

Radiation Therapy Anxiety among Cancer Patients

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Introduction

All patients do have some emotional reactions before going for a new treatment due to uncertainty about the procedure. Especially for Cancer patients the diagnosis of cancer itself is a greater stress. The treatment of choice either Radiation therapy or Chemotherapy further aggravates and creates terrifying images in the patient. Most patients who are about to undergo radiation therapy have fear including fear of the unknown, of pain, of being burned, loss of job, causing sterility, of cancer, of sickness, or vomiting, increase burden on family members and the threat of permanent disability. This further aggravates the emotional strain on the patient, produced by the radiation therapy. Anxiety may decrease if patient views radiation therapy as having positive results such as curing the cancer; relieving the discomfort or prolonging the life. In contrast anxiety usually increases when the underlying pathologic condition is perceived to be life threatening.

Dr. Larry's Couch, Psychologist (1999) stated that patients receiving radiation will be faced with a number of stressors, emotionally and socially. He recommended that the radiation team members should provide the patient with orientation that consists of a complete visit to the radiation unit settings, as

well as meeting the health team members, seeing the radiation machines and receiving a video presentation of how they work which will give better emotional and physical relaxation. In India there are limited studies related to radiation therapy and its interventions.

Statement of the Problem

A study to assess the effectiveness of orientation program on anxiety of patients waiting for radiation therapy and their behavioral response during radiation therapy in a selected hospital at Trichy.

Aim of the Study

The aim of the study was to determine whether orientation program makes any difference in the anxiety of patients waiting for radiation therapy and their behavioral response during the treatment compared to patients without any orientation.

Objectives

- To assess and compare the level of anxiety among experimental group

before and after orientation program

- To assess and compare the level of anxiety among control group two days before and on the day of radiation therapy.
- To assess and compare the behavioral response among the experimental and control groups during the radiation therapy.

Hypothesis

H_1 : There will be significant difference between the mean anxiety score of experimental and control group after intervention.

H_2 : There will be significant difference between the behavioral response of experimental and control group during the radiation therapy.

Conceptual Framework

Calista Roy's Adoption model (1966) was used in this study to illustrate the patient's adaptation to new cancer treatment by providing the orientation program.

Research Methodology

An evaluative approach was used in this study to assess the effectiveness of orientation program on radiation therapy anxiety. The study was conducted in a radiation oncology department of a selected private hospital at Trichy. A non probability convenient sampling of 50 patients who were waiting for radiation therapy for the first time was taken. Radiation therapy anxiety scale (4 point) was used to measure the anxiety in three areas (state, Radiation therapy and Radiation therapy effects) and a behavioral assessment checklist was used to assess the patient's response during radiation therapy. The reliability of the tool was established by Karl Pearson (0.8) and inter rater method (0.9) respectively.

Research Design

A quasi - experimental pre- test and post test control - group design was used to test the effectiveness of orientation program on radiation therapy anxiety.

Experimental group

O_1 X..... O_2

Control group

O_1 O_2

O_1 - Assessment of anxiety two days before radiation therapy for the experimental and control group.

O_2 - Assessment of anxiety on the day of radiation therapy for the experimental and control group.

X - Information through orientation program including a visit to respective radiation units like Planning room, Monitoring room, Radiation treatment room and Outpatient room where patients were explained about the radiation unit settings, procedure, duration of treatment and showed the radiation machine, monitoring devices, finally the patients were made to interact with the health team members.

Data Collection Method

The data was collected for a period of one month. Using interview technique two days before the treatment the anxiety level of the patients waiting for radiation therapy was assessed. The experimental groups were received orientation program on the same day. The patient's anxiety level was again assessed on the day of radiation therapy before they undergone the treatment. During the radiation therapy the patient's behavioral response was assessed using a behavior assessment checklist.

Data Analysis and Interpretation

The data obtained was analyzed using descriptive and inferential statistics.

Figure I: Mean Score Percentage of Experimental Group in Three Areas of Anxiety before and after Intervention

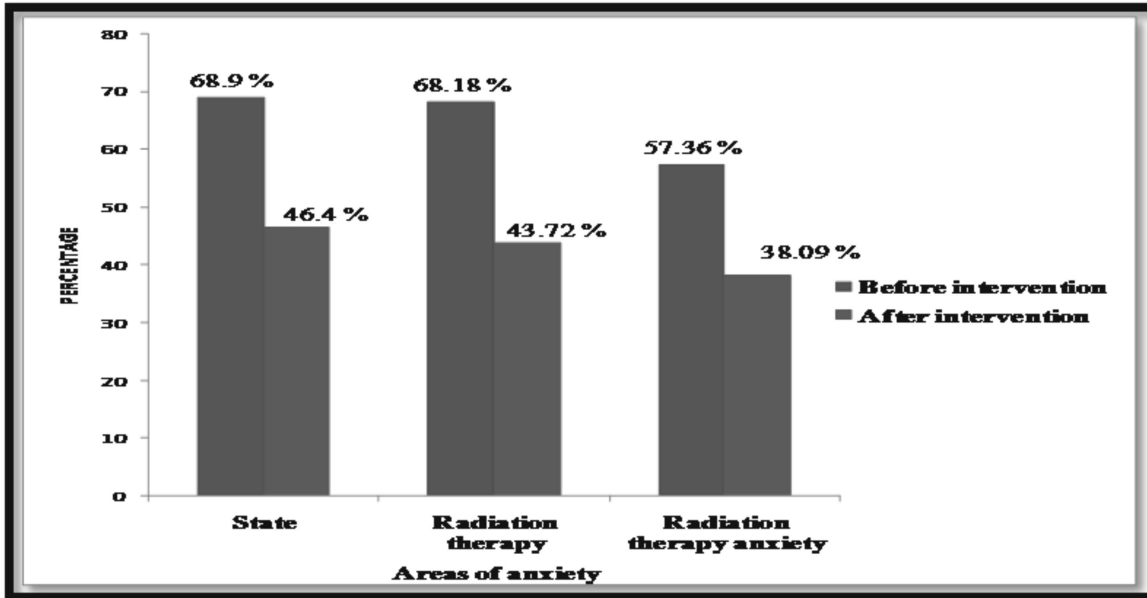
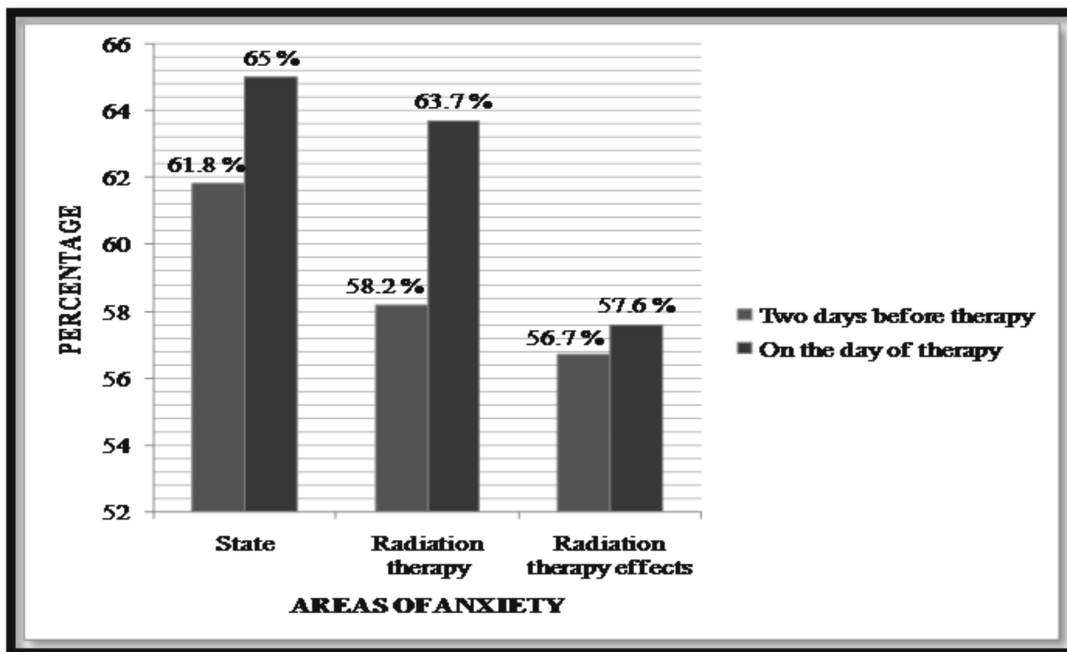


Figure II: Mean Score Percentage of Control Group in Three Areas of Anxiety Two Days before and on the Day of Radiation Therapy



Behavioral response	Experimental group		Control group		Mean difference	Unpaired "t" test	
	Mean score	SD	Mean score	SD		P < 0.05	df - 48
Positive response	4.56	1.12	2.44	0.712	2.12		7.98*
Negative response	3.84	1.54	6.32	1.70	2.48		5.39*

Interpretation

Mean Anxiety Score of Experimental Group before and after Intervention in Different Areas

In the experimental group two days before radiation therapy, the anxiety mean score ranged from 57% to 68%. On the day of radiation therapy the anxiety mean score ranged from 38% to 46%. The least anxiety mean score was shown in the area of radiation therapy effects (38%). After intervention there was statistically significant reduction of anxiety mean score in all the three areas of anxiety on radiation therapy showed the effectiveness of orientation program

Mean Anxiety Score of Control Group in Two Days before and on the Day of Radiation Therapy

On the day of radiation therapy the anxiety mean score increased ranging from (57% to 65%). The highest anxiety mean score was shown in the area of state anxiety (65%), radiation therapy (63%) and in the radiation therapy effects (57%). Statistically there was no significant difference among the control group two days before and on the day of radiation therapy.

Mean Score of Behavioural Response during the Radiation Therapy

After the intervention the experimental group showed more positive behavior (4.56) towards the therapy compared to the control group where the negative behavior (6.32) towards the treatment was predominant.

Conclusion

The study concludes that the patients who are waiting for radiation therapy have greater level of anxiety. Those who received the orientation program showed significant reduction in the level of anxiety compared to those who were not received any orientation program. Patients said that the information given through the orientation program and

seeing the radiation unit settings prior to the procedure was very useful for them to clarify their doubts and also it gave the exact idea about the procedure.

Nursing Implications

1. Nursing curriculum should emphasis the students on the psychological intervention in reducing the anxiety on radiation therapy. The orientation program is a simple technique to administer, offers firsthand gives experience to the patients regarding the therapy and also improves the interaction between the staff and the patient.
2. Nursing personnel working in hospital should arrange for such orientation Sessions prior to simulation either in group or individually, which will helps to improve the holistic nursing care approach.

Recommendations

1. A study can be conducted among patients undergoing various treatments for cancer.
2. A comparative study can be conducted by using different interventions with orientation program.
3. A study can be conducted among cancer patients to find the various learning/informational needs about radiation therapy.
4. A similar study can be conducted for the patients undergoing various diagnostic procedures for cancer.

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