The newly registered nurse and the cancer patient.

Corner, Jessica Lois

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THE NEWLY REGISTERED NURSE AND THE CANCER PATIENT

BY

JESSICA LOIS CORNER

Thesis submitted to King's College, University of London, for the degree of Doctor of Philosophy

March 1990
ABSTRACT

Research literature suggests that attitudes towards cancer held by health carers are largely negative, and that such attitudes affect care given to patients with cancer. This study aimed to: develop understanding of newly registered nurses' attitudes, knowledge, confidence, educational needs and experiences in relation to cancer care; to develop and pilot an educational package to meet needs identified; and to evaluate the package with groups of newly registered nurses in two general hospitals.

The study was undertaken in 3 phases and included an exploratory study of nurses' needs in relation to cancer care; the development and piloting of two educational interventions; and a quasi-experimental evaluation study of the interventions using a triangulation strategy in which multiple methods and sources of data were utilised. An in-depth baseline exploration of 127 newly registered nurses' needs in cancer care was undertaken, 107 of whom took part in the evaluation study. Groups of nurses were compared before, immediately after, and 3 months following a 3-day experiential workshop using small group work techniques, a series of formal seminars covering similar material, and nurses who received no educational input.

The study has revealed the perceived needs and desire for more education on cancer care, the strong association of cancer with death amongst newly registered nurses, and the enduring effect of nurses' encounters with patients suffering from the disease.
Significant benefits to those nurses attending the Workshop were demonstrated. Prior to the Workshop no differences were found between the research groups on measures used. Following the Workshop participants showed gains over the Control group in perceived educational needs; perceived competence to care for patients; knowledge; and on certain items of a Cancer Attitude Scale. During interviews subjects also reported greater feelings of comfort in dealing with patients. Differences were less obvious at 3-months follow-up.
ACKNOWLEDGEMENTS

I would like to thank all the nurses who took part in this Study, without their enthusiasm and commitment, this Study would not have been possible. My thanks are also extended to the two Hospitals and Schools of Nursing who offered their time, support and facilities.

I would also like to thank Jenifer Wilson-Barnett for her wise and insightful supervision; Virginia Dunn and Gary Kramer for their help with data collection and coding; Keith Jacka for his advice on analysis and statistics; and Noleen Ingham for typing the thesis.

I would finally like to thank my husband, Cameron Findlay, without whose devoted support and tolerance this thesis could not have been written.
"Who knows what form the forward momentum of life will take in the time ahead or what use it will make of our anguished searching. The most that anyone of us can seem to do is to fashion something - an object or ourselves - and drop it into the confusion, make an offering of it, so to speak, to the life force."

(Ernest Becker 1973)
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CHAPTER 1

INTRODUCTION

Cancer represents a significant health problem in Britain. Approximately 250,000 new cases are diagnosed each year representing one in three of the population, and around 160,000 people die of cancer annually. This means that cancer is the second most common cause of death in the United Kingdom after heart disease (Cancer Research Campaign 1987).

Cancer is a generic name for a group of diseases sharing common characteristics, represented by each cancer site. Many of these are quite different in nature, rate of progression, sequelae, treatment and outcome. While at least one-third of all patients can expect to be cured of the disease and significant strides forward in management of the disease and palliation of symptoms have been achieved, a diagnosis of cancer is known to hold very grave consequences for the individual sufferer and their family (Tiffany 1989). The effects of the disease process itself, the protracted and severe nature of treatment, and the psychological impact of cancer, mean that the implications of the disease for the individual reach beyond many other acute and chronic conditions. Patients with cancer therefore require very skilled and sensitive nursing care at all stages of the disease process. The recognition of the need for such skills has led to the development of courses for nurses to develop specialist skills in cancer and palliative care, and are validated by the English National Board for Nursing and Midwifery. Since 1975 when the first oncology nursing course commenced, until the time of the most recent records in 1989, 1,922 nurses have obtained their oncology nursing certificate and 2,713 have completed a palliative care course. This means that only
around 3% of currently registered nurses have undertaken training for cancer care (ENB 1989). The majority of patients with cancer in this country are therefore likely to be cared for by nurses who have received little or no specialist training for the task. The literature also abounds with empirical and anecdotal evidence that there is a pervasive negative view of cancer both amongst the general public and health carers, and suggests that the quality of care for patients with cancer is affected by this.

Research has focused on nurses' attitudes towards cancer which have been found to be pessimistic and not to reflect a true picture of the disease as represented by mortality and survival statistics. Education for nurses on cancer care has been put forward as a possible solution to such pessimism (Craytor et al 1971). Education it is felt should not only provide nurses with knowledge and skills to care more effectively for patients, but also to view the disease in a more realistic and optimistic light.

This study has used the literature relating to attitudes towards cancer as its starting point since this has been the focus of the majority of studies examining nurses' care for patients with cancer and in evaluating educational programmes for nurses and other health carers. Thus the research problem was identified as:

"Nurses' attitudes towards cancer are pessimistic and these are likely to influence the quality of care patients with cancer receive."

The study set out, 1) to collect baseline information on newly registered
nurses' attitudes, knowledge, confidence and perceived educational needs in relation to cancer care, 2) to develop and pilot an educational package to meet these needs, and 3) to evaluate the package with groups of newly registered nurses in two general hospitals.

A broad working definition and model of attitude was adopted for the study, since attitudes towards cancer in previous studies were felt to have been examined from a narrow and superficial perspective. In order to understand deeper dimensions of nurses' feelings towards the disease, its meaning to them, and their relationship with patients suffering from it, a wide umbrella approach to attitude as a construct was utilised encompassing feelings, values, beliefs, opinions, as well as meaning and context. Knowledge as a socially construed phenomenon was felt to be closely related to this.

Chapter 2 introduces the literature review by reporting and discussing the empirical evidence relating to nurses' attitudes towards cancer and examining the evidence suggesting the nature of the impact these attitudes may have on patient care. The chapter is concluded with a discussion of the possible reasons for the pervasive pessimism towards cancer identified in the literature.

Chapter 3 reviews studies that have attempted to change nurses' attitudes towards cancer through education and notes the lack of evidence generally, regarding education for nurses on cancer care and the superficiality of educational evaluation studies. Strategies for educational evaluation are discussed and literature relating to newly registered nurses reported.
Chapter 4 concludes the literature review by critically reviewing research methods used in studies of nurses' attitudes towards cancer in relation to attitude measurement theory. The quantitative-qualitative research methods debate is discussed and criticised for its divisive effect on nursing research, and the triangulation of different research methods and approaches is suggested as a possible solution to some of the methodological problems identified.
CHAPTER 2

(2.1) NURSES' ATTITUDES TOWARDS CANCER

The concept of attitude and its effects on behaviour have long been a central theme of mainstream psychological research as demonstrated by its regular attention in many psychology journals, a typical paper being Cooper and Croyle (1984). Many different definitions have been put forward for attitudes, most concerned with operationalising the concept so that it can be measured. The common element that runs through definitions is the influence of attitude on 'a readiness to respond' to a situation; for example Allport (1935) defines attitude as:

"A mental and neural state of readiness organised through experience exerting a directive or dynamic influence upon the individual's responses to all objects and situations with which it is related." (p.8)

Triandis (1971) defines attitude as:

"An idea charged with emotion which predisposes a class of actions with a particular class of social situations." (p.2)

Others have argued that the link between attitudes and subsequent behaviour is not direct and cannot be assumed (La Pierre 1934) and make the distinction between attitudes, beliefs and opinions (Elms 1976, Fishbein 1967). More recently the concept of attitude has been rejected in favour of "social representations" (Moscovici 1984). This discussion will be developed in Chapter 4, but for the purposes of this review of research regarding nurses' attitudes towards cancer the above definitions represent the approach to attitude adopted in the majority of studies.

It has been established that cancer as a disease holds particularly negative connotations to both the general public and to health care
professionals. An early study by Paterson and Aitken-Swan reported in 1954, surveyed 1200 women in the Manchester area regarding their opinions on cancer in an attempt to shed light on why women delay in seeking advice about symptoms of cancer. Cancer was rated as the most alarming of a list of diseases including heart trouble; tuberculosis; asthma; cancer and rheumatism, by 70% of the women regardless of social class or age. Fifty per cent of the sample felt that cancer can never be cured, and 29% felt that early treatment made no difference to chances of cure for cancer. These results reflected statistics indicating that 50% or more of women from the same area had delayed attending hospital for 3 months or more after suspecting cancer of the breast, and 21% who delayed a year or more.

Brooks (1979) summarises the findings of surveys of public attitudes towards cancer since this early study as:—

1. A tendency of respondents to exaggerate the number of deaths caused by cancer;
2. A tendency to underestimate the numbers cured of cancer;
3. A strong tendency to view cancer as the most worrying of all diseases;
4. A belief that smoking is implicated in lung cancer;
5. A knowledge of other 'causes' for which some scientific evidence exists;
6. A knowledge of some bona fide early warning signs of cancer;
7. A tendency to reject early treatment as leading to improved prognosis; and
Brooks (1979) concludes that 'one is left with the strong impression that cancer is seen to be very threatening, the most dreaded of all diseases, rarely if ever curable and largely unavoidable.' (P.457)

A recent study commissioned by the Cancer Relief Macmillan Fund (1988) examining public attitudes and knowledge of cancer, undertook in-depth structured interviews with a sample of 966 individuals who were thought to be representative of the general population in Great Britain. This study reflects the general picture of public attitudes towards cancer presented by Brooks' (1979) with certain changes. The majority of subjects knew that heart disease claims more lives than cancer, however it was cancer which was seen to be the main health concern, 52% of the sample identified cancer as the most worrying disease. AIDS was the second most commonly identified and was selected by 30% of the sample, particularly the young and single. Heart disease was third, with 14% of the sample selecting it as the most worrying disease. There was a high degree of awareness across all demographic groups that cancer can sometimes be cured with 72% giving optimistic responses. However 40% of the sample agreed with the statement "the fear of cancer is worse than the fear of death." It would seem that while cancer was recognised as being treatable, and that heart disease is in fact the bigger killer, cancer was still seen as the disease individuals most feared getting themselves.

The research on health care professionals' attitudes towards cancer seems to indicate that they reflect those of the general public. That is they are largely negative and stereotyped and cancer is seen to be more devastating than other life threatening diseases. One of the earliest studies investigating nurses' attitudes to cancer was undertaken by
Davison (1965) who surveyed 783 health visitors, district nurses and midwives. The subjects were asked to predict the number out of 100 middle-aged people with cancers of different sites they would expect to be cured. Davison interpreted the small proportion of respondents (44% for breast cancer and 31.2% for cancer of the cervix) accurately predicting cure rates, and the significant proportion (19.2% for breast cancer and 29.2% for cancer of the cervix) who underestimated cure rates as 'gross despondency' about cancer. Twenty per cent of the sample thought that hospital treatment for cancer was 'frequently not worthwhile'. The factors that influenced nurses' tendency to be 'optimistic' or 'pessimistic' were identified by Davison (1965). Nurses who had relatives, or who knew patients who had been cured of cancer were significantly less 'despondent' than those who had relatives who had died of cancer. While Davison's (1965) conclusions regarding these results, particularly her inference of 'despondent' attitudes from them, is open to question (issues of methodology in cancer attitude research will be discussed in a subsequent chapter). This study painted a worrying picture of nurses' understanding of cancer and the outcome of treatment for it.

Early studies involving medical students and physicians reflect a similar pattern. Easson (1967) collaborated with Davison and used the same questionnaire with medical students and general practitioners. Questions asking respondents to predict survival rates of different sites of cancer (cancer of the breast; cervix, larynx, testis; and Hodgkins' Disease) were included and administered to 77 final year medical students and 85 general practitioners. The general practitioners were found to be more pessimistic about survival rates for cancer of the breast than the medical students, the nurses in Davison's study were more pessimistic still, while
the medical students were most pessimistic for cancer of the cervix. All
groups showed substantial pessimism in relation to survival for cancer of
the larynx, testis and Hodgkins Disease. Easson concludes that the
responses did in fact reflect a pervasive degree of pessimism about cancer
amongst medical students, general practitioners and nurses, rather than
merely a lack of knowledge.

In a more recent study, Elkind (1981, 1982) refined Davison's methods by
using carefully worded questions to 'get nearer to nurses' true feelings'
and interpreting findings in terms of the impression nurses are likely to
give the general public about cancer through their opinions. Twenty-one
per cent of 785 nurses surveyed, agreed with the statement 'A patient who
has cancer can never really be cured', two-thirds of the nurses agreed
that 'treating cancer patients can do more harm than good', and 44%
selected cancer of the stomach as the most alarming among a list of
diseases including schizophrenia, coronary heart disease, rheumatoid
arthritis and chronic bronchitis. Increasing age and positive experiences
with cancer appeared to make nurses more likely to respond positively.
Nurses' accuracy at predicting survival for cancers of different sites did
not suggest any substantial change since Davison's study. Elkind was
careful not to try to place nurses' views along a continuum from optimism
to pessimism feeling this was too simplistic an approach to the complex
interplay of knowledge, opinion and experience which was reflected in
their responses. Elkind found that while training and experience seemed
to lead to a better understanding of curability, these also gave rise to
doubts about the value of treatment for cancer. She concluded from her
results that some nurses are likely to find it difficult to pass on
anything other than an entirely negative view of the disease.
As part of the same study Elkind (1978, 1980) also examined nurses' views on the prevention and early detection of cancer by asking nurses if they thought that not smoking, the cervical smear test and breast self examination 'have any value as measures against cancer?' All three measures were regarded as having some value by almost all the nurses. However, large variations were apparent in the extent to which individual measures were rated as valuable. The smear test was the most highly valued, 84% answering 'definite value' compared with 68% for breast self examination and only 59% for not smoking. Those nurses who believed cancer to be curable were significantly more likely to believe these measures to be of definite value and were also more likely to have accurate knowledge regarding survival for cancers of the cervix and breast. This would seem to demonstrate the significant effect pessimistic attitudes towards cancer are likely to have on nurses' role and as health educators and the close relationship between attitude and knowledge. Elkind's finding is all the more important when considered in relation to the fact she also found that 70% cent of her sample indicated that 'people they know socially' ask them questions about cancer, (this figure was 84% for trained nurses) and that such questioning was focused on the curability of cancer, the relationship of smoking to cancer, and the pain and suffering likely to be experienced by patients. Elkind (1978) notes that nurses are important links in the chain of communication about cancer, which extends far beyond the orthodox doctor/patient relationship. It would appear that the kinds of health messages nurses are likely to pass on are far from the situation of exploiting social relationships to promote health, since many of the nurses in Elkind's sample held doubts about cancer's curability and the value of treatment for it.
Rockliff (1977) was critical of earlier studies of nurses' attitudes which were based on the premise that attitudes directly influence health behaviour and used a questionnaire to survey 50 nurses randomly selected from a cancer hospital and a general hospital. Rockliff expanded on variables previously considered to look at personal characteristics and feelings about death, but used Davison's (1965) approach assessing optimism versus pessimism in predicting survival rates. She concluded that contrary to earlier findings nurses held realistic opinions, or had a tendency to be overhopeful about malignant disease. The sample was unfortunately biased in favour of nurses who had chosen to work with cancer patients, and this may well be reflected in the findings.

Whelan (1984) compared British and American oncology nurses' attitudes towards cancer, treatment and survival. She also based her questionnaire on Davison's (1965) methods asking respondents to estimate survival for different cancer sites and inferred optimistic or pessimistic responses from nurses' tendency to under or over-estimate survival rates. Sixty-two British and 87 American oncology nurses completed the questionnaire. No differences were found in estimates of five-year survival between the two groups with the exception of cancer of the tongue, where British nurses were significantly more optimistic regarding survival than the Americans. Both groups of nurses were felt to be pessimistic about survival for breast cancer, cancer in general, and heart disease, but were optimistic about survival for Hodgkin's Disease and cancer of the large bowel. British nurses were more likely to see treatment as being worthwhile than the Americans. Thus these nurses were pessimistic about cancer in general but not necessarily about all cancers of specific sites. These findings may reflect attitudes of nurses trained to work in the field of oncology.
With the exception of studies of specialist nurses, studies of both the
general public and nurses seem to indicate that cancer is seen to pose a
greater threat to life than other serious illnesses. Two studies
examining nurses' attitudes have looked specifically at this question.
Groszek (1981) used a questionnaire incorporating vignettes of terminally
ill patients either suffering from cancer or some other chronic illness.
Thirty-one randomly selected staff nurses working on general medical and
surgical wards completed the questionnaire. While the nurses showed no
preference for caring for either patient, they selected the patient with
cancer as terminally ill significantly more often than the patient
suffering from another chronic illness. It was also interesting that of
the 13 nurses who had stated they frequently cared for patients with
cancer, 8 were more likely to identify the patient with cancer as
terminally ill. Groszek speculates from this that the greater number of
interactions the nurse has with patients with cancer, the more likely that
a nurse's perception of cancer will be negative, and would seem contrary
to the findings of Whelan (1984) and Rockliff (1977). This may be due to
the setting of Groszek's study, nurses working in an acute care teaching
hospital may be less likely to nurse patients successfully treated for
cancer than nurses working in specialist oncology settings. While nurses
were more likely to identify patients with cancer as terminally ill, they
did not identify them as needing to express fears about impending death as
often as they did the patient with another chronic illness. Groszek
concludes from the study that nurses continue to perceive cancer as
automatically fatal and are reluctant to change their negative perceptions
of the disease.

The second study (Solodky et al 1986) again used case histories, this time
including a patient having a diagnosis of cancer and a patient diagnosed as having coronary heart disease. Forty-two registered and student nurses working in an oncology, medical and surgical wards completed the questionnaire. The patient with cancer was seen as having a more serious disease, lower probability of cure, shorter life expectancy, less control over and less effective treatment, than the coronary heart disease patient. The nurses also expected the coronary heart disease patient to have a higher activity level and more life happiness than the patient with cancer. Oncology nurses rated the patient with cancer's condition as more serious, but more likely to be cured than nurses from other areas. Solodky et al (1986) felt that the study indicates that all three groups of nurses responded in a negative and stereotypical manner concerning the prognosis for cancer and coronary heart disease patients. Experience of cancer, and level of education were found to have virtually no effect on attitudes. Similarly, McKegney et al (1979) found remarkable homogeneity in attributes amongst all levels of staff in a multidisciplinary team involved in the care of patients with advanced cancer.

Margolies et al (1983) used a similar method to examine 323 medical students' attitudes towards cancer. Students were given sets of 24 case descriptions with key words altered to assess the independent variables of sex, age, prognosis and diagnoses of cancer, heart disease and psychiatric disorder. They were then asked to respond to a Likert type scale containing items relating to desire to work with the patient; willingness to be candid with the patient; perception of the patients as easy to work with; perception of the patient's ability to cope; and perception of being effective in working with the patient. Analysis of variance of
responses revealed that students prefer to work more closely with heart
patients than with cancer patients and more closely with patients with
cancer than with psychiatric patients.

The magnitude of difference between heart and cancer patients was however
not great in relation to the extreme negative response towards psychiatric
patients. Students also preferred to maintain greater professional
distance from patients whose prognosis was poor. Students with personal
experiences of cancer were significantly more likely to rate patients with
cancer as difficult to manage than students who lacked this experience
but were more likely to want to work with patients with cancer. Sloan and
Gruman (1983) found non-medical undergraduates perceived stomach cancer as
less preventable, less understood and less effectively treated than heart
disease. It would seem that the picture of attitudes towards cancer in
relation to other diseases is a complicated one.

The most commonly used method of assessing attitudes towards cancer among
doctors and nurses has been Haley et al's (1968) Cancer Attitude Scale
(CAS). This Likert type scale assesses attitudes under four main
factors:-

I. Attitudes towards the patient's inner resources to cope with
   serious illness such as cancer

II a. Attitudes towards the value of early diagnoses

II b. Attitudes towards the value of aggressive treatment

III. Attitudes towards personal immortality and preparation for and

       acceptance of death.

Haley et al (1977) used the Scale as part of a longitudinal study of 450
medical students' attitudes towards cancer as they progress through
medical school, which were then compared with responses from 186 physicians. Results from the study indicate that as students gain experience and knowledge during their education they also gain more definite attitudes towards patient care. Mean scores for Factor I were seen to increase, and decrease for IIa and IIb as medical students progress through college, indicating that attitudes towards the patient's ability to cope with knowledge of cancer increases while they become more doubtful about the value of early diagnosis and aggressive treatment for cancer. This would reflect Rezler's (1974) conclusions regarding changes in medical students' attitudes generally during training.

Subsequent studies using the CAS have consistently identified a similar pattern of more neutral/negative attitudes towards aggressive treatment and the value of early diagnosis for cancer as students progress through medical school. (Blanchard and Ruckdeschel 1986, Cohen et al 1982, Madden and Dornbush 1986, Raina et al 1986). Studies using the Cancer Attitude Scale with practising physicians reveal scepticism regarding the value of early diagnosis and aggressive treatment for cancer (Cohen et al 1982, Lagarde 1983). French doctors in Lagarde's (1983) study also underestimated the inner resources of patients with cancer to cope, and in Cohen et al's (1982) study, patients with cancer and oncologists were significantly more in favour of aggressive treatment for cancer than other groups of physicians.

The CAS has been used to assess nurses' attitudes towards cancer. Felton et al (1984) used the CAS to measure nurses' attitudes before and after an oncology course. Three hundred and ninety-seven student nurses,
registered nurses and oncology nurses completed the pre-test questionnaire, the post test response rate was poor with only 35% of nurses returning the questionnaire. All the groups of nurses tended to agree or disagree in the same direction, and prior oncology experience did not appear to make any difference to attitudes. Felton et al (1981) concluded that responses from the nurses indicated the following:-

- Only some patients with cancer should be treated aggressively
- Therapeutic attempts to control the cancer's progress should not necessarily be continued as long as the patient can be kept alive
- No matter how good the result of cancer therapy is, the side effects cannot be ignored
- Choice of radical cancer treatment cannot be decided solely on the basis of statistics
- Nurses' attitudes are influenced more by personal experience than by cancer statistics.
- Amputation frequently is psychologically crippling.

Thus again doubts about the value of aggressive treatment for cancer were demonstrated, while patients' ability to cope with knowledge of cancer, and the early diagnosis of cancer were felt to be good.

Ray et al (1984) examined the nurses' perceptions of treatment for breast cancer and the role of health carers in providing support using a questionnaire based on interview data from pilot work. While the majority of the nurses were optimistic about treatment outcomes, a substantial minority were 'gloomily fatalistic' about patients' prospects for cure. The nurses were very positive about the value of health education and screening, but were hesitant about their role in counselling in patients with breast cancer. They saw themselves as having a key role in giving
comfort, but felt they had not been trained to give psychological care or
counselling; this was felt to be the domain of a specialist nurse. It
would seem that nurses are fatalistic about cancer, but do recognise
patients' needs for help in coping with the disease and feel inadequately
prepared to provide this care.

In a series of studies Craytor et al (1978, 1982) examined the question of
attitudes towards cancer and nurses' perceptions of their preparation for
cancer care. The authors aimed to identify nurses' perceptions of
patients with cancer and their educational needs in relation to caring for
patients with cancer; and then test out an educational intervention
designed to meet needs. Craytor et al used a technique known as Activity
Vector Analysis, an adjective checklist which can be used by subjects
describing human behaviour and from which personality descriptions can be
derived. This method was used to compare nurses' perceptions of the
typical hospital patient, the type of nurse who would best work with
patients with cancer, the ideal hospital patient and the typical patient
with cancer. Analysis of the results from 100 nurses revealed no
significant differences existing between nurses' perceptions of patients
with cancer and hospital patients in general; they indicated very
stereotypic perceptions of both hospital and patients with cancer which
were different from perceptions of the ideal patient. Nurses saw
themselves as somewhat less professionally competent, but not personally
different from the nurse best suited to care for patients with cancer.
This suggests that nurses' perceptions of their own ability to care for
patients with cancer may be related to their feelings about the disease.

Stover et al (1984) used a cancer attitude inventory assessing perceptions
of levels of comfort in dealing with aspects of cancer care with 204
specialist oncology and non-specialist nurses. Low mean attitude scores
were derived, particularly from the non-specialist group. These feelings
of lack of comfort tended to be directly associated with perceived
educational needs. While the tool used in this study is rather dubious
and that attitudes are actually assessed using it doubtful; it is
interesting that another study has linked preparation for role in cancer
care and attitudes.

Fanslow (1985) used a Likert scale consisting of items relating to skills
in cancer care, cancer related myths, treatment and disease process.
Analysis of variance on responses from 444 registered nurses revealed that
attitudes towards cancer and cancer therapies were more positive than
negative. These were not related to level of education, but nurses with
more than 15 years' experience had the most positive attitudes. Mean
scores for attitudes relating to oncology knowledge and beliefs were found
to be significantly higher than attitudes relating to oncology nursing
skills. However even with a positive attitude towards oncology related
knowledge, nurses held a negative attitude to caring for patients with
cancer in contrast to Craytor et al's study (1982). This study would
dispute the inference that adequate preparation would necessarily give
nurses a positive attitude towards caring for patients with cancer.

In reviewing studies relating to nurses' attitudes towards cancer only one
study was found to report positive attitudes, this was a study by Piper et
al (1985). It is impossible to draw any conclusion from the study since
the instrument employed to assess attitudes was declared redundant
following reliability testing.
While there are serious weaknesses in methods of attitude assessment employed in many of the studies to date so that drawing conclusions from them or for comparing results from different studies is difficult, and will be discussed in Chapter 4, it would seem reasonable to state that a tentative picture of attitudes towards cancer amongst nurses is emerging.

The studies to date paint at first sight a clear picture of a negative, stereotyped view of the disease similar to that of the general public. It would appear that nurses hold grave doubts about the curability of cancer and thus the value of aggressive treatment for patients. They assume that patients are unlikely to receive significant benefit from treatment but suffer unpleasant side effects. Nurses appear unable to predict accurately survival rates for a number of common cancer sites, tending to underestimate the numbers who will survive, and believe a greater chance of cure exists for patients with heart disease than for patients with cancer. They also are more likely to select cancer as the most worrying out of lists of diseases including heart disease. A number of factors have been identified as mediating these attitudes in a positive direction and include: positive personal and professional experiences of cancer; increasing professional experience; seniority; and specialist oncology training, although studies do not reflect a consistent pattern of positive influences on attitude. For some nurses it would appear that working with patients with cancer in non-specialist, acute care settings, increases pessimistic feelings. Contact with patients during education and training seems to increase doctors' and nurses' positive feelings about individuals' ability to cope psychologically with the disease, but gives rise to doubts about the value of aggressive treatment. The majority of studies reported are American and this makes it difficult to extrapolate
results to British nurses, although Whelan's (1984) study comparing British and American nurses revealed a similar pattern of responses for both. There also seems to be little difference in reported attitudes towards the disease between the general public, nurses, practising physicians and medical students.

The picture is a complex one. There is no evidence of a straightforward relationship between feelings about the disease and their expression as assessed in studies reported. It would seem that nurses' relationship to cancer has many influences and may well fluctuate so that studies only represent a snapshot of attitude expressed at any given time, indirectly measured using a single technique. With this in mind there appears to be three main facets to the evidence available on attitudes towards cancer in nurses:—

1) A lack of knowledge exists among subjects about the disease, its treatment and the likelihood of cure for cancer both as a whole and for specific cancer sites. It is not clear from studies to date whether this lack of knowledge is the result of nurses simply not possessing accurate information about the disease, or whether it is as suggested in many studies, an expression of despondency about cancer. Davison (1965) and Whelan (1984) demonstrated inaccuracy about survival indicated by underestimates of survival (which were interpreted as pessimism). While this interpretation may be dubious, there are a greater number of studies indicating under-estimates of survival among subjects to be the rule than over-estimates. It would seem we must wait for further investigation before any definite conclusions can be drawn.
2) It is clear from studies that an overwhelming fear of the disease as a whole exists. It has been consistently selected from lists of different illnesses as the most worrying of all diseases. (Elkind 1981, 1982, Cancer Relief Macmillan Fund 1988). Concern over treatment for patients with the disease has been expressed, and in the Cancer Relief Macmillan Fund (1988) Study, the general population see the fear of cancer being worse than the fear of death itself.

3) It is of note that a third aspect of attitudes expressed has been a feeling of lack of preparation, and lack of the skills necessary to deal with patients with the disease in a number of studies (Ray et al 1984, Craytor 1978, 1982, Fanslow 1985), and this appears to be inextricably linked to feelings about the disease itself.

More work needs to be carried out to examine the relationship between these three areas of attitude towards cancer and their relationship towards the care nurses give to patients with cancer.

(2.2) THE IMPACT OF NURSES' ATTITUDES ON QUALITY OF CARE FOR PATIENTS WITH CANCER

Direct causal relationships between the attitudes nurses and other health care professionals hold towards cancer and the care patients receive from them is difficult to establish, and with the exception of Bond (1978) has not specifically been addressed in any studies reviewed to date. There is however a body of evidence which exists suggesting that the care patients with cancer receive may be of poor quality and some aspects of this care appear to set cancer aside from other diseases. Such studies fall into two main categories; communication and psychological care, and physical
Poor communication and psychological care for patients in general has been the subject of many studies and is not unique to patients with cancer. Wilson-Barnett (1979) has reviewed literature relating to patients' psychological reactions to illness and health care, highlighting the importance of skilled communication with patients for optimal adjustment to and recovery from illness.

However, Stockwell (1972) noted nurses' avoidance of patients who were unpopular or who made nurses feel uncomfortable. Cartwright (1964) documented that the emphasis of nursing care was on physical aspects and information from nurses difficult to obtain. Macleod Clark's (1982) study of tape recorded conversations between nurses and patients documented nurses' failure to pick up and act on cues given to them by patients, so that they failed to use interactions with patients in a constructive manner, and Faulkner (1980) found similar deficiencies in the communication skills of student nurses. It would appear that the record of health care professionals in communication and psychological care is not good.

The important role for health carers in facilitating adjustment to cancer has been identified by many authors, for example Weisman (1979) and more recently Deridian (1987). Yet in the area of cancer care inadequacies in communication and psychological care appear to reach beyond those documented in relation to patient care in other settings, and for other patient groups. McIntosh (1974) and Bond (1982) have reviewed literature
in relation to this. The focus of McIntosh's (1974) review was the process of information giving to patients, and notes that the question of whether the patient with cancer should be informed of his condition has been the subject of debate for decades. Yet with the exception of dying patients, the question of whether other groups of patients should "be told" their diagnosis is rarely an issue. McIntosh's review highlights; the reluctance among many doctors in studies to reveal diagnosis to patients, and that nurses are excluded both from decisions regarding whether to tell or not to tell a patient, or from the processes of communicating such information to the patient. When patients are told of their condition information is given in general rather than specific terms and euphemisms for cancer are used. Relatives are more likely to be informed of the patient's condition than the patient himself and all patients are left to use 'informal' sources to gain information. McIntosh felt that such processes are grounded in the public's conception of cancer as a horribly painful and above all unavoidable disease, and therefore a patient's reaction to the news of suffering from such a disease would inevitably be negative.

McIntosh (1977) undertook his own participant observation study of communication processes in a cancer ward. Patients were found not to be informed of their condition, instead communication between doctors and patients were routinised. On admission all patients suspected their condition but the majority did not seek to find out 'the truth' since this might remove any hope they had. It was interesting that the extent to which patients sought information regarding their condition appeared to be governed by their perception of cancer in general, so that those patients for whom the truth about their condition would not destroy hope completely
appeared to most actively seek such information. Nursing staff were found to accept the prevailing policies regarding information giving to patients set by the doctors. They felt that if patients were told, their reactions would be bad and make the ward atmosphere difficult to manage.

Communication with patients was found to be "managed" by nurses who redirected their questions on to a doctor, or avoided answering questions by making some excuse, and absenting themselves from the patient.

Much of the findings from McIntosh's (1977) study were from reports at interviews rather than from a systematic observation of interactions and it is interesting therefore that other studies have revealed similar patterns of communication with patients with cancer. Quint's (1965) observation and interview study of women who had undergone mastectomy, revealed that the way such women were told about their cancer was couched in generalities, particularly in relation to the relative success of their surgery. Communication barriers set up by nurses and physicians prevented women from asking questions, and these barriers were observed to become greater the more extensive the cancer involvement. The association of cancer with inevitable death and the stigma attached to the disease were felt by Quint (1965) to be operating to cause such communication barriers and avoidance.

Knight and Field (1981) produced similar findings in a participant observation study of coping with dying patients with cancer on an acute surgical ward. "Closed" or "suspicion" awareness contexts were observed to be in operation, staff were skilled at not giving information to patients, and colluded with each other not to talk openly about the disease. The main responsibility for caring for dying patients with
cancer on the ward fell to junior nurses. These nurses formed close relationships with the patients which made them vulnerable to be asked questions about the patient's disease. This was difficult for them within the prevailing ward policy of non-disclosure. Two strategies were observed to be used by these junior nurses to avoid answering such questions. Firstly the ward organisation made it possible for them to be doing work elsewhere so that they could avoid contact with the patient, or they suggested by their actions that they were too busy to talk. Secondly, if faced with a question from a patient they would use their low status in the ward hierarchy to plead ignorance of the patient's case, and refer the patient on to someone more senior. Quint (1965) also describes avoidance strategies used by nurses on a cancer ward to maintain composure in the face of inevitable death of patients. These were different from the strategies employed by nurses working on an intensive care unit.

Bond (1978) undertook an observation study of patterns of communication on a radiotherapy ward, using questionnaires, interviews and direct observation of interactions between nurses and patients. Again routinisation of communication and avoidance tactics were used by nurses to avoid disclosing information and were characteristic of interactions with patients. Nurses and patients were found to be more likely to engage in brief contacts than sustained interactions. Short dyadic interactions occasioned by nurses' work were reported to be characteristic, and 90.9% of interaction time was occupied by physical care. Bond's observations did not suggest that nurses interacted with patients to alleviate anxiety, promote coping, or ameliorate social problems. Yet in interviews nurses indicated that they would like to help patients if only they knew how to
go about it, and had the time.

Bond's (1978) important study also included an in-depth analysis of nurses' beliefs in relation to communication. Nurses were questioned regarding their approach to patients in specific interactions observed, and regarding their beliefs in general about communicating information to patients with cancer. Despite feeling that more patients should be told of their diagnosis than was the case, the nurses accepted the doctor's policy for not telling. Nurses also felt that patients' perceptions of the disease cancer, were such that if patients were told, this would cause negative reactions. Those patients who could be told were felt to include: those with high intelligence, younger patients who had family to care for; those with business arrangements to settle; and those who asked. Those who should not be told were felt to include patients showing any sign of mental instability; or of low intelligence. Nurses' interpretations of signs of adjustment in patients who knew their diagnosis assumed that signs of depression, or talking about the disease, indicated maladjustment and those who did not talk, favourable adjustment. Bond notes that there was an apparent inextricable link between cancer and death in nurses minds which resulted at least in part from the cancer deaths they had witnessed. This perception of cancer was felt to influence the way in which nurses managed interactions with patients. Communication strategies were learnt through experience and observation. Bond's study replicated earlier work using an approach that allowed different sources of data regarding interaction to be compared and provided deeper insights into the factors influencing processes of communication with patients with cancer.
Other studies have demonstrated that nurses and other health carers fail to recognise the distress of patients with cancer and ignore non-verbal signs of emotional reactions of patients. (Maguire 1978, Bullough 1982).

Thorne's (1988) small interview study of helpful and unhelpful communications with health carers, reported by 15 patients with cancer, reflects findings from observation studies. The majority of communications reported were perceived to be unhelpful. Lack of concern, withholding information and intentionally unhelpful advice, characterised such unhelpful communications. Other studies report misperception of patients' learning needs, emotional state and spiritual needs by nurses (Jennings and Mühlenkamp 1981, Lauer et al 1982, Highfield and Cason 1983), and Derogatis et al (1976) found that physicians were inaccurate in their assessments of patients' psychological distress and depression when compared with patients' own ratings.

The evidence suggests that nurses and health carers are failing to meet the communication and psychological needs of patients with cancer. The reason most commonly put forward by authors for such inadequacies is the negative connotations cancer holds for carers.

(2.2.2) MEETING THE PHYSICAL NEEDS OF PATIENTS WITH CANCER

As has already been noted cancer presents sufferers with physical and psychological problems which are arguably unique in their extent and complexity among diseases (Donovan and Girton 1984). Not only does the disease have many physiological manifestations (Smith 1988) which make curative treatment and control of symptoms difficult, but treatments for cancer can be disfiguring, protracted, uncertain, and have many unpleasant
side effects. It would therefore not be surprising to discover that research gives evidence that physical needs of patients with cancer are not being met.

There is substantial evidence for the under-treatment of cancer pain (Twycross and Lack 1983, Marks and Sachar 1973, Rankin and Snider 1984) and that this results in part from lack of knowledge and from commonly held myths regarding the use of strong opiate analgesics (Twycross and Lack 1983). Nurses are also held particularly to blame for this poor relief of cancer pain (McCaffery 1979, Myers 1985). Although poor care by nurses for patients in pain is not unique to patients with cancer (Seers 1987, Lones 1989), studies would also indicate that symptoms, particularly in advanced patients with cancer, are numerous and difficult to alleviate (Ward 1985, Hockley et al 1988) and there are discrepancies between severity and number of symptoms identified by nurses and those reported by patients (Hockley 1983, Holmes and Edburn 1989), although Holmes and Edburn (1989) found that nurses also tended to overestimate the distress caused by such symptoms when compared with patients' own perceptions.

There is evidence to suggest that nurses' goals in relief of symptoms too readily accept their existence as an inevitable part of the disease (Rankin and Snider 1984). Research relating to patients receiving treatment for specific cancer sites gives further evidence that the special needs of individual groups are not being met, for example mastectomy patients (Feeley et al 1982) and stoma patients (Devlin et al 1971). It would also seem that health carers whilst caring for individual cancer patients, feel the need to maintain an optimistic approach and this is not translated into behaviour. Murray Parkes (1972) and more recently
Evans and McCarthy (1985) and H-yes-Moore (1987) have found physicians, radiologists, general practitioners and nurses to be overly optimistic in their estimates of length of survival of patients in their care. Murray Parkes (1972) interprets this to be the result of the strong emotions which the disease provokes.

The complex nature of physical care for patients with cancer makes the disease a challenging area for health carers, yet it appears that physical needs of patients are not always met. It is more difficult to argue however that this is necessarily the result of omission on the part of carers rather than purely reflecting the magnitude of problems for patients with cancer. It is clear though that there is much room for improvement.

(2.3) CANCER AS METAPHOR: REFLECTIONS ON THE MEANING OF CANCER TO SOCIETY AND INDIVIDUALS

Attitudes towards cancer already identified may at least in part be based on reality. Greer and Silberfarb (1982) note in relation to patients' reactions to the disease "emotional distress is, in part, an understandable and realistic response, since notwithstanding advances in treatment, cancer may still entail grave consequences for the individuals" (p. 563), and as Donovan and Girton (1984) highlight.

"The magnitude of the problem of cancer in our society is only partially reflected by statistics on mortality and morbidity. These figures do not tell of the panic inherent in the mere thought of cancer, the role changes and conflicts that may arise when cancer is treated, or the dozens of other problems encountered by the person who faces a diagnosis of cancer. Since cancer is frequently a chronic disease with periods of acute
intensive illness interspersed with the constant threat of death, the 
patient with a diagnosis of cancer must face the problems of each of these 
kinds of illnesses." (p.15)

It is also interesting that in the newly published second edition of 
Oncology for Nurses and Health Care Professionals (Tiffany and Pritchard 
1989) a guarded approach to developments in treatment for cancer prevails. 
So that despite many significant advances in cancer treatment over the 
last two decades, Davies (1989) concludes of the present understanding of 
the biology of cancer, that when looking at the facts in relation to 
cancer, prevention is better than cure, and that aside from that no 
conclusions are yet possible.

It is true that for the 160,000 cancer patients who die each year (Cancer 
Research Campaign 1987) cure was not an available option and as the 
majority of these patients die in the general hospital setting (Taylor 
1983) this may well represent the picture of cancer that many hospital 
nurses experience. Bond (1978) found evidence that nurses' experiences of 
cancer deaths influenced their attitudes towards the disease as did 
Solodky et al (1986). Quint's (1967) Study of Student Nurses' encounters 
with death, demonstrated the profound effect such experiences have on 
individuals, and the nature of support they were given by other staff 
during these was critical. Yet Kind's (1988) analysis of hospital 
inpatient enquiry data estimates a mortality rate of 15.4 per 100 
admissions for malignant neoplasms suggesting that only a small proportion 
of hospitalised cancer patients are actually dying. If the evidence from 
studies reviewed regarding nurses' attitudes is correct it would assume 
that a much higher proportion of cancer deaths, occurs among hospitalised
patients to produce such intense feelings about the disease. The precise way in which experiences of the disease influence attitudes and beliefs is unclear, there does not appear to be a direct link between experience and belief. This is an area which requires further research before conclusions can be drawn.

There is also a very different side of cancer experienced by many patients. At least 35% (Cancer Research Campaign 1987) are cured of cancer and a great many more experience long disease free episodes. A number of cancer sites are regarded as completely curable (Cancer Research Campaign 1987) and lung cancer, the most common, and one of the least curable of all cancers, without cigarette smoking would have a dramatically reduced incidence (Doll and Peto 1981). While the treatment for cancer can involve serious side effects, can be lengthy, debilitating and involve psychological sequelae (Greer and Silberferb 1982, Maguire et al 1978, 1980a and 1980b), the prospects for cure and significant numbers of recurrence free years are great for many cancers (Cancer Research Campaign 1987). For those cancers which are not regarded as curable, living with the disease is more the picture of living with a chronic disease such as arthritis than it necessarily is that of a terminal illness, and the hospice movement has made available good palliation of symptoms and relief of pain for those suffering ongoing disease (Twycross and Lack 1983, Hanks 1983). Such statistics suggest that the attitudes many nurses have been found to hold in relation to cancer may therefore be inappropriate to the experience of a whole section of the population diagnosed as having cancer, undergoing treatment for it, or living and working in the community cured of the disease.
If one aim of education for those caring for cancer patients is to foster a more positive and hopeful approach to the disease, then an understanding of what precisely it is about cancer that gives it such negative connotations and the psychological processes involved is important. A recurring theme throughout the literature both in learned writing about the disease (Brewin 1977) and in empirical studies, is the association of cancer with inevitable death. Donovan and Girton (1984) for example describe society's view of cancer as:

"a disease of the unclean, a retribution by a supernatural or subconscious power for wrongdoing, or an unspeakable and mysterious horror. Many still firmly believe it to be uncontrollable and thus nearly synonymous with death, and that death may be seen as painful, ugly, prolonged and lonely." (p.11).

Clark (1976) lists the reasons put forward to explain the fear of cancer in patients and health carers and are listed below:—

- Cancer can occur silently without warning until the skills of the physician are no longer adequate to save life,
- Cancer is not confined to the original site but spreads silently to any body tissue if not checked,
- For centuries nothing could be done to arrest the course of cancer after an early period of growth, particularly for those cancers that were not evident externally,
- Cancer deprives the rest of the body tissues from nutrients, causing wasting of these tissues while it thrives,
- Advanced cancer often causes intractable pain, often not responsive to available narcotics and analgesics,
- Cancer causes an attitude of hopelessness in many people, including
many physicians, leading to abandonment of patients with cancer by those who should be supportive,
- Often the diagnosis of cancer and type is unsure, and inadequate therapy may be administered until metastases has occurred,
- Therapy is often mutilative and deprives the patient of familiar self image, independence and perhaps means of livelihood,
- The aetiologies of many types of cancer are not known,
- The patient has little or no personal control over the disease process; that is even if he gives full co-operation to the physician, there can be no guarantee that the therapy will be successful.

Evidence for the magnitude of such fears can be seen in significant rates of delay among patients with symptoms suspicious of cancer (Sutherland 1960). Cobb (1976) studied the reasons why patients delayed seeking a diagnosis of suspected cancer, refused therapy or sought help from non-medical sources. Factors identified included aspects such as socio-cultural background, for example family history of cancer and cultural attitudes to cancer. The site of the lesion was found to be important, unless the initial lesion was visible or impaired function, often it was not considered serious enough to require help and if the growth rate was slow psychological adaptation to the lesion occurred and fears of mutilating surgery contributed to delay. Even with awareness of the early warning signs of cancer individuals delayed seeking diagnosis out of fear of inevitable death. It was also found that previous relationships with doctors was important. Doctors who were rejecting or took a 'nothing can be done' attitude with patients were not consulted. The single most
important factor found however was fear. In addition to fear of mutilation, fear of extended pain and suffering and financial problems were prevalent.

Brooks (1979) uses Berlyne's arousal curve as a model in attempting to understand reasons for such delay. This model states that appropriate behaviour occurs when our level of cognitive arousal is at an optimum. If we are not sufficiently worried about our health we will fail to act appropriately. Similarly if we are too worried we may also fail to act. Brooks (1979) following a review of the literature lists the fears involved in attitudes towards cancer. These are shown in Fig. 1. Brooks notes that the research is scanty in this area and has focused on the threat of the disease itself, ignoring other important areas, or how different variables interact with one another. Brooks (1979) calls for more research to be carried out into attitudes towards cancer so that an overall theoretical model for cancer attitudes can be constructed including all the interacting variables.
Fear of the medical world in general

including

(a) Doctors (who cause pain in the process of treatment)
(b) Hospitals (where the individual lacks control of events)
(c) Operations (which mutilate and change one's self image and one's life)
(d) Other patients (who make demands not normally experienced)

Fear of Separation from Family

including

(a) By hospitalisation
(b) By loss of responsiveness
(c) By loss of independence
(d) By loss of social interaction
(e) By death

Fear of the disease itself

(a) Pain
(b) Social Stigma
(c) Deformity/mutilation
(d) Disability
(e) Relative social isolation
(f) Helplessness
(g) Death
The concept of suffering, experience of suffering and inference of suffering in others may be useful in trying to understand attitudes towards cancer. Kahn and Steeves (1986) in their review make an important distinction between suffering and pain and note that suffering is experienced when some crucial aspect of one's self, being or existence is threatened. There are two important realms of suffering according to the authors. Firstly the patient's experience of suffering, and secondly the nurse's experience of the patient's suffering. Suffering is not only induced by actual events, but may also be enhanced through imagination, by attitudes, beliefs, values, emotions and cognition. Threat of death or extinguishment of self are among the greatest threats likely to induce suffering. The context in which suffering occurs is also an important variable in both the experience of suffering and also the inference of suffering in others. In relating cancer to the concept of suffering it is easy to see that the disease poses a great threat to self, and it is likely to be seen to cause great suffering in others. Such suffering is experienced not only by the patient, but also by those with whom he comes in contact. If negative beliefs about the disease are held then inferences of patients' suffering may be perceived to be greater than the reality for the individual sufferer. This complex interplay between experience and understanding may be one factor in influencing fears about cancer. The concept of suffering has yet to be usefully examined in relation to attitudes towards cancer.

As has already been suggested the meaning a disease such as cancer has to individuals or society will effect beliefs in relation to it. The meaning of cancer and the historical development of its meaning has been examined by Sontag (1979). According to Sontag (1979) two diseases which have been
spectacularly encumbered by the strappings of metaphor are tuberculosis and cancer. Sontag (1979) traces the development of the metaphors surrounding the two illnesses. Tuberculosis in the last century and cancer now have parallel characteristics. Both have been seen as intractable, incurable and insidious. Tuberculosis is no longer incurable and cancer has taken over from it to become synonymous with death and surrounded by mystery in society's mind. The metaphors associated with cancer according to Sontag go beyond the threat of death from the disease, and other diseases carrying equal threat to health, such as coronary thrombosis do not share such metaphors. These metaphors for cancer are also different to those which were associated with tuberculosis. The latter was aestheticized, thought to be painless and to represent an easy and refined death. Whereas cancer is thought to be painful, obscene, a "scourge from within"; and at times worse than death itself. The differences in the metaphors between the two diseases Sontag believes result from, but also go beyond society's changing attitudes towards death.

Sontag (1989) has recently published a book discussing the metaphors associated with AIDS, plague being the principal one. Sontag believes that in the decade since her original publication attitudes towards cancer have become more liberal due to greater media openness about many previous taboos, and also because cancer is no longer the most feared and stigmatised disease. AIDS is felt to have taken its place. In contrast to the soft death imputed to tuberculosis and to heart disease due to the instantaneous nature of death from it, AIDS like cancer leads to a hard death and threatens all societies and social groups. If Sontag is correct
in her observation of a new candour regarding cancer, this has yet to be reflected in studies of either the general public's or health carers' attitudes towards the disease. While the Cancer Relief (1988) Study found greater knowledge regarding the disease many respondents saw cancer as being "worse than the fear of death", and the fear of AIDS was only higher than cancer amongst the young and single and therefore most at risk.

The metaphors surrounding tuberculosis and cancer identified by Sontag (1979) reflect the changing attitudes society holds towards death. Authors such as Farrell (1982) and Kubler Ross (1970) describe how changes in society and culture have meant that death is increasingly denied. Unlike in Victorian society when death was very much a part of life. Infant and adult mortality figures dictated that death touched the lives of everyone. Today it is possible as a result of longevity, for death not to be experienced within a family for a generation. This has allowed denial of death by society to develop. Victorians used elaborate funeral and grieving customs to help them adjust to death, whereas in today's increasingly secular and youth worshipping culture, death is hidden and surrounded by euphemisms. Farrell (1982) traces how funeral practises have changed, reflecting society's attitude, so that funerals today give an impression of a painless easy death, and even corpses are dressed and made up to appear is if they still live. It is not surprising then that cancer equated with death threatens society's ability to deny the reality of death.

Death anxiety and fear in western societies has been described in both cognitive and psychoanalytic psychological literature (Kastenbaum and
Aisenberg 1972, Feifel 1959) and is likely to operate in relation to fear of cancer and may be reflected in studies of nurses' attitudes towards the disease. Kastenbaum and Aisenberg (1972) however feel that man's relationship to death is not purely cognitive, so that a stimulus-response framework is inadequate for explaining fear of death and death attitudes. Man's relationship with death is organismic and operates at a number of levels both conscious and unconscious, and may or may not operate in response to a stimuli.

Freud (1922) included a death instinct in this later work seeing an eternal struggle between life and death in every human being, which produces a tendency to conflict. The controversial and subsequently criticised death instinct described by Freud may be expressed in ambivalence, fear of death, death wishes for others and masochistic impulses, and are a manifestation of the death instinct. The death instinct operates within the individual and is repressed or may be seen in the form of aggression. Freud's theory developed by Brown (1959) among others, sees that at the biological level instincts for life and death are not in conflict, but it is man's flight from death that distinguishes him from other animals and man represses knowledge of his own death. Death however gives life its individuality since man is driven to create history and make his "mark" because he too as an organism must die and he cannot rest until he attains individuality, a defence against death. Becker (1973) develops this thesis further by arguing that the fear of death haunts humans like nothing else and that all of human activity is designed largely to avoid the finality of death, this is the terror of the human condition. Becker argues that the complex symbol of death is never absent
no matter how much vitality and inner sustainment a person has, but that the fear of death varies in intensity depending on developmental processes. According to Becker to stand up to the terror of the human condition and inevitable death is to face anxiety, no-one who does can avoid this.

Cancer it can be argued represents the symbol of death itself. On every occasion it raises its head it serves to force cracks into man's armoury repressing fears of death. As De Beauvoir (1969) concludes in her account of her experience of her mother's death from cancer:

"There is no such thing as a natural death: nothing that happens to man is ever natural, since his presence calls the world into question. All men must die: but for every man his death is an accident and, even if he knows and consents to it, an unjustifiable violation." (p.92)

Considered from such a perspective cancer, as a disease equated with death, is likely to evoke death fears and anxieties. Kastenbaum and Aisenberg (1972) discuss in depth the nature of death fear and anxiety. They note that death as an object of fear is not a single entity but incorporates a number of different fears such fear of the dying process; fear of what comes after death; and fear of personal extinction. These fears may be experienced not only in relation to one's own death, but also experienced vicariously in relation to death of another. Fear of cancer is likely to operate at all these levels and as a fear experienced vicariously, likely to be particularly evident amongst nurses who witness patients who suffer and die from the disease.

Katenbaum and Aisenberg (1972) also point out that an individual's ability
to conceptualise death and their own feelings and fears in relation to it are not static, nor necessarily follow a forward developmental progression. They are also related to factors such as: developmental stage as well as chronological age; and situational influences. The expression of death fear in behaviour is complex and is not necessarily a direct one. Fears therefore elicited by cancer are likely to fluctuate within an individual over time and vary according to circumstance. If cancer fear is parallel to death fear feelings of comfort and optimism in relation to the disease may not be attainable, nor if achieved likely to remain static and may be an unrealistic goal for educational programmes. It may also be true that as with survivors witnessing death as a result of disaster or war, experiences of cancer professionally for some health carers may be internalised so that cancer is equated with death, provoking fear that is in some way "carried within" the individual and therefore resistant to change.

Rheingold (1967) argues that the fear of death does not have a unitary causation, but rather it is complex, comprising many elements and individual experiences. These may derive from evolutionary origins, such as for self preservation; from awareness of the finitude of life and therefore are existential in nature; or in response to threats to survival during infancy. In some way, according to Rheingold (1967) the infant senses the precariousness of life in the hands of his mother and fears catastrophic death by her doing. This gives individuals an innate tendency to death anxiety. Unlike Kasterbaum and Aisenberg (1972) Rheingold (1967) does not attempt to separate dying, death or the afterlife as objects of fear. Rather fears may be directed towards
particular aspects of dying such as ageing and the process of dying, or the extinction of self, but Rheingold feels these are points upon a continuum and are psychodynamically united. Fear of a catastrophic death creates the linkage here. He says:

"In respect of death, the object is not just the natural end of life but catastrophic annihilation. We cannot know what fear of non-being itself may exist, because of the threat of death. It is possible that actually we are little perturbed by the thought of ultimate cessation which is unimaginable. What is terrifying is the ever present threat of malevolent death." (p.47)

Thus man, admits man is mortal but believes that he is personally exempt (Rheingold 1967). It is the fear of malevolent death which threatens his belief in personal exemption from death. The symbol of cancer within society it could be argued represents a form of malevolent death and hence is intensely anxiety provoking. Defences cited by Rheingold (1967) against catastrophic death anxiety include avoidance, denial, phobia and counterphobia, a sense of inferiority, aggression, guilt and ambivalence, all of which have been associated with lay conceptions of the disease, patients' reaction to the diagnosis of cancer, and health carers' behaviour in relation to sufferers from the disease.

This chapter has presented evidence which suggests that nurses and other health carers' attitudes towards cancer are negative and that such attitudes may be reflected in patterns of poor quality of physical and psychological care for patients with cancer. While in some senses such attitudes may reflect a disease which carries a heavy physical and psychological toll on sufferers and is responsible for a large number of
deaths in this country, reactions towards the disease by the general public and health carers alike seem to reach beyond what is a realistic picture for cancer in relation to other life threatening and chronic conditions. The reasons for this are complex and have not been adequately studied but appear to lie in the insidious, uncertain and protracted nature of the disease, and also in the disease representing a symbol for death within society. It is possible that reactions to the disease are a manifestation of death fear and anxieties in response to such a symbol, and are therefore likely to be resistant to change and amelioration.
CHAPTER 3

(3.1) EDUCATION FOR NURSES ON CANCER CARE

Chapter 2 reviewed research relating to nurses' attitudes towards cancer and revealed the strong, negative, connotations that the disease appears to hold for both the general public and health carers. It would seem that these in turn affect nurses' ability to give the highest quality of care for patients, not least in their conscious and subconscious need for avoidance of cancer as a disease which symbolises death. There would appear to be two possible solutions. Either to accept that anxiety and denial of death is a normal part of human nature and can be suppressed but not changed. In this case there is little hope of change in attitudes. Or to endeavour to help nurses and other health carers to be more realistic or optimistic in their responses to the disease and provide knowledge and skills necessary for cancer care in the hope that these might be reflected in their care of patients.

There are a number of studies which suggest that a need for more education in the area of cancer care is essential. The parallel between the educational needs of nurses for cancer care, and in care for the dying is close. A number of studies approach both issues in an inseparable way (Knight and Field 1981, Razavi et al 1988), since dying patients in these studies were suffering from advanced cancer and that fears and needs described by nurses apply to both groups of patients. There have also been more studies developing educational programmes relating to care of the dying than there have specifically in relation to cancer care, and much of the literature relating to the needs of the dying within the hospice movement have in the main specifically related to advanced cancer.
patients. At the risk of being accused of perpetuating the association of cancer with death, both areas of the literature will be addressed in this chapter.

Hitch and Murgatroyd (1983) undertook a delphi study of 30 nursing personnel working hospital units devoted to cancer care. Participants were asked to identify difficulties they and other nurses faced when caring for patients with cancer and possible solutions. Difficulties encountered in communicating with patients with cancer were highlighted and were attributed to poor information sharing between different groups of health carers. Lack of experience and training for nurses in the area of communication was frequently noted, and more education and training was requested for all levels of carers.

Craytor et al (1978) report a series of studies investigating nurses' perceived educational needs with a view to developing continuing education programmes. In the first study 182 registered nurses responded to a questionnaire which asked subjects to indicate success or lack of success they felt they achieved in 17 areas of cancer care; and to indicate areas of care they felt they needed more knowledge or practice in. The nurses indicated that although reluctant to care for patients with cancer, they needed to learn more about cancer care, especially about dealing with the effects of the psychological problems of patients, and communicating with patients. Physical care and emotional support were seen as equally important, but nurses were more confident in their skills in physical care than in psychosocial care. The nurses rated their need to deal with their own feelings about cancer as relatively unimportant. The second study undertaken by Craytor et al (1978) was a similar survey of 100 nursing
staff in an acute general hospital which also aimed to identify the reason for an unwillingness amongst these nurses to become involved with patients with cancer. The nurses reported that they felt helpless in relieving patients' discomfort.

Similar needs have been found amongst nurses from other countries, Mazonson et al (1981) surveyed registered nurses working in non-specialist areas in New Mexico regarding their educational needs in cancer care. Nursing interventions to help patients with cancer and families cope with cancer and deal with psychosocial needs were ranked highest among educational needs identified. Ninety-five per cent of respondents felt a need for more education in cancer care. Stover et al (1984) compared groups of nurses working on designated oncology units with nurses on other hospital units. The two groups were significantly different in their identification of perceived educational needs, nurses working in non-oncology units indicating greater educational needs and lower feelings of comfort in relation to their ability to deal with aspects of cancer care. Donaldson et al (1988) revealed striking knowledge deficiencies on cancer care amongst both generalist and specialist nurses, as has Fielding (1990) in her study of student nurses' knowledge of breast cancer.

It would seem that the few studies that have attempted to assess nurses' needs in relation to continuing education on cancer care reveal a large number of perceived educational needs particularly in the area of psychosocial care and poor knowledge levels. No study was identified which specifically investigated British nurses' educational needs in relation to cancer care.
Brown et al (1983) surveyed schools of nursing in the United States to determine the status of cancer nursing in basic education. Results indicated that on average only fourteen and a half hours were devoted to cancer care and that content areas inadequately covered were: prevention and early detection of cancer; oncological emergencies; late effects of treatment; unorthodox treatments; attitudes towards cancer; home care; social and political issues and patient and family resources. Only 41% of educators had undertaken any specialist education in cancer nursing. Since there was no comparison of input on cancer care with other areas of the curriculum it is difficult to assess whether cancer was neglected in relation to other subjects, although the amount of teaching hours devoted to it seemed small.

Evidence for the extent of input on cancer care in basic nursing education in the United Kingdom is difficult to find. An absence of any data relating to this was noted in the literature. Jacka and Lewin (1987) in their study of clinical learning of student nurses did however collect detailed information on timetabled classroom teaching for three schools of nursing. While it is impossible to know how much cancer related topics actually were taught in the schools of nursing, since there was no category identified for cancer care in any of them, hours devoted to cardiovascular, circulatory and thoracic nursing, ranged from 22 to 45 hours, compared with only 0-3 hours devoted to radiotherapy nursing. Studies aimed at developing resources for cancer education notably Hewertson (1984) and Duthie (1985) omitted any evaluation of existing cancer input in nurse education. The absence of details of such input is also notable in the Royal College of Nursing, Oncology Nursing Society
submission of evidence to the College's Commission on Nursing Education, reported in 1985 (Duthie 1985). The submission does however make recommendations for education at basic, post basic and specialist levels. There is some evidence for gaps in knowledge on cancer care among American senior nursing students (Frerichs and Varrichio 1988) but again evidence relating to British nurses is absent in the literature other than studies reported earlier (see Chapter 2) relating to nurses' knowledge of treatment and survival for different cancer sites. One of the problems in American basic nurse education noted by Kruse (1986) was the use of integrated curricula since this allows cancer to be taught but never develops the subject as an area requiring special attention. This would also appear to apply to the United Kingdom.

The lack of emphasis in basic education on areas such as communication skills, care of the dying and pain and symptom control has also been noted for example by Bond (1982), Goff (1984), Webster (1981) and recently by Hockley (1989). Birch (1983) assessed anxiety levels of student and pupil nurses at 8 and 24 months after commencing training, and compared these with the preparation the nursing curriculum had provided in these areas. Nursing patients in great pain, dealing with patients with cancer, and care of the dying were among the top five causes of anxiety amongst these students. In comparison to the level of anxiety caused amongst student nurses, these areas were given little attention in the curriculum. Field (1986) surveyed schools of nursing, academic nursing departments and medical schools regarding the amount of teaching on care of the dying undertaken. Input was found to vary widely and whilst much more attempt was being made to meet needs in the area by nurse educators, mean hours taught was only 9.8 for schools of nursing and 6.27 for medical degrees.

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Field (1986) concluded that care of the dying was a topic now receiving serious attention in nursing schools but methods of teaching currently in use seemed formal in nature, and therefore not necessarily the most appropriate for the subject. Little consideration had been given to the objectives of such teaching. There was also a discrepancy between teaching and actual experience on wards noted by students.

Much of the literature has noted the stressful and difficult nature of cancer care for nurses and other health carers, and education and support have been proposed as possible solutions to this problem. Wilkinson (1987, 1988) studied 88 nurses working in two specialist cancer hospitals in England using questionnaires and interviews. Communicating with patients and relatives was identified as the most difficult area of the job by 65.4% of the sample. A further 51% requested further education suggesting that training does not adequately equip nurses to cope with the difficult situations encountered while nursing patients with cancer. These difficulties occurred regardless of the fact that a large proportion of the sample had undergone specialist training in cancer care. Wilkinson (1987) concluded that more education in communication skills and assertiveness was required.

Other authors have focused on the development of core curricula or the application of American Nursing Association outcome standards in oncology for education in cancer nursing, for example Anglim et al (1980) and Nevidjon and Deatrich (1985). The most recent development has been the core curriculum for cancer education (Webb and Pritchard 1989) developed for post basic cancer nursing education in Europe. Outside of the United
States examples of minimum levels of education in basic training such as the outcome standards for oncology have yet to be reported. Neither has cancer care as an area yet been addressed in the new Project 2000 curriculum (ENB 1987, 1988). In order to assess the adequacy of basic level education for cancer care, for nurses in the United Kingdom, one must leave the specific area relating to cancer care and focus on the studies which deal with care of the dying for the reasons outlined earlier. Again evidence is scanty, but illuminating.

Quint's (1967) sociological study of student nurses' encounters with dying patients in schools of nursing in the United States gives insight into the way nursing education works outside of the classroom setting. In all of the schools investigated, the focus of education was on saving life, little attention was directed towards nurses' responsibility or problems in caring for those patients who face death rather than recovery. Nurses reported two kinds of encounters with death which were important, first those in which death was medically accepted and recognised as inevitable; and secondly, where death appears suddenly and heroic measures are brought in to play to prevent it. Very little supervision of the student nurses occurred in either of these situations. Rather the focus was on accurate administration of drugs to patients. This resulted in the students placing a high value on protecting themselves from negligent performance. Quint (1967) was critical of the fact that there was no central planning for students' assignments to dying patients, encounters were by chance as was the outcome of the experience for the student. The effect of the experience could be positive, neutral or traumatic depending on the circumstances surrounding it. Students were subject to the prevailing ward culture which tended to encourage distancing and avoidance of
involvement. For those students encountering death in a supportive environment the outcome was less likely to be traumatic than those in a non-supportive ward environment. Moreover encounters with death were frequently "turning points" in the students' lives, strongly affecting their views of themselves, and memories of these encounters appeared to last throughout their professional lives.

Quint (1967) describes three kinds of nurse teacher she observed in her study. The experienced teacher, the unaware teacher, and the concerned teacher. None of these were wholly adequate in their ability to support nurses through experiences with dying patients or to create an ideal learning environment. The inexperienced teacher was too concerned over making mistakes herself in the eyes of the student or ward staff, the unaware teacher might ensure students get experience with dying patients, but was unaware of the effects these might have on them; and the concerned teacher was aware of the students' needs and difficulties in relation to caring for dying patients but uncertain as to how best to teach and support them. The author also identified the newly registered nurse as an individual with particular needs. Since this was the first time they had been required to cope with decisions regarding resuscitation, difficult relatives or symptom control.

Field (1989) identifies the ward environment, the organisation of work in it and the ward sister as being critical to the quality of care for dying patients, but also to nurses' feelings of comfort and confidence in caring for them, and highlights the importance of providing nurses with positive experiences, within a supportive environment. Where this was absent Field
(1989) notes that initial apprehensions can become part of a negative feedback sequence of anxiety, avoidance, low satisfaction and lack of confidence in nurses' capacity to relate to people who are dying. The parallels with cancer care are clear. Whitfield's (1979) questionnaire study of student nurses' experience with dying patients highlighted nurses' feelings of anxiety and inadequacy, particularly in relation to communicating with dying patients. More teaching on caring for the dying, and more discussion on wards about the needs of the dying were recommended. Recently in an interview study of student nurses Hockley (1989) has found similar problems still exist.

Developments for the education of nurses in cancer care at both basic and post-basic (non-specialist) levels have been reported. Most programmes developed and evaluated are American. Educational programmes appear to have a number of aims; firstly to change attitudes towards cancer; secondly to increase knowledge; thirdly programmes aim to give increased confidence and feelings of ease in dealing with cancer and patients suffering from it and are aimed at personal anxieties; and fourthly programmes aimed at communication skills training. The literature reveals that none of these programmes are co-ordinated or controlled formally by a body at national level such as the English National Board, unlike courses at the specialist level. They appear to have been in the main initiated by enlightened individuals who have recognised a need amongst nurses and have been able to obtain funding for them. The only exception to this has been the development of programmes using the American Oncology Nursing Society, outcome standards for nursing education such as reported by Kruse (1986).
The subject of attitude change has been the focus of much attention in psychology literature for many years (Cooper and Croyle 1984) and has been used as a major variable in studies of educational programmes for nurses on cancer care. It is accepted that attitudes are relatively resistant to change and individuals employ subconscious tactics in order to maintain an attitude held in the face of new information (Festinger 1957, Zajonc 1966). Numerous studies have been conducted investigating the processes involved in attitude change and the conditions which are likely to be most favourable to provoke change. Such studies have in the main been conducted under strict experimental conditions and have often been focused on student populations making results difficult to extrapolate to the 'real' world or to health care situations. Hovland et al (1966) summarise conclusions from experimental studies of opinion change. Factors found to be important determinants of attitude change include:

1) the credibility attributed to the communicator of education aimed at attitude change, (communicators who were attributed credibility in the eyes of the audience were more effective in inducing change than low credibility communicators).

2) The message aimed to cause attitude change was more likely to succeed if substantiating arguments were included (positive or negative appeals have been found to act as incentives, although messages inducing a high degree of fear in subjects are likely to interfere with attitude change.)

3) Individual characteristics are also important, (individuals with low self-esteem, social inadequacy, inhibition of aggression or depressive tendencies have been found to be likely to be more easily influenced).
4) Social pressure to conform amongst group members exposed to communications aimed at attitude change increase the likelihood of change.

5) Situations where subjects are encouraged actively to participate such as by the use of role plays, have been found to increase the effectiveness of the interventions. Research demonstrates considerable variability in the extent to which induced changes in opinion are maintained over time (Hovland 1966). Studies aimed at changing nurses' attitudes towards cancer and dying largely reflect the psychological literature in this area.

Kelman (1967) discusses processes of attitude change and points out that it is not enough to know that there has been some measurable change in attitude, the nature of the change and the extent to which it will persist over time are also important. The author notes that knowledge in this area is derived from research traditions which range from the study of social influence using small group interaction to the effects of persuasive communicators on mass audiences. Kelman (1967) identifies three processes of social influences: Compliance, which occurs when an individual accepts influence from another person because he hopes to gain a favourable reaction from them; identification which occurs when an individual adopts behaviour derived from another group because this behaviour is associated with a satisfying, self-defining relationship to this person or group (for example in role modelling); and internalisation which occurs when an individual accepts the influence because it is congruent with his value system. Studies of nurses to date have not operated at this level of sophistication in their examination of attitude change.
One of the earliest studies reported, examining the effects of a 10-week course on nurses' attitudes towards cancer, was reported by Hohllock and Coulson (1968). The course was for undergraduate students and involved giving factual information regarding successful therapy in cancer, long-term remissions and curative radical surgery. It was hypothesised that such a course would foster more favourable attitudes towards the disease. An attitude assessment tool was developed, and pre and post course scores compared. The authors were unable to demonstrate any change in attitudes using their tool in the students following the course. Although acceptable reliability assessments were reported for the instrument, it is impossible from the study to know what effect the course had on the students because of the narrow focus of the investigation and the inadequacy of the instrument. The assumption that attitudes will necessarily be changed simply by exposure to factual information is also open to question.

Other studies had reported equivocal results in relation to attitude change following educational programmes. Felton et al (1981) used Haley et al's (1968) cancer attitude scale in 545 registered and graduate nurses undertaking four separate oncology programmes of varying length and content. The study failed to demonstrate attitude change in any of the nurses' responses to the Cancer Attitude Scale. Unfortunately the post-test response rate was poor at less than 50%, the post-test was conducted some six months after the educational experience and no attempt was made to differentiate the groups of nurses attending different educational programmes. These obvious limitations make it impossible to draw any conclusions regarding the effect of the education. Not only was the research tool unlikely to be sensitive enough to identify subtle changes
across such a wide and varied group, but also the use of a single measure to assess the effects of education would seem superficial. Piper et al (1985) report similar lack of significant changes in attitude scores for students undergoing masters level preparation in oncology nursing. This was felt to be the result of an unreliable attitude assessment instrument. Knowledge scores were significantly increased following the programme. Myers (1985) reports significant positive changes in attitude and knowledge scores immediately following a three-hour educational programme on cancer pain management, scores remained significantly higher, but had decreased slightly in a retention test administered two weeks later. It would have been interesting to assess retention over a larger time interval. Razavi et al (1988) reports favourable attitude change towards dealing with dying patients with cancer in a multidisciplinary group of health carers following a training programme which focused on psychosocial care and compared results with a control group receiving no education. The study was limited by its narrow approach to education and evaluation. Silberfarb and Levine (1980) report no such change following attendance of a psychodynamic group using the same instrument. Verran et al (1987) report improvements in attitude scale scores amongst undergraduate nurses in the United States following a semester long course.

Craytor and Pass (1982) designed a 13-session small group, learning module tailored to meet the needs of registered nurses' educational needs identified in earlier studies (Craytor et al 1978). The module was designed to help nurses and other health care professionals view cancer care in a more positive manner and themselves as better able to undertake this care. The module was based on 18 behavioural objectives to be
achieved by participants. Each session was intended to increase awareness and allow expression of feelings and attitudes. Eighteen participants completed pre, and post, and 18 months follow-up educational assessments using Activity Vector Analysis and an evaluation form. Participants' attitudes towards patients with cancer were found to be less stereotyped following the education. The authors felt that from this evaluation it was not possible to separate the effects of the use of the module from the effects of the group process, and that changes in participants needed to be reassessed to ascertain whether they endured with time. This was the only study reviewed which gave a detailed description of the educational intervention evaluated. Johnson et al (1982) used the same attitude assessment technique to assess registered nurses' attitudes pre, post and 6 weeks following a 3 day course on cancer nursing. Unlike the previous study no changes in personality profiles were identified using Activity Vector Analysis following the education, or six weeks later. Since there was no control group included in this study it again is difficult to know to what extent the education had failed to change attitudes or whether the assessment techniques were invalid.

Valencius (1980) studied a variety of cancer nursing educational programmes in the United States involving 250 registered nurses and reports their beneficial effects. Courses studied ranged from two sessions to six weeks. Subjects completed a questionnaire before and three to six months following attendance of one of these courses. A consistent increase in feelings of comfort in relation to six aspects of cancer care were found following these courses. The author did identify that the association of cancer and death was still strong following them though. Nielson et al (1979) reported increased knowledge and optimism
amongst participants attending a cancer course of four one-day sessions with 10 weeks of field experience. Participants however also showed significantly higher fatalism towards a cancer attitude test, which could not be explained by the researchers. The link between knowledge gain and positive attitude change has also been noted by Verren et al (1987) and Yeaworth et al (1974). The techniques used for evaluation in many of these studies are superficial so that it is difficult to draw conclusions from them. It would seem that either methods of attitude assessment are insensitive and unsatisfactory, or that attitudes towards cancer held by nurses are resistant to change.

Two British studies have been reported in which teaching materials aimed at nurses were developed, and designed to foster more positive attitudes towards cancer. 'About Face' was a package developed by the British Life Assurance Trust Centre for Health and Medical Education and was evaluated by Hewertson (1984). The pack consisted of a teaching manual, two audiotapes and slides, an information booklet and discussion cards and was aimed at both student and trained nurses. Evaluation of the package was superficial and was predominantly requesting nurse tutors to use the package and comment on its content, and students were asked to report its perceived impact on them. Attitude change was assessed by asking students to answer a simple yes/no question as to whether they felt their attitude had changed. Of the 180 nurses who responded, 33% replied yes, but 22% no. Such a superficial method of assessing attitude change adds very little to understanding of the effectiveness of such a package, neither had the package been used by all the tutors it had been distributed to suggesting that this may not be the most appropriate method of introducing cancer care education into the curriculum. The focus of the pack was also
very much related to fostering more optimistic attitudes by giving positive health information. It would seem that this is a rather simplistic approach to the complex area of attitudes towards cancer. No attempt was made to evaluate the effects of education on other variables such as knowledge.

The second study is reported by Duthie (1985) and was a project funded by the Cancer Research Campaign. This study was designed to develop and evaluate teaching materials rather than to evaluate a course. A large demand for both an increased input in basic nurse training on cancer care and for resources to use for such teaching was found amongst respondents from schools of nursing in Scotland. Evaluation of the materials though was again very superficial, making it impossible to gauge the usefulness of developing such materials or the impact they have on nursing education and attitudes towards the disease.

Studies evaluating the effects of cancer education on medical students have been reported more frequently than with nurses. The focus of these evaluations has been on attitude change. Blanchard et al (1981) report significant attitude change on items of Haley's CAS following a cancer course which consisted of didactic and small group sessions. Cassileth and Egen (1979), Appel et al (1981) and Blanchard and Ruchdeschel (1986) all report attitudinal changes in a positive direction following oncology input of varying lengths ranging from 8 hours to 4 weeks. Appel et al (1981) report that attitude changes were observed to persist at follow up 5 months later. Terasaki et al (1984) report improved communication skills observed on videotaped interviews with cancer patients following a didactic course. Students were found to devote more time to emotional
issues during patient interviews following the course. Results of these studies are interesting, but the narrow focus of the evaluations make it difficult to derive an understanding of how the process of education might affect outcomes in these groups of students or precisely how these may affect behaviour.

A number of studies have looked specifically at the area of communication skills since this is an area frequently identified as being a source of difficulty for health carers. In a series of studies Maguire (1978) and Faulkner and Maguire (1984), and Faulkner (1984) have used video and audio feedback during workshops to improve the communication and assessment skills with cancer patients amongst health carers. However, Maguire (1989) reports an inability to demonstrate that skills persist over long periods of time. Rainey (1983) reports considerable gains in nurses and social workers attending a 9 months course in psychosocial aspects of cancer. No investigation of attitude or knowledge change was undertaken for these studies; Fielding and Llewelyn (1987) offer a note of caution to anyone intending to embark on communication skills training programmes. They suggest that too often programmes have been set up with little thought of the needs of organisation and individuals or the difficulties of getting skills used in practice. They warn that unless trainers pay close attention to the training needs of the organisation and individual, and assess the effects of the training and its quality in relating to the whole organisation, the myth of the hero innovator will be perpetuated. This myth suggests that you can produce by training a righteous individual who, like a knight in shining armour, newly endowed with skills and attitudes by you, will bring in new rules of care and consideration to the institution. In reality such individuals are "eaten" by institutions "for
breakfast". The reality is that institutions are very resistant to change and individuals too often slip back into old accepted practices because of the strength of prevailing organisational culture.

A substantial group of studies have examined education relating to death and dying, most with the aim of changing attitudes towards death and reducing death anxiety. While this is an area distinct from education - for cancer care the parallels between the two are obvious. Merriam and Mullins (1982) reviewed 15 studies undertaken into short term programmes on death and dying in the preceding decade. The aim of the review was to gain an understanding of which programmes might be more effective. Three variables were examined in relation to the studies: first the length of the input; secondly the nature of the education; and thirdly the subjects studied. In general it appeared that the longer the intervention the greater the effect. Short term programmes of one day or less were not effective in changing attitudes towards death but did appear to cause cognitive changes in subjects. In a number of studies attitude changes were not observed immediately but took time to occur, persistence of attitude change was observed in the one study which examined this. The programmes reviewed used a wide range of educational techniques from formal sessions, through group work to relaxation techniques. It appeared that those programmes which used a variety of techniques within the intervention were more successful, also a short programme was more effective in changing attitude when there was time for reflection by participants between sessions. Subjects included in the programmes varied from nurses and medical students to college students and general public. It was apparent that programmes were most effective with groups of individuals to whom the material was highly relevant, particularly nurses.
The authors were critical of the assumption that desired change was defined in terms of reduction of death anxiety, or the development of 'positive' attitudes. Little consideration was found to have been given in the studies reviewed, to what constitutes 'positive' attitudes. Merriam and Mullins (1982) conclude that what constitutes desirable goals for such educational programmes needs rethinking, and that cognitive gains rather than attitude change may not only be more realistic but also more appropriate.

Degner and Gow (1988a) review death education programmes in basic, post basic and continuing education and note that three approaches have been used:

1) Integrating specific learning experiences on death and dying into a pre-existing curriculum
2) Offering an elective course
3) Altering the curriculum to include a required course.

The most frequent approach in basic education has been to integrate teaching on death and dying into the curriculum, whilst post basic and continuing education settings have used the other approaches. The authors note that few such programmes have been systematically evaluated and list 12 criticisms of research methods used in studies reviewed, namely:-

1) The general theoretical orientation for most studies was more often implicit than explicitly stated.
2) The nature of the independent variable was not always clearly specified.
3) Theoretical definitions of the concepts being investigated usually were not offered.
4) Most studies did not implement random assignment to treatment.
5) Quasi-experimental designs sometimes lacked a control group.
6) Cross-sectional surveys sometimes were implemented in preference to experimental designs with or without random assignment.
7) Sample sizes were small.
8) Response rates were not always reported.
9) Reliability of instruments usually was not reported for the sample being studied.
10) Analytic techniques usually did not take into account the absence of randomisation.
11) Important co-variates rarely were identified and/or controlled.
12) Longitudinal follow-up of students was rare.

These criticisms also apply to studies reporting the results of cancer education courses.

Degner and Gow (1988b) report their own longitudinal quasi-experimental study into the effectiveness of two alternative approaches to preparing undergraduate nurses for care of the dying. An integrated approach that included varying amounts of classroom and clinical exposure to death and dying, and a discrete course that also included clinical practice were evaluated. The study included a control group of non-nursing students so that the effects of maturation on death anxiety and attitudes could be compared with the effects of education. Three hundred and six undergraduate nursing students were assessed using Collett and Lester's (1969) Death Anxiety Scale and on an attitude to death questionnaire, pre-course, post-course and one year later. The post-test response rate was 51.5%. The experimental group was found to have significantly better
attitudes towards care of the dying than the nursing control group at all three testings and while death anxiety scores reduced over time in the experimental group receiving the discrete course, these were not significantly different from the integrated course group. The effects of the education were difficult to assess and were masked by a maturation effect which gradually reduced death anxiety and improved attitudes towards dying over time in the Control group. Interview data however gave evidence that students in the experimental group one year after graduation felt more adequate in caring for the dying, were more likely to discuss patients' emotional concerns with them, discuss preference of place to die, support groups, and inform relatives of the patient's condition. The non equivalence of the 3 research groups and poor follow-up response rates make findings from the study difficult to interpret. The study demonstrates the complexities of assessing change as a result of education. Degner and Gow (1988b) also note that death anxiety decreases with increasing age and experience in nursing, and as a result maturation may have been mistaken for treatment effect in previous uncontrolled studies of educational interventions on caring for the dying.

A number of conclusions can be drawn regarding research studies undertaken into the education for cancer care reported in the literature:-

1) There is an absence of detailed information regarding the nature of input on cancer care in basic nurse training in the United Kingdom.

2) There is some evidence to suggest that basic nurse training inadequately prepares nurses for their role in cancer care. (This evidence is mostly derived from American literature).

3) Evaluations of the effectiveness of educational input on cancer care identified at both basic and post basic levels in the United Kingdom
does not appear to have been the focus of research to date.

4) Most of the studies relating to continuing education programmes on cancer have been undertaken in the United States. Only two such studies were reviewed reporting development and evaluation of teaching programmes in the United Kingdom.

5) Studies both relating to the effects of educational input on cancer care, and care of the dying have largely focused on attitude change as a measure of programme effectiveness. Such studies have produced equivocal results and a number of studies have failed to demonstrate attitude change as a result of education.

6) It is not clear from studies reported in the literature whether failure to demonstrate attitude change as a result of education is due to methodological weaknesses, or some factor other than education effecting attitudes, such as age, experience and increasing maturity.

Methodological weaknesses include:-
- lack of sensitivity of research instruments
- narrowly focused research designs
- failure to use concepts currently employed in educational evaluation research.
Controversy over methods of educational evaluation most appropriate have been raging for some time (Hamilton et al. 1977). Easterby-Smith (1981) and Lathlean and Farnish (1984) have reviewed the historical development of evaluation approaches. Early studies from the 1960s onwards focused on performance as a result of training, and used pre and post-test designs assuming that statistically significant differences between these two testings indicated success of the programme. Later studies used comparative groups in experimental designs, where programme participants were randomly allocated to either the educational intervention or to a control group and differences assessed between the two. The problem with this approach has been the impossibility of eliminating the effects of the contexts within which subjects resided. Easterby-Smith (1981) summarises the shift in approach to incorporate the effects of 'context' that has occurred in evaluation designs:

1) Attempts to negate the effects of context have moved to:

2) Acceptance that context must be included in evaluation, but where it is seen as a set of 'givens' which determines the nature and content of the programme to:

3) Realisation that context (as value and belief systems) may have a very major impact on the way a programme unfolds, and on the messages and ideas that participants take away. (p.30)

Hamilton et al. (1977) are critical of previous approaches to educational evaluation, feeling that studies have paid little attention to the processes involved in education including those of learning milieu and have given too much attention to psychometrically measurable changes in student behaviour. Parlett and Hamilton (1972) identify two distinct
paradigms of educational research. Firstly the 'Traditional' or agricultural botany paradigm' in which students are subjected to deductive methods like seed crops and measured pre and post a number of different educational experiences. Large samples, randomisation, psychometric measures and control are characteristic of these studies. The authors criticise such methods as creating artificiality, assuming that in before-after research designs no change occurs in the programme during the study, or prevent programmes from necessary evolution, and for neglect of local differences and needs. The second evaluation paradigm they describe and advocate is "illuminative evaluation". This strategy takes into account the wider contexts in which educational programmes function. Its primary concern is with description and interpretation rather than measurement and prediction. Central to an understanding of illuminative evaluation are two concepts: the instructional system, and the learning milieu. The instructional system is the formalised plan for the programme and includes its assumptions, aims, techniques and equipment. Traditional evaluations focus on this and aim to assess whether the programme has obtained its objectives. Learning milieu is the psychological, social, cultural, and material environment in which students and teachers work together. Each class or course is unique and includes both 'hidden' as well as 'visible' curricula. Illuminative evaluation is not a standard methodological package, but rather uses a combination of techniques to take as given the complex scene encountered. It uses progressive focusing on issues emerging rather than working within a rigid research design. Observation, interviews and documentary evidence are useful tools.

Hamilton et al (1976) and Easterby-Smithy (1981) are also critical of the 'objectives' model of educational evaluation, which assesses the extent to
which pre-set objectives usually defined in behavioural terms are achieved. This approach removes the focus of the evaluation so that it only pays attention to intended outcomes; it restrains the programme from evolving; and significant learning outcomes are difficult to define and measure in behavioural terms.

Other models of evaluation have been put forward such as by Scriven (1972) who advocates 'goal free' evaluation in which the researcher is directed by what he finds rather than adhering to pre-set goals defined at the outset. Stake (1977, 1980) emphasises the need to include the description of how instruction occurred as well as measuring progress towards achievement of objectives and the relationship between the two. According to Stake three bodies of information should be tapped: antecedent data (any conditions existing prior to teaching and learning which may relate to outcome); transactional data (the encounters between student and educator); and outcomes (including negative aspects as well as achievements). Stake accepts the need for goal setting so that programme outcomes can be measured but is also concerned that the setting within which the education occurs is described. Such a 'responsive' research design is fluid rather than pre-determined, so that the researcher can respond to events and changes as they occur during the study.

A distinction in the literature between formative and summative evaluation is made (Scriven 1972). Summative being concerned with outcome achievements, and formative with the process of development and education. This is similar to Stenhouse's (1975) Process model which looks at the benefits of the process of learning rather than level of achievement.
The use of such newer approaches to educational evaluation have been reported in nursing research literature (Arthers 1983, Lathlean and Farnish 1984, Lathlean et al 1986, Meleis and Benner 1975) but are notably absent amongst evaluations of cancer education programmes.

Easterby-Smith (1981) concludes of current debate regarding evaluation strategies:

"Thus the traditionalists are castigated for being insensitive to the processes involved in the implementation of programmes, and being dominated by statistical significances; the more recent school of educational evaluation is castigated for being unduly subjective and eschewing any forms of measurement - thus limiting the generalisability of any particular study", (p.35)

Gallagher et al (1986) review strategies available for researchers evaluating cancer education programmes and is critical of studies to date which have been focused too narrowly on single evaluation methods. Studies were observed to be constrained by evaluators' own needs to maintain their professional identities within the academic disciplines of their training. Gallagher et al (1986) compare and contrast different strategies in tabular form and suggests that it is possible to combine different methods with a single evaluation plan. For example a pre-ordinate model employing standardised instruments could be supplemented with open-ended observations in naturalistic settings so long as this is done in a careful and thoughtful manner.

The parallels between philosophical developments in social science research and in evaluation research are clear. The shift away from a
positivist stance of evaluation as being too narrow an approach, has occurred in education as it has in nursing and other social sciences. The shift will be critically discussed in Chapter 4.

(3.4) THE NEWLY REGISTERED NURSE AND THE DIFFICULTIES OF CANCER CARE
The difficult nature of caring for patients with cancer has been identified, in particular the risk of stress amongst nurses is well documented. However, studies examining the risk of stress and burnout and possible methods of ameliorating these amongst nurses working with cancer patients in specialist settings give rather conflicting evidence. While the literature abounds with descriptions of the stressful nature of cancer care (for example Carpenter and Morrow 1986, and Weisman 1981), empirical studies have failed to demonstrate that the risk of stress and burnout is higher than in other settings (Jenkins and Ostchega 1986, Ogle 1983), whilst Vachon (1978) and others found stress experienced by nurses working on a newly opened palliative care unit to be nearly that of new widows. It is not clear whether this was a function of working in a new unit, or because of the nature of the work. Nurses working in specialist units such as intensive care have also been identified as being at risk of stress (May and Oken 1972, Buckaby and Jagla 1979) and it is the repetitive contact with death which has been thought to be one of the major factors in causing such stress in nurses (May and Oken 1972). Similar processes may be at work in cancer nurses. In a recent survey of hospice directors and matrons Finlay (1990) has however found that relationships with colleagues rather than patients and relatives were perceived as the greatest source of stress.
Evidence for the stress of caring for patients with cancer in non-specialist settings is hard to find, although again dealing with death and dying has been found to be an important source of stress. In the case of student nurses for example Lathlean et al (1986) found caring for the dying, and communication and psychological care to be potent stressors for newly registered nurses.

The relationship between cancer care and stress is not direct. Nor is the extent to which cancer care goes beyond the stressful nature of caring in general and described by authors such as Cherniss (1980), Bond (1986), and Bailey (1985). What does appear to emerge from the literature though, is that cancer, as a disease, has features which make the difficulties and stresses inherent in caring for patients with the disease greater than those encountered in many other types of patient care. Newlin and Wellisch (1978) list common reactions to nursing patients with cancer.

1) The feeling that the whole world has cancer
2) Cancer phobia
3) Mourning each patient's diagnosis
4) Identification with patients' and families
5) Frustration at inability to completely alleviate patients' pain
6) Frustration and inability to completely alleviate patients' and families' emotional pain
7) Conflict over involvement in experimental therapy or therapy which causes unpleasant side effects
8) Conflict caused by the time required for providing emotional support
9) Frustration over difficulties in nurse-physician and patient-physician relationships
Vachon (1986) has developed a model of stress in relation to cancer care in which she identifies the unique features of cancer which may operate as sources of stress in nurses caring for patients with cancer. The nature of the illness and its variable trajectory creates uncertainty in caregivers, other difficulties include communication barriers over diagnosis and prognosis; the strain of working as a communication mediator between patient, family and other health careers; the extended involvement with patients over the course of the disease; aggressive treatment and its side effects; and difficulties over palliation of symptoms; all contribute to the stressful nature of cancer care. These stresses may be exacerbated in particular groups of patients with cancer. Vachon (1986) identifies such groups as the young and those leaving behind families; intelligent and co-operative patients; patients of a similar age, social class or life-style as the staff members; patients with prominent positions in the community; patients who have responded well to treatment over an extended period of time; and popular patients.

According to Vachon (1986) it is these stresses which are particularly evident in cancer care because of the nature of the disease, which are then mediated or exacerbated by factors identified in the literature relating to occupational stress such as role ambiguity and conflict; personal characteristics such as coping styles and motivation; social support, and concurrent personal stressors. Weisman (1981) notes that care givers face considerable stress in caring for patients with cancer where frequently demands placed on carers in dealing with the patient's
'plight' outstrip what is possible to offer.

Wilkinson's Study (1987, 1988) identified five major areas of stress in cancer care and included conflicts with other health care workers; communication difficulties with patients and relatives; deterioration and death of patients; poor care and personal stresses. The most common source of stress was conflicts with other health care workers, particularly doctors, and in relation to chemotherapy and analgesia. Gaps in communication between nurses and doctors were a major problem. Stress derived from communicating with patients and relatives resulted in the main from nurses' feeling incompetent to deal with the situations in which they found themselves. While death and deterioration in themselves were not found to be a major source of stress, where nurses felt unable to give good care because of staff shortages, or where the patient was young or transferred to another institution whilst in the terminal phase, caused considerable stress. Satisfying incidents were particularly related to the extent of preparation individual nurses had for their role in communication and psychological care, opportunities for education and self development and support.

It seems likely that the demands of cancer care, particularly for nurses working in areas where support and training for the role are not available, and where individual nurses may not have chosen this role, are likely to be problematical.

A number of authors have identified the newly registered nurse as having particular difficulties at a vulnerable point in their career and their needs for development and support and may in part be reflected in the high
rates of turnover amongst qualified nurses (Carvanagh 1989, Waite and Hunt 1987). Transition from student to staff nurse has been identified as a difficult and stressful experience, and this has been described as a 'reality shock' by Kramer (1974). That is the shock that accompanies nurses who have spent years training for the moment that they qualify, only to discover that the training has not prepared them for the role they are expected to take. As Bygrave (1985) notes, nurses have to adjust to the fact that administrative skills assume more importance than they had anticipated and the skills required for ward management and leadership were given little attention during training. Studies by Vaughan (1980) and Lathlean et al (1986) identify as one might expect that concerns and difficulties surrounding ward management functions featured amongst newly registered staff nurses. Less expected though was the large proportion of their difficulties which were reported to lie in communicating with patients and relatives and dealing with the dying and their families. Lathlean et al (1986) identified needs for development amongst newly registered nurses in seven areas, these were:

- Knowledge and skills required for clinical and managerial aspects of their role
- Interpersonal skills and knowledge including communication with patients, relatives and other staff
- Autonomy, including the ability to make decisions and the capacity for self direction and analytical thought
- Personal development, such as awareness of own needs, strengths and weaknesses, confidence, motivational ability to manage stress
- Attitudes in relation to current professional issues
- Career planning
- Coping with stress in their own role.
In the absence of planned professional development programmes individual development in any of these areas relied on 'experience' and 'role modelling' and these were reported to have severe limitations in fostering development. Developments in individual nurses were observed to take place over the first six to ten months post registration although varied widely between individuals. Newly registered nurses were also subject to quite severe stress during this time. Lathlean et al (1986) recommend that educational programmes should be provided for newly registered nurses. The opportunity to take part in facilitated group sessions with peers, when individuals could share skills, knowledge and experience, with provision support, guidance and time away from the ward for discussion and reflection, were felt to be important components of such programmes. In order for newly registered nurses to cope and deal effectively with the stresses of cancer care in their new roles, education in the form of staff development programmes and facilitated group work would seem important.

Benner (1984) has studied the processes by which newly graduated nurses in the United States develop expertise in clinical care and management, by undertaking paired interviews with beginning and expert nurses regarding patient care situations they had in common. Interviews and participant observations were also undertaken with groups of experienced newly graduated and senior nursing students in order to further describe characteristics of nurse performance and different stages of skill acquisition. Accounts from nurses were interpreted using a phenomenological and constant comparison approach. Accounts from these nurses demonstrated that the development of expertise in clinical practice closely matched the stages of the Dreyfus (Benner 1984) model so that
newly graduated nurses progressed from the stage of the novice where behaviour was rule governed, limited and inflexible, since they have no experience on which to base practice; through advanced beginner, competent and proficient levels before reaching the stage of the expert, characterised by the ability to use an enormous background of experience and intuitive grasp of situations to accurately assess problems without wasteful consideration of alternative diagnoses and solutions. This highly skilled analytic ability according to Benner (1984) takes some five years to develop, but is situation specific, so that an expert practitioner may be reduced to the level of competent or advanced beginner in an unfamiliar clinical environment. The implications of this specificity of expertise according to Benner (1984) requires ongoing clinical teaching at the unit or patient group level and shows the importance of clinical specialisation. Benner notes that nurses graduate with little understanding of strategies, functional skills acquisition and have what she terms "secondary ignorance", in that they do not know, what they do not know, and have a limited understanding of how to go about learning it. This means that education is required for nurses at all levels of competence by educators who can demonstrate advanced levels of clinical judgement. Thus Benner's (1984) model of the acquisition of clinical expertise provides pointers to the ways in which educational programmes for newly registered nurses on cancer care might usefully be developed.

Little evidence has been found regarding the input on cancer in basic nursing education in Britain in order to prepare nurses for this challenging area of care, although education has frequently been offered
as a solution to the problem of pessimism about cancer. A number of studies examining the effects of short term educational programmes on cancer care for nurses have been reviewed. The majority of such studies have been undertaken in America, making their results difficult to extrapolate to British nurses and have also revealed equivocal results in relation to attitude change. Again methodological weakness, particularly with regard to the narrow focus of evaluation designs, have made results difficult to interpret.

Newly registered nurses have been identified as a group particularly in need of help in cancer care and Benner (1984) clearly outlines developmental stages such nurses pass through in developing clinical skills and demonstrates the importance of helping nurses develop expertise in cancer care at this vulnerable point in their careers.
CHAPTER 4

This chapter aims to review critically research methods and approaches used in the literature discussed in the preceding chapters, to review some research strategies and methods which have not been used to date in research regarding nurses' attitudes towards cancer in the light of recent developments and trends within nursing research as a whole.

(4.1) ASSESSMENT OF NURSES' ATTITUDES TOWARDS CANCER

Attitude is a complex construct central to personality, and one aspect of man's capacity for symbolic thought. Other aspects include ideas, thoughts, feelings, and values. They are means by which we make sense of, organise, predict and react to the world about us (Stevens 1975). Definitions of attitude are many and varied, two such definitions were introduced in the previous chapter. The measurement of attitude is difficult because they cannot be observed directly but only inferred from behaviour, statements, or reports from individuals. Such statements or behaviour may suggest a consistency in response towards objects or situations and therefore labelled as an attitude and its nature described. The tendency amongst researchers in attitude research to leap beyond what constitutes a hypothetical construct and make statements or claims regarding attitude or behaviour, characterises nursing research relating to attitudes (Fielding 1986), and attitudes towards cancer in particular.

It is the purpose of this chapter to critically examine methods used in studies relating to nurses' attitudes and to identify an appropriate research method for the study.

Important distinctions have been made between attitudes, values and beliefs (Elms 1976). Fishbein (1967) defines attitudes as:
"Learned predispositions to an object or class of situations in a favourable or unfavourable way." (p.217)

and beliefs as:
"Hypotheses concerning the nature of these objects and the types of actions that should be taken with respect of them." (p.257)

Stevens (1975) defines values as:
"A higher order concept .... what is believed to be good and desirable." (p.16)

and opinion as:
"A verbal statement of an attitude or belief. (p.16)

For the purposes of this study the terms, attitudes and beliefs will be used interchangeably. A three component model of attitudes has commonly been adopted (Rosenberg and Hovland 1960). That is attitude has: a cognitive component, an affective or emotional component and a behavioural component. As Fig. 2 demonstrates this model is useful in illustrating methods of attitude assessment available under each component. It must be reiterated however that attitude can only be indirectly inferred from these.

The problem in attitude measurement arises because the relationship between the attitude stimulus (in this case cancer), the components of attitude, and the way they may be expressed in behaviour or self reports are complex and not direct. Affect, cognition and action are not always highly correlated, and as Fishbein (1967) argues a multi-component conception of attitude in reality is frequently a multi-dimensional conception, so that the attitude a person may hold towards a particular
object such as cancer may fall at three very different positions, on three
different dimensions which the researcher may be attempting to measure.
Yet common methods of assessment yield a single score and therefore cannot
reflect these components in any precise fashion. For this reason Fishbein
(1967) argues for the use of a more restricted definition and also
criticises most attitude research for evaluating only the "affective
component" which is measured and treated by researchers as the essence of
attitude.

**Fig. 2  THE MEASUREMENT OF ATTITUDES. (ADAPTED FROM ROSENBURG AND
HOVLAND 1960)**

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Method of Measurement</th>
</tr>
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| AFFECT---| PHYSIOLOGICAL INDICES, e.g. sympathetic nervous system  
Signs indicating emotional arousal  
(Self-reports of emotion, feelings, etc.) |
| CANCER---| PERCEPTUAL RESPONSES  
(self-reports of belief through attitude scales and assessments, responses to open or closed questioning) |
| BEHAVIOUR---| OBSERVED ACTIONS, e.g. with cancer patients  
(self-reports of behaviour) |

In nursing these criticisms also apply. Fielding (1986) has reviewed the
usefulness of the concept of attitude in relation to student nurses' attitudes towards old people. She notes that there are problems with both the concept of attitude and the ability to operationalise it using current definitions, and authors of studies demonstrate conceptual confusion about attitude. Yet despite this, she felt a reluctance to abandon the concept due to its "commonsense currency". Fielding (1986) criticises attitude
research in nursing saying:

"In Nursing 'attitude' has been used as a shorthand for the explanation of behaviour, the wider theoretical implications being overlooked in the interests of pragmatism ... such approaches have capitalised on a convenient methodology aimed at the prediction of behaviour, in a mistaken attempt to explain behaviour." (p.21)

Prediction of behaviour must be made with great caution from attitudes since research demonstrates that the connection between the two may be tenuous (La Pierre 1934). It is difficult to be sure that any method of attitude measurement is both reliable and valid since with an attitude measurement scale or questionnaire social desirability may influence response. It is also probable that attitudes are not constant over time but fluctuate, as does their expression. Elms (1976) lists the reasons why studies have frequently failed to demonstrate a link between attitudes and behaviour; studies have involved inappropriate measurement of one or both variables; have made inappropriate assumptions about single behaviours as expressions of particular attitudes; or have made inappropriate assumptions about single attitudes as sole determinants of behaviour.

Attitude measurement is further complicated by its possession of different attitude dimensions, making attitude assessment a formidable task. Stevens (1975) includes a useful list of such dimensions which need to be considered when measuring attitude and summarised below:
Valence: The degree of positive or negative feeling towards the object.

Multiplexity: The degree to which an attitude is differentiated.

Breadth: Degree of specificity of attitude attributes.

Intensity: The strength of feeling about the object.

Stability: The degree to which an attitude is resistant to change.

Centrality: The degree to which an attitude is part of the individual's self-concept and to which he feels it reflects his identity.

Salience: The degree to which an attitude occupies a person's awareness.

Interrelatedness: The degree to which an attitude is interrelated with other attitudes.

Behavioural Expression: The degree to which an attitude is acted upon.

Verifiability: The degree to which an attitude's cognitive aspects can be checked against evidence.

It is clear that to incorporate such dimensions into a single measure would be a virtually impossible task. However, many studies mentioned in Chapter 2 using a variety of approaches have made quite specific claims regarding nurses' attitudes towards cancer, yet do not appear to have taken concepts of attitude measurement already discussed into account whilst making such claims.

A common method used in studies was first reported by Paterson and Aitken Swan (1954) in their study of public opinion on cancer. Attitudes towards cancer were coupled with knowledge. Interviews using a structured questionnaire were conducted with two groups of women, one who received questions on cancer disguised within a tuberculosis survey, and a second group receiving undisguised cancer questions. The questions related to
the curability of cancer, the value of treatment and knowledge of symptoms.

A number of studies have used this approach to make inferences about the attitudes of nurses towards cancer. A common method, which is problematic, has been to assess attitudes towards cancer by asking respondents to predict cure rates for cancer of different sites. A positive or negative attitude being inferred from correspondingly high or low responses relative to accurate prediction. Davison (1965), Basson (1967), Elkind (1981, 1982), Rockliff (1977) and Whelan (1984) are among the studies which use this method. While the findings of these studies are interesting it is impossible to separate 'opinion' in terms of optimism or pessimism about cancer from actual knowledge or lack of it. This bipolar view of attitude in which the respondent is placed along a continuum from optimism to pessimism is too simplistic and ignores the many factors which operate in the formation of attitudes and do not represent the dimensions of attitude already discussed. Davison (1965) found that nurses were better able to predict recovery from early lung cancer (which is in fact very low anyway) than for other more curable sites. The use of different response categories for the other cancer sites makes comparison inappropriate, it is also impossible to interpret the result since there is no way of knowing whether responses may be a product of lack of knowledge or a prevailing pessimism and while Fishbein (1967) advocated a unidimensional approach to attitude measurement it certainly did not mean extrapolating results of such measures to broad attitude objects. Whelan's (1984) analysis actually included a description of optimistic and pessimistic responses, optimism being
demonstrated when 65% of respondents overestimated survival, and pessimism when 65% of respondents underestimated five year survival from diagnosis of a given cancer site. Elkind (1981, 1982) was much more guarded in her interpretations of responses and did not rely on this one rather dubious tool to make inferences about attitudes. Hence her findings would seem more reliable.

The Cancer Relief Study (1988) utilised a similar method of questioning during interviews but by using a greater breadth of questioning was able to develop a more penetrating understanding of the extent of optimism regarding curability for cancer amongst the general public. Not only were respondents asked to predict survival rates for cancer of different sites, but they were also asked to indicate how curable they felt cancer to be, and also to define what they meant by cure, and the meaning of the word cancer to them. A combination of open and closed questions during structured interviews, permitted greater depth and understanding to be achieved.

Other studies have used different approaches to attitude assessment and used attitude scaling techniques. Such scaling techniques are the most widely used method of attitude measurement in social psychology and methods of construction of commonly used scales are described by Oppenheim (1966). Hohlock and Coulson (1968) developed an attitude inventory to evaluate change in nurses' attitude following a course on treatment and care for patients with cancer. The scale was devised using the established method for developing Likert type scales and reliability was demonstrated. No differences were seen in nurses' attitude scores before and after the course. The authors concluded that attitude change did not
occur. This study demonstrated a finding consistent with other attitude
research (Triandis 1971) that education, or other communications designed
to change attitudes, may have no effect on subsequent attitude scores.
This may be because attitudes are relatively stable constructs resistant
to change, or that the scaling techniques used were not sensitive enough
to pick up more subtle changes. Hoklock and Coulson's cancer attitude
inventory is problematic since it is doubtful that attitude towards cancer
is being assessed at all, rather the tool used in several studies (Stover
et al 1984, Piper et al 1985) yields scores relating to nurses' feelings
of comfort in relation to aspects of caring for patients with cancer.

Piper et al (1985) combined three established instruments to assess
attitude and attitude change in undergraduate nurses including the Hoklock
and Coulson cancer attitude inventory, and Donovan et al's (1977)
instrument. In assessing the instrument's reliability, correlation
coefficients between the three were significant but rather low at between
0.43 and 0.63. Again no significant changes in attitude scores were
found before and after the course, in fact mean total scores decreased
over time. The authors concluded that the instrument was redundant.

As has already been noted, whilst reviewing the literature the most
commonly used attitude scale was Haley's (1968, 1977) Cancer Attitude
Scale and results of studies using the scale among doctors, medical
students and nurses for the 4 subscales were reported in Chapter 2. A
copy of the original cancer attitude scale is in Appendix E. The scale
has been used widely to delineate the pattern of attitudes amongst the
various groups of health carers studied, and to demonstrate change in such
attitudes over time. However reliability and validity of the instrument has never adequately been established. Raina et al (1986) and Stolman et al (1984) have expressed doubts as to its reliability. Raina et al (1986) questioned the scale's validity feeling that cancer management practices and societal values may have changed in relation to a number of the scale items so that they may no longer represent desired attitudes. The scale was rigorously tested for reliability by Raina et al (1986) with 200 medical students and 162 oncologists alongside a semantic differential scale developed by the authors. The study failed to yield acceptable reliability estimates for the scale. The scale tested though was not the original scale developed by Haley et al (1968, 1977), both the structure of the subscales and wording of individual items had been changed. Both Stolman et al (1984) and Raina et al (1986) tested an 18 item instrument whereas the original scale consisted of 33 items. In contrast Madden and Dornbush (1986) demonstrated acceptable reliability estimates for the original scale with a large sample of medical students and oncologists. These studies demonstrate the difficulty in interpreting both the results, and the reliability and validity of an established instrument such as the CAS. One of the problems has been that the CAS has been used in highly modified forms yet the results have been directly compared with the early work of Hayley et al (1968, 1977). Scale items have been changed, reduced or added to and different scaling techniques have been used; the original five-point Likert Scale has been extended to a nine-point scale in several studies. Subsequent factor analysis of scores for the scale has failed to reproduce the four factors described by Haley et al, (Blanchard et al 1981, Felton et al 1981), further adding to the confusion. Felton et al (1981) however did find the tool useful in delineating the pattern of nurses' attitudes towards cancer and recommended its further use. The
Cancer Attitude Scale remains the most commonly used cancer attitude measure in all its forms. Since the instrument was developed nearly 20 years ago when understanding of cancer and its treatment was different to what it is today, the scale needs to be validated with different groups of doctors and nurses and results of studies using the scale interpreted with caution.

A number of approaches other than formal scaling techniques or closed questioning in questionnaires have been used in studies. For example Merenda and Clark's (1965) Activity Vector Analysis (AVA), was used by Craytor et al (1978, 1982). This allows personality descriptions to be built up from responses to an adjective checklist. Comparisons could then be made between nurses' personality descriptions of cancer and non-cancer patients. It is doubtful though that this tool which was successful in demonstrating change over time following an educational intervention is actually measuring attitude towards cancer since perceptions of personality types expressed in relation to AVA seem to be a rather narrow method of inferring feelings towards a disease. The rights to AVA analysis are held by an American Company and it is therefore not practical for British nursing research.

Other studies have compared perceptions of different diseases, frequently coronary heart disease and cancer. Groszek (1981) used responses by nurses to vignettes where the disease was the only variable to be changed in an account of a terminally ill patient. Again this indirect method of looking at nurses' attitudes/perceptions has serious methodological problems. It is impossible to extrapolate responses to a vignette to real life situations; it is also not possible to identify whether a response
to a vignette actually represents perception about cancer, rather than knowledge, confidence in dealing with different diseases, or some other aspect of the vignette. Groszek's (1981) study also only included a small sample (32 nurses) and no evidence of reliability or validity of the method were presented. Lancaster et al (1986) used a disease comparison technique to develop an attitude test for dental students and was able to demonstrate a significant shift in attitudes after a junior oncology course. The respondents were presented with 36 pairs of diseases and asked to indicate the disease in each pair they felt least comfortable encountering during practice. Their attitude was thus addressed in a comparative way rather than directly. Initially cancer was ranked behind hepatitis as the disease students felt least comfortable encountering. After the test this had moved down to fourth place. Reliability coefficients calculated for the test were lower than optimum.

This method represents an attempt to explore a further area of the attitude domain. Haley et al's CAS looked at feelings towards aggressive, early treatment and patients' ability to cope emotionally with the disease. This comparative method focused on feelings of comfort in encountering the disease and therefore measures quite different factors. Other studies using similar disease comparison techniques again failed to give evidence of reliability and validity for the tools used (Margolies et al 1983, Solodky et al 1986 and Sloan and Gruman 1983).

Solodky et al's (1986) study was interesting in that the tool used here asked subjects to rate the chances of survival and quality of life anticipated for patients suffering from cancer and coronary heart disease
on a 7-point graphic scale. This is perhaps a more accurate way of
assessing optimism or pessimism towards cancer than how accurate a
respondent is in predicting survival for different disease sites in that
there is a measure against which estimates for cancer can be compared.

Review of the literature relating to nurses' attitudes towards cancer
revealed a number of tools which had been developed for use in this area.
However none of the studies gave evidence of acceptable reliability and
validity for these instruments, and with the possible exception of Haley
et al's CAS, none had been used in replication studies. The Instruments
also were limited in their approach, were confined to assessments of
cognition and examined narrow areas of a wide and complex attitude domain.

It would seem that more innovative methods of looking at attitude are
needed than have been used to date. These should serve not only to
document nurses' attitudes but also to explain their complexities giving
indications for education and training. Moscovici (1973, 1984) has
proposed a new nomenclature for terms such as attitudes or opinion since
these are regarded entirely from the point of view of response, and
prefers instead the concept of social representations. In using this term
Moscovici recognises that there is no clear distinction between an
individual's inner world, and that of the outside world as attitude
research might suggest. Social representations function to establish an
order enabling individuals to orientate themselves and give meaning to the
outside world and to provide a code for social exchange for individuals
and groups. Thus representations serve not only to guide response but
also to interpret, and are developed not only within individuals but also,
collectively amongst social groups. For this reason Moscovici (1984)
argues that research into social representations must take into account the contexts within which studies of individuals takes place. There are obvious parallels between this and Berger and Luckman's (1967) theory of the Sociology of Knowledge. In that knowledge as defined by the authors is developed through men's commonsense understanding of his reality and is socially constructed. Thus knowledge is not necessarily that which has been established empirically, but is that which has been accepted by society as a reality. Harre and Secord (1972) have been influenced by Social Representation theory and write that most attitude research was focused on too narrowly selected sets of operations allowing the attitude scale or questionnaire to represent the concept itself. The outcome of this research they believe is that it is quite unclear what the attitude measurements mean and how they are related to other phenomena.

Since attitudes find expression in both actions and self reports, Harre and Secord (1972) emphasise an important distinction between attitudes and 'avowed' attitudes. Psychological scales and interview techniques have been primarily concerned with avowed attitudes, that is, those expressed in quiet situations between researcher and subject. Harre and Secord (1972) point out that the questionnaire method used by most researchers assumes that what shows up in respondents' answers is his or her attitude and which is relatively situation invariant. They call for attitude research which requires the participant to act out or 'avow' attitude and demonstrate genuine commitment to it. This can either be engineered by the researcher or identified during field work; then the participant should be called upon to pronounce justification of the attitude enacted or avowed. These justificatory accounts should be the substance of data
for analysis of attitude. Self-report and interpretation by the individual should be an important tool for such innovative methods. Harre and Secord (1972) put forward a method by which some of the problems identified earlier in assessing different components of attitude simultaneously could be overcome.

Fielding (1986) used this method in her study of student nurses' attitudes towards old people. Nurses were tape-recorded interacting with patients, then the nurses were interviewed and challenged about their actions. Using this method a greater depth of understanding was gained about the complex nature of nurses' attitudes towards old people. Bond (1982) used interviews with nurses to provide insight into nurses' communications with cancer patients, these interviews revealed data relating to their attitudes and beliefs in relation to the disease. With this one exception the use of such new approaches has yet to be reported in relation to nurses' attitudes to cancer.

(4.2) METHODOLOGICAL APPROACHES IN NURSING RESEARCH

The majority of research examining nurses' attitudes towards cancer have fallen within the quantitative domain of the research methods spectrum. Tools aimed at the 'measurement' of attitudes on a linear scale from optimism to pessimism in relation to the disease have been characteristic. Attitude scales reviewed earlier use a summative approach, collating scores for groups of research subjects' responses to these scales. Correlation between influential variables, and differences between different experimental groups are then tested for significance. Conclusions drawn with regard to attitudes from such measures are difficult to interpret, such studies are really most notable for their
limitations rather than the significance of their findings. The issue here appears to lie within the debate relating to methodology in nursing research. Duffy (1985) states that nursing remains a neophyte scientific discipline and that as a result of nurse researchers' struggle to gain scientific acceptability in an age of technology and objectivism, the paradigm of the natural sciences has been identified and used as the only truly scientific methodology.

It is interesting to note that the word 'scientific' has been dropped from Macleod Clark and Hockey's (1989) definition of research for the second volume of research for nursing (p.4). It would seem that there has been some evolution in approach to nursing research in the ten years since the first volume was published. While Burns and Grove (1987) give equal weight to both traditional and qualitative research methods, 'measurement' remains fundamental to their definition of research. It is this emphasis on the experimental and measurable as being essential to 'true' research which has led to a schism in nursing research and represents simultaneous shifts in emphasis and thinking within other disciplines, for example educational research, sociology and social psychology. As already stated, educational evaluation has undergone a move which has called for a more holistic approach than assessment of outcomes, ethnomethods being an important approach for sociological research; and the new social psychologists such as Moscovici, Harre and others are discussing different approaches to psychological constructs and processes, and advocate different research methods in order to examine them fully. The parallel movement within nursing research has been to focus on the product of data collection. That is whether quantitative or qualitative methods of data
collection and analysis are most appropriate. This somewhat false
dichotomy has been raging within Social Sciences for some considerable
time. Duffy (1985), Bryman (1984, 1988) and Leininger (1985) are among
recent authors to make this distinction between two poles of a spectrum
from which research design and methods can be derived. On the one hand
quantitative methods, most commonly represented by experimental research
designs, where causal relationships between variables are examined,
controlled, or removed from the natural setting in research. Here
observations are quantified and analysed to determine statistical
probabilities and the certainty of a particular outcome (Duffy 1985). On
the other hand qualitative methods seek to examine phenomena in context,
generating theory from the actor's perspective and accepts and even
encourages study designs where the researcher and subject are part of a
two way process in which understanding develops in the development of
theory.

Burns and Grove (1987) summarise the differences between the two
approaches and are shown below:

Fig. 3. **QUANTITATIVE AND QUALITATIVE RESEARCH CHARACTERISTICS**
(Burns and Grove 1987 p.36)

<table>
<thead>
<tr>
<th>Quantitative Research</th>
<th>Qualitative Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard science</td>
<td>Soft Science</td>
</tr>
<tr>
<td>Focus: concise and narrow</td>
<td>Focus: complex and broad</td>
</tr>
<tr>
<td>Reductionistic</td>
<td>Holistic</td>
</tr>
<tr>
<td>Objective</td>
<td>Subjective</td>
</tr>
<tr>
<td>Reasoning: logistic, deductive</td>
<td>Reasoning: dialectic, inductive</td>
</tr>
<tr>
<td>Basis of knowing: cause and effect relationships</td>
<td>Basis of knowing: meaning, discovery</td>
</tr>
<tr>
<td>Tests theory</td>
<td>Develops theory</td>
</tr>
<tr>
<td>Control</td>
<td>Shared interpretation</td>
</tr>
<tr>
<td>Instruments</td>
<td>Communication &amp; observation</td>
</tr>
<tr>
<td>Basic elements of analysis: Numbers</td>
<td>Basic element of analysis: Words</td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td>Individual interpretation</td>
</tr>
<tr>
<td>Generalisation</td>
<td>Uniqueness</td>
</tr>
</tbody>
</table>

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This represents a useful summary, but overly simplistic notion of the two research approaches. The labelling of the two approaches as 'hard' and 'soft' science would also seem to perpetuate the notion that analysis by numbers is of a superior quality to analysis of words. Leininger (1985) gives a more sophisticated comparison of the two, she feels that in order to discover the elusive nature of human care, methods other than those which reduce people to measurable objects independent of their historical, cultural and social contexts are required. Qualitative approaches are seen to offer a solution to this problem since such research does not seek to control or manipulate individuals or groups of people. Naturalistic and familiar data are valued and sought, in order to gain understanding of people. Quantitative research methods according to Leininger (1985) make an epistemological assumption that the social world lends itself to objective forms of measurement. Such stripping of data from its natural context poses questions about the reliability of findings since random or accidental events are assumed not to happen. In contrast qualitative approaches are felt to be concerned with understanding human behaviour from the actor's own frame of reference. (Cook and Reichardt (1979).

This bi-polar view of nursing research has arisen as a reaction to the profession's desire for acceptability by more established 'scientists' and has been paralleled in other disciplines such as educational evaluation and research. Terms which merely represent the nature of data have come to represent 'extreme paradigms' of a separatist approach (Filstead 1979). Authors feel that quantitative methods represent the logical positivist approach to research and qualitative methods the phenomenological or ethnographic approach (Duffy 1985, Mischler 1979, Leininger 1985). Bryman (1984) sees that one of the difficulties resulting from the emergence of
this bi-polar view is that there has been a tendency for philosophical issues and technical issues to be treated simultaneously and occasionally to be confused. Philosophical issues relate to questions of epistemology (that is the appropriate foundation for the study of society and its manifestations). Whereas the technical issues relate to the appropriateness of method of research in relation to one another. Bryman (1984) notes the terms 'positivist' and 'empiricist' have been used to denote the same fundamental approach as 'quantitative'; and 'ethnographic' 'interpretist' and 'constructivist' used to denote 'qualitative'. The literature therefore seems to concentrate on the distinct and incompatible nature of these two methodologies rather than the relative value of particular research techniques. Bryman (1984, 1988) is critical of the confused nature of discussions relating to these two areas of research, so that epistemological and technical discussions are used interchangeably when really these are quite separate. It would seem that a more constructive approach to these discussions would be to examine the kind of research questions most usefully answered by various research designs.

One solution proposed to resolve the developing polarity in social science research is that of combining methods, so that the advantages of each complement the other, while the inadequacies of individual approaches are offset. Leininger (1985) calls for systematic study of the relative benefits of quantitative and qualitative methods (presumably at a technical rather than an epistemological level) and Filstead (1979) feels that the purposes and outcomes of each method need to be understood and used to advantage rather than played against each other. Carter (1988) notes that in order for this to happen the view that mathematics is "the"
language of science rather than only "a" language of science would need to be rethought.

Cook and Reichardt (1979) feel that the paradigmatic perspective which promotes the incompatibility between method types is in error. This assumes that the type of method is inextricably linked to a paradigm and is so rigid that one must choose between these in order to select a method. 'Triangulation' as a research strategy has been proposed as a way forward.

Triangulation first suggested by Campbell and Fiske (1959) is the combination of methodologies in the study of the same phenomenon (Denzin 1978). Denzin (1978) describes four types of triangulation:

1) **Data triangulation:** Not only may researchers triangulate methodologies, but also data sources. That is researchers use as many different data sources as possible to examine events under analysis.

Denzin (1978) identifies 3 sub-types of data triangulation as

   a) time
   b) space
   c) person (aggregate, collectively or interactive).

2) **Investigator triangulation:** Consists of multiple rather than single observations of the same object.

3) **Theory triangulation:** Consists of using multiple rather than single perspectives in relation to the same set of objects. In this way data can be approached with multiple hypotheses in mind so that various theoretical points of view could be placed side by side to assess their relative power.
4) **Methodological triangulation:** Both within methods.

For example a questionnaire could be constructed so that it contains several scales measuring the same unit. And **between methods** using dissimilar methods to measure the same unit.

Denzin (1978) does however identify a number of problems likely to be encountered whilst conducting this kind of research. These problems include; the difficulty of finding a method by which two very different theories can be assessed; employment of multiple methods and observers has cost and time implications; and there may be difficulty of finding several methods of approaching the same problem.

Jick (1979) uses a continuum to demonstrate different levels of sophistication used in triangulation studies. The simplest of these being the use of scaling techniques to quantify qualitative measures, or use of a number of measures to assess reliability. The most sophisticated level being a more complete, holistic portrayal of the area under study. In this sense,

"triangulation may be used not only to examine the same phenomenon from multiple perspectives but also to enrich our understanding by allowing for new or deeper dimensions to emerge." (Jick 1979, p.604).

Shortcomings of this approach may include the difficulty of replication, and the danger of lack of focus to the study.

Triangulation as a research strategy has been advocated by nurse researchers. Duffy (1987) compares and contrasts quantitative and qualitative methods and calls for a "combinationist" approach in nursing
research rather than researchers remaining in purist position totally committed to either quantitative or qualitative methods. Such a combinationist approach would represent a move towards appeasement in an otherwise increasingly separatist discipline. Mitchell (1986) suggests that multiple triangulation offers flexibility and an in-depth approach that is not always available with more simple designs so long as four principles are adhered to:—

1) The research question must be clearly focused
2) The strengths and weaknesses of each chosen method must complement each other,
3) The methods should be selected according to their relevance to the nature of the phenomenon being studied; and
4) Continual evaluation of the methodological approach should be undertaken during the study.

The use of triangulation methods in nursing research has as yet only rarely been reported. For example Hinds and Young (1987), and Murphy (1989) who reports using multiple triangulation in a longitudinal disaster study. Multiple data sources were used including subjects bereaved during the eruption of Mount St.Helens in Washington in the United States; subjects who lost property; and subjects who suffered no loss were compared using multiple methods of data collection. The authors recommend the strategy as a useful method of studying traumatic life events.

Bryman (1988) feels that common technical problems facing researchers in relation to quantitative and qualitative approaches need greater recognition and states that:

"The emphasis on their epistemological separateness runs the risk of failing to give due attention to these common problems. The
recognition of mutual technical problems may also invite a questioning of whether the quantitative and qualitative research traditions really are as far apart from each other as the epistemological argument may be taken to imply." (P.112)

Many studies do not adhere to the 'purist' letter of their paradigm, so that qualitative studies use words such as frequency, proportion, smaller and larger, implying some form of measurement; and quantitative studies often insert quotes from subjects giving impressions and opinion in their own words. Thus few studies are strictly ethnographic or positivist in nature.

Bryman (1988) suggests where the two approaches may be usefully employed together:-

- Aiding decisions regarding the number of cases to employ.
- Qualitative research can be used to facilitate quantitative research by acting as a precursor, highlighting important aspects for a later survey.
- Quantitative research can be used to facilitate qualitative to generalise findings to a larger sample, or to identify groups who may warrant in depth qualitative study.
- They can be combined so that methods from one paradigm fill the gaps left by the other.
- Qualitative research may facilitate interpretation of relationships between variables.
- The two approaches may be combined so that both 'macro' and 'micro' levels of the objects under study are examined.
- They may also be combined to allow the examination of both structure
and process, the researchers and the subjects' perspective, allow cross-sectional and longitudinal data to be collected, and to both generate and test theory.

Bryman (1984) agrees that the idea of combining different methods and approaches could be a way out of the methodological parochialism seen amongst researchers who extol the virtues of particular methods whilst denigrating the alternatives. But warns that the level of argument upon which such suggestions rest has so far been on a technical level when debates regarding quantitative methods have been on an epistemological level. Researchers using such combined approaches have been guilty of oscillating between these and between levels of analysis. Bryman (1984) believes it is debatable whether it is really possible to mix methods on the basis of very divergent philosophical backgrounds.

Cook and Reichardt (1979) reconsider the link between paradigm and method, questioning whether the researcher who uses quantitative methods really is a logical positivist or the researcher who uses a qualitative approach necessarily a phenomenologist. It would appear that in much research undertaken this is not obvious. Neither are quantitative methods necessarily reductionist nor their qualitative counterparts necessarily holistic. They argue against such a strict distinction between the two methods and conclude that the attributes of a paradigm are not inherently linked to either qualitative or quantitative methods. Cook and Reichardt's (1979) notion that there is nothing to stop the researcher from mixing and matching the attributes from the two paradigms to achieve a combination which is most appropriate for the research problem at hand, this however needs applying with caution. Again the distinctions between
technical aspects and epistemological aspects of this argument are not clear in their discussion. Cook and Reichardt (1979) express the hope that the next generation of researchers will be trained in both quantitative and qualitative research traditions and will be able to use the broadest possible range of methods.

One further solution to the problems of polarity of paradigm in social science research may lie in a 'new paradigm' from which a philosophical basis for research can be derived, such as that put forward by Harre (Harre 1979, Harre and Secord 1972) and developed from the realist tradition. Logical positivism which incorporates the assumption that empirical and deductively derived evidence as the only acceptable method of deriving understanding regarding objects and events, and on which all 'safe' decisions should be based, is rejected. Dependent/independent variable methods assume that social and psychological conditions can be broken up into parts, and that the sum of such parts is equal to the whole. This approach fails to acknowledge the importance of actors' own interpretations and beliefs over and above the treatment to which they are subjected and have been emphasised in relation to attitudes by Moscovici (1984). Experiments are also rejected by the authors as creating simplified social environments, as are methods such as the descriptive survey and the assumption that research instruments are transparent, that is, that they enable the researcher to 'see' the phenomenon under study 'through' the instrument. Instead Harre (1979) and Harre and Secord (1972) call for methods that are 'intensive' rather than 'extensive' and idiographic rather than nomothetic. That is to concentrate more on the in depth study of single individuals rather than summative studies of sets of
individuals. Central to this approach is the view that the things people say about themselves and other people should be taken seriously. According to Harre and Secord (1972) explaining behavioural phenomena involves identifying the "mechanisms" which give rise to behaviour:

"We believe that the main process involved ..... is self direction according to the meaning ascribed to the situation." (p.9)

Part of the approach involves the obtaining of "accounts" or the actor's own statements about why he acted in a certain way, and what social meanings he gave to the actions of himself and others. An important tool for this therefore is ordinary language. The authors are critical of social psychologists who typically provide research participants with their own terms, usually trait-words, and then use a numerical scale to estimate how much of the trait the target person possessed. A more useful method might involve free interviews providing rich data in ordinary language. These can be analysed by use of coding systems and then treated with conventional statistics.

The criticisms of traditional paradigm research are very evident in the research relating to nurses' attitudes towards cancer. A new approach to such studies of attitude has already been described. An important part of this 'new paradigm' research is that it is not necessarily wholly qualitative in nature as proponents of the quantitative - qualitative debate might suggest. Rather it rejects the search for correlations and causal inferences and takes into account meaning and context.

The literature reveals serious methodological flaws in many of the studies regarding nurses' attitudes towards cancer. Not only have studies failed
to take into account the complex nature of attitude but they also represent the catalysts of current debate within nursing and social science research regarding the most appropriate methods and research techniques for such studies and their philosophical foundations. Solutions however are not so easy to find but may lie within strategies such as triangulation or the development of 'new paradigm' approaches to data collection and analysis.
CHAPTER 5

METHODS

The literature review generated a large number of research questions which were to be addressed by the Study and are listed below:

This chapter describes the research design, methods and procedures used in the study. Since the research was designed to move in three phases, the development and testing of the research instruments will be described and then the procedure and analysis for each of the three phases of the study will be discussed separately.

The focus of this thesis is on the third phase of the study which included a baseline investigation of the newly registered nurses' attitudes, knowledge, confidence, experience and educational needs in relation to cancer care; and an evaluation of two different educational interventions with groups of newly registered nurses in two general hospitals. However the third phase of the study evolved out of the first and second phases, during which the newly registered nurses' needs in cancer care were explored and the interventions were developed and tested. For this reason the main findings of the first and second phases of the study are presented in this Chapter and not in the main body of the results.

(5.1) RESEARCH QUESTIONS

a) GENERAL RESEARCH QUESTIONS

1) What are the Newly Registered Nurses' attitudes towards cancer and caring for patients with cancer?

2) How confident/competent do Newly Registered Nurses feel about caring for patients with cancer?
3) How much knowledge do Newly Registered Nurses have in relation to cancer care and how does this relate to their attitudes?

4) What are the Newly Registered Nurses' perceived educational needs in relation to cancer care?

5) What educational preparation have Newly Registered Nurses had in relation to caring for patients with cancer?

6) To what extent is cancer care part of the Newly Registered Nurse's role?

7) What exactly does the Newly Registered Nurse's role in cancer care constitute?

8) What are the ethos, approaches to care of patients with cancer currently held on wards in general hospitals?

9) What personal experiences of cancer have Newly Registered Nurses had and how might these affect their attitudes to cancer, and feelings about caring for patients with cancer?

10) What professional experiences of cancer care have Newly Registered Nurses had and how might these affect their attitudes to cancer and feelings about cancer care?

11) How do Newly Registered Nurses feel about caring for the terminally ill and dealing with death/how is this different from their feelings about cancer care?

b) THE EDUCATIONAL INTERVENTION

12) Is it possible to design an educational intervention for Newly Registered Nurses to meet their educational needs?

13) What kind of educational intervention might be most appropriate?

14) What are the organisational constraints on implementing an educational intervention of cancer care for Newly Registered Nurses?
15) What changes may be identified in the Newly Registered Nurse's attitudes, confidence, knowledge and competence to care for cancer patients as a result of the educational intervention?

16) What are the processes involved in any changes identified in Newly Registered Nurses?

17) What are the constraints involved in any lack of change/development identified in Newly Registered Nurses?

18) What effect on confidence and competence to care for patients with cancer does increasing experience as a staff nurse with patients with cancer have on the Newly Registered Nurse?

c) METHODOLOGICAL RESEARCH QUESTIONS

1) Is it possible to use 'attitude' as a concept in the context of this study?

2) What are the best methods for assessing attitudes to cancer in Newly Registered Nurses?

3) How valid and reliable is Haley's (1968, 1977) Cancer Attitude Scale?

4) Could a case study approach to this project have been used in retrospect, and if so, at what point were all new avenues/themes exhausted?

5) How useful is Triangulation, and the combination of quantitative and qualitative data collection methods as a research strategy?

The research questions were broad in nature and were not all addressed to the same depth by the Study.
(5.2) **THE STUDY POPULATION**

The newly registered nurse was selected as the subject for the Study for a number of reasons:-

- It was felt that newly registered nurses give "front line" care to patients with cancer in general wards.

- Previous research studies had identified that caring for cancer and dying patients, and dealing with relatives of such patients is an area that the new staff nurse finds particularly difficult and stressful (Lathlean et al 1986).

- This group of nurses receive no special education for their role in cancer care but are known to have particular educational needs at a vulnerable point in their career (Kramer 1976, Lathlean et al 1986).

- Newly registered nurses are also the focus of development programmes to prepare them for the role (Lathlean et al 1986). It was therefore felt that an additional educational input on cancer care could be accommodated within these.

- Newly registered nurses were thought to be a discrete group which would be easy to identify and follow up.

"Newly registered nurse" was defined for the purpose of this study as:-

Within 6 months of first registering as a registered general nurse with the United Kingdom Central Council of Nursing, Midwifery and Health Visiting.

(5.3) **AIMS OF THE STUDY**

The Study aimed to move in three phases:-

1) To collect baseline information on Newly Registered Nurses' attitudes, knowledge, confidence and perceived educational needs in
relation to cancer care.

2) To develop and pilot an educational package to meet these needs.

3) To evaluate the package with groups of newly registered nurses in two general hospitals, using the research design shown in Fig. 5.

The phases of the Study are shown in Fig. 4.

The three phases of the Study also allowed research instruments to be developed and piloted for the main study. Data derived from these research instruments developed during phases 1 and 2 acted as an exploratory study from which the educational package was developed. The package and procedure for the main Study was then piloted in phase 2, while research instruments underwent their third and final pilot run.

Fig. 4. PHASES OF THE RESEARCH STUDY

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploratory Study</td>
<td>Development of educational package</td>
<td>Evaluation of the educational package using research design in Fig.</td>
</tr>
<tr>
<td>57 Newly Registered Nurses from 2 general hospitals.</td>
<td></td>
<td>Including: -</td>
</tr>
<tr>
<td><strong>QUESTIONNAIRES</strong></td>
<td></td>
<td><strong>BASELINE STUDY</strong></td>
</tr>
<tr>
<td>Attitudes</td>
<td>Baseline study of 127 NRNs from 2 general hospitals</td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived competence in cancer care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Needs</td>
<td>Piloting of research instruments</td>
<td>EXPERIMENTAL EVALUATION</td>
</tr>
<tr>
<td><strong>GROUP DISCUSSIONS</strong></td>
<td></td>
<td>STUDY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of 107 NRNs (See Fig. 5) over 6 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Questionnaire study = 107</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Interview study = 79</td>
</tr>
<tr>
<td><strong>PILOTING OF RESEARCH INSTRUMENTS</strong></td>
<td></td>
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</tr>
</tbody>
</table>

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Fig. 5. THE RESEARCH DESIGN FOR THE EXPERIMENTAL STUDY

EXPERIENTIAL CANCER WORKSHOP

PRE-ASSESSMENT QUESTIONNAIRES
- Attitude Scale
- Knowledge test
- Self Ratings of competence and educational needs

FORMAL SEMINARS

POST ASSESSMENT

3 MONTH FOLLOW UP

CONTROL

PROCESS
- WORKSHOPS - TAPE RECORDED
- SEMINARS - OBSERVED
- ANONYMOUS WRITTEN EVALUATIONS OF EDUCATIONAL INTERVENTIONS

6 MONTHS
The research timetable is summarised below in Fig. 6.

**Fig. 6. THE RESEARCH TIMETABLE**

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Literature Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 1985-January 1986</td>
<td>1st pilot of Research Instruments</td>
</tr>
<tr>
<td>January - June 1986</td>
<td>2nd pilot of Research Instruments</td>
</tr>
<tr>
<td></td>
<td>Baseline Study of 57 newly registered nurses' attitudes, knowledge, confidence</td>
</tr>
<tr>
<td></td>
<td>and educational needs on cancer care.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2</th>
<th>Development of the educational package</th>
</tr>
</thead>
<tbody>
<tr>
<td>June - July 1986</td>
<td>3rd pilot of research instruments</td>
</tr>
<tr>
<td></td>
<td>Pilot run of educational interventions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 3</th>
<th>Main study</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 1986-January 1988</td>
<td>Data Analysis and write up</td>
</tr>
<tr>
<td>November 1987-May 1989</td>
<td></td>
</tr>
<tr>
<td>April 1989-February 1990</td>
<td>Preparation of thesis</td>
</tr>
</tbody>
</table>

(5.4) THE RESEARCH STRATEGY

In reviewing the literature some considerable time was devoted to methodological issues currently under debate in nursing and other related disciplines. Deficiencies in research looking at nurses' attitudes towards cancer were highlighted, and some new research strategies which have been given relatively little attention in research to date were identified. As a result of the review it seemed important to develop a clear research strategy to guide the study which could incorporate such
new approaches.

Three main concerns seem to have emerged from the literature which needed to be addressed and taken into account in the research strategy in order to achieve the aims of the study. These were:-

1) Whether this study could provide a useful strategy to help overcome deficiencies identified in both quantitative and qualitative research methods, triangulation as a research strategy was identified as a possible solution (defined in Chapter 4 page 111.

2) Current approaches to educational evaluation recommend researchers take a broad perspective which includes context, process and formative evaluations of education as well as taking into account its outcomes.

3) Theories of adult learning and continuing education (Knowles 1973, Rogers 1969, Cooper 1982) state that educational programmes should be based upon needs identified by its participants and the use of techniques which encourage active participation in the learning process.

These were incorporated into the research design. Development of the educational intervention was based on an exploratory study of newly registered attitudes, knowledge, confidence and perceived educational needs in relation to cancer care. The educational intervention itself also included participants' defining their own aims and objectives, and mutual agreement on content and form of the intervention.

While no one education evaluation strategy was adopted in its entirety a
number of different approaches were considered important so that a broad approach to the study was developed. For this reason the Third phase of the study attempted to incorporate 'illumination' 'process' and 'transaction' within a more traditional quasi-experimental research design. Thus Stakes' (1977) model of "responsive" educational evaluation was influential in developing the research design as was Parlett and Hamilton's (1972) 'illuminative evaluation'.

Triangulation of methodologies was adopted as the research strategy (Campbell and Fiske 1959). All of Denzin's (1978) types of triangulation were incorporated into the research design and are detailed below:

1) **Data Triangulation** (The use of different data sources to examine events under analysis)

Different sources of data were gathered by using 3 comparison groups undergoing different educational interventions (i.e. experiential workshop, formal seminars or control). The main source of data was the newly registered nurse and the dimension of time was incorporated so that nurses were followed over the course of their first 6 months following registration. Different data and levels of analysis were used to approach the same research questions so that data from the group of newly registered nurses were analysed in aggregate (as in a survey), interactively (that is looking at how nurses' interactions with cancer patients had affected their perception of cancer and cancer care and how the process of education occurred), collectively (as a discrete group) and individual differences both within and between persons were examined.
2) **Investigator Triangulation**

Was achieved by using two researchers in the third phase of the study. This meant that a cross over of educator and researcher roles could be built in to the research design to assess whether the educational interventions were generalisable, and to assess the effect that the combined educator/researcher role might have on the data collected. The two researchers also allowed: discussion in relation to themes arising from the data; and coding, interviewing and transcription checks to be undertaken.

3) **Theory Triangulation**

This was intended to be approached by using different methodological perspectives underpinned by their discrete theoretical and philosophical origins, within the same research study and were:

- psychometric attitude assessment techniques as well as phenomenological/ethogenic (Harre and Secord 1972) techniques
- quantitative as well as qualitative methods
- quasi-experimental evaluation as well as illuminative evaluation, and
- a large sample of research subjects with detailed study of 'cases' within this.

The difficulty in combining such opposed methods within one research design was recognised particularly as distinct polar approaches are not comfortably reconciled with each other. But concepts were drawn from each perspective and incorporated where these seemed appropriate. In this way it was felt that the relative merits of each could in retrospect be evaluated.
4) **Methodological triangulation**

Was achieved by using between method triangulation so that different approaches to measuring the same phenomenon were used.

These different approaches are shown in Fig. 7.
Fig. 7. SUMMARY OF DIFFERENT METHODS EMPLOYED IN TRIANGULATION STRATEGY

<table>
<thead>
<tr>
<th>Questionnaires</th>
<th>Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Attitudes towards cancer</td>
<td>Cancer Attitude Scale</td>
</tr>
<tr>
<td></td>
<td>Semi structured open ended questioning, Questions designed to relate closely to the 4 factors of the cancer attitude scale. Attitudes also identified at 1) MANIFEST LEVEL in responses to direct questioning, and 2) LATENT LEVEL in underlying themes emerging from data.</td>
</tr>
<tr>
<td>2) Confidence/Perceived competence to care for cancer patients</td>
<td>Perceived Competence rating scale</td>
</tr>
<tr>
<td></td>
<td>Cross checking of scale ratings with subjects during interviews Responses to questions relating to feelings of confidence and experiences dealing with patients with cancer</td>
</tr>
<tr>
<td>3) Perceived educational needs</td>
<td>Perceived educational needs checklist</td>
</tr>
<tr>
<td></td>
<td>Cross checking of items indicated on scale during interview Responses relating to questions which asked subjects to identify educational needs</td>
</tr>
<tr>
<td>4) Knowledge</td>
<td>Knowledge Test</td>
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<td></td>
<td>Self reports of knowledge during interviews</td>
</tr>
<tr>
<td>5) Evaluation of educational interventions</td>
<td>Anonymous Evaluation forms</td>
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<tr>
<td></td>
<td>Questioning at interviews regarding the interventions</td>
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<td></td>
<td>Differences in pre and post test assessments of Scale Scores</td>
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<td></td>
<td>Self reports of change</td>
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<td></td>
<td>Changes identified in latent themes</td>
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<td></td>
<td>Differences in pre and post test assessments between different research groups</td>
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<td></td>
<td>Changes identified and latent themes emerging</td>
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<tr>
<td>6) Other Data</td>
<td>Field notes and</td>
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<tr>
<td></td>
<td>Transcripts from tape recorded workshop sessions</td>
</tr>
</tbody>
</table>

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Jicks' (1979) concept of 'holistic' triangulation was employed so that not only was the phenomenon examined from multiple perspectives but a strategy to enrich understanding by allowing new and deeper dimensions to emerge was employed.

Mitchell (1986) lists the problems that researchers may encounter in attempting to undertake such in depth triangulation studies:-

1) Unit of Analysis. Mitchell suggests that a common unit of analysis is required to guide the data collection and analysis. (The study focused on the newly registered nurse), the common unit needs to be part of all aspects of the triangulation.

2) Time and money constraints. The time and money required to combine different approaches of data collection and analysis is likely to be considerable.

3) Investigator demands. According to Mitchell (1986) the investigator who wants to use multiple triangulation successfully needs a broad theoretical perspective and a broad knowledge base in research methodology, including both quantitative and qualitative methods. Also required are the ability and desire to deal with complicated design, measurement and analysis issues.

4) Data Analysis. Mitchell (1986) notes that analysis of data generated by multiple triangulation is a difficult problem that has yet to be solved. The literature provides few guidelines. Numerous questions are generated by the analysis issue such as:-

- how to combine numerical data, linguistic and textural data
- how to interpret divergent results between numerical and linguistic data
- what to do with overlapping concepts that emerge from the data and
are not clearly differentiated from each other
- whether and how to weight data sources
- whether, each different method used should be considered equally sensitive and weighted equally.

Mitchell (1986) offers two approaches to merging quantitative and qualitative data analysis. The first step for both approaches is to analyse each type of data separately according to the principles of analysis pertinent to that type of data, then either to use Multivariable Statistical Analysis (so long as the variables are conceptually distinct from one another and not highly intercorrelated) or to search for logical patterns of relationship and meanings between and among significant variables. The latter approach was felt to be the most appropriate for this study.

(5.5) **THE SETTINGS**
The continuing education departments in nursing at two large general hospitals in London were approached as initial points of contact. These were selected for convenience and as they were thought to be representative of the kinds of institutions newly registered nurses were working in. Both nursing departments were enthusiastic about the study at the outset and gave great assistance in identifying research subjects, accommodating the educational interventions and providing facilities for them. Some resistance from the "service side" of one of the hospitals was encountered during the second and third phases of the study. This was mainly due to concerns over releasing numbers of staff nurses from wards for study days during a period when a shortage of nursing staff had reached
crisis proportions. There were 150 staff nurse posts vacant in the hospital at the time of data collection.

(5.6) ETHICAL ISSUES

At the time of the study in the two hospitals, ethical clearance through formal channels was not required since it involved nurses as research subjects rather than patients. Access to the study settings was negotiated by letter and interview via the senior tutor for continuing education and director of nursing services in hospital 1, and the senior nurse for continuing education and assistant director of Nursing Services in hospital 2. Copies of the research proposal were sent to relevant staff of both hospitals and brief descriptions of the study, its aims and the educational interventions (phases 2 and 3) were distributed to sisters and ward staff. Careful consideration was given to ethical issues involved in data collection throughout the study and guidelines published by the Royal College of Nursing (1977) followed. Subjects were given written and verbal descriptions of the study before being invited to take part and were asked to give written consent before being included in the study. Further verbal consents were obtained to specific methods of data collection such as questionnaires and tape recorded interviews and group sessions. Anonymity was assured at all times and protected by the use of subject codes rather than names on all items of data and recordings of interviews and group sessions were erased following transcription. (Consent forms are shown in Appendix A.)

The development of the research instruments during the 3 phases of the study will be discussed. Then the conduct and procedure for the 3 phases will be outlined separately. A summary of the findings from phases 1 and
2 of the study will also be included within these sections.

(5.7) **RESEARCH INSTRUMENTS**

Research instruments selected for the study included:-

1) **A Self Completion Questionnaire Incorporating:**
   a) Questions relating to demographic variables found to be important in previous studies
   c) A 15-item Self Rating Scale of perceived competence to care for patients with cancer adapted from Craytor et al (1971).
   d) A 23-item checklist of perceived educational needs in cancer care adapted from Craytor et al (1971).
   e) A 20-item open ended cancer knowledge test (adapted from Robinson 1986).

2) **Semi Structured Interviews**

3) **A Self Completion Workshop Evaluation Questionnaire (Phases 2 & 3)**

4) **Tape Recorded, Researcher Facilitated Group Discussions (Phase 1).**

5) **Tape Recordings of Workshop Sessions (Phase 3).**

6) **Observation of Seminar Sessions (Phase 3).**

The development of each of the instruments will now be discussed separately.
A systematic review of the literature revealed a number of instruments and strategies which had been used in the collection of data on attitudes towards cancer. All existing tools were thought to have limitations, but it was not within the scope of the study to develop a new attitude assessment tool. It was therefore decided that an existing tool should be refined and used as part of a triangulation exercise to give a picture which was as complete as possible of the complex interplay of factors likely to influence attitudes towards cancer in nurses. Haley et al's (1968, 1977) Cancer Attitude Scale was finally selected as the most commonly used attitude assessment tool. This scale consists of 33 positively and negatively loaded attitude statements derived by factor analysis from an item pool of 600 statements. The items in the Scale fall under 3 main factors (the second factor being divided in two further sub-factors). The broad attitude areas that items in the factors relate to are as follows:

Factor I: Attitudes towards the patient's inner resources to cope with serious illness such as cancer

Factor IIa: Attitudes towards the value of early diagnosis

Factor IIb: Attitudes towards the value of aggressive treatment

Factor III: Attitudes towards personal immortality, preparation for and acceptance of death.

Haley et al (1968, 1977) failed to report estimates of the scale's reliability and validity, resting by subsequent authors as has already been noted expressed some doubts as to its reliability (Raina et al 1986, Stolman et al 1984). Madden and Dornbush (1986) unlike previous authors
undertook reliability testing for the original 33 item scale rather than a modified 18 item scale and claimed acceptable alpha coefficients for responses to the scale among different groups of medical students and doctors. These ranged from 0.41 to 0.9. The lowest scores were clustered under Factor IIa. The authors also claimed face and predictive validity for the instrument.

Limitations of the Cancer Attitude Scale were felt to include:—

- As with any attitude scale it is difficult to be sure that the items in each factor actually represent the breadth of issues arising under the factor headings so that content validity could be questioned. (Knapp 1985)

- The researcher could not be sure that the items under each factor actually measured the attitude area, so that construct validity could be questioned. This was of particular concern for items under Factor III. The researcher also did not feel that it was actually possible to score responses under attitudes towards personal immortality as either positive or negative. (Cronbach and Meehl 1955).

- Criterion related validity was reported by Madden and Dornbush (1986) and evidence was available showing consistent results from a large number of studies. It was however felt that criterion validity for the scale was still open to question (Nunnally 1978).

- The use of the 5 point Likert scale which included a mid-point of uncertain reduces the levels of measurement of a scale. While the scale yields ordinal level data, it is difficult to describe an uncertain response as being the mid-point between agree and
disagree. Neutral and uncertain categories on Likert scales as opposed to continuous scales however are reported to decrease the likelihood for central tendency, (Topf 1986).

Because of discrepant findings in previous assessments of the scale's reliability, this could not be assumed and needed careful assessment with a new sample.

(5.7.2) THE 15 ITEM PERCEIVED COMPETENCE TO CARE FOR PATIENTS WITH CANCER RATING SCALE

This was developed from a tool used by Craytor et al (1971) which consisted of a 17 item list of cancer care areas requesting respondents to indicate how important to patient care they felt the areas were, by circling an appropriate figure between 1 and 5. The respondents were also asked to tick areas they felt that nurses were less successful at carrying out. Pilot work revealed that this was a useful tool but the instructions were found to be ambiguous so a 5 point rating scale was included and respondents asked to rate themselves on a scale of 1 - 5 according to how competent they felt in each of the areas of cancer care. The amended scale is shown in Appendix B page 438.

Craytor et al (1971, 1978, 1981) do not report estimates of reliability and validity for these instruments. Since the self rating scale was refined a number of times during pilot work it was decided that reliability assessments would need to be calculated for the main study sample. Nunnally (1978) describes content validity being ensured by (1) a representative collection of items and (2) sensible methods of test construction. By these standards one can assume content validity of the scale. The items were observed to be representative as defined in the
literature although a little weighted towards psychosocial aspects of cancer care. Since most studies suggest (including Craytor et al 1978, 1981) that it is the psychosocial domain that nurses feel least competent to deal with, this would seem appropriate.

Limitations of the self rating scale include:-

- The inability of the scale to assess actual competence in cancer care. The scale only represents the subject's self assessment and therefore no inferences regarding behaviour could be made from it. Neither could it allow respondents to differentiate their feelings of competence in relation to patients with different types of cancer or stages of the disease.
- Cancer care covers a huge range of needs and problems for patients with cancer and therefore a short scale cannot hope to cover all of these items, content validity could be questioned on these grounds.
- The scale was developed for use with American nurses and no British study had reported its use.

During main study interviews subjects were asked to look at their responses to the scale at the three testings and reflect on whether what they had indicated resembled what they felt in relation to each area and to cancer care as a whole. They were also asked to reflect on the processes involved in any changes identified. A high degree of agreement was consistently found between self rated scores and responses at interview, supporting both the reliability and validity of the instrument. Test re-test reliability assessments using Spearman R tests on 7 subjects during Phase 2 of the study revealed a significant correlation between the 2 testings. \( R = 0.89. \ P = <0.005 \).
(5.7.3) **23-ITEM PERCEIVED EDUCATIONAL NEEDS CHECKLIST**

Developed by Craytor (1971), was used in its original form, with the addition of boxes for subjects to indicate their responses in. Content validity again was assured by Craytor by devising the checklist from important areas identified in the literature on cancer care. The checklist was limited by the number of areas that could reasonably be included in a scale that represented only 1 page of a questionnaire. This problem was overcome by including an 'other - please specify' category. This was found not to be needed during pilot and main studies further leading to the assumption that the checklist had content validity. Again responses to the checklist were checked during interviews for validity and clarification. One major limitation was felt to be the wording of the instructions which asked subjects to indicate what areas of cancer care they would like "additional knowledge or practice in?" This made it impossible to differentiate between the two. After much deliberation the decision was taken not to alter these instructions but to clarify the way subjects interpreted this question during main study interviews. In a minority of cases subjects reported increasing the number of areas they ticked over the three administrations because of feeling the need for more 'practice' rather than 'education' in these areas. It was not felt that this effected the reliability of the tool. Again a high degree of agreement was consistently found between the self completed educational needs checklist, and responses relating to educational needs given during main study interviews, indicating reliability and validity of the instrument. Test-re-test assessments of the checklist on 7 subjects using Spearman rank correlation tests were not significant. However the 6-week gap between the 2 testings makes the test inconclusive (Nunnally 1978).
(The check-list can be seen in Appendix B page 439.)

(5.7.4) **THE CANCER KNOWLEDGE QUESTIONNAIRE**

Robinson (1986) developed the cancer knowledge questionnaire (as part of her BSc in Nursing Studies) by working in conjunction with the author during Phase 1 of the project. The questionnaire was developed and piloted, then used to gain insight into newly registered nurses' knowledge of cancer and cancer care with 42 of the 57 newly registered nurses who took part in Phase 1. The knowledge test was designed to cover areas of cancer care which had been highlighted in the literature as part of nurses' responsibilities.

Robinson lists these areas of responsibility in cancer care amongst general nurses as:-

1) **Health education including**
   a) early warning signs of the most common cancer sites,
   b) methods of cancer prevention,
   c) methods of screening,
   d) incidence, prevalence, survival and mortality for cancer,
   e) awareness of how the media portrays cancer,
   f) understanding that cancer is curable/preventable.

2) **Understanding of cancer treatments and the needs of patients in relation to these,**

3) **Psychosocial needs,**

4) **Pain and symptom control,**

5) **The needs of the dying patient with cancer,**

6) **Changes in body function as a result of cancer.**

The knowledge test was designed to incorporate questions on each of these
areas. Robinson (1986) reported a split half reliability of 0.85 and an alpha co-efficient of 0.68 for the tool indicating its reliability. (For a detailed description of the development of the knowledge test see Robinson 1986).

It was felt that the cancer knowledge questionnaire was too lengthy and time consuming to be used as a repeated measures tool in the main study. It was therefore reduced from 30 questions to 20 and the wording of some questions was changed making them more specific and less ambiguous. The refined version appears in Appendix B, pages 440-443. Robinson's marking schedule was also abandoned for the main study because it was felt to be
- difficult to use particularly for long responses,
- it did not utilise the large amount of data derived from such an open ended tool,
- it did not take into account the incorrect responses as well as the correct and therefore might be less sensitive to change over time,
- was rather narrow and superficial.

Scrutiny of responses to the knowledge questionnaire revealed that they were illuminating and contained a great deal of data relating to knowledge, understanding and attitudes towards cancer. It was therefore decided that as little of the data as possible should be lost during the analysis process. A complex coding system was devised which allowed multiple responses to each question to be coded and entered on to a computer. From this frequencies of particular responses could be counted. Then correct and incorrect responses were identified and allocated scores and summarised. This process required two data files for the statistical
package for the Social Sciences (SPSSX), one which scored correct responses and a second which scored incorrect responses. This meant that the number of correct and incorrect responses for each question used for the total knowledge test could be compared over time. The process of coding and developing an SPSSX programme for the analysis took 5 months to perfect, check for errors, and test for reliability. Intercoder reliability was checked by comparing codes allocated to responses between two coders. Similarities and differences were noted and discussed between the two coders and then re-checked after a second 'dummy coding run'. The knowledge test coding was then undertaken by one person to prevent the problem of intercoder reliability.

Limitations of the knowledge test include:-
- Difficulty in ensuring that questions within the test adequately assess knowledge in all areas of cancer care, and to the same depth. Therefore content validity could be questioned.
- The use of open-ended questions may result in some respondents writing more than others and therefore score more, so that scores reflect length of response rather than knowledge itself.
- Using the instrument in a repeated measures design may have the effect of subjects improving their score over time because of 'practising' or 'learning' the questions (Campbell and Stanley 1963) or falsely low scores occurring in subsequent administrations of the test because of boredom with the task. However the difficulty in creating three equivalent and reliable knowledge tests was felt to be greater than the risks of subjects learning responses, or boredom.
Reliability of Questionnaire Coding

Coding reliability checks were carried out for the whole questionnaire including the knowledge test by randomly selecting 5 subjects and coding all 3 questionnaires for each subject then comparing the extent of agreement between the two coders. Percentage agreements ranged between 70.6% and 90%.

(5.7.5) SEMI-STRUCTURED INTERVIEWS

It was felt that available tools for assessing nurses' attitudes towards cancer and patients with the disease and their feelings and needs in relation to caring for them, had limitations. As already noted, there were doubts as to the cancer attitude scale's reliability. It was also felt that the questionnaire was essentially quantitative, and "closed" in nature, its validity could therefore be questioned.

In order to overcome some of these problems, to incorporate concepts of education evaluation, and triangulation of data, and to allow the areas of interest to be studied at greater depth, semi-structured, open ended interviews were conducted with nurses participating in the study.

The format of these interviews was piloted during Phase 2 of the Study a list of areas of interest was devised, of areas under which data was to be collected during the interviews. The list was derived from: areas highlighted in previous research; a number of questions which covered the themes of the Cancer Attitude Scale factors; areas relating to experiences with patients with cancer on the wards; responses to the educational interventions and the processes involved in any changes they identified in themselves, as well as a number of other areas added by the researcher.
These areas of interest were then written as questions in order to give a structure for the interviews. The instructions to the interviewers were that the questions were simply to guide the interviews. It was not essential that the exact wording be used, nor that they should be asked in sequence. Rather the subject should be encouraged to report areas/anecdotes/experiences relevant to them. In using this method the value of 'Self Report', and the 'open souls doctrine' advocated by Harre and Secord (1972) was adopted. Careful consideration was given to the imposition of structure on open-ended interviews rather than allowing these to emerge totally from the subjects. This was felt to be important so that a large number of subjects could be readily compared and also to allow triangulation between different data sources. The prior structure was still felt to permit new themes and patterns to emerge from subjects' responses to change (Miles and Huberman 1984).

The interviews were tape recorded, lasting from between 30-50 minutes each. They were transcribed by the interviewer verbatim as soon as possible following the interview. The researcher aimed to have the transcription available prior to the next interview with the subject, so that themes arising from one interview would be explored further in the next. It was felt that this technique would aid subjects to reflect on any changes that had occurred. Such techniques are advocated by Field and Morse (1985) and Miles and Huberman (1984) among others.

Two researchers conducted the interviews during the main study. Subjects were interviewed before, immediately after, and three months following the educational interventions. No attempt was made to assess reliability of
interview techniques as it was never assumed that two interviews would be the same, this was not the aim. However attempts were made to ensure that there was equivalence between the two interviewers. The researchers transcribed each other's interviews at regular intervals during the data collection period and areas of similarity/dissimilarity were discussed to increase conformity. Such techniques have subsequently been advocated by authors such as Collins et al (1988) and adhere to Miles and Huberman's (1984) concept of verification in qualitative data collection and analysis.

Since the interviews asked nurses to talk about sensitive and difficult issues, great effort was made by the researchers to build a rapport with subjects, Massarick (1981). The interviewers took an informal approach, learned question areas beforehand to reduce the need for papers, and ensured comfort and privacy for subjects during interviews. Lanier Microcassette recorders were used to record the interviews as they are small and unobtrusive. Limitations of the interviews include:

- There were difficulties in ensuring equivalence between two researchers and between interviews conducted by the same researcher. While this was not an aim for the Study, it meant that areas of questioning were not covered across all research subjects making generalisability difficult.

- Inevitable loss of data occurred through poor quality tape recording, technical failures such as flat batteries, and transcribing errors.

- The effect of researcher on interview subject particularly where researcher was also the 'educator', may have influenced in a positive direction comments about the educational interventions.
Subjects might also report attitudes and feelings that are different to their 'true' feelings because of the desire for social acceptance, (Field and Morse 1985).

Potential 'experimenter effects' (Polit & Hungler 1984) that is the effect on the subject of talking over their feelings and experiences in relation to cancer care in the research interview could in itself be therapeutic and cause change to occur within individuals. This was known to have occurred in at least two control group subjects during the main study.

(5.7.6) **TAPE RECORDED, RESEARCHER FACILITATED GROUP DISCUSSIONS**

During Phase 1 of the study, it was decided to hold group discussions with groups of newly registered nurses in order to elicit more spontaneous data relating to:

- Feelings about cancer and cancer care
- Individuals' feelings regarding their own confidence to provide cancer care
- Experiences and education they had undergone with cancer care
- Perceived educational needs
- Interest in attending some additional education.

These seminars were tape recorded and transcribed verbatim where possible. Analysis was undertaken of transcripts to identify major themes emerging from these discussions.

(5.7.7) **TAPE RECORDED WORKSHOP SESSIONS**

During Phase three of the Study the workshops were tape recorded using a Lanier Microcassette recorder. Consent for this was obtained verbally
from participants. This meant that the process of the education could be recorded, and differences between groups of participants and facilitators checked for. The workshop recordings were later transcribed verbatim where possible.

(5.7.8) **Observations of Seminar Sessions**

These included a record of the number of participants attending each (including research subjects), and field notes taken by one of the researchers regarding nature and number of interactions that occurred between lecturer and participants. This acted as a check that there was a difference in the nature of education between the two interventions. No attempt was made to assess reliability or validity of this technique. Seminar participants were also asked to make written comments about each session.

(5.7.9) **The Workshop Evaluation Form**

An open-ended evaluation questionnaire was developed and piloted during phase 2 of the study and used during phase 3 with only minor alterations. The Evaluation Form is shown in Appendix G.

(5.8) **Pilot Work**

A pre-pilot study of the questionnaire involving 8 undergraduate nurses was undertaken using a number of different instruments to assess their usefulness and ease of completion by respondents. Instruments included; those already mentioned; and 4 questions from Elkind's (1980, 81) Study, (These were retained for both Phases 1 and 2 but excluded from the main study since they did not yield a lot of additional useful data); and Laube's (1977) personal death history. The questionnaire was also
administered to two expert cancer nurses for completion and comments.
Following the pre-pilot Laube's (1977) personal death history was excluded because the questionnaire was felt to be too time consuming and it was not thought to be yielding useful data for analysis.

A revised questionnaire was then administered to 57 newly registered nurses and a third pilot which included a further 15 subjects doing a dummy run of the education interventions was undertaken. A number of changes were made to the instruments as a result of the pilot work. These were:

a) The Cancer Attitude Scale
The author wrote twice to Haley requesting further information on the Scale and specific questions relating to scaling/scoring techniques, and why particular items appeared in two of the factor scale. As no reply was received it was decided that these should be excluded in future.

Comments from the nurses demonstrated the need for more careful instructions to subjects on completion of the scale. Some found individual items rather ambiguous and questioned why items appeared twice during the same questionnaire. They assumed that this was testing their consistency in responding to the scale and were a little put off by this.

The pre-pilot respondents also seemed to have difficulty in responding to items containing the word 'aggressive' and frequently replied 'uncertain'. It was therefore decided that this should be changed to the word 'Active' for future administrations of the scale. The word 'therapeutic' was
changed to 'palliative' in keeping with current terminology, and "PAP smear" was Anglicised to "cervical smear" for item 17. Item I in Factor IIa "complete physical is usually necessary in everyday practice" and Item 2 "proctoscopic examination should be required in routine physical examination despite the difficulty and discomfort for the patient" were deleted because they were not considered relevant to nurses and 3 new items were inserted along the same theme as Factors IIa & b and with the same positive score loading. These were:

Item 12 "Teaching patients the early warning signs of cancer causes unnecessary anxiety".

Item 13 "Nurses should teach breast self examination to all women patients".

Item 23 "There is still much that can be done for terminally ill cancer patients" was inserted into 1 Factor IIb.

Item 4 Factor III: "A man can be happily reconciled to the belief in his own non-existence after death" was deleted since it was given a negative score loading in the original scale and this was not felt to be consistent with current approaches to spiritual care of the dying."

The original items of the CAS are shown in Appendix E.

Analysis of Phase 2 data included some reliability assessments of the amended scale. These included a Test-retest analysis of responses from 7 subjects. Correlation between factor scores from the 2 testings calculated using Spearman's Rank correlation coefficient were rather low and only reached the P = 0.05 level of significance for Factor IIb and were just below the level for Factor III. These results were rather inconclusive because of the length of time between testings (6 weeks).
Since Nunnally (1978) recommends test-retest analysis to be undertaken at an optimum interval of 2 weeks, it was decided that the results neither proved nor disproved the scale's reliability. It was decided that more detailed reliability and validity assessments should wait until the main study when these could be tested on a large group of nurses and scores triangulated with data from different sources. The revised CAS is shown in Appendix B, pages 437a - 438.

b) **Perceived Competence Rating Scale**
Some minor alterations to the scale's presentation and instructions were made following Phase I pilot work to make the scale easier to complete.

c) **Perceived Educational Needs Checklist**
This was retained in its original form for the main study.

d) **Group Discussion**
It was not possible to pilot the group discussions since these were designed to yield information on which the educational interventions could be based and were only undertaken early in the study. The author was still developing skills in group facilitation at this time, yet despite this the participants seemed to be very willing to express their feelings and needs in cancer care and were vocal in the discussions. This was thought to be more due to the intensity of the participants' feelings than the skill of the facilitator.

e) **Interviews**
Pilot runs of interviews were undertaken during Phase 2 of the study with
subjects. Two workshop participants, 2 seminar participants and 1 control group member. The aim of these was to:-

- Rehearse and critique the interview technique
- Assess the adequacy of the recording methods
- Assess whether new areas for interview data collection needed to be defined and allow themes to emerge from the data which may become important areas of questioning for the main study thus taking into account the 'actor's perspective' (Glaser and Strauss 1967)
- Gain some insight into workshop participants' perception of the intervention and any changes they might suggest
- Assess how acceptable tape recording was to subjects.

Subjects were very willing to agree to be interviewed and appeared comfortable during tape recording. Two subjects did however report a sense of relief when the recorder was turned off, and one subject suddenly "opened up" once the recorder was turned off. As a result it was decided that during the main study greater attention should be taken to putting the subjects at their ease and in reassuring them of confidentiality. The Control subject was felt to be more difficult to interview than those who had attended the interventions. Firstly because the time between the pre and post test interviews was short and therefore there were few new experiences or changes to discuss, unlike the Workshop participants. It was also felt that Control subjects had much less commitment to the research project since they had not gained from it in terms of education. This was worrying since it was felt that it might effect the response rate to interventions and questionnaires in the main study. During the main study great effort was made by the researchers to become friends with all research subjects which seemed to increase the commitment of the Control

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group subjects to the project and reduced loss to a minimum.

Transcription of interviews allowed the interviewer to gain insight into
her interview technique, in particular the danger of leading questions.
One new major theme was added to the areas of questioning - this was to
ask subjects "the meaning of the word cancer to them" and to compare this
to the "meaning of heart disease" since the association of cancer with
death became apparent. The list of areas derived from the interviews and
the interview questions are shown in Appendices C and D.

(5.9) PROCEDURES FOR THE PHASES OF THE STUDY

(5.9.1) PHASE 1.
Groups of newly registered nurses were approached attending standard post
registration development courses in the continuing education departments
of the two hospitals. Three such courses commenced during the period
allotted to Phase one, one in Hospital One, and two in Hospital Two. This
meant that a total sample of all newly registered nurses in the two
hospitals, registering within three months of one another were approached
for inclusion in this part of the Study. The researcher was given one
hour of the timetable with these nurses, by the respective continuing
education departments. The researcher was introduced by the groups'
course tutors, then explained the study and invited subjects to
participate by filling in the consent form and questionnaire. The
response was 100%, no subject declined to take part in the project.
Subjects then completed the questionnaire in the classroom, with the
researcher present to answer any queries; this took between 20 and 30
minutes. After all subjects had completed their questionnaires these were
collected in, and the researcher led a group discussion with subjects.
Analysis of Phase 1 Data

Since the purpose of Phase 1 data collection was exploratory in nature, to identify newly registered nurses' educational needs in relation to cancer care in order to develop the educational interventions, the approach to the analysis was descriptive.

Questionnaire data was coded, entered on to a VAXA computer, and analysed using the statistical package for the Social Sciences (SPSSX), using descriptive statistics. Transcripts from the group discussion were subjected to a content analysis and major themes identified.

A summary of their findings from Phase 1 will now be presented since they were important for the development of the educational interventions in Phase 2 of the Study.

(5.9.2) FINDINGS FROM PHASE 1 OF THE STUDY

Fifty-seven newly registered nurses were recruited to the Study, completed the questionnaire and took part in the group discussions. Table 1 shows the division of single subjects from the two hospitals.

Table 1. THE SAMPLE OF NURSES BROKEN DOWN BY POST REGISTRATION COURSE AND HOSPITAL

<table>
<thead>
<tr>
<th>Group of Newly Registered Nurses ((G_x))</th>
<th>Hospital 1</th>
<th>Hospital 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
<td>18</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17</td>
<td>40</td>
</tr>
</tbody>
</table>

With the exception of one subject in Hospital 1, all of the sample were
within 3 months of registration as shown in Table 2.

Table 2.  **LENGTH OF TIME SINCE REGISTRATION**

<table>
<thead>
<tr>
<th>Group of Newly Registered Nurses</th>
<th>&lt; 1 month</th>
<th>3 months</th>
<th>7 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital 1</td>
<td>16</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Hospital 2</td>
<td>22</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Group 1</td>
<td>-</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>Group 2</td>
<td>-</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>38 (66.7%)</strong></td>
<td><strong>18 (31.6%)</strong></td>
<td><strong>1 (1.8%)</strong></td>
</tr>
</tbody>
</table>

The majority (73.7%) of the nurses were between 20 and 25 years old. Subjects from Hospital 2 tended to be older than from Hospital 1 (Table 3).

Table 3.  **AGE OF SUBJECTS**

<table>
<thead>
<tr>
<th>Age (g≥57)</th>
<th>Hospital 1</th>
<th>Hospital 2</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-25 years</td>
<td>17</td>
<td>25</td>
<td>42 (73.7%)</td>
</tr>
<tr>
<td>26-30 years</td>
<td>-</td>
<td>11</td>
<td>11 (19.3%)</td>
</tr>
<tr>
<td>Over 31 years</td>
<td>-</td>
<td>3</td>
<td>3 (5.3)</td>
</tr>
</tbody>
</table>

The majority (79.5%) of the nurses were working on general medical and surgical wards. The remainder were working on specialist wards such as cardiology, paediatrics, intensive care, neurology. Two nurses were working on oncology wards. Eighty-six per cent of the nurses said they had patients with cancer on the wards at least occasionally.

a) **QUESTIONNAIRE DATA**

**Worries about Caring for Patients with Cancer**

Subjects were asked whether they had any particular worries in relation to
caring for patients with cancer. Forty (70.2%) mentioned specific worries, only 3 (5.3%) said that they had no worries. These worries are listed below ranked in order of the number of times each was mentioned by respondents:

(1) Communicating - 'counselling' the patient, talking to the patient or dealing with psychological problems was mentioned by 15 respondents (35% of those with worries).

(2) Pain control was mentioned by 10 respondents (25%).

(3) Problems over whether the patient knew their diagnosis was mentioned by 7 (17.5%) of respondents.

(4) Talking to relatives: 6 (15%) respondents.

(5) Worries over their own lack of knowledge about the disease and its prognosis 5 (12.5%) of respondents.

(6) Worries of death and dying: 3 (7.5%) of respondents.

(7) Not having enough time to talk to patients: 3 respondents (7.5%)

Other worries each mentioned by 2 respondents included: -
- Lack of experience
- Not enough support for staff
- The shock and difficulty of working with young patients who are terminally ill.
- Justifying painful tests, operations and treatments when prognosis may be poor.
- Easing discomfort.

Worries which were mentioned by only one respondent included: -
- Not knowing how to give care to cancer patients.
- Coping with confused patients with cancer.
- Feelings of failure with terminally ill patients.
Perceived Competence to Care for Patients with Cancer

Responses to the 15 item perceived competence to care for patients with cancer self rating scale were very similar on both Phase 1 and in the main study. For this reason results of the main study will be reported in depth in Chapter 6.

Rating of scores of each of the items revealed that giving physical care was the area nurses felt most competent in, and general areas of communication (with family, patient and physician) were ranked next. Helping the patient deal with an uncertain future and teaching early detection of cancer were ranked lowest, with talking about death and dying (ranked 7th out of the 15 items).

Perceived Educational Needs

Respondents indicated that they felt they needed more knowledge and practice in a large number of the items on the perceived educational needs checklist. Only 5 items were ticked by less than 50% of the sample. These were:

- Nursing measures to minimise or prevent complications and side effects of treatment
- Mastectomy care
- Tracheostomy care
- Colostomy care
- Ileostomy care.

The remaining areas ranked in order from the area nurses most frequently indicated they needed more knowledge or practice in are shown below:
Educational Need (Number of subjects)

Family involvement (50)
Dealing with pain (49)
Agencies to call upon for assistance to cancer patients (46)
Communicating with patients at different stages of illness (45)
Methods of early detection of cancer (43)
Death and dying (39)
Rehabilitation of the patient (39)
Interviewing techniques (35)
Problems resulting from radiotherapy (36)
Problems resulting from surgery (34)
The nature of cancer (32)
Changing attitudes of staff members to cancer (30)
Cancer as a chronic disease (29)
Diagnostic measures generally used (28)
Terminal illness - physical care (26)

More education on specific areas of physical care appeared to be felt to be needed by few subjects. Whereas psychological care, communication, early detection and pain and symptom control were areas of high perceived educational needs.

The Cancer Attitude Scale

Analysis of summed scores for the four factors of the Cancer Attitude Scale revealed a lower range of scores for Factor II B "Attitudes towards the value of aggressive treatment for cancer" suggesting that subjects held more negative attitudes towards this area. Ranges for the four factors are shown in Table 4.
Table 4  SCORE RANGES FOR THE CANCER ATTITUDE SCALE FACTORS

<table>
<thead>
<tr>
<th>Cancer Attitude Scale Factor</th>
<th>Range</th>
<th>(%)</th>
<th>Highest Possible Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (patients' inner resources to cope)</td>
<td>39 - 65 (55.7 - 92.9)</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>IIa (value of early detection)</td>
<td>15 - 28 (50 - 93.3)</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>IIb (value of aggressive treatment)</td>
<td>18 - 31 (45 - 77.5)</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>III (personal attitude to death and immortality)</td>
<td>22 - 35 (55 - 87.5)</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

Responses to Questions from Elkind's (1980, 1981) Study

Four questions relating to attitude towards cancer were included from Elkind's (1980, 1981) study to enable a comparison between the two studies to be made. Three of these questions were added to the end of the Cancer Attitude Scale and appeared as additional items where subjects indicated the extent of their agreement with statements on a 5 point Likert scale. The distribution of responses to these questions is shown in Table 5.

Table 5  RESPONSES TO QUESTIONS FROM ELKIND'S STUDY RELATING TO ATTITUDES TOWARDS CANCER

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree (%)</th>
<th>Agree (%)</th>
<th>Uncertain (%)</th>
<th>Disagree (%)</th>
<th>Strongly Disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A patient who has cancer can never be cured</td>
<td>-</td>
<td>4 (7%)</td>
<td>3 (5.3%)</td>
<td>48 (84.2)</td>
<td>-</td>
</tr>
<tr>
<td>2. Treating cancer patients can do more harm than good</td>
<td>13 (22.8)</td>
<td>20 (35.1)</td>
<td>6 (10.5)</td>
<td>12 (21.1)</td>
<td>4 (7%)</td>
</tr>
<tr>
<td>3. Treating cancer patients can help even when a cure is not possible</td>
<td>18 (31.6)</td>
<td>30 (52.6)</td>
<td>2 (3.5)</td>
<td>2 (3.5)</td>
<td>2 (3.5)</td>
</tr>
</tbody>
</table>
While this study used different response categories to those in Elkind's questionnaire, the results are comparable. Elkind found that 19% of her sample agreed that cancer can never really be cured. The newly registered nurses were much more likely to disagree (84.2%) with the statement. They were however more likely to believe that treating cancer patients can do more harm that good with 57.9% agreeing with the statement. (Only 5% of Elkind's sample believed this statement was often true). These responses also reflect the lower scores for subjects on Factor IIb of the Cancer Attitude Scale.

Elkind found that her subjects were more likely to pick cancer of the stomach as the most alarming, out of a list of 5 diseases, 44% of her sample did so. The sample in this study was notable in that overall schizophrenia, was most often selected as the most alarming disease. Respondents from the two hospitals were different on this question. Hospital 1 subjects were most likely to select cancer of the stomach as the most alarming disease, and Hospital 2 schizophrenia (See Table 6.) It is possible that different experiences of cancer and the mentally ill amongst these two groups of nurses affected their perceptions of these diseases.
The data were also analysed to assess the effects of different variables on attitudes towards cancer. Personal experiences of cancer appeared to have no affect on the likelihood of subjects agreeing or disagreeing with the statement "a person who has cancer can never really be cured," or from subjects in the older age groups. Professional experience of cancer did seem to have an effect though. 90.5% of respondents reporting a moderate or, a lot of experience of cancer nursing, disagreed with the statement compared with only 71.4% who had some or little experience. No differences were found between subjects on any of the other questionnaire responses. The small sample prevented in depth statistical analysis of relationships between variables.

**Knowledge of Cancer and Cancer Care**

During Phase 1 of the study Robinson (1986) reported poor knowledge among the newly registered nurses on all areas of the knowledge test particularly:-

- Knowledge related to health education
- Chemotherapy and radiotherapy
- Care of patients following surgery for cancer

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**Table 6  RESPONSES TO THE QUESTION "WHICH OF THE FOLLOWING CONDITIONS WOULD YOU FIND MOST ALARMING?"**

<table>
<thead>
<tr>
<th>Disease (n=?)</th>
<th>Hospital 1 (%)</th>
<th>Hospital 2 (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer of the Stomach</td>
<td>9 (52.9)</td>
<td>8 (20)</td>
<td>17 (29.5)</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>4 (23.3)</td>
<td>22 (55)</td>
<td>26 (45.6)</td>
</tr>
<tr>
<td>Rheumatoid Arthritis</td>
<td>2 (11.8)</td>
<td>4 (10)</td>
<td>6 (10.6)</td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>1 (5.9)</td>
<td>3 (7.5)</td>
<td>4 (7)</td>
</tr>
<tr>
<td>Chronic Bronchitis</td>
<td>1 (5.9)</td>
<td>2 (5)</td>
<td>3 (5.3)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>39</strong></td>
<td><strong>56</strong></td>
</tr>
</tbody>
</table>
- Pain control
- Aspects of psychological care.
b) FINDINGS FROM THE GROUP DISCUSSIONS

Themes derived from transcripts of the groups' discussions will be discussed under each of the 3 groups since there were differences found between them.

The Extent to which the Nurses were Involved in Cancer Care

The discussions seemed to reveal that Hospital 1 nurses appeared to have more patients with cancer on their wards than nurses from Hospital 2. A large number of Hospital 2 nurses had been allocated to either the radiotherapy ward or medical oncology ward during their training. As a result it appeared that Hospital 1 nurses had stories and anecdotes to tell, drawn from their experiences. In contrast Hospital 2 nurses tended to make general statements, such as "doctors don't communicate" and Hospital 1 subjects appeared to be more comfortable participating in the group discussions. A minority of nurses from both hospitals were not involved in caring for patients with cancer, for example those who were working on ITU, theatres or more rarely on geriatric or paediatric wards.

Group Discussion with Nurses from Hospital 1.

The dominant theme among the group of nurses was a feeling of inadequacy in talking to and dealing with patients with cancer and their relatives. Further probing of this by the facilitator revealed two areas of difficulty:

(1) Communication - knowing what to say and how. Subjects felt that they needed "counselling skills".

(2) Subjects felt that they lacked knowledge about the disease and the disease course. This made it very difficult for them to answer patients' questions and talk to patients with cancer.
Other themes included:

- Worries were expressed regarding how justified treatment and surgery was for patients with poor prognosis.
- Pain control for patients with cancer was generally felt to be inadequate.
- Doctors were felt often to not tell patients their diagnosis.
- Treating patients from abroad, who were clinging on to last hopes of cure were felt to be very difficult to deal with.
- Communication on oncology wards was difficult because of a lack of openness which contrasted with the hospital's radiotherapy ward.
- A number of nurses described particularly traumatic experiences they had had with patients with cancer. These obviously had a very lasting effect on the individuals encountering them, and an impression was given that there was a lack of support available for nurses whilst dealing with such cases.

Group Discussion with Nurses from Hospital 2 (Group 1)

The discussion with this group of subjects was rather shorter than the others because of shortage of time. The focus of this session tended to be on what nurses felt about the care patients with cancer received in general, rather than on subjects' personal experiences. This was partly due to the fact that it was only 2 weeks since subjects had registered and many did not yet know which ward they were going to be working on.

The main themes arising from the discussion were:

- Patients with cancer were felt to be treated "abysmally" in hospitals and do not receive the care they deserve. (This was felt to apply to other patients as well).
- Pain control was felt to be "appalling" and it was felt that patients with cancer should be cared for on specialist units.
- Psychological care was felt to be absent from care of patients with cancer.
- The nurses did not feel in a position to change care for patients with cancer.
- Some wards were felt to give patients good support.
- Nurses felt they had difficulty in communicating with doctors.
- Communicating with patients with cancer was felt to be difficult, because they did not usually know how much the patient knew regarding their condition. Because of this the nurses reported leaving it to the patient to open any discussion regarding their disease. This also applied to relatives of patients with cancer.
- Patients who cannot be cured were often felt to be ignored on the doctor's rounds.
- The nurses expressed negative feelings towards radical surgery for cancer.
- They also reported finding it difficult to talk to dying patients.

Perceived educational needs were listed as:-

- A lot on psychological care
- Communication skills
- Pain control
- Self help/alternatives to treatment

There appeared to be a general opinion that subjects had received virtually no education on caring for patients with cancer during their training.
Group Discussion with Nurses from Hospital 2 (Group 2)

Unlike the other groups in this discussion, few of the subjects focused on feelings of inadequacy in relation to cancer care. Only one subject referred to herself as personally finding caring for patients with cancer difficult. A lot of the discussion was focused on medical staff who were felt:

- Not to communicate adequately with relatives or nursing staff
- Absence of team work with doctors was noted, and patients were felt to have no choice in treatment decisions.

These nurses appeared to feel that their difficulties lay in doctors' (rather than their own) lack of skills. They saw themselves as having to collude with medical staff over "telling" patients their diagnosis. Feelings of powerlessness amongst these nurses were evident. Perceived educational needs included:

- Knowledge of the disease.
- Pain control, so that they could give more informed suggestions, and Counselling skills.
In summary, findings from Phase 1 were:-

1) Attitudes of newly registered nurses were found to be pessimistic, particularly in relation to the efficacy of treatment for patients with cancer. There was a general feeling that treatment does more harm than good.

2) Gaps in knowledge of cancer and cancer care were evident and seemed to contribute to some nurses' feelings of inadequacy regarding caring for patients with cancer.

3) Nurses from the two hospitals appeared to have had quite different experiences of cancer nursing.

4) Perceived educational needs fell into three main areas:—
   Communication skills; pain control; early detection and prevention of cancer.

5) These nurses had many worries about caring for patients with cancer. They felt inadequate because they did not know how to communicate with them and felt that the quality of care patients with cancer received from both nursing and medical staff, is poor.

6) Responses to the suggestion of additional educational input on cancer care were met with enthusiasm. No negative comments were received.
Findings from Phase 1 gave considerable insight into newly registered nurses' needs and difficulties in relation to cancer care, and also gave confidence that the demand for education in this area was great. Discussions with the continuing education departments, and directors of nursing services in the two hospitals were also helpful in deciding the amount of educational input, the number of sessions and hours of study leave which would be feasible and appropriate for newly registered nurses. Because of service needs and anticipated difficulties in obtaining study leave for this group of nurses it was decided that a short educational input was the most feasible, split into 8, 2-hour sessions, which would take place during the overlap of nursing staff in the afternoons. It was also felt that time between the sessions could be valuable, allowing participants to try out ideas and skills gained during the educational input with patients on their wards and to allow time for reading. Tuesdays and Thursdays were selected for the sessions. Within the constraints of the timing and length of sessions a theoretical approach to the educational intervention was selected.

Quinn (1980) reviews theories of learning and categorises them as follows:-

1) Stimulus - response theories (behaviourist, correctionist, associationist);
2) Cognitive theories (Gestalt theory; field theory);
3) Humanistic theories;
4) Other theories and approaches (p.15)

It is not the purpose here to give a detailed explanation of these
theories nor to review research regarding their relative merits, these are usefully described elsewhere (Quinn 1980, Cooper 1982, Huckaby 1980). Rather it is to make clear a philosophical and theoretical stance from which the educational programme could be developed. Cooper (1982) discusses the concept of continuing education in nursing and notes that in its broadest sense it encompasses all the educational activities in which a nurse engages after registering as a nurse. In reality such education tends to consist of shorter segments than traditional academic courses. Cooper also points out that the responsibility for education rests with the learner rather than the educator. For this reason continuing education sits most comfortably within humanist theories of learning. Such theories are derived from the work of Maslow (1971), Rogers (1969) and Knowles (1973) among others and incorporate concepts of self actualisation, meaningful learning, student-centred education and facilitation of learning rather than teaching into their approaches.

For some time nurse training has focused on a behavioural objectives model of education and these describe observable, measurable outcomes of instruction and have been central to curriculum design in nursing (Quinn 1980). Such methods of curriculum design have been criticised by MacDonald-Ross (1973) as being prescriptive, simplistic and limiting student development.

Traditional methods of teaching in nursing have also been criticised (ENB 1987). Such methods, which focus on the product of teaching rather than the process of learning, have also been described as the 'pedagogical approach' (Knowles 1973). These approaches are exemplified by Butler (ENB 1987):
"Teachers do the reading, the explaining, the talking, the appreciating, the devising, the planning, the problems are teacher worked, the reasons are teacher-thought-out, the formulas are teacher derived, the apparatus is teacher set-up; the causes are teacher enumerated; the beautiful is teacher praised; all that pupils do is remain passive, to listen, to copy, to memorise and finally recite or to write at a stated time what they can squeeze out of their crammed minds. The bulwark of this conception of education is the easy eating of teacher provided and prepared digested food." (P.8)

In contrast to this approach authors such as Rogers (1969) state that the only learning which can affect behaviour is self discovered learning and this cannot be directly communicated from one to another. Teaching in contrast according to Rogers is negative and inconsequential. Significant learning will only take place when the subject matter is perceived to have relevance to the learner. Learning which involves change to the self is inherently threatening to the individual and will only take place when external threats are at a minimum. Since the forms of education in this study was nurses' negative perceptions of cancer and their feelings of inadequacy in relation to caring for patients with the disease, this was felt to be important. Facilitation of learning according to Rogers (1969) occurs only when the student participates in the learning process, in a self initiated and uncritical environment. The educator within this theory does not 'teach' but facilitates the conditions under which significant learning will occur. Techniques include: providing a wide range of resources (including oneself), equal value given to intellectual and emotional aspects, facilitating learning by participating and sharing
in the learning process with the students; and using learning contracts so that pupils can set goals for themselves. The use of an intensive group experience of 10-15 people is according to Rogers (1969) one of the most effective means for facilitating such constructive learning. Within these small groups the emphasis is on the interactions among group members creating a climate of risk taking and honesty. This enables the person to recognise and change attitudes, and to test out and adopt new behaviours.

Parallel to Rogers (1969, 1983) is Knowles' (1973) theory of androgogy or adult learning. This implies that as an individual matures his needs for learning changes and he brings with him experiences and needs which must be used in the learning environment, also his capacity to become self directing and to identify his own readiness to learn increases. Within such a framework of adult education, the role of the teacher is to establish a climate conducive to learning, create a mechanism for mutual planning, diagnose needs for learning, formulate programme objectives which will meet these needs, design and conduct a pattern of learning experiences and evaluate learning outcomes, rediagnosing learning needs. Both the philosophical and theoretical foundations of Knowles' (1973) theory have been criticised for making an inappropriate distinction between adults and children and in the confused nature of his argument (Hartree 1984). Nevertheless the notion of handing back power to the student (particularly in the light of Phase 1 subjects' criticism of nursing education during group discussions) and creating an environment that is permissive and encourages individual thought and action, is useful.
Educational strategies in keeping with Rogers (1969) and Knowles (1973) are facilitated small group work, and self-directed and experiential learning. Experiential learning is described by Heron (1982) as involving the whole person and his experience using a process of reflection. Burnard (1987) makes the distinction between propositional knowledge (textbook knowledge), practical knowledge (developed through the acquisition of skills), and experiential knowledge (gained through direct personal encounters). There is an interaction between these three types of knowledge. The concept of the acquisition of expertise through experience is an important one. Benner (1984) has illuminated the nature of such expertise in nursing and the processes by which nurses develop it through their encounters with clinical situations over years of experience. Within Benner's (1984) model (described in Chapter 3) the nurses in this study were within novice, advanced beginner, and competent categories of clinical proficiency since they were developing experience in managing groups of patients and learning to react to changes in clinical signs of their patients. Their level of competence was also novice in relation to caring for patients with cancer. According to Benner (1984), at this level of competence nurses need to learn guidelines and sets of rules in order to direct decision making and interventions. They have not yet gained enough experience in patient/situation encounters to be able to identify subtle differences between patients and events, nor are they yet able to view situations in a holistic or integrated manner. Thus education tailored to meet needs at this stage of development should help identify rules and guidelines with which to meet new or difficult situations in patient and ward management, to draw on experiences previously encountered and suggest methods of applying these guidelines.
The use of simulations in which participants can practice application of skills, and use of case studies in which participants can begin to develop a more holistic approach to patient management and with which to integrate and contrast their own experiences are useful methods of teaching for nurses at this stage of professional development. Such techniques fall under the umbrella of experiential learning. Burnard (1985) outlines the characteristics of experiential learning:

- There is an emphasis on action
- Students are encouraged to reflect on their experience
- A clarifying approach is adopted by the tutor
- There is an accent on personal experience
- Human experience is a valued source of learning (p.33).

The teacher's role in experiential learning is described by Heron (1982) as raising issues about practice, asking questions about ethics, principles, values or norms of good practice applied to specific situations. These approaches based on the facilitation of learning were adopted as the strategy for the first educational intervention.

Topics and areas selected for inclusion in the interventions were derived primarily from the needs identified by subjects during Phase 1 of the study, and additional key areas were identified from the literature. Topics included, and features of the intervention are listed in Fig. 8. Appendix F gives more detail on the educational package developed and the materials, resources and references used for it.
Fig. 8  FEATURES OF THE WORKSHOP

TECHNIQUES USED

Small group work (10-12 participants optimal)
Experiential learning techniques
Role play
Discussion
Self direction
Use of library of resource materials and books
Videos
Case Studies
Games
Facilitation of Learning
Some more didactic presentations

TOPICS INCLUDED

Attitudes to cancer/personal, feelings/fears of cancer
Prevention and early detection of cancer
Patient education
Ethical issues
Pain and symptom control
Implications of cancer and its treatment
Reactions to loss and coping with cancer
Communication skills
Orthodox and complementary treatments
Staff, patient and family support
Resources available for patients with cancer
In order to promote the concept of facilitation of adult learning and to produce the Rogerian 'intensive group experience' both the room and 'scene' for the education were carefully chosen and arranged. This involved:

- Choosing a small discussion style room where there were comfortable chairs and a coffee table
- An informal relaxed atmosphere was created by the use of first names. A kettle, coffee and tea were provided and participants were encouraged to help themselves to drinks whenever they liked even if it meant interrupting the session.
- One part of the room was set aside to become the "resource library". This comprised a large number of books, articles and pamphlets on cancer care. These could be borrowed at any time by the participants.
- Hand-outs of relevant articles, pamphlets and resource materials were prepared for most sessions so that it was not necessary for participants to take notes. This also meant that participants had literature covering more theoretical aspects of cancer care to refer to later. These handouts were also used as teaching aids to facilitate discussion or illustrate particular points in some sessions, and were used as resources for group activities in others.
- Ground rules were set at the commencement of the workshop ensuring confidentiality, making it clear that participants' presence was entirely voluntary, and suggestions to protect individuals during group work were made.
- Techniques to create the 'group experience' were used such as icebreaker games and exercises, and facilitation of self revelation and expression.
Great care was also taken by facilitators to ensure safety and protection for participants during group work, by facilitating a supportive and permissive environment, using de-briefing techniques and closing exercises, and ending participants' revelations on a positive and constructive note.

The end of the group experience was 'closed' by the facilitation of a 'closing circle' which acted as a rite of passage out of the workshop setting and back to the 'real world'.

Facilitators of the workshops had undergone training in the use of small group work techniques.

**INTERVENTION 2 (The Seminar)**

The second educational intervention was designed to be broadly similar to the first, covering similar material, and using the same educators. These were however designed as a seminar programme using formal, didactic teaching techniques and taking place in a large lecture theatre or classroom. These were again designed to be easy for nurses to attend, not requiring large amounts of study leave. They were designed to take place during the overlap of staff in the afternoon. Research subjects as well as any staff from the two hospitals were invited to attend.
(5.9.4) THE PROCEDURE FOR PHASE 2 OF THE STUDY

The 'dummy run' of the educational interventions was planned to take place during July and August of 1986 in Hospital 1. Two groups of newly registered nurses attending their post registration development courses were recruited using the same procedure as Phase 1, after being recruited for the study, they completed their pre-test questionnaire, and were also invited to take part in some further education on cancer care. The educational interventions had been approved by the hospital education committee (consisting of nurse managers and educationalists) and study leave guaranteed for participants by nurse managers.

The response to the offer of cancer education was great. Out of a sample of 32, 26 (81.3%) requested further education. The researcher contacted nurse managers by letter and telephone to arrange study leave so that subjects could attend the interventions. Considerable difficulty was encountered in obtaining study leave for subjects, so that only 6 (23.1%) were granted leave for the cancer course. Commitment to allowing staff nurses time for further education appeared to be of greater priority on some wards than others. A number of nurse managers were having problems maintaining staffing levels on wards during an acute shortage of trained nurses in the hospital, and other nurse managers felt that they had not been given enough time to plan for nurses' absence by the researcher. These difficulties surprised the researcher since the course had been planned to run during the overlap of morning and afternoon shifts.

The seminar programme was offered to all of those nurses who wished to attend the cancer course but had been unable to obtain study leave (20 subjects). Three nurses attended these from the research group and in
addition a further 5 to 15 nurses from the hospital and community attended each of the seminars.

Following the intervention and again 3 months later, all subjects were sent the second questionnaire with a stamped addressed envelope for its return. Five subjects (2 course participants, 2 seminar subjects and 1 control group member) were interviewed prior to, and following the interventions. This acted as a pilot study for the interview technique and to gain some feedback on the cancer course and seminar programme. The questionnaire response rate was found to be poor following the interventions at less than 50%. It was decided that for Phase 3 questionnaire and interview studies should coincide, so that subjects would be sent the questionnaire prior to being interviewed and subjects could then be reminded to return it during the interview. A contributory factor to the poor response rate was a 22.2% drop out of research subjects during the pilot study due to mobility of newly registered nurses moving away from their training hospital. This high rate of sample attrition was predicted as a problem for Phase 3 of the study.

The 5th subjects participating in the cancer course did not attend all of the course sessions. The number of subjects attending individual sessions ranged from between 3 and 5. Reasons for non-attendance included high workload of the ward, night duty, ill health and annual leave. This inconsistency of attendance was a problem for both the cancer course and the seminars. One of the course participants commented on the difficulties of attending the cancer course in her anonymous course evaluation:

"The one thing which I felt was not ideal was the arrangement of the
study days .... attending such a course after working on the ward all
morning did not always lead to a clear, responsive mind to the topics
to be discussed. I feel it would be more beneficial to have whole
study days if at all possible."

Similar comments were received from the other participants.

After the difficulties that were encountered in obtaining study leave for
nurses, and the problems course participants faced in attending study
afternoons, a meeting was requested with the nurse managers at Hospital 1
to ask their advice on future courses. The researcher had rather naively
assumed that nursing education and nursing services worked
collaboratively, communicated well with each other, and therefore the
continuing education committee’s approval and meetings with key personnel
was sufficient. Unfortunately this was not the case and the researcher
faced considerable hostility from two of the nurse managers at the
meeting. The researcher asked for advice from the nurse managers as to
the best way to organise the course so that staff nurses could attend.
The nurse managers suggested that the course should run as 3 consecutive
study days, rather than afternoon sessions, feeling that this was easier
to plan for off-duty quotas. They also requested that nurses themselves
request study leave (rather than the researcher) and that nurse managers
complete a form giving written, signed consent for it. The researcher was
happy to comply with this suggestion.
(5.9.5) PHASE 2 ANALYSIS AND FINDINGS
The poor response rate to post education questionnaires, and the high
mobility rate amongst subjects meant that there were only pre and post
test questionnaires available for analysis for 6 course members and 3
control group members making comparisons between research groups
difficult. No consistent pattern of changes in scores for the Cancer
Attitude Scale, the perceived competence to care for patients with cancer
self rating scale, the perceived educational needs checklist or the
knowledge test were evident for control group members or course
participants. It was therefore decided that detailed analysis should wait
until Phase 3 of the study.

Interviews conducted pre and post intervention with the five subjects were
transcribed verbatim and subjected to content analysis which focused on 4
main areas:-
- Comments relating to the educational interventions and any changes
  which might be suggested by participants.
- Evidence of change relating to feelings regarding caring for
  patients with cancer (self reported change and evidence from latent
  themes).
- Processes reported in any changes identified by subjects.
- Data relating to the conduct of the study which only require
  changing for Phase 3.

The two course members were on the whole very positive. The main
recommendation being a request for whole study days rather than afternoon
sessions. They both had useful comments regarding individual sessions
which were helpful in 'fine tuning' of the workshop designed for Phase 3.
Both subjects felt the course had stimulated their interest and had made them more aware of the needs of patients with cancer.

For example one of the course participants said:

"I think more positively about it now. I think in terms of what treatment they are having rather than what is their prognosis. I still think, if I knew more there would be areas where I could feel more positive. I don't immediately think of them dying now, I think what is their treatment?"

One area that the researcher was particularly interested in were comments regarding the use of experiential learning techniques since these were thought to be new to subjects and that many nurses disliked techniques such as role play. A comment from the second course participant was useful here, she described her previous experiences of role play as "hopeless" and said:

"We didn't do it that often but whenever we did it seemed to be against everybody's will having to do something we didn't want to do about a subject we didn't want to do, it just seemed like we didn't achieve anything at the end of the day, we'd get fed up with it or embarrassed or you know ... but I didn't feel that about this."

Researcher: "What do you feel was different?"

"Maybe it was just a question of everyone sitting down on an equal level with a cup of tea which immediately made me feel more relaxed, as opposed to a person standing up at the end of a room and you've got desks between you all and it's them and you situation."
While this subject found the role play a little unrealistic, she felt no reluctance to take part.

Interviews with the two seminar group members were difficult to interpret since they had only attended three of the seminars between them. One of the subjects felt she had a little more knowledge regarding pain control following attending a seminar on the subject, and was more confident in dealing with the terminally ill but put this down to recent experiences on the ward. The second subject felt she had not changed in any way.

The researcher was concerned with the interview with the control group subject, since it felt rather awkward that there was little since the previous interview and no changes were identified. It was felt therefore that for the main study, control group interviews must be made to feel rewarding and useful for the subjects taking part.
PROCEDURE FOR PHASE 3: THE MAIN STUDY

The research design for Phase 3 is shown in Fig. 9. The sample for the main study was recruited as for Phases 1 and 2. Post registration development courses were attended by the researchers from August 1986 to June 1987 (8 in all). Subjects were offered some additional education on cancer care, invited to take part in the study, and informed written consent was obtained.

After experiences already discussed regarding the difficulty of obtaining study leave for newly registered staff nurses, the researchers attended a nursing management liaison meeting in the second hospital to seek advice on the best way to gain approval for the course and study leave. The same proposals as had been requested in Hospital 1 were put forward as a procedure for obtaining study leave. The nurse managers in Hospital 2 were enthusiastic. While workshops in Hospital 2 were never over-subscribed, it appeared to be easier to obtain study leave for nurses. However the proportion of the total number of nurses wanting additional education on cancer and who were also able to obtain study leave was small in both hospitals. Because of these difficulties it was clear that random allocation to the three research groups was not going to be possible, instead the workshops were filled first, and all other nurses were invited to attend the seminar programmes and permission for them to do so requested from ward sisters and nurse managers. Those who attended neither educational intervention were followed up as the control group.

The educational evaluation study was comprised of two main parts:-
1) **The Baseline Study.** This included all the nurses recruited from post registration development courses (100%), a minority of whom did not want further education on cancer; and

2) **The Experimental Evaluation Study.** This was a quasi-experimental study where all nurses who wanted additional education for cancer care were divided retrospectively into 3 groups:
   - Those who attended the 3-day experiential cancer care workshop
   - Those who attended at least one of the formal seminars
   - Those who did not attend either of the educational interventions who were willing to take part in the evaluation study.

A number of factors (other than random allocation) determined which research group they entered.

- A number of nurses at recruitment stated that they wanted to attend the workshop but were unable to for a number of reasons, for example holidays and other engagements. These nurses were automatically invited to attend the seminars and study leave negotiated for these.
- If there were several nurses working on one ward it was unusual for more than one to be released to attend the workshop. The others were then offered the seminar programme.
- Nurse managers made the arbitrary decision as to whom should attend which form of education.
- Some wards were reported to be too short of staff to spare a staff nurse for the workshop.
- In other wards nurse managers actually felt that the education had
no relevance to the ward specialty (e.g. cardiothoracic) and therefore would not release nurses for study leave. Others were not granted leave because they were working their notice or were felt to be too junior.

Any nurse who did not attend either educational intervention was described as a "control" and followed up as a comparison group. It is clear that sources of bias could have entered the study because influences other than chance determined research group allocation.

(a) **TIMING OF DATA COLLECTION**

**Pre-test/Baseline Study**

Questionnaires were administered as already described by the researcher during a session with each group of newly registered nurses on their post registration development course. Questionnaires were returned to the researcher at the end of this session.

**Interviews**

Subjects were then contacted individually by telephone and interview appointments booked with them. These took place on wards the subjects were working on, in a variety of quiet and private places ranging from Sister's Office to the bathroom! Subjects were asked to seek permission for the researcher to interview them on the ward from the ward sister prior to the appointment. The researchers also made an effort to introduce themselves to ward staff and give them information on the study and educational interventions wherever possible.
Questionnaires were completed 2-3 months prior to the subjects attending education and the other interviews within 1 month. Prior to the education, two researchers conducted the interviews, completing the interviews for all subjects was difficult and time consuming. Appointments were often difficult to arrange because of days off and night duty. Interviews consequently took place during afternoons, evenings, and occasionally at weekends. Some non-response occurred simply because researchers were unable to arrange an appointment during the time available.

Post Test

Questionnaires (and workshop evaluation forms) were given to workshop participants in the last session of the workshop. Seminar and control group members were personally delivered or sent their post test questions to coincide with the end of the educational programme (i.e. 4 weeks after the end of the pre-test). Wherever possible questionnaires were collected at post test interviews, or subjects were given a stamped addressed envelope for its return. This latter method was used as little as possible because of the problem of non-response.

Interviews. Appointments were arranged as before, as soon as possible following the workshop or 4 weeks after the pre-test for the other research groups. Similar difficulties over arranging appointments were encountered which meant that there could be considerable differences in timing of interviews after the interventions between subjects. Questions were included during interviews to take this into account.
Follow-up

Questionnaires were delivered personally or sent to subjects 3 months following the educational interventions, and interview appointments arranged as before, as soon as possible. Questionnaires were collected as for the post-test. The researchers found that nurses needed to be interviewed prior to reaching six months post registration, since many left their training hospital soon after this date.

The data collection required considerable commitment by research subjects. Questionnaires were lengthy, repetitive and time consuming, and interviews demanded time from them. Commitment to the project was encouraged by the researchers who worked hard to become 'friends' with subjects and show interest and support for them. At the end of the project the researchers frequently found themselves giving career guidance to subjects, and a number of them have kept in close contact with the researchers since the project ended. A similar approach was taken with ward staff.

(b) THE EDUCATIONAL INTERVENTIONS

The educational interventions and therefore research design shown in Fig. 9 were repeated five times in the two hospitals, three times at Hospital 1 and twice at Hospital 2. The seminar programme was abandoned at Hospital 1 following the second seminar programme due to lack of attendance. A typical seminar programme is shown in Appendix H.

Two possible limitations of this research design were identified. Firstly it was felt that while the roles of educator and researcher were kept separate as far as possible, this was a potential source of contamination of results. Secondly it was felt that any difference detected between
Fig. 9. The Research Design and Timetable

Hospital

A

187

Hospital

B

1986 1987
subjects attending the interventions and the control group subjects could be due to some unique characteristic or skill of the educator rather than the intervention itself. A number of strategies were therefore incorporated into the research design in order to detect any influences of these two sources of bias on findings. These were:--

- A cross-over of educator and researcher so that the educator and researcher roles were separated and undertaken by two different individuals for the fourth and fifth workshops and concurrent seminar sessions. The second facilitator was trained in the techniques used and was careful to model her style and content of the workshop on the first facilitator.

- Tape recording of workshops and observation of seminar sessions were undertaken so that methods of teaching and processes of education could be scrutinised for differences.

- Anonymous evaluation forms were administered to workshop participants.

- Interview transcripts and test scores for subjects from all five groups were compared for differences in scores and response.

(c) ANALYSIS

Analysis was undertaken in two parts:--

1) The Baseline Study. This explored all areas under investigation in depth as they occurred in the newly registered nurses prior to any intervention in order to obtain a picture of what it was like for these nurses to care for patients with cancer and the extent to which their training had prepared them for this role.
2) **Experimental Evaluation Study.** This compared data from all sources pre, post and 3-months following the educational interventions and looked for differences between research groups, and within groups and individuals over time.

**QUESTIONNAIRE DATA**

A coding framework for the questionnaire data was devised and data coded and coding reliability checks carried out as already described in Section 5.7.4. The data was entered on to a computer and analysed using the Statistical package for the Social Sciences (SPSSX) after checks for errors in data entry had been undertaken and the data declared "clean". Missing data was inevitable in a longitudinal study where non-response and mobility of research subjects occurred. The sample therefore diminished over time and this was taken into account during interpretation of results. Non-parametric statistical tests were used since the data were ordinal in nature. Medians were used as measures of central tendency and range as the measure of dispersion.

**Interview Data**

The interview transcripts contained a very large amount of rich data under the category list. This data needed to be reduced into manageable areas for analysis (Miles and Huberman 1984). Areas of the data which fell under particular themes were therefore identified using the list of areas in Appendix D and coded so that they could be lifted from the transcripts and analysed separately. The steps in the stages of analysis were as follows:-

(1) Verbatim transcriptions were made of tape recorded interviews
Major themes were coded using interview category codes.

Passages, quotes and summaries under each theme were lifted for all subjects onto data matrices. These were arranged by subject and theme for the baseline study and using time ordered matrices (Miles and Huberman 1984) for the experimental evaluation study.

Each major theme or area was then further coded according to themes which emerged from these data areas.

Themes, patterns and categories and the relations between these were noted. Judgements of the relative importance of themes, patterns and variables were confirmed using counts of the frequency of their occurrence among subjects (Carney 1972, Miles and Huberman 1984).

A distinction was made between manifest themes (phrases, descriptions and terms central to the research topic) and latent themes (significant meanings) in the data (Field and Morse 1985), as were indigenous and analyst constructed typologies (Quinn Patton 1987).

For the experimental evaluation, using time ordered matrices (Miles and Huberman 1984) key variables and themes were compared over time across subjects from the three research groups. Themes emerging which indicated change over time among subjects, were coded, as was the direction of change (e.g. positive change, no change, negative change). Counts of the number in each category of change then compared across the three research groups.

Validity of judgements made regarding how themes applied to excerpts from the data were checked out with individuals not undertaking the data analysis. This was only possible with small, focused areas of the data analysis but confirmed to the researcher that judgements were valid. (Reason and Rowan 1981).
One area of the interview data was analysed on a different level. This was the category relating to nurses' experiences with patients with cancer. The nature of nurses' experiences with cancer was felt to warrant detailed attention. These experiences were analysed by collating experiences and perceptions surrounding them for the whole group rather than by subject. The steps in this analysis are described in Chapter 7.

Quotes from interview transcripts felt to represent the spirit of themes which emerged from data were selected for use when presenting results and can be found in Chapters 6 and 7. (Full transcripts from one workshop subject are shown in Appendix I.)

Other Sources of Data

A more superficial content analysis of themes and frequencies of their occurrence was undertaken for workshop evaluation forms, with the seminar group's comments, workshop recordings and field notes.

(d) UNITS OF ANALYSIS

1. The Baseline Study. The unit of analysis used for the baseline study was individual items of the scales, checklists, and knowledge test used in the questionnaire rather than summed scores. This was because the relative importance of each item was required to gain insight into nurses' needs in relation to cancer care and since there was no 'norm' established for scale sums against which subjects would be measured. These units were assessed across the whole group of newly registered nurses. Inter-subject differences were analysed by selecting key variables to compare for the effects
of these, between individuals and aspects of cancer care. Intra-subject differences were addressed during interviews, particularly whilst analysing the effects of particular cancer experiences on individual subjects.

(2) The Experimental Study

Units of analysis included:

(A) The Group.
- Item, and total scale scores were assessed for differences between the research groups for the 3 test administrations and changes within each of the research groups over time.
- Change scores were calculated for item and total scale scores for subjects over the 3 tests (and were assessed for differences between the research groups.)
- Interview themes and indices of change in subjects were counted and compared across the research groups.

(B) The Individual
- Interview themes, indices of change and processes involved in change were compared within individual and between individual subjects over the 3 interviews, and across the research groups.
- Total Scale Scores were compared within and between individuals, and between and within the research groups for the 3 test administrations.

These units of analysis were utilized to allow maximum triangulation of data from different sources. These were set side by side each other and findings from different sources compared and contrasted for similarities and dissimilarities during analysis.
Exploiting the data for all units of analysis and all sources of data was intense, time consuming and produced a large volume of results. It was therefore not possible to present all of these in this thesis. The intention has been therefore to present all major sections of results which meet the aims of the study. Details of statistical analysis applied to the data will be presented in Chapter 7.

ASSISTANCE WITH THE RESEARCH

The author received some help with collection of the data for the study. A second researcher helped undertake approximately one-third of the interviews and facilitated the fifth workshop and seminar programme lectures. The second researcher also helped with data coding and data entry on to the computer. The author designed the study and educational interventions, set up the study in the two hospitals, identified and approached the sample, collected the majority of the data, and undertook the data analysis.
RESULTS

INTRODUCTION

Results presented in this section are from Phase 3 of the study. (For clarity Fig. 10 again shows the phases of the research study.)

Fig. 10

<table>
<thead>
<tr>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploratory study of 57 RN's from 2 general hospitals.</td>
<td>Development of Educational Package.</td>
<td>Evaluation of the Educational Package including:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapter 6 Baseline Study</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Questionnaire Study = 127 RNs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interview Study = 68 RNs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chapter 7 The Evaluation Study</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre, post and 3 months following educational interventions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Questionnaire Study = 107 RNs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interview Study = 79 RNs</td>
</tr>
</tbody>
</table>

Eight sets of newly registered nurses in the two research hospitals were approached whilst attending post registration development courses. They
were given a detailed explanation of the study, invited to take part in
the research, and offered some additional education on cancer care. All
127 nurses approached in this way agreed to take part and completed the
baseline study questionnaire.

Twenty (15.7%) of the newly registered nurses declined the offer of
further education on cancer care and took no further part in the research.
Their baseline study questionnaires were however retained and included in
the baseline analysis so that comparison between nurses who accepted the
offer of education and those who did not could be undertaken. For those
subjects who took part in the educational evaluation study, these baseline
questionnaires were analysed as pre-test data, prior to the educational
interventions. Post-test and 3-month follow-up questionnaires were
administered to these subjects subsequently.

Some inevitable sample attrition largely due to the mobility of nurses
away from their training hospital occurred prior to the educational
evaluation study, so that of the 107 subjects who accepted the offer of
additional education on cancer care, 93 (86.9%) subjects remained and were
sent the second (post-test) questionnaire.

It was hoped that all 107 subjects would participate in the supporting
interview study. Fourteen (13.1%) did not for a variety of reasons. Two
(1.9%) did not consent to be interviewed. Of the remainder, 5 (4.7%)
while not explicitly refusing consent to be interviewed, declined to take
part by never being available for interviews. It became impossible to
interview the remaining subjects for reasons such as leaving the hospital
before the researcher managed to contact them, or sickness. One subject was interviewed but her interview transcripts were inaudible. This left a non-random sample of 79 subjects who took part in the interview study by completing at least one of the 3 planned interviews.

Sixty-eight subjects had data available for the first of the 3 interviews, and 74 the second and third interviews. Missing data arose due to researchers being unable to contact and interview them in the time allocated, and due to technical failures such as poor quality tape recordings.

Pre-test interview responses were analysed in depth as part of the baseline study and were re-examined for differences between members of the three research groups for the educational evaluation study.

Since interviews were semi-structured and open-ended, not all areas of questioning were systematically covered across all subjects or for all three interviews. For this reason under each section presenting results from interviews the number of subjects who had responses available for analysis is stated and does not necessarily correspond to the total interview response rate.

Results will be presented in the following chapters and sections:

CHAPTER 6 THE BASELINE STUDY

(6.1) The Sample

(6.2) Newly registered nurses' preparation to care for patients with cancer

196
6.3) Newly registered nurses' attitudes towards cancer

6.4) Newly registered nurses' experiences of cancer.

CHAPTER 7  THE EDUCATIONAL EVALUATION STUDY

(7.1) Questionnaire Data

(7.2) Interview Data

(7.3) Triangulation of Questionnaire and Interview Data

(7.4) Participants' evaluation of the Workshops and Seminars

(7.5) Analysis for other influential differences.
THE EXPERIMENTAL BASELINE STUDY

(6.1) THE SAMPLE

The 127 newly registered nurses who agreed to take part in the study and completed the first questionnaire included both nurses who opted for further education on cancer care and the 20 (15.7%) who declined it. This allowed an opportunity to develop an understanding of nurses' attitudes, knowledge, feelings, experiences and needs in relation to caring for cancer patients from a group which was felt to be representative of nurses as a whole at this vulnerable point in their careers.

There were two main sources of data for this baseline study:

1. **Questionnaire Data (N = 127)**

   There was a 100% response rate to the baseline questionnaire.

2. **Interview Data (N = 79)**

   Sixty-eight baseline interview transcripts were available for analysis (86.1% of interview sample). (53.5% of total sample).

   The 11 missing transcripts can be accounted for by subjects not available for the first round of interviews but who were interviewed post test and for follow up, or where interviews were lost due to poor quality recording rendering them inaudible for transcription.

One hundred and twenty-seven nurses were from 8 sets of newly registered nurses undertaking post registration development courses. A breakdown of the sample's characteristics is shown in Tables 1 to 7:-
### Table 7. The Sample Broken Down Into Hospital and Set Undertaking Post Registration Development Courses

<table>
<thead>
<tr>
<th>Set of Newly Registered Nurses</th>
<th>Hospital 1</th>
<th>Hospital 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>59 (46.5%)</strong></td>
<td><strong>68 (53.5%)</strong></td>
</tr>
</tbody>
</table>

### Table 8. Proportion of Sample Opting for Further Education on Cancer

<table>
<thead>
<tr>
<th>(n=127)</th>
<th>Opted for Education</th>
<th>Declined Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital 1</td>
<td>49 (83.1%)</td>
<td>10 (16.9%)</td>
</tr>
<tr>
<td>Hospital 2</td>
<td>58 (85.2%)</td>
<td>10 (14.7%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>107 (84.3%)</strong></td>
<td><strong>20 (15.7%)</strong></td>
</tr>
</tbody>
</table>

### Table 9. Proportion of Sample Available for Education and To Take Part in Interview Study

<table>
<thead>
<tr>
<th>(n=127)</th>
<th>Available for Education</th>
<th>Took part in Interview Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital 1</td>
<td>48 (81.4%)</td>
<td>39 (66.7%)</td>
</tr>
<tr>
<td>Hospital 2</td>
<td>45 (66.2%)</td>
<td>40 (58.8%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>93 (73.2%)</strong></td>
<td><strong>79 (62.2%)</strong></td>
</tr>
</tbody>
</table>
6.1.1 THE DEMAND FOR FURTHER EDUCATION ON CANCER

As can be seen from Table 8, the demand for education was great, the majority (84.3%) requesting it. Of the 20 (15.7%) who declined the education, variables such as: previous experiences of cancer and cancer nursing; the absence of cancer patients on the ward they were working on; worries about caring for cancer patients; age; educational background; ward; or personal experience of cancer; did not appear to have any effect on their likelihood to request more education on cancer care.

However the two nurses who were working on recovery and casualty did not request more education on cancer as they did not feel it was relevant to their work. It would appear that the nurses opting for further education on cancer were very similar to those who did not. Evidence from field notes suggest that not being available to take part in the study, feeling they had other commitments, and that cancer was not relevant to their current work were involved in nurses' decisions not to opt for the educational interventions.

"Availability for education" determined whether the 93 nurses took part in the evaluation study and which research group they were allocated to. Of these nurses, all of whom were available, were approached to take part in the interview study and only 2 nurses declined to be interviewed. The remainder were unobtainable for interview for a variety of reasons which will be discussed in Chapter 7.
(6.1.2) **AGE**

Table 10. **AGE OF SAMPLE SUBJECTS**

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 25 years</td>
<td>104 (81.9%)</td>
</tr>
<tr>
<td>26 - 30 years</td>
<td>20 (15.7%)</td>
</tr>
<tr>
<td>Over 30 years</td>
<td>2 (1.6%)</td>
</tr>
</tbody>
</table>

As expected, the majority of the nurses were between 20 and 25 years of age.

(6.1.3) **SEX**

Table 11. **SEX OF SAMPLE SUBJECTS**

<table>
<thead>
<tr>
<th></th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>7 (5.5%)</td>
</tr>
<tr>
<td>Female</td>
<td>120 (94.5%)</td>
</tr>
</tbody>
</table>

The number of males in the sample was slightly less than the national average of 10% (UKCC 1990).

(6.1.4) **EDUCATIONAL BACKGROUND**

Table 12. **EDUCATIONAL BACKGROUND OF SUBJECTS**

<table>
<thead>
<tr>
<th></th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 year RGN training</td>
<td>106 (83.5%)</td>
</tr>
<tr>
<td>Graduates + Shortened</td>
<td></td>
</tr>
<tr>
<td>RGN training</td>
<td>14 (11.0%)</td>
</tr>
<tr>
<td>Graduates in Nursing</td>
<td></td>
</tr>
<tr>
<td>Studies</td>
<td>7 (5.5%)</td>
</tr>
</tbody>
</table>

16.5% of subjects were graduates and accounted for the majority of nurses...
in the older age groups.

(6.1.5) WARD

Table 13. WARDS SUBJECTS WERE WORKING ON

<table>
<thead>
<tr>
<th>Ward</th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Medical</td>
<td>27 (21.3%)</td>
</tr>
<tr>
<td>General Surgical</td>
<td>27 (21.3%)</td>
</tr>
<tr>
<td>Orthopaedic</td>
<td>12 (9.4%)</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>11 (8.7%)</td>
</tr>
<tr>
<td>Ophthalmic</td>
<td>7 (5.5%)</td>
</tr>
<tr>
<td>Cardiothoracic</td>
<td>6 (4.7%)</td>
</tr>
<tr>
<td>Neurology</td>
<td>6 (4.7%)</td>
</tr>
<tr>
<td>Intensive Care</td>
<td>6 (4.7%)</td>
</tr>
<tr>
<td>Geriatric</td>
<td>4 (3.1%)</td>
</tr>
<tr>
<td>Paediatric</td>
<td>4 (3.1%)</td>
</tr>
<tr>
<td>ENT</td>
<td>4 (3.1%)</td>
</tr>
<tr>
<td>Communicable Diseases</td>
<td>3 (3.4%)</td>
</tr>
<tr>
<td>Short Stay</td>
<td>2 (1.6%)</td>
</tr>
<tr>
<td>Other</td>
<td>8 (6.3%)</td>
</tr>
</tbody>
</table>

42.5% of the nurses were working on general medical or surgical wards. It was interesting to note that none of the subjects were working on specialist oncology wards, yet 117 (92.1%) of these nurses had patients with cancer on their wards at least occasionally, and only 6 (4.7%) reported never having patients with cancer on their ward. The most commonly encountered types of cancer were not surprisingly those of lung/bronchus; breast; head and neck; central nervous system; colon; bone; soft tissue and stomach.

(6.2) NEWLY REGISTERED NURSES' PREPARATION TO CARE FOR PATIENTS WITH CANCER

(1) QUESTIONNAIRE DATA (N = 127)
(6.2.1) **Worries about Caring for Patients with Cancer**

One hundred and four (81.9%) of the nurses expressed worries in relation to caring for patients with cancer, only 14 (11%) stated that they had no worries. The nature of worries expressed by the respondents are shown in Table 14. It was very apparent that issues relating to communicating with patients with cancer and their relatives were the predominant cause of concern for these newly registered nurses. Worries were expressed irrespective of whether or not the nurses were caring for patients with cancer on their ward.

(6.2.2) **Experience of Nursing Patients with Cancer**

All but 5 of the subjects had experience of caring for patients with cancer during their training. Thirty-two (25.2%) had worked on a specialist oncology ward as a student nurse and 10 (7.9%) felt they had experience of caring for a lot of patients with cancer. Thirty (23.6%) felt they had little or minimal experience of caring for patients with cancer during their training.

(2.3) **Personal Experiences of Cancer**

The nurses were asked whether they had any personal experience of someone close to them suffering from cancer. Sixty-one (48%) indicated that they had; of these, 24 had experienced more than one friend or relative with cancer. 24% of these personal experiences had been with a close friend or relative such as a parent, of the remainder 23% were with grandparents.
Table 14. WORRIES ABOUT CARING FOR PATIENTS WITH CANCER

<table>
<thead>
<tr>
<th>Rank</th>
<th>Worry</th>
<th>Number</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Concerns over the ethics of information giving/withholding for patient and family</td>
<td>27</td>
<td>(15.2%)</td>
</tr>
<tr>
<td>2)</td>
<td>Helping patient and family cope with the diagnosis of cancer</td>
<td>19</td>
<td>(10.7%)</td>
</tr>
<tr>
<td>3)</td>
<td>Lack of communication/counselling skills to give support</td>
<td>16</td>
<td>(8.9%)</td>
</tr>
<tr>
<td>4)</td>
<td>Own lack of knowledge</td>
<td>15</td>
<td>(8.4%)</td>
</tr>
<tr>
<td>5)</td>
<td>Difficulty in talking to patients who don’t know their diagnosis</td>
<td>14</td>
<td>(7.8%)</td>
</tr>
<tr>
<td>6)</td>
<td>Difficulty in talking to patients who know they are dying</td>
<td>13</td>
<td>(7.3%)</td>
</tr>
<tr>
<td>7)</td>
<td>Psychological care in general</td>
<td>13</td>
<td>(7.3%)</td>
</tr>
<tr>
<td>8)</td>
<td>Not having enough time to talk to patients</td>
<td>12</td>
<td>(6.7%)</td>
</tr>
<tr>
<td>9)</td>
<td>Doctors negative attitude/knowledge towards patients with cancer</td>
<td>9</td>
<td>(5.1%)</td>
</tr>
<tr>
<td>10)</td>
<td>Pain control</td>
<td>8</td>
<td>(4.5%)</td>
</tr>
<tr>
<td>11)</td>
<td>Dealing with own feelings/inadequacies in relation to cancer care</td>
<td>8</td>
<td>(4.5%)</td>
</tr>
<tr>
<td>12)</td>
<td>Upsetting nature of care</td>
<td>6</td>
<td>(3.3%)</td>
</tr>
<tr>
<td>13)</td>
<td>Talking about death/pain/dying</td>
<td>6</td>
<td>(3.3%)</td>
</tr>
<tr>
<td>14)</td>
<td>Young patients with cancer are upsetting</td>
<td>5</td>
<td>(2.8%)</td>
</tr>
<tr>
<td>15)</td>
<td>Poor physical care patients with cancer receive</td>
<td>3</td>
<td>(1.6%)</td>
</tr>
<tr>
<td>16)</td>
<td>Concerns over ethics of treatment</td>
<td>2</td>
<td>(1.1%)</td>
</tr>
<tr>
<td>17)</td>
<td>Dealing with relatives</td>
<td>1</td>
<td>(0.6%)</td>
</tr>
<tr>
<td>18)</td>
<td>The public’s lack of knowledge about cancer</td>
<td>1</td>
<td>(0.6%)</td>
</tr>
</tbody>
</table>

Total number of worries expressed 178
The nurses reported the outcome of 92 of these experiences with cancer. Slightly over half (56.5%) were dead, 10 (10.9%) were alive with ongoing disease, 21 (22.8%) were alive and well and 6 (6.5%) were described as fully recovered.

Respondents were also asked how they felt about their relative's disease and treatment. Their responses were categorised into positive, neutral and negative. Only 14 (17%) of the responses could be described as positive, the majority 50 (60%) were negative. For example, one respondent said:

"I felt upset, especially seeing her having lost all her hair, and that is now always how I remember her."

Another felt:

"Resentful that it should happen to them, angry at the lack of information .... from informed staff."

And a third felt:

"Frightened by the disease."

These comments are typical of the negative responses. There appeared to be little association between more positive outcomes of these experiences and positive feelings about their friends' or relatives' disease and treatment. Seventy-seven per cent of "good outcomes" were accompanied by negative feelings compared with 71% of "bad outcomes" of these personal experiences which were accompanied by negative feelings. There was also no apparent relationship between personal experiences of cancer and subsequent Attitude Scale Scores for either positive or negative experiences.
(6.2.4) Nurses' Perceived Competence to care for Patients with Cancer

Respondents were asked to rate themselves on a linear scale of 1 – 5 according to how competent they felt (where 1 = I do not feel competent, and 5 = I feel highly competent) in each of the 15 areas of cancer care which made up the perceived competence in cancer care, rating scale.

Data yielded from responses to the rating scale were felt to fall between the ordinal and interval level of measurement. While at first sight the linear scale used possessed some of the characteristics of interval level measurement, no claim could be made that all subjects rated themselves equally for a given level of competence, nor that individual subjects would rate a given level of competence equally across all items. With this in mind median scores were calculated for all subjects, and mean and standard deviation used tentatively to allow mean scores of subjects to be ranked from the area of cancer care they felt most competent in, to the least. These are shown in Table 15.

Newly registered nurses felt most competent in giving physical care to patients with cancer. They also felt competent in communicating generally with patients, the family and physician. However it was items relating to more specific areas of communication and psychological care where nurses felt least competent, such as helping the patient come to terms with the fact he has cancer, dealing with an uncertain future and talking about death and dying with the patient. Teaching early detection and prevention of cancer was another major area in which nurses felt they lacked competence.
<table>
<thead>
<tr>
<th>Rank</th>
<th>Item</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Giving physical care</td>
<td>4.27</td>
<td>4</td>
<td>0.77</td>
</tr>
<tr>
<td>2</td>
<td>Communicating with patients</td>
<td>3.33</td>
<td>3</td>
<td>0.82</td>
</tr>
<tr>
<td>3</td>
<td>Communicating with the physician</td>
<td>3.27</td>
<td>3</td>
<td>0.94</td>
</tr>
<tr>
<td>4</td>
<td>Communicating with the family</td>
<td>3.19</td>
<td>3</td>
<td>0.90</td>
</tr>
<tr>
<td>5</td>
<td>Dealing with your own feelings about cancer</td>
<td>2.94</td>
<td>3</td>
<td>1.02</td>
</tr>
<tr>
<td>6</td>
<td>Helping the patient manage dependency</td>
<td>2.90</td>
<td>3</td>
<td>0.98</td>
</tr>
<tr>
<td>7</td>
<td>Doing special treatments</td>
<td>2.80</td>
<td>3</td>
<td>1.01</td>
</tr>
<tr>
<td>8</td>
<td>Helping the patient deal with changes in body image</td>
<td>2.64</td>
<td>3</td>
<td>0.88</td>
</tr>
<tr>
<td>9</td>
<td>Helping the patient with illness</td>
<td>2.60</td>
<td>3</td>
<td>0.82</td>
</tr>
<tr>
<td>10</td>
<td>Dealing with the side effects of treatment for cancer</td>
<td>2.55</td>
<td>3</td>
<td>0.89</td>
</tr>
<tr>
<td>11</td>
<td>Talking about death and dying with the patient</td>
<td>2.55</td>
<td>2(.5)</td>
<td>1.11</td>
</tr>
<tr>
<td>12</td>
<td>Teaching prevention of cancer</td>
<td>2.45</td>
<td>2</td>
<td>0.97</td>
</tr>
<tr>
<td>13</td>
<td>Helping the patient deal with an uncertain future</td>
<td>2.40</td>
<td>2</td>
<td>0.96</td>
</tr>
<tr>
<td>14</td>
<td>Helping the patient come to terms with the fact he has cancer</td>
<td>2.27</td>
<td>2</td>
<td>0.86</td>
</tr>
<tr>
<td>15</td>
<td>Teaching early detection of cancer</td>
<td>2.14</td>
<td>2</td>
<td>0.92</td>
</tr>
</tbody>
</table>
Factor Analysis of Responses to Perceived Competence to Care for Patients with Cancer

Craytor et al (1976) used factor analysis to assess whether there were some logical categories into which responses to their 17 item scale could be grouped for analysis and interpretation. They extracted two factors accounting for 62% of total variance in responses. These were labelled as "psychosocial care" and "physical care". The authors found that psychosocial care items were indicated as being less successfully carried out, significantly more often than physical care areas. As a result of Craytor et al's findings it was decided that factor analysis should be carried out on responses to the baseline questionnaire, Perceived Competence Rating Scale.

Factor analysis is a statistical method of data reduction whereby a relatively large set of variables (in this case the 15 items of the rating scale) can be reduced to a smaller number of underlying dimensions called Factors. The Factors produced by the analysis thus represent categories or ways the variables group together and thus aid interpretation of results. Items grouped under a factor share something in common, that is they tend to be more highly correlated with each than with the other variables (Craytor et al 1976, Polit and Hungler 1984). Factor analysis using principal components analysis with varimax rotation was used and extracted 4 factors accounting for 62.9% of the total variance, these are shown in Table 16.
Table 16. FACTOR VALUES EXTRACTED FROM THE PERCEIVED COMPETENCE RATING SCALE RESPONSES USING PRINCIPAL COMPONENTS FACTOR ANALYSIS

<table>
<thead>
<tr>
<th>Perceived Competence Rating Scale Items Grouped under Factors</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Helping the patient come to terms with the fact he has cancer</td>
<td>0.83</td>
<td>0.10</td>
<td>0.18</td>
<td>0.20</td>
</tr>
<tr>
<td>D. Helping the patient deal with an uncertain future</td>
<td>0.81</td>
<td>0.04</td>
<td>0.08</td>
<td>0.14</td>
</tr>
<tr>
<td>O. Talking about death and dying with the patient</td>
<td>0.73</td>
<td>-0.02</td>
<td>0.16</td>
<td>0.10</td>
</tr>
<tr>
<td>F. Dealing with your own feelings about cancer</td>
<td>0.69</td>
<td>-0.14</td>
<td>-0.22</td>
<td>0.10</td>
</tr>
<tr>
<td>J. Communicating with patients</td>
<td>0.66</td>
<td>0.47</td>
<td>0.2</td>
<td>-0.05</td>
</tr>
<tr>
<td>K. Communicating with the family</td>
<td>0.65</td>
<td>0.38</td>
<td>0.05</td>
<td>-0.12</td>
</tr>
<tr>
<td>E. Helping the patient deal with changes in body image</td>
<td>0.62</td>
<td>0.14</td>
<td>0.23</td>
<td>-0.01</td>
</tr>
<tr>
<td>H. Helping the patient accept illness</td>
<td>0.53</td>
<td>0.48</td>
<td>0.34</td>
<td>0.14</td>
</tr>
<tr>
<td>L. Communicating with the physician</td>
<td>0.11</td>
<td>0.76</td>
<td>0.07</td>
<td>0.05</td>
</tr>
<tr>
<td>I. Helping the patient manage dependency</td>
<td>0.31</td>
<td>0.69</td>
<td>0.11</td>
<td>0.24</td>
</tr>
<tr>
<td>M. Giving physical care</td>
<td>-0.15</td>
<td>0.65</td>
<td>-0.22</td>
<td>-0.01</td>
</tr>
<tr>
<td>B. Teaching prevention of cancer</td>
<td>0.03</td>
<td>0.06</td>
<td>0.86</td>
<td>-0.03</td>
</tr>
<tr>
<td>A. Teaching early detection of cancer</td>
<td>0.26</td>
<td>-0.08</td>
<td>0.80</td>
<td>0.03</td>
</tr>
<tr>
<td>C. Dealing with the side effects of treatment for cancer</td>
<td>0.20</td>
<td>-0.02</td>
<td>0.19</td>
<td>0.77</td>
</tr>
<tr>
<td>N. Doing special treatments</td>
<td>0.00</td>
<td>0.18</td>
<td>-0.15</td>
<td>0.76</td>
</tr>
</tbody>
</table>
Inspection of the areas of cancer care associated with the items grouped into the various factors, suggested that related activities had indeed been grouped together. Items grouped under Factor 1 account for 33.5% of the total variance between items, these appeared to be related to issues surrounding communication with patients, and helping patients cope psychologically with the disease. Items grouped under Factor 2 (accounting for 11.8% of the total variance) appear to be related to general physical care as opposed to the two items grouped under Factor 4 (accounting for 8% of the variance) which appear to relate to Physical Care specifically related to cancer and its treatment. Items grouped Factor 3 (accounting for 9.6% of the total variance) relate to teaching early detection and prevention of cancer. Median and ranges of scores for each factor are shown in Table 17.

Table 17. MEDIANs AND RANGES OF SCORES IN EACH OF THE 4 FACTORS OF THE PERCEIVED COMPETENCE RATING SCALE.

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>(No. of items in Factor)</th>
<th>MEDIAN (% of total possible Factor Score)</th>
<th>RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>22 (55)</td>
<td>30 (8 - 38)</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>10 (66.7)</td>
<td>10 (5 - 15)</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>4 (40)</td>
<td>8 (2 - 10)</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>5 (.3) (53)</td>
<td>8 (2 - 10)</td>
</tr>
<tr>
<td>TOTAL SCALE</td>
<td>42 (56)</td>
<td>40.8 (23.2 - 64)</td>
<td></td>
</tr>
</tbody>
</table>

By comparing the median scores, as a percentage of the total possible score for each factor (that is if all subjects had rated themselves as highly competent for all items in that factor) shown in Table 17, Median Scores of Competence were relatively higher among the 3 items comprising Factor 2, which related to giving physical care (where the median score of
10 represented 66.7% of the total possible scores). Lowest median scores were found under Factor 3 containing items relating to teaching early detection and prevention of cancer (where median scores of 4 represented 40% of total possible).

This reflects the ranking of items by mean scores, and again suggests that nurses felt most competent in general physical care.

**RELIABILITY**

Reliability testing for the perceived competence to care for patients with cancer self rating scale revealed a high alpha coefficient of 0.82 for responses from 115 subjects.

(6.2.5) **PERCEIVED EDUCATIONAL NEEDS IN CANCER CARE CHECKLIST**

This checklist asked respondents to indicate by ticking appropriate boxes whether they felt they needed more knowledge or practice in each of the 23 items. In Table 18 the items from the perceived educational needs checklist are ranked in order of the number of respondents indicating that they would like more knowledge or practice in each area.

A large number of items from the perceived educational needs checklist were ticked. The median number of items indicated was 13, with a range of between 4 and 23. It is clear that areas of communication and psychological care, pain and symptom control, and prevention and early detection feature high on the list of educational needs identified. This reflects the areas of worry identified by the nurses in relation to cancer care and the areas of care in which the nurses felt least competent.
Table 18. NEWLY REGISTERED NURSES' REQUESTS FOR MORE KNOWLEDGE AND PRACTICE IN 23 AREAS OF CANCER CARE.

<table>
<thead>
<tr>
<th>Rank (N=277)</th>
<th>Item</th>
<th>Frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Communicating with the patient in different stages of illness: newly diagnosed, recurrence, terminally ill, unknown diagnosis</td>
<td>115</td>
<td>(90.6)</td>
</tr>
<tr>
<td>2</td>
<td>Dealing with social and psychological problems of cancer patients</td>
<td>110</td>
<td>(86.6)</td>
</tr>
<tr>
<td>3</td>
<td>Nursing measures to minimise or prevent side effects of treatment</td>
<td>98</td>
<td>(77.2)</td>
</tr>
<tr>
<td>4</td>
<td>Complementary methods of pain &amp; symptom control</td>
<td>95</td>
<td>(74.8)</td>
</tr>
<tr>
<td>5</td>
<td>Agencies to call upon for assistance to patients with cancer</td>
<td>93</td>
<td>(73.2)</td>
</tr>
<tr>
<td>6</td>
<td>Family involvement</td>
<td>92</td>
<td>(72.4)</td>
</tr>
<tr>
<td>7</td>
<td>Methods of early detection for cancer</td>
<td>91</td>
<td>(71.7)</td>
</tr>
<tr>
<td>8</td>
<td>Dealing with pain</td>
<td>91</td>
<td>(71.7)</td>
</tr>
<tr>
<td>9</td>
<td>Problems resulting from Chemotherapy</td>
<td>87</td>
<td>(68.5)</td>
</tr>
<tr>
<td>10</td>
<td>Changing attitudes of staff members towards cancer</td>
<td>84</td>
<td>(66.1)</td>
</tr>
<tr>
<td>11</td>
<td>Methods of prevention of cancer</td>
<td>83</td>
<td>(65.4)</td>
</tr>
<tr>
<td>12</td>
<td>Problems resulting from Radiotherapy</td>
<td>81</td>
<td>(63.8)</td>
</tr>
<tr>
<td>13</td>
<td>Death and Dying</td>
<td>76</td>
<td>(59.8)</td>
</tr>
<tr>
<td>14</td>
<td>The nature of cancer</td>
<td>74</td>
<td>(58.3)</td>
</tr>
<tr>
<td>15</td>
<td>Terminal illness</td>
<td>70</td>
<td>(55.1)</td>
</tr>
<tr>
<td>16</td>
<td>Cancer as a chronic disease</td>
<td>63</td>
<td>(49.6)</td>
</tr>
<tr>
<td>17</td>
<td>Rehabilitation of the patient</td>
<td>62</td>
<td>(48.8)</td>
</tr>
<tr>
<td>18</td>
<td>Problems resulting from surgery for cancer</td>
<td>60</td>
<td>(47.2)</td>
</tr>
<tr>
<td>19</td>
<td>Diagnostic measures generally used</td>
<td>52</td>
<td>(40.9)</td>
</tr>
<tr>
<td>20</td>
<td>Mastectomy care</td>
<td>41</td>
<td>(32.3)</td>
</tr>
<tr>
<td>21</td>
<td>Tracheotomy care</td>
<td>40</td>
<td>(31.5)</td>
</tr>
<tr>
<td>22</td>
<td>Ileostomy care</td>
<td>25</td>
<td>(19.7)</td>
</tr>
<tr>
<td>23</td>
<td>Colostomy care</td>
<td>18</td>
<td>(14.2)</td>
</tr>
</tbody>
</table>
It is also notable that all nurses regardless of whether or not they opted for further education on cancer care indicated that they had need of more knowledge and practice in cancer care, and the majority of nurses indicated they had educational needs in a large number of areas of cancer care.

(6.2.6) **KNOWLEDGE ON CANCER AND CANCER CARE**

A coding framework for responses to the 20 open ended questions of the Knowledge test was devised to allow scores of both correct and incorrect responses to be summed. The correct scoring system gave a total possible score of 126 and the incorrect scoring system an unlimited total score depending on the number of responses given by the respondent.

The median total score for the 20 knowledge questions was 40, or 31.7% of the possible score with a 'range' of 17 to 67. Incorrect responses ranged from 4 to 50, with a median of 26. Table 19 shows median scores for correct and incorrect responses to the 20 questions.

(6.2.7) **RESPONSES TO INDIVIDUAL KNOWLEDGE QUESTIONS**

(a) **Cancer Screening and Prevention**

Questions relating to screening and prevention of cancer were not answered well relative to other areas of questioning. Question 1 asked respondents to name types of screening for specific sites of cancer. The median score was 2 for this question and the median number of incorrect scores was 3. One hundred and two (15.6%) of the responses identified the cervical smear as a method of screening for cancer and 55 identified thermography or mammography. Only 11 subjects identified testicular self examination, 26 breast self examination, and 29 chest X-Rays. Of the incorrect responses
<table>
<thead>
<tr>
<th>No.</th>
<th>Knowledge Topic</th>
<th>Correct Responses</th>
<th>Incorrect Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Median (Range)</td>
<td>Maximum</td>
</tr>
<tr>
<td>1</td>
<td>Cancer Screening</td>
<td>2 (0 - 5)</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Cancer Prevention</td>
<td>2 (0 -10)</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Early signs of cancer of the colon</td>
<td>2 (0 - 4)</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Value of Screening for Cancer</td>
<td>1 (0 - 3)</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Cancer Mortality</td>
<td>1 (0 - 1)</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Statistics</td>
<td>0 (0 - 2)</td>
<td>2</td>
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<tr>
<td>7</td>
<td>Cancer Survival</td>
<td>0 (0 - 2)</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Side effects of Chemotherapy drugs</td>
<td>3(.5)(0 -11)</td>
<td>16</td>
</tr>
<tr>
<td>9</td>
<td>Patient information for Chemotherapy</td>
<td>4 (0 - 6)</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>Complications of Radiotherapy</td>
<td>4 (0 - 7)</td>
<td>7</td>
</tr>
<tr>
<td>11</td>
<td>Patients with cancer &amp; Infection</td>
<td>2 (0 - 5)</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>Colostomy Care</td>
<td>2 (0 - 4)</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>Discharge advice following Colposcopy</td>
<td>1 (0 - 4)</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>Psychological sequelae to Mastectomy</td>
<td>1 (1 - 6)</td>
<td>6</td>
</tr>
<tr>
<td>15</td>
<td>Nurses' role in pain control</td>
<td>2 (0 - 6)</td>
<td>8</td>
</tr>
<tr>
<td>16</td>
<td>Pain control using Morphine</td>
<td>1 (0 - 4)</td>
<td>8</td>
</tr>
<tr>
<td>17</td>
<td>Complementary methods of pain control</td>
<td>4 (1 -11)</td>
<td>14</td>
</tr>
<tr>
<td>18</td>
<td>Rubler Ross' Stages of coping with dying</td>
<td>0 (0 - 5)</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>Dealing with patients using denial as a method of coping</td>
<td>1 (0 - 3)</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>Family centred care</td>
<td>2 (0 - 5)</td>
<td>5</td>
</tr>
</tbody>
</table>
investigations involving fibre optic scopes such as Bronchoscopy and gastroscopy identified as methods of screening were most common. This suggests a misunderstanding of the concept of screening for cancer by newly registered nurses.

Question 2 asked respondents to identify any methods of prevention of cancer of which they might be aware. Ninety-seven identified not smoking; 43 avoiding hazardous substances such as asbestos; 37 a high fibre diet; and 13 avoiding excessive exposure to the sun. Of the incorrect responses, avoiding stress was most often identified.

Incorrect responses to Question 3 asking subjects to list early warning signs of cancer of the colon failed to recognise that symptoms such as weight loss identified in 26 responses are not early signs of cancer. Seventy-eight responses did correctly identify a change in bowel habit as being an early warning sign of cancer of the colon.

The responses to these questions seemed to reflect a lack of knowledge of screening and prevention for cancer, and also reflect nurses' self reports regarding their feelings of competence to deal with these areas of cancer care.

(b) Knowledge of Cancer Statistics

In response to Question 5, only 59 (46.5%) respondents correctly identified cancer as the second most common cause of death, and only 11 subjects scored 1 or more points for Question 6 asking for the proportion of the population who suffer from and die from cancer. Responses varied
from "7% of the population suffer from cancer" to "80%", 22 respondents replied that "they didn't know". Five subjects correctly wrote that 20% of the population die from cancer. The majority 81 (63.8%) either replied that they did not know, or did not answer the question.

Question 7 asked respondents to estimate how many out of 100 middle aged people with early cancers of four different sites, they would expect to be alive and well 5 years after treatment. This kind of question has frequently been used by researchers to infer attitudes towards cancer from subjects depending on whether they over or underestimate survival (underestimates were felt to indicate a pessimistic attitude and correct or overestimates indicating an optimistic attitude). Table 20 shows respondents' estimates grouped into underestimated, correct (+ 5%), overestimated or don't know. Knowledge of survival rates for all for sites appeared to be low. Correct responses ranged from 2 for breast and lung cancer, to 20 (15.7%) for skin cancer. Survival rates for early breast and skin cancer were grossly underestimated by 83 (65.3%) and 75 (59%) subjects respectively. The situation was reversed for cancer of the lung and colon, here the majority of subjects overestimated survival by 94 (74%), 74 (58.3%) of respondents respectively. For cancers of sites with poor 5 year survival rates the nurses overestimated survival, and for cancers with good 5 year survival rates, survival was underestimated. It would seem that these responses reflect a lack of knowledge about specific sites of cancer rather than overall positive or negative view of the disease itself.
Table 20. ESTIMATED SURVIVAL RATES FOR EARLY CANCERS OF 4 DIFFERENT SITES

<table>
<thead>
<tr>
<th>Estimated Survival Rate (Actual)</th>
<th>Breast (%)</th>
<th>Lung (%)</th>
<th>Skin (%)</th>
<th>Colon (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underestimate</td>
<td>83 (65.4)</td>
<td>5 (3.9)</td>
<td>75 (59.1)</td>
<td>17 (13.4)</td>
</tr>
<tr>
<td>Correct ± 5%</td>
<td>2 (1.6)</td>
<td>2 (1.6)</td>
<td>20 (15.7)</td>
<td>7 (5.5)</td>
</tr>
<tr>
<td>Overestimate</td>
<td>16 (12.6)</td>
<td>94 (74.0)</td>
<td>1 (0.8)</td>
<td>74 (58.3)</td>
</tr>
<tr>
<td>Don't Know</td>
<td>8 (6.3)</td>
<td>8 (6.3)</td>
<td>9 (7.1)</td>
<td>7 (5.5)</td>
</tr>
<tr>
<td>Missing</td>
<td>18 (14.2)</td>
<td>18 (14.2)</td>
<td>22 (17.3)</td>
<td>22 (17.3)</td>
</tr>
</tbody>
</table>

(c) Knowledge of Cancer Treatment

Knowledge of cancer treatment appeared to be variable. Questions 8 and 9 had a rather larger proportion of correct responses. Question 8 asked for the side effects of methotrexate and cyclophosphamide, two drugs used in chemotherapy for cancer patients, and Question 9, information the nurse would provide for a patient undergoing chemotherapy. Question 8 had a median score of 5 with a median of 2 incorrect responses, and Question 9 a score of 4 with a median of 0 incorrect responses. Respondents seemed to be aware of common side effects of chemotherapy such as nausea and vomiting, alopecia and bone marrow suppression, but were not aware of the specific side effects for the two drugs.

The complications of radiotherapy appeared to be less well understood. For Question 10, 36 responses mentioned burns and 42 alopecia, which suggests a misunderstanding of the nature of radiotherapy and its side effects.

Respondents appeared to demonstrate some understanding of the reasons why
patients with cancer may be prone to infection in response to Question 11. Incorrect responses to Question 12 centred around a lack of attention to the wording of the question. The question asked for physical problems which might be anticipated for a man following the formation of a colostomy for cancer of the rectum. Many respondents also included information regarding psychological problems which was not asked for in the question. Question 13 asked what discharge advice would the respondent plan to give a woman who has had a cone biopsy for cancer of the cervix. Responses revealed a lack of knowledge of specific information a woman would need following this kind of procedure. Seventeen did mention advice regarding sexual activity, this however was not specific. Six subjects felt they would advise a woman to avoid sex and promiscuity following a cone biopsy which indicated a lack of knowledge.

Question 14 asked for psychological problems a woman who had undergone a mastectomy for cancer of the breast may face. The median score for the question was 4 and median number of incorrect responses was 0. The respondents demonstrated a good understanding of the difficulties for women facing this kind of surgery.

(d) Knowledge of Pain Control

Responses to Questions 15 and 16 regarding pain control for cancer reflected some ignorance. Question 15 asked what responsibility does the nurse have in the management of cancer pain? Typical responses related to giving analgesia as prescribed, communicating with the doctor regarding its effectiveness and ensuring the patient is pain free. Only 29 responses noted that analgesia should be given regularly, and an alarming
16 were concerned with oversedation. Only 19 responses mentioned assessment as part of the nurse's role, and 1 the use of a pain assessment chart for this. The median score for Question 16 which asked the most important factors to be considered when using morphine was only 1, with a median number of incorrect responses of 2. One of the most common factors identified was respiratory depression mentioned in 33 of the responses; 14 mentioned not giving too much morphine; 19 avoiding oversedation; and 16 mentioned addiction indicating that the myths surrounding the use of morphine still prevail. Only 10 highlighted the need to give the drug regularly. The median number of complementary methods of pain control listed in response to Question 17 was 4, indicating some understanding of non-pharmacological interventions available to patients.

(e) Knowledge of Psychosocial Care for Patients with Cancer
A median score of 0 for Question 18, Rubler Ross's stages of coping with dying and 1 for Question 19 dealing with patients using denial as a method of "coping" suggests a lack of knowledge and understanding of definitions and psychological mechanisms at work in cancer and dying patients.

Question 20 relating to the importance of family centred care was interesting in that many respondents felt this was important because it somehow helped both patient and family adjust to death and bereavement. Significantly 60 (25%) of the responses related to death in some way. This seems to reflect the association of cancer with death in nurses' minds.
Summary of Newly Registered Nurses' Knowledge on Cancer and Cancer Care

In general there were many incorrect responses. Respondents scored worst on sections regarding cancer screening and prevention, incidence, survival and mortality for cancer, pain control and psychosocial aspects of care. Nurses scored slightly better on aspects of treatment for cancer such as Chemotherapy and the psychological sequelae of mastectomy. Responses indicated a lack of awareness of the outcome of treatment for cancer, and demonstrated an association of the disease with inevitable death, and that the common myths regarding the use of morphine for the relief of cancer pain still prevail.

Reliability of the Knowledge Test

Reliability testing of the scores from 121 subjects yielded a satisfactory alpha coefficient of 0.67 (Polit and Hungler 1984) for 'correct scores'.
(2) INTERVIEW DATA (N = 68)

(6.2.9) Nurses feelings in Relation to Caring for Patients with Cancer

At interview 68 nurses responded to direct questions relating to their general feelings in relation to caring for cancer patients. Themes relating to these responses were identified and coded from the interview transcripts and their frequency calculated.

The most commonly occurring theme was a general feeling of inadequacy and lack of preparation in relation to caring for patients with cancer. Feelings of inadequacy fell into two main areas. First relating to the physical care of patients with cancer, 9 (13.2%) of subjects reported such feelings. These tended to focus on the difficulty of dealing with patients who had poor pain and symptom control, or where nurses felt it was difficult to persuade doctors to prescribe adequate pain relief. A number of accounts mentioned a feeling of lack of knowledge in relation to cancer care which made it difficult to give good care, but also to communicate effectively with the patient regarding their treatment and prognosis. The second and largest area of concern was that of psychological care and communication with patients with cancer. This feeling of inadequacy and lack of skills was reported by 37 (54.4%) of the nurses interviewed. Great concern was expressed on such issues as how to answer patients' questions; knowing how much information to give patients; and how much information they were allowed to give patients by the doctor.

Nine (11.8%) felt that their ability to care for patients with cancer depended on the patient's ability to cope. If the patient talked openly about cancer it made it very much easier for the nurse to deal with. Those patients who were obviously finding it difficult to cope emotionally with
their disease were perceived to be the most difficult. Age of the patient appeared to affect whether nurses felt able to care for patients with cancer. Twelve (17.6%) felt that caring for young patients was very much more difficult than for older people and 2 (2.9%) found caring for children particularly difficult. Eight (11.8%) felt that their difficulties lay in not being able to give enough time to patients due to pressures of work. Part of the difficulties nurses had in communicating with patients with cancer related to their new role. Four (5.9%) mentioned that now they were qualified questions were actually directed at them, before such questions would have been passed on to someone more senior. They were now expected to answer but felt ill equipped to do so, and were not clear of the boundaries to their role in relation to this difficult area.

Eleven subjects (16.2%) admitted to avoiding patients with cancer. Cancer was something that they tended to shy away from; or they concentrated on physical aspects of the disease because they felt unable to deal with it emotionally. For those patients who were admitted to hospital for reasons other than cancer (for example patients with cancer admitted to an orthopaedic ward for treatment of pathological fractures) cancer was ignored because subjects perceived it to be something that they wanted to forget.

Only 12 (17.6%) of the nurses actually stated they enjoyed caring for patients with cancer. For these nurses cancer presented a challenge to them and they derived satisfaction from giving care.
Ten (11.8%) openly stated that cancer evoked fears of death in them and that this affected their ability to give care to patients. Two nurses denied (unprompted) any fear of death when asked about feelings in relation to caring for patients with cancer. Both nurses held strong Christian beliefs.

Twenty-five (36.8%) subjects' responses revolved around the theme of the association of cancer with inevitable death. This was a recurring theme throughout many of the data sources for this study. Discussions centred around issues relating to dealing with dying rather than cancer as such. Some examples of nurses' comments are shown in Fig. 11.

(6.2.10) **NURSES' SELF REPORTS OF PREPARATION FOR THEIR ROLE IN CANCER CARE**

Forty-four (64.7%) of the 68 subjects who had interview transcripts available for analysis reported a feeling of lack of knowledge in relation to cancer and cancer care. For some this was felt to affect their ability to reassure patients or to teach student nurses. Only 1 nurse reported a feeling of good knowledge in relation to cancer care and 2 further nurses reported their knowledge as basic. Thirty (44.1%) felt that they did not have enough knowledge on pain control, although generally a significant proportion (17.6%) felt that their knowledge on pain control was good, feeling that they would know what to suggest to a junior doctor if a patient was in pain. Seven (10.3%) were not confident enough in their knowledge of pain control for this.

In general subjects from both hospitals could remember very little input during their training on cancer care, particularly in the area of communication and psychological care; 24 (35.3%) felt that they did not
have enough preparation in this area. Fifteen (22.1%) felt they had not had enough time devoted to cancer care during their training and this tended to contrast strongly with the time devoted to teaching on heart disease. Knowledge both of physical care and psychological care tended to have been derived from experience, by "picking things up as you went along." Where gaps in knowledge were noted it was felt to have been because of the inadequacies of this method of learning.
"It's alright if you get the patient who can openly talk. I can quite openly talk with someone if they initiate it. It's when you get the patient that avoids the word 'cancer' or just cannot accept it or have just been told about it .... I find it very difficult because you cannot really appreciate how somebody feels unless you've been through it yourself ... I've never really had anybody in my family that has died of cancer and also what makes it worse is that it's generally the nicest patients who have it and also you see patients dying of cancer. I mean I've never seen anybody die a dignified death from cancer."

"I find it quite difficult really because we've never had much input as to how to express yourself or how to cope with what patients feel when they find out. It's a horrible thing for them to find out. I just tend to sit there and give them a cuddle or something but I never know what to say. I mean if you feel awkward it makes them feel awkward. I just feel that we ought to be given more of that sort of thing in our training, so you know what to say and how to cope with it yourself as well as for them."

"I nursed quite a few people with breast cancer. I found that quite traumatic really. Because you can relate to it and also because well I don't know, I suppose any cancer tends to be quick, but I mean some of the patients who come in with breast lumps they had more or less just found it and you know they already had secondaries and they were young as well. I know it's awful whoever it is, if it is a 70 year old who has cancer of the lung you can think 'well they've had their life' when it's a 30 year old with a family, you sort of think 'why?', it's not fair and you can't cope really."
Nurses who reported that they had a good knowledge on pain control felt that they had more input on this subject during their training and a number had written an extended essay on pain for their state final examination. However a number of responses regarding pain control by nurses reflected inaccurate knowledge such as regarding the appropriate use of opiate analgesics. So that while nurses felt their knowledge was good this may not have in fact been the case.

Comments from two nurses on their preparation to care for patients with cancer during their nursing are shown below.

Fig. 12. NURSES' COMMENTS ON THEIR PREPARATION TO CARE FOR PATIENTS WITH CANCER

"Well we never had any sort of teaching in a situation when a patient turns round and says 'Have I got cancer?' I mean we had study days and they'll take you through what to do and how to cope when someone says 'Am I dying?' But actually for the amount of patients we see we are poorly prepared for dealing with them ... I mean nursing care-wise. Yes we get an awful lot of teaching, but to actually sit down and talk to somebody about it is very hard."

".... not a lot, simply because whatever you know, when it crops up in the practical setting you just do not know what to do about it anyway, so you feel as if you've not had any. We have had lectures on care of the terminally ill, that sort of thing. We had a lecture as well on the different types of cancer, but you know they were so spread out. They were an hour here and there and you do not tend to retain lectures, and quite often it's put in where it's not relevant to what you are doing anyway, and so admittedly you forget it very quickly."
Accounts such as these suggest that not only did subjects feel that the amount of input on cancer care had not been enough during their training but also the nature of the input had not met their perceived needs.

Two nurses gave some indication regarding the kind of help they needed. One nurse had experienced a number of incidents in which she had become very involved in the care of dying patients with cancer, the effects on her of these experiences had been quite devastating. This nurse felt she needed more support and feedback from the ward sister. She said:

"I didn't want her just to say 'Oh how awful'. I wanted a little bit more than that, because it had been bloody horrendous. Like going through the conference with Mr. --. I wanted to sit down and tell her what I'd said, and find out whether I'd said the right thing to this man. I could have had a really profound effect on him .... I could have set up psychological problems for this guy, I could have been causing him such trauma and anxiety, but I don't know."

Only one nurse gave an account of the positive effects of education, this was a closely supervised experience on an oncology ward.

"The first few weeks were very, very difficult but we had a clinical teacher on there who was there most of the time. Because he was very open and understanding and looked after you all the time, you sort of became more confident in looking after the patients .... he was brilliant. He never forced himself upon you but you could speak to him .... we did loads of visits down to different units, hearing about different treatment and the prognosis for different diseases."

It seemed that subjects felt they needed to be able to discuss cases they
were caring for, and be given feedback on their performance in communicating with them as well as having teaching on the disease and how to communicate with patients with cancer.

(6.2.11) THE RELATIONSHIP BETWEEN PERSONAL EXPERIENCES OF CANCER AND FEELINGS ABOUT CANCER AND CARING FOR PATIENTS WITH CANCER

During baseline interviews subjects were asked whether they had any personal experiences of cancer and were encouraged to talk about such experiences and how they felt about them. The relationship between personal experiences and feelings about the disease did not appear to be a direct one. For some, experiences appeared to have had a profound affect, for example one nurse's grandmother had died of cancer and she had been involved in looking after her, and while she said that the experience was 'not too bad' it had affected her care of patients.

"I think you try and sort of shut it out, you don't involve yourself, if you have a close personal experience you try and put a barrier between you and it so you don't get involved again. I don't know if I hadn't had that experience whether I would feel any different now. But I find now I can manage to put a barrier between me and the patient with it."

For another, five of her mother's friends had died of breast cancer and she felt "It makes you paranoid. I'm more frightened of cancer as a result."

Another subject whose mother had been treated for breast cancer some years earlier was "Shocked at her recurrence-free survival".
For others there seemed to be no connection between for example positive personal experiences and their rather negative picture of cancer care. One nurse's mother had been cured of cancer of the ovary 6 years previously, yet her views on the value of active treatment for example were: "Yes it has value it improves quality of life", but included no mention of the possibility of cure.

The majority of subjects' personal experiences of cancer had not been with close relatives, for example grandparents, many of whom had undergone treatment and died while the subject was still quite young, for this reason the impact of the experiences on them appeared to be minimal and was only remembered vaguely.

These interviews reflect questionnaire results. It would seem that the relationship between personal experiences of cancer and attitudes towards the disease is a tentative one and that other influences were more important in this group of nurses. Professional experiences of cancer care appeared to have a greater effect on their feelings about the disease and their feelings of ability to care for patients suffering from it.
(6.2.12) **SUMMARY OF PROFESSIONAL PREPARATION FOR CANCER CARE**

As has already been outlined, subjects perceived their preparation during training to care for patients with cancer to have been poor, particularly in the area of communication and psychological care. Questionnaire and interview data suggest that:

- nurses' knowledge was poor
- feelings of competence were rated low, particularly in the area of communication and cancer care
- theoretical input on cancer care during training had been minimal
- many nurses held a pervasive feeling of inadequacy in relation to their feelings about dealing with patients with cancer
- misconceptions about the disease were held by nurses (such as its association with inevitable death) which were compounded by a lack of knowledge about the disease, its treatment and outcome.

Thus the impact of nurses' educational preparation (or rather lack of it) to care for patients with cancer on their attitudes and beliefs about the disease although impossible to quantify, was likely to have been significant.
(6.3) **NEWLY REGISTERED NURSES' ATTITUDES TOWARDS CANCER**

(6.3.1) **THE CANCER ATTITUDE SCALE**

Reliability testing carried out on responses from 115 of the subjects did not support the use of the CAS as a tool of 4 subscales. Alpha coefficients on the 4 subscales ranged between 0.15 and 0.76. Only subscale I of the CAS obtained a satisfactory alpha coefficient of 0.6 or above (Polit and Hungler 1984).

Factor analysis of responses to the CAS carried out using principle components analysis and the maximum likelihood technique failed to reproduce the factors identified by Haley et al (1968). It was decided that the summing of CAS Scores for each factor would be inappropriate and an item analysis of responses was carried out.

Tables 21 to 24 show responses to each of the items in the 4 subscales of the CAS. Responses were scored 1 - 5 according to the extent of agreement/disagreement each respondent had with the attitude expressed in each item. Some items were positively loaded so that the respondent would have to strongly agree with the Statement in order to score 5 and others were negatively loaded so that the respondent had to strongly disagree with the Statement to score 5. (Positively loaded items are indicated by *).

(6.3.2) **INTERVIEW DATA**

During interviews the newly registered nurses were asked questions relating to the four factors of the CAS. Responses to these questions were subjected to a content analysis and major themes, both manifest and latent, were identified. Sample sizes for the questionnaire and interview studies were very different, and made direct comparisons between responses
to the CAS and interview for individual subjects difficult. Despite this, results of these two sources of data are presented side by side so that a comparison of similarities and differences between the two made, and thus operating as a form of triangulation.

Not all 68 subjects who had interview transcripts available for the baseline study responded to questions relating to the CAS factors. The number of interview responses available for analysis are therefore reported for each area of questioning.

(6.3.3) RESPONSES TO FACTOR I OF THE CANCER ATTITUDE SCALE. 'ATTITUDES TOWARDS A PATIENT'S INNER RESOURCES TO COPE WITH SERIOUS ILLNESS SUCH AS CANCER'

Median Scores of 4 and 5 for all but Item 3 of Factor I reflect nurses' generally optimistic attitudes towards patients' inner resources to cope with cancer. The lower median score for Item 3 is difficult to interpret since the item itself is rather ambiguous and does not relate specifically to patients with cancer. Ninety-seven (76.4%) respondents disagreed or strongly disagreed with the statement "it is better not to use the word cancer when answering a cancer patient about his condition." Thirty-eight (29.9%) strongly disagreed indicating nurses' desire for openness with patients about their diagnosis. Eighty-nine (70.1%) of the nurses also strongly disagreed with the statement 'Dealing directly with a patient's feelings about death is to be avoided' and 103 (81.1%) disagreed with Item 7 'no-one who realises he is going to die in the near future can remain in a state of mental wellbeing'. These responses suggest that nurses also feel communicating with patients regarding their feelings about death is important and that patients can cope psychologically with the knowledge that they are dying.
TABLE 21  RESPONSES TO FACTOR I OF THE CANCER ATTITUDE SCALE 'ATTITUDES TOWARDS A PATIENT'S INNER RESOURCES TO COPE WITH SERIOUS ILLNESS SUCH AS CANCER'

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Agree (%)</th>
<th>Agree (%)</th>
<th>Uncertain (%)</th>
<th>Disagree (%)</th>
<th>Strongly Disagree (%)</th>
<th>Median Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The patient would be psychologically damaged by knowing of his incurable cancer</td>
<td>2 (1.6)</td>
<td>22 (17.3)</td>
<td>26 (20.5)</td>
<td>59 (46.5)</td>
<td>15 (11.8)</td>
<td>4</td>
</tr>
<tr>
<td>2. The harmful reaction of the patient to the news he has cancer usually overshadows the good of his being told</td>
<td>1 (0.8)</td>
<td>14 (11)</td>
<td>15 (11.8)</td>
<td>76 (59.8)</td>
<td>20 (15.7)</td>
<td>4</td>
</tr>
<tr>
<td>3. Any psychological stress on the patient should be avoided</td>
<td>3 (2.4)</td>
<td>31 (24.4)</td>
<td>35 (27.6)</td>
<td>53 (41.7)</td>
<td>4 (3.1)</td>
<td>3</td>
</tr>
<tr>
<td>4. Since it is hard enough to do a good job on the cancer, it is not wise to risk having to deal with a depressed patient by telling him his diagnosis</td>
<td>-</td>
<td>1 (0.8)</td>
<td>15 (11.8)</td>
<td>71 (55.9)</td>
<td>39 (30.7)</td>
<td>4</td>
</tr>
<tr>
<td>5. A patient generally deteriorates if he knows he has cancer</td>
<td>-</td>
<td>4 (3.1)</td>
<td>23 (18.1)</td>
<td>79 (12.2)</td>
<td>20 (15.7)</td>
<td>4</td>
</tr>
<tr>
<td>6. Experience shows that since cancer patients who say they want to know their condition have adverse reactions to knowing, patients do not really want to know they have cancer</td>
<td>-</td>
<td>6 (4.7)</td>
<td>20 (15.7)</td>
<td>77 (60.6)</td>
<td>22 (17.3)</td>
<td>4</td>
</tr>
<tr>
<td>7. No-one who realises he is going to die in the near future can remain in a state of mental well-being</td>
<td>1 (0.8)</td>
<td>8 (6.3)</td>
<td>14 (11.0)</td>
<td>73 (57.5)</td>
<td>30 (23.6)</td>
<td>4</td>
</tr>
<tr>
<td>8. A patient will not do well unless he has hope of recovery from illness</td>
<td>5 (3.9)</td>
<td>17 (13.4)</td>
<td>20 (15.7)</td>
<td>72 (56.7)</td>
<td>12 (9.4)</td>
<td>4</td>
</tr>
<tr>
<td>9. Knowledge of dreaded prognosis is detrimental to the patient</td>
<td>-</td>
<td>9 (7.1)</td>
<td>33 (26)</td>
<td>72 (56.7)</td>
<td>11 (8.7)</td>
<td>4</td>
</tr>
<tr>
<td>10. It is better not to use the word 'cancer' when answering a cancer patient about his condition</td>
<td>1 (0.8)</td>
<td>8 (6.1)</td>
<td>20 (15.7)</td>
<td>59 (46.5)</td>
<td>38 (29.9)</td>
<td>4</td>
</tr>
<tr>
<td>11. Dealing directly with a patient's feelings about death is to be avoided</td>
<td>1 (0.8)</td>
<td>1 (0.8)</td>
<td>4 (3.1)</td>
<td>31 (24.4)</td>
<td>89 (70.1)</td>
<td>5</td>
</tr>
<tr>
<td>ITEM</td>
<td>Strongly Agree (%)</td>
<td>Agree (%)</td>
<td>Uncertain (%)</td>
<td>Disagree (%)</td>
<td>Strongly Disagree (%)</td>
<td>Median Score</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
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</tr>
<tr>
<td>12. Teaching patients the early warning signs of cancer causes unnecessary anxiety</td>
<td>2 (1.6)</td>
<td>10 (7.9)</td>
<td>19 (15)</td>
<td>60 (47.2)</td>
<td>35 (27.6)</td>
<td>4</td>
</tr>
<tr>
<td>13. *Nurses should teach Breast Self Examination to all women patients</td>
<td>55 (43.3)</td>
<td>48 (37.8)</td>
<td>15 (11.8)</td>
<td>3 (2.4)</td>
<td>4 (3.1)</td>
<td>4</td>
</tr>
<tr>
<td>14. Too often doctors are so busy working with sick patients that they can't be expected to do screening procedures and complete physical examination on all who walk into their surgeries</td>
<td>7 (5.5)</td>
<td>39 (30.7)</td>
<td>18 (14.2)</td>
<td>40 (31.5)</td>
<td>22 (17.3)</td>
<td>3</td>
</tr>
<tr>
<td>15. *Every person should have a complete physical check-up annually</td>
<td>35 (27.6)</td>
<td>50 (39.4)</td>
<td>12 (9.4)</td>
<td>29 (22.8)</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>16. A physician can be so discouraged by the low cure rate that he will not feel the need to do screening procedures and routine 'cancer tests' especially when he is so busy working with sick patients</td>
<td>18 (14.2)</td>
<td>25 (19.7)</td>
<td>59 (46.5)</td>
<td>24 (18.9)</td>
<td>1 (0.8)</td>
<td>4</td>
</tr>
<tr>
<td>17. Obtaining routine cervical smears should be more the patient's responsibility than the doctor's</td>
<td>11 (8.7)</td>
<td>51 (40.2)</td>
<td>20 (15.7)</td>
<td>37 (29.1)</td>
<td>7 (5.5)</td>
<td>3</td>
</tr>
<tr>
<td>ITEM</td>
<td>RESPONSE</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
</tr>
<tr>
<td>(n=123)</td>
<td>Strongly Agree (%)</td>
<td>Agree (%)</td>
<td>Uncertain (%)</td>
<td>Disagree (%)</td>
<td>Strongly Disagree (%)</td>
<td>Median Score</td>
</tr>
<tr>
<td>18. Pelvic exenteration is such a mutilating procedure and has such a low cure rate that there is little indication for its use.</td>
<td>2 (1.6)</td>
<td>28 (22)</td>
<td>79 (62.2)</td>
<td>14 (11)</td>
<td>1 (0.8)</td>
<td>3</td>
</tr>
<tr>
<td>19. Only some cancer patients should be treated actively</td>
<td>8 (6.3)</td>
<td>71 (55.9)</td>
<td>19 (15)</td>
<td>20 (15.7)</td>
<td>7 (5.5)</td>
<td>2</td>
</tr>
<tr>
<td>20. Active treatment for cancer frequently subjects the patient to illness and pain without much benefit to him</td>
<td>7 (5.5)</td>
<td>44 (34.6)</td>
<td>28 (22)</td>
<td>46 (36.2)</td>
<td>1 (0.8)</td>
<td>3</td>
</tr>
<tr>
<td>21. Patients with cancers of low 5 year survival rates (for example oesophagus, lung, stomach and pancreas) are not improved by active treatment</td>
<td>1 (0.8)</td>
<td>11 (8.7)</td>
<td>32 (25.2)</td>
<td>73 (57.5)</td>
<td>8 (6.3)</td>
<td>4</td>
</tr>
<tr>
<td>22. *Palliative attempts to control a cancer's progress should be continued for as long as the patient can be kept alive</td>
<td>6 (4.7)</td>
<td>38 (29.9)</td>
<td>23 (18.1)</td>
<td>50 (39.4)</td>
<td>9 (7.1)</td>
<td>3</td>
</tr>
<tr>
<td>23. *There is still much that can be done for terminally ill cancer patients</td>
<td>76 (59.8)</td>
<td>42 (33.1)</td>
<td>1 (0.8)</td>
<td>5 (3.9)</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>24. Radical surgery for cancer patients is rarely indicated in patients over 70 years of age</td>
<td>10 (7.9)</td>
<td>44 (34.6)</td>
<td>33 (26)</td>
<td>38 (29.9)</td>
<td>1 (0.8)</td>
<td>3</td>
</tr>
<tr>
<td>25. *In patients with prostatic cancer the results of oestrogen therapy are so good that if side effects occur, they should be disregarded</td>
<td>-</td>
<td>8 (6.3)</td>
<td>70 (55.1)</td>
<td>48 (37.8)</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>ITEM</td>
<td>RESPONSE</td>
<td>Median Score</td>
<td></td>
<td></td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=23)</td>
<td>Strongly Agree (%)</td>
<td>Agree (%)</td>
<td>Un-</td>
<td>Disagree (%)</td>
<td>Strongly Disagree (%)</td>
<td></td>
</tr>
<tr>
<td>26. To be realistic a man has to accept he cannot exist after death</td>
<td>5 (3.9)</td>
<td>6 (4.7)</td>
<td>27 (21.3)</td>
<td>51 (40.2)</td>
<td>35 (27.6)</td>
<td>4</td>
</tr>
<tr>
<td>27. A person's immortality consists of lingering on in some way through material goods, example, reputation, offspring</td>
<td>8 (6.3)</td>
<td>43 (33.9)</td>
<td>29 (22.8)</td>
<td>27 (21.3)</td>
<td>18 (14.2)</td>
<td>3</td>
</tr>
<tr>
<td>28. *By detachment from things of this world a person can have a more real and effective relationship with others and a readiness for death</td>
<td>7 (5.5)</td>
<td>25 (19.7)</td>
<td>39 (30.7)</td>
<td>45 (35.4)</td>
<td>8 (6.3)</td>
<td>3</td>
</tr>
<tr>
<td>29. *There is the possibility for a beautiful death for the cancer patient</td>
<td>39 (30.7)</td>
<td>57 (44.9)</td>
<td>18 (14.2)</td>
<td>10 (7.9)</td>
<td>1 (0.8)</td>
<td>4</td>
</tr>
<tr>
<td>30. A person should live his life without concerning himself that death might come</td>
<td>8 (6.3)</td>
<td>24 (18.9)</td>
<td>13 (10.2)</td>
<td>71 (55.9)</td>
<td>10 (7.9)</td>
<td>4</td>
</tr>
<tr>
<td>31. *Those patients who are terminally ill and have not realised it should be told so that they can prepare themselves spiritually for death</td>
<td>18 (14.2)</td>
<td>48 (37.8)</td>
<td>47 (37)</td>
<td>12 (9.4)</td>
<td>1 (0.8)</td>
<td>4</td>
</tr>
<tr>
<td>32. The dying patient has to be kept happy since he has nothing to look forward to</td>
<td>1 (0.8)</td>
<td>15 (11.8)</td>
<td>26 (20.5)</td>
<td>73 (57.5)</td>
<td>10 (7.9)</td>
<td>4</td>
</tr>
<tr>
<td>33. *The cancer patient may consider himself fortunate to have time to prepare for death rather than face it suddenly</td>
<td>19 (15)</td>
<td>64 (50.4)</td>
<td>23 (18.1)</td>
<td>18 (14.2)</td>
<td>2 (1.6)</td>
<td>4</td>
</tr>
</tbody>
</table>
While the majority of nurses appeared to feel that patients do have the psychological resources to cope with knowledge of cancer and death, there was still a significant minority who were unsure about this. Twenty-four (18.9%) agreed or strongly agreed with the statement 'The patient would be psychologically damaged by knowing of his incurable cancer' and 22 (17.3%) agreed or strongly agreed that 'A patient will not do well unless he has hope of recovery from illness.' This would suggest that either nurses have mixed feelings about patients' ability to cope or that a small but significant group of newly registered nurses hold quite pessimistic attitudes towards this area of care. A scrutiny of patterns of individual responses to Factor I items is helpful here. Only 3 respondents scored 2 or less for the majority of the 11 items of the subscale, but a large number of respondents had quite mixed scores across the items. For subjects who had just one or two item scores of 2 or below, while the rest of their scores were 4 or above, the low scores appeared to be clustered under the Items 1, 2 and 8, directly reflecting the overall pattern of scores already described. This would indicate that nurses do in fact hold quite mixed feelings in this area.

Interview data from nurses asked questions, on the theme of Factor I, reveal a similar pattern.

(6.3.4) INTERVIEW DATA: NURSES' FEELINGS ABOUT PATIENTS' ABILITY TO COPE PSYCHOLOGICALLY WITH CANCER.

Sixty-seven nurses responded to questions relating to this theme during their first interview. Their comments were spontaneous replies to open questioning, and therefore need to be interpreted differently from forced responses to attitude scale items. Themes identified from responses give
a clear indication of important issues and beliefs about them. Themes will be discussed and reference to the extent to which they applied to the 67 subjects' responses is indicated by showing the number of respondents to which the theme applied. This however does not mean that the remaining subjects did not agree with the theme, or did not think it important, it merely was not part of their response or was not part of what the respondent wanted to talk about.

Twenty-eight (41.8%) respondents believed patients should be told they had a diagnosis of cancer. One of the factors on which nurses based this opinion was the fact that they would like to know themselves if they had cancer.

Twenty-three (34.3%) were however hesitant about telling, feeling it was important to assess patients' ability to cope, perhaps involve the family in the decision as to whether to tell, or choose the timing of telling very carefully. Five (7.5%) felt you should wait for the person to ask or indicate in some way that they wanted to know. Relatively few (9.0%) of the respondents stated it was the patients' right to know their diagnosis regardless of whether it was felt that they could cope with this knowledge, or whether relatives wanted them to know.

Twenty (29.9%) felt that coping depended on the individual and varies a great deal. Sixteen (23.9%) felt that the majority of patients cope in time, although possibly not initially. Eight (11.9%) felt that there is a minority of patients who will not cope at all well with the diagnosis. Very few recognised that there are many ways of coping and that this does not necessarily require open acceptance of the disease. Denial and other
emotional reactions tended to be thought of as maladaptive. Only 3 (4.5%) respondents could be described as incorporating this theme of the process of adjustment to cancer in their reply.

Some typical responses are shown in Fig. 13.

It would seem that a surprisingly large proportion of subjects believed that while it is essentially a patient's right to know their diagnosis, this does not mean that telling should be automatic; it was felt that patients need to be assessed as to how well they are likely to be able to cope before deciding whether to tell or not; that the patient needs to ask or indicate in some way that they want to know; that the relatives should be involved in making decisions as to whether or not a patient should be told; and that the decision to tell was felt to be the doctor's prerogative, not nurses. These responses seem to reflect the mixed nature of responses to Factor I of the Cancer Attitude Scale.

The latent theme associating cancer with inevitable death was apparent in subjects' replies. This theme was identified in 25.4% of responses to questions related to Factor I. Eleven (16.4%) of the nurses felt this was an important reason for telling them so that they could prepare for that eventuality.

For example one nurse said:
"I'd want to know, it's so unfair if you are going to die. It might be devastating but I'd want a chance to sort out my affairs".
"Outwardly I've seen a lot appear to cope, the majority. One or two go
pieces. That's something I don't know much about, how they are coping
inside. I've never spoken on intimate terms about it to know what they
are feeling inside."

"On the whole patients should have a right to know. But I remember a
chap who just couldn't cope and became totally withdrawn and wouldn't
respond. So I feel they only have a right to know if they can accept."

"I think that the ones I've seen have coped well, they've had to ...
because nobody would sit and help them through it ... you get the doctor
coming up and saying 'you've got cancer we can treat it' and then they
have a good cry and that's it, you never see them express their feelings
again ... Nobody attempts to go up and talk to them because nobody
really can."

"The majority seem to be able to cope. Some obviously don't and deny
that they've got cancer, even though they've been told several times. I
don't know whether it's because they don't understand how serious it is
and that it will spread and they will eventually die."

And another:

"I think it is a right to know. I'd like to know. Why should people
around you know what's happening but not yourself? Perhaps if someone is
old and ill then it's not really necessary for them to know that they
have got cancer because they are going to die anyway. But I think
younger people need to know so they can prepare themselves. So if they
have a few years left, they can fit in what they always wanted to do."
It is interesting to note that even the Cancer Attitude Scale items in Factor 1 confuse these two issues by mixing Statements relating to cancer and to death in the same subscale.

(6.3.5) RESPONSES TO FACTOR IIa OF THE CANCER ATTITUDE SCALE 'ATTITUDES TOWARDS THE VALUE OF EARLY DIAGNOSIS OF CANCER'

The nurses generally held favourable attitudes towards the value of early diagnosis of cancer with 95 (74.3%) Disagreeing or Strongly Disagreeing with the Statement "Teaching patients the early warning signs of cancer causes unnecessary anxiety" and 103 (81.1%) agreeing that "Nurses should teach breast self examination to all women patients". The nurses were less sure about the precise role doctors should take in screening for cancer represented by the Lower Median Scores for items 14 and 17.

It is interesting that 12 (9.4%) of subjects Agreed or Strongly Agreed that teaching patients the early warning signs of cancer causes unnecessary anxiety, indicating again a small minority who held less optimistic attitudes.

Interview data illuminates nurses' feelings in this area.

(6.3.6) INTERVIEW DATA: NURSES' FEELINGS ABOUT THE VALUE OF SCREENING AND PREVENTION OF CANCER

During interviews the nurses recognised the value of screening and prevention of cancer but were less sure of their own role in this, particularly in relation to their own knowledge and skills in order to teach it.

Sixty-eight nurses talked about their feelings in this area during the
baseline interview study, 39 (57.4%) felt that screening and prevention of cancer was very important and could help increase the cure rate for the disease. Only 6 (8.8%) had doubts about its value. However 26 (38.2%) felt that they had been inadequately prepared to take this on as part of their role and only 2 (2.9%) actually said that they felt confident to do this. Knowledge that they had, was either gained from their own reading or was felt to be no greater than that of a lay person.

While nurses generally felt very positive about the value of screening and prevention, they were less sure of their own role in this. Sixteen (23.5%) described their role as that of a health educator. The aspects that this role were thought to cover included:
- Teaching informally to family and friends
- Discussing breast self examination and cervical smears with patients
- Smoking (only 3 nurses)
- Diet was mentioned by 1 nurse.

It is interesting to note that in response to the Cancer Attitude Scale 74% agreed that breast self examination should be taught to all women patients, while only 12 (17.6%) mentioned it as part of their role.

Reasons given for screening and prevention not being seen as part of newly registered nurse's role included:-
- Being too busy for it to be a priority
- It was felt that it was not always appropriate since patients in hospital have been admitted for other conditions and were generally quite anxious
- Patients on the ward already had advanced cancer
- It might worry the patient
- They felt they would only give information on screening and prevention of cancer if the patient specifically asked
- Screening and prevention was felt to be the patient's responsibility not the nurses'.

Typical responses are shown in Fig. 14.

(6.3.7) RESPONSES TO FACTOR IIIb OF THE CANCER ATTITUDE SCALE
'ATTITUDES TOWARDS THE VALUE OF ACTIVE TREATMENT FOR CANCER'

The lowest median scores for the attitude scale appeared to be clustered under this factor, indicating a more pessimistic attitude towards the value of active treatment for cancer. The lowest median score was for Item 19 "Only some cancer patients should be treated actively" when 79 (62.2%) respondents Agreed or Strongly Agreed with this statement. Fifty-four (42.5%) respondents also Agreed or Strongly Agreed with the statement "Radical surgery for cancer patients is rarely indicated in patients over 70 years of age", compared with 39 (30.7%) who Disagreed or Strongly Disagreed; and a significant proportion of the respondents (40.2%) Agreed with item 20 "Active treatment for cancer frequently subjects the patient to illness and pain without much benefit to him". Similarly 59 (46.5%) respondents Disagreed with the statement "Palliative attempts to control a cancer's progress should be continued as long as the patient can be kept alive."
"I think I've got a job in that area to do, it's part of my job. Having said that though, it probably isn't one of my priorities, it should be but because of the time limitations I don't take it on as often as I should."

"I suppose I feel I should be then it's the sort of thing that gets pushed out in the bustle of the ward. I think that if it was incorporated more into training than on admission you ask if someone has had a cervical smear, I mean, I don't know what I would say if they said 'No'. Maybe if we had more emphasis on it in training."

"Well we're supposed to be health educators aren't we? ... it's a bit of a joke ... it just doesn't happen .... Either because you're too busy or when it comes down to it your patients don't understand and you haven't got the patience to tell 25 different patients exactly the same thing ... I think we actually ought to be taught how to educate that way."

"I think it should be part of my role, but I don't think I'm sort of well equipped enough to do it ... I don't feel that I would be giving enough good advice."

"I don't think I've been trained for it, I think I've been trained to care. I think that is where my training is badly lacking really ... it's an important role, it's where perhaps nursing will change."

The low Median Scores for items 18 and 25 of Factor IIb can be accounted for by the majority of respondents (62.2% and 55.1% respectively)
indicating Uncertain as their response, this is most likely accounted for by the subjects' lack of knowledge relating to two rather specific methods of cancer treatment expressed in the item Statements. Median scores were 4 and 5 for items 21 and 23 of Factor IIb respectively indicating some ambivalence in newly registered nurses' attitudes towards the value of active treatment. Item 23 was added by the researcher to replace Statements deleted from the Scale which were declared inappropriate. In retrospect it would appear that this Statement may well relate to a different attitude domain in the eyes of respondents, that is of care rather than treatment, and was therefore answered differently to other Statements within the subscale and may in part account for its low alpha coefficient.

Interview data derived from questions relating to this attitude area are particularly illuminative.

(6.3.8) **INTERVIEW DATA: NURSES' FEELINGS ABOUT THE VALUE OF ACTIVE TREATMENT**

A large number of the 68 nurses responding to questions relating to this area of attitudes toward cancer had serious misgivings about the value of active treatment for patients with cancer. Only 10 (14.7%) of the responses could be described as a positive/optimistic attitude towards the value of active treatment. Thirty-three (48.5%) held doubts about its value or listed occasions where active treatment should not be given. A number of nurses had quite strict criteria which they felt doctors should use when making decisions as to whether patients are suitable candidates for active treatment. Twenty-one (30.9%) held mixed views about its value, many had seen cases where it seemed to have been beneficial, but
equally cases where they thought it had not, and felt it may have actually hastened a patient's death. Only 4 (5.9%) of these nurses noted the role of active treatment in palliation of symptoms or progress of the disease. Three (4.4%) felt they did not know whether active treatment was of any value. It would seem that these responses closely reflect responses to corresponding items from the CAS. Themes at interview were volunteered spontaneously in contrast to the forced response to the Attitude Scale, yet there was a substantial uniformity in themes arising between subjects at interview, and these closely paralleled items on the Attitude Scale.

(a) Optimistic Responses

Ten (14.7%) subjects were felt to have expressed optimistic responses to questions relating to this area. The most common reason for feeling optimistic about the value of active treatment was that experience had led these nurses to see the positive benefits of treatment and that it had been used appropriately. Others recognised the psychological benefit of active treatment and the importance of maintaining a fighting spirit, another theme was the feeling that it was natural to want everything possible done. Optimistic feelings were also related to understanding of the broad nature of active treatment and its use in the palliation of symptoms.

A selection of responses are shown in Fig. 15.
"Yes, you should actively treat if appropriate. If the patient has got a good chance of making a full recovery and having a good life expectancy for another 5 years and wishes to have their life expectancy lengthened, then, yes, I think you should actively treat. I think it's something that's got to be discussed with the patient. Under active treatment I consider palliative. Even if they've got a massive tumour, if it can be reduced or say have nausea and vomiting reduced, or some paid by radiotherapy then yes ... I think palliative is active as anything. Yes, it should be done." (This nurse had worked for some time in a hospice before entering nursing).

"Every time I've come across active treatment it's been of benefit. On the oncology ward where they did chemotherapy, a lot of the patients had moles and teratomas, so there was a good prognosis for most of them with active treatment."

"It's the patient's decision more than anything ... I think because psychologically fighting is so important you should give everyone a chance for as long as possible because you only have one life."

(b) Mixed Responses

The responses that were classified as mixed (and included responses from 20 (29.4%) of subjects), generally noted that active treatment has its place but that decisions regarding who it is appropriate for need to be carefully made. Generally it was felt that the young, fit, and those
patients who have a good chance of benefiting from treatment should have it. But nurses in this category were much more worried about the appropriateness of active treatment for the elderly, those with advanced disease, and those who have a poor prognosis. Quality of life was felt to be more important than quantity and that a balance between minimising side effects of treatment and extending life needed to be found. This group of nurses felt that wrong choices regarding treating patients were sometimes made. They had the impression that treatment is sometimes given by doctors for treatment's sake or for research purposes, rather than the patient's benefit, and that doctors have difficulty in knowing when to stop active treatment to allow a patient to die peacefully. It was also felt that there is a fine line between the treatment itself, being worse than the disease it intended to treat. Some negative experiences with patients were reported particularly in relation to surgery and treating elderly patients, and that patients returning to die 6-18 months after treatment makes it difficult to maintain a positive attitude towards treatment.

Some examples of responses classified as mixed are shown in Fig. 16.
"I've got mixed views about it, I mean I think it's great if you can do surgery and cure the patient and everything is wonderful. But so often it's not."

"I'm in two minds really, I think yes if the person wants to be treated, especially the young. People come in very young to this hospital and you do see active treatment that works. But I do feel strongly that if someone is in the end stages it's better not to. It's sometimes better not to treat them."

"Yes, I think that has an important part to play because if you are screening and you find it, you've got to be prepared to act on what you find ... but I think you can take it too far. I mean on the day that people are dying and doctors are still trying active treatment, it's very distressing for relatives. But where do you draw the line, it's not for me to decide."

"I suppose it depends on the stage you find it, and how ill the patient is at the time ... if someone is severely ill and it's widespread, if you can make quality of life better, maybe just settle for radiotherapy and chemotherapy. You've got to weigh up, will the effects of treatment outweigh the side effects? It's difficult."

(c) Respondents who held Doubts about Value of Active Treatment
Similar themes emerged from responses categorised as "Doubtful about the
value of active treatment as those that were "mixed". Thirty-three
(48.5%) of respondents fell into this category. The Doubtful responses
rarely included acceptance of active treatment in any form and gave the
impression that it should be confined to a minority of carefully selected
patients.

Patients who should be excluded from active treatment were felt to be:
- the elderly
- very young
- those whose quality of life was poor
- those who have not expressed a desire for active treatment.

Other factors that were felt to need careful consideration were: side
effects, the cure rate, whether there were other options, and what the
patient wanted. It seemed to be felt that dignified death could not be
achieved with active treatment and that it was therefore more appropriate
to make patients, particularly the elderly, comfortable with adequate pain
control rather than treat actively. Again there was a feeling that active
treatment often involved more suffering than if the disease was allowed to
run its course, and for those who were not cured by active treatment side
effects such as hair loss were too traumatic. Active treatment was felt
to be cruel at times and a number of the nurses felt that they would turn
down active treatment if they had cancer. Surgery was singled out as
being particularly problematic, often being carried out on the elderly who
had little hope of recovery. There was a group of 8 of these nurses who
felt they had negative experiences of active treatment (usually surgery)
where they felt patients' death had been accelerated and they had suffered
more, than if the disease had been left to take its course.
These responses again seem to reflect the theme associating cancer with inevitable death. There was a lack of knowledge evident regarding the great strides forward that cancer treatment has taken in the last 10 or 20 years; and the increase in the cure rate for cancer as a consequence. It was obvious that nurses' views in many instances were coloured by experiences that they were having on the wards, particularly in relation to surgery for cancer, either where patients were returning to the ward who had been treated for cancer, had relapsed and were now dying, or where patients died very soon after surgery and the nurses were left wondering if their lives would have been longer without such interventions. Some examples of nurses' responses are shown in Fig. 17.
"I honestly don't think mutilating treatment, anything that changes your appearance, is worth it. I mean I wouldn't want to have a breast lopped off, or part of my face lopped off or whatever."

"I don't believe in doing major surgery on very elderly patients who haven't much chance of getting through the operation anyway. I don't think it's fair to put them through that or radiotherapy or anything ... I think they should just be made comfortable and have adequate pain control. But on other patients I've seen an improvement."

"I feel it's done for experiments sake a lot of the time ... because it's a horrible way to die - these major operations. A mastectomy, although it's psychologically devastating, they can have some quality of life afterwards, but those who have the oesophagus removed are going to be on a liquidiser if they survive anyway. I mean, I wouldn't let that happen to my mother - I would advise her not to go ahead."

"I think it depends on the prognosis the patient has got because often the side effects of active treatment can be as bad as dying from cancer and if they are going to die from cancer anyway, what are the options?"

Responses to Factor III are a little difficult to interpret since a number of the attitude statements responses cannot be considered 'positive' or 'negative' since beliefs about death are a personal matter.
It is interesting to note however that while 66 (52%) of respondents Agreed or Strongly Agreed with the Statement "Those patients who are terminally ill and have not realised it should be told so that they can prepare themselves spiritually for death," 47 (37%) were Uncertain. A smaller but still significant proportion of respondents (18.1%) felt Uncertain that "the cancer patient may consider himself fortunate to have time to prepare for death rather than face it suddenly". Eighty-three (65.4%) Agreed or Strongly Agreed.

(6.3.10) INTERVIEW DATA: NURSES' FEELINGS ABOUT PATIENTS' ABILITY TO COPE WITH THE KNOWLEDGE OF IMPENDING DEATH.

Questioning at interview did not attempt to illuminate an individuals' beliefs but rather asked whether respondents felt patients were able to cope with knowledge of dying and whether being told you are dying is in any way different from being told you have cancer. Fifty-six subjects responded to questions in this area.

It was interesting that while nurses appeared to hold mixed feelings as to whether patients should be told that they have a diagnosis of cancer, they were less certain about whether patients should be told they were dying, and there was less uniformity in their responses.

Eighteen (32.1%) stated that patients should be told 9 (16.1%) felt this was an individual thing. Twelve (21.4%) felt that most patients know anyway or would ask and 8 (14.3%) based their decision about telling on the feeling that they themselves would want to know.

A number of the nurses were not sure whether patients should be told or
not (12.5%), others found it difficult to make a decision (14.3%). One nurse commented that she was too terrified of death to think about it and another that she needed to sort out her own feelings about death before deciding. Three (5.4%) felt that any patient given a diagnosis of cancer would automatically expect to die.

It would seem that interview data again reflects responses to the CAS. Subjects appeared to be much less sure about precisely what to tell patients about dying, how to tell them or whether to tell them. They were also less certain about patients' ability to cope with that knowledge. This corresponds with the relatively large number of Uncertain responses to these items on the attitude scale.

Fig. 18 NURSES FEELINGS ABOUT WHETHER PATIENTS SHOULD KNOW THAT THEY ARE DYING, WHETHER THIS IS DIFFERENT FROM CANCER, AND THE EXTENT TO WHICH THEY CAN COPE WITH THAT KNOWLEDGE.

"I don't know how to answer, I've always been terrified of dying. I suppose I always want to stay around and in a way I try and shut it out of my mind, because of that I don't think about it."

"If people are dying, they know they've got cancer and that they are dying with cancer, it's difficult to separate the two."

"I would ask them what they felt. I'm not sure I would tell outright. I think people know by that time, often the relatives ask more than the patient themselves. I'm not sure I would come out and tell."
Two additional aspects central to nurses' attitudes towards cancer emerged during the study and were of two types:

1) Pre-defined categories derived from literature, pilot work and early interview data. Questions used during interviews were specifically designed to collect data relating to these categories (primary themes).

2) Categories arose out of the data during analysis, and appeared to demonstrate mechanisms and influences involved in the development of nurses' attitudes towards cancer, (secondary themes).

In responding to questions relating to the CAS factors during pilot and early main study interviews, it became apparent that the nurses found it difficult to differentiate between dealing with patients with cancer, and dying patients. It seemed that to many of the nurses cancer was synonymous with death. It was common for interviews to become a discussion of issues relating to clients and dying rather than cancer per se. This continued to be a theme during interviews at both post test and follow-up. For this reason questions asking respondents what the word cancer meant to them, and to compare the meaning of the word cancer with the meaning of the word heart disease, were included in subsequent interviews.

During the first interview 56 nurses responded to the question, what does the word cancer mean to them? Their comments were revealing.
Responses were grouped into positive, neutral, mixed and negative and are shown in Table 25.

Table 25. RESPONSES TO THE QUESTION 'WHAT DOES THE WORD CANCER MEAN TO YOU?

<table>
<thead>
<tr>
<th>Category of Response</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>5 (8.9%)</td>
</tr>
<tr>
<td>Neutral</td>
<td>7 (12.5%)</td>
</tr>
<tr>
<td>Mixed</td>
<td>10 (17.9%)</td>
</tr>
<tr>
<td>Negative</td>
<td>34 (60.7%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>56 (100.0%)</strong></td>
</tr>
</tbody>
</table>

(a) POSITIVE RESPONSES

Responses were coded as positive if they included an acknowledgement that cancer is treatable or curable in many cases. As can be seen from Table 25, only 5 (8.9%) responses fell into this category and are all shown in Figure 19.
"It used to mean dying but now, being a nurse and seeing people cured, I think cured and still living."

"It's treatable, what type and it is treatable."

"It depends on where and what stage, it seems fairly treatable until you're told otherwise."

"A word people don't like to say much, but experience tells me that you can lead life with it. Through nursing I have seen patients with cancer who have done well."

"Recently I've felt that it's not as bad because I know a lot are available. At .... I see a lot of active treatment and have seen how improved patients were."

(b) NEUTRAL RESPONSES

Seven (12.5%) subjects' responses were felt to be neutral since they did not seem to be expressing any particular opinion about the meaning of the word cancer. Two examples of responses coded as neutral are shown in Figure 20.

"I'm not sure, it's difficult."

"A malignant growth."
Ten (17.9%) responses appeared to be expressing more than one opinion in relation to the meaning of the word cancer and were therefore coded as mixed. Two themes appeared to be expressed in these responses, firstly a feeling that cancer means inevitable death, but also an acknowledgement by the respondent that there is or may be another and more positive side of cancer. Respondents still appeared to have the fear of dying of cancer in the back of their minds. Some examples of mixed responses are shown in Fig. 21.

Fig. 21 SOME EXAMPLES OF RESPONSES CODED AS MIXED IN RELATION TO THE MEANING OF THE WORD CANCER

"Am I going to die? But then there's a positive side. There's more information coming out about screening and so on."

"It sounds very terminal. I don't necessarily think it means death. Some time till they're 90."

"Being ill and eventually dying. I don't see that cancer means death, although ultimately it does. Being ill, sadness."

The majority of responses to the meaning of the word cancer, 34 (60.7%) were coded as negative. Twenty-five (44.6%) respondents used the words death or dying in their descriptions of what cancer meant to them and 6 (10.7%) equated cancer with inevitable pain. There appeared to be an association between nurses' experiences of cancer and its meaning to them.
Three of the 5 respondents whose comments were felt to be positive noted that positive professional experiences where they had observed patients with cancer responding well to treatment, had influenced their feelings, whereas none of the respondents whose comments were felt to be negative did. Nine (26.5%) responses classified as negative mentioned that experiences of cancer had influenced their feelings about the disease. Seven felt they had very negative experiences of the disease professionally with most patients they had come across dying, often in pain. Two mentioned negative personal experiences where relatives had died of cancer. Illustrations of the kinds of responses which were classified as negative are shown in Fig. 22.
"Death. I think I always have and probably always will associate cancer with death. Not necessarily a nasty death and not necessarily a blissful death. One way or another in my experience it's actually resulted in death. I see it very much as a terminal illness."

"Pain, dying, losing out on life. Not achieving the things that you want to achieve, not living to the fullest extent, worried about relatives or children."

"It means dying to me. Which is probably wrong, in fact it is wrong. But that's what it evokes to me. Because working in hospital you don't see the patients out in the street who have cancer, you tend to see the grotty ones on their last legs. And the few relatives that I know who've had cancer - they've died."

"Treatment or attempted treatment then death. Some people die from secondary cancers and the pain that is associated. I don't think that I have ever looked after someone who hasn't been in pain in the terminal stages. Even if they have been given analgesia I think they always look scared."

Eight of the respondents at interview 1 were also asked to compare their feelings about cancer with their feelings about heart disease. Seven of the 8 felt much more positive about heart disease than they did about cancer despite heart disease being responsible for more deaths in Great
Britain than cancer. The theme which ran through their comments on heart disease was one of prevention and health education that one could take action to avoid it, or minimise its effects once diagnosed by adopting a healthy lifestyle. This was not felt to be the case with cancer. Two illustrative comments are shown in Fig. 23.

Fig. 23 TWO RESPONDENTS' COMPARISONS OF THE MEANING OF CANCER AND HEART DISEASE TO THEM.

Respondent A

"It (cancer) just means death and no support which is what you get here."

"(Heart disease) As long as you take a bit of healthy exercise you can make an improvement, it doesn't hold the same fears."

Respondent B

"It (cancer) would immediately mean I was going to die a horrible death."

"(Heart disease) Education. You can avoid it, overweight people, smoking."
Overall as has already been noted there was a consistency between responses to the Cancer Attitude Scale and replies to questions during interviews relating to the Cancer Attitude factors. The researcher was also interested to see whether there was a consistency in either positive or negative responses for subjects. In order to examine this Cancer Attitude Scale item scores and responses at interview were scrutinised for clusters of such responses for particular subjects. This subject by subject analysis revealed a great consistency between responses for the whole group under each factor of the CAS as has already been described in preceding sections. There was however much less consistency for each subject across the 4 subscales. Very few subjects could be described as having consistently optimistic or pessimistic responses, this is perhaps not surprising since the CAS is designed to examine different attitude areas.

Interview responses and CAS scores were also compared for each interview subject for consistency of responses. There was a fairly high consistency of responses for CAS scores under each of the factors, and corresponding responses to questions at interview (for example there was a close match between CAS Factor IIb Scores and interview responses to this area for 80% of subjects). However few subjects were consistently either optimistic or pessimistic for both CAS scores and interview responses. Only 3 (4.4%) subjects could be described as having optimistic responses, and 8 (11.8%) as pessimistic responses to the majority of CAS items, and interview questions. It would seem that attitudes towards cancer are complex and involve many areas of feelings and beliefs. Subjects appeared to hold
mixed and fluctuating views in relation to cancer and cancer care.

(6.3.14)  **SUMMARY OF NEWLY REGISTERED NURSES' ATTITUDES TOWARDS CANCER**

Responses to the Cancer Attitude Scale and to questions relating to the four factors of the scale at interview were similar and revealed that the newly registered nurses appeared to be:

- Pessimistic in their feelings regarding the value of active treatment for patients with cancer
- Held mixed views in relation to patients' ability to cope psychologically with cancer
- Were very positive in their views regarding the value of screening and prevention for cancer, but were unsure as to their own role in this with patients on their wards
- Were mixed in their views regarding whether patients should be told that they are dying
- Responses during interviews revealed a recurrent latent theme of the association of cancer with inevitable death, regardless of stage of disease or cancer site
- Responses by subjects during interviews to the question "What does the word cancer mean to you?" were negative, again revealing the association of cancer with death
- In contrast respondents asked to compare cancer with heart disease associated the latter with the need for health education and changes in life style.
- There did not appear to be a group of subjects who consistently responded in a positive or optimistic manner in relation to questions regarding their attitudes and feelings in relation to cancer. The pattern revealed was of a complex construct to which
subjects appeared to hold mixed and fluctuating, though largely pessimistic, views.

(6.4) **NEWLY REGISTERED NURSES' EXPERIENCES OF CARING FOR PATIENTS WITH CANCER**

During interviews subjects were asked to recount encounters with patients with cancer they could recall, both as a student nurse, and from their current work as a staff nurse. Whenever nurses discussed beliefs or feelings about cancer these were frequently expressed as being derived from experience. Subjects were asked to avow these by reporting any specific encounters with patients with cancer from which these feelings were derived. These reports of encounters were collated and coded so that a picture of the nature of experience of patients with cancer could be built up, and their perceptions surrounding them examined. A model showing how these encounters were analysed is shown in Fig. 24. An encounter was defined as any contact, or incident or episode involving a patient with cancer recounted during interviews.

Two hundred and sixty-one encounters were reported by the interview subjects during their baseline interview, 170 (65.1%) were recent and occurred since becoming a staff nurse, this reflects the focus of the interviews. Ninety-one (34.9%) encounters were recalled from student nurse training. Fig. 25 shows the distribution of these encounters between the 68 subjects available to be interviewed for the baseline study. Sixty-five (95.6%) subjects interviewed reported at least one cancer encounter as a staff nurse, with a range of 0 to 6 encounters for all subjects. Only 3 subjects had no encounters with cancer as a staff nurse. Forty-eight (70.6%) reported at least one encounter with cancer as
a student nurse, with a range of 0 - 5 encounters for all subjects. Twenty (29.4%) did not report an encounter with cancer as a student nurse.

Experiences recounted as a staff nurse reflect fairly accurately the extent to which newly registered nurses are involved in cancer care since the focus of interviews was on caring for patients with cancer on wards they were currently working on. Encounters reported as a student nurse do not necessarily reflect the extent of involvement with cancer care during training since this was not the focus of interviews. These experiences tended to be those that stood out in the subject's mind and were therefore likely to be more subject to the effects of recall. Thirteen (5%) of the encounters recounted did not involve personal contact with the patient with cancer but were experienced second hand through other staff working on wards, for example a patient who had been on the ward but had been looked after by other members of the team.

During interviews subjects either spontaneously or with prompting described their feelings regarding these encounters. They were encouraged to reveal how they felt they dealt with the situation; whether there was support available for them, and how they perceived the experience in general. A classification of these descriptions has allowed a picture of the nature of encounters with cancer, reported by this group of nurses to be built up. During collation of the 261 encounters four main areas relating to the nature of cancer encounters emerged. These were aspects of the encounters which the nurses focused on in recounting it, and included:
- age of the patient
- treatment the patient received
- issues relating to communication and psychological care of the patient
- support for the subject whilst caring for the patient with cancer.
Step 1
261 Cancer Encounters in Interview Transcripts Identified

These were:

a) Encounters reported as a student nurse (recalled from training)
b) Encounters reported as a staff nurse (recent)
c) Encounters recounted in direct response to questioning
d) Encounters recounted as spontaneous revelations (e.g. in connection with feelings or attitudes)

Step 2
Cancer Encounters Classified

- As a Student Nurse (91)
  - Direct Personal Involvement
  - Indirect Encounter recounted
    - Secondhand
- As a Staff Nurse (170)
  - Direct
  - Indirect

Step 3
The nature of the Cancer Encounter was identified and coded

Step 4
Nurses' Perceptions of the Cancer Encounter were coded

Step 5
Adjectives used to describe perceptions or the encounter were identified and coded

Step 6
Methods of coping with the encounter reported by subjects were coded

Step 7
Reports of impact of cancer encounter on subject's future caring behaviour were identified and coded.
Fig. 25  CANCER ENCOUNTERS REPORTED DURING BASELINE INTERVIEWS.

n = 68  (Percentages based on number of subjects interviewed for Baseline Study)

Number of cancer encounters reported as a staff nurse:

- 23.5% (25 subjects)
- 22.1% (15 subjects)
- 16.2% (9 subjects)
- 7.4% (4 subjects)
- 2.1% (3 subjects)
- 0.0% (0 subjects)

Number of cancer encounters reported as a student nurse:

- 36.8% (17 subjects)
- 20.6% (9 subjects)
- 8.8% (4 subjects)
- 2.9% (2 subjects)
- 1.6% (1 subject)
- 0.0% (0 subjects)
These categories relating to the nature of the encounter could then be compared with the subject's perception of that encounter in an attempt to assess the relative impact of different cancer encounters on their perceptions, beliefs and attitudes. Table 26 shows a breakdown of the 261 encounters under the various categories identified. A single cancer encounter might relate to a number of categories since they were not mutually exclusive.

The majority of encounters were with adults (55.9%) and with those undergoing surgery (42.9%). The second largest group of encounters related to dealing with dying cancer patients, 92 (35.2%) encounters related to this and a further 55 (21.1%) related to encounters surrounding the death of a patient with cancer. This meant that over half (56.3%) of encounters with cancer care reported by these nurses related to death or dying. Issues relating to communication and psychological care for patients with cancer featured frequently among the cancer experiences reported. One hundred and forty-two (54.4%) related to doctors either giving information regarding diagnosis, treatment or prognosis, or withholding such information from patients, and 82 accounts discussed the effects of this on the patients. Forty-one (15.7%) encounters related to dealing with relatives and only 11 (4.2%) to talking about death and dying with patients which was very small in relation to the large number of encounters relating to dying patients with cancer. The majority of encounters involving treatment of patients with cancer related to surgery only, 15 involved radiotherapy and 29 chemotherapy, this again reflects the general hospital setting for the study. In 19 (7.3%) encounters a lack of support for the subject by other staff was reported, only 7 (2.7) encounters reported that support had been given at the time.

269
<table>
<thead>
<tr>
<th>Nature of Encounter</th>
<th>Frequency</th>
<th>% of 261 Cancer Encounters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n=68</td>
</tr>
<tr>
<td><strong>Age of Patient</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>6</td>
<td>(2.3)</td>
</tr>
<tr>
<td>Young adults</td>
<td>20</td>
<td>(7.7)</td>
</tr>
<tr>
<td>Mature adults</td>
<td>146</td>
<td>(55.9)</td>
</tr>
<tr>
<td>Elderly</td>
<td>30</td>
<td>(11.5)</td>
</tr>
<tr>
<td><strong>Treatment Patient Received</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>29</td>
<td>(11.1)</td>
</tr>
<tr>
<td>Radiotherapy</td>
<td>15</td>
<td>(5.7)</td>
</tr>
<tr>
<td>Surgery</td>
<td>112</td>
<td>(42.9)</td>
</tr>
<tr>
<td><strong>Outcome of treatment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Successful</td>
<td>26</td>
<td>(10.0)</td>
</tr>
<tr>
<td>b) Unsuccessful</td>
<td>30</td>
<td>(11.5)</td>
</tr>
<tr>
<td>Patient with cancer in pain</td>
<td>29</td>
<td>(11.1)</td>
</tr>
<tr>
<td><strong>Communication &amp; psychological care</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dealing with relatives:</td>
<td>41</td>
<td>(15.7)</td>
</tr>
<tr>
<td>a) Withholding information</td>
<td>15</td>
<td>(5.7)</td>
</tr>
<tr>
<td>b) Imparting information</td>
<td>9</td>
<td>(3.4)</td>
</tr>
<tr>
<td>Doctor withholding information</td>
<td>63</td>
<td>(24.1)</td>
</tr>
<tr>
<td>Doctor imparting information</td>
<td>79</td>
<td>(30.3)</td>
</tr>
<tr>
<td>Effect of doctor's information giving/withholding on patient:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Positive</td>
<td>15</td>
<td>(5.7)</td>
</tr>
<tr>
<td>b) Neutral</td>
<td>38</td>
<td>(14.6)</td>
</tr>
<tr>
<td>c) Negative</td>
<td>29</td>
<td>(11.1)</td>
</tr>
<tr>
<td>Talking about death &amp; dying with patient</td>
<td>11</td>
<td>(4.2)</td>
</tr>
<tr>
<td>Dealing with dying patient with cancer</td>
<td>92</td>
<td>(35.2)</td>
</tr>
<tr>
<td>Dealing with death of patient with cancer</td>
<td>55</td>
<td>(21.1)</td>
</tr>
<tr>
<td>Patient's ability to cope with cancer:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for the nurse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support reported</td>
<td>7</td>
<td>(2.7)</td>
</tr>
<tr>
<td>Lack of support reported</td>
<td>19</td>
<td>(7.3)</td>
</tr>
</tbody>
</table>
Categories regarding the nature of cancer encounters were compared with the subject's perception of that experience. Nurses' perceptions of their encounters with cancer were coded into positive, neutral, mixed or negative for those accounts which were possible to interpret in this way. A breakdown of these perceptions is shown in Table 27.

<table>
<thead>
<tr>
<th>Nurses' Perception of the Cancer Experience</th>
<th>Experience as Staff Nurse</th>
<th>Experience as Student Nurse</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>25 (14.7)</td>
<td>19 (20.9)</td>
<td>44 (6.8)</td>
</tr>
<tr>
<td>Neutral</td>
<td>41 (24.1)</td>
<td>14 (15.4)</td>
<td>55 (21.1)</td>
</tr>
<tr>
<td>Mixed</td>
<td>46 (27.1)</td>
<td>15 (16.5)</td>
<td>61 (23.4)</td>
</tr>
<tr>
<td>Negative</td>
<td>53 (31.2)</td>
<td>37 (40.7)</td>
<td>90 (34.5)</td>
</tr>
<tr>
<td>Not possible to interpret</td>
<td>5 (2.9)</td>
<td>6 (6.6)</td>
<td>11 (4.2)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>170 (100)</td>
<td>91 (100)</td>
<td>261 (100)</td>
</tr>
</tbody>
</table>

Decisions regarding perception of the encounter were based on self reports from subjects and the kinds of adjectives they used in describing the encounter. For example adjectives such as upsetting, distressing, depressing, frightening, shocking, horrific, dreadful, worrying, shattering, horrendous and disgusting were used 78 times in descriptions of encounters. While adjectives such as rewarding, satisfying, hopeful, interesting and challenging were only used 27 times in descriptions of encounters.

As can be seen from Table 27, a greater proportion of encounters with
cancer were perceived as negative, these perceptions accounted for 90 (34.5%) of the 261 experiences, compared with only 44 (16.8%) perceived as positive. There appeared to be little difference in the likelihood of an encounter being perceived as either positive or negative, between staff nurse and student encounters. A greater proportion of student encounters were classified as positive or negative, rather than mixed or neutral.

The distribution of different perceptions of cancer encounters between the 68 interview subjects is shown in Table 28. A greater proportion of interview subjects, reported encounters with cancer which were classified as negative, than subjects whose encounters were classified as positive. Forty-seven (69.1%) subjects interviewed had one or more negative encounters compared with 31 (45.6%) who had one or more positive encounters.

<table>
<thead>
<tr>
<th>Perception of Cancer Encounter (%) of 68 interview subjects</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive 37 (54.4) 21 (30.9) 7 (10.3) 3 (4.4) - 44</td>
<td></td>
</tr>
<tr>
<td>Neutral 32 (47.1) 22 (32.4) 10 (14.7) 3 (4.4) 1 (1.1) 55</td>
<td></td>
</tr>
<tr>
<td>Mixed 27 (39.7) 24 (35.3) 14 (20.6) 3 (4.4) - 61</td>
<td></td>
</tr>
<tr>
<td>Negative 21 (30.9) 19 (27.9) 16 (23.5) 9 (13.2) 3 (4.4) 90</td>
<td></td>
</tr>
</tbody>
</table>
A comparison of the nature of cancer encounters and perceptions of encounters surrounding this as shown in Table 29. The majority of encounter categories were accompanied by a greater number of negative perceptions surrounding the experience, than positive. It would seem that contact with cancer, generally for these nurses both when they were student nurses, and as staff nurse evoked negative feelings. Only 5 categories of encounter were accompanied by more positive perceptions than negative. These were:-

- Where the outcome of treatment was successful
- Where the doctor imparted information to the patient regarding diagnosis, treatment and prognosis
- Where the effect of the doctor giving such information to the patient was positive
- Talking about death and dying with patients
- Where the patient's ability to cope psychologically with cancer was good.

It would seem that these nurses felt more positive and confident in dealing with patients with cancer where treatment was successful, open communication existed and where the patient was well adjusted to their disease. It would also appear that while dealing with death and dying was very difficult for them, for those who dared to talk about death and dying with patients this was likely to be a positive encounter.

Correspondingly, negative perceptions surrounded encounters where:-

- Patients were young or elderly
- Treatment was unsuccessful
- Where treatment involved surgery
### Table 29: Positive and Negative Perceptions of Different Cancer Encounters

<table>
<thead>
<tr>
<th>Nature of Encounter (n=68)</th>
<th>Nurses' Perception of Encounter</th>
<th>% of 261 Encounters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive (%)</td>
<td>Negative (%)</td>
</tr>
</tbody>
</table>

#### Age of Patient

<table>
<thead>
<tr>
<th>Category</th>
<th>Number (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>2 (10)</td>
<td>7 (35)</td>
</tr>
<tr>
<td>Young adults</td>
<td>30 (20.5)</td>
<td>146 (55.9)</td>
</tr>
<tr>
<td>Mature adults</td>
<td>3 (10)</td>
<td>30 (11.5)</td>
</tr>
<tr>
<td>Elderly</td>
<td>45 (30.8)</td>
<td>146 (55.9)</td>
</tr>
</tbody>
</table>

#### Treatment Patient Received

<table>
<thead>
<tr>
<th>Category</th>
<th>Number (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemotherapy</td>
<td>5 (17.2)</td>
<td>29 (11.1)</td>
</tr>
<tr>
<td>Radiotherapy</td>
<td>2 (13.3)</td>
<td>15 (5.7)</td>
</tr>
<tr>
<td>Surgery</td>
<td>17 (15.2)</td>
<td>112 (42.9)</td>
</tr>
</tbody>
</table>

#### Outcome of Treatment

<table>
<thead>
<tr>
<th>Category</th>
<th>Number (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Successful</td>
<td>4 (15.4)</td>
<td>26 (10)</td>
</tr>
<tr>
<td>b) Unsuccessful</td>
<td>2 (6.7)</td>
<td>30 (11.5)</td>
</tr>
<tr>
<td>Patient with cancer in pain</td>
<td>3 (10.3)</td>
<td>29 (11.1)</td>
</tr>
</tbody>
</table>

#### Communication & Psychological Care

<table>
<thead>
<tr>
<th>Category</th>
<th>Number (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Withholding information</td>
<td>11 (26.8)</td>
<td>41 (15.7)</td>
</tr>
<tr>
<td>b) Imparting information</td>
<td>13 (31.7)</td>
<td>63 (24.1)</td>
</tr>
<tr>
<td>Doctor witholding information</td>
<td>3 (9.5)</td>
<td>23 (9.1)</td>
</tr>
</tbody>
</table>

#### Effect of Doctor's Information Giving/Withholding on Patient:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Positive</td>
<td>7 (46.7)</td>
<td>15 (5.7)</td>
</tr>
<tr>
<td>b) Neutral</td>
<td>9 (23.7)</td>
<td>38 (14.6)</td>
</tr>
<tr>
<td>c) Negative</td>
<td>-</td>
<td>29 (11.1)</td>
</tr>
</tbody>
</table>

#### Talking about Death & Dying

<table>
<thead>
<tr>
<th>Category</th>
<th>Number (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Good</td>
<td>16 (48.5)</td>
<td>33 (12.6)</td>
</tr>
<tr>
<td>b) Poor</td>
<td>4 (11.1)</td>
<td>36 (13.8)</td>
</tr>
</tbody>
</table>

#### Support for the Nurse

<table>
<thead>
<tr>
<th>Category</th>
<th>Number (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support reported</td>
<td>1 (14.5)</td>
<td>7 (2.7)</td>
</tr>
<tr>
<td>Lack of support reported</td>
<td>8 (42.1)</td>
<td>19 (7.3)</td>
</tr>
</tbody>
</table>

---

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- The doctor withheld information regarding diagnosis, treatment or prognosis
- Where the patient's ability to cope psychologically with cancer was poor
- Where a lack of support for the nurse was reported
- Dealing with a dying patient with cancer
- Dealing with the death of a patient with cancer

ONE EXAMPLES OF CANCER ENCOUNTERS PERCEIVED AS POSITIVE

Nurse A "I've actually had positive experience from patients who you expected to die because they've had really nasty tumours and they've carried on and have obviously enjoyed life. That's really good."

Nurse B "A gentleman who died recently, I thought was really well handled. He had some gut problem, I don't know exactly where the cancer was. But he was allowed to say no to food and drink, and I think that was so good. That was the first time I've come across it, when we haven't been told to encourage it. And also told not to leave it there and see if he'll have it, but if he doesn't want it take it away, because it makes him feel sick. And his pain control was good. I didn't have anything to do with telling him, it came from sister and the doctors, but they told him and he knew everything and he sorted out his will, wrote to and called in the relatives he wanted to see, tied up everything, told his friends all about it. Sorted it all out and was comfortable when he died. And that was probably the only one I've seen."

Nurse C "There's one that stands out because I was able to do a lot for this particular patient. He was actually a security officer at the hospital who I knew. He had leukaemia and he came in to die .... I was
able to spend a lot of time caring for him and for his pain relief....
I think it helped I knew him .... in building .... we already had a relationship to build on."

Researcher "Were you there when he died?"

Nurse C "Yes, I was sad but also quite pleased because I felt I had done my job well. It was nice because I was able to follow it through .... and talk with the family and all the rest of the things you have to do. Which I found very satisfying."

SOME EXAMPLES OF CANCER ENCOUNTERS PERCEIVED AS NEGATIVE

Nurse D "A 50 year old man I admitted which was unusual. He came in complaining of back pain for investigation. He looked very well. He wasn't very emaciated at all .... I never dreamt at all that he would be diagnosed as cancer. It was the last thing .... he was treated quite badly, he didn't see the doctor as much as I thought he should have done. He had a CAT scan and the results were really bad. It was basically that he had metastases and bone cancer. He was absolutely riddled with cancer that there was nothing they could do for him. The doctor said he would come to speak to him and didn't, eventually the registrar said that the consultant wanted to see him, himself, because his prognosis was so bad. He used to say 'What will be, will be' but underneath you could see he was really anxious about it. He was in pain as well, which we never really got under control as well. It wasn't until he was diagnosed that they put him on morphine sulphate. Eventually they got it reasonably controlled but not as soon as they should have done .... the doctor still didn't come to see him. I felt terrible because I knew he didn't know, and I knew, and he thought
because the doctor didn't come and see him it was really bad. I couldn't actually say and be honest with him. Then eventually the doctor came (I was off) and told him and he went home. I felt really dissatisfied and cross. He'd been treated really badly it was awful."

Nurse E "I remember one gentleman he had delta-pectoral flaps and major surgery and it all went wrong and just all collapsed and the skin came off and that was it. And when I think of cancer I always think of him. This was in my third year, and he just died in such an awful way in such a mess. It was dreadful and he's the man I remember most out of everyone when I think of cancer. It was just awful, the worst thing I've ever seen. It was horrible, I mean the whole thing just broke down, and there was like green puss .... I don't really know what it was but it was just everywhere and the smell was just horrific, and I can just remember the smell so much as well.

Nurse F "I remember one time I was told 'go down and talk to this patient, he's just been told he's got cancer ....' that was my first experience. I had to go and sit with the gentleman. I didn't know what DXT was, he knew he was going to have radiotherapy, he knew more than I did, that was a horrible experience."

During interviews subjects either spontaneously, or were asked by interviewer, to reflect on how they coped with these encounters with patients with cancer. The frequency of different methods of coping reported by nurses is shown in Table 30.

It was not possible to compare methods of coping with encounters as a student nurse with those that occurred more recently since registering. Since there was no data available for many of the student experiences
making such a comparison rather meaningless.

It was interesting to note that in 59 encounters subjects reported that their own ability to cope related directly to how well the patient coped which reflects data relating to the perceptions of these encounters. In 74 experiences methods of coping reported involved some form of avoidance. These were either by passing responsibility for talking with the patient on to others, or avoiding contact with the patient. For 34 of the encounters subjects openly admitted feeling either inadequate or incompetent to deal with the patient.

Table 30  THE FREQUENCY OF DIFFERENT METHODS OF COPING REPORTED BY NURSES

<table>
<thead>
<tr>
<th>Method of Coping Reported</th>
<th>Frequency</th>
<th>(% of 261 cancer encounters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses' ability to cope related directly to how well patient coped</td>
<td>59</td>
<td>(22.6)</td>
</tr>
<tr>
<td>Nurse passes responsibility for talking on to others</td>
<td>59</td>
<td>(22.6)</td>
</tr>
<tr>
<td>Nurse accepts and takes on responsibility for patient's care</td>
<td>42</td>
<td>(16.1)</td>
</tr>
<tr>
<td>Nurse uses an open and honest approach</td>
<td>36</td>
<td>(13.7)</td>
</tr>
<tr>
<td>Nurse openly admitted feeling either inadequate or incompetent</td>
<td>34</td>
<td>(13)</td>
</tr>
<tr>
<td>Nurse felt reassured by previous experience</td>
<td>22</td>
<td>(8.4)</td>
</tr>
<tr>
<td>Avoided contact with patient</td>
<td>11</td>
<td>(4.2)</td>
</tr>
<tr>
<td>Treats patient exactly the same as other patients</td>
<td>7</td>
<td>(2.7)</td>
</tr>
<tr>
<td>Keeps emotionally distant</td>
<td>4</td>
<td>(1.5)</td>
</tr>
</tbody>
</table>
Subjects were asked to reflect on the effect individual encounters had on their feelings and confidence to care for cancer patients in the future. Sixty-six positive effects and 92 negative effects were reported and categories relating to these effects are shown in Table 31. A further 72 experiences were classified as having a mixed or neutral effect on nurses' reported ability to care for patients with cancer in the future.

**Table 31** EFFECTS OF CANCER ENCOUNTERS ON ABILITY TO CARE FOR PATIENTS WITH CANCER REPORTED BY NURSE.

<table>
<thead>
<tr>
<th>Effect of Encounter on Ability to Care (Categories not mutually exclusive)</th>
<th>Frequency</th>
<th>% of 261 Encounter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Realised cancer can have a good outcome</td>
<td>34</td>
<td>(13.0)</td>
</tr>
<tr>
<td>2) Felt more responsible for cancer care</td>
<td>22</td>
<td>(8.4)</td>
</tr>
<tr>
<td>3) Reinforced confidence in cancer care</td>
<td>21</td>
<td>(8.0)</td>
</tr>
<tr>
<td>4) Felt more positive about cancer treatments</td>
<td>10</td>
<td>(3.8)</td>
</tr>
<tr>
<td>5) After experience felt more positive about cancer</td>
<td>9</td>
<td>(3.4)</td>
</tr>
<tr>
<td>Negative Effects</td>
<td>92</td>
<td>(35.2)</td>
</tr>
<tr>
<td>1) Now finds it difficult to talk to patients with cancer</td>
<td>49</td>
<td>(18.8)</td>
</tr>
<tr>
<td>2) Now feels incompetent in cancer care</td>
<td>25</td>
<td>(9.6)</td>
</tr>
<tr>
<td>3) Feels negative about cancer treatment following cancer encounter</td>
<td>19</td>
<td>(7.3)</td>
</tr>
<tr>
<td>4) Now feels unable to cope with care of dying patients with cancer</td>
<td>17</td>
<td>(6.5)</td>
</tr>
<tr>
<td>5) Now avoids patients with cancer</td>
<td>3</td>
<td>(1.1)</td>
</tr>
</tbody>
</table>

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An excerpt from one nurse's interview is shown in Fig 26. This encounter was classified as negative and illustrates the effect such an encounter had on the subject and the coping strategy of avoidance she used in dealing with the patient with cancer.

**Fig. 26** A NEGATIVE ENCOUNTER OF CANCER ILLUSTRATING THE EFFECTS SUCH AN EXPERIENCE HAD ON THE NURSE.

Nurse G "There was a lady; she had ca lung and they operated and it was no good. And she was sort of going down hill .... I used to love her. I thought she was gorgeous but we never really talked in depth about her condition and then she said to me .... 'Am I going to survive?' And I just looked at her and I couldn't have the heart to turn round to her and say 'Well no you're not'. and I didn't know how to tell her that she was, or if it was my place to tell her?"

Researcher "So what did you do?"

Nurse G "I can't really describe it you know, you just waffle your way through it and sort of avoid the question totally..."

Researcher "Then what happened?"

Nurse G "Well then I found it really hard to talk to her after that, I had to avoid her because I couldn't .... I felt so guilty not being able to help her when she put so much trust in me by asking me a question like that. And I just couldn't help her."

Researcher "That must have been horrible."

Nurse G " .... I don't know it effects you in a way you don't realise it's effecting you. When I went home that night I cried, I really cried because I just couldn't help her."
During interviews subjects recounted a large number of encounters with patients they had experienced both as a student nurse and as a staff nurse. A much greater proportion of encounters (34.5% compared with 6.8%) were surrounded by negative perceptions, than positive ones. Positive and negative perceptions of cancer were equally distributed across all interview subjects. Experiences accompanied by positive perceptions appeared to be associated with the following factors:

- where outcome of treatment was successful
- where the doctor imparted information to the patient regarding diagnosis, treatment and prognosis
- where the effect of the doctor giving such information was positive
- talking about death and dying with patients
- where the patient's ability to cope with cancer was good.

In contrast negative perceptions appeared to be associated with the following factors:

- where the patients were young or elderly
- treatment was unsuccessful
- where treatment involved surgery
- the doctor withheld information regarding diagnosis, treatment, prognosis
- where the patient's ability to cope with cancer was poor
- where a lack of support for the nurse was reported.
- dealing with dying patient with cancer
- dealing with the death of patient with cancer
It appeared that the nature of experiences nurses have with cancer have a profound effect on their feelings about the disease in general and on their own feelings of competence to care for patients with cancer.
CHAPTER 7

THE EDUCATIONAL EVALUATION STUDY

One hundred and seven of the newly registered nurses from the baseline study opted for further education on cancer care, of these 93 were available to take part in the Educational interventions, 76 completed the post test questionnaire and 61 the follow-up questionnaire. Seventy-nine were also available and consented to take part in the interview study. The Evaluation Study therefore had two main components:

1. Questionnaire Study \( N = 107 \)
2. Interview Study \( N = 79 \)

Table 32 shows the division of subjects between the three research groups (Workshop attenders, Seminar attenders and Control Group). Availability for education determined allocation to research group. Five workshops and 3 concurrent Seminar programmes were run during the data collection period. 3 Workshops in Hospital 1 and 2 in Hospital 2. The number of participants in each workshop ranged between 5 and 10. The Seminar programme was problematic. These sessions were planned to coincide with a time when wards had most staff on them, during the overlap between morning and afternoon shifts. The Seminars were well publicised and open to all hospital staff to attend. In both hospitals attendances by research subjects specifically invited to attend and who had requested to do so was poor as shown in Table 33. Only 11 of the 40 or so nurses invited to attend these sessions did so, and the majority only attended one session each. This represented an attendance rate of 25%. Attendance for the workshops contrasted strongly with this, with an attendance rate of over 98%.
### Table 32. Division of Subjects Between the Research Groups

<table>
<thead>
<tr>
<th></th>
<th>Hospital 1</th>
<th>Hospital 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop attenders</td>
<td>17</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>Seminar attenders</td>
<td>2</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Control group</td>
<td>32</td>
<td>27</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>56</td>
<td>107</td>
</tr>
</tbody>
</table>

### Table 33. Oncology Seminar Attendance

<table>
<thead>
<tr>
<th></th>
<th>Seminar No.</th>
<th>Numbers Present</th>
<th>Number of Research Subjects Present</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N=11)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOSPITAL 1</td>
<td>Seminar Series 1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>HOSPITAL 2</td>
<td>Seminar Series 2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>HOSPITAL 2</td>
<td>Seminar Series 3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>16</td>
</tr>
</tbody>
</table>

The Control group consisted of nurses who wanted to take part in the education but were unable to leave their wards, or were not released for study leave by their nurse managers.
The Questionnaire Study

Table 34 shows the response rates of subjects to the 3 questionnaires. There was a drop out rate of 22 subjects (17.3%) from the study due to the mobility of the staff nurses leaving their training hospital some of whom were leaving the nursing profession altogether. This is similar to the mobility rates reported by Waite and Hunt (1987) for registered nurses nationally, although occurred over a shorter period of time and therefore is likely to underrepresent attrition of newly registered nurses from their training hospitals. Seven (6.6%) of these subjects were from Hospital 1 and 15 (14%) were from Hospital 2. This accounts for a large proportion of the non-response to questionnaires. Many of the nurses left the hospitals soon after their involvement in the study was over and they had completed 6 months post registration. This was a major factor accounting for the lower response rate to the third questionnaire.

Table 34. QUESTIONNAIRE RESPONSE RATES

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Sent</th>
<th>Returned</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaire 1</td>
<td>127</td>
<td>127</td>
<td>100</td>
</tr>
<tr>
<td>Questionnaire 2</td>
<td>93</td>
<td>76</td>
<td>81.7</td>
</tr>
<tr>
<td>Questionnaire 3</td>
<td>73</td>
<td>61</td>
<td>83.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>293</td>
<td>264</td>
<td>90.1</td>
</tr>
</tbody>
</table>

The Interview Study

Seventy-four of the 79 Interview study subjects had data available for analysis for the educational evaluation study. The distribution of these interview subjects across the 3 research groups is shown in Table 35.

Five subjects from the Control group of the questionnaire study attended
the workshop at a later date and were interviewed following this. Since their comments were felt to be important, they were included in the Workshop group for the interview study. For this reason the Workshop group in the Interview Study study had 42 subjects which left 54 subjects who had agreed to take part in the Evaluation study from the Control group. Missing interview data was inevitable due to poor quality tape recordings, sickness and mobility of research subjects. Only 44.4% of the Control group had data available for analysis for the Interview study, compared with 97.6% of the Workshop group. This was partly due to the higher mobility rate of subjects in the Control group which was one of the reasons for their not being able to attend the educational interventions, but also reflects the high commitment to the research study by those subjects who had attended the educational interventions. A small proportion of interview data was lost due to poor quality tape recording rendering them inaudible for transcription. Data for each of the three interviews was also not always available for every subject. Completed sets of interview were analysed for 50 (63.3%) of the interview subjects.

Table 35 DISTRIBUTION OF INTERVIEW SUBJECTS ACROSS THE 3 RESEARCH GROUPS

<table>
<thead>
<tr>
<th>Research Group</th>
<th>Number of Interview Subjects</th>
<th>Missing Interview Data (N = 79)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP</td>
<td>41 (97.6%)</td>
<td>1 (2.4%)</td>
</tr>
<tr>
<td>SEMINAR</td>
<td>9 (81.8%)</td>
<td>0</td>
</tr>
<tr>
<td>CONTROL</td>
<td>24 (44.4%)</td>
<td>4 (14.3%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>74 (93.7%)</td>
<td>5 (6.7%)</td>
</tr>
</tbody>
</table>
Results from the Evaluation Study will be presented in the following sections:

(7.1) Questionnaire data
(7.2) Interview data
(7.3) Participants' Evaluations of Workshops and Seminars
(7.4) Analysis for other Influential differences

(7.1) **QUESTIONNAIRE DATA**

Results in this section include pre-test, post-test and follow-up scores compared between the three research groups for the 107 evaluation study subjects on the following dependent variables:

- The perceived competence to care for patients with cancer self rating scale
- The perceived educational needs checklist
- The knowledge questionnaire
- The Cancer Attitude Scale.

Because of the small number of participants in each workshop it was not possible to analyse the results of each set of educational interventions separately. Groups were therefore combined for all 5 sets of educational interventions. Results concentrated on differences found between workshop participants and control group. Analysis comparing the seminar group with the control and workshop groups was difficult to interpret because of the small number of seminar group subjects and differences in sample sizes between the three groups. Where it was possible to calculate statistical tests using the seminar group, differences between the seminar group and control and workshop groups were not significant for variables tested.
Data is presented comparing scale items, and total scale scores, for between and within group differences over the three questionnaire administrations. Change scores were calculated for all subjects for the three assessments, by subtracting pre test item and total scale scores from post-test and follow-up scores, and post-test from follow-up scores. \((T_2 - T_1, T_3 - T_1, T_3 - T_2)\). The results of change score analysis are presented where they were felt to add to the understanding of data already presented.

(7.1.1) **STATISTICAL ANALYSIS**

Non parametric statistical tests were used for analysis since the data was assumed to be ordinal or a normal distribution for the sample could not be assumed. (Siegel 1956). Significance testing for differences between workshop and control groups was undertaken using chi squared tests on individual items of the perceived competence to care for patients with cancer rating scale, and knowledge test (testing the null hypothesis that there was no difference in the number of subjects rating themselves above or below the total samples median value for each item, between the two research groups) and also for the perceived educational needs checklist (testing the null hypothesis that there was no difference in the number of subjects who indicated a perceived educational need between the research and control groups). Individual items of the cancer attitude scale were tested using chi squared tests (testing the null hypothesis that there was no difference in the number of subjects indicating a positive response to the item between the workshop and control groups). Yates' correction for continuity was used for all chi squared tests since 2 x 2 contingency tables were used at all times (Siegel 1956).
Differences in total scores between the groups were assessed using Mann Whitney U tests (testing the null hypothesis that scores from research groups were the same). Since the sample of the largest research group was greater than 20 the Z score was calculated (Siegel 1956). Two tailed tests were used.

Within group differences were tested using Wilcoxon Signed ranks tests (testing the null hypothesis that there was no difference in scores for subjects between pre and post-test, and post-test and follow-up, and pre-test and follow-up assessments). Where the sample was larger than 25 the Z score was calculated (Siegel 1956), two tailed tests were used.

Since for the purposes of this study the risk of Type II error was felt to be greater than that of a Type I error, the significance level was set at \( p = 0.05 \) (Burns and Grove 1987). Numbers are rounded to two decimal places. N.S. stands for Not Significant, \( N \) stands for the number of cases, \( \chi^2 \) is used for chi squared. Missing data was inevitable in a longitudinal study, for this reason the number of cases available for analysis is stated in Tables.

(7.1.2) **NURSES' PERCEIVED COMPETENCE TO CARE FOR PATIENTS WITH CANCER.**

a) **ANALYSIS OF INDIVIDUAL ITEMS**

Analysis of responses to questionnaire one, comparing Workshop and Control groups completed before the educational interventions, revealed no significant differences using chi square tests in responses to any of the 15 items (Table 36). However, following the workshop, participants rated themselves above the median score significantly more often than the control group for 4 of the 15 items of cancer care, these were:-
- Teaching early detection of cancer
- Teaching prevention of cancer
- Helping the patient deal with an uncertain future
- Helping the patient come to terms with the fact he has cancer

Notably, these were the areas rated the lowest in the nurses' estimations of their own competence prior to the educational interventions. A fifth item, communicating with family, fell just below the p = 0.05 level of significance (Table 37). It would appear that the workshops did give nurses greater feelings of competence in the areas highlighted. At follow-up, 3 months after the educational interventions, only 1 of the 4 areas remained significant, this was item (a) teaching early detection of cancer ($X^2 = 4.11$, df = 1, $p = <0.05$) (Table 38).
<table>
<thead>
<tr>
<th>PERCEIVED COMPETENCE RATING SCALE ITEM</th>
<th>WORKSHOP GROUP Rating (N = 37)</th>
<th>CONTROL GROUP Rating (N = 59)</th>
<th>Significance Above Median Below Median df=1</th>
<th>X²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Teaching early detection of cancer</td>
<td>9 17 10 1 -</td>
<td>16 20 15 7 -</td>
<td></td>
<td>2.08</td>
<td>NS</td>
</tr>
<tr>
<td>b) Teaching prevention of cancer</td>
<td>3 18 12 4 -</td>
<td>9 22 15 13 -</td>
<td></td>
<td>1.27</td>
<td>NS</td>
</tr>
<tr>
<td>c) Dealing with side effects of treatment for cancer</td>
<td>6 14 12 5 -</td>
<td>6 19 28 5 1</td>
<td></td>
<td>0.03</td>
<td>NS</td>
</tr>
<tr>
<td>d) Helping the patient deal with an uncertain future</td>
<td>10 13 12 2 -</td>
<td>8 21 22 6 2</td>
<td></td>
<td>0.86</td>
<td>NS</td>
</tr>
<tr>
<td>e) Helping the patient deal with changes in body image</td>
<td>6 10 15 5 1</td>
<td>4 16 31 8 -</td>
<td></td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>f) Dealing with your own feelings about cancer</td>
<td>3 7 16 10 1</td>
<td>6 9 22 19 2</td>
<td></td>
<td>0.12</td>
<td>NS</td>
</tr>
<tr>
<td>g) Helping the patient come to terms with the fact he has cancer</td>
<td>4 21 11 1 -</td>
<td>12 20 23 3 1</td>
<td></td>
<td>0.50</td>
<td>NS</td>
</tr>
<tr>
<td>h) Helping the patient accept illness</td>
<td>2 19 12 4 -</td>
<td>3 16 32 7 1</td>
<td></td>
<td>0.10</td>
<td>NS</td>
</tr>
<tr>
<td>i) Helping the patient manage dependency</td>
<td>2 10 16 8 1</td>
<td>2 17 22 14 4</td>
<td></td>
<td>0.10</td>
<td>NS</td>
</tr>
<tr>
<td>j) Communicating with patients</td>
<td>1 5 19 12 -</td>
<td>1 3 24 27 4</td>
<td></td>
<td>2.61</td>
<td>NS</td>
</tr>
<tr>
<td>k) Communicating with the family</td>
<td>1 8 17 11 -</td>
<td>2 8 21 23 5</td>
<td></td>
<td>1.96</td>
<td>NS</td>
</tr>
<tr>
<td>l) Communicating with the physician</td>
<td>2 13 10 5 -</td>
<td>1 9 22 24 3</td>
<td></td>
<td>0.08</td>
<td>NS</td>
</tr>
<tr>
<td>m) Giving physical care</td>
<td>- - 3 18 16</td>
<td>1 1 5 26 26</td>
<td></td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>n) Doing special treatments</td>
<td>3 8 19 6 1</td>
<td>5 16 24 10 1</td>
<td></td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>o) Talking about death and dying with patients</td>
<td>7 16 7 7 -</td>
<td>14 11 21 9 3</td>
<td></td>
<td>0.00</td>
<td>NS</td>
</tr>
</tbody>
</table>

Key: 1 = I do not feel competent  5 = I feel highly competent
### WITH CANCER SELF-RATING SCALE FOLLOWING THE EDUCATIONAL INTERVENTIONS

<table>
<thead>
<tr>
<th>PERCEIVED COMPETENCE RATING SCALE ITEM</th>
<th>WORKSHOP GROUP</th>
<th>CONTROL GROUP</th>
<th>Significance Above Median Below Median df = 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rating (N = 35)</td>
<td>Rating (N = 31)</td>
<td>$X^2$</td>
</tr>
<tr>
<td>a) Teaching early detection of cancer</td>
<td>- 6 12 17 -</td>
<td>5 10 10 6 -</td>
<td>4.96</td>
</tr>
<tr>
<td>b) Teaching prevention of cancer</td>
<td>- 3 10 19 5</td>
<td>2 11 10 8 -</td>
<td>7.67</td>
</tr>
<tr>
<td>c) Dealing with side effects of treatment for cancer</td>
<td>1 2 20 11 1</td>
<td>5 3 13 10 -</td>
<td>0.16</td>
</tr>
<tr>
<td>d) Helping the patient deal with an uncertain future</td>
<td>- 4 21 10 -</td>
<td>5 12 12 2 -</td>
<td>7.16</td>
</tr>
<tr>
<td>e) Helping the patient deal with changes in body image</td>
<td>- 3 20 11 1</td>
<td>1 9 16 4 1</td>
<td>1.74</td>
</tr>
<tr>
<td>f) Dealing with your own feelings about cancer</td>
<td>- 2 13 20 -</td>
<td>1 9 8 11 2</td>
<td>2.11</td>
</tr>
<tr>
<td>g) Helping the patient come to terms with the fact he has cancer</td>
<td>1 5 16 12 -</td>
<td>2 13 13 3 -</td>
<td>6.78</td>
</tr>
<tr>
<td>h) Helping the patient accept illness</td>
<td>- 4 18 12 1</td>
<td>1 6 16 8 -</td>
<td>0.19</td>
</tr>
<tr>
<td>i) Helping the patient manage dependency</td>
<td>- 2 18 14 1</td>
<td>- 2 17 10 2</td>
<td>0.00</td>
</tr>
<tr>
<td>j) Communicating with patients</td>
<td>- 3 11 19 2</td>
<td>- 2 11 16 2</td>
<td>0.02</td>
</tr>
<tr>
<td>k) Communicating with the family</td>
<td>1 1 9 22 2</td>
<td>2 3 14 11 1</td>
<td>3.72</td>
</tr>
<tr>
<td>l) Communicating with the physician</td>
<td>- 2 7 22 6</td>
<td>- 4 7 19 1</td>
<td>0.35</td>
</tr>
<tr>
<td>m) Giving physical care</td>
<td>- 1 - 22 6</td>
<td>1 - - 17 13</td>
<td>0.00</td>
</tr>
<tr>
<td>n) Doing special treatments</td>
<td>2 8 14 10 1</td>
<td>2 4 17 5 2</td>
<td>0.00</td>
</tr>
<tr>
<td>o) Talking about death and dying with patients</td>
<td>2 3 17 13 -</td>
<td>1 9 14 7 -</td>
<td>0.83</td>
</tr>
</tbody>
</table>

**Key:** 1 = I do not feel competent  5 = I feel highly competent
<table>
<thead>
<tr>
<th>PERCEIVED COMPETENCE RATING SCALE ITEM</th>
<th>WORKSHOP GROUP Rating N = 31</th>
<th>CONTROL GROUP Rating N = 21</th>
<th>Significance Above Median Below Median df = 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1  2  3  4  5</td>
<td>1  2  3  4  5</td>
<td>$x^2$  P</td>
</tr>
<tr>
<td>a) Teaching early detection of cancer</td>
<td>1  4  12 13 1</td>
<td>2  4  12 3  -</td>
<td>4.11  &lt;0.05</td>
</tr>
<tr>
<td>b) Teaching prevention of cancer</td>
<td>1  2  12 13 3</td>
<td>1  5  6  8  1</td>
<td>0.32  NS</td>
</tr>
<tr>
<td>c) Dealing with side effects of treatment for cancer</td>
<td>- 4  15 12  -</td>
<td>1  5  7  7  1</td>
<td>0.00  NS</td>
</tr>
<tr>
<td>d) Helping the patient deal with an uncertain future</td>
<td>- 2  16 12 1</td>
<td>- 5  6  8  2</td>
<td>0.01  NS</td>
</tr>
<tr>
<td>e) Helping the patient deal with changes in body image</td>
<td>- 1  12 16 2</td>
<td>- 2  6  10  2</td>
<td>0.00  NS</td>
</tr>
<tr>
<td>f) Dealing with your own feelings about cancer</td>
<td>- 4  15 10  2</td>
<td>- 4  11  6  -</td>
<td>0.21  NS</td>
</tr>
<tr>
<td>g) Helping the patient come to terms with the fact he has cancer</td>
<td>1  3  11 13  2</td>
<td>- 2  9  8  2</td>
<td>0.00  NS</td>
</tr>
<tr>
<td>h) Helping the patient accept illness</td>
<td>- 1  11 17  2</td>
<td>- 1  4  12  4</td>
<td>0.35  NS</td>
</tr>
<tr>
<td>i) Helping the patient manage dependency</td>
<td>- 4  23 4</td>
<td>- 1  4  12  4</td>
<td>0.42  NS</td>
</tr>
<tr>
<td>j) Communicating with patients</td>
<td>- 1  5  21  4</td>
<td>- 2  5  9  5</td>
<td>0.67  NS</td>
</tr>
<tr>
<td>k) Communicating with the family</td>
<td>- 5  21  5</td>
<td>- 1  3  8  9</td>
<td>0.00  NS</td>
</tr>
<tr>
<td>l) Communicating with the physician</td>
<td>- 1  14 14  2</td>
<td>- 3  10  7  1</td>
<td>0.82  NS</td>
</tr>
</tbody>
</table>

**KEY:** 1 = I do not feel competent  5 = I feel highly competent
(b) **Analysis of differences in Perceived Competence Rating Scale Factor Scores between research groups.**

Scores for each of the items of the 4 factors described in Chapter 6 were summed to give factor scores for subjects. Mean, Median and ranges of these scores can be seen in Tables 39 to 42.

Mann Whitney U Tests (Shown in Table 43) revealed significantly higher scores post test in the Workshop Group compared with the Control Group for Factor 1 (items associated with communication and psychological care for patients with cancer), and Factor 3 (items associated with teaching prevention and early detection of cancer), but no significant differences in scores for Factor 2 (items associated with general physical care) or Factor 4 (items relating to physical care specific to patients with cancer). However any significance in differences was not demonstrated on follow-up for any of the 4 factors.

(c) **Analysis of Total Scores**

Scores for each of the 15 items of the Perceived Competence to Care for Patients with Cancer rating scale were summed for each subject, differences in these scores were compared over time and are shown in Table 44. Mann Whitney U tests revealed no significant differences in scores between workshop and control groups prior to the educational interventions, \(U = 845, Z = -1.38, P = 0.169\), immediately after education the workshop group scores were significantly higher than the control, \(U = 299, Z = -2.84, P < 0.005\), these differences were no longer significant at follow up 3 months later, \(U = 266.5, Z = -0.93, P = 0.35\). No differences were found using Mann Whitney U tests between the Workshop and Seminar groups, nor the Control group and Seminar group on any of the scale's occasions of testing.
Tables 39 to 42 PERCEIVED COMPETENCE TO CARE FOR PATIENTS WITH CANCER RATING SCALE, FACTOR SCORES AT 3 STAGES OF STUDY

Table 39 FACTOR 1

<table>
<thead>
<tr>
<th>Research Group</th>
<th>PRE TEST Median (Range)</th>
<th>POST TEST Median (Range)</th>
<th>FOLLOW UP Median (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP (n=37)</td>
<td>22 (9-31)</td>
<td>27 (16-33)</td>
<td>28 (20-38)</td>
</tr>
<tr>
<td>SEMINAR (n=37)</td>
<td>20 (13-35)</td>
<td>25 (19-35)</td>
<td>27 (18-32)</td>
</tr>
<tr>
<td>CONTROL (n=59)</td>
<td>23 (12-38)</td>
<td>24 (14-36)</td>
<td>27 (19-38)</td>
</tr>
</tbody>
</table>

Table 40 FACTOR 2

<table>
<thead>
<tr>
<th>Research Group</th>
<th>PRE TEST Median (Range)</th>
<th>POST TEST Median (Range)</th>
<th>FOLLOW UP Median (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP (n=37)</td>
<td>10 (7-15)</td>
<td>12 (8-15)</td>
<td>12 (10-15)</td>
</tr>
<tr>
<td>SEMINAR (n=37)</td>
<td>10 (5-14)</td>
<td>12 (11-14)</td>
<td>12 (9-14)</td>
</tr>
<tr>
<td>CONTROL (n=59)</td>
<td>11 (5-14)</td>
<td>12 (5-15)</td>
<td>13 (6-15)</td>
</tr>
</tbody>
</table>

Table 41 FACTOR 3

<table>
<thead>
<tr>
<th>Research Group</th>
<th>PRE TEST Median (Range)</th>
<th>POST TEST Median (Range)</th>
<th>FOLLOW UP Median (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP (n=37)</td>
<td>4 (2-8)</td>
<td>7 (4-9)</td>
<td>7 (2-10)</td>
</tr>
<tr>
<td>SEMINAR (n=37)</td>
<td>3 (2-6)</td>
<td>6 (4-8)</td>
<td>5 (4-8)</td>
</tr>
<tr>
<td>CONTROL (n=59)</td>
<td>5 (2-8)</td>
<td>5 (2-8)</td>
<td>6 (2-9)</td>
</tr>
</tbody>
</table>
Table 42  FACTOR 4

<table>
<thead>
<tr>
<th>Research Group</th>
<th>PRE TEST Median (Range)</th>
<th>POST TEST Median (Range)</th>
<th>FOLLOW UP Median (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP (n=37)</td>
<td>5 (3-8)</td>
<td>6 (3-8)</td>
<td>7 (4-9)</td>
</tr>
<tr>
<td>SEMINAR (n=21)</td>
<td>5 (2-8)</td>
<td>6 (5-9)</td>
<td>6 (4-9)</td>
</tr>
<tr>
<td>CONTROL (n=59)</td>
<td>6 (3-10)</td>
<td>6 (3-8)</td>
<td>6 (5-8)</td>
</tr>
</tbody>
</table>

Table 43  MANN WHITNEY U VALUES COMPARING WORKSHOP AND CONTROL GROUPS FOR THE 4 FACTORS OF THE PERCEIVED COMPETENCE RATING SCALE

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>MANN WHITNEY U VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRE TEST</td>
</tr>
<tr>
<td></td>
<td>U</td>
</tr>
<tr>
<td>FACTOR 1</td>
<td>839</td>
</tr>
<tr>
<td>FACTOR 2</td>
<td>1043</td>
</tr>
<tr>
<td>FACTOR 3</td>
<td>1002</td>
</tr>
<tr>
<td>FACTOR 4</td>
<td>975</td>
</tr>
</tbody>
</table>

Table 44  PERCEIVED COMPETENCE TO CARE FOR PATIENTS WITH CANCER RATING SCALE: MEAN AND MEDIAN SCORES AT 3 STAGES OF STUDY

<table>
<thead>
<tr>
<th>Research Group</th>
<th>Pre Test</th>
<th>Post Test</th>
<th>Follow up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop (n=37)</td>
<td>41.41</td>
<td>51.7</td>
<td>54.27</td>
</tr>
<tr>
<td>Control (n=59)</td>
<td>44.08</td>
<td>46.44</td>
<td>52.22</td>
</tr>
<tr>
<td>Seminar (n=9)</td>
<td>41.50</td>
<td>50.00</td>
<td>50.38</td>
</tr>
</tbody>
</table>
A closer look at mean scores for each item of the scale (Table 45) shed some light on why these changes were no longer significant at 3 months follow-up. On all items for both control and workshop groups respondents indicated that their own feelings of competence increased over time.

After the educational interventions the workshop group made significant gains over the control group in the areas outlined earlier, and also showed higher mean scores than the control group on:

- Dealing with the side effects of treatment for cancer;
- Helping the patient deal with changes in body image;
- Helping the patient accept illness;
- Talking about death and dying with patients.

At follow up the workshop group's mean scores remained higher than the control's on all these except item (L), helping the patient accept illness. The control group's mean scores increased over the 6 months of the study, this had the effect of reducing differences observed so that they were no longer significant. To illuminate the findings further Change Scores were calculated for each subject by subtracting pre test and follow up total scale scores, from post educational intervention scores, and pre test scores from follow up scores. These are shown in Table 46.

A negative change score would actually denote a decrease in self rating of competence to care for patients. As can be seen from Table 46 much higher ranges of negative change scores were evident in the Control Group than the Workshop Group, indicating that there were some respondents from this group who had a great decrease in their own feelings of competence during the 6 months of the Study. This suggests that the effects of the workshop did persist over time.
| Perceived Competence Rating Scale Item | PRE TEST |  | POST TEST |  | FOLLOW UP |  |
|----------------------------------------|----------|  |-----------|  |-----------|  |
|                                        | Workshop | Control | Workshop | Control | Workshop | Control |
|                                        | n = 37   | n = 59  | n = 35   | n = 31  | n = 31   | n = 21  |
| a) Teaching early detection of cancer  | 2.10     | 2 (1-4) | 2.24     | 2 (1-4) | 3.33     | 3 (1-5) | 2.91     | 3 (1-4) | 3.28     | 3 (1-5) | 2.76     | 3 (1-4) |
| b) Teaching prevention of cancer      | 2.47     | 2 (1-4) | 2.58     | 2 (1-4) | 3.63     | 4 (2-5) | 2.77     | 3 (1-4) | 3.49     | 4 (1-5) | 3.14     | 3 (1-5) |
| c) Dealing with side effects of treatment for cancer | 2.42     | 2 (1-4) | 2.60     | 3 (1-5) | 2.91     | 3 (1-5) | 2.91     | 3 (1-4) | 3.20     | 3 (1-4) | 3.05     | 3 (1-4) |
| d) Helping the patient deal with an uncertain future | 2.16     | 2 (1-4) | 2.56     | 3 (1-5) | 3.20     | 3 (2-4) | 2.37     | 2 (1-4) | 3.27     | 3 (2-5) | 3.10     | 3 (1-5) |
| e) Helping the patient deal with changes in body image | 2.61     | 3 (1-5) | 2.73     | 3 (1-4) | 3.29     | 3 (2-5) | 2.82     | 3 (1-5) | 3.38     | 3 (2-5) | 3.33     | 3 (2-5) |
| f) Dealing with your own feelings about cancer | 2.98     | 3 (1-5) | 3.05     | 3 (1-5) | 3.56     | 4 (2-4) | 3.14     | 3 (1-5) | 3.62     | 4 (2-5) | 3.52     | 4 (2-5) |
| g) Helping the patient to come to terms with the fact he has cancer | 2.24     | 2 (1-4) | 2.35     | 2 (1-5) | 3.16     | 3 (1-4) | 2.57     | 3 (1-4) | 3.32     | 3.5 (1-5) | 3.10     | 3 (2-4) |
| h) Helping the patient to accept this | 2.48     | 2 (1-4) | 2.78     | 3 (1-5) | 3.27     | 3 (2-5) | 3.01     | 3 (1-4) | 3.39     | 4 (2-5) | 3.48     | 3 (2-5) |
| i) Helping the patient manage despondency | 2.90     | 3 (1-5) | 3.02     | 3 (1-5) | 3.40     | 3 (2-5) | 3.40     | 3 (1-5) | 3.65     | 4 (3-5) | 3.91     | 4 (2-5) |
| j) Communicating with patients | 3.14     | 3 (1-4) | 3.51     | 4 (1-5) | 3.60     | 4 (2-5) | 3.61     | 4 (2-5) | 3.99     | 4 (2-5) | 3.91     | 4 (2-5) |
| k) Communicating with the family | 3.04     | 3 (1-4) | 3.36     | 3 (1-5) | 3.67     | 4 (1-5) | 3.21     | 3 (1-5) | 3.91     | 4 (2-5) | 3.81     | 4 (2-5) |
| l) Communicating with the physician | 3.29     | 3 (1-5) | 3.33     | 3 (1-5) | 3.86     | 4 (2-5) | 3.56     | 4 (2-5) | 4.02     | 4 (2-5) | 4.19     | 4 (2-5) |
| m) Giving physical care | 4.36     | 4 (3-5) | 4.28     | 4 (1-5) | 4.33     | 4 (2-5) | 4.33     | 4 (2-5) | 4.59     | 5 (4-5) | 4.57     | 5 (2-5) |
| n) Doing special treatments | 2.85     | 3 (1-5) | 2.87     | 3 (1-5) | 3.02     | 3 (1-5) | 3.06     | 3 (1-5) | 3.49     | 4 (2-5) | 3.10     | 3 (2-4) |
| o) Talking about death & dying with patients | 2.39     | 2 (1-4) | 2.59     | 3 (1-5) | 3.20     | 3 (1-4) | 2.91     | 3 (1-4) | 3.56     | 4 (2-5) | 3.29     | 3 (2-4) |
Table 46  COMPARISON OF WORKSHOP AND CONTROL GROUP, MEAN AND MEDIAN CHANGE SCORES FOR THE PERCEIVED COMPETENCE TO CARE FOR PATIENTS WITH CANCER SELF RATING SCALE.

<table>
<thead>
<tr>
<th>Research Group</th>
<th>Change Score T1 - T2 Mean (Range)</th>
<th>Change Score T2 - T3 Mean (Range)</th>
<th>Change Score T3 - T1 Mean (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop (n=39)</td>
<td>10.52 10.00 (-2-25)</td>
<td>2.44 2 (-7-21)</td>
<td>12.97 12 (2-29)</td>
</tr>
<tr>
<td>Control (n=59)</td>
<td>2.11 3.00 (-20-16)</td>
<td>3.58 3 (-8-18)</td>
<td>6.49 7 (-22-23)</td>
</tr>
<tr>
<td>Seminar (n=44)</td>
<td>7.44 7 (-1-18)</td>
<td>0.50 0 (-9-15)</td>
<td>8.00 4 (-7-28)</td>
</tr>
</tbody>
</table>

Mann Whitney U tests comparing Workshop and Control group change scores demonstrate significantly higher positive changes in the Workshop group following the intervention (U = 212.5, Z = 3.73, P = <0.001).

Differences in Change Scores for post intervention and follow-up ratings, between Workshop and Control groups were not significant (U = 233.5, Z = -0.42, NS).

(d) ANALYSIS OF WITHIN GROUP CHANGE IN SCORES OVER TIME

Comparison of pre, post and follow-up scores for the perceived competence rating scale, for each of the research groups, using Wilcoxon signed ranks tests illuminates previous findings, (see Tables 47 to 49). The Workshop group show significantly higher scores for the scale between pre-test and follow-up administrations of the scale, suggesting that Workshop group members increased in their own perception of competence to care for patients with cancer during the study following education. In contrast the Seminar group members only showed significantly higher scores immediately following the interventions. The Control group did also improve their scores but not until the follow-up test. This would appear...
to strengthen the explanation that there was a "catching up" effect for Control group subjects, with the Workshop group. The magnitude of change was greater in the Workshop group than in the other research groups.

Table 47  COMPARISON OF PRE AND POST TEST PERCEIVED COMPETENCE RATING SCALE SCORES FOR SUBJECTS WITHIN EACH OF THE RESEARCH GROUPS USING WILCOXON SIGNED RANKS TESTS

<table>
<thead>
<tr>
<th>Research Groups</th>
<th>Pre-test Scores Compared with Post Test Scores</th>
<th>No. of Cases with Lower Scores at Post Test</th>
<th>No. of Cases with Higher Scores at Post Test</th>
<th>Ties</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP (n=12)</td>
<td></td>
<td>3</td>
<td>30</td>
<td>1</td>
<td>-4.89</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>SEMINAR (n=11)</td>
<td></td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>-2.38</td>
<td>0.02</td>
</tr>
<tr>
<td>CONTROL (n=10)</td>
<td></td>
<td>8</td>
<td>20</td>
<td>0</td>
<td>-1.55</td>
<td>NS</td>
</tr>
</tbody>
</table>

Table 48  COMPARISON OF POST TEST AND FOLLOW-UP PERCEIVED COMPETENCE RATING SCALE SCORES FOR SUBJECTS WITHIN EACH OF THE RESEARCH GROUPS USING WILCOXON SIGNED RANKS TESTS

<table>
<thead>
<tr>
<th>Research Group</th>
<th>Post-test Scores Compared with Follow-up Scores</th>
<th>No. of Cases with Lower Scores at Follow-up</th>
<th>No. of cases with Higher Scores at Follow-up</th>
<th>Ties</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP (n=12)</td>
<td></td>
<td>9</td>
<td>18</td>
<td>1</td>
<td>-2.16</td>
<td>0.03</td>
</tr>
<tr>
<td>SEMINAR (n=11)</td>
<td></td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>-0.14</td>
<td>NS</td>
</tr>
<tr>
<td>CONTROL (n=10)</td>
<td></td>
<td>6</td>
<td>10</td>
<td>2</td>
<td>-2.07</td>
<td>0.04</td>
</tr>
</tbody>
</table>
Table 49  COMPARISON OF PRE-TEST AND FOLLOW-UP PERCEIVED COMPETENCY RATING SCALE SCORES FOR SUBJECTS WITHIN EACH OF THE RESEARCH GROUPS USING WILCOXON SIGNED RANKS TESTS

<table>
<thead>
<tr>
<th>Research Group</th>
<th>No. of Cases with Lower Scores at Follow-up</th>
<th>No. of Cases with Higher Scores at Follow-up</th>
<th>Ties</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP (n=33)</td>
<td>0</td>
<td>30</td>
<td>0</td>
<td>-4.782</td>
<td>&lt;0.001</td>
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<td>SEMINAR (n=44)</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>-1.33</td>
<td>NS</td>
</tr>
<tr>
<td>CONTROL (n=43)</td>
<td>2</td>
<td>16</td>
<td>3</td>
<td>-2.94</td>
<td>0.003</td>
</tr>
</tbody>
</table>
(7.1.3) **PERCEIVED EDUCATIONAL NEEDS IN CANCER CARE**

Responses to the perceived educational needs in cancer care checklist are reported in this section.

(a) **ANALYSIS OF INDIVIDUAL ITEMS OF THE CHECKLIST**

Tables 50 to 52 show the number of respondents for the Workshop and Control groups who indicated that they wanted more knowledge and practice in each of the 23 areas of educational need. Prior to the educational intervention no differences were found between the two groups on any of the items. Following the workshop a total of 11 of the 23 areas were indicated significantly more often amongst the control group subjects than the Workshop group. It would appear that for the Workshop group more areas of educational need were met through attendance of the intervention. At 3 months follow-up 7 of these areas remained significant (Table 53) indicating that the effects of the Workshop persisted over time.

(b) **ANALYSIS OF TOTAL SCORES FOR THE CHECKLIST**

Prior to the education no differences were found in the total number of items requested between the Workshop and Control groups. Following the interventions the median number of areas requested fell from 14 to 6 for the Workshop group, but rose from 13 to 14 in the Control group. \( \chi^2 = 10.19, \text{df} = 1, p = <0.005 \). At 3 months follow-up the Workshop group had a median of 4 areas of educational need requested, and the Control group a median of 10, the difference remained significant \( \chi^2 = 9.32 \text{df} = 1, p = <0.002 \). The median number of areas indicated by the Seminar group also fell following education but not to such a large extent, with a median of 14 areas indicated prior to the Seminars, and 8.5 at 3 months follow-up.
### Table 50: Comparison of Educational Needs in Cancer Care Between Workshop & Control Groups Prior to the Educational Intervention

<table>
<thead>
<tr>
<th>Area of Educational Need</th>
<th>Educational Need Indicated</th>
<th>Workshop Group n = 37</th>
<th>Control Group n = 59</th>
<th>$\chi^2$ df=1</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) The nature of cancer</td>
<td></td>
<td>24</td>
<td>32</td>
<td>0.82</td>
<td>NS</td>
</tr>
<tr>
<td>2) Methods of prevention for cancer</td>
<td></td>
<td>26</td>
<td>36</td>
<td>0.65</td>
<td>NS</td>
</tr>
<tr>
<td>3) Methods of early detection for cancer</td>
<td></td>
<td>26</td>
<td>42</td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>4) Problems resulting from surgery for cancer</td>
<td></td>
<td>19</td>
<td>26</td>
<td>0.31</td>
<td>NS</td>
</tr>
<tr>
<td>5) Problems resulting from radiotherapy</td>
<td></td>
<td>27</td>
<td>37</td>
<td>0.85</td>
<td>NS</td>
</tr>
<tr>
<td>6) Problems resulting from chemotherapy</td>
<td></td>
<td>27</td>
<td>42</td>
<td>0.01</td>
<td>NS</td>
</tr>
<tr>
<td>7) Nursing measures to minimise side effects of cancer treatment</td>
<td></td>
<td>32</td>
<td>46</td>
<td>0.85</td>
<td>NS</td>
</tr>
<tr>
<td>8) Cancer as a chronic disease</td>
<td></td>
<td>23</td>
<td>25</td>
<td>3.07</td>
<td>NS</td>
</tr>
<tr>
<td>9) Diagnostic measures</td>
<td></td>
<td>15</td>
<td>24</td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>10) Changing attitudes of staff members towards cancer</td>
<td></td>
<td>27</td>
<td>40</td>
<td>0.18</td>
<td>NS</td>
</tr>
<tr>
<td>11) Tracheotomy care</td>
<td></td>
<td>14</td>
<td>15</td>
<td>1.24</td>
<td>NS</td>
</tr>
<tr>
<td>12) Mastectomy care</td>
<td></td>
<td>14</td>
<td>20</td>
<td>0.05</td>
<td>NS</td>
</tr>
<tr>
<td>13) Colostomy care</td>
<td></td>
<td>5</td>
<td>8</td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>14) Ileostomy care</td>
<td></td>
<td>6</td>
<td>13</td>
<td>0.15</td>
<td>NS</td>
</tr>
<tr>
<td>15) Dealing with social and psychological problems of cancer patients</td>
<td></td>
<td>35</td>
<td>49</td>
<td>2.28</td>
<td>NS</td>
</tr>
<tr>
<td>16) Dealing with pain</td>
<td></td>
<td>31</td>
<td>46</td>
<td>0.34</td>
<td>NS</td>
</tr>
<tr>
<td>17) Rehabilitation of the patient</td>
<td></td>
<td>22</td>
<td>26</td>
<td>0.18</td>
<td>NS</td>
</tr>
<tr>
<td>18) Family involvement</td>
<td></td>
<td>29</td>
<td>43</td>
<td>2.25</td>
<td>NS</td>
</tr>
<tr>
<td>19) Agencies to call upon for assistance with cancer patients</td>
<td></td>
<td>31</td>
<td>41</td>
<td>2.11</td>
<td>NS</td>
</tr>
<tr>
<td>20) Complementary methods of pain &amp; symptom control</td>
<td></td>
<td>28</td>
<td>47</td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>21) Communicating with patient and family in different stages of illness</td>
<td></td>
<td>36</td>
<td>55</td>
<td>0.47</td>
<td>NS</td>
</tr>
<tr>
<td>22) Terminal illness</td>
<td></td>
<td>23</td>
<td>32</td>
<td>0.41</td>
<td>NS</td>
</tr>
<tr>
<td>23) Death and dying</td>
<td></td>
<td>24</td>
<td>39</td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>Area of Educational Need</td>
<td>Educational Need Indicated</td>
<td>Workshop Control</td>
<td>Group Group</td>
<td>$x^2$ df=1</td>
<td>p</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------</td>
<td>-----------------</td>
<td>-------------</td>
<td>-----------</td>
<td>---</td>
</tr>
<tr>
<td>1) The nature of cancer</td>
<td></td>
<td>11 19</td>
<td>4.77 &lt;0.05</td>
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<td></td>
</tr>
<tr>
<td>2) Methods of prevention for cancer</td>
<td></td>
<td>4 18</td>
<td>14.06 &lt;0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Methods of early detection</td>
<td></td>
<td>6 17</td>
<td>8.7 &lt;0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Problems resulting from surgery for cancer</td>
<td></td>
<td>11 15</td>
<td>1.33 NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Problems resulting from radiotherapy</td>
<td></td>
<td>14 17</td>
<td>0.92 NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Problems resulting from chemotherapy</td>
<td></td>
<td>13 22</td>
<td>6.25 &lt;0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) Nursing measures to minimise side effects of cancer/treatment</td>
<td></td>
<td>16 21</td>
<td>2.41 NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) Cancer as a chronic disease</td>
<td></td>
<td>6 16</td>
<td>7.31 &lt;0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9) Diagnostic measures</td>
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<td>11 12</td>
<td>0.13 NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) Changing attitudes of staff members towards cancer</td>
<td></td>
<td>13 18</td>
<td>2.11 NS</td>
<td></td>
<td></td>
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<tr>
<td>11) Tracheotomy care</td>
<td></td>
<td>11 8</td>
<td>0.05 NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12) Mastectomy care</td>
<td></td>
<td>6 7</td>
<td>0.06 NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13) Colostomy care</td>
<td></td>
<td>3 5</td>
<td>0.31 NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14) Ileostomy care</td>
<td></td>
<td>5 9</td>
<td>1.35 NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15) Dealing with social and psychological problems of cancer patients</td>
<td></td>
<td>16 27</td>
<td>10.64 &lt;0.01</td>
<td></td>
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<tr>
<td>16) Dealing with pain</td>
<td></td>
<td>7 21</td>
<td>13.45 &lt;0.001</td>
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<td>0.45 NS</td>
<td></td>
<td></td>
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<tr>
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<td>17 22</td>
<td>2.55 NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19) Agencies to call upon for assistance with cancer patients</td>
<td></td>
<td>12 28</td>
<td>19.34 &lt;0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20) Complementary methods of pain &amp; symptom control</td>
<td></td>
<td>12 24</td>
<td>10.66 &lt;0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21) Communicating with patient and family in different stages of illness</td>
<td></td>
<td>19 29</td>
<td>10.87 &lt;0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22) Terminal illness</td>
<td></td>
<td>8 17</td>
<td>5.85 &lt;0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23) Death and dying</td>
<td></td>
<td>10 17</td>
<td>3.67 0.055</td>
<td></td>
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</tbody>
</table>

304
Table 52  COMPARISON OF EDUCATIONAL NEEDS IN CANCER CARE BETWEEN WORKSHOP AND CONTROL GROUPS AT 3-MONTHS FOLLOW UP

<table>
<thead>
<tr>
<th>Area of Educational Need</th>
<th>Educational Need Indicated</th>
<th>Workshop Group n = 32</th>
<th>Control Group P = 21</th>
<th>X² df=1</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) The nature of cancer</td>
<td>8</td>
<td>8</td>
<td>0.50</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>2) Methods of prevention for cancer</td>
<td>3</td>
<td>12</td>
<td>12.00</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>3) Methods of early detection</td>
<td>6</td>
<td>14</td>
<td>10.43</td>
<td>&lt;0.005</td>
<td></td>
</tr>
<tr>
<td>4) Problems resulting from surgery for cancer</td>
<td>7</td>
<td>7</td>
<td>0.37</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>5) Problems resulting from radiotherapy</td>
<td>12</td>
<td>11</td>
<td>0.62</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>6) Problems resulting from chemotherapy</td>
<td>11</td>
<td>14</td>
<td>4.09</td>
<td>&lt;0.05</td>
<td></td>
</tr>
<tr>
<td>7) Nursing measures to minimise side effects of cancer/treatment</td>
<td>13</td>
<td>12</td>
<td>0.80</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>8) Cancer as a chronic disease</td>
<td>4</td>
<td>12</td>
<td>9.97</td>
<td>&lt;0.005</td>
<td></td>
</tr>
<tr>
<td>9) Diagnostic measures generally used</td>
<td>8</td>
<td>8</td>
<td>0.50</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>10) Changing attitudes of staff memberstowards cancer</td>
<td>12</td>
<td>9</td>
<td>0.01</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>11) Tracheotomy care</td>
<td>8</td>
<td>4</td>
<td>0.03</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>12) Mastectomy care</td>
<td>3</td>
<td>4</td>
<td>0.36</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>13) Colostomy care</td>
<td>2</td>
<td>2</td>
<td>0.00</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>14) Ileostomy care</td>
<td>3</td>
<td>4</td>
<td>0.36</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>15) Dealing with social and psychological problems of cancer patients</td>
<td>13</td>
<td>14</td>
<td>2.48</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>16) Dealing with pain</td>
<td>7</td>
<td>12</td>
<td>5.41</td>
<td>&lt;0.05</td>
<td></td>
</tr>
<tr>
<td>17) Rehabilitation of the patient</td>
<td>8</td>
<td>7</td>
<td>0.12</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>18) Family involvement</td>
<td>10</td>
<td>11</td>
<td>1.57</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>19) Agencies to call upon for assistance with cancer patients</td>
<td>8</td>
<td>15</td>
<td>9.32</td>
<td>&lt;0.005</td>
<td></td>
</tr>
<tr>
<td>20) Complementary methods of pain &amp; symptom control</td>
<td>9</td>
<td>17</td>
<td>12.12</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>21) Communicating with patient and family in different stages of illness</td>
<td>14</td>
<td>15</td>
<td>2.88</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>22) Terminal illness</td>
<td>4</td>
<td>7</td>
<td>2.20</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>23) Death and dying</td>
<td>6</td>
<td>8</td>
<td>1.54</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

305
(c) ANALYSIS OF WITHIN RESEARCH GROUP CHANGES IN SCORES OVER TIME

Comparison was made of the number of items of the educational needs checklist subjects indicated they wanted more knowledge or practice in, at pre-test, post-test and follow-up administrations of the questionnaire using Wilcoxon Signed Ranks test (see Tables 53 to 55). All three groups indicated significantly fewer areas of educational need between pre-test and follow-up, but only the Workshop group demonstrated a significant reduction in number of needs immediately after the educational interventions. Again the magnitude of differences was greater within the Workshop group than the other research groups.

Table 53  COMPARISON OF PRE AND POST TEST PERCEIVED EDUCATIONAL NEEDS CHECKLIST SCORES FOR SUBJECTS WITHIN EACH OF THE RESEARCH USING WILCOXON SIGNED RANKS TESTS

<table>
<thead>
<tr>
<th>Research Group</th>
<th>No. of Cases with Lower Scores at Post-test</th>
<th>No. of cases with Higher Scores at Post-test</th>
<th>Ties</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP (n=32)</td>
<td>32</td>
<td>3</td>
<td>0</td>
<td>-4.95</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>SEMINAR (n=10)</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>-2.80</td>
<td>0.005</td>
</tr>
<tr>
<td>CONTROL (n=15)</td>
<td>15</td>
<td>14</td>
<td>2</td>
<td>-1.12</td>
<td>NS</td>
</tr>
</tbody>
</table>
### Table 54
**COMPARISON OF POST TEST AND FOLLOW-UP PERCEIVED EDUCATIONAL NEEDS CHECKLIST SCORES FOR SUBJECTS WITHIN EACH OF THE RESEARCH GROUPS USING WILCOXON SIGNED RANKS TESTS**

<table>
<thead>
<tr>
<th>Research Group</th>
<th>No. of Cases with Lower Scores at Follow-up</th>
<th>No. of cases with Higher Scores at Follow-up</th>
<th>Ties</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP ( (n=33) )</td>
<td>22</td>
<td>5</td>
<td>4</td>
<td>-2.92</td>
<td>&lt;0.005</td>
</tr>
<tr>
<td>SEMINAR ( (n=11) )</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>-0.07</td>
<td>NS</td>
</tr>
<tr>
<td>CONTROL ( (n=59) )</td>
<td>12</td>
<td>6</td>
<td>1</td>
<td>-1.02</td>
<td>NS</td>
</tr>
</tbody>
</table>

### Table 55
**COMPARISON OF PRE-TEST AND FOLLOW-UP PERCEIVED EDUCATIONAL NEEDS CHECKLIST SCORES FOR SUBJECTS WITHIN EACH OF THE RESEARCH GROUPS USING WILCOXON SIGNED RANKS TESTS**

<table>
<thead>
<tr>
<th>Research Group</th>
<th>No. of Cases with Lower Scores at Follow-up</th>
<th>No. of cases with Higher Scores at Follow-up</th>
<th>Ties</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP ( (n=33) )</td>
<td>31</td>
<td>1</td>
<td>0</td>
<td>-4.82</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>SEMINAR ( (n=11) )</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>-2.20</td>
<td>0.03</td>
</tr>
<tr>
<td>CONTROL ( (n=59) )</td>
<td>15</td>
<td>5</td>
<td>1</td>
<td>-2.84</td>
<td>&lt;0.005</td>
</tr>
</tbody>
</table>
(7.1.4) KNOWLEDGE OF CANCER AND CANCER CARE

Scores derived from the number of correct and incorrect responses to the knowledge questionnaire administered before, immediately after and 3 months following the educational interventions were collated from the Workshop and Control groups.

(a) ANALYSIS OF INDIVIDUAL QUESTIONS

Significance testing using the Chi squared test was undertaken comparing the number of subjects with above and below median scores for each question, between the Workshop and Control groups. Prior to the educational interventions no significant differences were found between the research groups with the exception of Question 5 where more members of the Workshop group correctly answered the question asking where cancer ranks as a cause of death in this country ($X^2 = 7.77$ df = 1, $P < 0.01$) than the Control group. They also gave significantly fewer incorrect responses to question 10, (requesting the respondent to list 6 complications of radiotherapy), than the Control Group ($X^2 = 4.69$ df = 1, $P < 0.005$, (as shown in Table 56).

Following attendance of the Workshop, participants scored higher than the Control Group on 7 of the 20 Knowledge questions. These were questions relating to:-

1. Cancer Screening
5. Cancer Mortality
7. Cancer Survival
13. Discharge following colposcopy
16. Pain control using morphine
17. Complementary methods of pain control
19. Dealing with patients using denial as a coping mechanism.

These areas were amongst those questions answered least well by respondents in the baseline study, indicating that the Workshop helped to improve knowledge deficits.

Workshop participants also scored fewer incorrect responses than the Control group in the following questions/areas of cancer care:

5. Cancer Mortality
7. Cancer Survival
11. Cancer patients and infection
18. Kubler Ross' Stages of coping with dying, and
19. Dealing with patients using denial as a coping mechanism.

These results are shown in Table 57.

These differences did not persist over time and were no longer significant 3 months later at follow up (Table 58). It would appear that some of the knowledge gained from the Workshop was not retained by the newly registered nurses, so that while median scores for correct responses remained higher than the Control group, differences with the exception of Cancer Prevention were not significant.
<table>
<thead>
<tr>
<th>Cancer Knowledge Question</th>
<th>Correct Responses</th>
<th>Median &amp; Below</th>
<th>P</th>
<th>Incorrect Responses</th>
<th>Median &amp; Below</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cancer Screening</td>
<td>Workshop N=35 Median: 2 (0-4)</td>
<td>0.27</td>
<td>NS</td>
<td>Workshop N=35 Median: 3 (0-9)</td>
<td>0.01</td>
<td>NS</td>
</tr>
<tr>
<td>2. Cancer Prevention</td>
<td>Control N=59 Median: 2 (0-8)</td>
<td>0.07</td>
<td>NS</td>
<td>Control N=59 Median: 3 (0-10)</td>
<td>1.22</td>
<td>NS</td>
</tr>
<tr>
<td>3. Early signs of cancer of the colon</td>
<td>Workshop N=35 Median: 2 (0-4)</td>
<td>1.30</td>
<td>NS</td>
<td>Workshop N=35 Median: 2 (0-4)</td>
<td>0.48</td>
<td>NS</td>
</tr>
<tr>
<td>4. Value of screening for cancer</td>
<td>Control N=59 Median: 2 (0-5)</td>
<td>3.35</td>
<td>NS</td>
<td>Control N=59 Median: 1 (0-4)</td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>5. Cancer mortality</td>
<td>Workshop N=35 Median: 1 (0-1)</td>
<td>7.77</td>
<td>&lt;0.01*</td>
<td>Workshop N=35 Median: 2 (0-1)</td>
<td>7.77 &lt;0.01*</td>
<td>NS</td>
</tr>
<tr>
<td>6. Cancer statistics</td>
<td>Control N=59 Median: 1 (0-1)</td>
<td>0.00</td>
<td>NS</td>
<td>Control N=59 Median: 2 (0-1)</td>
<td>0.00</td>
<td>NS</td>
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<tr>
<td>7. Cancer survival</td>
<td>Workshop N=35 Median: 0 (0-2)</td>
<td>0.09</td>
<td>NS</td>
<td>Workshop N=35 Median: 4 (2-4)</td>
<td>0.49</td>
<td>NS</td>
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<tr>
<td>8. Side effects of chemotherapy drugs</td>
<td>Control N=59 Median: 0 (0-2)</td>
<td>0.88</td>
<td>NS</td>
<td>Control N=59 Median: 2 (0-2)</td>
<td>0.21</td>
<td>NS</td>
</tr>
<tr>
<td>9. Patient information for chemotherapy</td>
<td>Workshop N=35 Median: 4 (1-6)</td>
<td>0.00</td>
<td>NS</td>
<td>Workshop N=35 Median: 0(.5)(0-3)</td>
<td>1.97</td>
<td>NS</td>
</tr>
<tr>
<td>10. Complications of Radiotherapy</td>
<td>Control N=59 Median: 4 (0-6)</td>
<td>1.24</td>
<td>NS</td>
<td>Control N=59 Median: 1 (0-4)</td>
<td>4.69 &lt;0.05*</td>
<td>NS</td>
</tr>
<tr>
<td>11. Cancer patients and infection</td>
<td>Workshop N=35 Median: 2 (0-5)</td>
<td>1.37</td>
<td>NS</td>
<td>Control N=59 Median: 1 (0-4)</td>
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<tr>
<td>12. Colostomy care</td>
<td>Control N=59 Median: 2 (0-5)</td>
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<td>NS</td>
<td>Control N=59 Median: 2 (0-5)</td>
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<td>NS</td>
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<tr>
<td>13. Discharge advice following colposcopy</td>
<td>Workshop N=35 Median: 1 (0-4)</td>
<td>2.86</td>
<td>NS</td>
<td>Control N=59 Median: 2 (0-3)</td>
<td>0.52</td>
<td>NS</td>
</tr>
<tr>
<td>14. Psychological sequelae to mastectomy</td>
<td>Control N=59 Median: 2 (0-3)</td>
<td>0.00</td>
<td>NS</td>
<td>Control N=59 Median: 0 (0-1)</td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>15. Nurse's role in pain control</td>
<td>Workshop N=35 Median: 3 (0-5)</td>
<td>0.53</td>
<td>NS</td>
<td>Control N=59 Median: 1 (0-3)</td>
<td>0.33</td>
<td>NS</td>
</tr>
<tr>
<td>16. Pain control using morphine</td>
<td>Control N=59 Median: 1 (0-4)</td>
<td>1.60</td>
<td>NS</td>
<td>Control N=59 Median: 2 (0-5)</td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>17. Complementary methods of pain control</td>
<td>Workshop N=35 Median: 4 (0-10)</td>
<td>3.24</td>
<td>NS</td>
<td>Control N=59 Median: 0 (0-2)</td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>18. Rubler Ross' stages of coping with dying</td>
<td>Control N=59 Median: 4 (0-12)</td>
<td>2.61</td>
<td>NS</td>
<td>Control N=59 Median: 1 (0-5)</td>
<td>0.00</td>
<td>NS</td>
</tr>
<tr>
<td>19. Dealing with patients using denial as a</td>
<td>Workshop N=35 Median: 1 (0-3)</td>
<td>0.07</td>
<td>NS</td>
<td>Control N=59 Median: 1 (0-3)</td>
<td>0.01</td>
<td>NS</td>
</tr>
<tr>
<td>coping mechanism</td>
<td>Control N=59 Median: 1 (0-2)</td>
<td>1 (0-4)</td>
<td>0.13 NS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Family centred care</td>
<td>Workshop N=35 Median: 2 (0-5)</td>
<td>0.02</td>
<td>NS</td>
<td>Control N=59 Median: 1 (0-4)</td>
<td>0.13</td>
<td>NS</td>
</tr>
</tbody>
</table>

* Workshop Group correct significantly more often than Control.
<table>
<thead>
<tr>
<th>Cancer Knowledge Question</th>
<th>Correct Responses</th>
<th>Above Median &amp; Below X² df=1</th>
<th></th>
<th>Incorrect Responses</th>
<th>Above Median &amp; Below X² df=1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Workshop Median N=35</td>
<td>Control Median N=33</td>
<td></td>
<td>Workshop Median N=35</td>
<td>Control Median N=33</td>
</tr>
<tr>
<td>1. Cancer Screening</td>
<td>3 (1-6)</td>
<td>2 (0-4)</td>
<td>13.38 &lt;0.003*</td>
<td>1 (0-11)</td>
<td>2 (0-9)</td>
<td>0.19 NS</td>
</tr>
<tr>
<td>2. Cancer Prevention</td>
<td>4 (1-8)</td>
<td>3 (0-8)</td>
<td>2.56 NS</td>
<td>4 (0-7)</td>
<td>3 (0-11)</td>
<td>1.65 NS</td>
</tr>
<tr>
<td>3. Early signs of cancer</td>
<td>1 (0-4)</td>
<td>1 (0-3)</td>
<td>0.00 NS</td>
<td>3 (1-6)</td>
<td>1 (0-11)</td>
<td>2.20 NS</td>
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<tr>
<td>4. Value of screening for</td>
<td>2 (0-4)</td>
<td>2 (0-6)</td>
<td>0.00 NS</td>
<td>1 (0-3)</td>
<td>1 (0-4)</td>
<td>0.17 NS</td>
</tr>
<tr>
<td>5. Cancer mortality</td>
<td>1 (0-1)</td>
<td>1 (0-1)</td>
<td>8.68 &lt;0.005*</td>
<td>0 (0-1)</td>
<td>1 (0-1)</td>
<td>8.68 &lt;0.005*</td>
</tr>
<tr>
<td>6. Cancer statistics</td>
<td>0 (0-2)</td>
<td>0 (0-1)</td>
<td>3.45 &lt;0.06</td>
<td>2 (1-2)</td>
<td>2 (1-2)</td>
<td>2.23 NS</td>
</tr>
<tr>
<td>7. Cancer survival</td>
<td>2 (0-3)</td>
<td>0 (0-2)</td>
<td>13.17 &lt;0.0005*</td>
<td>2 (1-4)</td>
<td>4 (2-4)</td>
<td>12.63 &lt;0.0005*</td>
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<tr>
<td>8. Side effects of</td>
<td>5 (0-10)</td>
<td>3.5 (0-7)</td>
<td>1.13 NS</td>
<td>3 (1-9)</td>
<td>3 (0-6)</td>
<td>0.20 NS</td>
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<tr>
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<td>4 (1-6)</td>
<td>3 (1-6)</td>
<td>0.48 NS</td>
<td>0 (1-2)</td>
<td>1 (0-3)</td>
<td>1.00 NS</td>
</tr>
<tr>
<td>9. Patient information</td>
<td>5 (0-7)</td>
<td>4 (1-6)</td>
<td>0.81 NS</td>
<td>0 (0-2)</td>
<td>2 (0-4)</td>
<td>0.00 NS</td>
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<td>3 (1-5)</td>
<td>0.68 NS</td>
<td>2 (0-3)</td>
<td>2 (0-4)</td>
<td>5.22 &lt;0.05</td>
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<td>Radiotherapy</td>
<td>2 (0-5)</td>
<td>1 (0-3)</td>
<td>0.55 NS</td>
<td>2 (0-4)</td>
<td>2 (0-4)</td>
<td>0.00 NS</td>
</tr>
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<td>11. Cancer patients and</td>
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<td>2 (0-3)</td>
<td>10.30 &lt;0.005*</td>
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<td>1 (0-4)</td>
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<td>4 (1-6)</td>
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<td>0 (0-1)</td>
<td>0 (0-3)</td>
<td>0.34 NS</td>
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<tr>
<td>12. Colostomy care</td>
<td>3 (0-10)</td>
<td>2 (1-6)</td>
<td>0.92 NS</td>
<td>1 (0-3)</td>
<td>1 (0-3)</td>
<td>0.12 NS</td>
</tr>
<tr>
<td>13. Discharge advice</td>
<td>2 (0-6)</td>
<td>1 (0-4)</td>
<td>4.70 &lt;0.05*</td>
<td>2 (0-5)</td>
<td>2 (0-3)</td>
<td>0.26 NS</td>
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<tr>
<td>following colposcopy</td>
<td>6 (2-12)</td>
<td>3 (1-10)</td>
<td>7.53 &lt;0.01*</td>
<td>0 (0-2)</td>
<td>0 (0-2)</td>
<td>0.00 NS</td>
</tr>
<tr>
<td>14. Psychological sequelae</td>
<td>4 (2-5)</td>
<td>3 (1-5)</td>
<td>0.45 NS</td>
<td>1 (0-3)</td>
<td>2 (0-4)</td>
<td>14.31 &lt;0.0005*</td>
</tr>
<tr>
<td>to mastectomy</td>
<td>2 (0-3)</td>
<td>0 (0-3)</td>
<td>12.53 &lt;0.0005*</td>
<td>1 (0-3)</td>
<td>2 (0-4)</td>
<td>4.12 &lt;0.05</td>
</tr>
<tr>
<td>15. Nurse's role in pain</td>
<td>2 (0-5)</td>
<td>1 (0-5)</td>
<td>0.00 NS</td>
<td>1 (0-4)</td>
<td>1 (0-3)</td>
<td>0.45 NS</td>
</tr>
<tr>
<td>control</td>
<td>19. Dealing with</td>
<td>patients using denial as a</td>
<td></td>
<td>coping mechanism</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>coping mechanism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Family centred care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

*Workshop Group correct significantly more often than Control.
+Workshop Group significantly lower in correct scores.
<table>
<thead>
<tr>
<th>Cancer Knowledge Question</th>
<th>Correct Responses Workshop Median N=32</th>
<th>Control Median N=21</th>
<th>Above Median &amp; Below X² df=1 P</th>
<th>Incorrect Responses Workshop Median N=32</th>
<th>Control Median N=21</th>
<th>Above Median &amp; Below X² df=1 P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cancer Screening</td>
<td>3 (0-6)</td>
<td>2 (0-5)</td>
<td>1.10 NS</td>
<td>1 (0-9)</td>
<td>2 (0-10)</td>
<td>0.11 NS</td>
</tr>
<tr>
<td>2. Cancer Prevention</td>
<td>3 (0-7)</td>
<td>2 (0-7)</td>
<td>8.50 0.05</td>
<td>2 (.5) (1-10)</td>
<td>3 (0-8)</td>
<td>0.00 NS</td>
</tr>
<tr>
<td>3. Early signs of cancer of the colon</td>
<td>1 (0-3)</td>
<td>1 (0-5)</td>
<td>0.00 NS</td>
<td>3 (1-6)</td>
<td>2 (1-6)</td>
<td>0.04 NS</td>
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<tr>
<td>4. Value of screening for cancer</td>
<td>3 (0-9)</td>
<td>3 (0-9)</td>
<td>0.00 NS</td>
<td>1 (0-3)</td>
<td>1 (0-4)</td>
<td>0.12 NS</td>
</tr>
<tr>
<td>5. Cancer mortality</td>
<td>1 (0-1)</td>
<td>1 (0-1)</td>
<td>0.02 NS</td>
<td>0 (0-1)</td>
<td>0 (0-1)</td>
<td>0.01 NS</td>
</tr>
<tr>
<td>6. Cancer statistics</td>
<td>0 (0-2)</td>
<td>0 (0-2)</td>
<td>0.15 NS</td>
<td>2 (0-2)</td>
<td>2 (0-2)</td>
<td>0.44 NS</td>
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<tr>
<td>7. Cancer survival</td>
<td>1 (0-3)</td>
<td>0 (0-2)</td>
<td>0.58 NS</td>
<td>3 (1-4)</td>
<td>4 (2-4)</td>
<td>0.97 NS</td>
</tr>
<tr>
<td>8. Side effects of chemotherapy drugs</td>
<td>5 (0-10)</td>
<td>4 (2-12)</td>
<td>0.11 NS</td>
<td>2 (0-8)</td>
<td>2 (0-6)</td>
<td>0.05 NS</td>
</tr>
<tr>
<td>9. Patient information for chemotherapy</td>
<td>4 (1-6)</td>
<td>3 (1-6)</td>
<td>0.00 NS</td>
<td>0 (0-3)</td>
<td>0 (0-3)</td>
<td>0.00 NS</td>
</tr>
<tr>
<td>10. Complications of Radiotherapy</td>
<td>4 (0-7)</td>
<td>4 (1-7)</td>
<td>0.00 NS</td>
<td>1 (0-3)</td>
<td>1 (0-3)</td>
<td>0.00 NS</td>
</tr>
<tr>
<td>11. Cancer patients and infection</td>
<td>3 (1-5)</td>
<td>3 (1-5)</td>
<td>0.00 NS</td>
<td>1 (0-3)</td>
<td>1 (0-2)</td>
<td>0.00 NS</td>
</tr>
<tr>
<td>12. Colostomy care</td>
<td>2 (0-4)</td>
<td>2 (0-4)</td>
<td>0.00 NS</td>
<td>2 (0-5)</td>
<td>2 (0-3)</td>
<td>0.15 NS</td>
</tr>
<tr>
<td>13. Discharge advice following colposcopy</td>
<td>2 (0-3)</td>
<td>1 (0-4)</td>
<td>0.00 NS</td>
<td>2 (0-3)</td>
<td>2 (0-4)</td>
<td>0.37 NS</td>
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<tr>
<td>14. Psychological sequelae to mastectomy</td>
<td>4 (1-6)</td>
<td>3 (1-5)</td>
<td>1.80 NS</td>
<td>0 (0-1)</td>
<td>0 (0-2)</td>
<td>0.27 NS</td>
</tr>
<tr>
<td>15. Nurse's role in pain control</td>
<td>3 (0-6)</td>
<td>3 (1-5)</td>
<td>3.40 0.06</td>
<td>1 (.5) (0-3)</td>
<td>1 (0-3)</td>
<td>0.59 NS</td>
</tr>
<tr>
<td>16. Pain control using morphine</td>
<td>2 (0-5)</td>
<td>2 (0-5)</td>
<td>0.93 NS</td>
<td>2 (0-7)</td>
<td>2 (0-3)</td>
<td>0.00 NS</td>
</tr>
<tr>
<td>17. Complementary methods of pain control</td>
<td>5 (2-12)</td>
<td>4 (.5) (2-9)</td>
<td>0.34 NS</td>
<td>0 (0-3)</td>
<td>0 (0-1)</td>
<td>1.84 NS</td>
</tr>
<tr>
<td>18. Kubler Ross' stages of coping with dying</td>
<td>4 (2-5)</td>
<td>3 (2-5)</td>
<td>0.00 NS</td>
<td>1 (0-3)</td>
<td>2 (0-3)</td>
<td>2.92 NS</td>
</tr>
<tr>
<td>19. Dealing with patients using denial as a coping mechanism</td>
<td>1 (.5) (0-2)</td>
<td>1 (0-3)</td>
<td>0.06 NS</td>
<td>1 (0-4)</td>
<td>2 (0-4)</td>
<td>0.10 NS</td>
</tr>
<tr>
<td>20. Family centred care</td>
<td>2 (0-4)</td>
<td>2 (0-4)</td>
<td>0.00 NS</td>
<td>1 (0-4)</td>
<td>1 (0-3)</td>
<td>0.00 NS</td>
</tr>
</tbody>
</table>
(b) **ANALYSIS OF TOTAL SCORES**

Comparison of Median total scores for correct and incorrect responses for all 20 Knowledge questions reveals a similar pattern and are shown in Table 59.

### Table 59

**COMPARISON OF MEDIAN SCORES OF CORRECT AND INCORRECT RESPONSES TO THE KNOWLEDGE QUESTIONNAIRE BETWEEN THE RESEARCH GROUPS.**

<table>
<thead>
<tr>
<th>Research Group</th>
<th>PRE TEST</th>
<th></th>
<th>POST TEST</th>
<th></th>
<th>FOLLOW UP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct</td>
<td>Incorrect</td>
<td>Correct</td>
<td>Incorrect</td>
<td>Correct</td>
<td>Incorrect</td>
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<tr>
<td></td>
<td>Median</td>
<td>Median</td>
<td>Median</td>
<td>Median</td>
<td>Median</td>
<td>Median</td>
</tr>
<tr>
<td>Workshop</td>
<td>39 (20-67)</td>
<td>25 (4-47)</td>
<td>60 (32-89)</td>
<td>28 (17-49)</td>
<td>52 (31-78)</td>
<td>28 (15-63)</td>
</tr>
<tr>
<td>(N=59)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>41 (17-62)</td>
<td>26 (0-43)</td>
<td>44 (24-69)</td>
<td>29 (0-43)</td>
<td>49 (20-71)</td>
<td>33 (15-47)</td>
</tr>
<tr>
<td>(N=59)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Seminar</td>
<td>42 (30-52)</td>
<td>26 (14-36)</td>
<td>50 (23-82)</td>
<td>25 (.5) (22-37)</td>
<td>52 (.5) (27-81)</td>
<td>29 (18-31)</td>
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<tr>
<td>(N=22)</td>
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</tr>
</tbody>
</table>

No significant differences were detected between Workshop and Control groups prior to the educational interventions on correct scores. Following the education the Workshop group scored significantly higher than the Control Group (Mann Whitney \(U = 232.5, Z = -4.24\) \(p = <0.0001\)). At follow-up 3 months later these differences were no longer significant.

There were no significant differences between the Total number of incorrect scores between the Workshop and Control groups before, after, or 3 months following the education. It is notable that the median Total correct score from the Workshop group was still 13 points greater at 3 months follow up than it was prior to education, and although the Control group demonstrated an increase in median correct Knowledge Score of 8 points over the data collection period, this gain was more modest than the nurses who had attended the Workshop. The Seminar group's scores also

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gained over time following education, but again not to the same degree as the Workshop group. No significant differences were found between the Seminar group's scores and either the Workshop or the Control group. It would seem that Workshop participants demonstrated an increase in knowledge on cancer and cancer care following the education.

(c) ANALYSIS OF CHANGE WITHIN RESEARCH GROUPS OVER TIME

Comparison of correct and incorrect knowledge test scores for subjects within each of the research groups using Wilcoxon Signed ranks tests again illuminates the findings from between group analysis of scores, since significantly more Workshop group subjects increased their correct knowledge test scores between pre and post test, and re-test and follow-up administrations of the questionnaire. No significant change occurred in the Workshop group scores between post-test and follow-up. Neither Workshop nor Control group demonstrated significant changes in their scores between any of the three test administrations. (See Tables 60 to 62).
### Table 60
**Comparison of Pre and Post-test Correct Knowledge Test Scores for Subjects Within Each of the Research Groups Using Wilcoxon Signed Ranks Tests**

<table>
<thead>
<tr>
<th>Research Group</th>
<th>No. of Cases with Lower Scores at Post-test</th>
<th>No. of cases with Higher Scores at Post-test</th>
<th>Ties</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop (n=37)</td>
<td>5</td>
<td>28</td>
<td>0</td>
<td>-4.08</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Seminar (n=32)</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>-1.26</td>
<td>NS</td>
</tr>
<tr>
<td>Control (n=59)</td>
<td>11</td>
<td>21</td>
<td>1</td>
<td>-1.13</td>
<td>NS</td>
</tr>
</tbody>
</table>

### Table 61
**Comparison of Post-test and Follow-up Correct Knowledge Test Scores for Subjects Within Each of the Research Groups Using Wilcoxon Signed Ranks Tests**

<table>
<thead>
<tr>
<th>Research Group</th>
<th>No. of Cases with Lower Scores at Follow-up</th>
<th>No. of cases with Higher Scores at Follow-up</th>
<th>Ties</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop (n=37)</td>
<td>18</td>
<td>31</td>
<td>0</td>
<td>-1.10</td>
<td>NS</td>
</tr>
<tr>
<td>Seminar (n=32)</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>-1.26</td>
<td>NS</td>
</tr>
<tr>
<td>Control (n=59)</td>
<td>8</td>
<td>11</td>
<td>0</td>
<td>-1.29</td>
<td>NS</td>
</tr>
</tbody>
</table>

### Table 62
**Comparison of Pre-test and Follow-up Correct Knowledge Test Scores for Subjects Within Each of the Research Groups Using Wilcoxon Signed Ranks Tests**

<table>
<thead>
<tr>
<th>Research Group</th>
<th>No. of Cases with Lower Scores at Follow-up</th>
<th>No. of cases with Higher Scores at Follow-up</th>
<th>Ties</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop (n=37)</td>
<td>5</td>
<td>27</td>
<td>0</td>
<td>-4.19</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Seminar (n=32)</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>-1.27</td>
<td>NS</td>
</tr>
<tr>
<td>Control (n=59)</td>
<td>7</td>
<td>14</td>
<td>0</td>
<td>-1.88</td>
<td>NS</td>
</tr>
</tbody>
</table>

315
No differences were found in incorrect scores over time for any of the research groups using Wilcoxon signed ranks tests with one exception. The Control group scored significantly fewer incorrect scores at follow-up compared with the pre-test. This may be a function of this group actually giving shorter and less detailed responses on the third administration of the test. The Incorrect Knowledge test scores did not appear to be sensitive to change amongst subjects.
Responses to the Cancer Attitude Scale were collated for the three research groups and scrutinised for evidence of change over the 3 questionnaires. Little consistent evidence of change was seen in the Workshop group, or Seminar group over the Control group. At post test Median Scores for the Workshop group had only increased over the Control group for 3 items. These were

1) Item number 5 "A patient generally deteriorates if he knows he has cancer" (Factor 1)

2) Item number 7 "No-one who realises he is going to die in the near future can remain in a state of mental well-being" (Factor 1)

3) Item number 20 "Active treatment for cancer frequently subjects the patient to illness and pain without much benefit to him" (Factor 2b), and one item at follow-up:

4) Item number 8 "A patient will not do well unless he has hope of recovery from illness" (Factor 1).

In order to test these differences statistically, responses for the Workshop and Control groups were recoded into two categories. Uncertain or negative responses, and positive responses. (Combining categories in this way meant that for the majority of items from the 3 questionnaires there were sufficient responses in each cell for chi square tests to be carried out.) This analysis only compared responses indicating a positive response with other responses for the two groups, on each item of the attitude scale.

Prior to the educational interventions there were no significant differences found between the Workshop and Control groups for any of the
attitude scale items with the exception of item 31:

'Those patients who are terminally ill and have not realised it should be told so that they can prepare spiritually for death.'

When significantly more of the Control group were uncertain or disagreed with the statement than the Workshop group ($X^2 = 10.20$, df = 1, $p < 0.005$). This can be accounted for by the large number of the Control group (52.5%) who indicated that they were uncertain compared with only 8 (21.6%) of the Workshop group. Following the Workshop there were 3 items (all were under Factor 1 of the Attitude Scale) where significantly more members of the Workshop group responded positively than the Control group by either agreeing or disagreeing with the statement (depending on its loading), as follows:—

1) Item 3 'Any psychological stress on the patient should be avoided' ($X^2 = 7.81$, df = 1, $p < 0.01$).

2) Item 10 'It is better not to use the word 'cancer' when answering a patient about his condition.' ($X^2 = 6.1$, df = 1, $p < 0.05$), and

3) Item 6 'Experience shows that since patients with cancer who say they want to know their condition have adverse reactions to knowing, patients do not really want to know they have cancer.' ($X^2 = 3.72$, df = 1, $p = 0.053$).

These differences were no longer significant at 3 month follow up.

It would seem that either the Cancer Attitude Scale was not sensitive enough to pick up the complexity of changes that occurred in subjects following the interventions, or that change did not occur with the
exception of the area of Factor 1 'Attitudes towards a patient's inner resources to cope with serious illness such as cancer.'

Poor results from reliability testing for the Scale did not permit further analysis of Scale responses.
(7.2) INTERVIEW DATA.

Results presented in this Section include

- (7.2.1) Interview data relating to nurses' attitudes towards cancer
- (7.2.2) Interview subjects' self reports of changes in feelings regarding caring for patients with cancer following the educational interventions
- (7.2.3) Triangulation of data from Questionnaires and interviews
- (7.2.4) Experiences of caring for patients with cancer.

(7.2.1) INTERVIEW DATA RELATING TO NURSES' ATTITUDES TOWARDS CANCER

During post test and follow-up interviews subjects were again asked questions regarding their feelings relating to the four factors of the Attitude Scale, as in the baseline study. This allowed matrices of responses to the attitude areas to be built up and assessed for change over time, following the educational interventions.

Evidence of change from these responses occurred at 2 levels, firstly self reported change from the research subjects gained from their own insights. Secondly latent evidence of change came from comparing responses over time for obvious signs of attitude change. Change was identified from the latter only with extreme caution and where it was very obvious to the researcher, and only accounted for a minority of accounts.

(a) NURSES' FEELINGS ABOUT PATIENTS' ABILITY TO COPE PSYCHOLOGICALLY WITH CANCER.

Fifteen (35.7%) Workshop members appeared to have changed in their feelings related to this area during the period following the Workshop. Twelve demonstrated or reported increasing sophistication in their
discussion over the issue of telling. For example 2 felt that they had
tempered their view and were less evangelistic in their approach to the
issue, and others demonstrated increased knowledge and understanding of
"coping" in their response. Three subjects reported feeling more
competent in their dealings with issues relating to this area. Positive
change was not obvious or reported in any of the Control or Seminar group
members.

Three subjects at post test, and 6 subjects at follow up reported a
decrease in their optimism regarding patient's ability to cope with the
knowledge of cancer and felt that this was due to experiences with
patients with cancer. All 3 research groups were represented here. One
of the Workshop participants, immediately post course felt much more
positive regarding patients' ability to cope and her own competence to
deal with patients but following a difficult experience with a patient
with cancer all her ideas about the way patients with cancer cope were
"shattered" and that the course had conveyed it as a bit "too easy".

Little or no change was apparent in the responses of the remainder of
subjects at post test or follow up.

(b) NURSES' FEELINGS REGARDING THE VALUE OF SCREENING AND PREVENTION
FOR CANCER

Overall nurses from all research groups reiterated the importance of
screening and prevention at both post test and follow up, only 2 subjects
held doubts about its value in general. Prior to the educational
interventions 26 subjects felt inadequately prepared to take on prevention
and screening for cancer as part of their role, only 2 felt confident to
do this. Following the interventions 13 (31%) Workshop participants felt that this was an important aspect of their role and were thinking about how they could take it on board. This change was not seen in Control group participants, but was evident in two Seminar group participants. For example one Workshop participant said:

"I think there is a lot more we could do and don't do. It would be nice while admitting someone if you could discuss it openly. But you would have to choose your patients."

However, she went on to qualify this:-

"I'd like to but I don't think I will. Here it would be taking a shot in the dark for most patients."

This was a recurring theme among subjects. While they recognised the importance of prevention and screening they did not see themselves as health educators in their current role on medical and surgical wards. They felt awkward to initiate discussions and were worried about the appropriateness of doing so, feeling it was wiser to wait until the patient initiated such discussion. Others felt that because there were so many patients with cancer on their ward or many of the patients were elderly, it was too late for health education. By follow up 4 Workshop participant nurses were feeling that constraints on their time prevented them taking on this role. This again did not apply to other research group members.

At follow up 5 subjects (including 1 Seminar group participant) were using knowledge and confidence they had gained during the workshop with patients for example teaching breast self examination, and one nurse had actually developed a new form to be used during admission to assess women's
screening history and felt that it was working well on the ward. This was reported to have been a direct result of the Workshop.

At follow up 7 Control group, 3 Workshop group and 1 Seminar group member reported that screening and prevention of cancer represented a minimal part of their role.

It would seem that while this group of nurses felt positive about the value of screening and prevention for cancer, only a minority actually were putting these beliefs into practice.

(c) NURSES' FEELINGS REGARDING THE VALUE OF ACTIVE TREATMENT FOR CANCER

Prior to the educational interventions 33 (48.5%) of the interview subjects held doubts about the value of active treatment, only 10 (14.7%) could be described as holding optimistic views towards active treatment. Following the workshop 10 (24.4%) subjects' responses indicated that they held more optimistic responses than they had previously and a further 2 (4.8%) did so during follow up interviews.

For example, one subject prior to the workshop said:
"If there's just one lesion then O.K., but sometimes with a 90 year old with an abnormal mass and abnormal liver function you think 'Why do it. They are more likely to die (quicker) from the operation than from the cancer.'"

Following the Workshop her reply was more sophisticated:
"In a lot of cancers (even those) that don't have high survival rates
some active treatment is beneficial. Like radiotherapy to reduce the tumour can make life easier for them. Actual quality of life can be improved .... I'm more aware now, I used to think it's not worth it. But it is worth it."

Only 2 (8.3%) Control group members and 2 (22.2%) Seminar group members demonstrated similar change. Twenty-two (57.1%) Workshop group members continued to hold serious doubts, or mixed feelings regarding the value of active treatment following the Workshop. The most important factors involved in these nurses' resistance to change their feelings towards active treatment despite being presented with optimistic evidence, appeared to be the experiences they were having with cancer patients. Of those who did appear to hold more optimistic attitudes than before these appeared to persist over time. One of the Control group members who appeared to hold more optimistic attitudes reported that this was the result of a positive outcome of treatment for a patient on her ward.

(d) NURSES' FEELINGS ABOUT PATIENTS' ABILITY TO COPE WITH THE KNOWLEDGE OF IMPENDING DEATH

It was very difficult to identify change in responses to the area of questioning both at post test and follow up. Themes discussed in Section 6.3.10 of the preceding chapter applied to responses at later interviews. For most subjects if change had occurred this was not possible to assess from interview transcripts partly because of its close relationship in subjects' minds to Factor 1 questions. Two subjects actually stated that they had changed their views as a result of the Workshop.

For example, one subject said:
"I still think they should be told, but it's just made me think a bit more
about how they'd react; I think deep down I'd rather they know ... I think a lot of things since doing the course seem to be a bit more - I'm not seeing things in as black or white as I was. Before I had given myself sort of set rules and stuck by them, now I've thought a bit more about the other side ...."

No attempt has been made to present cancer attitude data from interviews and the Cancer Attitude Scale responses as a triangulation exercise in order that subject by subject responses could be compared for the two sources of data. While this approach has been taken with other aspects of data and will be presented later in the chapter it was felt that: firstly, the poor reliability demonstrated by the 4 subscales of the CAS would mean that presentation of summary data which would necessitate the summing of scores from items across the subscales would be inappropriate. Secondly it was felt that while interview data produced evidence of change among subjects the most important and reliable source for these decisions was felt to be self reported change. Since this was not requested systematically from subjects it was felt that a highly rigorous cross analysis of the two data sources was difficult to justify.

Responses at interview largely reflected CAS Scores in that the largest number of subjects to demonstrate change at interviews, was in response to questioning related to Factor 1. Change that occurred under Factors 2a and 2b were complex, a number of Workshop group subjects felt more positive about prevention and screening for cancer but were much less sure of their precise role in it, and a large number of Workshop participants continued to hold doubts about the value of active treatment following the educational intervention. This may be the reason why responses to the CAS failed to demonstrate change over time, or between research groups.

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THE MEANING OF THE WORD CANCER TO INTERVIEW SUBJECTS

Post test and follow up interview responses for subjects from the 3 research groups were again compared with pre-test responses for evidence of change. Many of these responses included self reports regarding whether their perceptions had changed since the previous interview. For most responses under this category evidence of change was more clearly visible than for other categories.

Table 63 shows responses from 3 subjects for the 3 interviews. Subjects 1 and 2 were Workshop participants whose responses were coded as moving in a positive direction for both post test and follow up interviews. These changes were reported to be due to the Workshop. Subject No. 3 was a Control group member whose responses appeared to become less negative and who reported that the process of talking about cancer (for the first time since the death of his mother from the disease) had made it less frightening for him.

Table 64 shows the frequency of subjects from the 3 research groups who were coded as demonstrating positive, negative or no change in their responses at interviews after 3 months following the interventions. Control group member interviews were timed to coincide with Workshop and Seminar group interviews. Not all subjects were asked, or responded to, this area of questioning during interviews hence the number of subjects where change was not known. Twenty-two (53.7%) of Workshop subjects demonstrated a positive change in their perception of the meaning of the word cancer, this compared with only 2 (22.2%) of the Seminar group, and 4 (16.7%) of the Control group. The two negative responses for Workshop members appeared to be due to subjects expressing their feelings more openly than in previous interviews perhaps due to increasing rapport.
between researcher and subjects. It would appear that nurses did change their perceptions of cancer following the Workshop.

<table>
<thead>
<tr>
<th>Subject Group</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRE-TEST</strong></td>
<td></td>
</tr>
<tr>
<td>1 WORKSHOP</td>
<td>It just means death and no support which is what you get here</td>
</tr>
<tr>
<td>2 WORKSHOP</td>
<td>I suppose I associate it with the whole thing of death. But then my father had cancer and he's been cured so there is a positive side to it, but you tend to think of the negative side.</td>
</tr>
<tr>
<td>3 CONTROL</td>
<td>Black crawling growths lumps, invading the body, mysterious, possibly connected with death and dying as well.</td>
</tr>
<tr>
<td><strong>POST TEST</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Not as frightening to me now. If a patient comes in with cancer I used to think 'Oh Lord'. Now I think I've got to make the effort and get things moving. It doesn't frighten me now.</td>
</tr>
<tr>
<td>2</td>
<td>Not as frightening, cancers have different survival rates - much better than I originally thought.</td>
</tr>
<tr>
<td>3</td>
<td>Crab - the sign of cancer (reported talking about cancer for the research had made it less frightening).</td>
</tr>
<tr>
<td><strong>FOLLOW UP</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>It's a daunting word, not quite so daunted by it now because it can be treated and there is a lot more hope than people realise.</td>
</tr>
<tr>
<td>2</td>
<td>I'm more optimistic, before I was terrified of it.</td>
</tr>
<tr>
<td>3</td>
<td>Mysterious disease.</td>
</tr>
</tbody>
</table>

Table 63

SELECTED COMMENTS FROM SUBJECTS ON THE MEANING OF THE WORD CANCER
Table 64  
CHANGES IN INTERVIEW SUBJECTS’ DESCRIPTIONS OF THE MEANING OF THE WORD CANCER TO THEM DURING THE DATA COLLECTION PERIOD

<table>
<thead>
<tr>
<th>Research Group</th>
<th>Positive (%)</th>
<th>No Change (%)</th>
<th>Negative (%)</th>
<th>Not Known (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP</td>
<td>22 (53.7)</td>
<td>7 (17.1)</td>
<td>2 (4.9)</td>
<td>10 (24.4)</td>
</tr>
<tr>
<td>(N = 41)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEMINAR</td>
<td>2 (22.2)</td>
<td>50 (55.6)</td>
<td>0</td>
<td>2 (22.2)</td>
</tr>
<tr>
<td>(N = 9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL</td>
<td>4 (16.7)</td>
<td>14 (58.3)</td>
<td>0</td>
<td>4 (16.6)</td>
</tr>
<tr>
<td>(N = 24)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As has been noted in the previous chapter, prior to the educational interventions subjects reported feelings of inadequacy and lack of preparation in relation to caring for cancer patients particularly in the area of psychological care and communication with patients and aspects of physical care and knowledge. For the evaluation study a 2 level approach to analysis of data was undertaken using post test and follow-up interview transcripts. At these interviews subjects were asked again to report their general feelings in relation to caring for patients with cancer and also to reflect on any changes that might have occurred since the last interview and the processes involved in such changes. The first level of analysis involved identifying subjects who reported positive and negative changes in relation to communication and psychological care and knowledge, and comparing such changes across the 3 research groups. The second level of analysis involved examining data, subject by subject, looking at interview responses in more depth and triangulating this with questionnaire data.

Table 65 shows the frequency of interview subjects reporting a positive change in their feelings in relation to caring for patients with cancer relating to the areas of communication and psychological care, and knowledge of cancer and cancer care. Following the educational interventions 31 (75.6%) of Workshop participants reported positive changes in their feelings relating to communication and psychological care for patients with cancer, and 30 (73.1%) a positive change in their feelings relating to their knowledge of cancer. This contrasts with the Control group, where only 3 (12.5%) reported such changes. At follow-up
positive changes were reported by a smaller proportion of the Workshop group, but still considerably more than either Seminar or Control group members. Post Interventions 4 (44.4%) of Seminar attenders reported positive changes in their knowledge, but only 1 (9.0%) reported positive change in the area of communication and psychological care. This would suggest that for those who attended the Seminars there was some benefit but this was not as marked as for Workshop participants and appeared to be confined to knowledge of cancer.

Table 66 shows the frequency of interview subjects reporting a negative change in their feelings in relation to caring for patients with cancer. Significantly subjects reporting such changes were concentrated in the Workshop group at follow up where 8 (19.5%) reported a decrease in their knowledge at 3 months follow up and 5 (12.2) in the area of communication and psychological care.
Table 65  INTERVIEW SUBJECTS SELF REPORT OF POSITIVE CHANGE IN FEELINGS REGARDING CARING FOR PATIENTS WITH CANCER IMMEDIATELY POST AND 3 MONTHS FOLLOWING EDUCATIONAL INTERVENTIONS

<table>
<thead>
<tr>
<th>Research Group</th>
<th>Post Intervention (%)</th>
<th>Follow up (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP (N = 41)</td>
<td>Communication &amp; Psychological Care</td>
<td>31 (75.6)</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td>30 (73.1)</td>
</tr>
<tr>
<td>SEMINAR (N = 9)</td>
<td>Communication &amp; Psychological Care</td>
<td>1 (11.1)</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td>4 (44.4)</td>
</tr>
<tr>
<td>CONTROL (N = 24)</td>
<td>Communication &amp; Psychological Care</td>
<td>3 (12.5)</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td>3 (12.5)</td>
</tr>
</tbody>
</table>

Table 66  INTERVIEW SUBJECTS SELF REPORT OF NEGATIVE CHANGES IN FEELINGS REGARDING CARING FOR PATIENTS WITH CANCER IMMEDIATELY POST AND 3 MONTHS FOLLOWING EDUCATIONAL INTERVENTIONS

<table>
<thead>
<tr>
<th>Research Group</th>
<th>Post Intervention (%)</th>
<th>Follow up (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORKSHOP (N = 41)</td>
<td>Communication &amp; Psychological Care</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td>0</td>
</tr>
<tr>
<td>SEMINAR (N = 9)</td>
<td>Communication &amp; Psychological Care</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td>0</td>
</tr>
<tr>
<td>CONTROL (N = 24)</td>
<td>Communication &amp; Psychological Care</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td>1 (4.2)</td>
</tr>
</tbody>
</table>
(7.3) TRIANGULATION OF DATA FROM QUESTIONNAIRES AND INTERVIEWS

While presenting data for each of the research groups as a whole indicates the positive effects of the Workshop intervention compared with the Control group, it is not possible to demonstrate how the effects of additional education, increasing experiences as a staff nurse and encounters with patients with cancer combined in a unique way for each individual. Thus the level of analysis focused on the "group" can only demonstrate a general trend rather than illuminate or point to causal factors.

Tables 67 to 69 present summary data from interviews, collating subjects' self reports of change in relation to communication and psychological care and knowledge, and the processes they identified in such changes. These reports of change have been tabulated case by case and are presented with individual scores from questionnaire data in order to triangulate these two data sources and to illuminate findings for individuals.

Comparison of interview data summarised in Tables 65 to 66 indicates that the majority of Workshop participants following the educational intervention felt that they had changed in a positive direction in the area of communication and psychological care and to a lesser extent knowledge of cancer care.

For example, subject No. 4 said:

"We've actually got one (a cancer patient) here at the moment and really its just slotted in with this cancer course, because she's on a syringe driver and we talked about that ... Because really as a student it was very easy for me to step back and let everybody get on with it. Now that
<table>
<thead>
<tr>
<th>Data Relating to</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interviews</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Feelings relating to Psychological Care</strong></td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td><strong>Feelings relating to Knowledge of cancer</strong></td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td><strong>Processes Involved</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing experience as a Staff Nurse</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Experience with cancer patients</td>
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N.B. Subjects 12, 16 - 18 excluded from questionnaire study since they undertook Workshop after completing questionnaire study as controls.
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Table 67 CONTINUED (Page 4 out of 4)

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I'm in charge, if anything happens I want to know what I'm talking about and to suggest changes. I just feel a lot happier about that now we've talked about symptom control.

...I think it has made me feel more at ease about sitting and talking with cancer patients that I don't have to go in there and I don't have to say anything ... I don't seem to have that fear and uneasiness that I had a few weeks ago. It just seems to have taken it away."

This quote demonstrates this subject's perceived increase in confidence, knowledge and comfort in dealing with patients with cancer and that the process involved in this change was identified as the Workshop.

At post test all Workshop participants for whom data were available for analysis reported positive change in one or both of these domains, and as has already been noted, contrasted with Control or Seminar groups. Comparison of perceived competence rating scale scores, perceived educational needs scores and knowledge test scores for cases across the 3 groups is revealing. The majority of subjects from all these three groups increased their perceived competence rating scale scores and knowledge test scores at post test, and decreased their perceived educational needs score, indicating an increase in knowledge and confidence.

Subjects were asked to reflect on the processes involved in changes they identified. Three areas were apparent; these were increasing experience as a staff nurse which gave the individual more confidence generally, experience with patients with cancer, and as a result of the educational interventions. Where subjects reported these areas playing a part in their development these are indicated on Tables 67 to 69.
For the Workshop participants the educational intervention was the most commonly identified process both immediately after the Workshop and at 3 months follow up. Experience of patients with cancer and increasing experience as a staff nurse also played an important part particularly by the time of the follow up interview. In the Seminar group the educational intervention was only identified as being a process in positive changes in knowledge in two subjects. For the Control group little change was identified in the majority of subjects. For those who felt they had developed it would appear that experience with patients with cancer and increasing experience as a staff nurse played a part. However as Table 69 indicates, a large number of control subjects were having experience with patients, yet they reported no change in feelings regarding caring for them. It would appear that the relationship between increased experience and development of knowledge and skills is not a direct or consistent one.

For example Control group Number 8 said:

"As a staff nurse ... as the months go by you gradually learn more how to explain things and what to say to relatives. You learn as you do them, you watch others dealing with them and learn by trial and error yourself."

Whereas Subject Number 15, despite looking after a lot of patients with cancer felt:

"It would be nice if nurses were given more counselling skills throughout their training. At the moment there are patients on the ward who are ill - they expect us to know suddenly how to deal with it and it's pot luck really. You just do your best."
It is important to note that by follow up 10 (24.4%) Workshop participants reported a decrease either in their ability to give psychological care, or in their knowledge. Four (9.8%) felt they had decreased in both areas. Two (4.9%) felt their knowledge had decreased their ability to give psychological care. The decrease in reported knowledge is understandable and is reflected in knowledge scores, subjects felt they had forgotten what they had learnt or were not putting it into practice. For example Workshop group subject 6 said:
"I suppose I have a bit more knowledge than I had before but since I'm not putting it into practice, I'm probably not as knowledgeable as I should be."

Subject number 31 reported a decrease in confidence in relation to communicating with patients with cancer. She had moved wards and was no longer dealing with patients with cancer and consequently felt:
"Very rusty. I would be very apprehensive again and seem to have reverted to what I used to be like when I first started. The actual care I can cope with but it is like counselling, sitting down and talking."

Subject number 7 had left the Workshop feeling highly motivated and at post test interview was feeling very much more confident and enthusiastic in her care of patients with cancer. But had since found the ward she was working on very busy and not particularly receptive of her new ideas; this was a frustrating experience. She said:
"We had the course, and I think that we all felt highly motivated, we were all thinking about it very much to start with... but if we were perhaps working in surroundings that were conducive to the way we were looking at
things in school then it would be easier to carry on, but away from your influence, away from having talked about it ... I mean I still think about some of the things, I still think about pain control, I think about cancer ... and why its a dirty word ... they are still there, when I need them, I do think about them ... But out of that environment, everything else forces it out of the way, I can't seem to hold on to it closely enough."

Subject number 4 left the workshop feeling very much more confident in communicating with patients with cancer. However she had a particularly difficult and traumatic experience surrounding the death of a patient with cancer. This experience seemed to knock her confidence and it made her realise that she had been over enthusiastic in her desire to "make" everyone accept their disease. This difficult event had served as a learning experience in which she redefined her own role in cancer care as "being supportive and not to solve all their problems".

By follow up, a number of other subjects were also beginning to feel very burnt out and exhausted in their new role and some were considering leaving the hospital.

These subjects were in the minority, for most the effects of the workshop had been positive so that by the follow up interview they were using their increasing confidence as a staff nurse, experiences of patients with cancer and what they felt they had gained from the workshop in their care of patients with cancer.

For example, subject number 1 said: "I feel much more confident in my role so that I feel I can deal with problems better. I think about it now
and whenever a patient is diagnosed I think can I reassess the patient?...

I feel much more comfortable being able to sit down with a patient and start talking about whatever they've got on their mind. I don't find it quite so threatening as I did ... I know more about the disease and how it might manifest itself, but I also know more about myself, about how I might handle it."

In order to tease out the precise role the workshop had played in such increased confidence a number of subjects were asked to weigh up the relative importance of more experience as a staff nurse against that of having some additional education. Some subjects felt it was the workshop alone, particularly those who were having little experience of patients with cancer on the ward, most felt that it was a combination of both experience and the workshop. One subject felt that a lot of it is the course, and quantified it as three-quarters of her increased confidence.

Comparison of individual scores for the perceived competence rating scale, the perceived educational needs checklist and the knowledge test with self reports of feelings in relation to caring for cancer patients at interview (summarised in Tables 67 to 69) shows that for most subjects data from these 2 sources mirror each other closely lending support to their validity. For a number of subjects the pattern of interview responses did not reflect questionnaire scores as closely as might be expected. During interviews subjects were shown their perceived competence rating scales and perceived educational needs checklist and asked to reflect on the pattern of scores they had given. This proved a useful exercise in validating questionnaire data and allowing interpretation of findings.
For example as can be seen in Table 67 Workshop subject number 8 continued to score a high number of perceived educational needs following the workshop despite indicating that she felt very much more confident. She reported at interview that this was due to the workshop actually stimulating interest in learning more about the areas of cancer care in the checklist. Workshop group subject number 37 also reported that the workshop did not give her enough detail on chemotherapy and radiotherapy and consequently this was reflected in the perceived educational needs score. Seminar group subject number 8 was finding the ward she was working on very difficult, and was finding it difficult to adjust to her new role and felt she lacked support from her ward throughout the data collection period. This seemed to reduce her confidence and appears to be reflected in the perceived competence rating scores which decreased significantly over the 3 questionnaire administrations.
(7.4) EXPERIENCE OF CARING FOR PATIENTS WITH CANCER

Reports of encounters with patients with cancer were recounted by subjects at post test and follow up interviews were analysed following the same steps as reported in the previous chapter for pre-test data (See Fig. 23 page 267). Table 70 shows the number of cancer encounters reported by subjects from the 3 research groups. Many fewer contacts with patients were reported subjects at post test compared with pre test and follow up interviews. This was due to the short period of time between pre and post test interviews. For this reason encounters reported during post-test and follow-up interviews were considered together.

As before subjects' perceptions of their encounters were coded into positive, neutral, mixed and negative and compared across the three research groups to assess whether there were any differences in perceptions relating to encounters with cancer following attendance of the educational interventions. The distribution of encounters perceived as positive or negative across the research groups is shown in Table 91. Prior to the educational interventions all three research groups had a much larger number of encounters associated with negative perceptions than with positive perceptions. Following the interventions the Workshop group show far fewer encounters surrounded by negative perceptions, and an increasing proportion surrounding positive perceptions. At pre-test 36.8% of encounters were perceived as negative, compared with 24.5% at follow-up. The proportion of positive perceptions increased from 17.5% to 28.0% by follow-up. The pattern for the Seminar group remained static for the three interviews, but for the Control group rose so that by the follow up interview 52.9% of experiences were perceived as negative.
Table 70  DIRECT PROFESSIONAL ENCOUNTERS WITH CANCER REPORTED AT INTERVIEW BY SUBJECTS FROM THE 3 RESEARCH GROUPS

<table>
<thead>
<tr>
<th>Research Group</th>
<th>Number of Cancer Encounters Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre Test (Range)</td>
</tr>
<tr>
<td>WORKSHOP N=41</td>
<td>114 (0-7)</td>
</tr>
<tr>
<td>SEMINAR N=9</td>
<td>23 (0-5)</td>
</tr>
<tr>
<td>CONTROL N=24</td>
<td>63 (0-6)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>200</td>
</tr>
</tbody>
</table>

(N.B. Only direct professional encounters with patients with cancer were included in this analysis hence discrepancy with baseline study)

Table 71  THE DISTRIBUTION OF POSITIVE AND NEGATIVE PERCEPTIONS OF CANCER ENCOUNTERS ACROSS THE RESEARCH GROUPS AT PRE, POST AND FOLLOW UP INTERVIEWS

<table>
<thead>
<tr>
<th>Research Group</th>
<th>Perceptions of Cancer Encounters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre Test</td>
</tr>
<tr>
<td></td>
<td>+ve %</td>
</tr>
<tr>
<td>WORKSHOP N=41</td>
<td>20 (17.5)</td>
</tr>
<tr>
<td>SEMINAR N=9</td>
<td>- (0)</td>
</tr>
<tr>
<td>CONTROL N=24</td>
<td>12 (19)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>32 (16)</td>
</tr>
</tbody>
</table>

(\% representing the proportion total number of experiences for each research group)

While these findings need to be interpreted with caution, it may be that Workshop participants' reports of greater feelings of ease and confidence were reflected in the way they perceived their encounters with patients with cancer. It is also important to note that there were still a large number of experiences perceived as negative amongst all 3 research groups following the interventions.
The Baseline Study revealed that positive, and negative perceptions surrounding encounters with cancer seemed to be clustered under certain aspects of cancer care; for example negative encounters appeared to be associated with:-

- young or elderly patients
- where treatment was unsuccessful
- where treatment involved surgery
- where the doctor withheld information regarding diagnosis, treatment or prognosis, or
- where lack of support for the nurse was reported
- dealing with a dying patient with cancer
- dealing with the death of a patient with cancer.

In order to identify whether this may have changed following the educational interventions the nature of cancer encounters and the perceptions surrounding them were compared for the Workshop and Control groups over time. Unfortunately the results of the analysis were difficult to interpret since the number of encounters relating to each category were smaller. Also since at the interviews researchers did not systematically request the same information regarding these encounters from all subjects, but had used an open ended approach allowing subjects to reveal aspects of their encounters with cancer which they felt to be important, a rigid comparative analysis was inappropriate. A superficial analysis revealed little difference between the groups over time. A comparison of Workshop subjects' perceptions surrounding experiences of cancer prior to the Workshop and those following the Workshop (collated from post test and follow up interviews) is shown in Table 72. There was a small decrease in the proportion of negative perceptions and a
corresponding increase in the proportion of positive perceptions associated within 4 categories of experiences. These were; experiences involving adults; patients undergoing surgery; the doctor imparting information to patients; and dealing with dying cancer patients. These changes could not be described as significant. Encounters involving patients whose ability to cope with cancer was poor had a greater proportion of negative perceptions following the Workshop. It has already been noted that the effect of such encounters on a number of Workshop participants was to decrease their feelings of confidence at follow up so this finding would appear to reflect other areas of interview data.

As in the Baseline study, methods of 'coping' with patients with cancer reported in subjects' encounters were collated for post test and follow-up interviews. A comparison of the reported methods of 'coping' with patients in their professional encounters, between Workshop and Control groups in the 3 interviews is shown in Table 73. It is important to note that this analysis only takes into account what subjects volunteered in relation to their methods of 'coping' with patients. While undertaking interviews probing techniques were used by the researchers to elicit how subjects dealt with patients, how they felt they 'coped' and their feelings in relation to these experiences. These data only represent what subjects reported.
<table>
<thead>
<tr>
<th>NURSES' PERCEPTIONS OF ENCOUNTER</th>
<th>Before Intervention (%) of 114 encounters</th>
<th>After Intervention (%) of 158 encounters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Age of Patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Young Adult</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mature Adult</td>
<td>17 (14.9)</td>
<td>25 (21.9)</td>
</tr>
<tr>
<td>Elderly</td>
<td>1 (0.9)</td>
<td>2 (1.8)</td>
</tr>
<tr>
<td>Treatment Patient Received</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>3 (2.6)</td>
<td>6 (5.3)</td>
</tr>
<tr>
<td>Radiotherapy</td>
<td>1 (0.9)</td>
<td>-</td>
</tr>
<tr>
<td>Surgery</td>
<td>7 (6.1)</td>
<td>19 (16.7)</td>
</tr>
<tr>
<td>Outcome of Treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Successful</td>
<td>4 (3.5)</td>
<td>2 (1.8)</td>
</tr>
<tr>
<td>b) Unsuccessful</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cancer patient in pain</td>
<td>4 (3.5)</td>
<td>1 (0.9)</td>
</tr>
<tr>
<td>Communication &amp; Psychological Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dealing with relatives</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>a) Withholding information</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>b) Imparting information</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Doctor withholding information</td>
<td>2 (1.8)</td>
<td>13 (11.4)</td>
</tr>
<tr>
<td>Doctor imparting information</td>
<td>11 (9.6)</td>
<td>14 (12.3)</td>
</tr>
<tr>
<td>Effect of Doctor's information giving/withholding on patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Positive</td>
<td>2 (1.8)</td>
<td>2 (1.8)</td>
</tr>
<tr>
<td>b) Neutral</td>
<td>4 (3.5)</td>
<td>6 (5.3)</td>
</tr>
<tr>
<td>c) Negative</td>
<td>-</td>
<td>5 (4.4)</td>
</tr>
<tr>
<td>Talking about death/dying</td>
<td>3 (2.6)</td>
<td>1 (0.9)</td>
</tr>
<tr>
<td>Dealing with dying cancer patient</td>
<td>5 (4.4)</td>
<td>20 (17.5)</td>
</tr>
<tr>
<td>Dealing with death of cancer patient</td>
<td>3 (2.6)</td>
<td>11 (9.6)</td>
</tr>
<tr>
<td>Patient's ability to cope with cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Good</td>
<td>7 (6.1)</td>
<td>1 (0.9)</td>
</tr>
<tr>
<td>b) Poor</td>
<td>2 (1.8)</td>
<td>6 (5.3)</td>
</tr>
<tr>
<td>Support of Nurse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support reported</td>
<td>1 (0.9)</td>
<td>3 (1.9)</td>
</tr>
<tr>
<td>Lack of support reported</td>
<td>5 (4.4)</td>
<td>3 (1.9)</td>
</tr>
<tr>
<td>Method of &quot;Coping&quot; Reported</td>
<td>Pre Test</td>
<td>Post Test</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>Workshop</td>
<td>Control</td>
</tr>
<tr>
<td>Nurse's ability to cope</td>
<td>36 (31.6)</td>
<td>12 (19.0)</td>
</tr>
<tr>
<td>related directly to how</td>
<td>114</td>
<td>63</td>
</tr>
<tr>
<td>well the patient coped</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse passes responsibility</td>
<td>33 (28.9)</td>
<td>6 (9.5)</td>
</tr>
<tr>
<td>for talking on to others</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Nurse accepts and takes on</td>
<td>17 (14.9)</td>
<td>24 (38.1)</td>
</tr>
<tr>
<td>responsibility for</td>
<td>114</td>
<td>63</td>
</tr>
<tr>
<td>patient's care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse uses an open and</td>
<td>15 (13.2)</td>
<td>24 (38.1)</td>
</tr>
<tr>
<td>honest approach</td>
<td>114</td>
<td>63</td>
</tr>
<tr>
<td>Nurse openly admits feeling</td>
<td>19 (16.7)</td>
<td>6 (9.5)</td>
</tr>
<tr>
<td>either inadequate or</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>incompetent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse felt reassured by</td>
<td>10 (8.8)</td>
<td>8 (12.7)</td>
</tr>
<tr>
<td>previous experience</td>
<td>114</td>
<td>63</td>
</tr>
<tr>
<td>Avoided contact with patient</td>
<td>5 (4.4)</td>
<td>-</td>
</tr>
<tr>
<td>Treats patient exactly the</td>
<td>4 (3.5)</td>
<td>3 (4.8)</td>
</tr>
<tr>
<td>same as other patients</td>
<td>114</td>
<td>63</td>
</tr>
<tr>
<td>Keeps emotionally distant</td>
<td>1 (0.9)</td>
<td>2 (3.2)</td>
</tr>
</tbody>
</table>
Following the Workshop participants were much more likely to report that they accepted and took responsibility for care of patients with cancer, and use an open and honest approach with the patients than the control group. These differences were not evident in data collated from follow-up interviews.

Further qualitative analysis of these interview data relating to newly registered nurses' experiences of cancer is possible and will be undertaken in the future.
PARTICIPANTS' EVALUATION OF THE WORKSHOPS AND SEMINARS

PARTICIPANTS' EVALUATION OF THE WORKSHOP

Thirty-five of the Workshop participants returned the anonymous evaluation form shown in Appendix G. Table 74 shows in response to the question about their own goals for the Workshop:

Table 74  PARTICIPANTS' AIMS FOR THE WORKSHOP

<table>
<thead>
<tr>
<th>Aims</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highlighted desire to increase their knowledge of cancer as a disease and its treatment.</td>
<td>23 (65.7%)</td>
</tr>
<tr>
<td>Also stated a need for increased confidence in communicating with patients with cancer</td>
<td>23 (65.7%)</td>
</tr>
<tr>
<td>Mentioned a need to come to terms with and understand their own feelings about cancer</td>
<td>7 (20.0%)</td>
</tr>
<tr>
<td>Mentioned psychological support for patients</td>
<td>4 (11.4%)</td>
</tr>
<tr>
<td>Terminal care</td>
<td>3 (8.6%)</td>
</tr>
<tr>
<td>Support for staff</td>
<td>2 (5.7%)</td>
</tr>
</tbody>
</table>

When asked to what extent did they feel these goals had been realised, the response was generally very positive. Only 3 of the participants were hesitant about how much they had increased their knowledge of cancer and its treatment, and 7 felt unsure about how much they had developed in communicating/dealing with patients with cancer. Most did feel they had gained a lot but felt it needed testing out in practice. One nurse described the Workshop as a 'starting block' for achieving this aim in the future and another nurse wrote that she now wanted to put what she had learnt into practice and would like to reassess this after 3 months. Of those nurses who felt they needed to come to terms with their own feelings about cancer, all felt they had met this aim and one described it as a 'beginning'.

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Table 75 shows the Aspects of the Workshop participants indicated were most useful and Table 76 those that were least useful while it was notable that the opportunity to talk and for group discussion was singled out as the second most useful aspect of the Workshop after the session on pain and symptom control. This suggests that the small group work was an important teaching strategy to use.

Table 75  MOST USEFUL ASPECTS OF THE WORKSHOP

<table>
<thead>
<tr>
<th>(N=35)</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain and symptom control</td>
<td>20</td>
</tr>
<tr>
<td>Opportunity to talk/group discussion</td>
<td>8</td>
</tr>
<tr>
<td>Complementary medicine</td>
<td>5</td>
</tr>
<tr>
<td>Reactions to loss/psychological care/coping</td>
<td>5</td>
</tr>
<tr>
<td>Communicating with cancer patients/patient education</td>
<td>3</td>
</tr>
<tr>
<td>Video: working with the terminally ill</td>
<td>3</td>
</tr>
<tr>
<td>Roleplay/telling diagnosis</td>
<td>2</td>
</tr>
<tr>
<td>Small group teaching style</td>
<td>1</td>
</tr>
<tr>
<td>Attitudes to cancer</td>
<td>1</td>
</tr>
<tr>
<td>Backup services/help groups</td>
<td>1</td>
</tr>
<tr>
<td>Caring for dying/bereaved</td>
<td>1</td>
</tr>
<tr>
<td>Facts about cancer/statistics</td>
<td>1</td>
</tr>
<tr>
<td>Screening/prevention</td>
<td>1</td>
</tr>
<tr>
<td>It was all useful</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 76  LEAST USEFUL ASPECTS OF THE WORKSHOP

18 of 35 nurses identified a least useful area. These were:–

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Anti-Cancer Lifestyle</td>
<td>4</td>
</tr>
<tr>
<td>Case Studies</td>
<td>4</td>
</tr>
<tr>
<td>Role Play</td>
<td>3</td>
</tr>
<tr>
<td>Complementary Medicine</td>
<td>2</td>
</tr>
<tr>
<td>Psychosexual Aspects</td>
<td>2</td>
</tr>
<tr>
<td>Video on Breast Cancer</td>
<td>2</td>
</tr>
<tr>
<td>Screening</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>
There was no one area of the Workshop that the participants found less useful, this seemed to depend on individual needs and feelings. In response to the question asking for a specific example of anything they had learnt that they might use in their work, 16 of the participants specifically noted that they would use what they had learned in relation to pain control particularly in feeling more able to make suggestions and in being more assertive with doctors. Three specifically mentioned using pain charts. Ten of the participants felt they would use communication skills they had learnt; 4 their new understanding of coping mechanisms and psychological care of patients with cancer; 4 felt they would be able to pass on their knowledge to other staff by teaching on the ward; 4 felt they could offer information on services, self help groups and agencies which may be of use to patients; 4 felt they would use health education and patient education skills and 2 felt they would be attempting to foster more openness with cancer patients.

A content analysis of general comments on the Workshop were overwhelmingly positive only 6 were negative. Fourteen involved positive comments on the teaching methods used and 12 were positive comments about the Workshop in general. A breakdown of the negative comments is shown below:

- Poor quality overheads = 1
- Not enough time = 1
- Some of more formal sessions too long = 2
- Request for shorter days = 2

During interviews following the Workshop participants' comments were again overwhelmingly positive. Some examples are shown below:
Nurse A: 'I think it was just talking more than anything ... with everyone else, and hearing what they said and what they found helpful in particular cases ... mind you the knowledge helps as well ... I think it helps sort of to be competent in both spheres, so that one doesn't detract from another.'

Nurse B: 'We actually have got a cancer patient here at the moment and really it has just slotted in with this cancer course, because she's on a syringe driver and we talked about that last week. She's come in very much out of control ... as a student it was very easy for me to step back and let everybody else get on with it, now that I'm in charge if anything happens I want to know what I'm talking about and to suggest any changes. I feel a lot happier now.'

Researcher: 'Last time I spoke to you, you said you just didn't know how to approach talking to someone who is dying, do you still feel like that?'

Nurse B: 'I think it has made me feel easier about sitting with cancer patients. That I don't have to go in there, and I don't have to say anything. And I suppose it's fear in myself really about the situation not really knowing how people are feeling, I don't seem to have that fear and uneasiness that I had a few weeks ago, it just seems to have taken that away.'
PARTICIPANTS' COMMENTS ON THE SEMINARS

Only 11 of the 40 or so subjects invited to attend the formal seminar sessions did so and the majority only attended one seminar. While subjects' evaluations of seminars attended were very positive, they had many problems in getting away from the wards in order to attend.

Typical comments from Seminar group members during post-test interviews are shown below:

Fig. 28 SEMINAR GROUP MEMBERS' COMMENTS

Nurse C: "I was keen, it wasn't a case of not wishing to go. It was a case of the days just didn't fit in because the ward was so busy. It would have been easier had there been time set aside for that and that alone and you didn't have to make way for it."

Nurse D: "Yes, trying to get to anything like that is awful .... I haven't been to any study days at all, I didn't even get my interview day. I had to do that and come in for a late."
(7.6) **ANALYSIS FOR OTHER INFLUENTIAL DIFFERENCES**

(7.6.1) **THE TWO HOSPITALS**

Cross tabulations for variables between the two hospitals revealed no significant differences in the number of newly registered nurses who opted for further education on cancer. There was an even spread of subjects across the research groups from both hospitals and no difference in age distribution of staff between the hospitals was detected. There were slightly more males in the sample from Hospital 2 (5) than Hospital 1 (2); this difference was not significant ($X^2 = 0.34 \, df = 1$). There was little difference in reported professional experience of cancer nursing between the two hospitals although nurses from Hospital 1 generally had more experience of nursing patients with cancer as student nurses, 28 (47.5%) had worked on an oncology ward during their training compared with 4 (5.9%) from Hospital 2. This was due to the fact that there were 2 specialist oncology wards at Hospital 1 and none at Hospital 2. ($X^2 = 28.05, \, df = 1, \, p = 0.0001$). There was no difference in the number of subjects who had patients with cancer on their wards between the two hospitals, there were slightly more graduates at Hospital 2 (13) than at Hospital 1 (8) but this difference was not significant ($X^2 = 0.9 \, df = 1$) neither were there any differences in the number of respondents who had personal experience of cancer or who expressed worries about caring for patients with cancer.

(7.6.2) **CROSS TABULATIONS FOR VARIABLES BETWEEN THE RESEARCH GROUPS**

The research groups including the 21 newly registered nurses who did not opt for further education on cancer were scrutinised for differences in age; sex; ward they were working on; whether they had patients with cancer on their ward; previous experience of cancer nursing; personal experience of cancer; worries about caring for patients with cancer; and
educational background. Only two of these variables appeared to have an uneven distribution across the research groups, these were worries about caring for patients with cancer and educational background.

Only one Workshop member reported having no worries about caring for patients with cancer compared with none in the Seminar group, 10 in the Control group and 3 of those who did not opt for further education on cancer care. This difference between the Workshop and Control group fell just below the \( p = 0.05 \) level of significance (\( \chi^2 = 2.95 \text{ df} = 1, p = 0.055 \)). This would seem to indicate that those nurses who reported having no worries about caring for cancer patients were less motivated to attend education on cancer care.

The 21 graduates in the sample appeared to be concentrated into the two educational intervention groups. Twelve of the 37 Workshop members were graduates; 5 of the Seminar group and only 3 of the Control group were graduates. While there was no significant difference between the Workshop group and the sample as a whole (\( \chi^2 = 0.72 \text{ df} = 1 \)) there was a significantly higher number of graduates in the Workshop group than there was in the Control group (\( \chi^2 = 4.34 \text{ df} = 1 p = <0.05 \)). Since subjects could not be randomly allocated to research groups for the reasons outlined earlier, it is possible that those nurses who had had higher education prior to entering nursing are more motivated towards attending education post registration and were more assertive in their requests for study leave to attend it.

A more detailed scrutiny of the results has satisfied the researcher that with one exception in Knowledge scores, no differences were discovered
between the groups in the outcome measures prior to the education. Since graduate nurses did not score significantly higher than non-graduates on any of the measures either before, after the education, or at three month follow-up it is unlikely that educational background could account for the statistically significant differences between the research groups following the interventions.

(7.6.3) ANALYSIS FOR THE EFFECTS OF EDUCATOR AND RESEARCHER ROLES BEING COMBINED.

As described in Chapter 5 (page 197) a cross-over of researcher and educator roles was undertaken for the fourth and fifth runs of the educational interventions.

Scrutiny of interview and questionnaire data revealed no differences in outcome measures for any of the three research groups following the cross-over of researcher and educator roles.

Comparison of scores for the two Workshop groups involved in the cross-over and using Mann Whitney U Tests revealed no significant differences between perceived competence scale scores, perceived educational needs checklist scores, or the knowledge test scores, before, immediately after, or three months following the workshops.

Transcripts from the fourth and fifth workshops revealed remarkable similarity between the two interventions. There were only small differences identified in facilitator style, content, material covered in group activities, ratio of discussion time to didactic teaching and contributions from participants.
The closing exercise for the workshop is a good example of this similarity. Excerpts from the two workshops are shown in Fig. 29. This was the final exercise of the workshop and the culmination of the three days.

(N.B. some of the responses of participants were inaudible for transcription and therefore have been excluded).

Further analysis of these Workshop transcripts will be the subject of a further study and would require more time.

No differences were detected in responses to the anonymous evaluation forms from participants in the Workshops run by the two facilitators.

Interview transcripts also revealed no differences from research subjects, (other than some minor differences in interviewer style). There were no differences detected in the number of positive or negative comments relating to the Workshop or Seminars between researchers. Neither was there any differences detected in the frequency of positive or negative changes reported by subjects in their feelings regarding caring for cancer patients, amongst any of the research groups during the cross-over of researcher and educator roles.
**Fig. 29 EXCERPTS FROM TRANSCRIPTS OF THE CLOSING SESSION OF WORKSHOPS 4 AND 5.**

<table>
<thead>
<tr>
<th>WORKSHOP 4 (FACILITATOR A)</th>
<th>WORKSHOP 5 (FACILITATOR B)</th>
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| Facilitator A: "Just to end, let's do a closing circle .... Just say something you want to leave behind in this room, and something you want to take away with you. Think for a minute - so something to leave behind and something to take away." | Facilitator B: "Great, now one last thing, when you walk out of the door - you are going to leave in this room, over in the corner, and one thing that you will take with you as you go out on to the ward again. Something you want to leave here anyway and something good, that you want to take away as you leave ... why don't I start with you?"
| Participant 1: I would like to leave behind my old fears about oncology nursing, and take away my bag when I go (laughter). | Participant 1: "I will leave behind the fear of a patient saying 'Have I got cancer?'"
| Participant 2: I would like to leave behind the feeling that school has given me once and for all, and take away my mug. | Participant 2: I will leave behind my underconfidence and take away a much better understanding of cancer patients."
| Participant 3: "I would like to leave behind my old fears about oncology nursing, and take away my bag when I go (laughter)." | Participant 3: "I will leave behind the pessimistic and take away the optimistic view."
| Participant 4: I would like to leave my fear of cancer patients. | Participant 4: "To leave behind the negative view and take with me an increased knowledge, really of what can be done to help cancer patients."
| Participant 5: I'd like to leave behind some old ideas that I had that perhaps are not the right ones, and go away with really good ideas." | Participant 5: "I will leave behind personal insecurity in avoiding patients and take the fact that I can cope with it better."
| Facilitator: "Well what shall I leave behind? Days of exhaustion, and I think I will take away a very pleasant 3 days working with you all." | Participant 6: "The standard of teaching has been so much higher than we were used to. You were very inspiring."
| | Facilitator: "I will leave behind my worries and take away my enjoyment of the 3 days."
This chapter has presented results from the evaluation study, and from phase three of the research study. The aim has been to present data in order to demonstrate its veracity and corroborate data from different sources. This has been a useful exercise in testing out the nursing tools, to help understand meanings behind subjects' responses, and to demonstrate no real effect of extraneous variables on outcome measures.
DISCUSSION

This study grew out of a body of literature which suggests that the attitudes nurses hold towards cancer and to patients suffering from the disease is negative, and that these attitudes affect the quality of care patients with cancer receive. Serious methodological flaws were identified in many of the studies investigating nurses' attitudes towards cancer particularly in relation to the use of "attitude" as a research variable and in the many attempts made to measure it. This meant that while research noted pessimism and despondency amongst nurses in relation to the disease, it was not possible to ascertain the nature of these attitudes, nor how they were formed. Education aimed at fostering more optimistic attitudes towards cancer was called for by a number of authors and a handful of studies were found to have attempted to implement educational programmes for nurses with this aim in mind. The extent to which such programmes were successful in fostering such positive attitudes was less easy to establish, particularly since many failed to demonstrate statistically any change over time in dependent variables and had concentrated on the measurement of change in only a small number of outcome measures.

The study attempted to redress this balance by exploring in depth newly registered nurses' attitudes towards cancer and the factors involved in their formation, by investigating the extent to which nurses felt prepared for their role in cancer care and their identified needs for further education in this area. The study also developed and evaluated two different educational interventions tailored to meet the needs identified
by newly registered nurses. The educational interventions aimed, not necessarily to change attitudes in a more optimistic direction but rather for nurses' attitudes to reflect a realistic picture of the disease and for individuals to be more aware of their own feelings and reactions towards cancer. The interventions also aimed to provide nurses with tools in the form of knowledge and understanding of the physical and psychological needs of patients with cancer. The aims of the study as described in Chapter 5 (p.122) were met during the three phases of the project. The study adopted a triangulation strategy for its design so that multiple methods of data collection and analysis were used in an attempt to gain greater understanding of both quantitative and qualitative data. This situation has only rarely been discussed in nursing literature. The educational evaluation was intended to be broad and illuminative and focused on process as well as outcome within a traditional experimental research design.

(8.1) **SAMPLE**
The sample of newly registered nurses involved in this study was drawn from two general hospitals. Few differences were found between nurses from the two hospitals, they were a remarkably uniform group. These nurses were felt to be representative of newly registered nurses as a whole and therefore findings from this study particularly in relation to nurses' preparation for their role in cancer care are likely to reflect the picture of education for cancer care during basic training in this country.

(8.2) **LIMITATIONS OF THE STUDY**
The main limitations of the study were felt to have been:-
- Mobility of the sample over time, leading to a decreasing sample size and missing data amongst subjects
- Non-random allocation to research groups
- The relatively short follow up of study subjects following the interventions. Follow-up for longer than three months was impractical because of the mobility of newly registered nurses.
- The poor reliability estimates calculated for the cancer attitude scale, which limited analysis and interpretation of data from the scale.

(8.3) **NEWLY REGISTERED NURSES' PREPARATION FOR CANCER CARE**

The extent of newly registered nurses' involvement in cancer care had not been documented in the literature prior to the study, and was found to be high, 92.1% had patients with cancer on their wards at least occasionally. This is noteworthy since 42.5% of subjects were working on general medical and surgical wards, and none were working on wards with designated oncology beds. Only six subjects reported never having cancer patients on their wards. While these figures give no indication of the time spent by nurses each day or week in contact with patients with cancer, questionnaire and interview data indicated that cancer care represents a significant element of the role of newly registered nurses working in general hospitals.

While the extent of this group of nurses' involvement in cancer care was found to be higher than anticipated, the level of preparation that nurses appeared to have received for the role was low. A large proportion (82%) of subjects expressed worries in relation to cancer care, and rated their own competence to care for patients as low for all items of the rating
Subjects indicated that they had a large number of educational needs in cancer care, and responses to the knowledge test indicated that they lacked knowledge particularly in relation to cancer screening; incidence, survival, and mortality for cancer; pain control and psychosocial aspects of care.

A commonly recurring theme amongst interview subjects was a general feeling of inadequacy and lack of preparation in relation to caring for patients with cancer particularly with regard to psychological care and communication, 54.4% of nurses interviewed felt inadequate in this area and a further 13.2% of subjects felt inadequate in aspects of physical care of patients with cancer such as pain and symptom control.

A major indication of the extent to which nurses had been prepared for their role in cancer care was derived from subjects' self reports of this during interviews. In general subjects could neither remember having much input on cancer care during their training nor felt that the input they had received was adequate. This reflects Robinson's (1986) finding from Phase 1 of the study that teaching time reported by the two schools of nursing was only 2 days at Hospital 1, and at Hospital 2 no formal time was devoted to cancer care in the curriculum, rather it was discussed as it arose in various modules. Knowledge and skills were learnt by "picking this up as you went along". This contrasted with the extent of input a number of subjects felt they had received on for example cardiovascular disease.

The extent of nurses' preparation in this area would also seem to be reflected in the demand for further education on cancer care in response
to that offered to subjects in the study. 107 (84.3%) of the sample requested to take part in the education offered them in the study.

While this study only reports indirect evidence relating to the adequacy of education for nurses undergoing basic training in the area of cancer care, the data indicated that this area requires close scrutiny. Unlike cardiovascular disease the time devoted to teaching on cancer care reported by subjects does not reflect the incidence of the disease, as already noted cancer currently effects one in three of the population, and is the second most common cause of death after heart disease.

Nurses' feelings of inadequacy may in part reflect their own underlying feelings in relation to the disease, and their association of cancer with death, which may have served to distort the extent of preparation they felt they had received. This was found to be quite different from nurses' feelings in relation to heart disease.

(8.4) NEWLY REGISTERED NURSES' ENCOUNTERS WITH CANCER
The analysis of interview data regarding nurses' encounters with cancer revealed some important findings, particularly in relation to the lasting effect such encounters appeared to have on subjects. Encounters with cancer during interviews were pooled and analysed as a discrete variable for the purposes of the baseline study. This permitted an in depth understanding of the nature of such encounters and the impact of these on subjects to be developed. This approach to the investigation of nurses' encounters with cancer was retrospective and seen "through the eyes" of subjects, and was the product of their memory, synthesis of the meaning of experiences by subjects, and what individuals chose to report and discuss.
during interviews. Because of this no claim is made regarding the representativeness of the number, type and frequency of nurses' actual encounters with cancer, although encounters with cancer reported as a staff nurse are likely to closely mirror 'actual' encounters since interviews focused on asking subjects to discuss patients on the ward they were currently working on. The effect of memory was most likely to have operated in nurses' accounts of encounters with cancer as a student nurse, encounters recounted are likely to be those that had 'stayed with' subjects and may account for the higher proportion of both positively and negatively perceived experiences reported and the longer time over which they looked back. The large proportion of encounters reported with adults undergoing surgery for cancer does however suggest that they closely reflect the nature of cancer care undertaken by nurses in general hospitals. The fact that over half (56.3%) of encounters reported, involved either dying cancer patients or the death of a cancer patient, is more difficult to interpret. As already noted in Chapter 2, Kind's (1988) estimates of mortality rates of 15.4 per 100 hospital admissions for malignant neoplasms, would suggest that death in relation to cancer was over represented amongst encounters reported by nurses. These encounters were also not surprisingly more likely to be surrounded by negative perceptions than positive perceptions. However encounters with dying cancer patients one would assume would be more likely to have involved contact over an extended period of time and also to involve greater demands on nurses in time required to give care, and in emotional investment by them, therefore this may be reflected in their experiences reported during interviews. It is possible that encounters with cancer involving dying patients or the death of a patient with cancer reported.
by nurses were more likely to be recalled by nurses than other encounters, and may reflect a theme which recurred in the data which was the association of cancer with death.

Nurses' perceptions surrounding encounters with cancer appeared to be related to the age of the patient. Young patients were felt to be particularly difficult to deal with because of the magnitude of loss felt by subjects, and elderly patients gave rise to concern over whether treatments should be undertaken and the quality of life following treatment for cancer. Other aspects affecting nurses' perceptions included: the extent to which treatment particularly surgery was successful in treating and curing the patient; whether or not the doctor imparted information regarding the disease to the patient and the effect this had on the patient; and whether or not the patient was perceived to be dying. Support for nurses whilst caring for patients with cancer was rarely reported. Nurses' perceptions of their ability to cope with patient care was reported to be directly related to how well the patient was coping psychologically with their disease, in a large proportion of encounters. Nurses also reported using avoidance strategies such as passing responsibility for talking to patients on to others, avoiding contact with the patient or keeping emotionally distant in 28.4% of patient encounters. The effects of these encounters with cancer was examined by collating the self reports of subjects in relation to them. In 35.2% of encounters negative effects on the subject such as making it difficult to talk to cancer patients, feeling incompetent in cancer care, feeling negative about treatment for cancer care, feeling unable to cope with care of dying cancer patients, and avoiding cancer patients in future. The outcome of encounters could also be positive but was so in a
smaller proportion of encounters (25.2%). These resulted in the realisation that cancer can have a good outcome; feeling more responsible for cancer care, having confidence reinforced, and feeling more positive about cancer and cancer treatment. It was of particular concern that such a large proportion of encounters with cancer were reported as having negative effects on nurses. This impression was very evident in interview transcripts and the scarring effect of many encounters with cancer was felt to be an important factor in determining nurses' attitudes towards the disease.

The role of personal experiences with cancer and its apparent affect on attitudes towards the disease has been reported in the literature for example Elkind (1980, 1981). However the relationship between professional experiences of cancer and attitudes is less clear. Elkind (1980, 1981) found that increasing age and years post registration was more likely to result in optimistic responses. Felton et al (1981) found that experience in oncology nursing did not appear to affect attitudes, and Stover et al (1984) found that non-specialist nurses working with cancer patients were more likely to have pessimistic attitudes although it was not clear why. Haley et al (1977) among others have discovered more pessimistic views regarding the value of active treatment for cancer as students progress through medical school presumably as a result of contact with patients with cancer and Quint (1967) has documented the profound effect that student nurses' encounters with dying patients can have on them. No direct evidence for the effect of encounters with patients with cancer was found in the literature. It would appear from the study that a very important influence on nurses' feelings regarding the disease has been neglected.
(8.5) NEWLY REGISTERED NURSES' ATTITUDES TOWARDS CANCER

During the baseline study nurses' attitudes towards cancer were found to be complex and encompassed a number of conflicting elements. The triangulation strategy allowed attitude using a broad definition, to be examined from a multi-component and multi-dimensional perspective. This meant that valence (see Chapter 3 p.97) was not the only dimension to be investigated, but also breadth, intensity, stability, centrality, salience, interrelatedness and indirect assessments of behavioural expression, as well as meaning and context, were examined.

Reliability testing on the CAS did not permit summing of attitude scores for items of the four subscales. A comparison of responses to individual items within the subscales with interview data revealed a largely consistent pattern of response amongst subjects. Responses to items under Factor 1 of the CAS "relating to attitudes towards a patient's inner resources to cope with serious illness such as cancer" suggested that nurses recognise the importance for nurses to communicate with patients regarding their feelings about cancer and death and that they do have resources to cope with a diagnosis of cancer. However there was a significant minority of around 18% who were unsure of this. A scrutiny of the pattern of responses by individual subjects across all the items of the subscale revealed that no one group of subjects accounted for pessimistic responses but that subjects had mixed views and responded quite differently to items within the scale. Interview data supported this finding.

An important finding during interviews was the large proportion of subjects (34.3%) who were hesitant about telling patients their diagnosis.
They felt that this should not necessarily be automatic and should depend on whether they felt able to cope and on decisions made by relatives. This finding may have been a function of the association of cancer with death, so that in the minds of a number of subjects imparting diagnosis meant telling patients that they were dying. There was also a strong feeling that 'telling' and discussions regarding diagnosis and prognosis were the prerogative of the doctor and that nurses should not enter this territory unless they were very sure that the doctor had discussed this with the patient first. Nurses were not satisfied with this approach but felt unable to change it. There was no sense of nurses facilitating adjustment to the diagnosis of cancer amongst subjects and a large proportion of subjects felt inadequate to do this.

Responses to Factor IIa of the CAS relating to attitudes towards the value of early diagnosis of cancer, and during interviews, indicated that subjects felt screening and prevention for cancer to be very important. They were much less sure of their own role in this though and felt they lacked knowledge and skills in this area. A reluctance to initiate conversations with patients regarding methods of prevention and screening was evident, feeling that this was not appropriate for patients admitted to wards with conditions other than cancer. This was important, at interview many of the nurses expressed strong feelings regarding the need for cervical screening to be available for all women. Yet they did not see a role for themselves in encouraging women in their care to undergo such screening.

The greatest area of pessimism amongst nurses relates to their feelings
regarding the value of active treatment for cancer. With just under half of all respondents expressing doubts about this in response to CAS items and during interviews. There appeared to be a general feeling that treatment for cancer does more harm than good, causes unnecessary suffering amongst patients, and may even hasten death. Only four subjects recognised a role for active treatment in palliation of symptoms or in slowing down the progress of the disease, one of the main aims of cancer treatment. The role of professional experiences of cancer on the formation of nurses' attitudes appeared to be significant. Responses were frequently backed up by accounts of encounters nurses had experienced with patients. Many nurses listed specific criteria which they felt should exclude patients from treatment and included in this list the elderly, the very young, and those whose quality of life was poor. There was a feeling that patients should only be included who have actively expressed a desire for active treatment.

Interview and CAS data discussed relate to specific components of attitudes towards cancer such as active treatment and decisions regarding revealing diagnosis to patients. Interviews attempted to illuminate nurses' attitudes towards cancer as a single entity. This was in order to establish whether the apparent latent theme of the association of cancer with death held true during direct questioning, and also to shed light on cancer as a symbol. The majority of responses to the question "what does the word cancer mean to you?" were classified as negative (60.7%), very few responses could be described as positive (8.9%). Cancer appeared to be inextricably associated with death, pain and suffering amongst these nurses. Again the influence of professional experiences of cancer on nurses' perceptions of the disease were apparent. This contrasted with
the respondents' feelings regarding heart disease, where subjects felt health education and healthy lifestyle would help sufferers return to a normal and active life.

Data from this study support previous work on nurses' attitudes towards cancer. A prevailing sense of pessimism regarding the disease was found amongst newly registered nurses. The overwhelming theme which pervaded all sources of data was the association of cancer with death, and a death which involved much pain and suffering. This association of cancer with death meant that all areas of their attitudes were affected, so that it was difficult for nurses to see the value of active treatment for cancer. This was felt to cause unnecessary suffering without offering long term benefit to the patient. Nurses were particularly critical of surgery for patients with cancer. This pessimism also appeared to affect their role in health education for cancer in that while they felt screening and prevention were important, they appeared to feel unable to initiate discussions regarding this, for fear of increasing patients' anxiety. A sense of powerlessness amongst these nurses was evident during interviews in relation to communication with patients. Many nurses felt unable to change the status quo regarding patients being told their diagnosis, or to contribute to decisions regarding treatment for patients. This was seen to be entirely in the hands of medical staff, although nurses were adamant that they would not lie to a patient if asked about their condition.

It is interesting to note that the technique used in previous studies for example Davison (1965) and Whelan (1984) of inferring optimistic or pessimistic attitudes towards cancer from subjects' estimates of survival
for different cancer sites, was replicated in this study within the knowledge test. The finding that subjects underestimated survival for cancer with good 5 year rates and over estimated sites of cancer with poor 5 year survival rates would not support the use for this technique as an attitude assessment tool. It would seem that results from this study indicated a lack of knowledge which made it impossible to differentiate between pessimism and simply not having knowledge of mortality statistics.

(8.6) FACTORS AFFECTING NURSES' ATTITUDES TOWARDS CANCER

Fig. 29 summarises factors which appeared to affect newly registered nurses' attitudes towards cancer. Culturally held beliefs and attitudes towards cancer, psychological defence mechanisms, and an innate fear of death already discussed in the literature review appeared to play a part in the formation of nurses' attitudes towards cancer in the study. Evidence for this appears in the form of latent themes which emerged from the data such as the association of cancer with inevitable death. Cancer appeared to 'embody' death for this group of nurses, and conversations about cancer and patients with cancer at interview inevitably became discussions of issues relating to death and dying rather than cancer per se. As has already been noted unprompted 10 of the interview subjects openly stated that cancer evoked fears of death in them and the association of cancer with death was evident in 36.8% of statements relating to feelings about caring for cancer patients in general; 25.4% of responses relating to cancer patients' ability to cope psychologically with cancer; and 44.6% of descriptions of the meaning of the word cancer.
Fig. 30  FACTORS AFFECTING NURSES' ATTITUDES, BELIEFS AND FEELINGS IN RELATION TO CANCER

PROFESSIONAL PREPARATION FOR ROLE IN CANCER CARE
- Preparation during nurse training
- Knowledge on cancer and cancer care
- Feelings of competence in cancer care
(The lack of preparation reported by nurses during basic had a negative effect of nurses' feelings of adequacy to care for patients)

Theoretical input
Skill based teaching & learning in classroom
and onwards
"Learning on the job" identified as major source of knowledge on cancer care

CULTURALLY HELD BELIEFS & ATTITUDES TOWARDS CANCER

PERSONAL ATTRIBUTES

CANCER AS A SYMBOL OF DEATH
THE FEAR OF DEATH AND PSYCHOLOGICAL DEFENCE MECHANISMS
Protecting the individual from the reality of death.
The association of cancer with death was recurring theme throughout all data sources

ATITUDE TOWARDS CANCER (Complex and having conflicting elements)

PERSONAL EXPERIENCES OF CANCER (Impact of personal experiences varied in subjects)

Prevailing professional Beliefs and Attitudes towards Cancer

PROFESSIONAL EXPERIENCES
- Experiences with cancer appear to function either to reinforce attitude already held, or
- To mediate attitudes generally in a negative direction
- It is possible that there was selective attention to cancer experiences so that those reflecting attitudes already held were lodged in subject's memory
- Evidence from data discussed suggests that professional experiences had a scaring & negative effect on nurses' attitudes & feelings in relation to caring for cancer patients in many instances.
The precise role of personal attributes on attitudes and beliefs regarding cancer is difficult to assess. There was a small group of subjects in the interview study who both interviewees agreed were 'special' nurses in some sense. This group were difficult to define other than they seemed to have an ability to see patients as a whole, to have an empathic understanding of patients' needs and an apparent ability to integrate their knowledge and understanding of physical and psychological areas into their care. The researchers felt that they would be very 'safe' as a patient in their hands. These nurses identified as 'special' subjects tended to be older, to have had other experiences before entering nursing and were more likely to be graduates. However contrary to what one might expect, these nurses did not appear to be more likely to feel confident in caring for patients with cancer or to hold optimistic attitudes. In fact they may have been more likely to express their feelings of inadequacy and difficulty in relation to caring for patients with cancer than some other nurses.

A scrutiny of those nurses who appeared to hold positive responses at interview, again gave little evidence for the effect of personal attributes, for example those who reported that they enjoyed caring for patients with cancer generally, who were identified as feeling optimistic regarding the value of active treatment, or who were identified as giving a positive response to the questions regarding the meaning of the word cancer. Subjects who had responded optimistically to these areas were identified and their responses to other CAS and interview items compared. There was no one group of nurses who could be described as responding in a consistently optimistic/positive manner to these areas, neither were their responses consistently free of the association of cancer with death.
Those nurses who reported enjoying caring for patients with cancer also reported finding areas such as communication and psychological care difficult. However, of the five nurses who gave a positive response regarding the meaning of the word cancer, three reported this to be the result of positive professional experiences. This would seem to reflect Moscovici's (1984) concept of social representations in that beliefs held appeared to be consistent for the group, individual differences were less important. The role of personal experiences with cancer in the formation of attitudes towards the disease was unclear in this study. Unlike studies by Elkind (1980, 1982) and Whelan (1984) no evidence was found associating personal experiences of cancer with a positive outcome or with a negative outcome, with CAS responses. At interview there also appeared to be no clear relationship between subjects who had close personal experiences and their subsequent feelings regarding cancer, and caring for patients with disease. So that some subjects who had a close relative cured of the disease still held pessimistic views. The evidence from this study would suggest that for these subjects, professional experiences of cancer could nullify any effect of a "good" cancer experience within their family, and that subjects whose personal experiences were negative seemed to confirm their professional ones. Age was not found to be an important factor amongst this group.

The factor which appeared to play the most important role in the formation or confirmation of nurses' culturally influenced attitude towards cancer was that of professional experiences. These experiences appeared to function either to reinforce attitudes already held, or to mediate attitudes generally in a negative direction. While it is possible that
there was selective attention to cancer experiences so that those encounters reflecting attitudes already held were lodged in the subject's memory, the sheer volume of data reported in this area suggests that encounters with patients profoundly affect nurses. The perceived inadequacy of nurses' preparation for cancer care during training and the professional culture of medical domination in decision making for patients and despondency regarding the disease which appeared to prevail, served to reinforce the negative affects of nurses' encounters with patients suffering from cancer.

(8.7) THE EDUCATIONAL EVALUATION STUDY

The evaluation study set out to examine the effects two different educational interventions might have on nurses' attitudes, knowledge, educational needs and ratings of perceived competency in relation to cancer care. One of the interventions involved attending workshops using small group work and experiential learning techniques, and the other more formal didactic seminars.

Significant differences in post education scores were found amongst workshop subjects compared with the control group on the following variables:

- They demonstrated greater summed scores for the perceived competence to care for patients with cancer self rating scale, and for 4 of the 15 individual items from the scale.
- They indicated fewer areas of educational need and significantly more control group members indicated an educational need in 11 out of 23 items of the checklist.
- The workshop group demonstrated significantly higher correct scores
for the knowledge test, and scored higher scores on 7 of the 20 individual questions, and fewer incorrect scores for a further 4 questions of the knowledge test.

- Workshop subjects demonstrated evidence of more optimistic attitudes on 3 items of the CAS.

These findings were mirrored by significant workshop group increases in scores following the interventions which were not seen in the control group, demonstrating that a change in individual scores had taken place over time following the workshop intervention.

Analysis for other influential factors found no evidence for any other variable which would explain the differences between the research groups.

Differences observed immediately post intervention did not all persist over time. At 3 months follow up only one of the perceived competence scale items, was rated significantly higher amongst workshop subjects compared with the control group, and there was no difference in total scale scores. Also no differences were found between workshop and control groups' knowledge scores for individual questions or the total test scores. However differences did persist on the perceived educational needs checklist, so that significantly fewer areas were indicated on 7 of the 23 areas at follow up, and the median number of items indicated was significantly lower.

There are a number of possible explanations for the failure of differences between workshop and control groups to persist over time.
Either there was some regression amongst subjects in their feelings of competence and their knowledge levels, or the control group developed during the six months of the study and began to "catch up" with the workshop group. The within group analysis of change in test scores over the study is useful here. Workshop group subjects demonstrated a significant change during Wilcoxon signed ranks tests on scores for the perceived competence rating scale, the perceived educational needs checklist and the knowledge test, following the intervention and not between post test and follow up scores. However the control group improved their scores significantly between pre-test and follow-up on these three major variables. (That is over the 6 months of the study). This may have in part been a function of the repeated measures design so that there was some learning of responses particularly for the knowledge test among subjects. More importantly it is likely that control group subjects' feelings of competence in cancer care improved over time as subjects gained in confidence and experience as a staff nurse. There was evidence of a reduction in knowledge test scores at 3 months follow up amongst workshop group subjects indicating some inability to recall information obtained through education.

It is possible that failure to detect significant differences between the groups at follow-up was the result of a type II statistical error. The workshop group did maintain higher median scores compared with the control group on outcome variables at follow up, although the magnitude of difference was much smaller. This suggests that a false retention of the null hypothesis was possible. The Mann Whitney test is one of the most powerful non-parametric statistical tests, and is felt to possess 95% of the power of the T test even with moderate-sized samples (Siegel 1956).
Therefore type II error is thought to be an unlikely explanation for this finding but can not be ruled out. Lathlean et al (1986) found that newly registered nurses develop more confidence and comfort in their role at between four and six months post registration. This may have been a factor operating in the improvement of scores seen amongst control group subjects.

The assumption that change in scores post intervention was uni-directional may have been wrong. (It was hypothesised that scores would increase for the perceived competence scale, the CAS and the knowledge test, and decrease in the educational needs checklist following education). One interview subject reported that her identified educational needs increased following the workshop since she now recognised how much she still needed to learn.

8.8 **THE SEMINAR GROUP**

Since only 11 subjects attended any of the seminar sessions, and the majority of subjects only attended one seminar each, comparison between these subjects and the other research groups are difficult to make. There was some evidence suggesting that seminar attenders increased significantly in feelings of competence over time and had fewer educational needs post intervention, although no significant improvement in knowledge scores was observed until 3 months follow-up. Interview data suggests that while these subjects were exposed to very little education, seminars may have served to increase their confidence in their own ability to care for patients. The magnitude of change within this group was much smaller than in the workshop group.
The Control Group

With the exception of availability for education on cancer care, the Control group did not differ from the Workshop and Seminar groups prior to the educational interventions. As has already been noted improvements in scores for dependent variables did occur over the 6 months of the study, but the improvements were slower to emerge and were of a smaller magnitude than for the Workshop participants. During interviews self reported change in feelings regarding caring for patients with cancer amongst Control group subjects suggest that for the majority no change was identified. A minority of subjects did report feelings of greater confidence and this appeared to be dependent on the nature of the ward environment, the number of patients with cancer they had on the ward, and the extent of support they received from colleagues.

Changes in Newly Registered Nurses' Attitudes Towards Cancer

The poor reliability estimates for the CAS and its lack of sensitivity made detailed assessments of change in attitude scores over time inappropriate. Interview data though did give evidence of change in attitudes amongst workshop group subjects. Greater optimism and sophistication were seen amongst these subjects following the interventions regarding their feelings about patients' ability to cope psychologically with cancer. Changes observed were much more mixed in relation to nurses' own role in screening and prevention for cancer, and the value of active treatment. A large number of workshop participants continued to hold doubts about the value of treatment for cancer despite discussing this area in depth during the workshop. It would seem that this area of attitude is resistant to change. Evidence for change was much more clearly visible amongst subjects in relation to the meaning of
the word cancer. Subjects reported being less frightened of the word following the workshop, and reported that the workshop had been responsible for this change. Changes in attitude were rarely seen amongst subjects in the other research groups.

(8.11) CHANGES IN NURSES’ FEELINGS REGARDING CANCER CARE

One of the most obvious areas of change was subjects' self reports of feelings in relation to caring for patients with cancer. Following the educational interventions, 75.6% of workshop subjects reported positive changes in their feelings relating to communication and psychological care, and 73.1% in their knowledge, compared with only 12.5% of the control group. The workshop group appeared to provide subjects with greater feelings of confidence in cancer care. It appeared that this was the most important influence on subjects identified, and seemed to have a greater effect than either increasing experience as a staff nurse or experience of caring for patients with cancer. This contrasted with both seminar group and control group subjects. For the control group little change was identified in the majority of subjects. The relationship between experience and increases in knowledge, skills and confidence was indirect, so that change where it occurred depended on the individual, the ward environment and support received there.

(8.12) ENCOUNTERS WITH PATIENTS

Analysis of workshop subjects' accounts of their encounters with patients with cancer following the interventions revealed that those perceived as negative accounted for a much smaller proportion of total encounters than reported before the workshop. This was in direct contrast to the control
group. The proportion of cancer encounters perceived as negative increased in this group so that by three months follow up these accounted for more than 50% of encounters. The pattern for the seminar group remained static. While one must be careful when attributing this to the effect of attending the workshop, it would seem that the workshop may have had an important effect both on nurses' feelings of confidence in relation to caring for patients with cancer, but also to help them perceive encounters with patients in a more positive and constructive light.

A minority of workshop group subjects decreased in their confidence to give psychological care between post test, and follow up. It was clear that for a handful of subjects the "myth of the hero innovator" discussed by Fielding and Llewelyn (1987) operated, so that subjects returning to an unsupportive ward environment quickly became exhausted in their attempts to effect change. Those subjects whose ward had few patients with cancer on it felt that they did not develop or practise their skills and therefore decreased in confidence, and one subject had a particularly difficult encounter with a patient with cancer which had served to knock her confidence in giving psychological care at follow up.

All subjects were extremely positive in their evaluations of the workshop, and continued to express these feelings at follow up. However the experience of the subjects just described would point to the need to tailor further interventions of this kind to nurses encountering patients with cancer regularly, and to provide ongoing support in the ward environment for nurses as they care for patients.

Unlike in many previous studies for example Hohlock and Coulson (1968) and
Pelton et al (1981), this study did demonstrate the positive effects a short, intense educational input on cancer care can have for nurses. Although while, as in Degner and Gow's (1988b) study statistically significant results diminished over time, self reports by participants during interviews continued to highlight the beneficial effects the education had for them.

(8.13) THE EDUCATIONAL INTERVENTIONS

(a) The Workshop
During the course of the study the workshop intervention was developed, refined and facilitated six times by two facilitators and has proved very successful. The second facilitator used a manual of the exercises, resources and techniques used to guide her. This means that both the workshop as a whole and the group exercises developed for it have undergone substantial testing, evaluation, and refinement. A great deal has been learnt with regard to the use of these techniques with small groups of newly registered nurses. It is felt that this knowledge and experience will prove invaluable in the future, and it is intended that a manual of the workshop intervention will be published for the use of nurse educators.

(b) The Seminars
The seminars were not a successful intervention due to the poor attendance at these by both research subjects and by members of staff invited to them from the two hospitals and despite widespread publicity for them. It was felt that this was due to staff finding it difficult to leave their wards to attend the sessions, particularly as this coincided with a period of
acute staff shortage in the two hospitals. Research subjects were highly motivated to attend but the pressures of ward work were greater. Subjects suggested that to have been given a whole study would be a solution to this problem.

The difficulty of obtaining study leave for research subjects was one of the major problems of the study. Nurse managers needed two to three months' warning in advance of the workshop and it was rare for more than one staff nurse to be released from each ward to attend. This has obvious implications for education in the future, particularly if education is aimed at staff on wards with most patients with cancer.

(8.14) METHODOLOGICAL ISSUES

The literature review highlighted a number of methodological problems which had arisen in previous studies, particularly in relation to attitude measurement and educational evaluation. For this reason a triangulation strategy was selected in which data from a number of different sources was obtained. It was felt that through this approach a comparative analysis of the relative merits of different research approaches and methods would be possible. Fig. 7 shows again the various methods employed in the study.
### Fig. 7. SUMMARY OF DIFFERENT METHODS EMPLOYED IN TRIANGULATION STRATEGY

<table>
<thead>
<tr>
<th>Questionnaires</th>
<th>Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Attitudes towards cancer</td>
<td>Cancer Attitude Scale</td>
</tr>
<tr>
<td>2) Confidence/ perceived competence to care for cancer patients</td>
<td>Perceived Competence rating scale</td>
</tr>
<tr>
<td>3) Perceived educational needs</td>
<td>Perceived educational needs checklist</td>
</tr>
<tr>
<td>4) Knowledge</td>
<td>Knowledge Test</td>
</tr>
<tr>
<td>5) Evaluation of educational interventions</td>
<td>Anonymous Evaluation forms</td>
</tr>
<tr>
<td></td>
<td>Differences in pre and post test assessments of Scale Scores</td>
</tr>
<tr>
<td>6) Other Data</td>
<td>Field notes and</td>
</tr>
</tbody>
</table>
(a) **Attitude Assessment**

Attitude assessment was approached in three ways: first by using an established attitude assessment tool which yielded quantitative scores for subjects. Secondly through self report by subjects at interview; and thirdly attitude was inferred from latent themes which emerged from interview data. The CAS did not prove to be a reliable tool for use with subjects, this placed constraints on the nature of analysis possible using the tool. Even accounting for this though, the tool was found to be difficult to complete by subjects since they felt they frequently were not able to give a categorical response to scale items. The positive and negative loadings of items of the scale were also not always easy to agree with since it assumed that an agree or disagree response was either right or wrong. For some items, particularly those relating to Factor III of the scale, it was felt that responses to items could not easily be described in this way. It was interesting to note that responses to the CAS and to questions at interview were largely remarkably similar suggesting that the CAS had validity. The CAS, and the research studies examining attitudes which have been undertaken using it provided a useful framework upon which interviews could be based. This focused areas of questioning and the findings of previous research largely held true during interviews for this sample.

The interview study of nurses' attitudes provided rich and illuminative data and gave depth to responses to the CAS. Using these methods attitudes could not only be examined in terms of optimism or pessimism regarding cancer, but also to develop understanding of meaning and how nurses' attitudes were formed and the effect these may have on care. The interview study also provided new themes and areas of attitude which
seemed to be important such as the meaning of the word cancer. Without
this approach, one of the most important findings of the baseline study
would have been missed, that is the effect of professional encounters with
cancer on nurses' attitudes and feelings of inadequacy in relation to
cancer care. This method also helped explain the apparent relative
unimportance of personal experiences with cancer amongst subjects.

The assessment of change in attitudes was found to be difficult in both
data sources, although change was evident in particular themes of the
interview data.

The use of attitude as a research concept is fraught with many
methodological problems as has already been discussed. As a concept it
also holds inherent value judgement within it and much attitude
measurement involves indirect assessment so that subjects unknowingly
expose themselves to these judgements while completing assessment tools.
For this reason it would seem that the use of self report during
interviews is a more acceptable method of assessment. Not least as this
study would appear to have demonstrated that it provides more meaningful
data than traditional psychometric methods. It also gives support to the
methods advocated by the new social psychology tradition, and that
constructs such as social representations (Moscovici 1984) may be more
useful than that of attitude.

(b) Perceived Competence to Care for Patients with Cancer
The 15 item rating scale provided a valuable form of assessment and
appeared to be a sensitive tool in assessing change in subjects over time.
The validity of this tool was also cross checked during interviews, when subjects gave explanations for their responses to the scale. Interview data gave subjects self reports of their feelings in relation to cancer care, and from this the two major categories of communication psychological care and knowledge were identified as areas of difficulty. Triangulation of these two data sources were so closely related to each other that both sources were felt to be of equal value. The use of such techniques which yield data relating to the same phenomena is recommended.

(c) Perceived Educational Needs
The perceived educational needs checklist yielded comprehensive data relating to newly registered nurses' identified needs for education and had the sensitivity to differentiate between needs for input on communication and psychological care, and specific types of physical care. It also proved useful in identifying changes in needs over time amongst subjects. The checklist may have encouraged subjects to identify a larger number of educational needs though by suggesting possible areas. This would mean that the longer the checklist the greater number of needs likely to be identified. Self reports of need reported in interview data gave an indication of the nature and intensity of nurses' feelings of inadequacy to meet patients' needs, but gave less specific information regarding content for the interventions.

(d) Knowledge
As for the educational needs, and competence ratings, the knowledge test yielded quantifiable data which were more sensitive to assess change in subjects over time than were subjects' self reports at interview. Data from interviews gave insight into the way knowledge was being used in
practice, but was less sensitive to the decrease in knowledge in workshop subjects at follow-up. The method of analysis used for the knowledge test, of calculating the number of both correct and incorrect responses, was useful in identifying the nature of nurses' responses to questions, but was too time consuming to be recommended in future.

(e) Evaluation of Educational Interventions
The use of complementary data sources for the educational evaluation was found to be important in fulfilling the aim of illuminating not just outcome of the education, but also antecedents and processes (such as the extent of educational preparation for cancer care, and feelings regarding caring for patients) involved in change (for example in differentiating between increasing experience as a staff nurse and the effects of the interventions) and gave a richer understanding of the context in which nurses were working with patients. It was through this approach that the complex interplay between nurses' attitudes and feelings regarding cancer and cancer care, the effects of education, subsequent encounters with cancer and the supportive nature of the ward environment was noted amongst subjects from all 3 research groups.

(f) Quantitative and Qualitative Data
The distinction between quantitative and qualitative methods of data collection and analysis has been discussed in Chapter 3. This dichotomy in research methods was criticised particularly since the nature of their data and philosophical traditions in research are not necessarily clearly distinguished. Questionnaires largely yielded quantitative data which, where appropriate, was subjected to non parametric statistical analysis
allowing calculations of the relationships between variables to be made. The measures employed were found to closely resemble responses given through self report and were therefore felt not to be "reducing" subjects' responses, but allowed the researcher to develop a certain confidence by formally testing out what subjects were saying during interviews. While data yielded from the attitude scale closely resembled subjects' self reports, it did tend to reduce understanding of attitudes towards cancer, so that data from the scale would have been much less meaningful without the interview data.

The qualitative data yielded from semi-structured interviews, was analysed using traditional techniques of content analysis, by identifying themes, and building matrices of responses across subjects and over time as advocated by authors such as Miles and Huberman (1984) and Quinn Patton (1987). However because of the large number of subjects interviewed it was difficult to know the relative importance of different themes and categories. Therefore notions of measurement were used within analysis of this data, so that the frequency with which themes were represented across subjects were presented in the form of percentages for manifest themes. Assessments of change amongst subjects' responses during interviews which was an important element within the evaluation study has inherent within it, measurement. For example subjects who felt more or less confident in giving cancer care. Viewed in this sense data analysis from different sources was not 'purist' in nature but used techniques which were felt most appropriately to answer the research questions. In this way the "combinationist" approach to nursing research called for by Duffy (1987) was used.
In this study therefore data was not seen to be derived from either one or other side of a polar spectrum, which the quantitative-qualitative data debate might suggest. But was seen to lie on a continuum for the purposes of analysis with latent themes which emerged from the data lying on one side, and data yielded from the perceived competence rating scale on the other, since data from the scale was the highest form of measurement for dependent variables. Manifest themes derived from the interview data and indices of change found in interview data would occupy a point further along the continuum as would knowledge scores, and educational needs scores.

Much discussion within the quantitative-qualitative research debate has focused on sample size and approach to the study of each "subject". Quantitative research focusing on differences between sets of individuals measured against some "norm". In contrast qualitative research has tended to focus on in-depth study of individuals, and has led to the development of styles of research such as the case study for example advocated by Yin (1984). This study triangulated both research approaches so that a nomothetic study was made of aggregated scores of individuals and idiographic study of single individuals over time were undertaken. At the outset of the study the decision was taken to interview a total sample of subjects rather than to select a smaller number of representative cases for in depth investigation. One of the research questions at the outset of the study therefore felt to be important was to examine in retrospect the number of cases which would have exhausted new themes and categories for the idiographic study.

It was interesting that many of the major trends observed in the study as
a whole, occurred within subjects in the group of nurses who took part in the first workshop and concurrent seminar programme. Responses during interviews and to questionnaires revealed patterns of scores and themes yielded for the group as a whole. This group of thirteen interview subjects also demonstrated the main exceptions to the positive benefits of the workshop, that is the effect of returning to non-conducive ward environment and the subject who experienced a traumatic encounter with a patient with cancer making her feel less confident in her ability to give care. It was clear from the data that many of the major themes would have been elicited in a small study, the majority were highlighted in data derived from the first forty subjects recruited to the study. However new themes and categories were identified amongst the last group of interview subjects who were drawn from nurses up to the 127th subject recruited to the study. The strategy of interviewing as many of the evaluation study subjects as possible also allowed triangulation of different data sources in a case by case analysis and allowed important understanding of within and between subjects, and research groups to develop. It would seem that with regard to sample size, the interview study in retrospect could have been undertaken at three levels and revealed the following:-

1) \( N < 20 \) subjects. Data yield revealed in depth understanding of the main themes surrounding subjects' feelings and experiences in relation to caring for cancer patients and the effects of the educational intervention on these.

2) \( N = 40 \) subjects. The sample up to \( n = 40 \) provided some additional key themes and saturated the majority of categories for the interview study.
3) N = 79 subjects. Permitted triangulation of different data sources, replication of findings from subjects following the first run of the educational interventions and weighting of relative importance with themes derived from subsequent groups, and between subjects from the two institutions, and a small number of additional minor themes, and categories.

(g) The Triangulation Strategy

The triangulation strategy provided complementary data from different sources and allowed deeper and more meaningful understanding regarding the newly registered nurse and the cancer patient to emerge than might have been possible in a study using a single methodological approach. The strategy meant however that the study was intense and a large volume of data was collected which was subsequently difficult and time consuming to analyse. The study therefore required expertise in very different research techniques and data analysis particularly in bringing together results from different data sources for comparison. There was also a risk of superficiality in a study encompassing multiple methods. The triangulation strategy was felt to have been very valuable but has implications of cost and time for future researchers considering employing it.
The study has highlighted the extent to which newly registered nurses working in general hospitals are involved in cancer care. Yet these nurses had very deep concerns about caring for patients with cancer and felt ill prepared for this aspect of their role. Their concerns centred around how much information they were allowed to give patients; over their lack of communication and counselling skills to deal with patients with cancer; and about their own lack of knowledge about the disease, its treatment and likely outcome for patients. Their attitudes towards the disease were very mixed. Whilst nurses were on the whole positive about patients' ability to cope psychologically with cancer, many were hesitant about telling patients their diagnosis, and were much less optimistic about the value of active treatment for cancer patients. During interviews cancer was associated by these nurses with inevitable death, and one which involves much pain and suffering. It appeared that nurses' encounters with cancer professionally were an important influence on their attitudes towards the disease and seemed to reinforce the culturally held belief that cancer is synonymous with death. Feelings of competence to care for cancer patients and perceived educational needs reflected the nurses' worries over caring for patients with cancer. It was in the areas of communication and psychological care, rather than physical aspects of care, where nurses felt least competent and in need of more knowledge and practice. Knowledge on cancer care was found to be poor. The demand for education on cancer care was great with over 84% accepting the offer of further education on cancer care.

Despite problems over availability for education and poor staffing levels
in the two hospitals, the study has shown the value of small group workshops on cancer care to newly registered nurses. The participants found the opportunity to talk, share experiences, discuss approaches and rehearse skills in a safe informal environment with a facilitator particularly useful. The contrast between this approach and the formal seminar sessions may in part explain the poor attendance rate for the latter.

The newly registered nurses who attended the workshop demonstrated significant gains over the control group in a range of areas. Following the workshop, participants rated themselves significantly more competent than the control group on four items of the perceived competence to care for cancer patients rating scale, and for the scale as a whole. They indicated that they had significantly lower educational needs and showed significant knowledge gain over the control group. Changes in attitude towards cancer were less clear but participants did gain on items of the cancer attitude scale relating to patients' ability to cope psychologically with cancer and in responses to questions relating to this area, and to the meaning of the word cancer, during interviews. Attitudes towards the value of active treatment were most resistant to change amongst subjects, differences observed between the seminar and control groups were not significant.

Subjects indicated greater feelings of competence in their knowledge and communication skills following the workshop and this appeared to have a positive influence on their perceptions surrounding subsequent encounters with patients. Evaluations of the workshop were overwhelmingly positive.
and evidence from interviews with the nurses demonstrates how perceptions of their ability to deal with patients' physical and psychological needs prior to the intervention were coloured by feelings of inadequacy and failure to react to communication needs. Following the workshop nurses felt they had new skills to build on, resources of knowledge, and a greater feeling of ease about the disease. A number of the control group also increased in confidence but this appeared to be dependent on the nature of support and experience they received in the ward environment.

At three months' follow up a number of gains seen in the workshop group persisted over time. Responses to the educational needs checklist indicated that seven of the areas had been met significantly more often among workshop participants than controls. The significant gains in competence to care for patients with cancer seen in the workshop group continued to be reflected in higher median scores than the control group. Increasing experience on the ward meant that the control group's feelings of competence also increased over time so that by three months' follow-up differences were no longer significant. A similar tendency was apparent in responses to the knowledge test and to the cancer attitude scale.

Statistical analysis of questionnaire data appears at first sight to fail to demonstrate that the effect of the workshops endures with time on a number of measures. This finding needs careful interpretation. Research undertaken by Lathlean et al (1986) tracing the careers of nurses over their first six months following registration noted the increasing confidence that accompanied these nurses as they approached the end of the six months and gained experience as a staff nurse. It would appear that this may well have been one of the factors at work which served to dilute
the magnitude of differences between workshop and control group at three month follow-up. Scrutiny of interviews and of test scores supports this theory. The workshop was designed to meet identified needs at a specific point in nurses' careers and certainly seemed to achieve this aim. The decrease in knowledge scores evident in some of the subjects is to be expected due to the effect of memory and the fact that a number of workshop participants had little opportunity to put their knowledge into practice if they only had cancer patients on their ward occasionally. This may support targeting the workshop to those most likely to be working with cancer patients on a regular basis.

There obviously were many difficulties encountered in applying a longitudinal experimental research design to a real situation in the face of an acute shortage of staff nurses in the two study settings. During the main study the staff shortage had reached crisis proportions and in one of the hospitals there were more than 150 staff nurse posts vacant. This was coupled with a high rate of mobility amongst the newly registered nurses, and despite these problems the newly registered nurses made every effort to attend the workshops and it was possible to arrange study leave for those nurses so that the attendance rate for the workshops was over 98%.

The majority of the research instruments selected for use in this study were useful in illuminating changes in knowledge, confidence, educational needs and attitudes towards cancer over the 6 months of the research study. With the exception of the Cancer Attitude Scale, the various tools used all were found to be reliable and helped provide insight into newly registered nurses' experience in relation to caring for patients with
cancer. The strategy of triangulation of findings using data from a number of different sources was valuable and illuminating.

In summary, the Research Study has demonstrated the positive effects a short, intense educational input can have on newly registered nurses' feelings, knowledge and experiences of nursing cancer patients in general wards. In fact anecdotal evidence from nurses with whom the researchers have kept in contact seems even more powerful. A number of the workshop participants have moved on to make their careers in oncology or terminal care nursing (two others were stimulated to enrol in the diploma of nursing course) and said that it was the workshop that helped them do this. Workshop members also stated that they wanted more of this type of education and wished it had been part of earlier nursing education.

The effects of the workshop on quality of care being given on the wards was likely to have been diluted to some extent by the fact that newly registered nurses attending the workshop were from wards all over the two hospitals. This meant that if the nurse returned from the workshop to an unsupportive ward environment their sense of new confidence could be frustrated. The stress experienced by newly registered nurses during their first six months was also very evident and may have contributed to the high mobility rate of research subjects. These considerations point to the need for future research using the educational intervention as a ward or unit based programme combined with an evaluation of a clinical facilitator/role model, who could work alongside nurses as they put into practice their newly acquired skills and confidence in cancer care.

The study has implications for nursing education since one of the major
findings was the perceived lack of preparation to give care for patients with cancer amongst newly registered nurses. Basic, post-basic and Project 2000 curricula need to address what appears to be a neglected area and to consider the impact encounters with patients suffering from cancer can have on student and qualified nurses. The lack of preparation for nurses in this important role may also be effecting the quality of care patients with cancer receive on general hospital wards. More education is needed for nurses at all levels of service.

RECOMMENDATIONS FOR FURTHER RESEARCH

Further research is recommended in the following areas:

- Research involving unit or ward based education for staff from different grades and disciplines, involving the workshop, but also the use of a clinical facilitator as already described. Data collection could also be extended to include observation and follow up of subjects on wards. Further analysis of workshop records and transcripts would be useful in developing understanding of its contribution to changes identified and the processes involved in these.

- A long term follow up study of nurses following education for cancer care would be useful to determine the extent to which aspects of this persist with time.

- Further in depth research is needed on the impact of encounters with patients suffering from cancer on student and qualified nurses.

- A national review of nursing curricula to assess the content and nature of input on cancer care in nursing education is needed, so that decisions regarding the implementation of new strategies for
cancer care education within Project 2000 can be developed and evaluated.

- Further research is recommended using triangulation as a research strategy so that understanding of its usefulness can be further assessed.

- Finally further research using self report during semi-structured interviews as a tool for attitude assessment is needed.
REFERENCES


Cancer Research Campaign, London.


Ward A. (1985). *Home Care Services for the Terminally Ill; A Report for the Nuffield Foundation.* Medical Care Research Unit, Department of Community Medicine, University of Sheffield Medical School.


DAMAGED
TEXT
IN
ORIGINAL
THE CONSENT FORM

CANCER RESEARCH CAMPAIGN RESEARCH PROJECT

WOULD YOU BE INTERESTED IN TAKING PART IN A 3 DAY WORKSHOP ON CANCER CARE?

It will be taking place in the School of Nursing on 8-10th September, and you would be given time off from your work for it.

The workshop is part of a research project in which we are looking at nurses’ feelings and knowledge of caring for cancer patients before and after a course on Cancer Nursing. If you agree to take part we will be asking you to fill in questionnaires today, after the course, and in 3 months’ time. We would also like to come and talk to you about your experiences with cancer patients at some time if you agree. You are under no obligation to take part in this research project if you do not wish to.

If for some reason you are not able to do the Cancer Nursing Course we would still like to involve you in our research project so that we can compare nurses’ experiences with those who do not do the course.

If you are interested in the workshop please fill in your name and ward and we will contact you at a later date.

Jessica Corner

Name ..................................... Ward ..........................................

* Please delete as appropriate.

* I would/would not like to take part in the workshop on Cancer Nursing.

Signed ................................. Date ............................... *

*I agree/do not agree to take part in the research project.

Signed ................................. Date ...............................
The Questionnaire

Cancer Research Campaign Research Project

We are looking at nurses feelings and knowledge of caring for cancer patients before and after a course on cancer nursing. Would you mind filling in the following questionnaire? We will be asking you to fill in questionnaires after the course and again in 3 months time, and we would also like to come and talk to you about your experiences with cancer patients at some time if you agree. You are under no obligation to take part in this research project if you do not wish to.

If for some reason you are not able to do the cancer nursing course we would still like to involve you in our research project so that we can compare nurses experiences with those who do not do the course.

The following questionnaire should take about 30 minutes to fill in. There are no right or wrong answers to any of the questions as this is not a 'test'. We are trying to find out how you feel and your knowledge of cancer and cancer care.

Your answers will be treated in complete confidence. However we do ask you to enter your initials in the top left hand corner of the first page so that we can compare your answers with those on later questionnaires. Your initials will be used for no other purpose than this. Please answer as honestly as possible.

Thankyou for your help.
1. When did you qualify as a staff nurse?

2. Please indicate by ticking the appropriate box which age group you are in:
   - 20 - 25 yrs 
   - 26 - 30 yrs 
   - 31 - 40 yrs 
   - 40+ yrs 

3. What kind of ward are you working on?

4. Is this the first ward you have worked on as a staff nurse?
   - yes 
   - no 

5. If no what kind of ward did you work on before?

6. How much professional experience of cancer nursing have you had?

7. Do you have cancer patients on the ward you are working on?

8. If yes, what types of cancer have you come across in these patients?

9. Have you any particular worries about caring for these patients?

10. Have you had personal experience of someone close to you who has had cancer?
    - yes 
    - no 
    - if yes whom:

11. How did you feel about their disease and treatment?

12. How well are they now?
Please indicate by ticking the appropriate box, the extent to which you agree or disagree with the following statements.

There are no right or wrong answers, some of the statements are difficult to express an opinion on as they apply differently to different individuals, but please try and generalise your response to your overall feelings in each area. Please answer as honestly as possible and make some answer for every statement.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>The patient would be psychologically damaged by knowing of his incurable cancer.</td>
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<td>The harmful reaction of the patient to the news he has cancer usually overshadows the odds of his being told.</td>
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<td>Psychological stress on the patient could be avoided.</td>
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<td>Once it is hard enough to do a good job of the cancer, it is not wise to risk having to deal with a depressed patient by telling him his diagnosis.</td>
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<td>The patient generally deteriorates if he knows he has cancer.</td>
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<td>Experience shows that since cancer patients say they want to know their condition, the adverse reactions to knowing, patients not really want to know they have cancer.</td>
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<td>One who realises he is going to die in the near future can remain in a state of mental well being.</td>
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<td>The patient will not do well unless he has hope of recovery from illness.</td>
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<td>Knowledge of dreaded prognosis is detrimental to the patient.</td>
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<tr>
<td>It is better not to use the word cancer in answering a cancer patient about his condition.</td>
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<tr>
<td>Talking directly with a patient's feelings about death is to be avoided.</td>
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<td>Telling patients the early warning signs cancer causes unnecessary anxiety.</td>
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<td>Nurses should teach breast self examination to all women patients.</td>
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<tr>
<td>Too often doctors are so busy working with sick people that they can't be expected to do screening procedures and complete physical examination on all who walk into their surgeries.</td>
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</table>
Every person should have a complete physical checkup annually.

A physician can be so discouraged by the low cure rate that he will not feel the need to do screening procedures and routine 'cancer tests' especially when he is so busy working with sick people.

Obtaining routine cervical smears should be more the patient's responsibility than the doctor's.

Pelvic exenteration is such a mutilating procedure and has such a low cure rate that there is little indication for its use.

Only some cancer patients should be treated actively.

Active treatment for cancer frequently subjects the patient to illness and pain without much benefit to him.

Patients with cancers of low five year survival rates (for example oesophagus, lung, stomach and pancreas) are not improved by active treatment.

Palliative attempts to control a cancer's progress should be continued for as long as long as the patient can be kept alive.

There is still much that can be done for terminally ill cancer patients.

Radical surgery for cancer patients is rarely indicated in patients over 70 yrs of age.

In patients with prostatic cancer the results of oestrogen therapy are so good that if side effects occur, they should be disregarded.

To be realistic a man has to accept he cannot exist after death.

A person's immortality consists in lingering on in some way through material goods, example, reputation, offspring.

By detachment from things of this world a person can have a more real and effective relationship with others and a readiness for death.
29. There is the possibility for a beautiful death for the cancer patient.

30. A person should live his life without concerning himself that death will come.

31. Those patients who are terminal and have not realised it should be told so that they can prepare themselves spiritually for death.

32. The dying patient has to be kept happy since he has nothing to look forward to.

33. The cancer patient may consider himself fortunate to have time to prepare for death rather than face it suddenly.

From our review of the literature regarding care of the cancer patient, we have selected a number of activities in which nurses are frequently involved. Please rate the following activities according to how competent you feel in them on a scale of 1 - 5, where:

1 is: I do not feel competent
and 5 is: I feel highly competent.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Teaching early detection of cancer</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>b. Teaching prevention of cancer</td>
<td></td>
</tr>
<tr>
<td>c. Dealing with the side effects of treatment for cancer</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>d. Helping the patient deal with an uncertain future</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>e. Helping the patient deal with changes in body image</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>f. Dealing with your own feelings about cancer</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>g. Helping the patient come to terms with the fact he has cancer</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>h. Helping the patient accept illness.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>i. Helping the patient manage dependency</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>j. Communicating with patients.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>k. Communicating with the family.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>l. Communicating with the physician.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>m. Giving physical care.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>n. Doing special treatments.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>o. Talking about death and dying with the patient.</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>
On the basis of the care of patients with whom you have worked, what areas would you like additional knowledge about or practice in? (tick appropriate box)

- The nature of cancer
- Methods of prevention of cancer
- Methods of early detection for cancer
- Problems resulting from surgery for cancer
- Problems resulting from radiotherapy
- Problems resulting from chemotherapy
- Nursing measures to minimize or prevent complications of cancer or side effects of treatment
- Cancer as a chronic disease
- Diagnostic measures generally used
- Changing attitudes of staff members towards cancer
- Tracheotomy care
- Mastectomy care
- Colostomy care
- Ileostomy care
- Dealing with social and psychological problems of cancer patients
- Dealing with pain
- Rehabilitation of the patient
- Family involvement
- Agencies to call upon for assistance to cancer patients
- Complementary methods of pain and symptom control
- Communicating with the patient in different stages of illness: newly diagnosed; with recurrence; terminally ill unknown diagnosis
- Terminal illness
- Death and dying
- Other please specify
This part of the questionnaire is designed to assess your knowledge of cancer since our research project is looking at how we can help nurses learn about cancer nursing. It is not a 'test', if you don't know the answer leave the question blank.

1. What forms of screening for specific sites of cancer have you come across?

2. Are you aware of any ways to reduce the likelihood, or prevent a person getting cancer? Please specify.

3. Are you aware of any early warning signs of cancer of the colon?

4. What if any do you feel is the value of screening for cancer?

5. In the U.K. do you know where cancer ranks as a cause of death?
6. In the U.K. do you know what proportion of the population

   a) suffers from cancer?

   b) dies from cancer?

   Please specify.

7. Of 100 middle aged people with early cancer of the following sites how many would you expect to be alive and well five years after the appropriate treatment?

   a) breast            c) skin

   b) lung              d) colon

8. What are the side effects of:

   a) Methotrexate:

   b) Cyclophosphamide:

9. What information would you plan to provide a person who is to undergo chemotherapy?

11. List five reasons why cancer patients may be more prone to infection?

12. What physical problems would you anticipate for a man following the formation of a colostomy for cancer of the rectum?

13. What discharge advice would you plan to give a woman who has had a cone biopsy for cancer of the cervix?

14. What are the main psychological problems for a woman who has had a mastectomy because of cancer of the breast?

15. What responsibility does a nurse have in the management of cancer pain using analgesia?
16. What are the most important factors to be considered when using morphine to control the pain of cancer?

17. What other methods, apart from analgesia can be used to relieve or lessen pain for the cancer patient?

18. What are the stages of coping with dying, outlined by Kubler Ross(1969)?

19. What would your approach be to a patient who is using denial as a method of coping with cancer?

20. Why is it important to involve the family in the care of the cancer patient?
APPENDIX C

OUTLINE FOR SEMI-STRUCTURED INTERVIEWS WITH STAFF NURSES

INSTRUCTIONS

The following questions relate directly to the categories for analysis of interview data and therefore the categories under which information should be gathered during the interview. They are re-worded in an attempt to give structure to the interview and should be used in conjunction with the category list. The questions do not have to progress in the order listed below, neither do specifically worded questions need to be asked. The aim is to gather as much information as possible under each category. The same schedule will be used for subsequent interviews as relevant, and should progress using information obtained from previous interviews, questionnaire data (comparing pre-course and post-course responses) and the questions/categories. Wherever possible ask the respondent to remember instances with patients on the wards. Questions should be open ended. Beware of LEADING the respondent.

1) What kind of ward does the staff nurse work on?

2) Has the S/N changed wards since qualifying?

3) How many and what types of cancer patients are on the ward?

4) To what extent is the S/N involved in cancer care?

5) Are there any cancer patients in the ward at the moment? (details, any difficulties, problems the S/N has encountered in dealing with them.)

6) How many months has the S/N been qualified?

7) What type of nurse training did the S/N undertake? (3yrs RGN, shortened course for graduates, Bsc Nursing etc)

8) What interest does the S/N have in the field of oncology?

9) What experiences have they had with cancer patients, are there any that stand out in their mind? eg whilst a student, first encounter with a cancer patient.

10) What are the S/N's worries, feelings about caring for cancer patients?
11) What would the S/N identify as the main priorities in caring for cancer patients? (eg communication, pain control)

12) Has the S/N had any personal experiences of cancer eg family, friends? What are her/his feelings about these.

13) What is the S/N's attitude to cancer? (ask the following questions)
   ie:  a) To what extent does the S/N feel the patient has inner resources to deal with the knowledge that they have cancer, and may be dying?
   b) What is the value of screening and early detection for cancer, and what does the S/N feel is her role in this?
   c) What does the S/N feel about the value of active/radical treatment for cancer?
   d) Does the S/N have a personal philosophy about death—should everyone accept it as inevitable and face up to this?

13) What would the S/N feel if she/he had cancer personally?

14) What does the S/N feel is the public's attitude to cancer?

15) Does the S/N feel that doctors and nurses view cancer differently from each other?

16) How does the S/N feel that the way we think and feel about cancer as nurses, affects our practice? (does this apply to her/him?)

17) How much knowledge does the S/N feel that she/he has of cancer?

18) Does the S/N feel confident in her knowledge of pain control.

19) What does the S/N feel is a prevalent attitude towards the use of opiate analgesia?

20) What does the S/N understand of the term 'patient's advocate'? How does this apply to her/him? eg asking for changes to be made to analgesia etc.

21) How does she/he feel about caring for the terminally ill?

22) What are the S/N's perceived educational needs, ie what would she/he like to see in a course on cancer care? (see also questionnaire)
23) What are the S/N's more general educational needs? eg relating to their own professional development.

24) How does the S/N feel about caring for the relatives of patients with cancer?

25) What does the S/N feel about talking over difficult emotional problems with the cancer patient? eg dying, knowledge of cancer etc.

26) What are the S/N's perceived competency ratings relating to cancer care? (see questionnaire)

27) What does the S/N feel about her/his new role now qualified?

28) THE COURSE/SEMINARS
   a) Why does the S/N want to do the course?
   b) What would the S/N like to see included in it?

AFTER THE COURSE/SEMINARS
   a) Were aims and objectives realised?
   b) What did the S/N feel about the teaching methods, ie the group experience/lectures etc.
   c) Go through individual sessions seminars asking for comments/criticisms/perceived gains/etc on each, wherever possible relate to clinical practice on the ward.
   d) What does the S/N feel she/he has gained from the course?
   e) How does the S/N feel her/his clinical practice has been effected by the course/seminars?
      (prompt using examples of difficulties expressed in first interview)
   f) Has the S/N read any of the literature from the course. How many articles books did they request?
   g) What areas were not covered in the course that the S/N would have liked?
APPENDIX D

AREAS IDENTIFIED FOR QUESTIONING DURING INTERVIEWS, AND ANALYSIS OF INTERVIEW DATA

N.B. *Area which emerged during data collection.

(1) WARD specialty, ? changed wards since qualified
(2) NUMBER AND TYPES OF PATIENTS WITH CANCER ON THE WARD i.e. extent to which involved in cancer care.
(3) MONTHS QUALIFIED
(4) EDUCATIONAL BACKGROUND, type of nurse training
(5) INTEREST IN FIELD OF ONCOLOGY
(6) EXPERIENCES WITH PATIENTS WITH CANCER
   (a) on ward presently working on (encourage to recount experiences)
   (b) as a student
(7) WARD POLICIES/METHODS OF DEALING WITH/APPROACH TO PATIENTS WITH CANCER e.g. revealing diagnosis
(8) FEELINGS WORRIES about caring for patients with cancer *or children with cancer
(9) EXPERIENCES OF SPECIALIST ONCOLOGY WARD and differences between this and other wards in relation to (7)
(10) PERCEPTIONS OF PRIORITIES FOR CARING FOR PATIENTS WITH CANCER
(11) PERSONAL EXPERIENCES OF CANCER e.g. family, friends
(12) ATTITUDES TO CANCER
    (a) CAS FACTORS: (i) Beliefs about patients' inner resources to deal with the knowledge that he/she has cancer and possibly an incurable condition
        (ii) Beliefs about the value of screening, prevention and early detection for cancer, i.e. by picking it up early increases chances of cure by treatment. *Their role in this, and knowledge
        (iii) Beliefs about the value of active/radical treatment for patients with cancer
        (iv) Beliefs about whether or not everyone must accept and live with death and its inevitability
    (b) PERSONAL FEELINGS i.e. if had cancer personally
    (c) PERCEPTIONS OF PUBLIC ATTITUDES
    (d) PERCEPTIONS OF PROFESSIONAL ATTITUDES e.g. how doctors and nurses are different
    (e) BEHAVIOUR how (a)-(d) effect behaviour in nursing practice
    (f) *MEANING OF THE WORD "CANCER" TO THEM
    (g) *COMPARSED WITH HEART DISEASE
(13) KNOWLEDGE OF CANCER GENERAL
(14) PAIN CONTROL
    (a) knowledge
    (b) attitudes
(15) NURSES AS PATIENTS ADVOCATE e.g. dealing with doctors and their staff
(16) CARING FOR THE TERMINALLY ILL
(17) DEATH AND DYING - attitudes
(18) CARING FOR RELATIVES
COMMUNICATION SKILLS/COUNSELLING/TALKING OVER DIFFICULT ISSUES WITH PATIENTS/RELATIVES etc.

STAFF SUPPORT FOR NURSES DEALING WITH PATIENTS WITH CANCER

COPING MECHANISMS OF NURSES DEALING WITH PATIENTS WITH CANCER

PERCEIVED EDUCATIONAL NEEDS
(a) Relating to cancer care
(b) Generally

PERSONAL COMPETENCE RATINGS/*FEELINGS OF CONFIDENCE in caring for patients with cancer and how relates to personal and professional experiences of cancer

PROBLEMS RELATING TO BEING AN RRN

THE COURSE
(a) Reasons for wanting to do the course
(b) Practical difficulties e.g. time off from the ward, reasons for missing sessions
(c) Aims and objectives for course/seminars
(d) Teaching methods/group experience
(e) PERCEPTIONS OF WHAT GAINED FROM COURSE (changes in themselves as a result of the course)
(f) Comments on individual sessions/seminars
(g) Literature gained from the course, using it
(h) Areas left unchanged by the course/not covered
(i) Visit to specialist

ATTITUDES TO CONTINUING EDUCATION/SELF MOTIVATION AND DEVELOPMENT

SELF AWARENESS

INFORMATION RELATING TO THE PROCESSES INVOLVED IN ANY CHANGES IDENTIFIED

COMMENTS ABOUT QUESTIONNAIRES e.g. relating to consistency of responses

MOTIVATION TO NURSING

DIFFERENCES IN CARING FOR AIDS PATIENTS AS OPPOSED TO PATIENTS WITH CANCER

INFORMATION RELATING TO FUTURE CAREER.
APPENDIX E.

THE ORIGINAL CANCER ATTITUDE SCALE ITEMS

THE CANCER ATTITUDE SCALE (Haley et al 1968, 1977)

THE ORIGINAL SCALE ITEMS

Factor I

The patient would be psychologically damaged by knowing of his incurable cancer.

The harmful reaction of a patient to the news he has cancer usually overshadows the good of him being told.

Any psychological stress on the patient should be avoided.

Since it is hard enough to do a good job on the cancer, it is not wise to risk having to deal with a depressed patient by telling him his diagnosis.

A patient generally deteriorates if he knows he has cancer.

Experience shows that since cancer patients who say they want to know their condition have adverse reactions to knowing, patients do not really want to know they have cancer.

No one who realises he is going to die in the near future can remain in a state of mental well-being.

Knowledge of a dreaded prognosis is detrimental to the patient.

A patient will not do well unless he has hope of recovery from illness in this life.

It is better not to use the word cancer when answering a cancer patient about his condition.

The dying patient has to be kept happy since he has nothing to look forward to.

The cancer patient may consider himself fortunate to have time to prepare for death rather than to have to face it suddenly.

Dealing directly with a patient's feelings about death is to be avoided.

A person should live out his life without concerning himself that death might come.

Factor IIa. Attitudes towards Early Diagnosis

Complete history and physical is usually unnecessary in everyday practice.

Proctoscopic examinations should be required in routine physical examinations despite their difficulty for the doctor and discomfort for the patient.
Too often doctors are so busy working with sick people that they can't be expected to do screening procedures and routine complete physical examinations on all who walk into their offices.

Every person should have a complete physical check-up annually.

A physician can be so discouraged by the low cure rates of cancer that he will not feel the need to do routine "cancer tests", especially when he is so busy working with sick people.

Obtaining routine Pap Smears is more the patient's responsibility than doctor's.

Factors IIb Attitudes towards Aggressive Treatment

Pelvic exenteration is such a mutilating procedure and has such a low cure rate that there is very little indication for its use.

Only some patients should be treated aggressively.

Aggressive treatment of cancer frequently subjects the patient to illness, pain and expense without much actual benefit to him.

Patients with cancers of low 5 year survivals (for example oesophagus, lung, stomach, pancreas) are not improved by aggressive treatment.

Therapeutic attempts to control a cancer's progress should continue for as long as the patient can be kept alive.

Radical surgery for cancer is rarely indicated in patients over 70 years of age.

In patients with prostatic cancer the results of oestrogen therapy are so good that if side effects occur, they should be disregarded.

Factor III Beliefs about acceptance and preparation for death

To be realistic a man has to accept he cannot exist after death.

A person's immortality consists in lingering on in some way through material goods, example, reputation, offspring.

By detachment from the things of this world a person can have a more real and effective relationship with others and a readiness for death.

A man can be happily reconciled to belief in his own non-existence after death.

There is a possibility of a beautiful death for the cancer patient.

Those patients who are terminal and have not realised it should be told so that they can prepare spiritually for death.

A person should live out his life without concerning himself that death will come.
The dying patient has to be kept happy since he has nothing to look forward to.

The cancer patient may consider himself fortunate to have time to prepare for death rather than having to face it suddenly.
APPENDIX F

THE WORKSHOP MANUAL

AN EXPERIENTIAL WORKSHOP ON CANCER CARE
CARING FOR PATIENTS WITH CANCER

WORKSHOP

DAY 1.

Morning

Session 1 - Introduction to Workshop
- Defining Aims and Objectives
- Attitudes to Cancer

Session 2 - Video and Discussion
"Breast Cancer Why Me?"

Session 3 - Prevention & Screening for Cancer: the Nurse's Role

Afternoon

Session 4 - Patient Education
- Information giving and ethical dilemmas in relation to caring for patients with cancer

DAY 2

Morning

Session 5 - Pain and symptom control for patients with cancer

Afternoon

Session 6 - The implications of cancer and its treatment.

DAY 3

Morning

Session 7 - Reactions to Loss: Coping with cancer at different stages of the disease

Session 8 - Video and discussion
"Working with the Terminally Ill"

Afternoon

Session 9 - Support for Carers, and support groups for patients with cancer and their families

Session 10 - Complementary therapies for patients with cancer

Session 11 - Reassessing aims and objectives
- Close of Workshop.
SETTING THE SCENE FOR THE WORKSHOP

In order to promote the concept of facilitation of adult learning for the workshop participants, the room and "scene" for the three days was carefully chosen and arranged. This involved:-

- Choosing a small, discussion style room where there were comfortable chairs, and coffee table.

- An informal, relaxed atmosphere was created by the use of first names only. A kettle, coffee and tea were provided and participants were encouraged to make themselves drinks whenever they liked, even if this meant interrupting a session.

- One part of the room was set aside to become the "resource library". This comprised of a large number of books, articles, and pamphlets on cancer care. These could be borrowed at any time by the participants.

- Handouts of relevant articles, pamphlets and resource materials were prepared for a number of the sessions so that it was not necessary to take notes. This also meant that participants had literature covering more theoretical aspects of the area of cancer care to refer to later. These handouts were also used as teaching aids in some sessions to facilitate discussion or illustrate particular points.
SESSION 1

INTRODUCTION TO THE WORKSHOP

Aims of the Session

- To set the scene for the Workshop
- To introduce the Facilitator role
- To lay down ground rules
- For group members to get to know one another
- To break the ice and set the group in motion
- For group members to identify their own aims and objectives for the Workshop
- To mutually agree on topics to be covered in the Workshop
- For participants to begin to explore their own attitudes towards cancer and the effects of these on their nursing care of patients with cancer.

Points to make as an Introduction to the Workshop

- The nature of small group work -
  Focus on discussion
  Each individual following their own interests
  Responsibility for learning lies with each participant
  Experiential learning - participants are encouraged to be active members of the group - rather than sitting back and being instructed.

- The facilitator's role (a new concept to many nurses). Acting as a resource and to help in pointing participants in the right direction to find information.

- Workshop Session themes.
  These may or may not be followed closely and could be changed according to participants' needs.

- Introduction to the Cancer Resource Library.

Exercise 1. Icebreaker 'names' game

Each group member told the group their Christian and Surnames and said something about them, how they felt about and how they got there. Ending with the Facilitator.

(This was a good way for participants to match names and faces and helped break the ice. Within the first 15 minutes every Workshop member had spoken to the rest of the group).

Exercise 2. Identifying Aims and Objectives for the Workshop

Objectives for the Workshop

- Equipment - large sheets of paper, felt tip pens
- Time Required - 20 minutes
Task - For participants to brainstorm in pairs:-

1) Their aims and objectives for the Workshop
2) How they would like to be different as a nurse at the end of the Workshop

(Facilitator should write his/her own aims and objectives - a humorous aim can help to break the ice).

Each pair then feeds their aims and objectives back to the group holding sheets of paper up for the rest of the group to see.

Hints for the Facilitator

- Facilitator first at this stage of the Workshop was helpful in further breaking the ice and 'starting the ball rolling').

- The Facilitator accepted what individuals said without positive or negative comment.

- Once all participants had spoken about their identified aims and objectives all the group members then mutually agreed on the Workshop Programme. Adding/changing any areas so that all their aims could be covered. Any aspects not covered in the programme could be negotiated at this stage.

Group Discussion: Feelings, fears and experiences of caring for Patients with Cancer

Aims

- For each participant to explore their own attitudes and feelings towards cancer and patients with cancer

- To discuss how these may have been formed and how their experiences as a nurse may have affected them

- To look at Cancer incidence survival, and mortality and to reflect on whether their own attitudes accurately represent cancer in the light of the cancer statistics.

This session usually required quite active facilitation of discussion points, since group had not yet warmed up.

Discussion Points:

- Cancer nursing - what is it? Is it different to other kinds of nursing?

- What does cancer mean to the participants?

- What do participants feel about the quality of care patients with cancer receive?
What does cancer mean to the general public?

Encounters with patients with cancer as student nurses.

Willingness of participants to care for patients with cancer.


Nurses' feelings of inadequacy in dealing with patients with cancer Usually due to - lack of knowledge - feelings of lack of counselling skills CANCER = DEATH - Fear.


Further Discussion Points

- Is cancer = death a true picture?
- Differences between incidence and mortality
- The significance of cancer as a health problem
- Curable cancers
- Stage at presentation with the disease and relationship to cancer
- Incidence and survival of most common cancers
- Sex differences in cancer incidence.

HANDOUTS at end of session:-


Notes on Cancer terminology.

BREAK FOR COFFEE

Time for reviewing cancer library, and requesting resource material.

VIDEO: BREAST CANCER WHY ME? Experiences and current treatments. Lederle.

Introduction to video was kept to a minimum. It was felt useful for participants to form their own opinions.

Group Discussion Points:

- Did the video paint a realistic picture of breast cancer? Here participants often expressed feeling that it was over-optimistic. It was felt not to be the picture of breast cancer that they had seen. (Discussion therefore of attitudes to cancer usually developed out of this).
- Survival rates for breast cancer of different stages.
- Reaction to different stages during illness that women express.
- Irrational fears women expressed of radiotherapy during the video.
- Attitudes of doctors to complementary medicine.
- Treatment choices -

  Lumpectomy versus mastectomy - advantages/disadvantages of each treatment. Results of Kings Fund consensus development Conference on the treatment of primary breast cancer.

- Discussion of treatment choice largely being dictated by consultant preference.
- Survival rates relating to different treatments.
- Typical treatment of Pre and post menopausal women.

  Use of adjuvant treatments:
  - Radiotherapy
  - Hormone therapy/ablotion/tamoxifen
  - Chemotherapy

  Highlighting complexity of breast cancer as a chronic disease.

HANDOUT:

Kings Fund Consensus Development Conference paper on Treatment of Primary Breast Cancer ONLY to those who specifically requested it.
British Medical Journal, 293, 946-7.
PREVENTION AND SCREENING FOR CANCER

Exercise: To design in groups of approximately 3-4. The Anti-Cancer Lifestyle. (The only requirement was that it should be realistic) using resources provided.

Equipment: Large sheets of paper, felt tip pens.

Resources Provided were:


Health Education literature on Smoking, and Cancer prevention.

Two sets of the resource material were scattered around the room as participants got into groups to work on the exercise.

Participants were not required to read resource material but it was there to provide interest and stimulate ideas particularly if participants were unsure what might be useful in cancer prevention.
Participants were given 30 minutes to complete the task. A whole variety of different approaches were used by participants in designing the anti-cancer lifestyle, some very humorous.

Resources could be taken away and kept by any participants who wanted them.

Participants then fed-back what they had designed.

Facilitator, apart from congratulating each group on its efforts, only asked each group whether they would stick to their anti-cancer lifestyle.

Facilitator then picked the lifestyle containing the most information and discussed whether or not there were research findings to support a change in lifestyle for all items.

Other points covered:
- Steps in Carcinogenesis
- Evidence for environmental influence on carcinogenesis - cancer avoidance around the world.

Summary at the end of the Session was given by the Facilitator using Goodwin's "prudent" anti-cancer lifestyle.

Anti-Cancer Lifestyle =

'Living with Prudence' (Goodwin 1984) 'Can you Avoid Cancer' BBC publication.

Stop smoking
  Fat and meat in diet
  Fresh vegetables and fruit
  Fibre in diet
Stay slim
  Alcohol especially if smoke
Keep out of the sun
Pill - don't take for more than 5 years
Regular smears
  BSE, T.S.E.

Be aware of body changes.

DISCUSSION OF ROLE OF STAFF NURSE IN CANCER PREVENTION AND EARLY DETECTION.

Discussion points:
- Idea of the quick cancer screen for all patients.
- Concept of primary, secondary and tertiary cancer prevention.
- Capitalising on e.g.: - The admission assessment
  The blanket bath
  for health education.
- Testicular self-examination/mammography

Handout: Early detection for cancer.
Discussion of - 1) Cancer's 7 warning signs
2) Recommendations for early detection in asymptomatic individuals
3) Where can these screening tests be done?
   National Health Service and private facilities (and costs)

Handout. Screening facilities in Local Health Authority, and Early Detection of Cancer Handout.

Discussion of the role of women, National Cancer Control Campaign (WNCC).

Handout. Testicular Self-examination leaflet
   WNCC leaflet on Breast Self Examination and Cervical Smear

BREAK FOR LUNCH
1. Increased awareness of one’s own body and alert to changes

Cancer’s 7 Warning Signals

- Change in bowel or bladder habits
- A sore that does not heal
- Unusual bleeding or discharge
- Thickening or lump in breast or elsewhere
- Indigestion or difficulty in swallowing
- Obvious change in wart or mole
- Nagging cough or hoarseness

If a person has one of the above signals, they should see their GP.

2. Recommendations for early detection in asymptomatic individuals

<table>
<thead>
<tr>
<th>Service</th>
<th>Age Group</th>
<th>Frequency</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cervical Smear</td>
<td>19-65</td>
<td>Every 3 years*</td>
<td>Cervical smear tests should be done for women less than 20 who are sexually active.</td>
</tr>
<tr>
<td>Breast exam by GP</td>
<td>20-40</td>
<td>Every 3 years</td>
<td></td>
</tr>
<tr>
<td>Breast self-exam</td>
<td>Over 20</td>
<td>Every year</td>
<td></td>
</tr>
<tr>
<td>Mammography</td>
<td>50-64</td>
<td>Every 3 years</td>
<td>In 14 Regional Breast Screening Units</td>
</tr>
<tr>
<td>Vesticular Palpation</td>
<td>Over 20</td>
<td>As arranged with GP</td>
<td></td>
</tr>
<tr>
<td>Self Exam</td>
<td></td>
<td>Every month</td>
<td></td>
</tr>
</tbody>
</table>

* Current national guidelines suggest (and pay for) cervical smears every 5 years, although some health authorities are suggesting and providing for cervical smears every 3 years.

Cancer sites with no screening recommendations at present include lung and colon.

Where can these screening tests be done?

Primarily, by the GP although there are other places like Well Women Clinics and Family Planning Clinics for breast and cervical screening. The Women’s National Cancer Control Campaign has listed these resources (01-499 7532).

Cancer screening is also available privately, for the fee of course! (e.g. UPA, Private Patients Plan).
ROLE PLAY; ETHICAL DILEMMAS AND CANCER

THE BOARD ROOM

Explored 2 scenarios:

1) To tell or not to tell a patient he has inoperable lung cancer, when both consultant and wife of the patient are against the patient knowing, but staff nurse and a close friend of the patient believe he should.

2) Whether or not a woman with late stage disease and liver metastases should enter a clinical drug trial with a cytotoxic drug which has some serious side effects, and little promise of benefit for the patient.

The aim of the Board Meeting was for the parties involved in each scenario to meet and discuss the problem at first hand and reach some sort of joint conclusion/decision if possible.

The Board Meeting was chaired by the facilitator who kept the discussion going by bringing in different members of the board, asking them to put forward their opinions. The Facilitator terminated the Board Meeting by asking for a final word from each member, then adjourning the meeting until a suitably agreed time.

The meeting was observed by the rest of the group who were asked to take an observer role.

Facilitator debriefed participants after each role play by asking

1) Each member of the role play their insights and learnings. (If felt necessary by saying "I am not Mr. Cartwright etc. I am ..... today is .... I am here (where?) .....)
   Negative aspects first
   Positive aspects last.

2) Observers fed back feelings, insights and learnings.
   (This was not allowed to become over critical, observers were encouraged to talk in the first person (they felt unhappy, embarrassed etc.)
   This again ended on a positive note.

3) Facilitator's comments on the whole play were confined to positive and uncritical comments such as:
   It was interesting that ..... Well done ......

Discussion Points:

Scenario (1)

- What were the patients', compared to the relatives' and consultant's rights in informing patients of their prognosis, disease, etc?
- What differences are there between informing the patient they have cancer, are dying, have a specific prognosis?

- What is the role of the staff nurse in situations like these?

- The Patient's advocate?

- What rights in law, professional conduct, does the staff nurse have if they disagree with a doctor's decision over imparting information to a patient?

- How best are situations like these handled? - the team approach.

- The staff nurse's role in this scenario has been interesting in that participants have had insightful learning, for example

  They often started with a dogmatic approach: 'All patient should know' regardless of relatives and ended up feeling that this may be insensitive and situations like these may not be resolved all at once, but require delicate handling.

  Also - a consultant's role in this (i.e. the one who is left having to do the talking, is a difficult one, which was an unexpected learning for some participants.

  It was important not to let this session slip into "Doctor bashing".
SCENARIO (1)

THE BOARD MEETING

Mr. Cartwright has been admitted to hospital for tests for breathlessness, and it has just been discovered that he has inoperable lung cancer. The aim is to treat him palliatively with radiotherapy.

The meeting has been called to discuss the problem of whether or not to tell Mr. Cartwright his diagnosis, since problems are arising from staff and relatives over this.

ROLE 1 MR. CARTWRIGHT (representative for)

All he knows is that he has been admitted for tests for his breathlessness. Last time his wife visited she seemed worried and upset. The visit was short and neither of them felt much like talking. But on his wife's way out she became very engrossed in conversation with a staff nurse. This seemed strange and he wondered what had been said, so he asked the staff nurse who just made some excuse and walked off. He now feels confused and anxious, no-one seems to come near him any more.

ROLE 2 MRS. CARTWRIGHT

You have just left your husband's bedside after a short visit. The visit has not gone well.

On your way into the ward, your husband's consultant asked you to go into his office, where he told you that your husband has an inoperable tumour of his lung, that they will give him radiotherapy, but they don't hold out much hope for him. The consultant has not told your husband his diagnosis.

You feel shocked, and terribly upset, and yet you managed to put on a brave face for him determined that he won't see that anything is wrong.

Fortunately your husband didn't have very much to say, he asked you why you were late, you said it was the bus. Then you both sat saying little until you left.

You are not sure you can cope, but are determined to carry on as normal and not let your husband suffer any more than he is already by knowing he is dying.

ROLE 3 THE STAFF NURSE

Mrs. Cartwright has said to you that she doesn't want her husband to know his diagnosis.

But Mr. Cartwright has noticed something is wrong with his wife and seems suspicious. While he seems withdrawn, he has asked a couple of difficult questions about what is wrong with him.
You have told Mrs. Cartwright her husband's diagnosis and that you don't hold out much hope for him. You feel Mr. Cartwright should not know his diagnosis not least because he has a history of depression and you don't feel he could cope. His wife agreed with you about this.

THE OBSERVER

Watch the board meeting and observe the kinds of interaction that goes on, who is most dominant, passive etc? Which arguments were good, which ones were unconvincing and why? What was the solution that was come to by the meeting? Does the solution reflect the true feelings of the group?

How was it arrived at? Note anything else that strikes you about either how people act at the meeting or the issues that were raised and discussed.

SCENARIO (2)

THE BOARD MEETING

Mrs. Johnson is 71 years old and has been admitted to hospital, she had a mastectomy for breast cancer 5 years ago which has now metastasised. She has signs of spread to her liver.

The consultant wants to put her on an experimental drug trial, which involves giving the drug CNU. Patients in the trial will be assigned to one of two groups: in the first group patients will be given CNU as a single agent, and in the second group patients will be given CNU as the main drug among others in a combination regime.

CNU - used for GI tract, Hodgkins, CNS tumours, and small cell CA of lung.
Side effects: Bone marrow depression, severe nausea and vomiting, and some hepatotoxicity.

ROLE 1 MRS. JOHNSON

You know you have got cancer in your liver now, you feel you've probably not got much longer before you die and you accept this. The doctor has said that they want to try a special drug on you which may give you a better chance of life, and would also mean being involved in a research project.

You feel resigned to your disease, but feel you would like to take part in the drug trial because you might help other patients. You also still secretly hope for a 'miracle cure', and this might be it.

ROLE 2 THE STAFF NURSE

Mrs. Johnson is a lovely elderly lady who is quite ill with her liver metastases. You know her and her son quite well. But you find the idea of giving her chemotherapy worrying. You know the side effects of CNU (e.g. Bone marrow depression and severe nausea and vomiting). You feel
that perhaps she ought to be able to die in peace since you feel the chemotherapy probably won't do much good, but will make her feel very unwell.

**ROLE 3 MR. JOHNSON (MRS JOHNSON'S SON)**

You feel worried about your mother. You have heard from the doctor how seriously ill your mother is, and realise that as things are she may only live a few weeks or at most a month or two longer.

The consultant has offered to give your mother a research drug. This seems exciting, and might give her the chance of a miracle cure, and so you are all for trying, anything.

**ROLE 4 THE CONSULTANT**

You want to put Mrs. Johnson into your drug trial, you feel you need subjects for an extremely important trial which may push forward the treatment of patients with liver metastases.

You understand that the treatment has side effects for the patient but you feel very strongly that you want to try to give your patients a chance and you feel that every patient who suits the criteria for inclusion in the drug trial should be approached and asked to take part.

**THE OBSERVER**

Watch the board meeting and observe the kinds of interaction that goes on, who is most dominant, passive etc. Which arguments were good, which ones were unconvincing and why? What was the solution that was come to by the meeting? Does the solution reflect the true feelings of the group?

How was it arrived at? Note anything else that strikes you about either how people act at the meeting or the issues that were raised and discussed.

**Discussion Points**

- Assertiveness - as a method for Staff Nurses to deal with difficult situations.

**SCENARIO (2)**

- The clinical trial -
  - Ethical committees
  - Research proposal and protocol
  - Rights of research subjects

- Informed consent

- The staff nurse's role in protecting patients' rights in clinical trials

- Ethical dilemmas in to treat or not to treat. Whose decision is it? Concept that active treatment can also be palliative.
PATIENT EDUCATION FOR CANCER PATIENTS

POINTS OF INTEREST FOR THE GROUP

In its broadest sense patient education was defined as informing patient, giving information to patient about disease and treatment. (This leads on from role play, and what is nurse's role in information giving).

INFORMATION -> ANXIETY -> PAIN & BETTER RECOVERY


Information needs - different types of patients:-

1) Those that ask

   Have different reasons for asking -
   a) For reassurance that things aren't serious
   b) Ask because want contact with carers
   c) Genuinely want to know direct answers to questions.

2) A group of patients who do not see it as their legitimate right to ask questions and yet still want answers.

Information needs very different at different stages of disease process.

- Need to ascertain which group that patient falls into and tailor patient education to their individual needs.

- Different modes of patient education.

   Video
   Tape recording
   Written material
   Verbal communication

   Combination of approaches useful

REVIEW OF PATIENT EDUCATION MATERIALS AND ROLE OF BACKUP
DAY 2

PAIN AND SYMPTOM CONTROL FOR PATIENTS WITH CANCER

Aims of the Session

- For participants to become familiar with the principles of pain assessment
- For participants to become familiar with current concepts of pharmacological and non-pharmacological pain and symptom control for patients with cancer
- To dispel common myths about the use of strong opioid analgesics
- For participants to become knowledgeable in the promotion and management of the side effects of strong opioid analgesics
- For participants to develop awareness of methods of assessment and alleviation of other common symptoms in patients with cancer
- For participants to develop awareness of their own potential in pain and symptom control for patients with cancer

This tended to be a more formal session with the facilitator giving a lot of information relating to pain and symptom control with discussion of patient cases and difficult pain problems encountered by participants.

Areas covered included:

Definitions of pain
Pain and cancer
The extent of unrelieved pain
Features of acute and chronic pain
Cognitive and affective components of pain
Factors affecting pain perception such as anxiety
Research on cancer pain

The group at this point stopped for a group exercise in which participants were asked to think of what factors they would consider whilst assessing a cancer patient's pain, and how they might design an assessment tool for patients. (This exercise took approximately 15 minutes). This exercise was performed in pairs.

Participants then fed back to the rest of the group what they had thought of.

The facilitator then handed around copies of a pain assessment chart for comment and discussion.

BREAK FOR COFFEE

Principles of pain control were then discussed including:
- Point in the disease course that analgesics should be given
- The analgesic ladder
- Equipotency of analgesics
- Common myths surrounding the prescription of strong opioids
- Common routes of administration and safe doses of strong opioids
- The concept of regular analgesia
- Side effects of opioids
- The use of coanalgesics
- Non-pharmacological methods of pain control
- The nurse's role in pain control including the influence nurses can have on prescription and non-pharmacological interventions in pain control.

Discussion of other Symptoms

These included:

Nausea and vomiting
Dyspnoea
Lymphoedema
Anorexia
Constipation

HANDOUTS: Pain Assessment Tool


BREAK FOR LUNCH

THE IMPLICATIONS OF CANCER AND ITS TREATMENT.

AIMS OF THE SESSION

- For participants to identify the multiple problems and needs of patients with cancer and to develop ideas as to how these might be assessed and dealt with in the reality of the ward situation.
- For participants to become familiar with treatment, and physical and psychosocial needs of patients suffering from cancer of three common sites (breast, lung and cervix).
- For participants to recognise different needs in patients with cancer depending on the stage of the disease process.
- For participants to have developed greater understanding of the concept of multi-modality cancer treatment.

This session centred around 3 case studies giving detailed information regarding patients with cancers of three different sites and at different stages in the course of their disease. The session was introduced by briefly discussing:-
- Cancer as a local and systemic disease
- Different modalities of cancer treatment
- The concept of multi-modality cancer treatment
- The aims of cancer treatment.

Case Study 1 was then worked on as a group. Then the group was split into two, to work on the second two case studies. Subjects were given as long as they required. Resource materials including books and articles to help them and help wherever appropriate by the facilitator.

After a break for tea, the two groups presented their case study to the other group discussing the disease and its implications for the patient both physical and psychological.

Again participants were allowed to keep any of the resource materials they felt would be useful (other than books).

Participants tended to find this session difficult and needed help and encouragement in order to complete it.
Admission information that comes up with Mrs. M from the clinic:

On a routine outpatient visit today, Mrs. M. c/o tiredness, anorexia, weakness, loss of appetite, a tendency to be weepy. She also has bone pain affecting her right shoulder, nodules on her left chest all over the mastectomy site, and enlarged left axillary lymph nodes.

Past medical history:

This 43 year old woman presented in September 1982 with left breast lump, diagnosed with adenocarcinoma of the breast. The disease was found to be Stage III and was treated with a simple mastectomy in October 1984. Following this she underwent a course of radiotherapy to the left axillary area with a boosting of the dose to the chest all area. Two years later in June 1986, she subsequently developed metastatic lesions in her right hip which were treated with local adiation therapy and began 6 courses of CMF -- Cyclophosphamide, Methotrexate and 5-Fluorouracil. Upon completion of this chemotherapy, she was placed on Tamoxifen in February 1987.

She is to be admitted to:

1. Assess present disease status and institute appropriate chemotherapy, probably Adriamycin;
2. Initiate effective pain control;
3. Sort out social situation;
4. Evaluate depression.

Laboratory studies called through to the ward:

Hematology - Hgb. 13.8 gm
W.B.C. 6.5
Platelets Within normal limits

Biochemistry - Alkaline phosphatase 120 IU/l
Calcium 2.9 mmol/l

Radiology (done on the way up to the ward)
- Chest PA & Lat lung fields clear
  osteolytic and blastic
  lesions in left ribs
  and right shoulder but
  no fracture present
- Spinal films Osteolytic and blastic
  metastatic lesions in L3, &.
Present problem:
"tired, weak, no appetite and nausea. I seem to be crying all the time too."
Onset of these symptoms occurred last week.
Nausea is continuous but no vomiting.
Is able to eat some but only eats to keep her husband happy.
Cries for no special reason and at any time. This is very unlike her usual behaviour.

Pain Assessment:
- Pain in left shoulder described as continuous aching which increases when the shoulder is moved.
- Pain on left chest near mastectomy scar described as continuous burning is irritated by bra with prosthesis.
Both keep her awake at night.
Taking Froben 100 mg approximately 4 x daily when the pain gets really bad.

Left Chest Wall:
- Described as burning pain.
- One broken area, 2-3 cm, in the middle of 5 nodules.
- Purulent drainage.
- Malodorous (It's smells).
Care at home has been washing it baking soda and water and covering it with a piece of clean cotton. When she takes the cotton off, it starts to bleed so she doesn't change it but once every 2 - 3 days.

Current Medications:
- Maxolon 10 mg. 3 x daily
- Froben 100 mg. 4 x daily
- Tamoxifen 20 mg. 2 x daily
- Temazepam 20 mg. nocte.

Knowledge about her cancer:
Knows she has cancer and knows it is not doing well. She doesn't want to be in the hospital because there are so many problems at home and she particularly doesn't want to worry her husband, who has enough to worry about.

Social information:
Married with no children. Live in a semi-detached house.
Husband is an office manager and has recently been made redundant.
Her father who lives with them has bronchial carcinoma and is followed at this hospital also. Father is unaware of his diagnosis. He is a considerable problem because of his aggressive and demanding behaviour.
Mr. and Mrs M. have spent more time with him than they have with each other.

June 1987

CS I - 2 -
CASE STUDY 2

Mr. S is admitted with lung cancer -- for further assessment and possible chemotherapy and local radiotherapy.

Patient Profile

This 68 year old gentleman experienced an unproductive cough and increasing breathlessness beginning December 1986 but because he was a lifelong smoker he didn't go to his GP until February 1987. Skin nodules were also noted at that time and biopsy taken in March 7. Pathology showed small cell anaplastic carcinoma consistent with lung as primary. He complains now of dyspnoea on exertion, and pain in left chest, left shoulder and left side of his face.

Review of systems reveals:
- Hearing and vision - normal
- Eating habits - difficult due to jaw pain
- Respiratory - Dyspnea on exertion
- GU - normal
- Bowel function - constipated
- Sleep pattern - approximately 7 hrs./night
- Mobility - fully mobile
- Skin - nodules on skin surface.
- Smokes 20 cigarettes/day for 40 years, drinks socially

On examination, Mr. S is not breathless at rest. Several cutaneous nodules are noted at various places over the skin face. Chest sounds are diminished on the left side with some rales. Abdominal examination is negative. B/P is 160/90 and peripheral circulation is normal. Temperature 38°C. No other abnormalities are noted.

Current medications:
- Ampicillin 250 mg. 4 x daily
- M.S.T. 10 mg. 3 x daily
- Diconal 1 tab. 4 x daily

Laboratory data:
- Haematology - normal
- Biochemistry - Albumin 31 g/l Calcium 2.07 mmol/l
- Radiology
  - Chest PA & Lat - left hilar mass. Consolidation of left upper lobe.
  - Facial x-ray - osteolytic metastases of body of maxilla
- Pathology of skin nodules (28/3/87)
  - Small cell anaplastic carcinoma. Consistent with lung primary.
- Bacteriology on sputum sent today - no report as yet
Impression: Small cell carcinoma of lung with metastatic spread to skin and bone. Pulmonary infection 2o obstruction of left hilum

Plan: 1. Chemotherapy, probably CAV (Cyclophosphamide, Adriamycin, Vincristine)  
   2. Local radiotherapy to hilar nodes and left maxilla.

From nursing admission interview:

Understanding about admission:

He is aware that he has cancer but was told by consultant that it is very responsive to treatment. He understands that he is being admitted to begin treatment but he is not sure what kind of treatment is being planned.

Present problems:

"Breathing troubles" No difficulties when resting but any activity makes him breathless.

"Pain all over left side"
   1. Left chest - dull constant ache
   2. Left shoulder - dull constant ache
   3. Left jaw - dull constant ache

In assessment:

Recent onset and increasing in intensity
Locations as described above
Difficulty getting to sleep due to pain but once asleep no problem
Difficulty eating due to jaw pain
Taking M.S.T. 10 mg. up to 3 x daily and Diconal 1 tab.
   approximately 3-4 x daily when pain gets bad. It dulls the pain but doesn't take it away.

Current medication

Ampicillin 250 mg. 4 x daily for chest infection
M.S.T. 10 mg. 3 x daily
Diconal 1 tab 4 x daily

Social information

Married with one daughter. Wife is 70 and tends to worry a lot. She is quite anxious about her husband's condition. He has worked as a caretaker in an office building but has not worked since last month because of his illness. They live in tied accommodation.

Daughter, Sarah, is a health visitor in Scunthorpe and there is some possibility that the S's will move to live with her. She has one child 12 years old.
CASE STUDY II

Additional Information:
- More information on eating habits
- More information on usual bowel habits and ways of dealing with constipation
- Response of family to diagnosis and treatment plans

Potential Problems:
1. Pain
   - Medication? if adequate and taken effectively
   - Effect on activities
   - Reassessment especially after local radiotherapy

2. Dyspnea

3. Eating

4. Constipation

5. Infection

6. Social problems
   - housing
   - ? family support
   - ? move to daughter's
   - job

7. Preparation for chemotherapy
   General considerations
   Bone marrow depression
   - Cyclophosphamide
   - Adriamycin
   - Vincristine
   Immediate concerns
   - N & V
   - Extravasation
   - Extravasion
   Later problems
   - Hem. Cystitis
   - Cardiotoxicity
   - Neuropathy

Source materials:
CASE STUDY III

Miss A is admitted with cancer of the cervix -- for further assessment and treatment.

Patient Profile

This 24 year old single woman had a routine cervical smear in the Family Planning clinic in February 1987. Pathology was reported squamous cell carcinoma of the cervix. Referred to gynaecology team for further assessment and treatment.

Review of systems reveals:
All systems within normal limits except
Gynae: Sexually active since age 16.
   Oral contraceptives x 8 years. Followed in Family Planning Clinic. Regular smears.
   Last one in February 1983.
   Menses regular q 28-30 days.
   Bleeding with intercourse
   Watery, foul-smelling discharge x 6 months.

On examination:
Healthy appearing female.
Head, Ears, Eyes, Nose & Throat - normal
Chest - normal
Abdominal exam - normal
   Internal exam reveals large lesion on apex of cervix extending into the left fornex, friable, bleeding when touched. Discharge present. Ovaries and uterus feel normal. Enlargement of left groin nodes due to infection.

Current medications: Oral contraceptive

Laboratory data:
Haematology - normal
Radiology
   Chest PA & Lat - within normal limits
   Pelvis - No enlarged periaortic lymph nodes.

Pathology - Pap smear (10/2/87) - Squamous cell carcinoma of cervix

Impression: Squamous cell carcinoma of cervix - Stage II

Plan: 1. Establish extent of disease
      2. Radiotherapy
From admission nursing interview:

Present understanding of disease and reason for hospitalization.

She is aware that she has a "bad smear" but doesn't know what that means. "The doctors want to make sure there is nothing wrong". She appears very anxious but avoids talking about her condition.

Current medications

Oral contraceptives. Prescribed through the Family Planning Clinic.

Sexual history

Been on "pill" for 8 years since she became sexually active. Currently has boyfriend who she has been going out with for 3 years and is planning to get married in the autumn. She has bleeding with intercourse but no pain and a smelly discharge.

Social information

Lives with 2 flatmates. Parents in Norfolk and don't know that she is being hospitalized. Works as a secretary for the BBC. Boyfriend, John, also works at the BBC and has been very supportive but is worried. She feels she can talk with him about her concerns.

Medical Course

Although she could have surgical treatment with hysterectomy or local radiotherapy, it has been decided that she will be admitted to the Royal Marsden Hospital for 3 days to have a cesium implant.
GUIDELINES FOR CASE STUDY

Is there any other information you wish the nurse admitting the patient had asked? If so, what is it? Why do you want that particular information?

What expected problems do you think the patient might have?
From the problems in question 2, determine when they should be addressed and how you would plan to meet them?

Immediate Action

Within 24 hours of admission

During Hospitalization Action

Potential Problems Action to minimize or prevent

Discharge and Home Advice/Action

Problems that may arise when the patient is discharged?
Given the admission information (page 1), what specific information will you want to get from the admission nursing assessment.
- How much time is available for the interview?

From data obtained from the admission nursing assessment and information about the disease, its course and treatment:
- What expected problems might she have. List them.
- Prioritize her nursing needs.
  - What are her immediate nursing needs?
    How will you plan to address them?
  - What needs can be addressed at some point during her hospitalization?
    How will you plan to address them?
  - What potential problems might you anticipate?
    Can these be prevented or minimized?
    How will you plan to address them?
  - What needs can be anticipated related to her going home?
    How will you plan to address them?
CASE STUDY I

Potential Problems

Pain
Medication not adequate and not taken effectively
? constipation

Left chest wall lesion
Infected - and this may be causing some of the pain
Pain and bleeding with dressing change
Odor and discharge

Differentiate between depression and hypercalcemia
Fatigue and weakness
Emotional lability
Nausea and decreased appetite

Sleep difficulties related to pain

Stress at home
Father
Husband - redundancy and worry about her
Maintaining responsibilities around the home

Define side effects of Adriamycin

Source materials:


CASE STUDY III

Initial information:
Identify who knows and how much they know
- boyfriend
- family

Initial Problems:
Determine what she knows about her diagnosis
- If unaware of diagnosis, see that she receives the information she will need to participate in treatment plans as well as information she wants.
Offer support as she comes to terms with diagnosis and treatment.

Preparation for treatment
Rationale for procedure and required activities
- isolation
- immobility
- bowel prep.
- catheter
Initiate discussion re. expected and common concerns and fears
- radioactivity
- sensations related to radiotherapy
- future sexual activity

Potential problems related to radiotherapy implant
Early
- transient diarrhea & cystitis due to inflammation
  - starts 8 - 10 days after treatment
  - peaks 10 - 15 days after treatment ended

Bleeding
- Deep vein thrombosis due to immobility

Late problems (discuss probable ones and ones for which she will be involved in minimizing)
- Stenosis - effect on intercourse
- use of dilator
- Fistulas
- Fertility

References:
Ainslie, S. Sexuality and the cancer sufferer.

夭nal Material if interested:
Royal Marsden Patient Information Series: Radiotherapy (Number 2), and Cancer of the Cervix (Number 3).
DAY 3

COPING WITH CANCER AND LOSS

The aim of this session was to define coping and emphasise coping strategies as positive and constructive methods of adapting to the crisis of having cancer. There was a tendency for participants to see denial as maladaptive and acceptance as the only positive endpoint of the coping process. Hence the aim of this session was for newly qualified nurses to be able to accept and understand common coping strategies seen in cancer patients. Rather than a more detailed understanding of adaptive and maladaptive styles and techniques to foster adaptation.

Topics discussed include Coping, its definitions

- Coping style
- Coping strategies
- Coping as adaptation/adaptive/maladaptive responses.
- Influence of Life stage and previous experiences.

THE IMPORTANCE OF COPING MECHANISMS AND CANCER

1) Need to cope with the stress of a life threatening disease.
2) Coping style has been demonstrated to affect disease outcome.

Research studies indicating the effect of coping style on disease outcome. For example:


COPIING WITH CANCER AT DIFFERENT STAGES OF THE DISEASE

- SYMPTOMS
- DIAGNOSIS
- TREATMENT - SURGERY
- TREATMENT - RADIOThERAPY
- TREATMENT - CHEMOTHERAPY
- RECURRENCE
- PROGRESSION - Stages of grieving
  - How manifested
  - Nurses' best ways of coping with these
- DYING
- CURE/SURVIVAL

BREAK FOR COFFEE

VIDEO: WORKING WITH THE TERMINALLY ILL. Malcolm Brown, Tavistock.

Group Discussion:

- Feelings about video
- Communication skills demonstrated by social worker
- Participants' feelings about their own abilities and experiences in using these communication skills.

CARING FOR THE FAMILY

Points for Discussion:-

- Cancer as crisis for the family.
- Anticipatory grieving.
- Family coping and stages - often proceed at different pace to the patient.
- Families. Become buffer for patient's anger etc.
  Directly affected by the demands and stresses imposed on them as a result of the illness.

BREAK FOR LUNCH

SUPPORT FOR THE CARERS

Discussion with the group of their own support needs and understanding of best methods of coping with stress.

POINTS FOR DISCUSSION

- Common reactions of Nursing Cancer Patients
- The Human Function Curve
  Heinemann, London.
- Definition of Burnout.
- Symptoms of Burnout.
- Factors making burnout worse and better.
- Methods of dealing with stress and Burnout.
- Discussion of useful strategies to use when in charge of the ward.

  **HANDOUT** The Burnout checklist.

- Staff support groups.

**Recommended reading:**

- Bond M. Stress and Self Awareness for Nurses. Heineman.

**SUPPORT GROUPS FOR CANCER PATIENTS AND THEIR FAMILIES**

- Discussion of the role of major groups for example:
  
  **BACUP**
  **CANCERLINK**
  Bristol Help Centre.

- Review of Literature from Support groups.
  
  Mastectomy Association
  BACUP Newsletter

  **HANDOUT** CANCERLINK Directory of useful organisations, with emphasis on this being taken back to their wards rather than keeping it at home.

**BREAK FOR TEA**

**COMPLEMENTARY MEDICINE FOR PATIENTS WITH CANCER**

**AIMS OF THE SESSION**

- To introduce participants to different methods of complementary medicine currently in use with patients with cancer.

- For participants to learn and experience relaxation techniques.

A clinical psychologist experienced in the use of complementary therapies with patients with cancer, led these sessions and discussed:

  - Diet
  - Acupuncture
  - Transcutaneous nerve stimulation
  - Hypnosis and Relaxation.

The relative merits of these for patients with cancer was also discussed.
HANDOUTS

Guide to relaxation exercises
Complementary medicine references

Participation in relaxation exercises led by the session facilitator.

This was found to be an effective way of overcoming the exhaustion of three intense days for participants and became an important part of the group closing experience.

GROUP CLOSING EXERCISES

1) sheets of paper with participants' aims and objectives were distributed and participants asked to comment on whether these had been achieved, and whether anything had been missed out.

CLOSING CIRCLE Aim to act as an end point for the Workshop.

2) SITTING IN CIRCLE. Each person in turn to say:

a) One thing they wanted to leave behind in the corner of the room when they go

b) One thing they wanted to take away with them when they left.

N.B. It was felt to be important to have the, i.e. positive last (take away thing).

Facilitator made her assessment last. It was nice to end with a positive comment about the group for them to take away.

When each participant was saying their 'leave behind' and 'take away' neither the facilitator nor the members of the group passed comment.

The facilitator controlled and encouraged the exercise with non-verbal communication.
CANCER RESEARCH CAMPAIGN SHORT COURSE ON NURSING CANCER PATIENTS

EVALUATION

The purpose of this questionnaire is to evaluate the effectiveness of the course, and your opinion will help in planning future courses.

1. What were your aims for the workshop?

2. To what extent have your hopes been realised?

3. What was most useful to you?

4. What was least useful to you?

5. What was not covered which you would have liked included?

6. Can you give a specific example of how you may use anything you have learned in your work?
Perhaps you could make some brief comments on how useful you found individual course sessions.

**STUDY DAY ONE**

**INTRODUCTION TO COURSE AIMS AND OBJECTIVES, ATTITUDES TO CANCER**

Comments:

**VIDEO 'BREAST CANCER WHY ME?' AND DISCUSSION OF VIDEO**

Comments:

**DESIGNING THE ANTICANCER LIFESTYLE, AND DISCUSSION OF PREVENTION AND SCREENING FOR CANCER.**

Comments:

**ROLE PLAY 'THE BOARD MEETING' - INFORMATION GIVING AND ETHICAL DILEMMAS IN RELATION TO CARING FOR CANCER PATIENTS**

Comments:

**LOOKING AT PATIENT EDUCATION MATERIALS**

Comments:
STUDY DAY TWO

PAIN AND SYMPTOM CONTROL FOR CANCER PATIENTS

Comments:

THE IMPLICATIONS OF CANCER AND ITS TREATMENT - GROUP WORK ON PATIENT CASE STUDIES AND FEEDBACK TO THE GROUP.

Comments:

PSYCHOSEXUAL IMPLICATIONS OF CANCER AND ITS TREATMENT

Comments:

STUDY DAY THREE

REACTIONS TO LOSS: COPING WITH CANCER AT DIFFERENT STAGES OF THE DISEASE

Comments:

VIDEO 'WORKING WITH THE TERMINALLY ILL' AND DISCUSSION

Comments:

SUPPORT FOR THE CAREGIVERS AND SUPPORT GROUPS FOR THE CANCER PATIENT

Comments:
Please could you give any suggestions for improvements in the general structure and organisation of the course, teaching methods used, content etc:

THANKYOU FOR YOUR HELP IN COMPLETING THIS QUESTIONNAIRE
AN EXAMPLE OF ONE OF THE SEMINAR PROGRAMMES

SEMINARS IN ONCOLOGY NURSING

Seminar 1

Oncology Nursing, an Overview.
Prevention, screening and early detection for cancer. The Nurse's role
Jessica Corner, Postgraduate Nurse Researcher, The Royal Marsden Hospital.

Seminar 2

The Role of Complementary Medicine in Caring for Patients with Cancer.
Beatrice Finlay Mills, Clinical Psychologist, The Royal Marsden Hospital.

Seminar 3

Care of the Advanced Cancer Patient.
Barbara Dicks, Nurse Advisor to Cancer Relief.

Seminar 4

Care of the Patient Receiving Chemotherapy for Cancer.
Sally Sims, Macmillan Lecturer, King's College.

Psychosexual Aspects of Cancer and its Treatment.
Cathryn Newton, Clinical Nurse Specialist, The Royal Marsden Hospital.

THE LECTURES ARE OPEN TO ALL STAFF IN THE RESEARCH HOSPITALS AS WELL AS THE RESEARCH GROUP. THEY ARE HELD IN A FORMAL LECTURE THEATRE OR CLASSROOM USING A DIDACTIC APPROACH WITH SOME DISCUSSION.
A WORKSHOP SUBJECT'S INTERVIEW TRANSCRIPTS

INTERVIEW PRE COURSE

JC So perhaps a good place to start is the ward whether you get any cancer patients here and if you do what you feel your involvement is with them?

HP WE don't get that many of them actually, the only sort of terminal ones we get are the HIV's.

JC So are you getting a lot of the AIDS patients then?

HP We are getting quite a few, more newly diagnosed HIV's with some from or infection rather than the older ..... but cancerwise we get very few. We get the occasional um.. ladies coming in with ca breast and they've got heepes zoster from it, their chemotherapy and things. But thats about it.

JC and thats not really surprising.. so with the AIDS patients are you seeing the Karposi'S and that sort of thing?

HP Oh yes we see those, but I mean thats probably not our worry at the particular stage.....but they obviously get quite worried about it but they are usually treated with radiotherapy just for like cosmetic sake rather than any other reason.

JC right so like at the moment with cancer?

HP We've got one lady at the moment who's got ca breast who's got shingles. And thats it.

JC and is that fairly typical?

HP It is , we do get quite a few um shes actually very, very good, and shes got secondaries in the lung but I mean shes very mobile and she doesn't look like a.... shes obviously had chemotherpay so her hair has fallen out...but she doesnt lok as a cancer patient... you know like they usually look fairly wasted and things, she looks very, very good. Very healthy, and up and about and everything.

JC right and do yo have any HIV positive patients here at the moment?

HP We had 2 , they've just gone homw.

JC abd when you say HIV positive.. they've just had a blood test?

HP No they've had the test... what usually happens and they've been in the clinic at ST James's and when they develop and infection they get seen over here, and they get to know us so that when they are actually admitted they know the ward, they know the staff. But I mean the ones we've had, one was an old AIDS patient, the other one was newly diagnosed here.

JC Because I suppose.. is the policy here for this hospital that any HIV positive person comes in here or are they spread around the hospital.

HP No they are usually I think if they are only HIV positive and actually nursed if they are having surgical procedures they are nursed on an ordinary ward. But we usually get them here, just form a counselling point of viev rather than anything else.

JC right so what about feelings generally about caring for cancer patients
Really I don't feel like I can look after them, because I've never been taught how to sit down and talk to somebody and say 'How do you feel?' basically 'How are you feeling even though you are dying' sort of thing. You know it's really blunt, but that's what it's about... talk to them and get them to talk to you about how they felt about death. And you have your counselling sessions or talk about bereavement and that sort of thing, but that really isn't enough. We're not taught any skills in how to approach the person.

right so it's like the communication side rather than anything else.

Actually nursing them I don't... I feel fine, but because you haven't got the actual I can't... say to them 'How are you feeling' I can't get them to open out to me you know they've said 'Oh I'm feeling alright,' 'Or I'm feeling poorly' and that's about it. But if they actually express themselves then I'm stuck, I don't know whether to carry on or whether to... try and smile.

It's very difficult.

It is.

And there aren't any easy answers to that one.... what about during your training then how much did you see of cancer then?

Um... I saw quite a lot of bowel cancer, when I was on a surgical ward, but that was most of them were fine, they removed the tumour and that was it. And I worked on Princess Louise.

right that's where they have the lung patients is it.

Yes... and that's really about it... I've done sort of bits and bobs.

you didn't work on... for instance?

No.

Right... so what about feelings about dealing with it during your training then?

Well I mean like they always used to start talking and you'd think I can't handle this, and you'd get somebody else to... I just didn't know how to say anything really. Say how you feel, and like they'd say 'nurse am I going to die?' and you'd think 'OH no.'

And did you find that happening to you?

Yes. I think they found it easier to talk to like a student because you knew you're more at hand, you're readily available. But when they actually got to the crunch with it... you just couldn't cope... I couldn't cope with it.

and can you remember specific instances where that happened?
no good. And she was sort of going down. Adn she just turned round....
I used to love her I though she was gorgeous but we never really talked
in depth about her condition and then she said to me 'Am I going to
get better?' And I just looked at her and I couldnt have the heart
to run round to her and say 'well no youre not.' and I didnt know
how to tell her that she wasnt and or if it wasmy place to tell her
that she wasnt. Which is what is sort of so difficult.

So what did you do?

'I just.... I cant really describe it you know you just woffle your
way through it and you sort of avoid the question totally. 'Youve
recovered form the operatin, 'sort of thing but you dont say in the
long term, you never actually say anything. And then 'I think that
you ought to go and have a word with this lady ' sort of thing.

and you got somebody to go and speak to her?

Yes.

'and hren what happened?

Well then I found it really hard to talk to her after that, I had to
avoid her because I couldnt. I felt so guilty not being able to help
her when she had put so much trust in me, by asking me a question like
that. And I just couldnt help her.....

you poor thing that must have been horrible.

Well it didnt.... you dont really.... I odnt know it effects youin
a way that you dont realise its effecting you.... and then you know,
when I wenthome that night I cried, I really cried because I just
couldnt help her, but at work it didn't bother me, I thought it was
another patient asking me a questin, but I think maybe because we'd
built up such a relationship before and , before she actually asked
me.. if it was someone who had just asked me sort of 'Oh amI dying'
or anything and you think...oh.... hang on a minute Ill go and get
somebody. And it doesn't bother you because you're not like in personal
contact basis. You know she used to call me by my first name and it
was really sad.

Very difficult...

What about then lun the nursing scholl during your training how much
did you get on cancer, I mean you said that didnt get much on
communication skills or counselling or whatever?

No we used to have um...------ for bereavement sessions,
and we'd talk about it and he'd ask you how you felt and everything.
And half the class ended up crying because it really got to you...
hed bring up... talk to you like if parents or grandparents died of
cancer or anything and ... but that was it and it used to end up half
the class crying and he session would sort of go completely downhill.

right so did you find that that helped then in any way?

No.. to be honest I dont think it did, I mean it was very nice to talk
and you know you see how your other like colleagues are feeling
but thats abot it , i doent tell you how to approach somebody or
it really is communication isn't it? I mean and you know they went all through the stages of accepting it you know death.. but it didn't...

 JC

 it wasn't enough. It was good but it wasn't enough.

 HP

 Right and what about the other sort of... more knowledge about the disease and that?

 JC

 I think we had an hour and a half on tumours

 HP

 and that's it?

 JC

 That's it... and like... you say if you do... of bowel ... and then they say if treated... hey would have radiotherapy or something. And that would be it you wouldn't have any more. We went to the Marsden for a day and had a few talks there, but then it was like a bit too high powered because it was like the first lot you'd had. And having these consultants spouting at you about everything. 6 Sessions in 1 day and you're left totally bewildered, you didn't know where you were.

 JC

 right... what about specific areas like pain control, how do you feel your knowledge is on that?

 HP

 Pain control, I'm probably better on pain control because we had to do an extended essay for our states, and it was the management of pain. So actual pain control I'm not too bad on, but that's not through the school its through the essay that I had to write. But through the school it wasn't...

 JC

 right... so what sort of things did you cover for that then?

 HP

 Well basically all the drugs, and the sort of relaxation about it and ice and heat treatments and things like that. And TENS you know... just basically the different bits of each. But mainly it was all based around drugs. You try and get away from that and find something completely different, which isn't and it's all back to drugs, and drugs are backing you up all the way. But that was it in school and everything they never did anything on it.

 JC

 right... what about sort of opiate side.. do you see them used a lot with cancer patients a lot?

 HP

 Yes... always MST here there and everywhere and that's it. And that's the only one apart from we had a lady I think she was on a Diamorphine sub cut.. but that was it its all MST. From what I've seen, I haven't nursed that many.

 JC

 Right and your sort of happy about the kinds of pain control that you've seen?

 HP

 Well not really, because its.. like everybody you see, like cancer patients you think her pain is not controlled lets supplement her with DF118 and you think why not get the pain team in and get them to sort her out, because if they are.. that's what they are there for.

 JC

 ther is a pain team is there?

 HP

 Yes there is, actually come round, and they make up those cocktails that they can drink, that taste of gin or whatever. But it has the...
Whereas pain's concerned, they think they always know.

JC

What about you if for instance there was patient on the ward who you felt their plan wasn't controlled that well would you feel in a position knowledge wise to actually suggest what could be done for her to the drs?

HP

I dont...Id suggest that they control wasn't enough and maybe we could supplement it but I wouldn't go any further, and suggest a drug or other sort of treatment.

JC

what about radiotherapy, chemotherapy, how do feel on those?

HP

I know nothing, absolutely nothing.

JC

right, you dont see radiotherapy here at all do you?

HP

No.

JC

What about personal experiences, have had any personal experiences with cancer freinds or family.

HP

Yes... well my grandfather died, he had cancer. I was very sort of at that horrible age, awful adolescence, her died and my Mum would never let me see him because he was really delerious, and I was never allowed to see him, I've never had any body close, because I wasn't allowed to see him when he was ill. So all I remember that it was grandfather and that was it, and everybody being upset when he died and I wasn't allowed ot go to the funeral or participate, so it was all like shelved away. I lived a sheltered life.

JC

So what did you feel about his treatment then, I suppose you had...?

HP

I didn't really know because nobody would say anything, they'd say 'he's alright' and they turned round one day and said he'd died. And that was it. There was no more.

JC

Each time I come I want to ask you the same 4 things .. its not a test there arnet any right or wrong answer, about feelings towards cancer generally not necessarily patietns that youd looked after. And well see if anything changes.

HP

alright.

JC

the first one is feelings about whether patients can cope psychologically with the knowledge that they've got cancer?

HP

I think that... the ones that I've seen, have coped well, whether they've had to. I think they've had to more than... its hard to explain actually... I think they've had to for the sake of having to because nobody would sit and help them through it. But I mean obviously but I mean I haven't seen that many that are more difficult. But nobody I've seen.. you get the dr coming up and saying 'you have cancer, we cant treat it' and then they have their cry and thats it.. you never see them express ttheir feelings again. You know they are the patient in bed number... and thats it. Nobody attempts to go up and tlak to them because nobody really can.
Right and that's from experiences that you've had?

Yes.

And have you found that patients generally are told their diagnosis?

No. Not until very late. Not until there is really no hope that nobody can do anything. Then it's sort of left to the last minute, and is drawn out, the relative, or wife are saying have they got cancer and it's 'well we don't really know yet' and you know it goes on, and on and on. And so the relatives build up that fear, the patients do, and so when they are actually told it you know then.

And does that include the lung patients on P Louise?

...you know now you mention it, I can't remember any of the patients being told that they have cancer. I can't remember them being told that they have cancer.

Is that Mr. Wright?

Yes. All I can remember them being told is that they had a shadow on the lung and that's it. What I can remember.... I really can't remember anyone being told.

It wasn't discussed?

No... they all knew what they were coming in for. A shadow on the lung to be investigated, and then if it was alright, they'd turn round and say 'everything is fine' and they never sort of broached the subject it was just 'see you in outpatients' and that's it. So that.. they might have done... but I really can't remember now.

What about feelings about the value of screening, prevention and early detection for cancer?

That's the best thing ever done. I really do think that's brilliant. It's just... well it's brilliant for the people who take it, a lot of people shy away from it..... they are too scared of what the results might say. But actually screening for it..... people are having their cervical smears and breasts examined by somebody who knows what they are doing... and it's just so much better. So may lives you can save just by one simple examination rather than a major op. at some stage. Well it's ignorance isn't it? On behalf of most people. They don't understand.

Right so your knowledge stops you?

My knowledge does yes.... but a lot you know my friends out of work I'm always saying to go, and I'll always hold your hand if you...
want me to. But I mean you can't do that to everybody can you?
Because you try with friends... and just educating people basically
like all your friends say 'OH you work with AIDS patients' and they
go 'gasp' they think... and it's not like that and you reel off what
its like and that it's not as bad as they think. But whereas cancers
concerned you know I haven't got a clue.
JC

What about feelings about the value of active treatment, which I
suppose you must have seen some of any way during your training if
not now?
HP

Mmmmm That's difficult isn't really, because.... if it's just that one
lesion and you can... then fair enough but then you know they sometimes
pick on a 90yr old, who's sort of like got an abdominal mass and
abnormal liver function and you think... well why do it, because they
are more likely to die from the operation than they will... well quicker
than they will from the cancer. I think... I didn't know morally its
very difficult.
JC

And is that from experiences that you've had, that you feel that?
HP

Yes.
JC

Is there any that you can remember particularly?
HP

Yes we had a lady on ward 23 at St James and she had a cancer of the
bowel and they went and did an AP resection, and this lady was 84,
she would barely walk as it was, she had nothing else wrong with her,
but this was like in my first year. And they did and AP resection
on her and she just within 4 days of having it she died. And you
think was it worth it. You know with adequate pain control and...
shed have been, you know she probably could have gone home, and spent
her last sort of few days at home. But then you know 'we have to
operate, we have to operate' sometimes I think having all this medical
knowledge can be really dangerous.
JC

What about feelings about whether patients need to know that they
are dying inorder to prepare for for that, and that's somehow slightly
different from knowing that you've got cancer?
HP

Well I don't know... I don't see the sort of difference really. (laugh)
I just know I don't think people are told I think they should be.
It doesn't matter what the... if they are going die of whatever. I
think they should be told even if they think they can cope with
it, its amazing how many people can, and if they've got the right
people there they can cope with it. You know if the family is
supportive, but it doesn't necessarily have to be the family. I think
that's what were here for. You know and all the medical staff here.
So I really think that everybody should be told, I know I'd like to
know, You know even if like you fear the worst. but once you know
then you can come to terms with it.
JC

Right... what about meaning of the word cancer to you, I'm thinking
of the first things that come into your head about it.... its like
being in the psychiatrist's chair
HP

(laugh) ....... um... it always means to me thinking about it.. nobody
ever gets told about it... as of sort of public opinion they just....
its jsut means death.
JC

And what about you?
a very minor thing... a minor tumour that can be.... but it does, it just literally means death and no support, which is what you get here.

JC And comparing that with something like heart disease?

HP Wel heart disease as long as you take a bit of healthy exercise you can make an improvement in it.

JC right so it doesn't hold the same feelings?

HP no not at all..... Well I find heart... bcause I have nursed more heart patients than cancer patients so I probably understand it more, but people think heart attack and they know that 'Oh she's had a heart attack they can go on living' but if you have cancer that means you are going to die.

JC Waht about if you had it... but then I know that's an impossible question to....?

HP Well I know... I had an abnormal cervical smear.

JC did you?

HP And that well that put the shivers up me. But then I... was going on having sort of treatment and everything and you think that you've caught it. And when you get a letter through the post and you've got a class 2 smear and you think 'Ooh... er'.

JC Right so what happened?

HP Well all they really was do another smear and turned out that it was just a couple of abnormal cells and it there was nothing else wrong, but I have to have one every 6 months now and keep an eye on everything. But its really frightening, very frightening.

JC right you sort of know what it's like to face...?

HP Well in a way that I think... I was frightened I was petrified you know and I just couldn't stop shaking and everything, and you think 'Oh I've got to change my lifestyle, I've got to give up this, that and the other' but then on the second hand you think well know they know its there, they can't treat it and you've got no worries. But you know the fear.

JC right so when did you go for your second smear then... to the same place?

HP Yes.

JC It was a family planning clinic or something?

HP Yes.

JC And did they sort of tell you about what it meant?

HP o... not at all. the basic attitude was 'you're a nurse, you understand everything' they said 'your alright 'kind of thing. But you think
'No Christ Im not alright, Im only human, I want someone to hold my hand' you know but they tend to be blase there. They see the people coming in and out dont they?

JC

ight so.. despite being absolutely quaking at the knees nobody helped you out of that?

HP

the dr was really nice, she was a lovely dr, she was an Indian lady, she was like smiling and she sat and listened when you said 'am I really alright' you know like the questions you get patients asking you and you think 'Oh dear' but it was veyr nerve racking.

JC

Yes Im sure.. still you foundt it so...

HP

Yes but then you know you think oh..... if its a ppatient whos got cancer of hte owel or something and you think ... you know thats what used to come through my mind I think 'well they had and htey cant treat it and they are going to die' and you think 'Its going to happen to and everything goes through your mind , the worst, the worst its horrible.

JC

Ive met other people whove been through that too, and said the same thing. You know even though they know thta its sort of not true you still feel it.

HPOh yes.. its worse than anything, talk about pessimistic (Laugh).

JC

What about caring for the dying how do you feel about that one?

HP

Totally inadequate really.

JC

And what is it that makes you feel inadequate?

HP

I think ... just communicating... and not having the time. When you are quite busy and you havent got the time to see the relatives and things, and the fact that, there are times when the relatives have rung up and you say 'well hes just the same', but that means nothing. You know and you cant say any more, and that is very, that really annoys me when you think well... now if I know the relatives I actually tell them if anything has happened during the day or whatever and Ill get hauled up in court about it or what , I dont really care. But they have a right toknow its their.... whoever its happening to.

JC

Diffiuclt.. do you get many patients here dying?

HP

We have alot of AIDs patients dying.

JC

right and so youve been through that with patients here have you?

HP

Well thats um.. I odt know but I find them far easier to communicate with... becasue weve known them for solong.. or usually for a long time that they know you inside out of you, and I dont know we have such a brilliant counsellor here as well, our AIDs counsellor. She is so good that if you have nay.. if you youself are feeling pretty upset you talk to her and she sort of talks to them, and you all sort of get together and everybody talks it out, which is what is so important.

JC

I didnt realise thatthere is and AIDS counselor here, as a nurse specialist is it?
HP  Yes she actually works for sexually transmitted diseases at St James, but she is so good she knows all her patients and they all go round to her house for tea with her family, because a lot of them tend to lose their friends and family and everything. So she has them round. She is so brilliant, she is really brilliant.

JC  So what is it with the AIDS patients, you said that its easier, is it something to do with the fact that everybody knows that its fatal, for them, is it something to do with that, or is it something different?

HP  No I think that its because we have the back up. The consultant that we have counsels his patients as well, we have the AIDS counsellor, sister here is excellent because she has done the counselling course, senior staff nurse has done a counselling course and everybody is there if you say 'I cant take any more' and thats it fine, somebody else takes over. (end of tape)

HP  I think thats the main thing that youve got the back up, and they know that you know and (interruption)

JC  any way you were talking about backup.

HP  Yes, it just is, youve got somebody to turn to.

JC  and that is the difference, its very interesting to hear that actually. Because as you say its not knowing how to approach it but when there is someone there to help you out somehow its not as bad.

HP  No its not because its new and so different that anything sort of like happening everybody knows about. We had a lady here and she was tested, for and had HIV and because she wasnt counselled before she had the test it got thrown back... because she didnt know about it because she wasnt told, and that is what its like. Like because I mean there is not many staff here which makes it easier that you know they are saying .... the patients know that all the nurses know what is happening and dont know.

JC  What about the dealing with relatives side of it now how are you feeling about that you must be dealing a lot more of it than you used to?

HP  Well thats ... I think you have to make do, you have to try and do what you think is best, even though I dont like it, I dont know how to do it, but you use tact, show a bit of tact and even then you know you feel... but Id rather sit with a dr and back up a dr. Rather than come off my own back.

JC  Right, yes fair enough.

HP  Im just a coward.

JC  A coward?

HP  I think so I must be because everybody else can do it. But you know if I got somebody else there Id rather like 2 people sit there and counsel somebody or... I think then youve got 2 opinions. And if you need back up youve got it.
So what is it 2 months since you've been qualified now?

4 months.

JC

Sop how has that been how has then change been for you-

HP

It's been much easier for me down here. Because I was here for 4 months last year before I qualified and I've just gone through the ropes and everything, but there's not that much different everybody treats me, as me, but having to assert your authority I find so hard.

JC

And who is that over?

HP

Because (students) because you think I was there not long ago. And you think, well I don't know, sometimes you think to because you used to do things off your own back but some of them aren't like that. And you think you've got to keep prompting them and you think that they aren't going to talk to you. I mean I don't particularly like being in charge I'd much rather (?)

JC

So are you being in charge a lot?

HP

Well, no, average amount, but like when sisters on she's usually puts on the most junior staff nurse to her, because she's usually on for the office. But she's so good at it and you think 'oh'.

JC

So she allows you to be in charge while she's um.....?

HP

Yes, she's good like when you were doing your management, you'd ask her and she'd say 'OK' and she'd assess you from that day, even though like the management is supposed to assess you on the same day, and if you've done anything right or wrong. She did it over 3 weeks or however long it took you to prepare for it. So on your actual management day you are just going through the motions of being in charge for a shift when she's on. I can't fault her actually she's so good.

JC

right.. what about.. has it been stressful for you the 4 months?

HP

Yes... it's been a big difference. Well having to make the transition of going even thought down here it's not quite so bad, well in a way I suppose in a way it must be worse if you go to like a ward as a staff nurse they treat you as a staff nurse, whereas here you are just one of the crew. I think just actually being in charge and having to you know.. you are answerable for the things that you do, whereas in school os it's more frightening so now you are more careful about everything. 'Have I filled this accident form in properly' and all that.

JC

what about, I mean I know you've been offered some education which sort of came out of the blue a bit I supposed but is there anything that you would particularly like in terms of education now.. you know anything that you would have asked for?

HP

Anything?

JC

Yes.

HP

A counselling course I wanted to do the cardiac course, but now I think that I'd like to be an AIDS counsellor or something in that line ..
dealing with the terminally ill.

JC So you've decided that, that's the field that you want to go into.

HP Well I think it is probably because I've been here for so long, and now I'm getting used to it but I mean I don't think that I've got the right sort of temperament to do it. They tend to worry me more than... you know I get panicked. 'Don't ask me a question please'.

JC So do you think that you will get a chance to do the counselling course?

HP I don't know, I've got a permanent job here. So I'm doing my IV course early.

HP The senior staff nurse had just finished it, and she says it's excellent, it just opens up to everybody.

JC I know you are coming on this unit next week, and you've seen the outline, although you might have forgotten, is there anything that you would actually ask to be included and also how you would like it to be organised?

HP How I would like it to be organised... as comfortable as possible. No desks and nothing like that, but for me I'd like some facts and some fiction if you know what I mean. I'd like the facts about cancer, and yet I want to learn how to counsel, I'm not fussy really. (laugh)

JC that's pretty much what it is (laugh)
INTERVIEW POST WORKSHOP 050

JC  So um its a shame you couldnt make it to the last day..

HP  No but I was ... really.... it was pretty awful actually because I
couldnt even phone up...(laugh)

JC  Oh well it doesnt matter... its just a shame...

HP  AH but no.. because I missed it.. I mean...

JC  right so pehaps a good place to start is just to talk a bit about
what you felt aobut what you did go to.. the 2 days.. that you did...
and be honest because we will change anything that isnt right.. so
you know we want to hear the negative.. as well

HP  Um.. well.. they were brilliant really.. I probably learnt about
100 per cent more aobut cancer patients than I did already..which
wasnt a lot... but.... no they were good.. and they were... it wasnice not to be talked down to.. you know to be part of the ... have
your own opinion which was valued .. which was really good.. and it
some of it was very surprisiong like the pain control and symptom
control....I think there were things there that I didnt even think
of.

JC  Really.. it was new to you a lot of it?

HP  mmm some of it...yes.. and like actual drugs.. what. they ...
equivalents... that was surprising.... the only thing I would of liked
some more on.. was the actual nature of cancer... and a bit more
factual about the types of cancer... but I think that obviously you
can read that in a book.

JC  Right... so we gave you a handout thast was a little bit about cancer
terms and stuff.. was that not enoughthen.. would it have helped ot have had
a bit more?

HP  I think it would have helped just to go thorugh.. just very , very
quickly.. in about half an hour. just the different types.. whether
it would spread.. whether it squamous cell that spreads easier...
and...and things like that.... that I think because then you can
identify a bit mroe.... and see which type of cancer is going to
meastasis.

JC  Right... so what session stand out in you mind then...?

HP  the pain control..... that was brilliant....and....I cant remember
nay of it... the actual discussion we had on breast cancer.. the video..
that was very good... I think really most of it...seemed to follow
on... so you know its difficult to pick out a particular session....
becasue they were interrelated.. but everything was of value..
there was nothing that wasnt useful.

JC  When I saw you last the thing that you identified as being most
difficult for you was the talking kind.. of the communicating and
you wanted to do more on that.. but unfortunately it was exactly the
bit you missed on the third day.. when we looked at coping with it
and we looked at a video that showed the communicating and that sort
of thing
So I suppose you must feel .. I dont know whether you feel that that
is nay easier or not?
HP I think it's easier now though. I found it easier to talk to somebody because I'm... my knowledge is better... and I don't feel so inadequate if I'm talking to them... and I feel as though I can offer them help. Whereas before I couldn't because I didn't really know what I was talking about... and they would ask all these different questions...

JC So can you think what the knowledge is that you've gained?

HP Well, things like pain control and symptom control and being more aware of how they are actually feeling which I think is very important and that you can control a lot of their suffering by just actually talking... and tell them some facts which is what they want to know... whereas before you used to waffle around it because you didn't know... and now I can actually give them some facts. And it makes it easier.

JC Right... so anything you would have liked changed?

HP Of the course?

JC Yes.

HP No... nothing....

JC Was a new way... we asked you to do a lot didn't we we put a lot on you?

HP But I think that's what you were there for... and if you want to learn you will do it. And you had the option to be on the course... I think the people who were there really wanted to know about it... and it wasn't like you get people who are not interested in that particular thing... not sitting there getting bored or... paying no....

JC Yes... because there were occasions where I thought we might have tired you out a bit too much?

HP I don't think we've ever been worked so hard in school before... I think that was a shock... I think we usually we go to school, its holiday... basically because you don't do anything... you just have tea breaks... and the you do something and then you go and have a tea break. Whereas there you... you know... the atmosphere was so relaxed... and you didn't realise how hard you were working until the end of the day and the you just collapsed. The brains ticking over (laugh).

JC So you wouldn't have liked slightly less. I was just wondering whether...

HP No because I think it keeps you on the ball... and if you carry on dealing with a particular topic then you remember bits that you've just learnt and you can apply them to what you are learning now and then eventually things just stay in your mind... and then you won't forget them.

JC What about... the one session that Ginny and I were a little worried about was that... the one where we gave you the case studies to do... on the second afternoon.

HP That was very difficult... but I think it was worth it.

JC Right... so what was difficult about it?

HP I think its very difficult to identify somebody's problems when they are not actually in front of you.
JC: Right that's interesting.

HP: Because then you can... as nurses you would make a general opinion as you look at them. And you think... well they look dehydrated or they look worried... but just having the facts down makes it very difficult you think well are they aren't they? But I think it was good to actually identify the problems and I think we did very well actually. You did it was good... it was quite complicated.

HP: Yes.. I think it worth doing because somebody suggests something and then you remember what somebody else suggests. So that next time you admit somebody like that you will remember.

JC: Right... so did you feel that you actually learnt from it though?

HP: Mmm I think you did because you are more using what you actually learnt in a practical way and a way that can actually apply it on the wards.

JC: Right... because with that one we could have looked I mean I know you all said... in fact I'm going to get you a chapter from a book on chemotherapy so you will get some more on that... so I know you said you wanted to know some more on that... but we didn't want to just tell it to you... we wanted to sort of...

HP: Make the effort (laugh).... well

JC: So we could have just given you information on it you know just talking it to you perhaps more like the pain control one... was more giving it to you?

HP: No.. I think that was... I think having the actually chemotherapy was right... and I think some additional information to take home... sort of ther and then would have been more beneficial.. rather than having to ask. I think I always like ask for extra information because then you are on the ball and thinking about it.

JC: And have you been reading the stuff that you gave you?

HP: Yes... I was reading about... I was trying to look up some chemotherapy drugs because we have a lady on the ward at the moment... who was having some of the drugs and it happens to have been related and I remembered some things for the study days....

JC: Oh well I will definately get that stuff off to you then.

HP: I think really they were excellent those study days and I think everyone should have them.... (laugh)... but they were very good.

JC: Right its very suieful to know that because often you don't know you just have an idea and you just carry on and do it... and just hope it was alright..

HP: Well at them moment I'm trying to sort out the information that you've given me and I'm going to do it into like just a couple of pages to give to the students because we get mostly third years down here and they are coming up to their exams and they don't have anything on cancer really... so it's just going to be like a short thing... hopefully get that handed out for them.

JC: Oh that's interesting.

HP: Just the basics... like.
JC Right so what will you concentrate on...in?

HP Um.. js the different types of cancers and there.... and their metastatic spread annd things.. and pain control and symptom control... because a lot of the symptoms you wouldnt expect.. I think... some of them..

JC right so the different types of pain...?

HP Well I htink not so much the different types of pain.. symptoms of bone cancer that you dont realy associate....you think 'well theyve got cancer' but you dont actually tink.. well hes got this becasue htey have cancer. And you dont treat it as such you jsut think you jsut think they have cancer so thats what they get.

JC I see what you mean yes.

HP Try and identify.. becasue its jsut sort of basic nursing care.

JC right..... so you said that you have a patient on the ward at the moment.. so have you bneen dealing much in teh way of cancer since I last saw you?

HP I havent seen any.

JC So the lady having chemotherapy?

HP Shes actualy had.. well shes still got very sever aplastci anaemia um and she had some chenzptherapy.. but Im really not sure what they are going to do for her.. but its makes it easier to talk to her. she didnt have very much for it...and now its this new drug from horses horse serum.

JC right I dont know very much about that.

HP No neither do I.. but shes having something.. and hopefully in the near future shes having a bone marrow transplant.. theyve jsut found a donor...

JC Oh thats interesting..so sort of related but not...

HP It is sort of.. but I think now.. Im waiting for a cancer patient to come in so I can getmy teeth into them (laugh)... it sounds cruel doesnt it but at least I will be able to appraoch them with a positive attitude.

JC right so what are your feelings now about caring for cacner patients?

HP Well If I had someone to care for(laugh).. I think now that um.. Im notgoing.to be quite so blase about the thing that htey have cancer I think....before I wasnt particularly aware of their symptoms .. and now Im more on the ball to treat them earlier...and sort of like suggesting with the pain control... the drs....but Im really looking forward to looking after oone now...and see how much I have learnt its very difficult to say ow.. becassue I dont ... unitl the actual situation comes up..

JC And what avbuot the kind of tlaing.. I remember when....you actually when you were a student yuold had some quite difficult expereinces ieht patietns asking you difficult questions that you really felt
just like shying away from... I mean who knows how you'll feel now

HP
I think... I have been through it with this particular lady actually I mean she started to bleed and we couldn't stop the bleeding... so I had to actually phone her husband up and ask him to come in... which I found a lot easier... I found it far easier to be honest with him and tell him what was actually happening before he came in... so that he was aware and it was... I don't know... the actual... I'm not afraid to talk to them... whereas before I would shy away... now I'll actually sit down and tell them the truth... hopefully with some support... a priest or doctor or whoever... I couldn't leave them not knowing rather than...

JC
So what has done that... I mean it may be just that you've had more experience as a staff nurse now?

HP
No I don't think it's that... I just think... I'm more aware now... I think that course makes you more aware of actually how you feel and how you would expect to be treated if one of your relatives was... severely ill... so I... like to treat relatives and friends as how I would expect to be treated... I would like to know what was happening and I'm sure they would... so I tell them.

JC
and what about the AIDS patients which you were having not lots but some of... which seemed to be... you have more of them now?

HP
Mmmm...

JC
And how are you finding that?

HP
Well... at the moment we have a couple who are very very anxious and we've actually got the help advisor talking to them... and she... its actually brilliant to sit in while she is talking to them because you can just see her... the way she sort of manipulates herself around the difficult questions and its... basically I'm just learning more from her... but I don't find it any harder or easier to talk to them... I think its the same... but...

JC
right... because with them last time you felt that it was easier because you had the support there.

HP
Yes you had the support... but I think now... that situation hasn't changed at all... but now I think I could cope... I couldn't cope with them with out any support I don't think... But I think I could cope with cancer patients now... I know that sounds silly.

JC
last time I asked you 4 questions...... can I ask you then again?

HP
(laugh)....

JC
the first one is feelings about whether patients can cope psychologically with the knowledge that they've got cancer.

HP
I can't remember what I said last time...

JC
It doesn't matter....

HP
Um yes I think they can... I think you adapt yourself to any situation I think they can... I think knowing that they have cancer makes it easier for them because they can actually get through the phases of coping accepting... if it is a terminal... one.

JC
Right and can you remember how you felt before?
No.

No thats fine.....what about feleigs about value of screening, prevention and early detection?

Excellent.. brillant.. better to be screened than to have radical surgery and go through chemoand radiotherpay.

What about your role in that?

more important now I know how to do it it better.. more aware of detecting things and.. but actuallyon thins ward we dont play such a great role in it because weve got patients that are examined fome tip to toe any way... they really are screened and because its so specialised they are tested for anything...so screening them any way. I suppose its jsut routine for us so were not really thinking about it we just do it...But I think it is so important.

and what about feelings on you knwoledge on that now?

OH its a lot better....like those 7 stages.. you reememr them.. and things like youve never thought of before like testicular and things like that...I mean like you just think about hem.. I odnt know Im just more aware of everything....when it comes to that....

What about feelings about the valuee of active treatment?

Well you can see that in a lot of cancers that dont have a high survival rate that some actives treatments can be more beneficial. Giving them radiotherpay can reduce the tumour which can make life easier for them.. the actual quality of life can be improved.in whatever space of time they have...but I think sometimes they go over hte top.. but Im more aware I can see why some peple actually do the treatment whereas before I used to think 'doing this on this woman shes jsutnot worth it'.. but it is worth it.

right so you are more.. you qualify that more now?

Yes,.. I can see their reasoning now ...rather than being negative.

what about feelings whether patients should know that hey are dying int order to prare for that.. and that is different fomr know that youve got cancer somehow?

I think its very difficult for anybody to accept that they are going ot die.. but I think that people have the right to know that they are dying and they should be able to prepare for it.. I mean you are vey lucky if you die in a matter of seconds and you dont have time to preare.. but I think a lot of the time nowadays you have to prepare. and I think its nicer toknow that you are ill...for a reason and why you are ill and tha you are going to die.. and I think you can cope woth your family and theres no....I cant think of the word......they are nopt fighting anything they are not hiding anything and they hve things out in the open which is where they should be...if one person knows they are going to die and the relatives dont know htey its very difficult... I think their communications better. problem are sorted out much quicker and basically patient's sort of like actual death can be very nice and very beautifult.

Mmm what about.. is that something you are experienceing with the AIDS patieten?

YES.
So how are you finding that?

HP  I think....its ....I think whoever is there ...you know.. you know them so well an dhtye know you.. and htey know theyve got AIDS because obviously hteyve got to test youfor it and they have to to be consented and four that moment onwards everything is out in the open there is nothing hidden and i htink that is waht makes the difference.. and so then you know.... you can all sit and the when whoever dies.. you are all there and you are all holding hands and you might say a payer or.. and I htink that is really beautiful its really nice. I mean the situation of the prons actually dying isnt nice, but the relatives and carers and its..... it can be nice and its not distressing.

JC what about these... you said htat youve got 2 fairly newly diagnosed... or maybe they are just new in?

HP mmmmm we had onewhyhas newly diagnosed he's gone home now.....weve got 2.. one positive patient in and two homosexuals in who look as though theyve got AIDS related symptoms but we havent....

JC right so they are just waiting for the news are they?

HP WELL they are beng counselled at the moment to see if they want the test:. because its of no benefit to them to have it.. but to us it is. So htey have got to make ou their minds as to whether they want it.

JC What about meaning of the word cacner to you now?

HP Itsnot as firghtening to me now...it means I odt.. well.. I think ..I used ..if a patient came down with ca I used to think 'Oh god' Now I jsut think I want to get my teeth into the situation and make it how htey should be. And I think now Ive got to make the effort after doung the course I know you can actually do that you dont have ot wait around for maybody else to start it off.. its going to be you.. and get things moving.. but it doenst firghten me now.

JC thats interesting becasue you were quite frightened before.... what about though if you had it?

HP Id be devastated.

JC right so what would be the first things that came into you mind then?

HP Id tingk I dhave to go and tlka to somebody who knows what they are ..laing about it donte matter how much you know you need to be reassured But...I mean I think these cacner patients are very, very strong and I dont htink Id be like that. But then I d suppose wed go through hte stages ourselves.

JC what about feelings aboug caring for the dying?

HP WELL I odnt particulllry like caring for hte dy8ing.. its not my.. Id rather see them live.. but I think now Im not so frightened, I sit in nOow..and see the relatives rather than opt you way out.... nad leve the relatives there...I used ot be more apart and try and keep away four them. Now Id rather sit with them and hold their hands.
And you've already said that speaking and dealing with the relatives was already easier in one incident... was that a general feeling?

Yes... whether it's because I'm getting on I don't know... but now I've got the feeling that I can make a decision and tell them.

Right... how are you feeling generally... what are you...now 3 months 4 months... how is that going?

I need a holiday (laugh)... it's getting better... people give you a lot more respect now... it's surprising they don't treat you like a lump or dirt now... it's true when you are student they treat you as if you are ignorant... and now they don't... but here it's so much easier... because we all know each other very, very well... the drs and staff and that. But it can get depressing here.

Can it? What makes it depressing?

AIDS... sometimes we do have a lot of AIDS patients... when you have a ward full of terminally ill patients it's nice to see somebody going home. I think if you don't see anybody going home then you know you do get a bit down, because that's all you see.

and so how many have you had then over since you've been here?

Not a lot... but we've got... like we keep getting in the last couple of weeks... we keep getting the patients back in, who we've just sent home who have relapsed and things... and you know what's happening and you are just waiting for it to happen.

Yes and they are so young aren't they. It must make it worse.

mm I'm going on holiday anyway so I'll just get out of it.

You need to I think don't you, you need to take a break from it?

Do you remember when you filled in this... right this is the first one...... well you've gone up on everything by the looks of it.... but quite a lot.... does that reflect how you feel?

Yes...(laugh)....

And then last time you ticked..... you still ticked some things that you want more knowledge education of practice in... death and dying communicating with the patient which is the bit that you missed... both of these really family involvement... dealing with social and psychological... which again is what you missed, changing attitudes to staff members this is interesting...... cancer as a chronic disease.

It's a lot less than before.

So would you like more of that... obviously some of that would have come on the third day... but things like you said the nature of cancer and the chemotherapy... but what about his changing attitude?

I think that's important... because I've changed my attitudes I think. I think people think... 'oh they've got cancer and that's it!' whereas now... I've got a little bit more respect for them now... probably because I know a little bit more.

What about generally though you've had something on cancer obviously but is there anything that you would ask for more education in now?
I wouldn't mind something on blood disorders... but really I can't think of anything because here you are learning something completely different anyway so this is enough. It's just the blood disorders with the haematology patients.
FOLLOW-UP INTERVIEW HP 059

JC: So you are six months qualified now?

JC: So, today is about going over the same ground, really, as before, looking at the ward and whether you have had any cancer patients and how you have felt dealing with them. And, then looking back over the last six months and seeing how that feels now. So maybe it is good to start with the ward.

HP: Well, we haven't any cancer patients at the moment, and we haven't had since I last saw you. We have just had a chap come in who has come from Caroline, he's had Ca surgery and it was three years ago - he had a gastrectomy and he is still with us, and he has nutritional problems at the moment but he doesn't talk about it at all - I expect most of the time, he has forgotten all about it. He has done really well.

JC: And that is the only cancer patient you had?

And what about the AIDS patients?

HP: We have had quite a bad time with those - a couple of them died and that has been quite sad, but everything is so much easier now, you really can talk to them and help them - especially the relatives.

JC: What has done that?

HP: I don't know, I think I have just got confidence in it now. There is no set way of dealing with them - when you do the course, it makes you realise that there is a certain way, but you can't always say the right things. Now, you just say what you feel and that does actually help.

JC: So, if you were to have cancer patients admitted tomorrow, how would you feel now about caring for them?

HP: I think I would be competent at caring for them, but I think that if they asked me some factual questions about it, I would have to just refresh my memory - because you are not using it -

JC: You don't retain it, yes.

HP: I think that actually dealing with them would not be as difficult as before.

JC: I know that when I first saw you, it was something that you dreaded really.

HP: Yes, and now I wouldn't be afraid to tell someone that they had cancer, if it was the right time.

JC: So what has done that? You have had 6 months experience now, haven't you? So, you haven't been doing a lot of it with cancer patients, but you have been dealing with relatives more, and AIDS patients, anyway?

HP: I am not really sure - I think it is partly confidence. The more you talk to them, the more different approaches you find, as to how to say things. It is just experience as much as anything.
What about knowledge now, then?

I am afraid that that is probably not very good. It has gone down again. I just don’t use it. Here, you don’t really handle chemotherapy drugs, and all the side effects. I can think of nausea and hair-loss and vomiting, and that is all I can think of, but I remember from the school, the pain lecture we had which we found fairly useful here. We are actually using that.

So what sort of things do you you actually use from that?

Well, for instance, how to deal with breakthrough pain - how you can use temgesic instead of morphine and different ways you can use it.

We had this lady who was dying and wondering what to give her, and they were saying 'We must give her some diamorphine' and were giving her injections and I suggested setting up an infusion - because you can always control it. So they started to do that I.V.

What was wrong with her?

She had aplastic anaemia.

Oh, and she died on the ward, did she?

Yes, she was the lady who had had it for years - she died recently - she was here from 31 March.

She said she was complaining of pain and they didn’t do anything - she was going to die, it was so inevitable - she was put on diamorphine and after 3 days she died. But, she was happier and her husband was happier - it was nice for all concerned.

Just imagine her being on III dialysis ...

So did you have any influence on the decision not to put her on dialysis.

I told them that I considered it a waste of time. I thought she should be left to die in dignity.

And what did they say to that?

'Oh, we can see that, but we must keep trying' and I asked 'Why?' - you have tried for the last 4 months - I think it is time you gave up.

Her liver had gone and her kidneys weren’t working - she was not going to recover - she was just 100% full of infection - sure it is hard for the doctors to accept, and I felt really hard, actually, telling them to stop it.

So why did you take that on? Was it because you happened to be on duty at the time that came up?

2.
They had in fact, been trying to treat her for a while - they wanted her to have a bone marrow transplant, but they couldn’t get rid of the infection and they kept trying different antibiotics and were just getting nowhere. They would keep changing drugs, as one would have an effect on the liver and the next the kidneys, and they were just alternating them to give the liver a rest, and that was detrimental to her kidneys - it just built up, and they couldn’t seem to let go, and all we wanted to do was to let her die. We could see it coming, and they must have done too.

So was the Ward Sister around then?

She knew, but she was actually being looked after by 2 consultants who were looked after by our doctors - one is a haematologist - and because the haematologists are not based down here, they don’t really see what is happening. She actually tried to commit suicide on one particular day and I would have thought then that that would have told them that she didn’t want to live.

So what did she do?

She had a Hickman's line in and she cut it - but it so happened that it was blocked so she wouldn’t bleed - but if that is not saying 'Stop it' I don’t know what is. They only carried it on because her husband wanted them to. Nobody respected what she really wanted, which was really sad.

So you managed to control her symptoms in her last week?

I think we did - we did in fact overdose a bit with the diamorphine but it better that she was oblivious with everything then be around with it. She had been through so much and all she wanted to do was sleep, and I think they did the right thing really. She was on 9mg of a drug per hour ... it was just not controlling the pain. She was just continuously asleep. They gave her diamorphine and I said give her some haloperidol and they said 'We will think about it...'

So, you remembered quite a few of the drugs we had been talking about?

I remembered that, because we use them here...chemo drugs I don’t know much about. A lot of facts about cancer I don’t remember. I shall have to read it up.

So have you used the pain control with any of the other patients here?

Yes, we actually had a patient with TB of the spine and we got the pain chart from Marsden.

Oh, did you...what the one that we had?

Yes, we are using that, which is good.
He had his own papers — which said where the pain was worse, so we were able to control his pain.

What was he controlled on?

He was controlled on DF 118 and paranol and then he could have some Paracetamol as well, but it was in such a way that he wasn't having so much at once and then if we felt that if he wasn't in too much pain, then we were actually missing out a couple of the doses, just so that he wouldn't become so completely bunged up really, but it did work, and then we eventually just cut the doses out and he was on Paranol 3 times a day.

Anything else you have used from those three days?

It is difficult to answer — relaxation sometimes — we discussed that in our last study day which I missed and it was useful in getting the patients to use it, when they could not sleep.

Do you remember last time I asked you about areas of feelings towards cancer? Can I ask them again? You do not have to remember what you said before.

I don't know whether I can.

The first one is feelings about whether the patient can cope psychologically with the knowledge that they have cancer.

I think they can — everyone has a coping system and they cope in different ways — even if it is by crying, screaming and shouting, you are actually coping with it. Accepting the inevitable — I think people are more strong-willed than they appear, and they can tolerate far more psychological strain before they do anything.

What about feelings about the value of screening, prevention and early detection?

I still think you can't beat it — because if you catch something early, you can save so much heart-ache in the long run.

Do you find that you use that at all in your role here?

Here? No. Just advice, really, sometimes — say, for instance if the patient has asked questions on screening — you may explain the benefits of cervical smears and things. You can do this generally, but down here, we don't use it at all, because most of the patients are at the end stage anyway and are dying and we cannot do this.

What about feelings about the value of active treatment?

In the right people — I think it must be a very hard decision for the doctors to make — to treat somebody, but you must draw the line somewhere. I have an 89-year-old lady with Ca — they are just controlling her symptoms, which
is probably the best way - you are prolonging life, but yet you can never be sure how they are going to recover and how long for...but sometimes, I think people might have drawn the line.

What about feelings about whether patients should be told that they are dying, which is different from knowing that you have got cancer?

It is a very hard thing to tell someone that they are going to die. I think if you can give a definite reason why they are going to die, that gives them something to hold onto and something to blame, but actually I think that they will not ask questions unless they have actually accepted it in their own minds. Or else, they won't talk to people and will perhaps cry just to one person, and they won't want people to know about it, especially I think, you find that with men - if they have been the head of a family, it is not done to be seen to cry. I think it is up to us to maybe encourage them if they want to talk, but to leave it if they don't.

You can give them the openings and the opportunities, but if they don't want to take them, don't push or force them.

And do you find yourself doing that with, perhaps, the AIDS patients?

I find it more so with the relatives coping, because I think the AIDS patients have really come to terms with it before they get here - they have already been counselled and they know about it and I think they have usually accepted it - but it is the relatives, especially the boyfriends, and the partners, who are so close, and they are waiting for a miracle cure, which is not going to happen and then you do all that. I think we are very sensitive to the partners and the relatives, because they can always stay - like we had one where one of the patients died and he had the bed next to him, and they pushed the beds together when he was dying and made it into a double bed, and that was really nice, and they were welcome to stay here at the hospital. We can use CNIU's overnight stay room as well, which is something many of the wards haven't got.

Yes, it is nice that you have the single rooms so that you can actually use them.

Yes, and we have camp-beds and things that they can put up, and they can phone any time, and all the nurses here know all the AIDS patients really well, and they have certain people they can approach too, because obviously we don't get on with all of them. I think they die really well and the relatives cope well too.

And how do you all cope?

I think that we have become very resigned to the fact that they know they are going to die and I think we cope with it very gradually. You can see that they are going down and we tend to treat them more physically, to take your emotions away from it. Because it is upsetting.

It is tough because they are so young.
I remember we had here, I think, our highest age was 39, which is low. It is something you do cope with and you tend to become quite blasé about the whole thing, as a way of coping with it.

What about the meaning of the word 'cancer' now?

I think it is a very daunting word - it is very 'hush hush' - and you get a patient coming in with cancer and you think 'Oh, God, poor thing' - but you can just imagine a terminally-ill patient coming in - but they are not, half the time. I am not quite so daunted by it now, I think, because it can be treated, and there is a lot more hope than people realise.

What about things like caring for the dying? We have talked about the fact that you have been dealing with it quite a lot, but how do you find it personally?

I think it depends whether or not you actually got on with the patient when they were well. I find that if a didn't particularly see eye to eye with a patient, then when I was caring for them when they were dying, I felt slightly hypocritical about it. That sounds really callous and awful, but it was slightly a problem, but if I had a patient and we got on really well, then it was really very moving. Here, I think, they get better care - they are looked after properly and have perfume and things put on - or aftershave, or whatever, and you shave them, and touches like that, so that when the relatives walk in, they see them in a good light...and if you know a person, you know what their habits were like and whether they were immaculate or whether they filed their nails or painted their nails...

And do you have time here to do those sorts of things?

Generally, we do, because if we have a terminal patient, we usually look after that patient because most of the time, the patients are self-caring - or they just need a hand with a wash - but nothing drastic, but with them, they need all the loving care and I think that if we can do it, we just make the time. We are all very aware of their needs here.

What about feelings as a Staff Nurse, now that you have done your 6 months? When was your last Study Day?

2 or 3 weeks ago.

What did you have?

We had this chap who was a Student Counsellor and we talked about experiences on the wards etc and he made us tell everything in the first person. It was really good and then we did all different counselling things. Just talking a lot. It was nice. And everyone shared experiences over 6 months. It was beneficial. It was a good day. Taxing but good.

So, how are you feeling now as a Staff Nurse?

At the moment, I could readily leave nursing, but it is because of the ward situation at the moment - we have just got no staff - we have 4 nurses, 4 permanent staff.... The other nurse here leaves at the end of the week.
So, no students?

No students.

Why not?

Oh, their school messed it all up - so we didn't get any - and you are just running the ward with Agency staff and the ward goes to pot...

It is hard because of their attitude - but when we have students back, it will be nice because you get continuation. You get back into teaching - that is what I miss - teaching.

So, when are you due to have another lot of students?

Hopefully, we will have 2 on the next rota, which will be nice.

So, when you say that you could leave nursing, are you seriously considering it?

I don't know - I don't know if I am seriously thinking of it, but I could quite readily do it, if I had an opportunity to do something, but I don't know if I could. I do enjoy it and I suppose I enjoy the stresses and strains of it - otherwise I would not still be here - but sometimes you get really fed up with - doctors attitudes to wards you - you have to stick up for yourself and carry on. You have to be assertive. I expect they have had enough of me...if we had more staff, though, I think it would be OK.

It is a problem, isn't it?

You have one newly-qualified Staff Nurse, haven't you?

Yes, but she is off sick at the moment and she leaves in about six weeks anyway, to go on Maternity Leave. Rose is leaving at the end of this rota leave - Trish who is the Staff Nurse above me - she starts midwifery in October - so it leaves Sister, Senior Staff Nurse and myself.

Good God, I wonder what will happen.

So, it is a third of the rota, which isn't bad after 6 months -

What about anything you might want educationally at the moment?

Yes, I want a lot but we can't have it - can't have Study Days - can't do anything.

Having to work in your holidays too?

Well, yes, I mean I did the IV course, because there was nobody on the ward who could do IV's apart from Sister. I did that and any courses that come along, I would like to go to, but it is just a matter of being there. It is important that you do a course every 2 months, or so, just to keep you going.

I did the IV course and came back and did all these teaching sheets on how to do drug calculations and so on - and when I had finished the cancer course, I did a lot on the differences between benign and malignant tumours, but because I haven't done anything, I haven't done any teaching or anything.

You haven't anybody to teach.

That's right.
JC What about the other wards - are they all as badly off as you are?

HP Not quite as badly off - but I think we have just hit a bad patch, and if we had a student, I think we would be all right.

JC Looking at the questionnaires now. You have not gone up a lot, but you haven't really changed much from last time - oh actually, no, those are higher, aren't they?

Communicating with patients and family is up...does that reflect how you feel?

HP It is true, I think.

JC It is interesting that it is so much the same, because you could not have remembered.

HP No.

JC Just a few things you would like... 'Communication with patient at different stages of illness' because you missed that on the Study Day, didn't you?

HP Did I.

JC Yes, because that was on the third day.

So what are you going to do now?

HP I don't know. Stay here for a while, I think, until things get better, and I might do the cardiac course. I will stay in the hospital and I want to try and be a Sister by 4 years.

JC Oh, you should do that...

HP I want to do so at the Surgical Ward, probably - I like it here but soon we will have 40 beds and it won't be the same.

JC Forty beds...

HP We will have ten childrens beds and thirty adult beds.

It will be integral diseases and haematology, and I don't like the latter.

JC So will Thomas Young be the surgeon?

HP No, he is going to do the bone transplants and things.

JC I can't believe that they are putting that on a communicable diseases ward.
HP It seems silly - you see, where the ward is situated, it goes round like that, and then you have got our 20 infectious beds here and 10 children's beds there and 10 haemotology beds, so it is 2 separate wards - you have 30 beds on one ward and 10 on another. You are nursing the haemotology patients next to the children who are the most infectious people you can imagine.

HP It is just stupid and they have moved the macerators and we are not having a macerator and have got to have bed-pan washer which is silly - because if you have a patient with toxic shock syndrome, they are using the bedpans every 5 or 10 minutes and we won't have enough bedpans anyway.

JC So, it is going to be a real problem?

HP I don't know if I will like it at all. I don't see how you can nurse 20 beds on one ward and 10 on another with the same staff - in 2 separate wards - it's crazy.