The effectiveness of a brief telephone-based intervention to improve fatigue in prostate cancer: a feasibility study

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Abstract

Background
Cancer-related fatigue is a significant clinical symptom commonly experienced by men during and following treatment for prostate cancer.

Aim
To evaluate the effectiveness of a brief telephone-based intervention for fatigue delivered by Specialist Nurses at Prostate Cancer UK.

Methods
A randomised control trial design was adopted. The intervention comprised psychological support, self-care education and goal setting for behaviour change. It was delivered using motivational interviewing via four telephone calls over 10 weeks.

Results
76 men were recruited. Fatigue in study groups was equivalent at baseline. Post-trial between group analysis showed the intervention group reported improved global fatigue (p=.005), fatigue severity (p=.001), fatigue management ( coping with fatigue in daily life) (p=.031), social functioning (p=.001), fatigue symptoms (p=.018).

Conclusions
The findings show the effectiveness of a brief telephone intervention at improving fatigue, fatigue management and social functioning. This represents a sustainable model of intervention delivery which is acceptable to men with prostate cancer and is effective in producing positive outcomes.

Background
- Men with prostate cancer can experience severe fatigue, particularly if they are receiving hormone therapy.
- Limited research has been conducted to evaluate fatigue interventions in this patient group [1].
- In breast cancer, where similarly high levels of fatigue have been reported, a number of interventions have been developed and tested [2, 3, 4, 5].
- Research in prostate cancer shows the benefit of exercise in reducing fatigue [6, 7] as well as psychosocial approaches and educational self-management techniques [8, 1].
- To current study aimed to evaluate the effectiveness of a brief telephone-based intervention for fatigue, delivered by Specialist Nurses at Prostate Cancer UK. It was hoped that through better management of fatigue men with prostate cancer would be more able to lead active lives and engage in desired activities.

Methods

Design and participants
A randomised control trial design was used. Participants were eligible to take part in the trial if they had a diagnosis of prostate cancer and were experiencing fatigue.

Procedure
Participants were recruited from:
- support groups around the UK
- men calling Prostate Cancer UK’s helpline
- prostate Cancer UK’s website advertised the trial.

Participants were randomly allocated to one of two groups:
- The intervention group received the fatigue intervention which comprised psychological support, self-care education and goal setting for behaviour change. It was delivered using motivational interviewing via four telephone calls over 10 weeks.
- The waiting-list control group received no advice or support for their fatigue.

All participants completed questionnaires pre and post-trial for comparison.

Materials
- Established measures were used to gather data.

Analysis strategy
- Analysis of between group comparisons consisted of Mann-Whitney Tests.
- Analysis of within group comparisons consisted of Wilcoxon Signed Rank Tests.

Results

- A sample of 76 men agreed to take part in the trial by returning a consent form.
- Mean age was 68 years old.
- The majority of the sample was White British (n=69; 93%).
- During the trial 152 calls were made to the 38 men in the intervention group.

Between group analyses demonstrated improvements for the intervention group in:
- global fatigue
- fatigue severity
- fatigue management
- fatigue symptoms
- social functioning.

There were no differences between the groups at baseline.

Table 1. Significant post-trial between group comparisons

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean rank</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global fatigue</td>
<td>41.0</td>
<td>27.6</td>
</tr>
<tr>
<td>Fatigue severity</td>
<td>44.2</td>
<td>28.0</td>
</tr>
<tr>
<td>Fatigue management</td>
<td>28.6</td>
<td>38.9</td>
</tr>
<tr>
<td>Social functioning</td>
<td>40.0</td>
<td>31.0</td>
</tr>
<tr>
<td>Fatigue symptoms</td>
<td>41.8</td>
<td>30.3</td>
</tr>
</tbody>
</table>

Conclusions

The findings show the effectiveness of a brief telephone intervention at improving fatigue, fatigue management and social functioning when compared to usual care. This research addresses the inadequacies that exist in caring for men with prostate cancer-related fatigue by providing men with effective support and advice.

This represents a model that allows men to better manage fatigue and be more able to lead active lives and engage in desired activities and pastimes. It is a sustainable form of delivery which is acceptable to men with prostate cancer. There is potential to apply this approach to fatigue in other cancer types, and other areas of cancer care such as pain management, healthy diet, weight loss and physical activity.

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