Conceptualising nurse-patient therapeutic engagement on acute mental health wards: an integrative review using the Theoretical Domains Framework

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Abstract

Objectives: The review aimed to 1) explore the constituents of nurse-patient therapeutic engagement on acute mental health wards; 2) map factors that influence engagement to the Theoretical Domains Framework and 3) integrate results into a conceptual model of engagement to inform the development of interventions to improve engagement.

Design: A systematic integrative review using an established framework specific to the integrative review methodology.

Data sources: Database searches (CINAHL, PsycINFO, BNI and Cochrane Library) and hand searching identified 3,414 articles. After screening, applying eligibility criteria, and quality appraisal, 37 articles were included: \( n=27 \) empirical research studies, \( n=10 \) expert opinion pieces, \( n=1 \) case study and \( n=1 \) theoretical paper.

Review methods: Peer-reviewed empirical studies, theoretical reports or expert opinion pieces that explored therapeutic engagement as a stated aim and were conducted in acute mental health inpatient settings from the patient or nurse perspective were included. Data were extracted from the introduction, results and discussion sections of empirical research, and the complete article of theoretical and expert opinion pieces. Data were coded then grouped into subthemes and themes. Data relating to influencing factors were further categorised according to the Theoretical Domains Framework. Results were synthesised into a conceptual model of engagement.

Results: Five conceptually distinct, but closely related constructs of engagement – called the “Principles of Engagement” – emerged: 1) Understanding the person and their experiences; 2) Facilitating growth; 3) Therapeutic use of self; 4) Choosing the right approach and 5) Authoritative vs. emotional containment. Influences on engagement ranged across all 14 theoretical domains of the Theoretical Domains Framework.

Conclusion: A holistic understanding of the essential components of engagement may make it easier for nurses to recognise what they do, and to do it well. The model can be used to generate testable hypotheses about how and where to target behavioural change interventions. The Principles of Engagement must be reflected in the development of interventions to improve engagement.
Introduction

Background

Nurse-patient therapeutic engagement (hereon referred to as engagement) is of fundamental importance to acute mental health inpatient care (Sweeney et al., 2014). Studies consistently find a positive correlation between engagement and improved outcomes (Farrelly et al., 2014), better perceptions of care (Csipke et al., 2014) and improved satisfaction of care for people who were legally detained (Wykes et al., 2018). Further, nurses who spent more time engaged with patients reported greater job satisfaction (Moreno-Poyato et al., 2017), which may lead to nurses taking fewer sick days (Dodds and Bowles, 2001). This reduces the use of agency nurses who are costly and unfamiliar to patients. Thus it is clear that patients, nurses and their organisations may benefit from improved engagement.

Governmental policy and patient advocacy groups – both in the UK and many other countries – have emphasised the centrality of engagement within acute inpatient settings (Department of Health [DH], 2006). They recommend patients have one-to-one contact with clinicians, alongside access to four hours of therapeutic activities per week (Cresswell et al., 2014; Mental Health Council of Australia). Despite this, research over many decades has failed to demonstrate engagement in practice (Altschul, 1972; Goulter et al., 2015; McAllister and McCrae, 2017), with the most recent review to measure nurse-patient interaction finding just 4–12% of nurses’ time was spent on activities that could be considered engagement (Sharac et al., 2010). Qualitative studies describe how on admission patients expect engagement; however, the reality was that this rarely occurred (Stenhouse, 2011; Rose et al., 2015). Mental health charities report both patients and clinicians complain about the quality of inpatient care, with a lack of activities and interaction the primary cause for this (Mind, 2017).

Deficiency of engagement is multifactorial: nurses report their primary reasons as increased administration due to the need to manage ward crises and their perceived lack of ability and skills to deliver activities that are evidence-based (Seed et al., 2010; Ward and Cowman, 2007). Patient reports are similar, citing “petty rules and regulations” as hindering quality engagement (Rose et al., 2015). Despite these challenges, both research and professional nursing bodies broadly describe mental health nursing as a specialised area of practice that uses skilful communication, verbal interchange and interpersonal processes to bring about positive health changes in patients (American Nurses Association, 1976; Cormack, 1976; Glass, 2017; NHS Employees, 2006).

Clearly the therapeutic use of interacting underpins the nurses’ role, and improves both nurses’ and patients’ experience of care. However, to date there has not been an agreed working definition of engagement in acute inpatient settings, with little specific indication as to how nurses engage as part of their role. This results in nurses assuming an ad hoc approach to engagement, which makes standardisation difficult (Anderson, 1983; Clark 2012; McAllister and McCrae, 2017) or reverting to more measurable tasks such as ward administration (Rose et al., 2015). Since research shows that the effectiveness of mental health nursing depends on engagement between nurses and patients (Browne, 2012; McKeown et al., 2017), there is an urgent need to formulate a holistic understanding of the essential components of engagement. Thus, creating a shared language to guide this complex area of practice and help nurses to articulate what they do, and to enable the development of targeted interventions to improve engagement.

There are some recent examples of interventions that have been implemented to improve engagement (Browne and Hurley, 2017; Dodd et al., 2017; Edwards et al., 2008; Molin et al., 2018; Moran et al., 2011; Salberg et al., 2018; Thomson and Hamilton, 2012). These, however, have been in the context of either empirical research (Molin et al., 2018; Salberg et al., 2018) – with no follow up, meaning the long-term effects and sustainability are unknown – or in a rehabilitation setting.
(Browne and Hurley, 2017) which differs from an acute setting due to longer admissions, with less acutely unwell patients who are not compulsorily detained (JCPMH, 2016). Two studies report on Protected Engagement Time (PET) (Edwards et al., 2008; Thomas and Hamilton, 2012), an intervention where nurses devote an hour each day for nurse-patient sessions (King’s Fund, 2005); however PET does not appear to have had the desired effect (McCrae, 2014). This may be because it emerged from ward practice, rather than being based on theory or evidence-based collaboration with service-users (Nolan et al., 2016). While there is consensus that therapeutic engagement should be prioritised, a practical, theoretically sound solution is yet to be found.

It is now recognised that theoretical understanding is vital in the development and evaluation of complex interventions (Craig et al., 2008), and consideration of behaviour and behaviour change is essential to maximise intervention effectiveness (Davis et al., 2015; Michie et al., 2005). As previously stated, a handful of interventions have been implemented to improve engagement, however there is no evidence that these derived from a sound behavioural change theory. With this in mind, to change behaviour and improve engagement, future interventions must be formulated based on a theoretical understanding of the behaviours needing to be changed (Campbell et al., 2000; Michie et al., 2014).

There are numerous theories of behaviour change (e.g. Prochaska and DiClemente, 1983; Ajzen and Fishbein, 1974), many with overlapping, or similar constructs. This creates difficulty in deciphering the most appropriate construct, and many theories contain just a small number of constructs (e.g. Icek, 1991 or Becker, 1974) where key determinants of behaviour change may not be represented (Michie et al., 2014).

In response to this, the Theoretical Domains Framework (TDF) was developed to amalgamate and simplify behaviour change theories (Cane et al., 2012; Michie et al., 2005). It consists of 14 domains, derived from 33 theories and 128 constructs, all which fall under the categories of Capability, Opportunity and Motivation (COM-B) (Table 1). The COM-B/TDF theoretical framework can be used to explore and group factors that influence behaviour, and inform intervention design by highlighting potential behavioural targets (Michie et al., 2015). This review aims to conceptualise engagement, and use the COM-B/TDF theoretical framework to explore the factors that influence engagement within acute mental health inpatient settings.

### 1. Research questions and aims

This review is part of a larger study which uses an Experience-based Co-design (Bate and Robert, 2005) approach to develop, implement and test interventions to improve engagement on acute mental health wards. The review integrates theory and evidence on engagement, in the context of acute mental health wards, to build a framework which will underpin the co-designed interventions to improve engagement in practice. To do this the review will:

1. Explore the constituents of engagement according to the experiences and perspectives of patients and nurses, by answering the following questions:
   i. How has nurse-patient therapeutic engagement been defined in the literature?
   ii. What factors influence nurse-patient therapeutic engagement, and how do they fit with the COM-B/TDF theoretical framework?

2. Devise a conceptual model of engagement on acute mental health wards

### 2. Methods

An integrative review of the literature was undertaken, following the method described by Whittemore and Knafli (2005). An integrative review was chosen as it is suitable for building theory, including both empirical and theoretical literature (Hopia et al., 2016), and has direct applicability to clinical practice (Whittemore and Knafli, 2005).
3.1 Eligibility Criteria

After conducting a preliminary search, the SPICE Framework (Booth, 2006) was used to develop eligibility criteria. The criteria were modified in an iterative process of reading, refining the criteria and re-reading. The final criteria were as follows: 1) any empirical or theoretical reports or expert opinion pieces; 2) published in a peer-reviewed journal in English; 3) that explore therapeutic engagement as a stated aim; 4) conducted in acute mental health inpatient setting; 5) from the patient or nurse perspective.

3.2 Search Strategy

The SPICE Framework (Booth, 2006) was then used to develop the preliminary search strategy. This search strategy was tested and modified to achieve balance between sensitivity and specificity (Higgins and Green, 2011). The final search was conducted in January 2018 and included an English language limiter. As recommended by previous research (McCrae et al. 2015) no date limiter was applied as the authors felt it arbitrary due to little evidence in the international literature of a shift in practice relating to nurse-patient engagement. The search was initially created for CINAHL, then adapted for PsycINFO, BNI and Cochrane library (see Supplementary 1 for detailed overview of the search strategy). Reference lists of all included papers and relevant review articles e.g. Cleary et al., 2012; McAndrew et al., 2014 and Sharac et al., 2010 were hand searched.

3.3 Screening and selection process

All articles retrieved from the databases were exported into the reference management software package EndNote (version X7). Once duplicates were removed articles were selected based on a two-level screening process:

1) SM screened all titles and abstracts and classified articles as “include”, “exclude” or “unclear”. Given the number of titles retrieved by the search, SM, NM and GR triple screened a random sample of 10% to classify articles in the same way and to structure and enable further discussion about article eligibility between the review team. Articles where consensus was not reached between two or more reviewers were independently assessed by SM and NM. Differences were discussed between SM and NM until consensus was reached.

2) SM and NM double screened all full text articles. A consensus meeting was held to discuss any articles classified as “unclear” or “include” and to agree upon the final set of articles to include. The number of and reason for exclusions were documented in each round.

3.4 Critical appraisal

SM independently appraised the studies, and discussed the assessments with NM, GR and VT. Qualitative studies were assessed using the Critical Appraisal Skills Programme (CASP) checklists for qualitative research (CASP, 2014), the quantitative studies were assessed using the STROBE checklist for cohort, case-control and cross-sectional studies (von Elm et al., 2008) and the mixed-methods studies were appraised using the Mixed-Methods Appraisal Tool (Pluye et al., 2011). Integrative reviews consider a wide range of evidence, including empirical research, theoretical papers and expert opinion (Whittemore and Knalf 2005). Many of these documents are central to the evolving field of nurse-patient engagement but are not suitable for appraisal with traditional grading tools. Articles were not, therefore, excluded based on their quality. Rather consideration of their place in the evidence hierarchy was taken into account during data analysis, and an overall summary of the quality...
of empirical evidence, presented in section 4.2 of this paper, should be considered alongside the findings of this review.

3.5 Data extraction and analysis

SM independently extracted and analysed the studies, and discussed results with NM, GR and VT. A data extraction form was developed based on study characteristics (e.g. author, year, country, aims, methods, setting, sample). An initial coding framework was devised from the aims of the review questions (e.g. constituents/concepts of engagement, good/bad engagement, influencing factors). Data were extracted from the introduction, results and discussion sections of empirical research, and the complete article of theoretical and expert opinion pieces managed in the qualitative data analysis software package NVivo11 (QSR International, Cambridge, MA, USA). The coding framework was further developed and codes were then grouped into subthemes and themes and checked against the aims of the review and the content of the dataset (see Table 2 and 3 in results). Data derived from the influencing factors section of the data extraction form was further categorised according to the COM-B/TDF theoretical framework (Michie et al., 2014) to inform the development of interventions to improve engagement in practice. Data tables and visual maps were created to display the coded data so similarities and differences could be identified (Miles and Huberman, 2014). The results were synthesised into a conceptual model of engagement that comprehensively portrayed the findings.

3. Findings

4.1 Summary of search results

Figure 1 presents the PRISMA flow diagram of the systematic search. Of the 3,410 titles identified, 205 full texts were screened against the eligibility criteria. In total, 37 papers met the eligibility criteria and were included in the analysis (Cleary et al., 1999 and Cleary and Edwards, 1999 reported results of the same study and were analysed as one). The 37 papers were published between 1963 and 2017 and referred to research undertaken in the UK (n=13), the USA (n=8), Australia (n=5), Norway (n=3), Finland (n=2), Sweden (n=2), Canada (n=1), UK and Canada combined (n=1) and country unknown (n=2). Nineteen papers were qualitative, five quantitative and three mixed-methods. There was also one theoretical paper, one case study and ten expert opinion pieces. See Supplementary Table 2 for details of the characteristics of the included literature.

4.2 Quality appraisal

Overall, a majority of studies sampled only nurses (total of 386 nurse participants). Just eight studies included patients within their sample (total of 121 patient participants), suggesting that the patient voice requires greater representation within the engagement literature. The qualitative studies (n=19) and qualitative sections of the mixed-methods studies (n=3) were of varied quality. The major methodological limitation was the lack of researcher reflexivity (n=16), specifically the effect of researchers’ preconceptions on study design, data collection and data analysis. Only two studies (Awty et al., 2010; Björkdahl et al., 2010) considered their ontological and epistemological stance, and just four (Latvala and Janhonen, 1998; McAllister and McCrae, 2017; Morrison et al., 1996; Seergersen et al., 2016) connected their findings to a theoretical framework. Thus, it remained unclear to what extent most papers’ findings were affected by pre-existing preconceptions of engagement, or what “lens” the phenomenon was examined through. Sample sizes were generally large for qualitative research, ranging from six to 45 participants, improving the transferability of results. The quantitative studies (n=3) and quantitative sections of the mixed-methods studies (n=3) comprised designs that
were cross-sectional, observational and survey, often based on self-report, or observations by a single researcher. These designs may have introduced bias and were considered low-grade evidence. Quantitative data collection instruments could have been improved with measures of validity and reliability \((n=3)\).

4.3 Analysis

**Question 1.1 – How has nurse-patient therapeutic engagement been defined in the literature?**

The language used to describe engagement was non-specific, and varied throughout the papers, for example “caring” (Björkdahl et al., 2010; Chiovitti, 200; Talseth et al., 1999), “connectedness” (Heifner, 1993), “interaction” (Cleary et al., 1999a, 1999b; Hargreaves, 1969; Morrison et al., 1996), “being with” (Bowles et al., 2002), “helping methods” (Latvala and Janhonen, 1998), “encounters” (McAllister et al., 2004), and “working relationships” (Berg and Hallberg, 2000), with just three papers referring to engagement specifically as “therapeutic engagement” (Delaney et al., 2017; McAllister and McCrae, 2017; Pereira and Woollaston, 2007). There was no consensually agreed construct of engagement, which may be because only three papers based their understanding of engagement on a sound theory (McAllister and McCrae, 2017; Morrison et al., 1996; Sebergsen et al., 2016), and even those papers did not use the same theory. The only paper to use a theory directly related to nurse-patient engagement was Morrison and colleagues who used Peplau’s (1952) theory of interpersonal relations to operationalise Peplau’s work roles in the psychiatric setting.

Due to the lack of a sound theoretical underpinning, and use of non-specific terminology, what it meant to engage therapeutically was poorly articulated in the literature. Despite this, through coding and iterative comparison five conceptually distinct, but closely related constructs of engagement emerged: 1) Understanding the person and their experiences; 2) Facilitating growth; 3) Therapeutic use of self; 4) Choosing the right approach and 5) Authoritative vs. emotional containment. These constructs will be referred to as the “Principles of Engagement”. Table 2 summarises these principles and the following section describes each principle as per the evidence that supports it.

**Principle 1: Understanding the person and their experiences**

Understanding the person and their experiences refers to practices such as “person-centred care”, “identifying feelings and needs”, “deciphering patterns”, “exploration” and “listening”. This construct describes how the nurse, in conjunction with the patient, must decipher the function and meaning of the patient’s lived experience of illness. This required the combination of both technical and soft skills to build a holistic picture of the pathophysiological and psychosocial elements of a patient and their illness. It was important that nurses did not dismiss the patient’s own reality on account of them being acutely unwell – but rather acknowledged and validated patients’ symptoms (Bowers et al., 2010; Chiovitti, 2008; Delaney et al., 2017; Keltner, 1985; Latvala and Janhonen, 1998).

Practically nurses achieved this by deciphering patterns in patients’ thoughts, feelings or actions, for example, piecing together fragments of information that had similar or distinctive features (Bowers et al., 2010; Bray, 1999; Delaney et al., 2017; Hargreaves, 1969; Peplau, 1992), naming common themes that occurred in distorted speech, and feeding this information back to patients to clarify meaning and build a picture of the patient as a person (Bowles et al., 2002; Koivisto et al., 2004; Morrison et al., 1996). This required nurses to employ both active and passive listening skills, for example nurses gave patients time and space to express their feelings in a non-directive manner which ensured the patient’s voice was heard (Anderson, 1983; Berg and Hallberg, 2000, Björkdahl et al., 2010; Bowers et al., 2010, Bray, 1999; Delaney et al., 2017; Forchuk and Reynolds, 2001; Latvala and Janhonen, 1998). Nurses clarified their understanding of the observed problems, concerns, behaviours and reactions
which developed an understanding of the patient that was centred in the patient’s own reality (Andes and Shattell, 2006; Awty et al., 2010; Bowles, 2000; Bowles et al., 2002; Cameron et al., 2005; Chiovitti, 2008; Morrison et al., 1996; Peplau, 1992). This understanding set the scene for Principle 2.

**Principle 2: Facilitating growth**

Facilitating growth refers to practices such as “collaborative care”, “giving feedback”, “role-modelling”, “protecting”, and “general reassurance”. This construct describes empowering acts that enable patients to learn and test new skills to manage their illness, symptoms and behaviours, and gain independence in preparation for discharge back into the community. To do this, nurses took their understanding of the patient - gained through employing the techniques discussed in Principle 1 - further by developing a working relationship where they co-created a shared understanding of the patient’s experiences, illness and behaviours. Nurses used this shared understanding to provide appropriate biopsychosocial support, apply and test remedial measures to improve patients’ wellbeing and empower patients to use this understanding to make their own decisions about the best strategies to manage their illness. Nurses performed a facilitative role, where it was recognised that the patient ultimately knew the path to becoming well again. Nurses respected patients’ decisions and allowed them to set the pace of things, which resulted in personal growth and a new understanding of self (Anderson, 1983; Awty et al., 2010; Bowers et al., 2010; Chiovitti, 2008; Delaney et al., 2017; Forchuk and Reynolds, 2001; Hem and Heggen, 2003; Latvala and Janhonen, 1998; Mackay et al., 2005; McAllister et al., 2004; Morrison et al., 1996; Peplau, 1992; Sebergens et al., 2016).

To practically facilitate an understanding of self, nurses were open, honest and empathetic when feeding back what they noticed about patients, for example what the patient was physically doing, the content of their speech, and subtleties such as body language (Bowers et al., 2010; Chiovitti, 2008; Delaney et al., 2017; Hem and Heggen, 2003; Keltner, 1985; Koivisto et al., 2004; Morrison et al., 1996; Peplau, 1992; Roche et al., 2011; Talseth et al., 1999). As well as facilitating understanding, to catalyse behavioural change, nurses also modelled behaviours and actions they wanted to see in patients. For example keeping calm during heated interactions or being open in conversation to encourage openness in the patient (Chiovitti, 2005; Latvala and Janhonen, 1998; McAllister et al., 2004; Peplau, 1992).

For patients to achieve personal growth, they needed confidence to test new ways of being. To facilitate this, nurses created a safe environment, by making the patient feel protected and reassured. Protecting was described by such acts as being present, taking the initiative to talk to the patient, using relaxed body language, calm voices, good eye contact and engaging in caring acts such as making a patient a cup of tea (Berg and Hallberg, 2000; Koivisto et al., 2004; Talseth et al., 1999). General reassurance was conveyed by giving time, physical contact and responding to patients’ concerns in a timely manner (Bee et al., 2006; Björkdahl et al., 2010; Chiovitti, 2008; Cleary et al., 1999a, 1999b; Keltner, 1985; Latvala and Janhonen, 1998).

**Principle 3: Therapeutic use of self**

The therapeutic use of self refers to terms and practices such as “being there”, “conversing as people”, and “interpersonal communication”. This construct describes the nurse’s conscious use of his or her own personal characteristics as a tool to facilitate optimal experiences and outcomes for the patient. This is opposed to relying on technical tasks or routines (Berg and Hallberg, 2000; Björkdahl et al., 2010; Hem and Heggen, 2003; Koivisto et al., 2004).

The ambiguous practice of being there was commonly referred to within the literature. More specifically it was described as “peaceful communication” (Sebergens et al., 2016), or “silent co-
existing” (Björkdahl et al., 2010) where few words needed to be said. For example “sitting quietly with a cup of tea” (McAllister et al., 2004), or “sitting with a patient when they cry” (Talseth et al., 1999), “being with, rather than looking on” (Pereira and Woollaston, 2007) by “being present on the floor” (McAllister and McCrae, 2017). Though words may be used, the literature suggests communication also occurred non-verbally through gestures, an activity, or simply an intensified presence that did not allow the patient to disappear (Berg and Hallberg, 2000; Björkdahl et al., 2010; Bowers et al., 2010; Mackay et al., 2005; McAllister et al., 2004; McAllister and McCrae, 2017; Sebergsen et al., 2016). This unique practice facilitated the first two principles of engagement by giving patients the space to feel safe, let go, be themselves, and talk in their own time, without the pressure of expecting a conversation.

To use oneself as a therapeutic tool, it was necessary for nurses to combine two contradictory roles: that of health professional, with that of fellow human being (Cleary et al., 1999a, 1999b; Delaney et al., 2017; Hem and Heggen, 2003; McAllister et al., 2004; Peplau, 1992). Nurses combined professional skills such as being perceptive to subtle body language and non-verbal cues and validating these, alongside human skills such as self-awareness. Practically this required nurses to know and monitor their own vulnerabilities and emotions, whilst also being open with the patient about these vulnerabilities (Hem and Heggen, 2003; McAllister et al., 2004). This links with the engagement technique of role-modelling as when nurses allowed patients to see their vulnerabilities, this helped them recognise their similarities with others, rather than their differences. However, showing vulnerabilities often took an emotional toll on nurses and could be counterproductive. Nurses who were expert in these techniques were able to give enough of themselves to be useful to patients, but maintain a suitable level of distance so as not to burden themselves emotionally and retreat from engagement completely.

**Principle 4: Choosing the right approach**

Choosing the right approach refers to terms and practices such as “adapting roles” and “structured vs. informal interactions”. This construct describes how nurses skilfully adapt their approach and use a variety of engagement techniques, depending on the needs and behaviours of the individual patient (Bee et al., 2006; Delaney et al., 2017; Gurel, 1963; Hargreaves, 1969; Keltner, 1985; Koivisto et al., 2004; McAllister et al., 2004; Talseth et al., 1999; Whittington and McLaughlin, 2000). Seven distinct, but interrelated role types emerged from the literature: 1) Stranger (Morrison et al., 1996; Forchuk and Reynolds, 2001); 2) Sensitive (Berg and Hallberg, 2000; Björkdahl et al., 2010; Forchuk and Reynolds, 2001; McAllister and McCrae, 2017; Morrison et al., 1996; Sebergsen et al., 2016); 3) Collaborator (Berg and Hallberg, 2000; Latvala and Janhonen, 1998; McAllister and McCrae, 2017; Morrison et al., 1996); 4) Committed (McAllister and McCrae, 2017; Morrison et al., 1996); 5) Instrumental (Berg and Hallberg, 2000; McAllister and McCrae, 2017; Morrison et al., 1996); 6) Dominant (Berg and Hallberg, 2000; Latvala and Janhonen, 1998; Morrison et al., 1996) and 7) Container (Berg and Hallberg, 2000; Björkdahl et al., 2010; Cleary et al., 1999a, 1999b; Mackay et al., 2005). Supplementary Table 3 shows each role type and its corresponding engagement techniques.

Nurses performed different roles throughout the progression of the therapeutic relationship, for example a “stranger” or “sensitive” role may be performed early on in the relationship. Conversely, once trust and familiarity were built, a “collaborative” role may be performed (Delaney et al., 2014; Forchuk and Reynolds, 2001; Morrison et al., 1996). Nurses performed more than one role at a time, for example nurses showed sensitivity whilst also containing patients’ emotions or behaviours, and expertly switched between roles based on cues from the patient (Delaney et al., 2014).

Nurses interacted in two main ways: either through planned, formal sessions, or informal, *ad hoc* interactions. There was contention in the literature as to the therapeutic merit of each. Some studies argued that therapeutic engagement was any period of time that structured or formal therapy was
given to patients (Bee et al., 2006; Hargreaves, 1969; Whittington and McLaughlin, 2000). Conversely, other studies suggest that any nurse-patient interaction could be therapeutic, but also had the potential to be non-therapeutic if conducted in the wrong manner (Koivisto et al., 2004; McAllister and McCrae, 2017). Despite this inconsistency, it was generally agreed that formal engagement could be positively or negatively influenced by the informal interactions between nurse and patient (McAllister and McCrae, 2017; Whittington and McLaughlin, 2000).

One of the few studies that examined engagement from the patients’ perspective (McAllister and McCrae, 2017), found that patients often preferred shorter, informal interactions that were regularly available, which is important as other studies found that nurses were deterred from engaging with patients as they feared all interactions had to be specifically formulated conversations (Gurel, 1963). When considered alongside the fact that both patients and nurses said engagement was lacking on acute mental health wards (McAllister and McCrae, 2017), it is reasonable to suggest that nurses should prioritise skilfully conducted, informal engagements that use the techniques laid out in the Principles of Engagement.

**Principle 5: Authoritative vs. emotional containment**

Principle five refers to both containing patients’ emotions and containing patients by control, coercion or force (Berg and Hallberg; 2000; Björkdahl et al., 2010; Bowers et al., 2010; Bowles et al., 2002; Cameron et al., 2005; Cleary et al., 1999a, 1999b; Mackay et al., 2005). As containment was embedded in the context of an acute ward, inevitably, nurses had to be directive and coercive in some instances (Mackay et al., 2005). Patients discussed the practice of setting limits on behaviour as a necessary part of the nurse’s role (Cleary et al., 1999a, 1999b). Nurses recognised that patients who were acutely unwell could be very demanding, therefore placed limits up front on how long they could engage (Bowers et al., 2010). However only one study (Björkdahl et al., 2010) found containment by control, coercion or force to be a therapeutic act. This may be because it was conducted on a psychiatric intensive care unit, where the most violent and aggressive individuals are cared for, hence control, coercion and force were necessary to maintain the physical safety of some individuals.

The rest of the literature spoke of containment by control as a last resort, and on the whole, it was considered non-therapeutic. Emotional containment was an alternative form of containment evident in some studies (Berg and Hallberg, 2000; Björkdahl et al., 2010; Bowers et al., 2010; Bowles et al., 2002; Cameron et al., 2005; Cleary et al., 1999a, 1999b). This was considered a wholly therapeutic act where nurses contained either their own emotions to facilitate good engagement, (Bowers et al., 2010; Bowles et al., 2002), or helped patients to contain their own distressing emotions (Berg and Hallberg, 2000; Bowers et al., 2010; Bowles et al., 2002; Cameron et al., 2005). Effective emotional containment required nurses to perform the techniques described in Principle 2 of Engagement, and deliberate, reflect and allow patients space and time to think and talk about their experiences rather than hastily react to patients’ symptoms through containment methods such as seclusion or special observations (Bowers et al., 2010; Bowles et al., 2002; Cameron et al., 2005). It was thought that if emotional containment was the dominant ward philosophy, therapeutic engagement would flourish (Bowers et al., 2010; Bowles et al., 2002).

**Question 1.2 – What factors influence nurse-patient therapeutic engagement?**

The Principles of Engagement synthesise what nurses, and to a lesser extent, patients, said was ideal engagement practice. In reality, however, there were many factors that facilitated or impeded ideal practice. The following findings use the COM-B/TDF theoretical framework to organise influential factors into theoretical behavioural domains that can be targeted by an intervention. Twenty overarching influential factors emerged from the literature. These were grouped into four principal
categories: 1) organisational climate and culture; 2) nurses’ personal resources; 3) patients’ personal resources and 4) safety and infrastructure. Influences on engagement ranged across all 14 theoretical domains of the COM-B/TDF framework (Table 3; more detailed summary, with illustrative quotes from the literature available in Supplementary Table 4). Domains which were present in all principle categories were social influences and social and professional identify (often grouped together), environmental context and resources and emotion. Though domains are discussed here separately, they were not mutually exclusive and often overlapped.

Social influences and social and professional identity

Ward culture, that encompassed a shared vision or philosophy that formalised engagement, positively influenced engagement (Awty et al., 2010; Cameron et al., 2005; Cleary et al., 1999a, 1999b; Delaney et al., 2017; Gurel, 1963; Hem and Heggen, 2003; McAllister et al., 2004; Miller, 1964; Whittington and McLaughlin, 2000). Despite this, most papers described ward philosophies based on medical, control and risk models, with little evidence of a united approach to patient care (Awty et al., 2010; Bee et al., 2006; Bowles, 2000; Bowles, 2002; Bray, 1999; Cleary et al 1999a, 1999b; Delaney et al., 2017; Forchuk and Reynolds, 2001; Pereira and Woollaston, 2007).

Nurses’ experience and attitude towards engagement strongly influenced whether they did or did not engage. Nurses spoke of the need to feel valued by patients and were encouraged when they created meaningful, person-centred relationships that facilitated positive change (Andes and Shattell 2006; Awty et al., 2010; Gurel, 1969; Heifner, 1993). Conversely, if they failed to see positive changes in patients, nurses were more likely to possess impoverished views of their self-efficacy (Andes and Shattell 2006). This led to fewer nurse-patient interactions, which was problematic as regular patient contact encouraged future interactions (Bowers et al., 2010; Koivisto et al., 2004; McAllister and McCrae, 2017).

Environmental context and resources

Nurses wanted support from their organisations to promote and foster their therapeutic abilities, however a lack of resources, for example staff and bed shortages, bureaucracy (Awty et al., 2010; Gijbels, 1995; McCrae, 2014), and high patient turnover meant some nurses struggled to develop meaningful relations with patients, instead gravitating towards tasks promoted by the organisation such as paperwork (Berg et al., 2000; Hargreaves, 1969; McAllister and McCrae, 2017).

The physical layout of wards was often thought to hinder engagement. Nursing stations with locked doors and Plexiglas walls meant patients had to breach a physical barrier to engage with nurses. This created an “us versus them” environment. The size of many wards meant that patients could easily go unnoticed, and nurses used valuable time just locating patients, rather than engaging with them (Andes and Shattell 2006; Cleary et al., 1999a, 1999b; Gijbels, 1995; McAllister et al., 2004; McAllister and McCrae, 2017).

Emotion

Empathising and feeling connected to patients was a strong determinant of engagement (Awty et al., 2010; Bjorkdahl et al., 2010; Bowers et al., 2010; Bowles et al., 2002; Bray, 1999; Chiovitti, 2008; Delaney et al., 2017; Forchuk and Reynolds, 2001; Heifner, 1993; Hem and Heggen, 2003; Keltner, 1985; Latvala and Janhonen, 1998; McAllister et al., 2004; McAllister and McCrae, 2017; Morrison et al., 1996; Peplau, 1992; Pereira and Woollaston, 2007; Talseth et al., 1999). This was achieved when nurses disclosed personal experiences and bonded over commonalities with patients. However the system did not encourage this behaviour, instead favouring a more distant approach which left nurses feeling constrained by text-book ways of interacting (Berg and Hallberg, 2000; Delaney et al., 2017;
Hem and Heggen, 2003). Some nurses felt emotionally burdened by empathetic feelings, which led them to retreat to the psychological safety of office administration in defence against the emotional toll (Björkdahl et al., 201; Gurel, 1963; Hem and Heggen, 2003; McAllister and McCrae, 2017; Miller, 1964). Awareness of their own vulnerabilities, coupled with the ability to know when to disengage helped nurses overcome this (Chiovitti, 2008; Delaney et al., 2017; Koivisto et al., 2004; McAllister et al., 2004; Sebergsen et al., 2016).

The potential for physical violence towards nurses was considered high, therefore nurses would disengage, or focus their work on assessing risk rather than engagement. Patients also felt unsafe on the wards. Some opted to stay in their rooms due to fear of attack from other more unwell patients. This caused them to become invisible to nurses, so important opportunities for engagement were missed (Björkdahl et al., 2010; Bowles, 2000; Bray, 1999).

Other domains
Skills, knowledge and beliefs about capabilities emerged as further key influences on engagement. Some studies found that nurses possessed engagement skills (Awty et al., 2010; Mackay et al., 2005; Pereira and Woollaston, 2007; Whittington and McLaughlin, 2000), however sometimes lacked the confidence to engage (Anderson, 1983; Cleary et al 1999a, 1999b). Conversely, other studies reported nurses with inadequate engagement skills, thus diminishing the quality of nurse-patient interactions (Bray, 1999; McCrae, 2014; Roche et al., 2011). Importantly, nurses needed guidance and organisational support to facilitate engagement (McCrae, 2014), but felt this was not provided, despite being skilled to engage (Awty et al., 2010; McAllister and McCrae, 2017).

4. Discussion
The aim of this integrative review was to conceptualise engagement, and use the COM-B/TDF theoretical framework to explore the factors that influence engagement within acute mental health inpatient settings. The review identified five principles of engagement that apply to nurse-patient therapeutic engagement in acute inpatient settings. Engagement is conceptualised as a multidimensional construct, where many influential factors work together to enhance or impede it. A tentative conceptual model of engagement was produced (Figure 2). The model depicts how the five principles, i.e. the active phase of engagement, work within an integrated triad of listening, understanding and responding. However, both the organisational climate and culture and safety and physical infrastructure of a ward, alongside nurses’ and patients’ own personal resources may either positively or negatively influence engagement. Additionally, an individual’s actual or perceived capabilities, opportunities and motivation drive their ability to overcome the influential factors, and once engagement is initiated, continue to drive ongoing engagement.

Nursing scholars have long argued that as a profession, mental health nursing has focused too long on trying to explain engagement “in” the therapeutic relationship, when focus should be placed on what happens once engagement takes place (Browne, 2012; Happell, 2011). While the model and accompanying description of the Principles of Engagement are consistent with existing definitions of engagement (Cormack, 1976; Thomson and Hamilton, 2012), they expand on current knowledge by providing the necessary specificity to guide nurses in practice, and go some way in creating a shared language that articulates what happens when active engagement does occur. Thus the model can be used to inform the provision of quality engagement on acute mental health wards, and may help nurses gain recognition for their unique contribution to practice, by equipping them with language to identify the therapeutic work they do.
The importance of engagement has long been recognised (Sharac et al., 2010), with a recent push towards improving patient experience and the quality of care (Ross and Naylo, 2017). Despite this, people admitted to acute wards still receive suboptimal care compared to other patient groups (Mental Health Task Force, 2016; Wykes et al., 2018). Patients continuously report acute wards as frightening and non-therapeutic places, where poor quality engagement has negatively impacted their mental health (McAllister and McCrae, 2017; Mind, 2004, 2011; Schizophrenia Commission, 2012). The literature shows similarities in the significance that both nurses and patients place on high quality engagement (Moreno-Poyato et al., 2016), yet also implies divergence between patients’ expectations of engagement, and what they receive in clinical practice. For example, this review found patients valued when nurses respected their decisions about their own care, however contemporary literature still indicates that patients’ opinions are not always fully considered and paternalistic modes of care still dominate (McCann et al., 2008). It is imperative that measures are taken to address this disparity, and improve the quality of engagement, particularly as service-user led research has found the quality of nurse-patient interactions the most important aspect of care (Gilburt et al., 2010). The review describes engagement in such a way that addresses the challenge of engagement’s complexity, thus making it easier to identify areas where poor quality engagement may occur. Interventions can then be targeted to improve those areas.

As previously discussed, some notable initiatives to improve engagement have been implemented, predominantly based around Protected Engagement Time (as described in the introduction) (e.g. Dodd et al., 2017; Edwards et al., 2008; Nolan et al., 2011; Molin et al., 2018; Thomson and Hamilton, 2012). Some studies found PET increased opportunities for engagement (Dodd et al., 2017; Edwards et al., 2008; Nolan et al., 2011), yet, to date, no intervention has been found that improves either the quality of engagement, or patients’ satisfaction of care (Dodd et al., 2017; Edwards et al., 2008; Molin et al., 2018). Impacts on the quality of care were found to depend on the capability, opportunity and motivation of nurses to engage (Dodd et al., 2017; Molin et al., 2018). However, PET emerged from ward practice (Nolan et al., 2016), rather than being theoretically informed, thus opportunities to address these essential behavioural targets may have been missed. By mapping specific nurse-patient engagement behaviours to the COM-B/TDF theoretical framework (Cane et al., 2012; Michie et al., 2015) the review addresses this issue, and can be used to develop interventions that target nurses’ and patients’ capabilities, opportunities and motivations to engage.

Table 3 demonstrates the complexity of the behavioural context of engagement. To unpick this complexity Michie et al. (2014) recommend considering – as a pragmatic approach – the likely impact, spill over, and ease of implementation and measurement to identify behavioural targets. As engagement works within a system of many interdependent behaviours, prioritising two or three key behaviours is encouraged (Atkins et al., 2017). Applying these criteria to Table 3 suggests three promising behavioural domains, which if targeted, have potential to improve nurses’ capability, opportunity and motivation (COM-B) to engage:

1. C: Knowledge (e.g. educating nurses about the Principles of Engagement)
2. O: Environmental context and resources (e.g. environmental and procedural restructuring)
3. M: Emotion (e.g. improving clinical supervision)

Interventions may best be targeted to modify nurses’ behaviour, as many patient behaviours were due to being acutely unwell, and have potential to change in response to a change in nurses’ behaviour. These three behavioural domains will address both organisational and personal aspects of engagement, which nursing scholars argue is imperative to the success of engagement (Lawes et al., 2018; McKeown, 2015; McKeown et al., 2017). Although clinical supervision is a well-established practice within mental health nursing its success is dependent on sufficient support systems (Bifarin and Stonehouse, 2017), and the personality and skill mix of the people involved (Ali and Panther, 2008). Furthermore, organisational change such as environmental and procedural restructuring may appear relatively easy to implement, however is frequently imposed through top-down approaches.
that do not take account the views of frontline staff (Laker et al., 2014). This often results in poor uptake of change innovations (Coetzee and Stanz 2007).

The barriers mentioned above require a new and novel approach if we want to truly see behaviours change and engagement improve. Although the components of the conceptual model and the behavioural targets have been developed from peer-reviewed literature, and represent a good starting point for intervention development, they will require further iterations through collaborative research methods. This is particularly important as the main limitation of this review is that the patient voice was not equally represented, with a majority of studies only considering engagement from the nurses’ perspective. Previous research has shown divergence between both patients’ and nurses’ and frontline and managerial staffs’ expectations of care (Laker et al., 2014; Hopkins et al., 2009; McAllister and McCrae, 2017). Moving forward we aim to further develop the model and use the results of this review, alongside Experience-based Co-design (Bate and Robert, 2005), to bring patients, carers and both frontline and managerial staff together to co-design an intervention to improve engagement on an acute mental health ward.

5. Conclusions

People with mental health problems admitted to acute wards could benefit from improved engagement if current evidence and theory can be utilised in a way that moves the field forward in truly understanding the process of engagement, and how to effectively target interventions to positively influence nurse and patient behaviours. The use of a shared conceptualisation of engagement could enable more rapid advances in the development of approaches to improve engagement in practice. Commissioners and policymakers could use the shared language to set standards, which engagement could be evaluated against. The formulation of a holistic understanding of the essential components of engagement may make it easier for nurses to recognise what they do, and to do it well. The model can be used to generate testable hypotheses about how and where to target behavioural change interventions. The Principles of Engagement must be reflected in the development of interventions to improve engagement, and the co-design process must involve patients, carers and staff throughout.

Author contribution:

What is already known about the topic?

- Although often lacking within acute mental health inpatient environments, it is well known that nurse-patient interactions which are therapeutic in nature improve service user outcomes and staff morale
- The therapeutic role of mental health nurses is typically conceptualised in terms of dichotomous approaches which undermine therapeutic potential
- Therapeutic engagement is impeded by conceptual ambiguity and operationalised through individual nurses’ experience, choices and education

What this paper adds?

- This is the first study to combine behaviour change theory with empirical evidence to enhance understanding of factors that influence nurse-patient therapeutic engagement and how to effectively target interventions to positively influence nurse and patient behaviours
- Constituents of nurse-patient therapeutic engagement and their influencing factors are integrated into a conceptual model
This model offers an accessible framework that can inform how nurses, commissioners and policy makers set standards and evaluate engagement.

References


Browne, G., Cashin, A. 2012. The therapeutic relationship and Mental Health Nursing: it is time to articulate what we do! J Psychiatr Ment Health Nurs. 19 (0), 839-843. DOI: 10.1111/j.13652850.2012.01944.x


Clark, L. 2012. The Therapeutic relationship and Mental Health Nursing: it is time to articulate what we do! J Psychiatr Ment Health Nurs. 19 (9), 839-843. DOI: 10.1111/j.1365-2850.2012.01944.x


Glass V. 2017. Specialising in mental health. Nursing in Practice


The King's Fund 2005. The acute care collaborative. Partnership CSI.


Figure 1 PRISMA flow diagram of search results

Additional records identified through other sources (e.g. expert recommendation, ResearchGate, reviews) (n = 1)

Additional records identified via hand searching reference lists

Records identified through database searching

Records after duplicates

Record abstracts screened

Full-text articles assessed for eligibility

Studies included in review (n = 37)

Records excluded

Full-text articles excluded and reason for exclusion (n = 173)

Not relevant to nurse patient therapeutic engagement: n = 50

Does not explore concept or constituents of engagement: n = 29

Unable to access: n = 2

Secondary data analysis e.g. reviews: n = 18

Not peer reviewed e.g. book chapter/dissertation: n = 14

Exploration of therapeutic engagement not as a focus: n = 1
Figure 2 – Tentative conceptual model of nurse-patient therapeutic engagement on acute inpatient wards
Table 1 The COM-B model and TDF domains and definitions (Michie et al., 2014)

<table>
<thead>
<tr>
<th>COM-B component</th>
<th>TDF domains</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capability</td>
<td>Skills</td>
<td>An ability of or proficiency acquired through practice (skills, skills development, competence, ability, practice, skill assessment)</td>
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<tr>
<td></td>
<td>Knowledge</td>
<td>An awareness of the existence of something (including knowledge of condition/scientific rationale, procedural knowledge, knowledge of task environment)</td>
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<td></td>
<td>Memory, attention, decision</td>
<td>The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives (memory, attention, attention control, decision making, cognitive overload/tiredness)</td>
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<td></td>
<td>Behavioural regulation</td>
<td>Anything aimed at managing or changing objectively observed or measured actions (self-monitoring, breaking habit, action planning)</td>
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<tr>
<td>Opportunity</td>
<td>Social influences</td>
<td>Those interpersonal processes that can cause individuals to change their thoughts, feeling, or behaviours (social pressure, social norms, group conformity, social comparisons, groups norms, social support, power, intergroup conflict, alienation, group identity, modelling)</td>
</tr>
<tr>
<td></td>
<td>Environment context and resources</td>
<td>Any circumstance of a person’s situation or environment that discourages or encourages the development of skills and abilities, independence, social competence, and adaptive behaviour (environmental stressors, resources/material resources, organisational culture/climate, salient events/critical incidents, person x environment interaction, barriers and facilitators)</td>
</tr>
<tr>
<td>Motivation</td>
<td>Beliefs about capabilities</td>
<td>Acceptance of the truth, reality, or validity about an ability, talent, or facility that a person can put to constructive use (self-confident, perceived competence, self-efficacy, perceived behavioural control, beliefs, self-esteem, empowerment, professional confidence)</td>
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<tr>
<td></td>
<td>Beliefs about consequences</td>
<td>Acceptance of the truth, reality, or validity about outcomes of a behaviour in a given situation (beliefs, outcome expectancies, characteristics of outcome expectancies, anticipated regret, consequents)</td>
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<td></td>
<td>Social/professional identity</td>
<td>A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting (professional identity, professional role, social identity, identity, professional boundaries, professional confidence, group identity, leadership, organisational commitment)</td>
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<tr>
<td></td>
<td>Optimism</td>
<td>The confidence that things will happen for the best or that desired goals will be attained (optimism, pessimism, unrealistic optimism, identity)</td>
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<td></td>
<td>Intentions</td>
<td>A conscious decision to perform a behaviour or a resolve to act in a certain way (stability of intentions, stages of change model, trans theoretical model and stages of change)</td>
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<td></td>
<td>Goals</td>
<td>Mental representations of outcomes or end states that an individual wants to achieve (goals (distal/proximal), goal priority, goal/ target setting, goals (autonomous/controlled), action planning, implementation intention)</td>
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<td></td>
<td>Reinforcement</td>
<td>Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus (rewards (proximal/distal, valued/not values, probable/improbable), incentives, punishment, consequents, reinforcement, contingencies, sanctions)</td>
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<td></td>
<td>Emotion</td>
<td>A complex reaction pattern, involving experiential, behavioural, and physiological elements, by which the individual attempts to deal with a personally significant matter or event (fear, anxiety, affect, stress, depression, positive and negative affect, burn-out)</td>
</tr>
</tbody>
</table>
### Table 2 Therapeutic engagement on acute mental health wards

<table>
<thead>
<tr>
<th>Principle of engagement</th>
<th>Type of engagement (Techniques)</th>
<th>Relevant research/evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principle 1: Understanding the person and their experiences</td>
<td>Person-centred care</td>
<td>Anderson et al., 1983, Awty et al., 2010, Cleary et al., 1999a/b; Delaney et al., 2017, Hem and Heggen, 2003, Koivisto et al., 2004, Talseth et al., 1999</td>
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<tr>
<td></td>
<td>Respecting the patient’s decisions</td>
<td>Anderson et al., 1983, Awty et al., 2010, Hem and Heggen, 2003</td>
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<td></td>
<td>Protecting</td>
<td>Berg and Hallberg, 2000, Koivisto et al., 2004, Talseth et al., 1999</td>
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<td></td>
<td>Interpersonal communication</td>
<td>Forchuk and Reynolds, 2001, Keltner, 1985</td>
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<tr>
<td>Principle categories</td>
<td>Overarching factors</td>
<td>COM-B</td>
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<tr>
<td>Organisational climate and culture</td>
<td>Ward philosophy</td>
<td>Opportunity</td>
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<td>Motivation</td>
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<td>Ward milieu</td>
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<td>Opportunity</td>
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<td>Motivation</td>
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<td>Patient turnover</td>
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<td>Role support</td>
<td>Capability</td>
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<td>Workload</td>
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<td>Overlapping nurse and patient personal resources</td>
<td>Empathy and connectedness</td>
<td>Motivation</td>
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<td>Experiences and attitudes</td>
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<td>Emotional toll</td>
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<td>Behavioural regulation</td>
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<td>Trust</td>
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<td>Regular contact</td>
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<td>Staff characteristics</td>
<td>Opportunity</td>
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<td>Patients' personal resources</td>
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<td>Capability</td>
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<td>Ward layout</td>
<td>Opportunity</td>
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