

A study to assess the effect of education about radiotherapy on distress among cancer patients receiving radiotherapy

Objective

In a course of acute illness and hospitalisation, patients face many threatening events and unfamiliar procedures can be a source of emotional distress to the patients. The cause of this distress could include the fear of the unknown and/or the patient's belief that the event is potentially hazardous in terms of pain or discomfort, embarrassment, and/or adverse events. Rising healthcare costs, a shortage of nurses, and the multiple demands on staff nurses make it imperative to demonstrate that cancer education programs are useful and address patients' information needs.

The primary aim of this study was to identify distress experienced by patients undergoing curative radiotherapy treatment for the first time at Central West Cancer Care Centre (CWCCC), Orange. Furthermore, this study aimed to determine if nurse education to patients after simulation will better alleviate the distress experienced by patients.

Methods

This prospective one-group before and after study design recruited 39 participants who had been prescribed curative radiotherapy treatment protocol for the first time as a treatment modality for their cancer using convenience sampling.

Distress was measured by using two self-administered tools, the Distress Thermometer (DT) and the Hospital Anxiety and Depression Scale (HADS), on two separate occasions (pre and post intervention). Intervention in the form of nurse education on radiotherapy was done after the first set of data and demographic variables were collected. Changes in distress was assessed by repeating the administration of the same questionnaires at the start of radiotherapy treatments, with Wilcoxon signed rank tests used to assess significance.

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Robin is a clinical nurse specialist in radiation oncology at Orange Health Services in the Western NSW Local Health District. His research focuses on the impact of education about radiotherapy on distress among cancer patients undergoing treatment.

By advocating for nursing-led education strategies and the measurement of distress and anxiety, Robin aims to enhance patient care and improve the overall patient experience during their radiotherapy journey.

Results

Distress Thermometer scores dropped from a mean of 4.44 (\pm 2.42) to 2.36 (\pm 0.4), a change that was significant ($p<.00001$). Anxiety scores from the HADS significantly dropped from 6.69 (\pm 2.31) to 4.62 (\pm 1.9) ($p<.00001$), as did HADS depression scores going from 4.08 (\pm 2.97) to 2.77 (\pm 2.4), ($p<.00001$). Demographic variables demonstrated no difference across DT scores, with significant reductions in DT scores regardless of age, gender, education levels, distance to treatment or numbers of radiotherapy sessions.

Conclusion

This study has found that nursing education help alleviate the degree of anxiety and emotional distress among radiotherapy participants

after receiving nursing education on radiotherapy. Decreases in distress were significant across all demographic measures, demonstrating the value in nursing education for this group of patients. Depression scores also decreased, however it should be noted the number of patients with depression was very low ($n=5$).

Radiotherapy services should continue to measure distress and anxiety, and incorporate nursing-led education strategies early in the patient's radiotherapy journey to improve patient care and patient experience.

Keywords

Radiotherapy, nursing education, distress, anxiety, rural