EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND ATTITUDE REGARDING RADIATION THERAPY AMONG PATIENTS WITH CANCER RECEIVING RADIATION THERAPY

By

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A DISSERTATION SUBMITTED TO THE TAMILNADU Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING

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CERTIFICATE

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TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ethical Committee of Dr. G. Sakunthala College of Nursing has discussed with its members the topic "A Study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding radiation therapy among patients with cancer receiving radiation therapy" opted by Mrs. C. FRANSISCA BRINDA and its implication on study objects for her thesis for M.Sc. Nursing programme and the committee passed clearance for the same topic for her to persue.

Prof. Mrs. SANTHAM SWEETROSE, ***M.Sc.(N), Ph.D***

ETHICAL COMMITTEE

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"I will guide thee with mine eyes"

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ABSTRACT

A pre experimental study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding radiation therapy among patients with cancer receiving radiation therapy at Dr.G.V.N.Cancer Cure Centre, Trichy – 2010-2011

OBJECTIVES OF THE STUDY:

1. To assess the level of knowledge regarding radiation therapy among patients with cancer receiving radiation therapy admitted in Dr.G.V.N Cancer Cure center, Trichy.

2. To assess the level of attitude regarding radiation therapy among patients with cancer receiving radiation therapy admitted in Dr.G.V.N Cancer Cure Centre, Trichy.

3. To assess the effectiveness of structured teaching programme on knowledge and attitude regarding radiation therapy among patients with cancer receiving radiation therapy admitted in Dr.G.V.N cancer cure center, Trichy.

4. To find out the relationship between knowledge and attitude regarding radiation therapy among patients with cancer receiving radiation therapy admitted in Dr.G.V.N Cancer Cure Centre, Trichy.

5. To find out the association between selected demographic variables such as (Age, Sex, Educational status, clinical

variables such as Duration of illness, Duration of treatment) and knowledge regarding radiation therapy.

6. To find out the association between selected demographic variables such as (Age, Sex, Educational status, clinical variables such as Duration of illness, Duration of treatment) and attitude regarding radiation therapy.

Conceptual frame work : Sister Callista Roy adaption model.

Research design : A pre experimental design, one group pre test and post test.

0_1= pre test assessment of knowledge and attitude.

X=Intervention.

0_2 = post test assessment of knowledge and attitude.

Population : Newly diagnosed patients with cancer who were admitted at Dr GVN Cancer cure center was selected as the population of the study. Nearly 5 cancer patients were admitted in the in-patient unit per day.

Sample size : 40 newly diagnosed patients with cancer were planned to have radiation therapy.

Sampling	:	Convenience sampling technique. Each day 3 cancer patients who met the inclusion criteria were selected for the study.
Setting	:	Dr. GVN cancer cure centre Trichy.
Tool	:	Tool - I A Structured knowledge questionnaire was used to assess the knowledge of cancer patients on radiation therapy by a prepared multiple-choice questionnaire. TOOL-2A structured attitude was a likert attitude scale, which 5 items were positive attitude and the remaining 5 items were negative attitude.
Data collection	:	Each day three samples were selected for interview. A pre test was conducted by using structured interview schedule that consisted of part-1 demographic variable and part-II multiple choice questionnaire regarding radiation therapy. After the pre test, they were given structured teaching programme for about 45 minutes using digital video disc. The structured teaching programme contained information regarding radiation therapy

that includes general information meaning of radiation therapy types, dose care to be taken before radiation therapy after radiation therapy, care about nutrition, skin, sexuality, fatigue, reduce fear &anxiety, treatment side effects and its management.

After seven days, post test was conducted using the same questionnaire. The same procedure was followed to all groups of cancer patients.

Data analysis : Descriptive statistics Number, Percentage mean, standard deviation, and inferential statistics Paired t- test Chi-Square test were used to test the research hypotheses.

MAJOR FINDINGS OF THE STUDY:

1. Majority of the patients with cancer receiving radiation therapy had adequate knowledge. None of the subjects had inadequate knowledge.

2. Majority of the patients with cancer receiving radiation therapy had positive attitude none of the subjects had negative attitude.

3. There was a significant relationship between the posttest knowledge and posttest attitude regarding radiation therapy among patients with cancer.

4. There was no significant association between selected demographic variables such as (Age, Sex, Educational status, clinical variables such as Duration of illness, Duration of treatment) and knowledge regarding radiation therapy.

5. There was no significant association between selected demographic variables such as (Age, Sex, Educational status, clinical variables such as Duration of illness, Duration of treatment) and attitude regarding radiation therapy.

CONCLUSION

1. A successful way to reach out positive health is by organizing health education programme to the needy.

2. The study has given clues that majority of the cancer patients had inadequate knowledge and attitude regarding radiation therapy which guided the investigator to perform a structured teaching programme about the various aspects of general information on cancer, radiation therapy, treatment modalities and prevention of sideeffects and its management.

CHAPTER – 1
INTRODUCTION

BACKGROUND OF THE STUDY

The radiation therapy is the use of high energy rays to treat cancer. Approximately 60% of oncology patients will receive radiation therapy at some point in the cancer treatment continuum (David Sutton, 2003). Appearance is said to be enormously important to the self image of every person. Self image has been regarded as a significant component of beauty, sexuality, personality. Park K. 2000 stated that cancer is one among the leading causes of death in the world. Cancer found is between age 30 and 50 years. Incidence sharply increases after thirty years. Cancer is any of a group of more than 200 diseases with symptoms of unrestrained group of cells in one of the body organs or tissues.

Cancer can be considered a chronic disease requiring ongoing management, rather than a terminal illness, which consists of more than 100 different conditions characterized by uncontrolled growth and spread of abnormal cells.

The malignant cell is able to invade the surrounding tissues and regional lymph nodes. Metastasis is the secondary growth of the primary cancer in another organ. The cancer cell migrates through a series of steps to another area of the body. This is the reason that cancer cannot always be cured by surgical removal alone.

Cancer has a tremendous economic and sociological impact that influences people in their lives physical, emotional, spiritual, cognitive, social and economic.

Currently quality of life issues are salient considerations in managing disease and assessing treatment outcome. In recent decades, psychological factors have been added to known physical factors involved in the experience of cancer and quality of life. Quality of life is affected not only by the far reaching and lasting effects of cancer but also by the client variables of self esteem, learned resource fullness and social support (Leli. W. Pedro, 2003).

The discovery of x-ray and gamma rays by Roentgen and Curie was being used to treat a variety of neoplasm. Radiation is the movement of energy through a space, causing damage or changes to the cells, and healthy cells are minimally affected.

Radiations therapy is a main cancer treatment that can be used alone or in combination with other therapies. Radiobiology in which DNA double strand breaks (DSB) are most important lesions caused by radiation two DSB result in cell kill at the time of cell division, mutation or carcinogenesis.6.9 GY to kill 1 log of cell, the tumor with 10^9 cells would require 10 logs of cells kill to = 90% chance control = 69GY.

Radiation therapy should be given with a curative intent; it includes radiation therapy alone, chemo radiation, adjuvant radiation following surgery, trimodality therapy. Radiation therapy alone as a curative measure for prostate cancer, head &neck cancer, skin cancer, lung cancer, and Hodgkin's disease. As a Curative chemo radiation is used for organ preservation, like bladder cancer and cervical cancer, as a curative adjuvant radio therapy for CNS malignancies and cervical cancer. As a Curative trimodality therapy is used for breast, pancreas, colon, and rectal cancer. Radiation therapy is also used to relieve cancer

pain, prevent fracture; change the manner of death to that, which is more acceptable to the patient and their family. High dose palliation is used for unresectable cancer. Radiation therapy is estimated that over 50% of all people with cancer will receive during treatment for their disease both cure, control and palliation of cancer, hence it becomes the greatest responsibility to educate the cancer patients, which will be effective in promoting and reinforcing positive health behaviour that increases the coping ability to manage the side effects of radiation therapy.

Radiation therapy can cause a variety of physical side effects, emotional changes that affect all aspects of patient's lives including sexuality. Alteration in physical appearance can significantly influence people's perception of their sexual identities, activities of daily living, attractiveness and worthiness (Sch Wartz & Pluwcuki, 2002).

Cancer can perpetuate stress and a series of crisis for the individual, radiation therapy presents a challenge to patients and their families because of altered abilities for self care. To cope with the threat and the emotional crisis, patients frequently need information that they can participate in their own care and reduce the likelihood of hospitalization (Hirmoto Dungan, 2001).

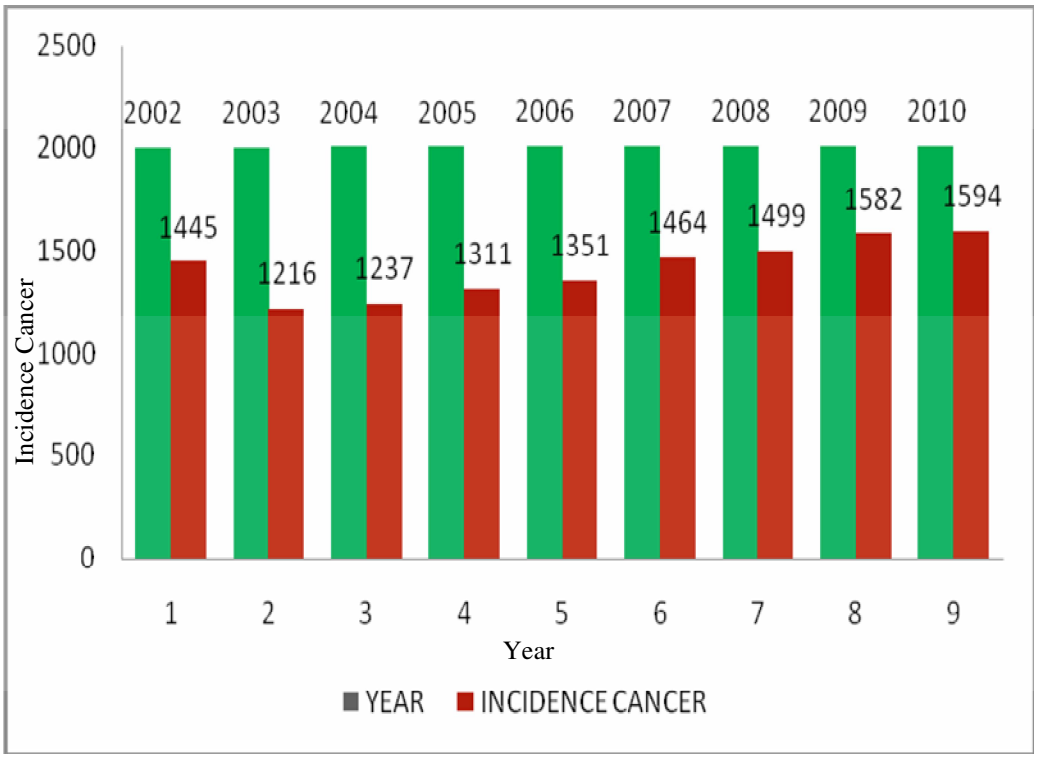
The word 'cancer' means death and the cancer was incurable, But today because of advances in early diagnosis and treatment more and more people are living after the diagnosis has been made. Prevention of side effects and best available radiation therapy are standard expectations for an effective health care system in developed countries. These are equally needed in developing nations, but limited resources and competing demands require a rationale, and pragmatic approach which

help to address these issuses.With increasing opportunities for mutual exchange of knowledge and for developing practical, realistic and workable solutions in lower income countries, the gap between developed and developing nations needs to be closed, before it gets even wide.

Patient's education is an important function because cancer is life threatening and chronic disease and affects the life style of the patient. Patients receiving radiation under go severe physiologic and emotional stress.

Cancer incidence registered at Dr G.V.N cancer cure center, Trichy.

Figure 1



Orlando's theory is potentially beneficial in achieving valued outcome. Identifying the patient's needs for help and the nurse's ability to meet these needs are important to nursing practice.

Patient sought teaching from a variety of sources, but many found, that nurses and other patients were the most helpful sources. Although most patients wanted as much information as possible, they would be prepared for managing the side effects.

Need based education regarding radiation therapy would enable the patients to cope with the stressors related to radiation therapy and managing the side effects.

SIGNIFICANCE AND NEED FOR THE STUDY

According to Hubbard 1985 cancer is the disease that people fear the most. Cancer is often cured as a metaphor for death. This is paradoxical because cancer is now one of the more curable chronic diseases when the principles of cancer surgery, radiation therapy, and chemotherapy are applied in an integrated and multidisciplinary treatment. Appropriate information, offered at the right time has been recognized as a key factor on enabling to cope with a diagnosis of cancer, being aware of treatment modality, its effects, and its management. Mills and Davidson (2002) asked for a sample of 430 patients to indicate as a series of likert scales their views of 19 commonly available sources of information. The most frequently used sources of information were the hospital consultant, general practitioner, radiotherapy staff, ward staff and family/ friends. These sources have the highest scores in forms of quality of information from the specialist / nurse. Written material scored poorly

informs of quality of information. Specialist / Nurses were clearly the prepared source of information for the majority of cancer patients.

Lack of knowledge on radiation therapy leads to the cancer patients and their family members experienced worries and concerns about the patient being at home after treatment and there is variation in their knowledge about what precautions are needed.

Many experienced psychological distress, but very few received adequate assistance for their difficulties. Those patients experienced a low grade of fatigue and psychological distress, but their functional status and quality of life were high.

Cancer patients need to understand the physical changes attributed to the treatment, treatment choices, knowledge of the disease and the use of radiation therapy to control symptoms post treatment .patients education and to assist patients in making appropriate treatment choices.

Several hundred patients die from this disease each year. Research has shown that they do not know the importance of treatment and they were not knowledgeable about treatment modalities, sideeffect management related to those treatments and special issues dealing with sexuality, body image perception and infertility as in the case of testicular cancer

Baseline knowledge provides the cancer patients to understand the quality of life and could motivate to practise the recommended behaviour. Patients must be made aware of potential gains in quality of life as well as sideeffects of radiation therapy to make informed decisions about treatment.

Knowledge on radiation therapy provides cancer patients to interact with the environment in a positive way, further transforming experience to other group. Their knowledge towards cancer as, sickness and death, cancer as an obstacle, cancer as a transforming agent. Understanding the meaning of cancer may enhance to paint a new vision of cancer survivorship that comprises potentially positive and transforming experience. Patients with cancer may be at risk for development of late complication, knowledge on radiation therapy is essential for the various treatment modalities and awareness of the risks for developing late complication of their treatment.

The studies reported above have indicated the need for patient education by nurse. Today, the majority of cancer patients, 50% patients receiving radiation therapy in an ambulatory care study. The received radiation treatments have a risk of developing multiple problems in addition to healing with number of new informational users.

These patients are now more likely to encounter problems outside the hospital setting where there is limited opportunity for discussion with oncology specialist. Therefore it is now important that they receive the necessary preparatory information during their session. Thomson (2000)

The nurse's role in helping cancer patients is broad in scope and area of influence. Clients and their families look to the nurse for assistance and guidelines in all phases of illness from primary prevention to terminal care.

The real challenge lies in finding ways to promote self care in a population with life threatening diseases who are receiving radiation therapy.

Oncology nurses are challenged with the increased responsibility for coordinating quality patient care with limited resources and support providing the appropriate information to patients must be an integral component of this challenge (MC Caughey & Kate, 2000).

With the expanding role of the nurse, radiation therapy by itself has become an area of specialization .With the aim of educating cancer patients regarding radiation therapy, the researcher wanted to develop and test the video and audio clipping structured teaching programme. The developed teaching programme can be used as a teaching strategy for cancer patients.

The investigator from her personal experiences during her clinical postings at oncology ward found many symptoms leading to reduced self esteem, reduced concentration, fear, anxiety, because of stress and tension related to sideeffects of radiation therapy and the investigator had cared for such clients during her clinical postings at the Dr. G.V.N Cancer Cure center Trichy.

From the literature search, the investigator could identify only very few studies related to knowledge and attitude of radiation therapy among cancer patients in India. Hence the investigator feels from her experience and review that there is a need to give teaching on radiation therapy management.

Further, the level of knowledge and attitude among the patients with cancer could be improved by providing adequate and appropriate teaching to the patients with cancer.

The investigator is more interested to impart education and create awareness on managing sideeffects of radiation therapy. Hence there was an immense need to undertake this study .The present study was undertaken to add evidence based information on managing side effects of radiation therapy at Dr.G.V.N Cancer Cure center.

STATEMENT OF THE PROBLEM

A pre experimental study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding radiation therapy among patients with cancer receiving radiation therapy admitted at Dr.G.V.N cancer Cure Centre, Trichy-2010-2011

OBJECTIVES OF THE STUDY

1. To assess the level of knowledge regarding radiation therapy among patients with cancer receiving radiation therapy admitted in Dr.G.V.N Cancer Cure center, Trichy.
2. To assess the level of attitude regarding radiation therapy among patients with cancer receiving radiation therapy admitted in Dr.G.V.N Cancer Cure Centre, Trichy.
3. To assess the effectiveness of structured teaching programme on knowledge and attitude regarding radiation therapy among patients with cancer receiving radiation therapy admitted in Dr.G.V.N cancer cure center, Trichy.
4. To find out the relationship between knowledge and attitude regarding radiation therapy among patients with cancer receiving

radiation therapy admitted in Dr.G.V.N Cancer Cure Centre, Trichy.

5. To find out the association between selected demographic variables such as (Age, Sex, Educational status, clinical variables such as Duration of illness, Duration of treatment) and knowledge regarding radiation therapy.

6. To find out the association between selected demographic variables such as (Age, Sex, Educational status, clinical variables such as Duration of illness, Duration of treatment) and attitude regarding radiation therapy.

HYPOTHESES

At $p < 0.05$ level.

1. The mean post test knowledge score regarding radiation therapy will be significantly higher than the mean pre- test knowledge score of patients with cancer who receive structured teaching programme.

2. There will be a significant change in the mean post test attitude score regarding radiation therapy than the mean pre – test attitude score of patients with cancer who receive structured teaching programmes.

3. There will be significant association between selected demographic variables such as (age, Sex, Educational status, duration of illness, & duration of treatment) and the level of knowledge regarding radiation therapy.

4. There will be significant association between selected demographic variables such as (age, sex, educational status, duration of illness, & duration of treatment) and attitude regarding radiation therapy.

5. There will be significant relationship between knowledge and attitude among patients with cancer.

OPERATIONAL DEFINITIONS

Effectiveness

It is the ability to produce a specific result.

In this study, it refers to the outcome of the structured teaching programme in terms of knowledge gained that is measured by using knowledge questionnaire.

Structured Teaching Programme

It is the powerful and effective means of translating complex messages to target group.

In this study, it refers to a formal and specific teaching developed for patients with cancer on radiation therapy, cancer characteristics, warning signs, treatment modalities, radiation therapy –meaning, its action, type, dose, side effects and its treatment.

Knowledge

Knowledge means Information acquired through education.

In this study, it refers to the understanding expressed by the patients with cancer on radiation therapy, effect of radiation therapy, skin

care, nutrition, sexuality that is measured by knowledge part of the questionnaire.

Attitude

It is the expression of opinion.

In this study, it refers to the expressed belief and feelings of the patients with cancer as measured by a 3 point likert scale.

Patient With Cancer

Patient diagnosed with malignancy.

In this study, it refers to the individuals who were diagnosed to have cancer by histopathology, cancer refers to the disease caused by an uncontrolled division of abnormal new growth of tissue that serves no useful purpose and may harm the individual.

Radiation Therapy

It is a mode of treatment for cancer patients given in different doses in different fraction and period.

In this study, it refers; radiation therapy is a modality of the treatment given for the control of cancer to the patient with cancer.

ASSUMPTIONS

1. Cancer patients need to be educated about their treatment.
2. Structured teaching programme is an economical and efficient way of meeting the learning needs of most of the patients with cancer regarding radiation therapy.
3. Patient with cancer have poor knowledge regarding radiation therapy.

4. The nurse plays an important role as an educator among the public with relation to health.
5. An information (STP) provides an opportunity for active learning and participation.
6. Structured teaching programme is the best way to meeting the behavioral change communication and modifying the behavior of patients with cancer.

PROJECTED OUTCOME

The findings of the study will help to evaluate the effectiveness of structured teaching programme on knowledge and attitude regarding radiation therapy among patients with cancer who were receiving radiation therapy.

It will motivate the nursing personnel to be more aware of the patient knowledge, to provide adequate information to the patients regarding their disease and to reduce their doubts; thus it can improve the quality of life of patients with cancer.

The present study is focused to find out the effectiveness of structured teaching programme on radiation therapy among cancer patients on increase in knowledge and change in attitude.

CHAPTER - II
REVIEW OF LITERATURE

"Practically all human knowledge can be found in books and libraries unlike other animals that must start a new each generation, man builds upon the accumulated and recorded knowledge of the past"

Best john W.

A review of literature has been very helpful in focusing the widened perspectives of the study.

A review of related literature enables one to get an insight into the various aspects of the problem under study. It uncovers promising methodological tools, throws light on ways to improve the efficiency of the data collection and suggestions, how to improve or increase the effectiveness of data analysis and interpretation.

Review of literature is therefore an essential step in the development of the research project. The results of the studies conducted in various aspects of radiation are presented below:

The literature review is arranged in the following sections

1. Studies related to information needs of cancer patients.
2. Studies related to patient education regarding radiation therapy
3. Studies related to radiation therapy - fear and anxiety
4. Studies related to radiation therapy-skin care
5. Studies related to radiation therapy-nutrition
6. Studies related to radiation therapy-sexuality
7. Morbidity and mortality rates related to cancer in various countries.

1. Studies related to information needs of cancer patients

Bashore l 2004 states that a lack of knowledge especially of the survivors individual risk for developing late complications of their radiation therapy education should be introduced early in their radiation therapy and it helps the cancer patients how their own health behaviours may influence the development of these late complications

Dun J Steginga SK 2007 has suggested that education on radiation therapy for cancer patients has the potentials to promote adjustment through assisting patients to participate in treatment decision-making. Patients in the intervention group reported high level of satisfaction with the video and all reported that they would recommend the video to other patients preparing for radiation therapy

90% patients in the intervention group reported that some or all of the information in the video was new to them. Education materials that have excellent face validity are received well by patients.

Siekkinen (2005) identified that kind of information, radiation therapy patients are expected to receive through education. Patients information expectations were the highest in the biophysiological, functional areas and the lowest in the financial areas. The results can also be used in the individual patient's education.

Dubois S Loiselle C (2008) revealed a qualitative study about the rate of informational support. Perception about their experience with cancer informational support in relation to healthcare services varied along with the following dimensions. Information directed their decisions about reliance on health services. Lack of knowledge was somewhat paralyzing as it which leads to distress, conflict,and reduced confidence

in the health care system. Knowledge about how and when informational support may be most timely may optimize individuals wellbeing and further guide their use of cancer related treatment modalities.

2. Studies related to patient education regarding radiation therapy

Hirsch JM (2007) conducted retrospective qualitative study. It shows how patients with oral cancer experience their sickness and treatment. The oral cancer patients need for support may increase a treatments progress and may be the greatest factor of radiation therapy; as they return home with mouths that have not recovered after treatment and do not function normally. The importance of understanding the patients situation during treatment and their desire for a return to normal living and normal mouth function at treatment end. Knowledge may be useful in guiding the organization on oral care.

Larsson M (2009) describes that patients with head and neck cancer have complex, longlasting physical and psychosocial needs to illness and treatment. To meet these patients needs of knowledge, care and support both concerning practical measures related to the disease and its treatment and emotional needs this way of organizing the care contributes to these patients health and well being.

Sepucha K (2006) states that to explore an approach to measuring the quality of decision made in the treatment of early stage breast cancer focusing on patients decision-specific knowledge and the concordance between their valves and treatment preferences for outcome and treatment received, are feasible and important.

Jazieh and Brawa (2002) documented a patient information package 71 for veterans with oral cancer receiving radiation therapy. PIP contained information about radiation therapy's side effects, when to call for help, and available resources and information about support groups. The PIP had helped 13 patients to call the hospital and had helped the patients decide whom to call. The PIP which was developed to meet the specific needs of this patient population was well received and utilized.

3. Studies related to radiation therapy-sexuality

Faithful S white I (2008) in a descriptive study of taboo of women's sexual health after pelvic radiation therapy says that women should receive knowledge before completing pelvic radiation therapy information strategies to provide more comprehensive coverage of knowledge gaps in a post-treatment. Sexual rehabilitation improves the knowledge in sensitive content and copes with and supports sexual health that intervenes in cancer practice

Polacek GN (2007) statesthat the differences in incidence and outcome are undoubtedly due to multiple factors, but one element in poor outcome may be treatment choices. Those treatments shown to be related to best outcomes are less likely to be the choices by certain groups of women.

Breast cancer incidence and outcome disparities in the US are due to multiple interacting factors. These include information about treatment, different types of treatment, the emotional context of decision-making and patient preference for level of involvement. Treatment decision-making is complex.

4. Studies related to radiation therapy - fear and anxiety

Fitch ML Megrath (2003) conducted a study on radio nuclide therapy which provides little insight regarding what patients or family members identify as their needs or concern. It indicates how family members experienced worries and concerns about the patient being at home after treatment. Family members provided evidence that many experienced psychological benefits.

Gattuso (2005) states the internal influences e.g. fear and external influences e.g. family motivated the cancer patients to participate in health promotion activities. But patients generally supported a gradual provision of information. Appositive listening environment is important for patients. The provision of adequate information during and after radiation therapy as well as peer counseling in a positive listening environment are important in helping survivors participate in health promotion activities.

Xiana-ya (2005) describes the quality of life and coping style of naso pharyngeal carcinoma patients. There were negative correlation between emotive, fatalistic and evasive quality of life .The adverse effects of radiation therapy remains the major problems that affect the health – related quality of life of NPC patients post therapy .Positive emotion focused coping styles that were positively correlated to QOL and negative emotion focuses ones negatively correlated to problem focused coping styles that need to pay attention to the QOL of NPC to minimize ongoing adverse effects and support the use of effective coping style.

Capirci C Feldman – Stewart (2005) find out the information priorities of health care professionals and patients treated with radiation therapy. There was considerable variation between the groups and also considerable variation within each group. Professionals cannot assume that their own information priorities are the same as those of their patients

Ahiberge K (2004) describes that patients experienced a low grade of fatigue and psychological distress. Women with uterine cancer who were scheduled to receive radiation therapy significant correlations were found between general fatigue and anxiety and also between general fatigue and depression. There was a significant negative correlation between general fatigue and coping resources.

Xiaokun L (2006) states education provide the base line knowledge for understanding the quality of life among mastectomy patients.

5. Studies related to radiation therapy-skin care

Morrow (2007) in his study was to determine whether cancer patients may experience skin problems while undergoing radiation therapy. Frequent skin reaction may be influenced by skin pigmentation and psychological problems. Total radiation exposure did not significantly correlate with the report of skin problems at the treatment site for white or black patients. Overall the black patients reported more severe post treatment problems than the white patients. A direct correlation was observed between severity of skin problems and pain at the treatment site.

Sitton (1997) in his study depicts that the goals of skin care management are to enhance patient comfort. Radiation beam passes

through the skin to reach the target. Skin response to radiation depends on numerous patient and treatment related factors, use of beam type, energy, daily treatment dose, tissue equivalent, material on the skin surface, and size of the treatment fields.

Hatisfield Wolfe (2005) conducted a study on development and pilot testing of a teaching booklet for oncology patients assessment and skin care. Oncology patients often experience skin breakdown because of radiation therapy, the loss of skin integrity is neither identified nor treated until it becomes severe and painful.

Nursing staff identified the need to develop a booklet that would both instruct adult oncology patients concerning necessary skincare following therapy and encourage them to collaborate with the nursing skill. Participants were given a handheld mirror as an aid to assess skin changes. Feedbacks from both staff and patients are very positive.

6. Studies related to radiation therapy-nutrition

Hauer-Jensen M (2007) states knowledge about gastro intestinal radiation toxicity. The risk of injury to the intestine is dose limiting during abdominal and pelvic radiation therapy. Delayed bowel toxicity is difficult to manage and it adversely impacts the quality of life of cancer survivors.

Madsen SM (2007) states the attitudes towards cancer. Most patients voiced positive attitudes towards cancer, originated mostly from the media.

Chrn KE Sihden (2003) notified that Oral care, self care, and ability to eat and drink during cancer radiation therapy and to explore patient attitude to oral examinations. Compared with patients receiving

chemotherapy. Those who received radiotherapy have significantly more often visited dentistry, and have been informed of oral complications, oral hygiene and received instructions in oral hygiene procedure.

Szumacher E (2006) states that a lack of knowledge and alternative treatment are not widely accepted while discussing their treatment option with oncologists, women with breast cancer frequently express many concerns regarding treatments side effects.

7. Morbidity and mortality rates related to cancer in various countries.

During the past 30 years there has been little improvement in survival rates. This is due to a number of factors, but important among them is the continued late presentation and detection of lesions, the relative five year survival rates are 44% (males) and 49% (females). Worryingly there is some evidence that survival has actually declined recently in persons under 65 years of age. This may be related to an increase in incidence among persons in low socio economic groups, who tend to have generally poorer prognoses.

Patients sought teaching from a variety of sources, but many found that nurses and other patients were the most helpful sources. Although most patients wanted as much information as possible, they would be prepared for managing the side effects. Need based education for cancer patients regarding radiation therapy would enable the client to cope with the stressors related to radiation therapy and managing the side effects (Thakur 2004).

Iconmous, Kalofonos (2002) assessed the information needs and awareness of 100 Greek cancer patients. Patients exhibited a great desire for information overall. The need to have more information was high especially regarding the aftermath of radiation therapy, prognosis, how radiation worked and diagnosis. Patients were more satisfied with care but less satisfied with the information received.

Dunn. J. Stegingan (2004) targeted treatment education for cancer patients has potential to promote adjustment through assisting patients to

participate in treatment decision making. They also comply with treatment regimes and cope more effectively with treatment sideeffects.

Barnas (2004) Information regarding radiation therapy provided communication with referring physicians in a radiotherapy clinic. Interim consultation report is useful in patient management. Suggestions were made on how to improve the report and they will be used to further enhance physician's communication and ultimately patients care.

THE ESTIMATED LEADING SITES OF CANCER INCIDENCE AND DEATH 2008

In United State

SITE OF CANCER	INCIDENCE		MORTALITY	
	MALE	FEMALE	MALE	FEMALE
ALL SITES	745,180	692,000	294120	271530
PROSTATE	186320	---	28660	----
BREAST	----	182460	---	40 480
LUNG& BRONCHUS	114690	100330	90810	71030
URINARY BLADDER	51230	----	9650	---
UTERINE	----	40100	---	7470
NON-HODGKINS LYMPOMA	35450	36670	9790	9370
MELANOMA OF SKIN	34950	----	27530	-----
KIDNEY AND RENAL PELVIS	33130	21260	8100	----
LEUKEMIA	25180	19090	12460	9250
ORAL CAVITY	25130	---	----	----
PANCREAS	18770	18570	17500	16790
THYROID	-----	28410	----	----
OVARY	----	21650	----	15520

Indices of burden of cancers in India in 2004.

Indices	Males	Females
Population (in thousands)	550,404	515,354
No of cases of cancer	309,809	428,545
No of deaths	132,622	121,192

Site-specific cancer burden for 2004 in India

Site	Male	Female
Mouth and oropharynx	516448	163132
Esophagus	135737	110441
Stomach	129317	117724
Colon and rectum	101392	94036
Liver	82436	29182
Pancreas	36552	27128
Trachea, bronchus and lung	147747	45094
Melanoma and other	20369	23709
Skin	537	8,89,224
Breast	62805	-
Prostate	45173	16571
Bladder	149613	1,02,980
Lymphomas and multiple myeloma	2,29,819	1,57,933
Leukaemia	-	4,31,538
Cervix uteri	-	63661
Corpus uteri	-	227088

Cancer mortality rates (pre 100,000) in India

Population based cancer registry	Males	Females
Bangalore	19	17.4
Barshi@	34.4	32.2
Bhopal	12.1	8.3
Delhi	16.2	14.8
Chennai	47.9	42.2
Mumbai	35	37.9
All registries	25.19	23.52
Medical certification of causes of death	32.2 (3.0)	30.0(3.44)

Conclusion

The provision of adequate information during and after radiation therapy as well as peer counseling in a positive listening environment are important in helping survivors participate in health promotion activities.

CONCEPTUAL FRAMEWORK

The conceptual model of this study was based on Sister Callista Roy's adaptation model which was developed in 1964. This model focuses on the concept of adaptation of a person as an open living system. The theorist's concepts of nursing, person, health environment are all interrelated to this central concept.

Roy's expressed that a person's adaptation level is a constantly changing point made up of focal, contextual and residual stimuli to which one can respond with ordinary adaptive responses. According to Roy's view, the stimulus is the degree of change or stimulus most immediately confronting the person. Contextual stimuli are all other stimuli. Residual stimuli are factors that may be affecting behaviour but those whose effects are not validated.

Roy's considered regulator is a sub system of coping mechanisms which respond automatically through neural, chemical, and endocrine processes.Cognator is also a subsystem of coping mechanisms which respond to the complex processes of perception and information processing, learning,judgement and emotion and cognator activity that is physiological self concept, role function and interdependence. Adaptive responses are responses that promote integrity of the person. Effective responses are responses that do not contribute to adaptive goals.

Feedback is the result of effectors; this provides a new kind of positive adaptation. In this study input is the assessment of the existing level of knowledge regarding radiation therapy among patients with cancer by using a structured knowledge questionnaire on various aspects

such as general information of cancer, radiation therapy, skin care, nutrition, sexuality fear and anxiety, and side effects management.

Control process is the assessment of knowledge and attitude regarding radiation therapy. The structured teaching programme stresses on the meaning of cancer, radiation therapy, skincare, and nutrition.

Output is the in knowledge (adequate, moderately adequate or inadequate level of knowledge) after structured teaching programme, which will be measured using the same structured knowledge questionnaire used in the pre-test. Feedback emphases strengthen the input control process of coping mechanisms.

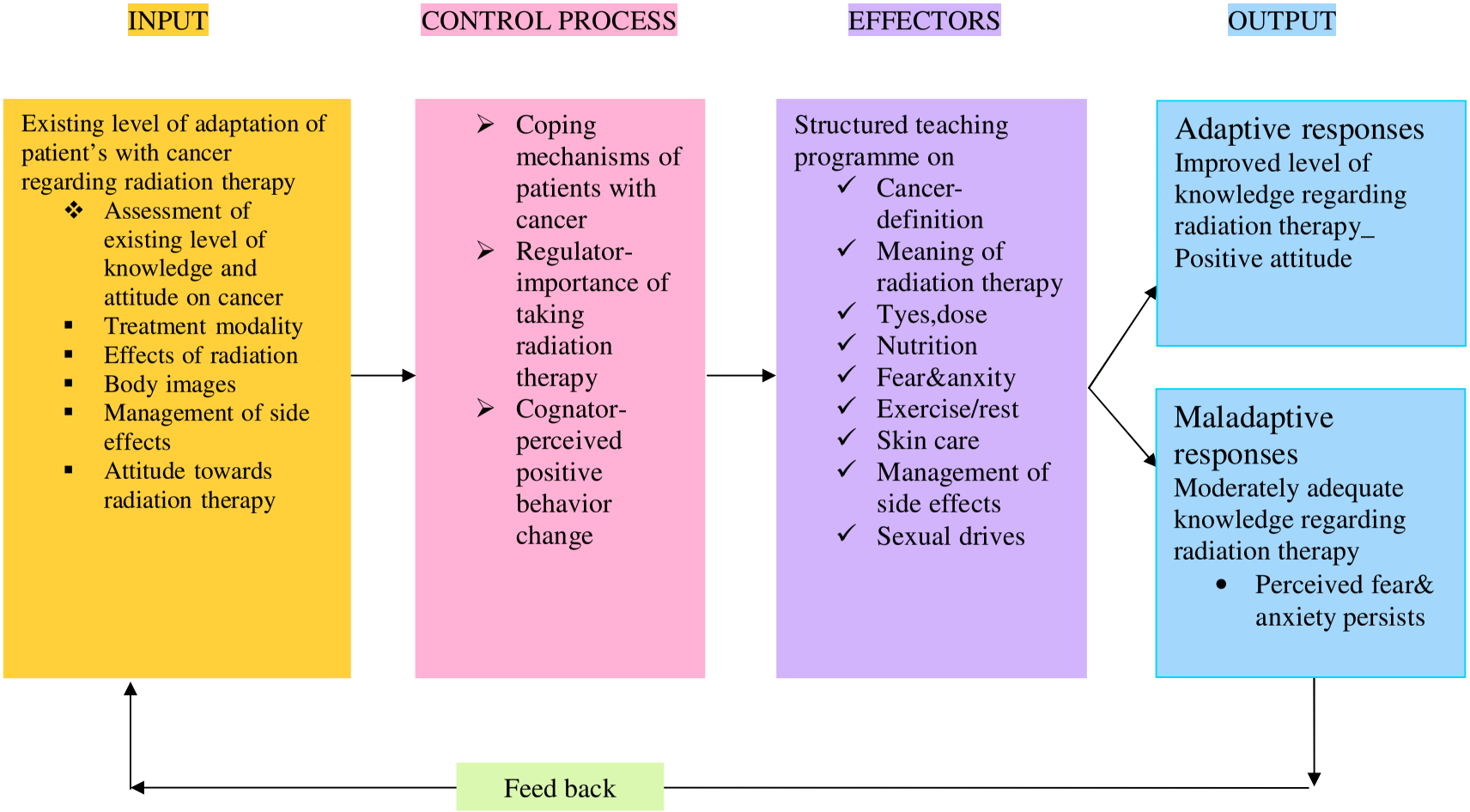


Figure 2 : CONCEPTUAL FRAME WORK – SISTER CALLISTA ROY ADAPTATION MODEL

CHAPTER III
METHODOLOGY

Methodology of the study includes research design, population, sample, data collection procedures and statistical analysis of data.

RESEARCH APPROACH&DESIGN

The research approach used in this study was evaluative approach. A pre experimental, one group pre test, post test design was adopted for this study to assess the effectiveness of structured teaching programme on radiation therapy among the patients with cancer

SETTING OF THE STUDY

The study was conducted in the Dr. GVN cancer cure centre Trichy. It is 50 bedded Government approved private oncology hospital as well as referral center for oncology services. It has out and in patient units which function around the clock. The setting was selected on the basis of feasibility and also investigator familiarity of the setting out of her professional experience.

POPULATION

Newly diagnosed patients with cancer who were admitted at Dr. G.V.N. Cancer cure center was selected as the population of the study. Nearly 5 cancer patients were admitted in the in-patient unit per day.

SAMPLING METHOD

Convenience sampling technique was employed for the study.

SAMPLE SIZE

40 newly diagnosed patients with cancer were planned to have radiation therapy who met the inclusion criteria were taken as the samples for the study.

SAMPLING TECHNIQUE

Samples of 40 patients with cancer who were admitted for radiation therapy were selected by using convenience sampling technique. Each day 3 cancer patients who met the inclusion criteria were selected for the study.

CRITERIA FOR SAMPLE SELECTION

INCLUSION CRITERIA

1. Patient with who are admitted in the inpatient ward for radiation therapy at GVN cancer cure center, Trichy during the period of data collection.
2. Both male and female patient with cancer who were planned to have radiation therapy for the treatment of cancer.
3. Patients with cancer who were able to communicate either in Tamil or English.
4. Patients with cancer who were willing to participate in the study

EXCLUSION CRITERIA

1. Patients who were critically ill
2. Professionals who belonged to the medical and nursing field.
3. Patients who were not willing to participate in the study.
4. Patients who were receiving radiation therapy as palliation.
5. The subjects selected for the pilot study.
6. Patients with cancer who were not able to communicate either in Tamil or English.

DESCRIPTION OF INSTRUMENT/TOOL

The investigator developed the instrument for this study based on review books, journals research reports. The content validity was obtained from experts like senior nursing professors and oncologist. The study was carried out using a self-administered questionnaire. Data collection instrument was divided into two parts.

TOOL

Part-1 Demographic data

A structured interview schedule was used to assess the information on the demographic variables such as age, sex, education, religion, occupation, income, marital status, duration of illness and locality.

Part-II Questions related to radiation therapy

Tool – 1 A structured knowledge questionnaire was used to assess the knowledge of cancer patients on radiation therapy by a prepared multiple-choice questionnaire. The questions were related to general

information, fear and anxiety, skin care nutrition, sexuality and side effects managements. A structured attitude

TOOL – 2 A structured attitude was a likert attitude scale, which 5 items were positive attitude and the remaining 5 items were negative attitude. The attitude was measured on a three point likert scale to assess the attitude of the patients with cancer regarding radiation therapy.

Positive attitude->75%

Neutral attitude-51-75%

Negative-<50%

SCORE INTERPRETATION

Part-1

Information on demographic data was collected from the samples. Patients with cancer who were planned to have radiation therapy and based upon their response ✓ mark was put against the appropriate response.

Part-II

A structured knowledge questionnaire was made to assess the knowledge of cancer patients who were planned to have radiation therapy. It contains 30 multiple-choice questions. The answers were written in the box provided against each question. Each question had one correct response and the correct answer was awarded a score of “one” and the wrong answer a score of “zero”. The score was 30.

THE SCORE WERE INTERPRETED AS BELOW

<50%	-	inadequate knowledge
50-75%	-	moderately adequate knowledge
>75%	-	adequate knowledge

CONTENT VALIDITY

Content validity of the tool, structured knowledge questionnaire was established on the basis of opinion of experts. Four in the field of nursing and one in the field of oncology specialist. The necessary suggestion and modification were incorporated in the final preparation of the tool.

RELIABILITY OF TOOL

Reliability denotes the degree of consistency of the tool. The reliability of the tool was established by test. The reliability score obtained for structured teaching schedule was r = 0.742 which showed consistency and correlation of the tool.

PILOT STUDY

Pilot study was conducted at Dr GVN cancer cure center Trichy for period of seven days. The purpose of this pilot study was to determine the feasibility of the main study and refine and modify the instruments. Six subjects who met the newly diagnosed cancer patients who planned to have radiation therapy were admitted in the Dr GVN cancer cure center Trichy who met the inclusion criteria were selected by using convenience sampling.

The cancer patients were seated comfortably and the pre test was conducted by using the planned interview schedule for about 25-30 minutes. Then structured teaching programme was conducted for about 45 minutes. At the end of the teaching programme, 10-15 minutes were allotted for discussion. After that post test was conducted and results were analyzed based on the cancer patient's scores. These six cancer patients were excluded in the main study. The practicability and feasibility of the instrument was checked based on the results of the pilot study.

DATACOLLECTION PROCEDURE

The main study was conducted from 03 05 2010-16 06 2010 in Dr. G.V.N. cancer cure center in-patient ward Trichy after obtaining permission from the director of Dr. G.V.N., CCC, Trichy to conduct the study patients with cancer who planned to have radiation therapy were interviewed by investigator, those met the inclusion criteria were selected by using convenience sampling technique. The duration of the interview ranged from 25-30 minutes. Each day three samples were selected for interview. A pre test was conducted by using structured interview schedule that consisted of Part-1 demographic variable and Part-II multiple choice questionnaire regarding radiation therapy.

After the pre test, they were gathered and seated comfortably and the investigator gave the introduction initially followed by structured teaching programme for about 45 minutes using digital video disc

The structured teaching programme contained information regarding radiation therapy that includes general information meaning of radiation therapy types, dose care to be taken before radiation therapy after radiation therapy, care about nutrition, skin, sexuality, fatigue,

reduce fear and anxiety, treatment side effects and its management at the end of teaching 10-15 minutes were allotted for discussion to clear their doubts. Cancer patients are very curious in clearing their doubts participated in the teaching programme with full attention and great interest.

After seven days, post test was conducted using the same questionnaire. The same procedure was followed to all groups of cancer patients.

Ethical consideration

The investigator ensured the privacy, religion, dignity; cultural belief and ethical valves were respected during the process of data collection.

Protection of Human Rights

The study was conducted after the approval of the research committee of the college. Permission was obtained from the head of the department of oncology, nursing superintendent and staff of the department of oncology. Written consent of each subject was obtained before data collection. Assurance was given to the study subjects regarding the confidentiality of the data collected.

PLAN FOR DATA ANALYSIS

The items were scored after the pre test and post test and the results were tabulated. The methods used for analysis were number, percentage, mean, standard Diviation, paired t test and chi-square test.

No.	Data analysis	Method	Remarks
1	Descriptive statistics	Number, Percentage, mean, standard deviations.	To describe the demographic variables To assess the knowledge of pre test and post test.
	Inferential statistics	Paired t- test	Analyzing the effectiveness pre post and post test
		Chi-square test	Analyzing the association between demographic characteristic and knowledge regarding radiation therapy among cancer patients. Analyzing the association between demographic characteristic attitude regarding radiation therapy.

CHAPTER IV
DATA ANALYSIS AND INTERPRETATION

KERLINGER (1973) defines, analysis as categorizing, manipulating and summarizing of data to reduce to intelligible and interpretable form so that research problem can be studied and tested including relationship between the variables.

This chapter deals with statistical analysis. Statistical analysis is a method of rendering quantitative information in a meaningful and an intelligible manner. Statistical procedure enables the research to organize analyze, evaluate, interpret and communicate numerical information meaningfully.

ORGANISATION OF DATA

The data obtained were mainly classified into following four sections.

SECTION A	:	Distribution of subjects according to demographic variables.
SECTION B	:	Frequency distribution of pre test knowledge level of subjects regarding radiation therapy among patients with cancer.
SECTION C	:	Frequency distribution of subjects pre test level of attitude regarding radiation therapy among patients with cancer.
SECTION D	:	Distribution of post test knowledge score and attitude score regarding radiation therapy among patients with cancer

SECTION E	:	Comparison and correlation between knowledge and attitude of pre and post test.
SECTION F	:	Association between post test knowledge and attitude scores with selected demographic variables of cancer patients regarding radiation therapy
SECTION G	:	Association between the post test level of knowledge and attitude regarding radiation therapy among patients with cancer

Figure 3 reveals that, according to age, high population of newly diagnosed cancer patients were between the group of 30-40 years is 18 (45), next, in the age group is 40-50 years is 16 (40).

Regarding the educational status, primary education were 27 (68), illiterate were 10 (25), only 3 of them come under the category of collegiate level of education.

In regard to the occupation, most of the cancer patients were agricultures 20 (50), 12 (30) subjects were employed in the daily wages 8 (20) were unemployed.

According to occupation agriculture 20(50),unemployee 8(20), employee 12 (30).

According to income status, majority of the samples income are below Rs. 2000-31 (78), the income between Rs. 2000-5000 were 7 (18), only above Rs.5000 income were 2 (5).

With regards to residence, majority of the samples were resided in the rural areas 35 (88), only 6 (15) were in urban areas. According to alcohol consumer 6 (15), non consumer 34 (85). Having the habit of betel chewing 14 (35), not having the habit of betel chewing 26 (65). According to food habits vegetarian 7 (18), non vegetarian 33 (83).

Regarding the life style factor like tobacco, majority of the samples were the habit of tobacco chewing 25 (63) only 15 (38) were not the habit of tobacco chewing. According to habit of smoking 7 (18), no smoking habit 33 (83).

With regards to the religion, most of the samples were Hindu 35 (88), only 3 (8) were Christian, 2 (5) were Muslim.

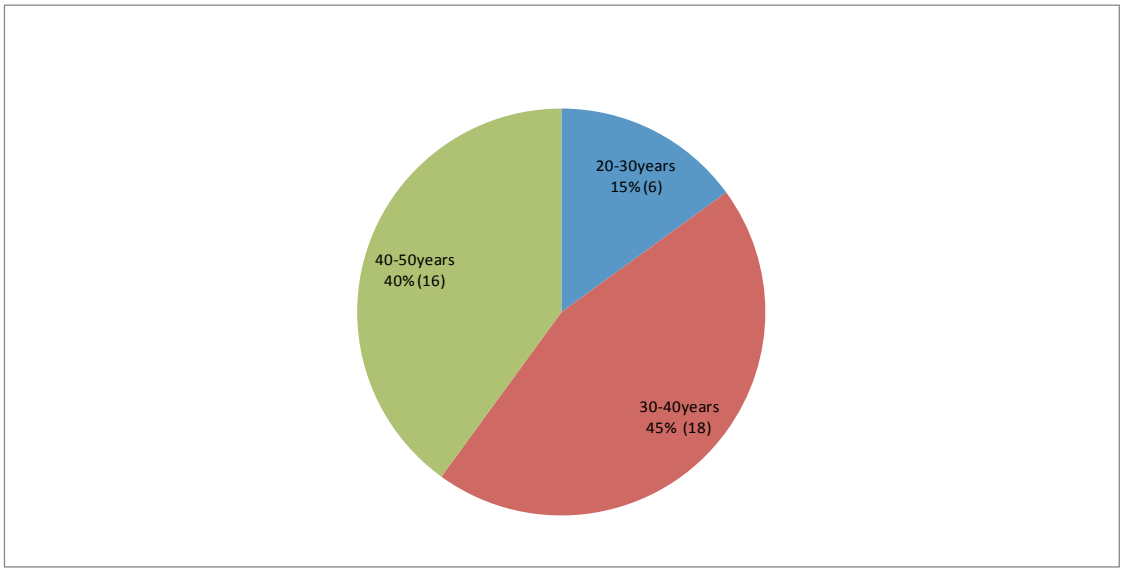
According to duration of illness, most of the samples were between 6 months-1year 23 (58), 17 (43) were between 1year -2 years. In relation to duration of treatment 0 months to 1 month duration of treatment were 34 (85), 1 month to months 6 (15).

SECTION – A

Distributions of subjects by demographic variables

Figure 3(a)

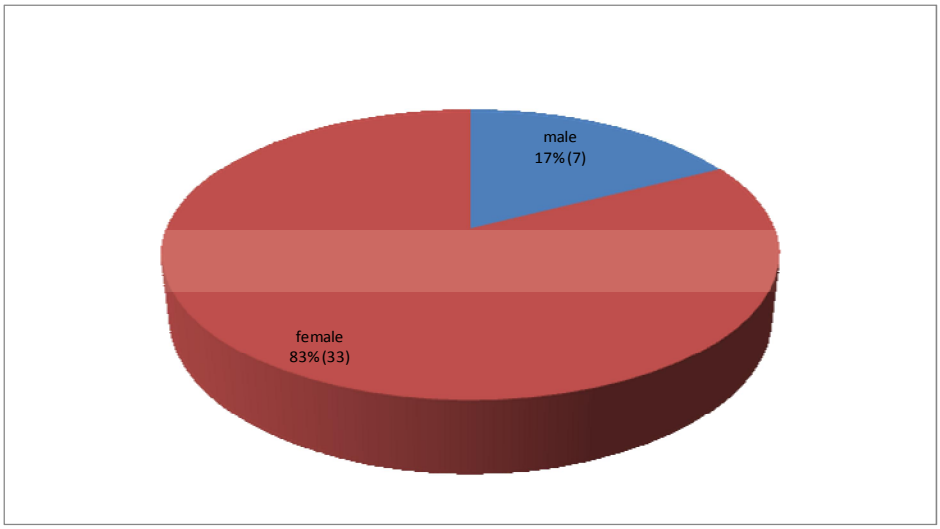
Frquency disrtribution of age



AGE

Figure 3(b)

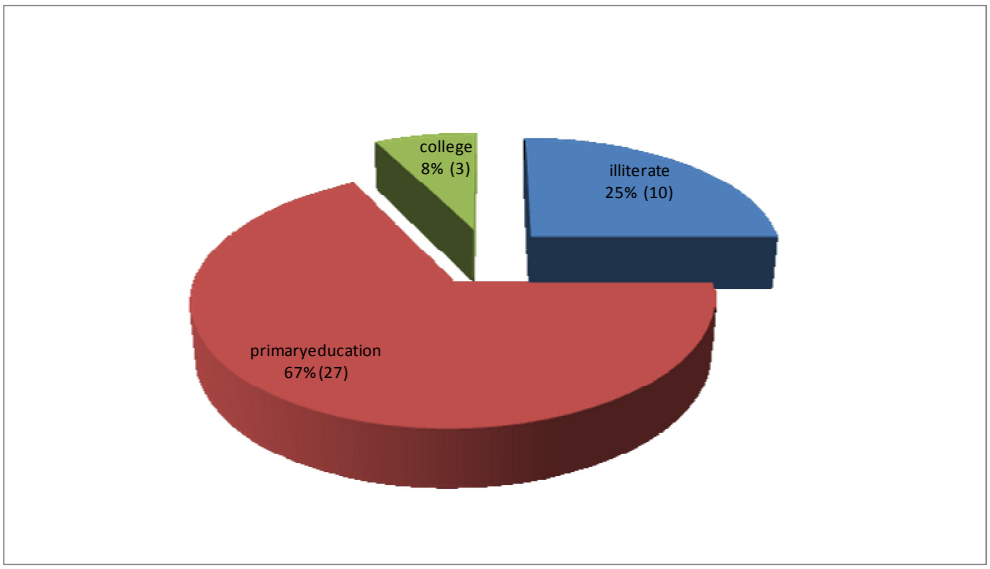
Frequency distributions of sex



SEX

Figure 3(c)

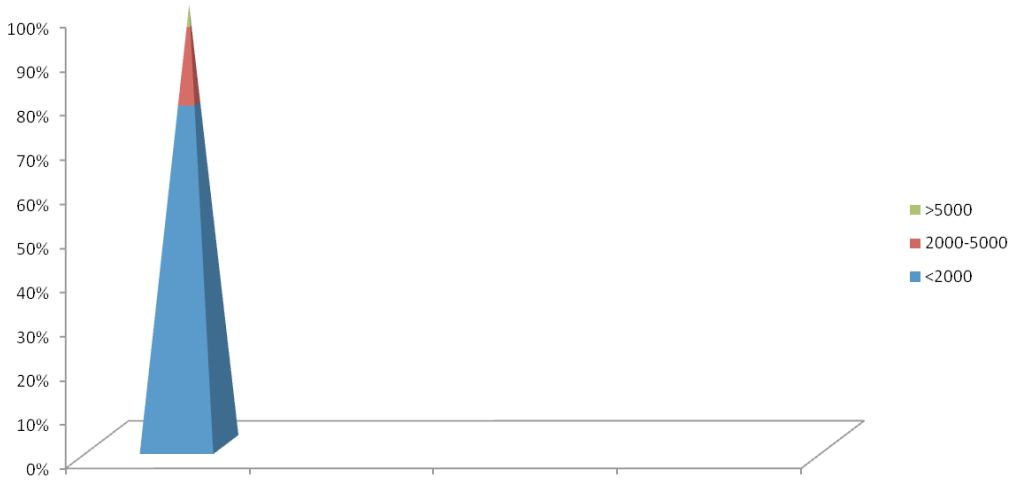
Frequency distribution of educational qualification



EDUCATION QUALIFICATION

Figure 3(d)

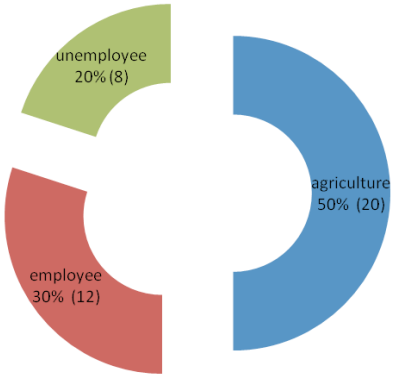
Frequency distribution of income



INCOME

Figure 3(e)

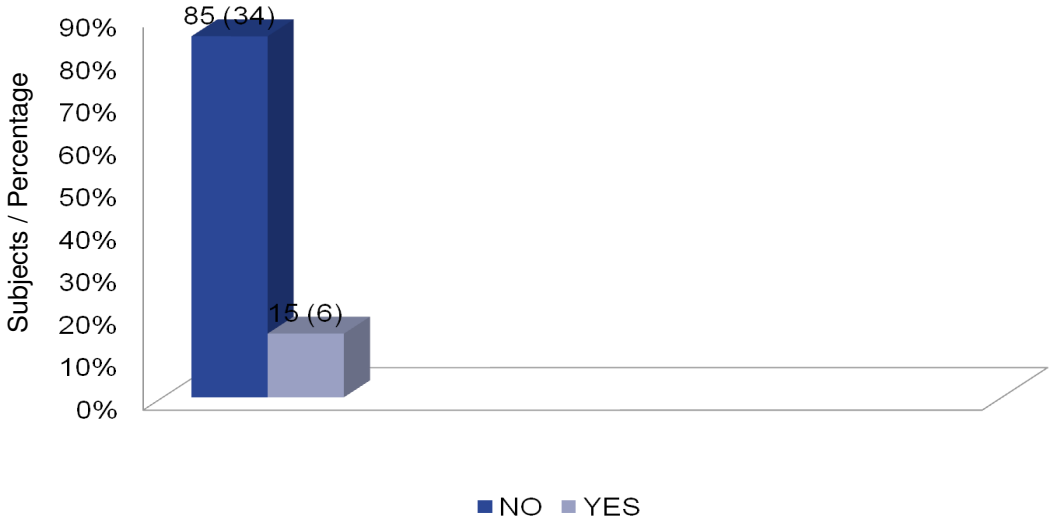
Frequency distribution of occupation



OCCUPATION

Figure 3(f)

Frequency distribution of alcohol intake



ALCOHOL INTAKE

Figure 3(g)

Frequency distribution of betel chewing

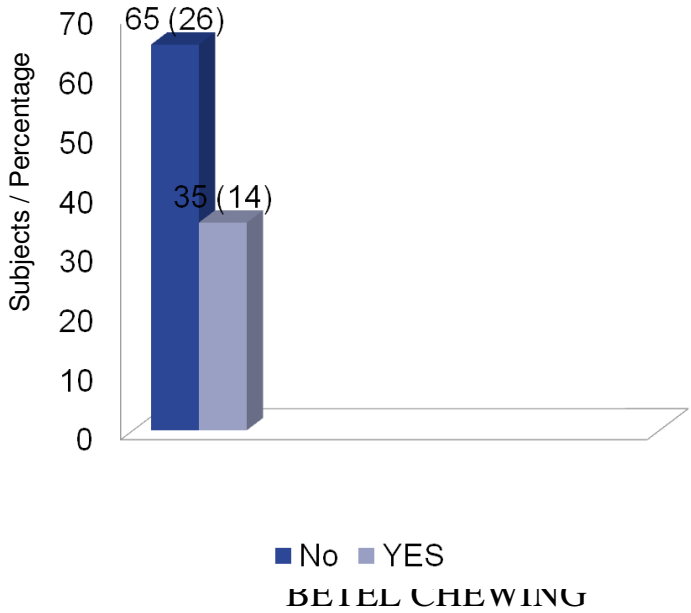


Figure 3(h)

Frequency distribution of food habits

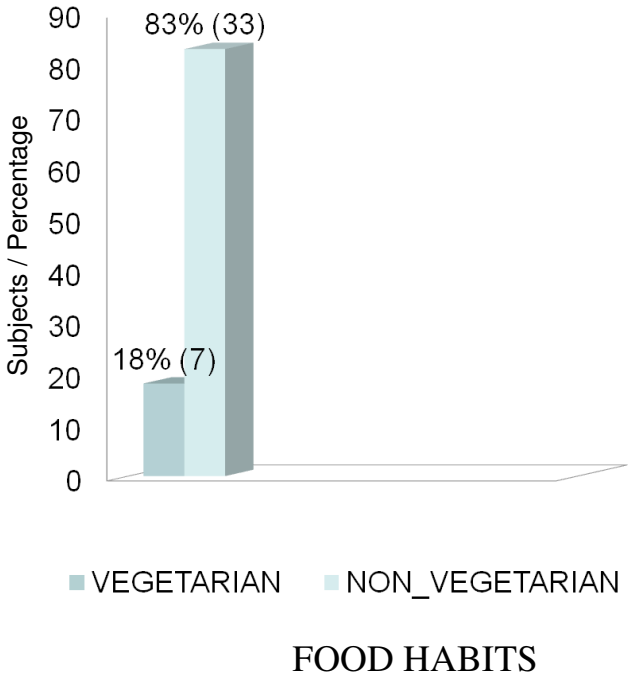
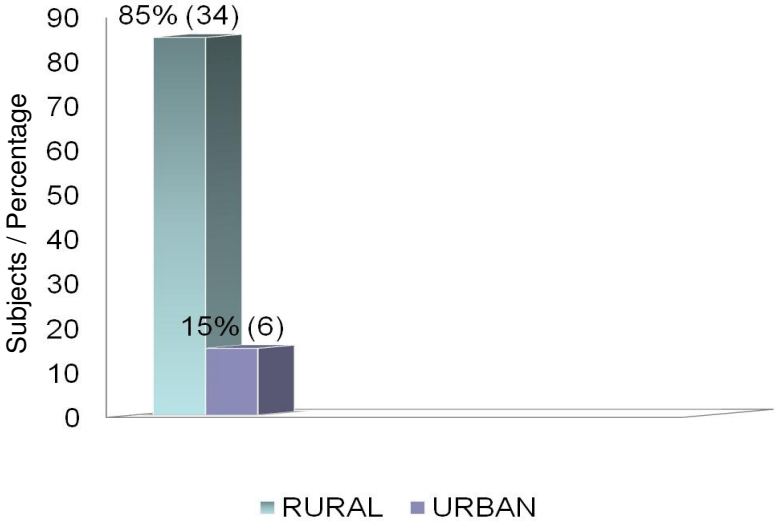


Figure 3(i)

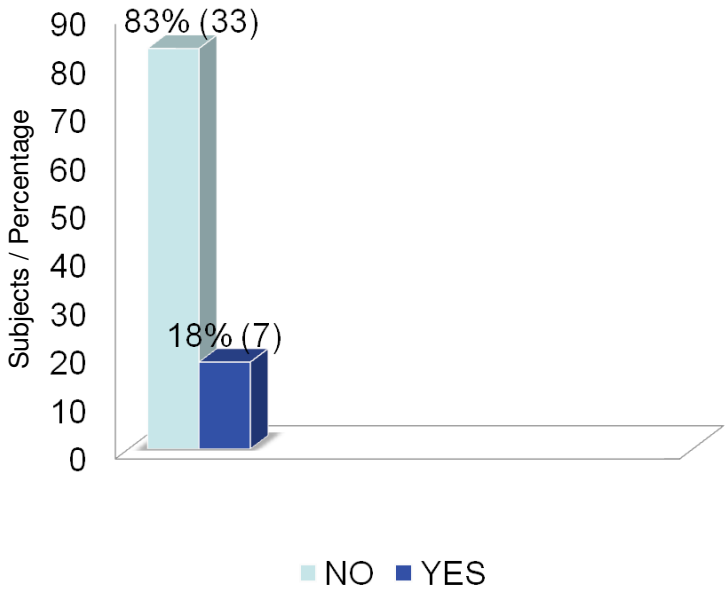
Frequency distribution of residence



RESIDENCE

Figure 3(j)

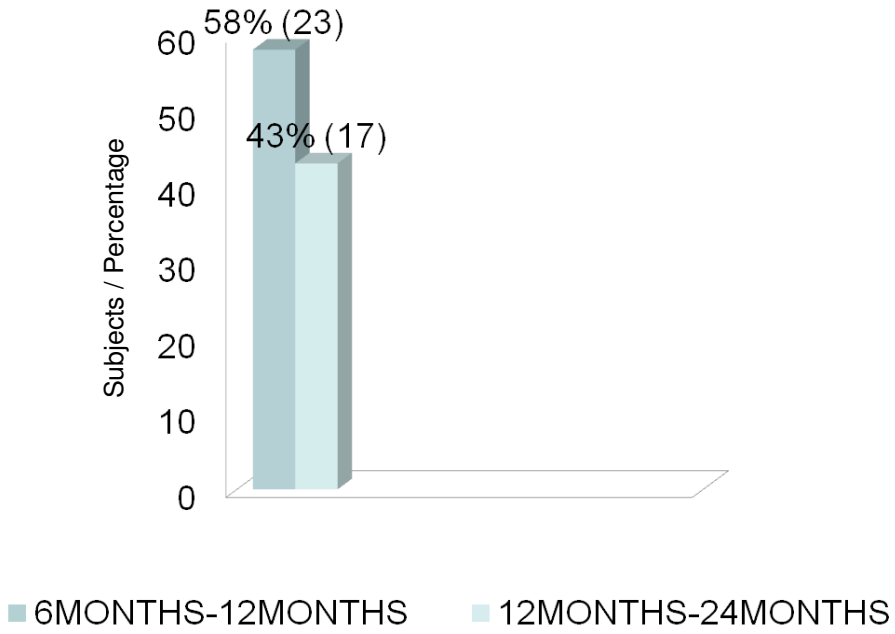
Frequency distribution of smoking



SMOKING

Figure 3(k)

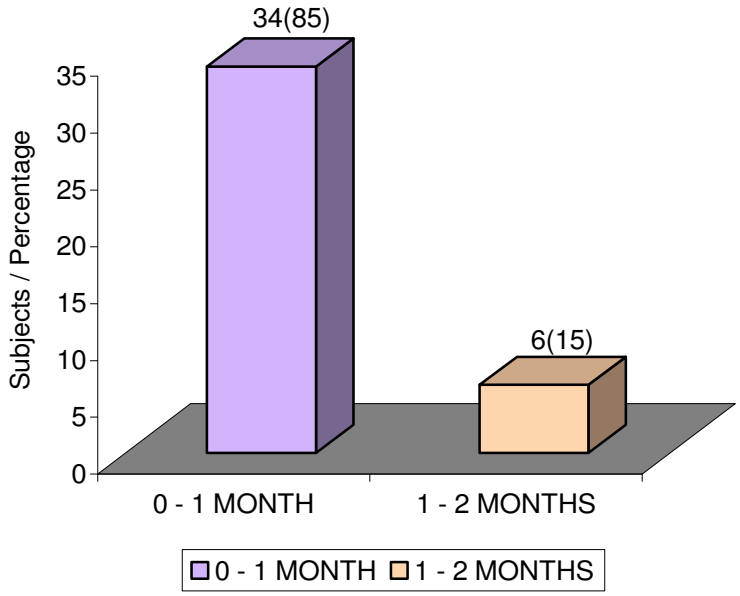
Frequency distribution of duration of illness



DURATION OF ILLNESS

Figure 3(L)

Frequency distribution of duration of treatment



DURATION OF TREATMENT

SECTION B

Frequency distribution of pre test knowledge level of subjects regarding radiation therapy among patients with cancer

Table 1 : Frequency distribution of subjects of pre test knowledge

N = 40

		Correct response		Incorrect response	
ITEM	TOOL CONTENT	f	%	f	%
General information	1. Definition of cancer	17	(39)	23	(52)
	2. Cause of cancer	19	(43)	21	(48)
	3. Who will be with you during radiation therapy	19	(43)	21	(48)
	4. Modalities of treatment	15	(34)	25	(57)
	5. Meaning of radiation therapy	16	(36)	24	(55)
Fear anxiety	6. Common feelings after radiation therapy	20	(46)	20	(46)
	7. Feel during radiation therapy	18	(41)	22	(50)
	8. Does your body images gets changed	20	(46)	20	(46)
	9. Do you feel cancer is a result of sin	17	(39)	23	(52)
	10. Do you fear whether your offspring will get affected by radiation	17	(39)	23	(52)
Skin care	11. Care for skin fold area	12	(27)	28	(64)
	12. Clothing wear during radiation therapy	18	(50)	22	(50)
	13. Immediate localized effect of radiation therapy	19	(43)	21	(48)
	14. Care to the treatment area of dry skin	15	(34)	25	(57)
	15. Measures for burning sensation of the skin	9	(21)	31	(71)

Nutrition care	16. Diet to be avoided during radiation therapy	18	(41)	22	(50)
	17. Diet suitable for radiation therapy	19	(43)	21	(48)
	18. Compensate the fluid	19	(43)	21	(48)
	19. Diet before radiation therapy	17	(39)	23	(52)
	20. Side effects of radiation therapy	15	(34)	25	(57)
Sexuality	21. Effects on sexual function	16	(36)	24	(55)
	22. Sex during the course of radiation therapy	13	(30)	27	(61)
	23. Can radiation therapy weaken your sexual act	16	(36)	24	(55)
	24. The cancer spread to your spouse during act of sex	15	(34)	25	(57)
	25. Unpleasant sensation during, sexual act	16	(36)	24	(55)
Side effects	26. Commonest side effects caused by radiation therapy	15	(34)	25	(57)
	27. Measures to reduce fever	17	(39)	23	(52)
	28. Manage tiredness	16	(36)	24	(55)
	29. Effect of radiation therapy on hair growth	18	(41)	22	(51)
	30. Action for constipation	15	(34)	25	(57)

This table reveals that in the pre test knowledge score on general information was 86(43) were correct response, majority of the questions were incorrect response 114 (57).

Regarding fear & anxiety was 92 (46) were correct response, majority of the questions were 108 (54) incorrect responses.

In response to skin care, only 73 (36) were correct response, majority of the questions were 127(64) incorrect response, regarding nutrition care 88 (44) were correct response 112 (56) were incorrect response, regarding sexuality76 (38) were correct response, 124 (62) were incorrect response, in side effects 81(40) were correct response, 119 (60) were incorrect response.

SECTION C

Frequency distribution of subjects pre test level of attitude regarding radiation therapy among patients with cancer

Table 2 : Frequency distribution of pre test attitude level.

N = 40

S. No.	Tool Content	Agree f %	Uncertain f %	Disagree f %
1	Radiation therapy can cure few types of cancer	18 (41)	6 (14)	16 (36)
2	Radiation therapy is like a punishment for cancer	23 (53)	5 (11)	12 (27)
3	Radiation therapy is a unpleasant way of treating cancer	23 (53)	4 (9)	13 (30)
4	Radiation therapy makes the cancer patients to loose his independence	18 (41)	10 (41)	12 (23)
5	Radiation therapy will loose the sexual drives	14 (32)	15 (34)	11 (25)
6	Radiation therapy is a safe and reliable method of treating cancer	9 (21)	13 (30)	18 (41)
7	Cancer patients receiving radiation therapy can lead a normal life	9 (21)	16 (36)	15 (43)
8	Problems duo to radiation therapy can be managed effectively	9 (21)	15 (34)	16 (36)
9	Patients receiving radiation therapy can have friends and be happy	26 (36)	10 (23)	14 (32)
10	Radiation will burn cancer cells	13 (30)	10 (23)	17 (39)

The above table shows 24 (60) were having negative attitude, 9 (23) were neutral, only 7(17) had positive attitude.

SECTION D (a)

Distribution of post test knowledge score and attitude score regarding radiation therapy among patients with cancer

Table 3 : Frequency distribution of post test knowledge.

N = 40

Item	Tool Content	Correct response f %	incorrect response f %
General information	1. Definition of cancer	31 (80)	9 (20)
	2. Cause of cancer	32 (82)	8 (18)
	3. Who will be with you during radiation therapy	33 (85)	7 (15)
	4. Modalities of treatment	30 (78)	10 (22)
	5. What do you mean by radiation therapy	35 (89)	5 (11)
Fear & anxiety	6. Feelings after radiation therapy	37 (94)	3 (6)
	7. Feel during radiation therapy	36 (91)	4 (9)
	8. Body images gets changed	35 (89)	5 (11)
	9. Do you feel cancer is a result of sin	37 (94)	3 (6)
	10. Fear whether your offspring will get affected by radiation therapy	24 (64)	16 (36)
5 Skin care	11. Care for skin fold area	37 (94)	3 (6)
	12. Clothing wear during radiation	34 (87)	6 (13)
	13. Immediate localized effect of radiation therapy	35 (89)	5 (11)
	14. Care to the treatment area of dry skin	38 (96)	2 (4)
	15. Measures for burning sensation of the skin	21 (57)	19 (43)

(Contd...)

Nutrition care	16. Diet to be avoided during radiation therapy	23 (62)	17 (38)
	17. Diet suitable for radiation therapy	38 (96)	2 (4)
	18. Compensate the fluid	30 (78)	10 (22)
	19. Diet before radiation therapy	31 (80)	9 (20)
	20. Commonest side effects of radiation therapy	34 (87)	6 (13)
Sexuality	21. Effect on sexual function	35 (89)	5 (11)
	22. Sex during the course of radiation therapy	31 (80)	9 (20)
	23. Radiation therapy weaken your sexual act	32 (82)	8 (18)
	24. The cancer spread to your spouse during act of sex	33 (85)	7 (15)
	25. Experience any unpleasant sensation during, sexual act	33 (85)	7 (15)
Side effects	26. Commonest side effects caused by radiation therapy	37 (94)	3 (6)
	27. Reduce fever during radiation therapy	38 (96)	2 (4)
	28. Manage tiredness	39 (98)	1 (2)
	29. Effect of radiation therapy on hair growth	34 (87)	6 (13)
	30. Action for constipation	37 (94)	3 (6)

The above table shows post test knowledge score of patients with cancer regarding radiation therapy. In all aspects of radiation therapy, there is a difference because of effectiveness of structured teaching programme.

This table reveals that in the post test knowledge score on general information was 161(82) were correct response, only39 (19) were incorrect response.

Regarding fear & anxiety was 169 (85) were correct response, only31 (15) questions were incorrect responses.

In response to skin care, 165 (83) were correct response, 35(17) the questions were incorrect response, regarding nutrition care 156 (78) were correct response 44 (22) were incorrect response, regarding sexuality164 (82) were correct response, 36 (18) were incorrect response, in side effects 185(93) were correct response, 15 (7) were incorrect response.

SECTION D (b)

Distribution of post test knowledge score and attitude score regarding radiation therapy among patients with cancer

Table 4 : Frequency distribution of post test attitude.

N = 40

S. No.	TOOL CONTENT	Certain f %	Uncertain f %	Disagree f %
1	Radiation therapy can cure few types of cancer	3 (7)	8 (18)	29 (75)
2	Radiation therapy is like a punishment for cancer	4 (9)	5 (11)	31 (80)
3	Radiation therapy is a unpleasant way of treating cancer	-	16 (36)	24 (64)
4	Radiation therapy makes the cancer patients to loose his independence	2 (5)	14 (31)	24 (64)
5	Radiation therapy will loose the sexual drives	2 (5)	8 (17)	30 (78)
6	Radiation therapy is a safe and reliable method of treating cancer	31 (80)	5 (11)	4 (9)
7	Cancer patients receiving radiation therapy can lead a normal life	29 (76)	9 (19)	2 (5)
8	Problems duo to radiation therapy can be managed effectively	24 (76)	9 (19)	2 (5)
9	Patients receiving radiation therapy can have friends and be happy	26 (75)	10 (22)	4 (3)
10	Radiation will burn cancer cells	26 (75)	7 (13)	7 (12)

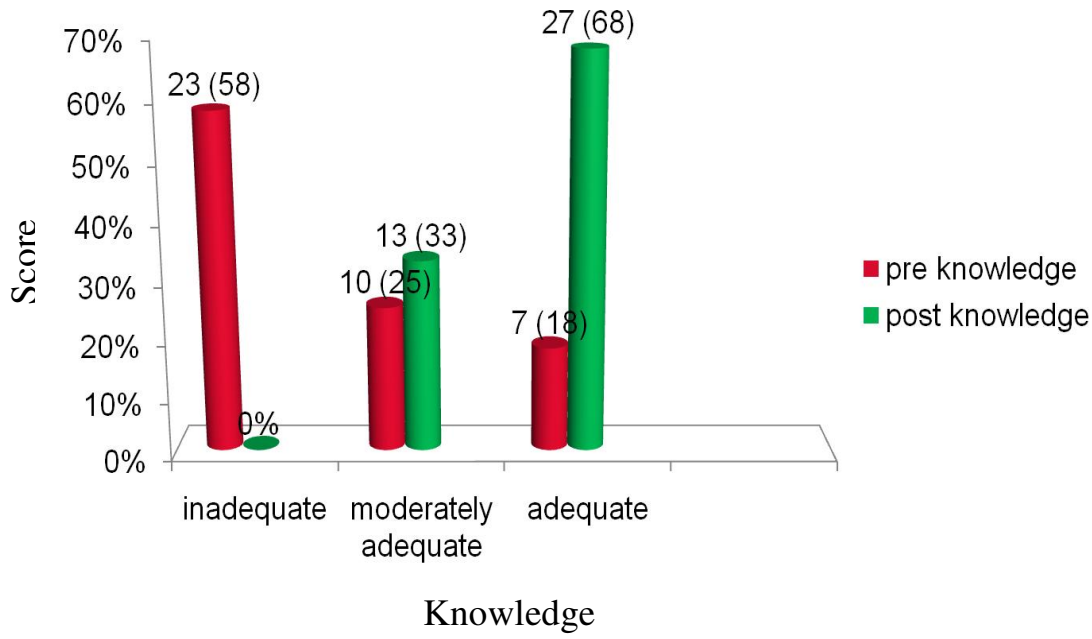
The above table shows 27 (68) had positive attitude, 9 (32) had neutral, none of them negative attitude.

SECTION D

DISTRIBUTION OF PRE AND POST KNOWLEDGE FREQUENCY

Figure 4(a)

Percentage distribution of pre test and post test knowledge scores.



The inferences made are

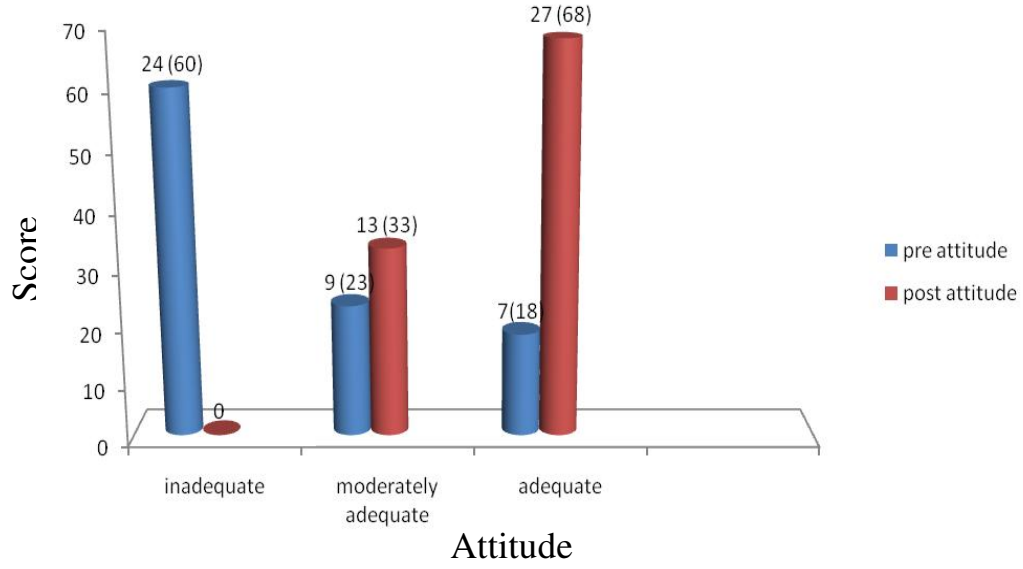
In the pre test knowledge score, among 40 patients with cancer who were receiving radiation therapy 23 (58) of them were inadequate; 10 (25) of them were moderately adequate; only 7 (18) of them were adequate. In the post test knowledge score 2 (68) had adequate knowledge, only 13 (33) had moderately adequate knowledge; none of the subjects had in adequate knowledge.

SECTION D

DISTRIBUTION OF SUBJECTS ACCORDING TO PRE AND POST ATTITUDE

Figure 4(b)

Percentage distribution of pre test and post test attitude score.



The inferences made are

In the pre test attitude score, among 40 patients with cancer who were receiving radiation therapy 24 (60) of them were inadequate; 9 (23) of them were moderately adequate; only 7(18) of them were adequate. In the post test attitude score 13 (33) had moderately adequate, 27 (68) had adequate. None of the subjects had negative adequate.

SECTION E

Comparison of mean scores of knowledge and attitude and correlation between pre and post test

Table 5 : Comparison of mean scores and correlation.

N = 40

Score	MEAN	SD	Paired 't' test
Pre test knowledge score	50.00	18.27	7.592*
Post test knowledge score	78.83	12.27	
Pre test attitude score	49.00	23.48	7.088*
Post test attitude score	81.25	13.43	

p*< 0.01 level

The effectiveness of structured teaching programme was more significant at P < 0.01 level. The above table shows that there was a highly significant difference in the mean scores between pre test and post test in relation to knowledge, attitude regarding radiation therapy among patients with cancer. The mean knowledge pre test 50 00 significantly lesser than the mean knowledge post test 78.83, similarly the mean attitude pre test score 49.00 significantly lesser than the mean attitude post test score 81,25. This difference is true and not by chance.

Correlation of post test knowledge and post test attitude of the subjects.

Correlation coefficient between knowledge and attitude

Group (N = 40)	post test 'r'
	.797

** Correlation is significant at the 0.01 level

SECTION F

Association between post test knowledge and attitude scores with selected demographic variables of cancer patients regarding radiation therapy

Table 6 : Frequency distribution of post test knowledge scores with selected demographic variables.

N = 40

Demographic variables		f	χ^2
Age in years	20-30	6	
	30-40	18	
	40-50	16	1.032
Sex	Male	7	
	Female	33	.060
Marital status	Married	39	
	Unmarried	1	.494
Educational status	Illiterate	10	
	Primary education	27	
	College	3	1.709
Income in ₹	< 2000	31	
	2000-5000	7	
	> 5000	2	1.306
Occupation	Agriculture	20	
	Employee	12	
	Unemployed	8	1.481

(Contd...)

Religion	Hindu	35	
	Christian	3	
	Muslim	2	2.751
Residence	Rural	34	
	Urban	6	.985
Life style factor tobacco	Yes	25	.008
	No	15	
Life style factor alcohol	Yes	6	.002
	No	34	
Life style factor betel chewing	Yes	14	.101
	No	26	
Life style factor smoking	Yes	7	.060
	No	33	
Food	Vegetarian	7	
	Non-vegetarian	33	.060
Duration of illness	6 - 12 months	23	
	1 – 2 years	17	1.085

The above table shows that there was no significant association between the selected demographic variables like age, sex, occupation, betel chewing, alcohol intake and the post test knowledge at $p<0.01$ level

SECTION-G

Association between the selected demographic variables, and Posttest attitude score of patients receiving radiation therapy

Table 8 : Frequency distribution of post test attitude scores with selected demographic variables.

N = 40

Demographic Variables		f	χ^2
Age in years	20-30	6	
	30-40	18	1.792
	40-50	16	
Sex	Male	7	.060
	Female	33	
Marital status	Married	39	.494
	Unmarried	1	
Educational status	Illiterate	10	
	Primary education	27	.359
	College	3	
Income in ₹	< 2000	31	
	2000-5000	7	2.566
	> 5000	2	
Occupation	Agriculture	20	
	Employee	12	.456
	Unemployed	8	
Religion	Hindu	35	2.752

	Christian	3	
	Muslim	2	
Residence	Rural	34	.807
	Urban	6	
Life style factor tobacco	Yes	25	.008
	No	15	
Life style factor alcohol intake	Yes	6	.002
	No	34	
Life style factor betel chewing	Yes	14	.1.203
	No	26	
Life style factor smoking	Yes	7	.060
	No	33	
Food	Vegetarian	7	.060
	Non-vegetarian	33	
Duration of illness	6 months – 1 Year	23	.129
	1 – 2 Years	17	

The above table shows that there was no significant association between selected demographic variables like age, sex, occupation, betel chewing, alcohol intake and the post test attitude.

CHAPTER- V
DISCUSSION

This chapter discusses the findings of the study from the statistical analysis. The aim of the present study was to assess the effectiveness of a structured programme on knowledge attitude regarding radiation therapy among the patients with cancer.

The purpose of this was to educate the cancer patents who intended to receive radiation therapy. This would enable them to take care of themselves at home to maintain stringent vigilance for early identification and seek medical aid immediately.

The first objective of the study was to assess the knowledge regarding radiation therapy among the patients with cancer receiving radiation therapy.

The investigator feels that the patients with cancer who are about to undergo radiation therapy lack knowledge about radiation therapy. They had anxiety about their children's future, anxiety may be increased with duration of treatment. They had fear that they would be deserted by their husbands because of their illness and sexual difficulties.

Pre test knowledge score on general information was 86(43) correct response, majority of the questions were incorrect response 114 (57).

Regarding fear & anxiety 92 (46) were correct response, majority of the questions were 108 (54) incorrect responses.

In response to skin care, only 73 (36) were correct response, majority of the questions were 127(64) incorrect response, regarding nutrition care 88 (44) were correct response 112 (56) were incorrect response, regarding sexuality76 (38) were correct response, 124 (62) were incorrect response, in side effects 81(40) were correct response, 119 (60) were incorrect response.

This was supported by Bashore l 2004 who states that a lack of knowledge especially of the survivors individual risk of for developing late complications of their radiation therapy education about late complication of therapy should be introduced early in their radiation therapy and it helps the cancer patients how their own health behaviorus may influence the development of these late complications.

Dun J Steginga SK 2007 has suggested that education on radiation therapy for cancer patients has the potentials to promote adjustment through assisting patients to participate in treatment.

The second objective of the study was to assess the attitude towards radiation therapy among patients with cancer receiving radiation therapy. It Shows 24 (60) were having negative attitude, 9 (23) were neutral, and only 7(17) had positive attitude.

The attitude towards radiation therapy was minimally positive and greatly negative. The women experienced more negative attitude then men. The amount and type of information required to cope effectively vary among individuals and depend on the kind of diagnosis, inactive communication among family members, coping styles and behaviour.

Larsson M (2009) describes that patients with head and neck cancer have complex long lasting physical and psychosocial needs to illness and treatment. To meet these patients needs knowledge, care and support both concerning practical measures related to the disease and its treatment and emotional needs. This way of organizing the care contributes to these patients health and well being.

The third objective of the study was to assess the effectiveness of structured teaching programme on knowledge and attitude regarding radiation therapy among patients with cancer. This Shows post test knowledge score of patients with cancer regarding radiation therapy.

In all aspects of radiation therapy, like nutritional care, skin care, management of side effects, there was a difference because of structured teaching programme.

In the post test knowledge score on general information was 161(82%) were correct response, and only 39 (19%) came with incorrect response.

Regarding fear & anxiety, 169 (85%) were with the correct response, only31 (15) questions were incorrect responses.

In response to skin care, 165 (83) were correct responses in, 35(17) the questions elicited incorrect responses, regarding nutrition care 156 (78) were correct responses 44 (22) were incorrect responses, regarding sexuality 164 (82) were correct responses, 36 (18) were incorrect responses, in side effects 185(93) were correct responses, 15 (7) were incorrect responses. Regarding attitude, 27 (68) had positive attitude, 9 (32) had neutral,and none of them had negative attitude.

The patients with cancer had gained adequate knowledge regarding radiation therapy during post test. 27 (68) had adequate knowledge and none of the subjects had inadequate knowledge. This difference in the pre test knowledge scores and post test knowledge score could be due to structured teaching program regarding radiation therapy.

The post test majority of subjects 100% had positive attitude whereas in the pre test only (7out of 40) 17.5% had positive attitude. None of the subjects had negative attitude. The difference in the pre test and post test attitude scores might be due to structured teaching programme.

Madsen SM (2007) supported the finding that most patients voiced positive attitude towards cancer originated mostly from the media.

Also supported by Dubois s Loiselle C (2008) Information directed their decisions about reliance on health services. Lack of knowledge is somewhat paralyzing and this leads to distress, conflict, reduced confidence in the health care system. Knowledge about how and when informational support may be most timely may optimize individuals well being and further guide their use of cancer related treatment modalities.

Supported by Dunn J Steginga 2007 video education program on radiation therapy for cancer patients has the potential to promote adjustment and the information in the video was new to them. Education materials that have excellent face validity are well received by patients in order to meet the specific needs of the patients.

Hatisfield Wolfe 2005 also supported the findings on development and pilot testing a booklet for oncology patients assessment. Nursing

staff identified the need to develop a booklet that would instruct adult oncology patients feedback from both staff and patients that are very positive.

Mills and Davidson 2004 also supported this finding that appropriate informationed offered at the right time, has been recognized as a key factor in enabling the patients to cope with treatment modalities. Specialist nurses were clearly the preferred sources of information for the majority of cancer patients.

The fourth objective of the study was to find out the relationship between the post test knowledge score and post test attitude score of patients with cancer receiving radiation therapy. That the mean pre test knowledge score. Radiation therapy was (50.00), SD = 18.27 before receiving; whereas the mean post test knowledge score was (78.83), SD = 12.27 after receiving structured teaching program. In order to test the difference between the two means 't' test was computed with spss 13.0 and the obtained 't' value at (39)was 7.592, which was significant at 0.05 level.

The mean post test attitude score radiation therapy was (49.00), SD = 23.48) before receiving; whereas the mean post test attitude score was (81.25), SD = 13.43 after receiving structured teaching program. In order to test the difference between the two means't' test was computed with spss 13 .0 and the obtained't' value at (39) was7.088, which was significant at 0.05 level. Since the obtained 't' value was higher than the table value the researcher accepted the research hypothesis. It indicates that structured teaching programme on radiation therapy had a significant

role in increasing the knowledge and change in attitude regarding radiation therapy.

The corresponding hypothesis was H5.There will be a significant relationship between knowledge and attitude regarding radiation therapy among patients with cancer. When the knowledge has increased significantly positive attitude also increased. There was a significant correlation between knowledge scores and attitude scores of the subject group. Hence there was a significant relationship between knowledge and attitude. H5 was accepted.

Ahiberge K 2004 describes that patients experienced a low grade of fatigue and psychological distress. Women with uterine cancer who were scheduled to receive radiation therapy, significant correlations were found between general fatigue and anxiety and also between general fatigue and depression. There was a significant negative correlation between general fatigue and coping resources, which also was supported by Xiaokun l 2006 states that education provides the base line knowledge for understanding the quality of life among mastectomy patients.

Morrow 2007 in his study. A direct correlation was observed between severity of skin problems and pain at the treatment site. The fifth objective was to find out the association between post test knowledge scores with demographic variables of the patients with cancer, the commonly used X2 has been used. The corresponding hypothesis was H6. There will be association between attitude scores with demographic variables of the patients with cancer.

It is hypothesized that there is no association between the knowledge and demographic variables, and attitude and demographic

variables. The test statistics shows that there is no reason to reject the hypothesis, since the significant value is greater than 0.05 and it is concluded that there is no association between knowledge, attitude and majority of the demographic variables. It is found that the demographic variables do not have effect over the knowledge and attitude regarding radiation therapy.

In patients undergoing radiation therapy education plays a meager role, because though the patient is literate, they also have a fearful mind setup about radiation therapy.

Similarly age also has no role in dealing with knowledge about radiation therapy and also sex of the patient does not show any positive attitude about the effects of radiation therapy. Economical status of the patients does not determine their approach towards radiation therapy.

That which was supported by Gattuso 2005 states that internal influences e.g. fear and external influences e.g. family motivated the cancer patients to participate in health promotion activities. But patients generally supported a gradual provision of information. Appositive listening environment is important for patients. The provision of adequate information during and after radiation therapy as well as peer counseling in a positive listening environment are important in helping survivors participate in health promotion activities.

Xiana-ya 2005 describes the quality of life and coping style of naso pharyngeal carcinoma patients. There were negative correlation between emotive, fatalistic, and evasive quality of life. The adverse effects of radiation therapy remains the major problems that affect the health related quality of life of NPC patients post therapy. Positive emotion focused

coping styles were positively correlated to QOL and negative emotion focused ones were negatively correlated to problem focused coping styles which need to pay attention to the QOL of NPC to minimize ongoing adverse effects and support the use of effective coping style.

Capirci c Feldman – Stewart 2005 find out the information priorities of health care professionals and patients treated with radiation therapy.There was considerable variation between the groups and also considerable variation within each group. Professionals cannot assume that their own information priorities are the same as those of their patients.

Szumacher E 2006 states that a lack of knowledge and alternative treatment are not widely accepted while discussing their treatment option with oncologists, women with breast cancer frequently express many concerns regarding treatment side effects.

Hence it is concluded that if at all there is any improvement at any of the knowledge aspects and positive change behaviour regarding radiation therapy, it is due to teaching imparted by the investigator. This study is also supported by safe radiation therapy review letter 1993 which stated that “any formal education programme such as structured teaching and provision of –self-learning materials, peer treatment group motivates cancer patients in improving knowledge about current health practices.

CHAPTER VI
SUMMARY AND RECOMMENDATIONS

This chapter deals with the summary, conclusion, limitation, and implications for nursing practice, nursing education, nursing administration and recommendations for further nursing research.

An evaluative approach was undertaken to assess the effectiveness of structured teaching programme on knowledge and attitude regarding radiation therapy among patients with cancer receiving radiation therapy admitted at Dr GVN Cancer Cure Center, during the year 2010.

The study was conducted from 3.05.2010-16.06 2010 in patient unit of Dr GVN Cancer Cure Center Trichy. A sample of 40 cancer patients who were intended to receive radiation therapy were selected by using convenient sampling technique.

Conceptual Framework of the study was adopted from Sister Callista Roy's adaptation model. After collecting the demographic data, pre test was conducted using structured interview schedule.

The instrument consisted of two parts; demographic data consisted of age, religion, sex, occupation, income residence, life style factors like smoking, betel chewing, tobacco chewing, and Clinical variables such as duration of illness, and duration of treatment. A structured knowledge and attitude questionnaire on radiation therapy were administrated.

After the pre test, the structured teaching programme on radiation therapy was conducted using audio, and video clips in a computed video disc. After seven days, post test was conducted using the same questionnaire by interview. Statistical analysis was done using

descriptive statistical methods like numbers, percentage, mean, standard deviation and inferential statistical methods such as chi-square and paired ‘t’test. The post test data analysis showed that the knowledge of individuals has increased and none of the subjects had negative attitude regarding radiation therapy after structured teaching programme

MAJOR FINDINGS OF THE STUDY

In the pre test, with regard to the knowledge score of cancer patients 23 (58) subjects had inadequate knowledge, 10 (25) had moderately adequate knowledge and only 7 (18) had adequate knowledge regarding radiation therapy.

In the pre test majority of subjects 24 (60) had negative attitude, 9 (23) had neutral attitude and only 7 (18) had negative attitude regarding radiation therapy.

In the post test, the knowledge score has increased markedly 13 (33) had moderately adequate knowledge, 27 (68) had adequate knowledge and none of the subjects had inadequate knowledge.

In the post test, 27 (68) had positive attitude,and 13 (33) had neutral attitude regarding radiation therapy. None of the subjects had negative attitude,

This implies that structured teaching programme played a vital role in improving knowledge and change in their attitude regarding radiation therapy.

The effectiveness of structured teaching programme between pre test and the post test was analyzed by paired‘t’ test. The pre test score was 50 which was increased to 79, the pre test attitude score was 49

which was increased to 81 after the structured teaching programme, which was statistically significant at $p < 0.05$ level. This proved that structured teaching programme had been effective.

There was relationship between knowledge and attitude regarding radiation therapy when knowledge increases; it brings a change in the attitude. To test the correlation of knowledge and attitude, Pearson correlation test is applied; it is found that there was correlation of knowledge and attitude. There was no significant association was found between knowledge and demographic variables such as educational status, occupation, age, sex and income. Also there no association which was found between attitude and the same demographic variables.

NURSING IMPLICATION

Patient education practices are scattered all around the world.

1. The early identification of side effects, prevention of side effects and it can be made increasingly in the home for which health education plays a vital role. Lack of health teaching may sometimes become life threatening.
2. The complex health behaviour of an individual is influenced by various factors like knowledge, awareness and attitude. The implication drawn from the present study is a vital concern for the health team including the professional nurse, practitioners, nurse administrations and educators.
3. The health teaching is an integral part of nursing service. The successful out come of health results from the assessment of the previous knowledge.
4. The prepared structured teaching programme can be a useful manual for health care providers.

5. Health education helps the cancer patients to identify the symptoms of radiation therapy, side effects and report to the nursing personnel. Further more, they can be the source of information to the other cancer patients and community.
6. This would automatically decrease the expenditure on health care. Therefore health teaching is a professional responsibility of every nurse.

IMPLICATION FOR NURSING PRACTICE

1. The nurses working in the hospital, community, and clinical setting should practise the health teaching as an integral part of nursing profession. The teaching tool developed by the investigator may be used by the health care providers in the hospital to create awareness among nurses about the importance of teaching regarding radiation therapy.
2. This will help the cancer patients to prevent the side effects of radiation therapy and to improve the knowledge and change their attitude i.e. communication of behavioural change.
3. Nurses should place health in the hands of the people especially for the cancer patients who are in need of long term care. During investigation it was identified that there is a need for health advice and the responsibility lies in the hands of the health care this study also implies the need for integrated services, feedback and follow up of health team.
4. The shift from cure to care concept, which implies the need for change that haste is introduced from within the patient's behaviour rather than the organic system.

IMPLICATION FOR NURSING EDUCATION

1. The nursing curriculum, the students need to be strengthened to enable them to identify the skin changes related to radiation therapy and to provide supportive educative care for the self care in preventing complications.
2. This study calls for the strengthening of the patient education in the present system of nursing education.
3. The study stresses the significance of the short- term courses, in service education to provide nurses with advanced knowledge of radiation therapy, the facilities available and the latest development in the field of oncology.

IMPLICATION TO NURSING ADMINISTRATION

1. Nursing leaders are challenged to take care of the most dreadful disease condition by effective organization and management.
2. The nurse administrators should take active participation in the health policymaking, developing protocol, procedures, and standing orders related to health of the cancer patients.
3. They should concentrate on the proper selection, placement and effective utilization of the nurses in all areas giving room for their creativity, interest and ability in educating the patients with cancer.
4. The educative role of the nurses can be well established by an ongoing educational programme.Good supervision of nursing care services would motivate the nurses to carry out this role in a very effective manner.

IMPLICATION FOR THE NURSING RESEARCH

1. The essence of research is to build up a body of knowledge in nursing, as it is an evolving profession.
2. The effectiveness of the studies in research field is verified by its utility by the nurses in the practical field.
3. The findings of the study also help the professional nurses and students to develop inquiry by providing a base.
4. The generalization of the study result can be made by further replication of the study.
5. This study helps the nurse researchers to develop insight in to the development of teaching module and material for care of the skin during and after radiation therapy towards promotion of health of the cancer patients.

LIMITATION

It was time consuming for the investigator as it took 30-40 minutes to interview the samples. The study was done among 40 subjects; hence generalization is possible only for the selected sample.

RECOMMENDATIONS

1. The nurse posted in the oncology radiation therapy unit could spare sometime for teaching and guiding the cancer patients who are chosen to undergo radiation therapy.
2. A nurse health educator may be posted in the pre radiation therapy unit.

3. A pamphlet containing information in their own language to create more awareness and knowledge about radiation therapy may be prepared.
4. In the pre radiation therapy unit room display boards and posters depicting the details of self care management of radiation therapy may be kept available.

RECOMMENDATION FOR FURTHER STUDIES

Based on the study findings, the following recommendations were made.

1. Replications of the study may be done with larger samples and generalize the findings.
2. Experimental and control groups can conduct a similar study.
3. A similar study can be conducted by using a qualitative approach (phenomenological) on feelings of patients regarding radiation therapy.
4. A study may be carried on to evaluate the various treatment modalities for cancer
5. A comparative study can be done between the effects of STP versus self-instruction module.

CONCLUSION

A successful way to reach out positive health is by organizing health education programme to the needy. The study has given clues that majority of the cancer patients had inadequate knowledge and attitude regarding radiation therapy which guided the investigator to perform a structured teaching programme about the various aspects of general information on cancer, radiation therapy, treatment modalities, and prevention of side effects and its management.

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APPENDIX - A

LETTER REQUESTING TO VALIDATION

From

Mrs. C. Fransisca Brinda,
II Year M.Sc (N),
Dr. G. Sakunthala College of Nursing,
T.V. Kovil,
Trichy – 5.

To

Through

The Principal,
Dr. G. Sakunthala College of Nursing,
T.V. Kovil,
Trichy – 5.

Respected Sir,

Sub: *Letter Requesting opinion and suggesting from Experts for establishing content validity of the tool.*

I am B. Cynthia M.Sc. nursing student of Dr. G. Sakunthala College of Nursing, T.V. Kovil, Trichy – 5. As part of my course, I am doing study on the topic mentioned below.

'A pre experimental study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding radiation therapy among patients with cancer receiving radiation therapy admitted at Dr.G.V.N cancer Cure Centre' Trichy – 2010 – 2011.

May I request you to go through and validate the content of the tool. Please give your valuable suggestion for modifying the tool.

Thanking you,

Your's sincerely,

C. Fransisca Brinda

II Year M.Sc (N) Student,

KNOWLEDGE QUESTIONNAIRE

QUESTIONS RELATED TO GENERAL INFORMATION.

1. What is cancer?
   (a) Abnormal cell growth
   (b) Abscess
   (c) Collection of pus
   (d) Don't know

2. What are common causes of cancer?
   (a) Bacteria &dust
   (b) Fungus & protozova
   (c) Virus &chemical
   (d) Don't know

3. Who will be with you during radiation inside the room?
   (a) Doctor / nurse
   (b) Family members
   (c) No one
   (d) Don't know

4. What are the modalities of treatment used for cancer?
   (a) Diet therapy & yoga
   (b) Radiation therapy &chemotherapy
   (c) Exercise & x-ray
   (d) Don't know

5. What do you mean by radiation therapy?

(a) Being burnt

(b) Being disfigured

(c) Killing of cancer cells by rays

(d) Don't know

QUESTIONS RELATED TO FEAR / ANXITEY

1. What are the common feelings after radiation therapy in your body?

(a) Dryness, nausea

(b) Feeling sleepy

(c) Dizziness & giddiness

(d) Don't know

2. How do you feel during radiation therapy in your body?

(a) Very painful

(b) No abnormal sensation

(c) Itching

(d) Don't know

3. Does your body image gets changed because of radiation therapy?

(a) Changed

(b) Unchanged

(c) Regain after Radiotherapy

(d) Don't know

4. Do you feel cancer is a result of sin?
   (a) Cancer is a curse of god
   (b) Cancer is a curse by others
   (c) Cancer is gene or chemical related
   (d) don't know

5. Do your fear whether your off spring will get affected by radiation therapy?
   (a) Yes
   (b) No
   (c) Uncertain
   (d) Don't know

QUESTIONS RELATED TO SKIN CARE

1. How will you give care for skin fold area?
   (a) Ice pack
   (b) Apply hot water bottle application
   (c) Keep the skin fold clean &dry
   (d) Don't know

2. What type of clothing will you wear during radiation therapy?
   (a) Tight fitting clothing
   (b) Light weight loose cotton garments
   (c) Polyster variety
   (d) Don't know

3. What is the immediate localized effect of radiation therapy on skin?
   (a) Erythema

(b) Ulcer

(c) Swelling

(d) Don’t know

4. How can you give care to the treatment area of dry skin?

(a) Apply oil

(b).Expose the skin to the sunlight

(c) Use of GV paint

(d) Don’t know

5. What measures must you take for burning sensation of the skin?

(a) Avoid contact with water

(b) Do mild exercise

(c) Consult the doctor and apply ointment prescribed

(d) Don’t know

QUESTIONS RELATED TO NUTRITION

1. What kind of diet to be avoided during radiation therapy?

(a) Spicy food

(b) Fat food

(c) Fiber food

(d) Don’t know

2. Kind of diet suitable for radiation therapy?

(a) Low calorie diet

(b) Protein rich diet

(c) Ordinary diet

(d) Don’t know

3. How will you compensate the fluid loss?
   (a) ORS
   (b) Fruit juice & tender coconut
   (c) Only water
   (d) Don't know

4. What diet will you take before radiation therapy?
   (a) No intake of food
   (b) Light non irritating food
   (c) Heavy food
   (d) Don't know

5. What is the commonest side effects of radiation therapy on body fluids?
   (a) Body pain
   (b) Edema
   (c) Diarrhea / vomiting
   (d) Don't know

QUESTIONS RELATED TO SEXUALITY

1. Is there any effect on sexual function during radiation therapy?
   (a) Sterility
   (b) Reduce sexual desire
   (c) No effect
   (d) Don't know

2. Is it advisable to have a sex during the course of radiation therapy?
   (a) Yes
   (b) No

(c) Good for health

(d) Don’t know

3. Can radiation therapy weaken your sexual act?

(a) Yes

(b) No

(c) Same as before

(d) Don’t know

4. Does the cancer spread to your spouse during the act of sex?

(a) Not spread

(b) spread

(c) Spread by virus

(d) Don’t know

5. Will you experience any unpleasant sensation during sexual act because of radiotherapy?

(a) Yes

(b) No

(c) Head ache

(d) Don’t know

QUESTIONS RELATED TO SIDE EFFECTS

1. What are the side effects caused by radiation therapy?

(a) Dry squmation / Wet squmation

(b) Head ache/ Back ache

(c) Cholera / Dyscentry

(d) Don’t know

2. What measures will you take to reduce fever during radiation therapy?
   (a) By maintaining proper personal hygiene
   (b) By taking regular antibiotics
   (c) By regular exercise
   (d) Don’t know

3. How can you manage tiredness which is a common problem due to radiation therapy?
   (a) Taking complete rest
   (b) Taking short naps, rather than long rest period
   (c) Taking high cholesterol diet
   (d) Don’t know

4. What is the effect of scalp radiation therapy on hair growth?
   (a) Hair fall
   (b) Hair growth improves
   (c) No effect
   (d) Don’t know

5. What action will you take for constipation?
   (a) Drink plenty of fluids
   (b) Eat small quantity of high fatty food
   (c) Plenty of cooked rice
   (d) Don’t know

ATTITUDE SCALE

SI. No.	TOOL CONTENT	Agree	Uncertain	Disagree
1.	Radiation therapy can cure few types of cancer.			
2.	Radiation therapy is like a punishment for cancer patient			
3	Radiation therapy is a unpleasant way of treating cancer			
4	Radiation therapy makes the cancer patients to loose his independence			
5	Radiation therapy will loose the sexual drives			
6	Radiation therapy is a safe and reliable method of treating cancer			
7	Cancer patients receiving radiation therapy can lead a normal life			
8	Problems due to radiation therapy can be managed effectively			
9	Patients receiving radiation therapy can have friends and be happy			
10	Radiation will burn cancer cells			

Intstrument (Tamil)

பகுதி - I ஜனத்தொகை – விவரம்

மருத்துவ பதிவு எண் : தேதி :

1. வரிசை எண் :
2. புற்றுநோயின் உறுப்பு :
3. சிகிச்சையின் தன்மை :
4. சிகிச்சையின் காலம் :
5. வயது :
6. பாலினம் : ஆண் ☐ பெண் ☐
7. திருமண விபரம் : அ) திருமணம் ஆனவர் ☐
   ஆ) திருமணம் ஆகாதவர் ☐
8. வசிக்கும் இடம் : அ) கிராமம் ☐ ஆ) நகரம் ☐
9. கல்வி நிலை :
   அ) படிக்காதவர்
   ஆ) ஆரம்பக்கல்வி
   இ) நடுநிலைப்பள்ளி
   ஈ) உயர்நிலைக்கல்வி
   உ) கல்லூரி கல்வி
10. தொழில் :
    அ) கூலி வேலை
    ஆ) விவசாயம் செய்பவர்
    இ) சொந்த வியாபாரம் செய்பவர்
    ஈ) தொழிற் பணியாளர்

11. மாத வருமானம் :

அ) < 2000

ஆ) < 2000 - 4000

இ) < 4000 – 6000

ஈ) > 6000

12. பழக்க வழக்கங்கள் :

அ) புகைப்பிடிப்பவரா ? ஆம் / இல்லை

ஆ) ஆம் எனில் எவ்வளவு காலம்

இ) நாள் ஒன்றுக்கு சிகரெட் எண்ணிக்கை

13. குடிப்பழக்கம் உள்ளவரா :

ஆம் / இல்லை ☐ ☐

அ) ஆம் எனில் எவ்வளவு காலம் ☐

ஆ) தினமும் / எப்போதாவது ☐

இ) அளவு ☐

14. உணவு பழக்கம் :

அ) சைவம் ☐

ஆ) அசைவம் ☐

15. புகையிலை / வெற்றிலை பாக்கு போடுபவரா ? :

ஆம் / இல்லை ☐ ☐

ஆம் எனில் எவ்வளவு காலம் ☐

கதிரியக்கச் சிகிச்சை பற்றிய உங்களது மனோபாவம்

கதிரியிக்கச் சிகிச்சை அதன் பக்க விளைவுகள் மற்றும் அவற்றை எவ்வாறு மேற் கொள்வது என்பது பற்றிய உங்கள் அறிவுத்திறனைப் புரிந்துக்கொள்ள இது நல்லதொரு சந்தர்ப்பம். கீழே கொடுக்கப்பட்டுள்ள கேள்விகளை நன்றாக படித்து புரிந்துக்கொண்டு ஒவ் வொன்றுக்கும் கீழே தரப்பட்டுள்ள நான்கு பதில்களில் சரியான பதிலைக் கவனமாகத் தேர்வுசெய்து (√) செய்யுங்கள் உங்களுக்கு உதவ.

ஓர் உதாரணம் :

பருவின் அறிகுறிகள் :

அ) மதமதப்பு, தொண்டை வறட்சி, நிறம் மாறுதல் ( )

ஆ) நல்ல பசி, மலச்சிக்கல் மற்றும் தலைச்சுற்று ( )

இ) தலைவலி, களைப்பு மற்றும் குமட்டல் (√)

ஈ) தெரியவில்லை ( )

இதில் சரியான பதில் இ அதில் டிக் செய்துள்ளோம். இதனைப்போல் கீழுள்ளவற்றையும் படித்துப்பார்த்து சரியான பதிலைத் தேர்வு செய்யுங்கள்.

பொதுவான கேள்விகள் :

1. புற்றுநோய் என்றால் என்ன ?

அ) அதாசதாரணமான திசு வளர்ச்சி ( )

ஆ) கட்டி ( )

இ) சீல் கோர்த்தல் ( )

ஈ) தெரியவில்லை ( )

2. புற்றுநோய்க்கான சில காரணங்கள் யாவை ?

அ) பாக்டீரியாவும், தூசியும் ( )

ஆ) காளானும், புரோட்டோசோவா ( )

இ) வைரஸ்ம், வேதிப்பொருட்களும் ( )

ஈ) தெரியவில்லை ( )

3) கதிரியக்கச் சிகிச்சை பெறும்போது உங்களுடன் அந்த அறையில்

இருப்பவர் யார் ?

அ) மருத்துவர் / செவிலியர் ( )

ஆ) குடும்ப உறுப்பினர்கள் ( )

இ) ஒருவரும் இருக்கக்கூடாது ( )

ஈ) தெரியவில்லை ( )

4) புற்றுநோய்க்கான சிகிச்சை முறைகள் யாவை ?

அ) உணவு சிகிச்சை மற்றும் யோகா ( )

ஆ) கதிர்வீச்சு சிகிச்சை மற்றும் பல மருத்துவ கலவை சிகிச்சை ( )

இ) உடற்பயிற்சி மற்றும் எக்ஸ்ரே ( )

ஈ) தெரியவில்லை ( )

5. கதிரியக்கச் சிகிச்சைமுறை என்றால் என்ன ?

அ) எரித்தல் ( )

ஆ) உருவம் மாறுதல் ( )

இ) புற்றுநோய் திசுக்களை ஒளிகதிர்மூலம் அளித்தல் ( )

ஈ) தெரியவில்லை ( )

II- கதிரியக்கச் சிகிச்சை தொடர்பான பயம் மற்றும் படபடப்பு பற்றியதான கேள்விகள்

1. கதிரியிக்கச் சிகிச்சையின் போது உங்கள் சரீரத்தில் எவ்வாறு உணர்கிறீர்கள் ?

அ) அதிக வலி ( )

ஆ) எந்த உணர்வும் இல்லை ( )

இ) அரித்தல் ( )

ஈ) தெரியவில்லை ( )

2. கதிரியிக்கச் சிகிச்சை முடிந்த பிறகு என்ன பிரச்சனை ஏற்படும் என நீங்கள் நினைக்கிறீர்கள் ?

அ) வாய் உலர்தல் / குமட்டல் ( )

ஆ) தூக்க கலக்கம் ( )

இ) தலைசுற்றல் / மயக்கம் ( )

ஈ) தெரியவில்லை ( )

3. கதிரியிக்க சிகிச்சையினால் உங்கள் தேகத்தில் மாற்றம் ஏற்பட்டுள்ளதா ?

அ) ஆமாம் ( )

ஆ) இல்லை ( )

இ) உறுதியாக சொல்வதற்கில்லை ( )

ஈ) தெரியவில்லை ( )

III - கதிரியிக்க சிகிச்சை தொடர்பான சரும பராமரிப்பு பற்றியதான கேள்விகள்

1. மடிப்பு மடிப்பு உள்ள சரும பகுதியினை எவ்வாறாக நீங்கள் பராமரிப்பீர்கள் ?

அ) குளிர்ந்த தண்ணீரினால் ஒத்தடம் கொடுப்பது ( )

ஆ) கூடும் தண்ணீரினால் ஒத்தடம் கொடுப்பது ( )

இ) மடிப்பு பகுதி தோளினை சுத்தமாகவும் மற்றும் உலர்ந்த நிலையில வைத்தல் ( )

ஈ) தெரியவில்லை ( )

2. கதிரியிக்க சிகிச்சையின் சருமத்தில் ஏற்படும் உடனடி பாதிப்பு என்ன ?

அ) சிகப்பு நிறமாக மாறுதல் ( )

ஆ) இரணம் ஏற்படுதா ( )

இ) வீக்கம் ஏற்டுதல் ( )

ஈ) தெரியவில்லை ( )

3. கதிரியிக்க சிகிச்சைக்கு பின் உலர்ந்த நிலை காணும் சருமத்தை எவ்வாறாக பாதுகாத்து மற்றும் சிகிச்சை செய்வீர்கள் ?

அ) எண்ணெய் தடவுதல் ( )

ஆ) சூரிய ஒளியில் தோளை காட்டுதல் ( )

இ) ஆயிண்மெண்ட் உபயோகித்தல் ( )

ஈ) இறுக்கமாக ஆடை அணிதல் ( )

4. கதிரியிக்க சிகிச்சையினால் சருமத்தில் எரிச்சல் ஏற்படின் என்ன செய்வது ?

அ) தண்ணீரை தொடாமல் தவிர்ப்பது ( )

ஆ) நடப்பது போன்ற மிதமான உடற்பயிற்சி செய்தல் ( )

இ) டாக்டரை கலந்து ஆலோசித்து உரிய ஆயிண்மெண்ட் போடுவது ( )

ஈ) தெரியவில்லை ( )

IV - உணவு பற்றியதாள கேள்விகள்

1) கதிரியிக்க சிகிச்சையின் போது தவிர்க்க வேண்டிய உணவு வகைகள் என்ன ?

அ) வாசனை மசாலா உணவு ( )

ஆ) கொழுப்பு உணவு ( )

இ) நார்சத்து உணவு ( )

ஈ) தெரியவில்லை ( )

2. கதிரியிக்க சிகிச்சையின் போது எடுக்க வேண்டிய உணவு வகைகள் என்ன ?

அ) கலோரி குறைவான உணவு ( )

ஆ) புரதம் நிறைந்த உணவு ( )

இ) சமசீர் உணவு ( )

ஈ) தெரியவில்லை ( )

3. நீர் சத்து இழப்பினை எவ்வாறு சரி செய்வீர் ?

அ) ஓ.ஆர் . எஸ் ( )

ஆ) பழச்சாறு மற்றும இளநீர் ( )

இ) தண்ணீர் மட்டும் ( )

ஈ) தெரியவில்லை ( )

4. கதிரியிக்க சிகிச்சையின் முன் என்ன விதமான உணவு எடுத்துக்கொள்வீர் ?

அ) எந்தவிதமான உணவும் கிடையாது ( )

ஆ) காரமில்லாத உணவு ( )

இ) அதிகளவு உணவு ( )

ஈ) தெரியவில்லை ( )

5. கதிரியிக்க சிகிச்சையினால் முக்கியமாக உடலில் உள்ள நீர் சத்தில் ஏற்படும் பக்க விளைவு என்ன?

அ) நீர் சத்து குறைதல் ( )

ஆ) வீக்கம் ஏற்படுதல் ( )

இ) வயிற்றுபோக்கு மற்றும் வாந்தி ( )

ஈ) தெரியவில்லை ( )

V - உடலுறவு கொள்வதில் ஏற்படும் சிக்கல் பற்றியதான கேள்விகள்

1. கதிரியிக்க சிகிச்சையினால் உடலுறவு கொள்வதில் ஏதேனும் சிக்கல்கள் ஏற்படுமா?

அ) குழந்தையின்மை ( )

ஆ) ஆமாம் ( )

இ) இல்லை ( )

ஈ) தெரியவில்லை ( )

2. கதிரியிக்க சிகிச்சையில் இருக்கும் போது உடலுறவு கொள்வது ஏற்புடையதா ?

அ) நன்மையல்ல ( )

ஆ) ஆமாம் ( )

இ) இல்லை ( )

ஈ) தெரியவில்லை ( )

3. உடலுறவு வைத்துக்கொள்வதில் கதிரியிக்க சிகிச்சை முறை பலகீனப்படுத்துமா?

அ) எப்பொழுதும் இருக்கின்றது போன்று ( )

ஆ) ஆமாம் ( )

இ) இல்லை ( )

ஈ) தெரியவில்லை ( )

4. உடலுறவு மூலமாக புற்று நோய் உயிரிகள் வாழ்க்கை துணைவியாருக்கு பரவுமா ?

அ) பரவுவது இல்லை ( )

ஆ) பரவலாம் ( )

இ) நுண்ணுயிர் மூலமாக பரவுகிறது ( )

ஈ) தெரியவில்லை ( )

5. உடலுறவின் போது விரும்ப்படாத உணவு ஏதேனும் நீங்கள் கதிரியிக்க சிகிச்சையினால் உணர்கிறீர்களா ?

அ) வலி உணர்வு ( )

ஆ) ஆமாம் ( )

இ) இல்லை ( )

ஈ) தெரியவில்லை ( )

VI-கதிரியிக்க சிகிச்சை முறையினால் ஏற்படும் பக்க விளைவுகள் பற்றியதான கேள்விகள்

1. கதிரியிக்க சிகிச்சையினால் ஏற்படும் முக்கியமான பக்க விளைவுகள் என்ன ?

அ) வறட்சியான சரும எரிச்சல் / ஈரத்துடன் சரும எரிச்சல் ( )

ஆ) தலைவலி / முதுகுவலி ( )

இ) வயிற்றுப்போக்கு / சீதபேதி ( )

ஈ) தெரியவில்லை ( )

2. கதிரியிக்க சிகிச்சையின் போது காய்ச்சல் வந்தால் என்ன செய்ய வேண்டும்?

அ) தன்சுத்தம் பேணுதல் ( )

ஆ) மருந்து சாப்பிடுவது ( )

இ) தேவையான நீர் சத்து மற்றும் போதிய ஓய்வு ( )

ஈ) தெரியவில்லை ( )

3. கதிரியிக்க சிகிச்சையினால் ஏற்படும் சோர்வை எவ்வாறு நிவர்த்தி செய்வீர்கள்?

அ) ஓய்வு எடுத்தல் ( )

ஆ) அவ்வப்போது சிறிது தூங்குவது ( )

இ) அதிக கொழுப்பு சத்து நிறைந்த உணவு உண்பது ( )

ஈ) தெரியவில்லை ( )

4. கதிரியிக்க சிகிச்சையினால் தலைமுடியில் ஏற்படும் பக்க விளைவு ?

அ) தலைமுடி உதிர்தல் ( )

ஆ) தலைமுடி வளர்தல் ( )

இ) தலைமுடி அடர்த்தி அதிகரித்தல் ( )

ஈ) தெரியவில்லை ( )

5. கதிரியிக்க சிகிச்சையின் போது மலச்சிக்கல் ஏற்பட்டால் என் தசெய்ய வேண்டும்?

அ) அதிகமான நீர் ஆகாரம் குடித்தல் ( )

ஆ) அதிக கொழுப்பு சத்து நிறைந்த உணவு உண்பது ( )

இ) சாதம் நிறைய சாப்பிட வேண்டும் ( )

ஈ) தெரியவில்லை ( )

INTERVIEW SCHEDULE

PART – I DEMOGRAPHIC DATA

HOSPITAL NO:

1. SERIAL NO. DATE:

CLINICAL DATA

2. Site of Cancer
3. Duration of Illness
4. Duration of Treatment
5. Previous Knowledge about radiation Therapy. Yes / No

DEMOGRAPHIC DATA

6. Age in years
7. Sex : Male / Female
8. Marital Status Married Unmarried
9. Educational Status.
    - Illiterate
    - Primary Education
    - Secondary Education
    - Higher Secondary Education
    - Graduate and above
10. Occupation
    - Coolie
    - Agriculture
    - Business
    - Employee
    - Non employee

11. Religion

Hindu

Christian

Muslim

Others:

12. Residence Locality

Rural

Urban

13. Monthly Income:

Below ₹ 2000

₹ 2001 – ₹ 4000

Above ₹ 5000

14. Life Style Factors:

Tobacco in the form of

Smoking - Yes / No

15. Alcoholic intake Yes / NO

16. Food Habits

Vegetarian

Non – Vegetarian

17. Betal Chewing Yes / No

STRUCTURED TEACHING MODULE

Topic	**:**	Knowledge and attitude of radiation therapy among patients with cancer.
Name of the Investigator:		Ms. C. Fransisca Brinda
Group	**:**	Patients with cancer Undergiong radiotherapy.
Duration	**:**	45 minutes
Method of Teaching	**:**	Lecture cum Discussion.
Teaching Aid	**:**	Digital video Disc.

GENEAL OBJECTIVE

At the end of teaching the patients will be able to acquire knowledge and understand about management of radiation therapy and bring desirable changes in attitude about management of radiation therapy.

SPECIFIC OBJECTIVES

People with cancer undergoing radiation will be able to

1. Define Cancer.
2. Differentiate benign and malignant neoplesam.
3. List down treatment modalities for cancer.
4. Enlist the investigations done before administrating radiation therapy.
5. Discuss the side effects and management of radiation therapy.

SPECIFIC OBJECTIVES	CONTENTS	TEACHER LEARNERS ACTIVITIES
	1. Structured information video disc, Cancer characteristics of cancer cells, Characteristics of benign malignant neoplasm. 2. Seven warning signals of cancer. 3. Treatment modalities in cancer. 4. Meaning of radiation therapy. 5. Action of radiation therapy. 6. Types of radiation therapy. 7. Investigation done before administrating RT. 8. Side effects of radiation therapy and its management.	
Define Cancer	**INTRODUCTION** Cancer is slowly becoming an increasing health problem in India. Cancer is a disease process that the term cancer includes neoplasm, Carcinoma are all used interchangeably cancer is an abnormal, uncontrolled growth of body cells. Cancer cell grows without control. Cancer cells may or may not reasonable the normal cells at the organ from which it arises.	What is Cancer?

Differentiate Between Benign and malignant Neoplasm	**Characteristics and difference between Benign and malignant neoplasm** **BENIGN** — **MALIGNANT** Encapsulated. — Non ecapsulated. Non-Invasive. — Invasive Highly Differentiated. — Poorly differentiated. Mitosis rare — Mitosis relatively common Slow Growth — Rapid Growth Little or Noanapalsia — Anaplastic to Varying degrees. **SEVEN WARNING SIGNALS OF CANCER** C- Change in bowel or bladder habits. A – A sore that does not heal. U – Unusual bleeding or discharge. T- Thickening or lump in breast or else where. I- Indigestion or difficulty in swallowing. O- Obvious Change in wart or mole. N – Nagging cough (or) Hoarseness.	

Client will be able to list down treatment modalities for treatment	**Treatment Modalities for Cancer** • Surgical Intervention. • Radiation Therapy. • Chemotherapy. • Biologic Therapy. • Bone marrow and stem cell transplantation. • Gene Therapy. • Nutritional Therapy. **Meaning of Radiation Therpay** Radiation therapy is a local treatment. It is also called as radiotherapy (or) X- ray therapy which involves treating cancer with beans of high energy particles or waves (radiation) such as gamma rays. One of the common radio isotopes for radiation therapy is cobalt – 60. More than half of all people with cancer receive. Some type of radiation therapy to kill or destroy cancer cells. Radiation may be used in conjunction with surgical and chemotherapy.	

Client will be able to explain radiation therapy.	**Types of radiation Therapy** → Teletherapy - External Radiation. → Brachy Therapy - Internal Radiatin. **How radiation therapy is used in cancer treatment** → Radiation therapy as an option at different times during cancer treatment and for different treasons including,. → Before surgery to shrink cancerous tumour (Neo adjuvant Therapy) → During surgery to direct large doses of radiation directly at a tumor. → After surgery to stop the growth of any remaining cancer cells (adjuvant therapy) → In combination with other treatment such as chemotherapy, to destroy cancer cells. **External Radiation** External radiation treatment can be given by external bean radiation (tele therapy) which is the most common treatment delivery. This radiation comes from a machine called linear accelerator. Treatment will be for one eight weeks period.	

Cancer clients undergoing treatment will be able to enumerate purpose of radiotherapy.	During treatment session cancer clients will be asked to lie down and might be positioned with molds to hold in place and with shields to block radiation from reaching certain parts of the body., The machine may rotate around body to reach the target from different directions treatment sessions last approximately 15- 30 minutes. ❖ **INTERNAL RADIATION BRACHY THERAPHY** Radioactive material is placed directly into tumour. Normally a high dose of radiation to the tumour, and a lower dose to the normal tissue. **MEASUREMENT AND DETECTION** Rad is the basic unit of measurement. Rad is equivalent to 0.01 joule of energy per tailogram of tissue. Radiation is invisible, it is detected by a device, Geiger counter for low dose (or) ionization champer survey meter for high dose. Gray (Gy) 1Gy=100rads. **Effects of Radiation** Radiation is the commission and distribution of energy through space or a material medium, delivery of high energy beams, when absorbed into tissues	

	produces ionization of atomic particles generation of free radicles act to break the chemical bonds in DNA and the cell is anable to replicate. Impair protein synthesis function necessary for survival. **Types of Rays** ➢ Gamma Rays. ➢ Alpha Rays. ➢ Electrons, neutrons, protons. **Dose** ➢ Based on tumour volume ➢ Type of tumour. Radiation to surrounding healthy tissues limited to the maximal tolerated dose for the specific tissue. Investigation done before administering radiation therapy. • Examination of blood including routine examination Carried out in blood are - Haemoglobin - Red blood cell count RBC - White Blood cell Count WBC - Erythrocyte white blood cell count ESR	

	• Other Investigation Platelets count Bleeding time Clotting time Blood Group • Doctors may some times ask you to have Urine examination Stool Examination X-ray **Side effects of radiation therapy and their management** Most of the side effects gradually go away after treatment ends and the healthy cells have a enhance to grow normally. The time it takes to get over side effects depends on many things including your over all health and the kind of radiation therapy you have been taking. The side effects of radiation therapy can be unpleasant but they must be measured against the treatment ability to destroy cancer. **Fatigue / Tiredness** Fatigue, feeling tired and lacking energy is the common symptoms reported by cancer patients.	

Enlist the investigation done before administering radiation therapy.	The exact cause is not always known.It is to your disease, radiation therapy, chemotherapy, surgery low blood counts, lack of sleep, pain, stress and poor appetite. **How can you cope up with fatigue** • Plan your day so that you have time to rest. • Take short naps rather than one long rest period. • Save your energy for the most important things. • Try easier or shorter versions of activity you enjoy. • Take short walks or do light exercise of possible. • Talk to your health care provider. • Try activities such as prayer, meditation, yoga, guided imaging. • Eat as well as you can and drink plenty of fluids. • Share your feelings with others which can ease the burden of fatigue. **NAUSEA & VOMITTING** Many patients have fear that they will have nausea& vomiting while receiving radiation therapy, But radiation has made these side effects for less common.	

Discuss the side effects and managements.	• Drink liquid at least an hour before and afger meal time instead of with your meals • Drink frequently and small amounts. • Eat and drink slowly. • Eat small frequent meals through out the day, instead of one or two three large meals. • Chew your food well for easier digestion. • Drink cool clear unsweetened fruit juices such as apple grape, • Wear loose fitting clothes. • Breathe deeply and slowly you nauseated. • Try to avoid odors that bother you such as smoke, perfume. • Avoid sweet, fried fatty food. • Rest, but do not lie flat for atleast 2 hours after ypu finish the meal. • Avoid foods at least a few hours before treatment of nausea usually occurs during radiation therapy. **How can you care scalp and hair during neo adjuvant radiation therapy** → Use a bowel or cloth to dry your hair. → Use umbrella when you go out. → Do not comb hair when it is wet.	

	→ Avoid dying your hair. → Use head cap or scarf when you go out. → Use non irritant wick. → Hair prosthesis (Wig) Wash after 20 weeks. → Use a mild shampoo & conditioner weekly. → Pat dry gently with a bowel, do not rub. → Comb hair very gently → You might find that sleeping on a satin pillow care reduce friction. **Skin care** With radiation, skin effects are local, occurring only in the treatment field. Radiation induced skin changes can be acute or chronic depending on the area irradiated, dosage and technique. Erythema may develop 1 to 24 hours after a single treatment. Dry desquamations.(Scaling) Wet desuamatous- If the rate of cellular sloughing is faster than the ability of the new epidermal cells to replace dead cells.	

	II. Exposure of dermis and weeping of serous fluid. **How can you care for skin** **Do's** **Don't** Keep the skin clean and dry. Don't wash off skin ink mark. Wash the skin with warm Water and pat dry. Avoid using lotion in the Treatment skin field. Use mild soap such as non Irritant has been good for your skin Don't use hot water Applicant. Don't Change the soap. Don't scrap & rub the skin. Wear cloth that covers the skin When you are in the light Don't use ice pack applicant. Wear cotton clothing, choose Cloths with soft fabricks Don't use deodorant or perfume. Keep watch on sign of dryness Itching, breakdown of skin Treatment advised by the physician. Don't use oil or oil massage and topical Avoid sun, temperature Extremes and other trauma Or irritant Don't share your soap. with others or family members.	

	Monitor the skin folds or skin Is subjected to pressure such as behind ear, breast, gluteal fold etc. **Skin reactions are grades** O- No changes. 1- Mild Erythema 2- Severe, red erythema and tenderness & moist desquamatous. 3- Oedema and confluent, moist desquamatous. 4- Ulcerated hemorrhage or necrosis. **Skin care** ✷ Gently cleanse the skin in the treatment field using mild Soap (Dove) tepid water, a soft cloth, patting motion. ✷ Avoid tight fitting clothing. ✷ Avoid harsh fabrics such as wool. ✷ Use cotton or soft clothing ✷ Avoid direct exposure to the sun. ✷ Avoid hot water or ice pack applicant. ✷ Avoid swimming in chlorinated or salt water. ✷ Avoid the use of all medication, deodorants, perfumes ✷ Apply nonmedicated, non perfumed, moisturizing lotion like (Aloe gel) ✷ Expose the area to all as often as possible.	

	✷ If any drainage is present, use of astringent compresses ✷ Discharge as protected from further damage with moisture vapor-Permeable dressing. ✷ Use an electric rador of shaving is necessary in the ✷ Treatment field. But avoid shaving the hair in the treatment area. ✷ Use wide brimmed hat during exposure to the sun. **INFECTION** It is the successful invasion, establishment and growth of micro organisms in the tissues of the host. This happens because affect bone marrow, making it harder to make white blood cells that may fight many types of infections. There are medicines that help to stop the recovery of WBC, shortening the time when the web count is low. There medicines are called colony stimulating factor. ✷ Wash your hands before you eat, after you are the bathroom and after touching the animals. ✷ Clean your rectal area, if it becomes irritated. ✷ Stay away from people who have infection such as cold, flu, measles or chicken pox. ✷ Try to avoid crowds for example go shipping to the movies.	

	Effect on Mouth Gum and Throat Good oral care is important during cancer treatment as radiation can cause sores in the mouth and throat a called stomatitis ot mucososti s. **How Can You keep your mouth gums, throat health** → Talk to your doctor seeing your dentist general weeks before you short radiation. You may need to have your teeth cleaned and to take care of any problem such as gum diseases or poorly fitting dentures. → Brush your teeth and gums after every meal use a soft toothbrush and a gentle touch. Brushing too hard can damage soft mouth tissue. Rinse well with warm saline after meals and before bed tome. → Rinse your teeth brush well after each use and store it un a dry place. **How can you cope up with sores** → Ask your doctor of there is anything you can apply directly. → Eat foods at a room temperature, Ho & warm foods can irritates a tender mouth & throat. → Avoid irritating acidic foods and juices such as tomato & citrus. ***Diarrhoea*** Where radiation affects the cells lining the interlines, it can cause diarrhoea water or loose stool. If you have diarrhoea that continues for more than 24 hours or of you have pain in cramping along with the diarrhoea call your doctor.	

	Management of Diarrhoea Drink plenty of fluid. This will help to replace the fluid that you have lost through diarrhoea. • Mild clear liquids such as water, clean broth. If there drinks make you more thirsty or nauseous, deink slowly by diluting them with and make sure that drinks are at room temperature. • Eat small amount of food through out the day instead of large meals. • Eat specific rich fooed unless your doctors has hold you not to eat. • Avoid high fibre foods which can lead to diarrhoea and cramping. High fibre foods includes whole grain bread and canals, raw vegetables. • Avoid tea, Alcohol and sweets stay away from spoicy, too much of chills food. • Avoid milk or milk products including ice cream. If they make your diarrhoea worse. **Constipation** The cells of the mucosal lining of the intestinal mucosa are one of the most sensitive to radiation. It can also occur if you less active or if your diet lacks enough fluid or fibre. If you have not had bowel movement for more than a day call your doctor for management, he may prescribe or a laxative or stool softener.	

	Management of Constipation 1. Drink plenty of fluids to help looser bowels. If you do not have mouth sores, drink warm and hot fluids including water which work especially oval. 2. If you do not have diarrhoea, eat breads, cereals raw or cooked vegetables, freah and dried fruits. 3. Do some exercise every day, go for a walk or you may want to try a more structural exercise. Program talk to your about the amount and type of exercise that is right for you. **Problems with sexual interest/ Activity** Vaginal dryness, narrowing and discharge can result from radiation therapy. This may cause difficult or painful inter course. Vaginal infections may also occur more often. Briefly experiences bleeding and discharge after radiation. **Try there methods to ease symptoms** → Before sexual activity, use water soluble lubricants such as zylocaine jelly or any vaginal moisturizers. → Apply vitamin E oil to the area to reduce irritation and burning.	

	Effects on fertility → If you are a woman in child bearing years it is important to discuss birth control and fertility issues with your doctor. → You should not become pregnant during radiation therapy because radiation treatment during pregnancy may injure the fetus especially in the first three months. → Radiation therapy to the area that includes the testes can reduce both the number of sperm and their effectiveness. Your doctor can help you to get information about the option of banking your sperm or ovum before radiation treatment. → With most type of radiation therapy, both sexes may notice a decreases in their level of desire to have sex. This is more likely to be due to the stress of having cancer than to the effects of RT. Once the treatment ends sexual desire is likely to return to previous levels. → During RT to pelvis, some women are advised not to have intercourse. Others may find that intercourse is uncomfortable or painful. With a few weeks after treatment there symptoms usually disappear. → If shrinking of vasginal tissues occurs as a side effects of RT, Your doctor / xlusive can explain how to use a dilator, a device that gently stretches the tissues of vegina.	

வடிவமைக்கப்பட்ட கற்பித்தல் நிகழ்ச்சி

தலைப்பு	**:**	புற்று நோயால் பாதிக்கப் பட்டவர்களுக்கு கதிரியக்க சிகிச்சையின் மூலம் அளிக்கப்படும் சிகிச்சையின் ஏற்படும் அறிகுறிகளை மேற்கொள்ளுதல்
சோதனையாளர் பெயர்	:	செ.பிரான்சிஸ்கா பிருந்தா
பிரிவு	:	கதிரியக்க சிகிச்சை மூலம் கொடுக்கப்படும் சிகிச்சைக்கு உட்பட்ட புற்றுநோயாளிகள்
இடம்	**:**	ஜி.வி.என். புற்றுநோய் மருத்துவமனை கிலேதார் தெரு, திருச்சி
காலம்	**:**	45 நிமிடங்கள்
கற்பிக்கும் உபகரணங்கள்	:	படவிளக்கம் வீடியோபடம்

பொதுவான நோக்கங்கள்

இந்த வடிவமைக்கப்பட்ட கற்பித்தல் நிகழ்ச்சியின் முடிவில் புற்றுநோயால் பாதிக்கப்பட்டவர்கள் கதிரியக்க சிகிச்சையின் மூலம் கொடுக்கப்படும் சிக்ச்சையினால் ஏற்படும் பக்க விளைவுகளை எவ்வாறு நேர்த்தியாகவும் செம்மையாகவும் தனித்து சமாளிக்க அறிந்து கொள்ளுதல்

குறிப்பிட்ட நோக்கங்கள்

புற்றுநோய் பற்றிய விளக்கம்

- புற்றுநோய்க்கான சிகிச்சை முறைகள்
- புற்றுநோயின் ஏழு எச்சரிக்கை அறிகுறிகளை சொல்லுதல்
- கதிரியக்க சிகிச்சை முறை பற்றிய விளக்கம்
- கதிரியக்க சிகிச்சையினால் ஏற்படும் விளைவுகளை விவரித்தல்
- கதிரியக்க சிகிச்சையினால் ஏற்படும் எதிர்பார்க்கப்படும் விளைவுகளை மேற்கொள்ளும் முறைகளை விளக்குதல்

குறிப்பிட்ட நோக்கங்கள்	உள்ளடக்கம்	மதிப்பீடு
புற்று நோய் பற்றிய விளக்கம் புற்றுநோய்க்கான சிக்சசை முறைகள்	**அறிமுகவுரை** புற்று நோயானது இந்தயாவிவ் மெதுவாக வளர்ந்து வரும் சுகாதர பிரச்சனை புற்றுநோய் என்பது ஒரு அசாதாரணமான செல் கார்சினோமா நியோபிளாசம் என்ற சொற்கள் கூட புற்றுநோய் சார்பாக உபயோகப்படுத்துவதுதான் புற்று நோய் என்பது செல்கள் ஏதோ ஒரு காரணத்தினால் கட்டுக்கடாங்காமல் பலுகிப்பெருகுவதே. சில சமயங்களில் வைரஸ் மற்றும் சில வேதி பொருட்களின் ஒவ்வாமையினால் ஏற்படுகிறது. இன்றைய பாடவேளையில் கதரியக்க சிக்ச்சையினால் ஏற்படும' எதிர்பார்க்கப்படும் பக்கவிளைவுகளை மேற்கொள்ளும் முறைகள் பற்றி பார்ப்போம். **புற்றுநோய்க்கான சிக்சசை முறைகள்** ○ அறுவைச்சிகிச்சை ○ கதரியக்கச்சிகிச்சை ○ மருந்து மூலம் அளிக்கப்படும் சிகிச்சை கீமோதெரபி ○ உயிரியல் சிகிச்சை ▪ எலும்பு மஞ்சை மற்றும் செல்களின் பகுதியை மாற்றம் செய்தல் ○ உணவுமுறை சிகிச்சை **புற்றுநோயின் ஏழு எச்சரிக்கை அறிகுறிகள்** ○ மலம் மற்றும் சிறுநீர் கழித்தலில் ஏற்படும் மாற்றம் ○ வாயில் ஏற்படும் ஆறாத புண் ○ இடைவிடாத இரத்தப்போக்கு ○ மார்பு பகுதியில் ஏற்படும் மாற்றம் கட்டி ஏற்படுதல் ○ செரிமானத்தில் ஏற்படும் மாற்றம். ○ மருவில் ஏற்படும் மாற்றம். ○ வறட்டு இருமல்	

புற்றுநோயின் ஏழு எச்சரிக்கை அறிகுறிகள் கதிரியக்க சிகிச்சை முறை பற்றிய விளக்கம்	**கதிரியக்க சிகிச்சை** கதிரியக்க சிகிச்சை என்றால் புற்று நோய்க்கு குறிப்பிட்ட இடத்தில் சிகிச்சை அளித்தல்.கதிரியக்க சிகிச்சையை ரேடியோ கதிரியக்கம் அல்லது எக்ஸ்ரே கதிரிக்கம் என்றும் அழைக்கப்படுகிறது இந்த கதிரானது ஒளி ஆற்றலாக அல்லது ஒலி அலையாக இருக்கும் காமா கதிர்கள் இவைகளில் பொவான கதிர் ஆகும். சிகிச்சையின் போது வலி மற்றும அரிப்பு போன்ற உபாதைகள் வருவதற்கில்லை. குதிரியக்கம் என்பது உடல் அரோக்கியத்திற்கு ஒரு அபாயகரமான ஒன்று கேள்விப்பட்டு இருப்பீர்கள் ஆனால் மிக கவனமாக முறை செய்யப்பட்ட கதிரியக்கமானது புற்றுநோயினால் பாதிக்கப்பட்டவர்களின் உயிர்காக்கும் ஒரு உன்னதமான சிகிச்சையாக கருதப்படுகிறது. உடல் தோற்றத்திலோ எந்தவித மாற்றத்தை உண்டுபண்ணுவதற்கில்லை. புற்றுநோயினால் பாதிக்கப்பட்டவர்களினல் 50 சதவிதத்தினால் ஏதாவது ஒரு வடிவில் கதிரியக்க சிகிச்சையை பெறுகிறார்கள் இது புற்று நோய் அணுக்களை கொல்கிறது அல்லது அழிக்கிறது. கதிரியக்க சிகிச்சையானது அறுவை சிகிச்சை மற்றும் மருத்துவ சிகிச்சையுடன் இணைந்து பயன்படுத்தக்கூடியது. **கதிரியக்க சிகிச்சை எவ்வாறு புற்று நோயில் பயன்தருகிறது?** **கதிரியக்க சிகிச்சை** புற்றுநோயிக்கான சிகிச்சையில் பல நேரங்களில் பல காரணங்களுக்காக தேர்ந்தெடுக்கப்படுகிறது அக்காரணங்களாவன ○ அறுவை சிகிச்சைக்கு முன் புற்றுநோய் கட்டிகளை சுருக்கச்செய்வதற்காக துணைசிகிச்சை. ○ அறுவை சிகிச்சையின் போது நேரடியாக அதிக அளவிலான கதிரியக்கத்தை கட்டியின் மேல் விழச்செய்தல் ○ அறுவை சிகிச்சைக்கு பின் விடப்பட்ட புற்றுநோய் அணுக்கள் மீண்டும் வளராமல் தடுக்க (துணை சிகிச்சை) ○ மருந்து சிகிச்சையின் போது புற்று நோய் அணுக்களை அழிப்பதற்கு துணைபுரிதல்	

கதிரியக்க சிகிச்சையின் வகைகள்

- வெளிப்புற கதிரியக்கம்
- உட்புற கதிரியக்கம்

வெளிப்புற கதிரியக்கம்

வெளிப்புற கதிரியக்கமானது வெளிப்புற கதிரிக்க கற்றைகள் (கதிர்களை) அனும்பும்முறை இது மிகவும் பொதுவாக செயல்படுத்தப்படும் ஒருமுறையாகும். இந்த கதிரிக்கமானது லீனியர் ஆக்ஸிவரேட்டர் என்ற கருவியின் மூலம் வெளிக் கொண்டு வரப்படுகிறது. இந்த சிகிச்சை ஒன்று முதல் எட்டு வாரங்களுக்கு அளிக்கப்படுகிறது.

சிகிச்சையின் போது நீங்கள் படுத்திருக்கும் நிலையில் கிடத்தப்படுவீர்கள். உங்கள் உடலின் மற்ற பகுதிகளுக்கு கதிரியக்கம் செல்லாமல் இருக்க ஒருவகை லெட் எனப்படும் தமுப்பு தகடு பயன்படுத்தப்படுகிறது. கதிரியக்க இயந்திரம் உங்கள் உடலை பல கோணங்களில் திருப்புவதன் மூலம் குறிப்பிட்ட பகுதிக்கு கதிரியக்கம் செலுத்தப்படுகிறது. இந்தகதிர் உங்கள் உடலில் எந்தபகுதிக்கு சென்று அடைய வேண்டுமோ அந்த பகுதிக்கு ஒரு சில வினாடிகளில் சென்றடையும் ஆனால் முழுவதுமாக இந்த சிகிச்சை முடிய 15 முதல் 30 நிமிடம் நீடிக்கும்

உட்புற கதிரியக்கம்

இச்சிகிச்சை “.்.பிராக்கிதெரபி “ என்று அழைக்கப்படுகிறது. சிகிச்சை தேவைப்படும் இடத்தில் கதிரியக்கத்தை தரக்கூடிய பொருள் உடலின் அப்பகுதியில் பதிக்கப்படுகிறது. இந்த சிகிச்சை கர்ப்பை கழுத்து புற்று நோய் உள்ள பெண்களுக்கு அளிக்கப்படும்.

கதிரியக்கத்தை அளவிடும் அளவுகோல்

ராடு இதை கணக்கீடும் கருவியின் பெயர் ஜீர்ஜர் கவுண்டர் குறைந்த கதிரியக்கத்தை அளவிடலாம். ஆதிக அளவு நிறைந்த கதிரியக்கத்தை அய்யானிகேள் சேம்பர்மீட்டர்

கதிரியக்கத்தின் வகைகள்

- காமா கதிர்
- ஆல்பா கதிர்
- ஏலக்ட்ரான்
- நீயூட்ரான்
- புரோட்டான்

கதிரிக்க சிகிச்சைக்கு முன்பு செய்யபட வேண்டிய பரிசோதனைகள்

- இரத்தபரிசோதனை - -ஹீமோகுளோபின்
  சிவப்பணு எண்ணிக்கை
  வெள்ளணு எண்ணிக்கையில் வேறுபாடு
  எரித்ரோசைட் படிமான அளவு.
- பிறச்சோதனைகள்

இரத்தக்கசிவு நேரம்
இரத்தம் உறையும் நேரம்
இரத்த வகை
சீரம் கிரியாட்டினின்

சில சமயங்களில் சிறுநீர் மற்றும் மலப்பரிசோதனையும் எக்ஸேரே மற்றும் பயாப்சி எனும் திசுப்பரிசோதனையும் செய்ய நேரலாம். பொதுவாக கதிரியக்க சிகிச்சையினால் தோன்றும் பக்க விளைவுகளும் அவற்றை சாமளிக்ககும் முறைகளும் கீழ தரப்பட்டுள்ளது

- தளர்ச்சி
- தோள்வறட்சி
  ஈரத்துடன் கூடியதோல்
  எரிச்சல்
- முடிஇழப்பு
- ஏளிதாக தொற்று பற்றிக்கொள்ளுதல்
- குமட்டலும் வாந்தியும் வறட்சி

தளர்ச்சி

உடல் சோர்ந்து சக்தியே இல்லாததுபோல் மிகவும் தளர்வாக உள்ளது இது பொதுவாக புற்றுநோயாளின் கூறும்

அறிகுறிகள். எப்பொதும் எதற்குமே இதுதான் காரணம் என்று உறுதியிட்டுக் கூற முடியாது இது நோயின் தன்மையாலோ கீமோதெர.்பியினாலோ கதிர்வீச்சினாலோ அறுவைச்சிகிச்சையாலோ இரத்த அணுக்குறைவினாலோ துக்கக்குறைவினாலோ புற்றுநோயினால் ஏற்படும் வலியினாலோ மனஅழுத்தத்தாலோ, பசிக்குறைவினாலோ அல்லது அத்தோடு வேறு பலக்காரணங்களாக இருக்கலாம்

எவ்வாறு உடல் தளர்வை சமாளிப்பது

- அந்தந்த நாளைத்தெளிவாக தட்டமிட்டு ஓய்வெடுக்க நல்லநேரம் ஒதுக்குங்கள்
- நீண்டநெடு நேரம் தூங்குவதை விட அவ்வப்போது விட்டு விட்டு சற்றுநேரம் தூங்கிபாருங்கள்.
- மிக முக்கியமான வேலைகள் செய்ய சக்தியை சேமித்து வைத்திருங்கள்.
- எளிதான அல்லது குறைந்த நேரம் கொண்ட வேலைகளில் முழுமனதுடன் ஈடுப்பட்டு சந்தோசமாக இருக்க முயற்சியுங்கள்.
- முடியுமால் சிறிது தொலைவு நடப்பது அல்லது எளிமையான உடற்பயிற்சிசெய்து பாருங்கள்.
- மருத்துவரிடம் எவ்வாறு சக்தியை சேமிப்பது தளர்வடையாமல் காத்து கொள்வது எப்படி என்பது பற்றிய வழிமுறைகளைக் கலந்தாலோசியுங்கள்.
- தியானம் பிராத்தனை யோகா உள்ளுணர்வின்படி நல்வழி நடத்தை போன்ற செயல்களில் ஈடுபட முயற்சியுங்கள்
- உங்களால் முடிந்த அளவு நன்கு சாப்பிடுங்கள் அத்தோடு அதிக அளவில் நீராகாரம் எடுத்து கொள்ளுங்கள்
- அனைத்திற்கும் மேல் உங்கள் எண்ணங்களையும் உணர்வுகளையும் மற்றவருடன் பகிர்ந்து கொள்ளும் போது உடல்தளர்விலிருந்து மெல்ல நீங்கள் விடுபடுவது உங்களுக்கே புரியும் வாய் உலர்தல்

குமட்டலும் வாந்தியும்

கதிரியக்கச்சிகிச்சை முடிவு பெற்றவுடன் வறட்சி குமட்டல் வாந்தி போன்ற உணர்வுகள் வருவதற்கு முற்றிலும் பயம்

கதிரிக்க சிகிச்சைக்கு முன்பு செய்யபட வேண்டிய பரிசோதனைகள்	எதிர்காலத்தின் கவலைகள் காரணமாக இருக்கலாம் அல்லது நோய் பற்றிய காரணமாகவும் துணை சிகிச்சையின் தன்மையாகவும் இருக்கலாம் மசாலா உணவு அதிக மணம் நெடிகொண்ட சாப்பாட்டை தவிர்க்க . கூடு குறைந்த அல்லது அறை வெப்பநிலைக்கேற்றவாறு உணவு சாப்பிடுங்கள். மெதுவாய சாப்பிடுங்கள் மெதுவாகவே நீராகாரம் குடியுங்கள் ஒரு நாளைக்கு 2 அல்லது 3 நேரம் சாப்பிடுவதை விட நாள் முழுவதும்-------- சமசீர் உணவு வகைகளை நன்றாகமென்று சாப்பிடும் போது உணவு செரிப்பதும் எளிதாகிவிடும். நீர்சத்து இழப்பு இருப்பின் படிச்சாறு மற்றும் இளநீர் எடுத்து கொள்வது நல்லது. காலையில் குமட்டல் அதிகமிருப்பின் உங்களுக்கு வாய்புண் அல்லது தொண்டைப்புண் அல்லது உமிழ்நீர் குறைவாக சுரத்தல் போன்ற பிரச்சனைகள் இல்லாத பட்சத்தில் உலக் தானங்கள் சாப்பிடலாம் குளிர்ந்த தெளிவான இனிப்பு சேர்ந்த ஆப்பிள் திராட்சை போன்ற பழரசங்களையோ அல்லது இஞ்சிச்சாற்றையோ குடிப்பது நல்லது தளர்வான உடை அணியுங்கள். சிகிச்சைக்கு முன்பு எளிதான உணவைச்சாப்பிடுங்கள் பொதுவாக கதிரியக்கச்சிகிச்சை எடுக்கும் நேரங்களில் குமட்டல் இருந்தால் சிகிச்சைக்கு ஒரு சில மணிநேரங்களுக்கு முன்பு சாப்பிடுவதை தவிர்த்துவிடுங்கள் வறட்சியும் குமட்டலும் இருக்கும் நேரங்களில் ஆழமாக மெதுவாக இழுத்து மூச்சு விடுங்கள். அனிப்பான வறுத்த அல்லது கொழுப்பு நிறைந்த உணவு பொருட்களை தவிர்த்து விடுங்கள் வாய் உலர்தல் நீடித்த வாய் உலர்தல் காரணமாக ஸீரோஸ்டோமியா ஏற்படுகிறது. சிகிச்சைகளினால் உமிழ் நீர் சுரப்பிகள் படுதடைவதால் இந்நிலை ஏற்படுகிறது. இது வாழ்க்கையில் எதிர்மறை சிந்தனையை கொண்டு வருகிறது ஏனெனில் இதனால்	

	பேச இயலாமை, மெல்லுவதற்கு விழுங்குவதற்கு மற்றும் ருசியின்மை ஆகியவை ஏற்படுகிறது. பேசவும் விழுங்கவும் உதவியாக அடிக்கடி சில நீர் அருந்தவும். வாயை தூய்மையாக வைத்து கொள்ளவும். வாய் உலர்தல் அதிகமாக இருப்பின் உங்கள் மருத்துவாக அல்லது பல் மருத்துவரை அணுகி வாய்யையும் உட்பகுதியையும் பாதுகாக்க மருந்துகள் தரும்படி கேட்கவும். புகை பிடித்தலையும் புகையிலை பயன்பாட்டையும் தவிர்க்கவும். **தோலில் மாற்றம்** கதிரியக்க சிகிச்சை பெறுபவர்களுக்கு தோல் சம்பந்தமாக உபாதை ஏற்படும். தோலானது உலர்ந்து அரிப்பெடுத்தல் சிவந்திருத்தல் மற்றும் நிறமாற்றம் ஏற்படுகிறது உங்களது சருமத்தை எங்ஙாறு பாரமரிக்க வேண்டும். குதிரியக்க சிகிச்சை பெறும் நோயாளி மேல் தோலுக்கு பிரத்தியோக கவனிப்பு அளித்தல் வேண்டும் மேல் தோல் கதிரியக்க சிகிச்சையின் போது பாதுகாக்கப்பட வேண்டும் **செய்க** ○ மேல் தோலை தூய்மையாகவும் உலர்ந்தும் பாதுகாக்க வேண்டும் ○ மேல் தோலை இளம் சூடுள்ள நீரினால் கழுவி உலர்த்தவும் கதிரியக்க சிகிச்சை பெறும் தோல் நீங்கலாக ○ நீங்கள் உபயோகப்படுத்தும் சோப்பினை தொடர்ந்து பயன்படுத்தவும். ○ வேயிலில் செல்லும் போது உடலை துணி கொண்டு மூடவும் சூரிய வெளிச்சத்திற்கு மேல் தோலை மறைக்கவும் ○ பருத்தி உடையை பயன்படுத்தவும் மிருதுவான நூல் ஆடை பயனபடுத்தவும்	

மேல் தோல் காய்ந்து போதல் அரிப்பபெடுதல் வலி சிவந்து போதல் மற்றும் தோல்பிரிதல் போன்றவை ஊற்படும் போது அதனை மருத்துவரிடம் அல்லது செவிலியரிடம் அறிவித்தல் வேண்டும்

பசியின்மை

புற்றுநோயாளிகள் நோய்க்கான கதிரியக்க சிகிச்கை எடுக்கும்போது நல்ல சமசீர் உணவு வகைகளை உட்கொள்ளும்போது உடல் வலிமை ஏற்படும்.நல்ல சுறுசுறுப்போடும் நோய் தொற்றுதலையும் தடுக்கும். ஊடல் நலமடைய உடலுக்கு வலிமை மிக அவசியம் என்பதை மனதில் கொள்ள வேண்டும்.

உங்கள் உடல் எடையை சரிசெய்வதற்கான சத்து நிறைந்த உணவுகளை உட்கொள்ளவும்.

சிறிய அளவு மற்றும் காரமில்லாத உணவுபொருட்களை எடுத்து கொள்ளவும்.

வாசைன மசாலா உணவு வகைகளை தவிர்த்துவிடவும்

விருப்பமான உணவுகனை தயார் செய்யவும்.

உணவு உட்கொள்ளுவதற்கு அரைமணிநேரத்திற்கு முன் இலேசான உடற்பயிற்சிகளை ஐந்தில் இருந்து பத்து நிமிடம் செய்யவும்

பசியை உணரும் போது சாப்பிடவும் ஒரு வேளை சாப்பிடவும். அது ஒருவேளை சாப்பிடும் நேரமாக அல்லாவிட்டாலும் பரவாயில்லை.

ஊடல் செப்பத்தை சிராக வைப்பதற்குஇ நீர்சத்து இழப்பை சரிசெய்வதற்கும் திரவ ஆகாரம் உட்காள்ளவும்.

நல்ல ருசிகரமான உணவை தேர்ந்தெடுக்கவும் அது உண்பதற்கும் எளிதாக இருக்கும்

உங்கள் கைவசம் திண்பண்டங்களை வைத்து கொளளவும் பசியை உணரும் போது சாப்பிட உதவும்.

ஊணவை மிருதுவாக்கி உண்பதற்காக உணவுப்பொருளுடன் திரவத்தை அல்லது குழம்பு வகைகளை சேர்த்துக்கோள்ளவும் இது உணவை மிருவாக்கும்

வாசனைப்பொருட்கள் மற்றும் -------பொருட்கள் உணவு

	சமைக்கும் போது பயன்படுத்துலதைத்தவிர்க்கவும் அது வாயை உலரவும் கடினத்தன்மையையும் ஏற்படுத்தவும். **முடி இழப்பு** முடி இழப்பு என்பது கதிரியக்க சிகிச்சை மற்றும் கூட்டு மருந்து சிகிச்சையினால் ஏற்படும். முடி இழப்பு ஏற்படும் போது அடர்த்தி புறைந்தோ அல்லது முழுவதுமாக உதிர்ந்தோ போய்விடும். ஊடல்முழுவதும் (தலை முகம் அக்குள்இகை கால் மற்றும் பிறப்புறுப்பு மேல் பகுதிபோன்ற முடிஇருக்கும் இடங்களில் எல்லாம்) இந்த முடி இழப்பு இருக்கும். எல்லா சிகிச்சைகளும் முடிந்தபின்பு உதிர்ந்த இடங்களில் முடி வளர ஆரம்பிக்கும் சில நேரங்களில் முடியின் நிறம் மாறியோ கூடமுளைக்க ஆரம்பிக்கலாம். சிகிச்சை முடிந்தவுடனேயே முடி இழப்பு ஆரம்பித்து விடும் என்றில்லை. ஒரு சில வாரங்கள் கழித்துக்கூட அல்லது சில சிகிச்சைக்கள் முடிந்த பின்பு முடி வளர ஆரமபிக்கலாம் முடி உதிர ஆரமிப்பதற்கு முன்பு தங்கள் தலையில் கூரிய உணர்வு இருந்ததாக பலர் கூறுகின்றனர். உதிரும் முடி கொஞ்சம் கொஞசமாக அல்லது கொத்து கொத்தாக உதிரலாம். உதிர்ந்த பின் முடி வளர்ந்தால் கூட மெதுவாக பசையற்றதாகஆவ இருக்கும். ○ ஒரு துண்டை அல்லது உலர்ந்த துணியை தலை துவட்டப்பயன்படுத்துங்கள் ○ அவளியே செல்லும்போது குடை உபயோகியுங்கள் ○ ஈரமாக இருக்கும் போது தலை வாராதீர்கள் ○ முடிக்கு சாயமேற்றுவதை தவிருங்கள் ○ டோப்போ நல்லவிதமான டோப்பா பயன்படுத்தலாம் ○ லேசான ஷாம்பு உபயோகியுங்கள் ○ சேட்டீன் தலையனையை பயன்படுத்துங்கள் **தொற்று** தொற்று என்பது ஒருவரின் செல்களில் நுழைந்து நன்றாக ஊடுருவி தன்னை நிலை நிறுத்திக்கொண்டு வெற்றிகரமாக வளரும் நுண்ணுயிரியைக்குறிப்பதாகும். ஏதனால் எனில் எலும்பு மஞ்சை கடினமாகி பலவித தொற்றுகனை எதிர்த்துப்போராடக் கூடிய	

	செல்களான வெள்ளையணுக்களின் உற்பத்தியை அதிகிக்க கூடிய வகையிலான மருந்துகள் தற்போது வந்துள்ளன. தோல் வாய் குடல் மற்றும் பிறப்புறப்புப்பாதையில் காணப்படும் பாக்டிரீயாவிலிருந்து பெரும்பாலான தொற்றுக்கான காரணம் சரிவர புலப்படுவதில்லை ○ உணவு உண்பதற்கு முன் டாய்லெட் உபயோகித்து பின்புறம் மற்றும் விலங்கினங்களைத் தொட்டதற்குப்பின்பும் கைகளை கன்றாக கழுவினீர்களா என்று எச்சரிக்கையுடன் இருக்கவும். ○ ஆசனவாய் பகுதியில் எரிச்சல் இருந்தாலோ அல்லது இரத்தக்கசிவு இருந்தாலோ நன்றாக கழுவி விடுங்கள். ○ சுளி .ான்புளு தட்டமை அல்லது சின்னம்மை போன்ற எளிதில் தொற்றக்கூடிய நோய்களில் இருந்து விலகி இருங்கள் ○ கூட்டம் அதிகமாக இருக்கும் இடங்களுக்கு செல்வதை தவிருங்கள **வாய் ஈறு மற்றும் தொண்டையில் பாதிப்பு** புற்று நோயின் துணை சிகிச்சை பல சமயங்களில் வாய் மற்றும் தொண்டை பகுதிகளில் புண்களை ஏற்படுதிதிவிடும். இந்நிலையை வாய் அழற்சி என்பர் இதனை சமாளிக்க நோயாளிகள் எப்போதும் வாய் சுத்தத்தைப் பேணுவது மிகவும் அவசியம் ஊங்கள் பற்களை சுத்தமாக வைத்துக்கொள்வது மிகலும் அவசியம். புற்குழி அல்லது ஈறுகளில் அழற்சி அல்லது நோய் அல்லது சரியாக பொருத்தபடாத செயற்கைப்பற்களால் பிரச்சனை இருப்பின் பல் மருத்துவரிடம் அணுகி தக்க சிகிச்சை எடுப்பது அவசியம் ○ ஓவ்வொறு முறை சாப்பிட்ட பின்பும் பற்கனையும் ஈறுகளையும் நன்கு துலக்குங்கள். மென்மையான .ான்பிரஸ் கொண்டு மெதுவாக துலக்குங்கள். சாப்பாட்டியிற்க்கு பின்பும் படுக்க போவதற்க்கும் முன்பும் உப்பு கலந்த மிதமான சுடுநீரால் வாயைக் கொப்பளிங்கள் ○ ஓங்ஙொரு முறையும் உபயோகித்தப்பின் .ான்ப்ரஸ்ஸை நன்றாக கழுவி உலர்ந்த இடத்தில் வையுங்கள்.	

எவ்வாறு வாய்ப்புண்ணை சமாளிப்பது.

- ஊணவை அதிகம் சூடாக்காமல் குளிரவைத்து அரை வெப்பநிலைக்கு தக்க சாப்பிடுங்கள். அதிகம் சூடாகவோஇ குளிர்ந்தோ இருந்தால் எரிச்சலூட்டக்கூடம்
- குாரதன்மையுள்ள எரிதல் உணர்வு கொண்ட உணவு வகையான தக்காளி ஆரஞ்சு உப்பு காரம் நிறைந்த கூடிய உணவை பொருட்களை தவிர்ப்பது நல்லது.

வயிற்று போக்கு

கதிரியக்ககசிகிச்சை குடல் உள் வரிச்சுவற்றை பாதிக்கும் போது நீர் போன்று அல்லது இளகிய வயிற்று போக்கு ஏற்படுகிறது. இந்த வயிற்று போக்கு ஏற்படுகிறது. இந்த வயிற்றுப்போக்கு 24 மணி நேரத்திற்கு மேலும் நீடித்து வயிற்றில் இழுத்து பிடித்தது போர் வலியிருந்தால் உடனே மருத்துவரை அணுகவும்.

வயிற்றுப்போக்கை சாமளிக்கும் விதம்

- நீராகாரமாக நிறைய குடியுங்கள் இது இழந்த நீர்ச்சத்தை ஈடுகட்ட உதவும்
- மிதமாக தெளிவான நீர் கஞ்சி போன்றவை நல்லது குமட்டும்படி இருந்தாலோ சிறிது தண்ணீர் விட்டு நீர்க்கச்செய்து அறை வெப்பநிலையில் இருக்குமாறு செய்து கொஞ்சமாக குடியுங்கள்
- மூன்று வேளையும் நன்கு சாப்பிடுவதற்குப்பதில் நாள் முழுவதும் கொஞ்சம் கொஞ்சமாக புடியுங்கள்
- போட'டாசீயம் சத்து அதிகமுள்ள உணவான வாழைப்பழம் ஆரஞ்சு உருளைக்கிழங்கு போன்றவற்றை உட்கொள்ளலாம்
- அதிக நார்ச்சத்துள்ள பொருட்களை சேர்த்தால் வயிற்று போக்கு அதிகமாகி இழுத்து பிடித்தாற் போன்ற வலியும் ஏற்ப்பட்டுவிடும் எனவே அவற்றை தவிர்த்து விடுங்கள் கோதுமை தனியா ரொட'டி பச்சை காய்கறிகள் பீன்ஸ் கொட்டை விதையுள்ள பழங்கள் மற்றும் உலர்ந்த பழங்கள் நார்ச்சத்து மிக்கவை
- காபி டீ .இனிப்பு வகைகள் ஆல்கஹால் தவிர்ப்பது நல்லது.

	○ பால் மற்றும் பால் சார்ந்த பொருட்களை தவிர்த்தல் நல்லது இவை உங்கள் வயிற்று போக்கையும் வயிற்று வலியையும் உண்டாகிடுபவை. **மலச்சிக்கல்** கதிரியக்கசிகிச்சை குடல் உட்புற செல்களை தாக்க கூடியதாகவும் மலச்சிக்கலை தோற்றுவிக்க கூடியவை. ஊங்களுக்கு சுறுசுறுப்பு குறைந்திருந்தால் அல்லது நீங்கள் தேவையான அளவு நார்சத்து குறைந்த உணவு மற்றும் நீராகாரம் எடுக்கமாலிருந்தாலும் மலச்சிக்கல் வரலாம் .ஒரு நாளைக்கு மேல் மலம் கழியாமல் இருந்தால் மருத்துவரை அணுகுங்கள் அவர் உங்களுக்கு மலமிளக்கி தருவார். **மலச்சிக்கலுக்கு என்ன செய்யலாம்** இறுகிய மலம் இளக அதிகமாக தண்ணீர் குடியுங்கள். வாய்ப்புண. இல்லையென்றால் வெதுவெதுப்பான மற்றும் சூடாள நீரார்காரம் குடிக்கலாம். வயிற்று போக்கு இல்லையென்றால் கோதுமை ரொட்டி தானியங்கள் பச்சை அல்லது வேகவைத்த காய்கறிகள் உலர்ந்த பழங்கள் கொட்டைகள் சாப்பிடலாம் தினமும் ஏதாவதுதொரு உடற்பயிற்சி செய்யுங்கள் **உடலுறவு கொள்வதில் பிரச்சனை நாட்டண்மை** சில சமயங்களில் உடலுறவின் போது வலியும் வசதி குறைவும் ஏற்படும் சிசுத்தாரையில் தொற்று அடிக்கடி ஏற்படும் கதிரியக்கத்திற்கு பின் இரத்த ஒழுக்கம் மற்ற ஒருக்குகளும் ஊற்படக்கூடும். இந்த அறிகுறிகளை மேற்கொள்ள கீழ்க்கண்ட முறைகளை பின்பற்றவும். ○ ஈரப்பதத்தை உண்டாக்கக்கூடிய மருந்தினை பயன்படுத்த வும் ○ சிசு திரையில் எரிச்சலை தவிர்க்க வைட்டமின் இ எண்ணெயை பயன்படுத்தவும். ○ மருத்துவர் ஆலோசனைபடி நோய் தொற்றை தடுக்க பூஞ்சை காளானை எதிர்க்கும் மருந்துகளை பயன்படுத்தவும்	

புற்று நோயாளிகள் சருமத்தை பராமரிக்க கற்று கொள்ளல் கதிரியக்க சிகிச்சை பெறும் புற்று நோயாளி பசியின்மையை கண்டுபிடித்து அதை எங்ஙாறு கையானுவது என்று அறிந்து கொள்ளல்	**கருவுறும் காலத்தில் ஏற்படும் விளைவுகள்** ○ நீங்கள் கருவை சுமக்கும் வயதினராக இருப்பீர்கள் என்றால் நீங்கள் குடும்ப கட்டுபாட்டினை கடைப்பிடித்தல் பற்றி உங்கள் மருத்துவரின் ஆலோசனையை நாடவும். ○ கதிரியக்க சிகிச்சை மேற் கொள்ளப்படும் போது நீங்கள கருவுற்றால் கதிரிக்கமானது குழந்தைக்கு பாதிப்பினை ஏற்படுத்தும் முக்கியமாக முதல் மூன்று மிதங்களில். ○ நீங்கள் கதிரியக்க சிகிச்சைக்கு முன்னதாக கருவுற்றிருந்தால் இச்செய்தியை மருத்துவபிடம் அறிவிக்கவும் கூடமானால் கருவிலுள்ள சிசுக்கு ஏற்படும் பாதிப்பினை தவிர்க்கலாம் ○ கதிரியக்க சிகிச்சையின் மூலம் உங்கள் ஆண் விந்தனுக்களின் எண்ஞிக்கையும் வீரியமும் குறையலாம் ஆகவே மருத்துவர் அறிவுரைப்படி உங்கள் விந்தணுக்களை சேமித்து வைக்கலாம் ○ கதிரியக்க சிகிச்சை பெறும் நாட்களில் உடலுறவு கொள்வதில் நாட்டமின்மை காணப்படலாம். இது கதிரியக்க சிகிச்சையின் பக்க விளைவால் ஏற்படுவதல்ல புற்று நோயின் காரணமாக ஏற்படும் மன அழுத்தத்தினால் ஏற்படும் சிகிச்சை முடிந்தபின் உடலுறவு கொள்வதில் உள்ள நாட்டம் பறைய நிலையை அடையலாம் ○ கதிரியக்க சிகிச்சையின் பக்க விளைவாக சிசுத்தரை சுருங்க வாய்ப்பு உள்ளது அதனை சரிசெய்ய சிசுத்தரை விரிவாக்கியை எவ்வாறு பயன்படுத்த வேண்டும் என்று உங்கள் மருத்துவர் அல்லது செவிலிலியர் கற்பிப்பார் **கவலையும் மனகோர்வும் படப்படப்பு கோப உணர்வு** பெரும் பாலாவைர்கள் புற்று நோய் என்று கண்டுபிடிக்கப்பட்டவுடன் கவலைக்கும் மனசோர்வுக்கும் உள்ளாகிறார்கள். சிகிச்சையினாலும் அதனால் வரும் தற்காலிக அறிகுறிகளினாலும் பணத்தேவைகளினாலும் படபடப்பு இருக்கும். சில சமயங்களில் உதவுதற்கு துணை இல்லாததினால் நோயாளிகள் தேவை உணர்வுடன் இருப்பர் இந்த உணர்வுகள் தற்காலிகாமனாது.	**செய்யற்க** ○ தோலில் போடப்பட்ட குறிகளை கழுவி விட வேண்டாம். ○ அளிப்பவரின் உத்தரவு இல்லாமல் சிகிச்சைப் பெறும் இடத்தை நீரில் முழ்க வைக்க வேண்டாம் ○ சிகிச்சை அளிக்கப்படும் தோலை சவரம் செய்ய வேண்டாம். ○ புற்றுநோய் நிழணரின் அனுமதி இல்லாமல் சிகிசிச மேல் தோலில் களிம்பு மற்றும் லோசன் பயன்படுத்த வேண்டாம் ○ கதிரியக்க சிகிச்சை பெறும் மேல் தோலில் சூடு உள்ள பொருட்களை பயன்படுத்த கூடாது. ○ ஊங்க உடலை தேய்க்கவோ அழுத்தவோ கீறவோ கூடாது. ○ பனகட்டி ஜஸ்கட்டி ஒத்திடம் கூடாது ○ சூடான நீர் ஒத்தடம் கூடாது. ○ ஆசானவாயில்

சிகிச்சைக்குட்பட்ட நோயாளிகள் கவலை படப்படப்பு மற்றும் கோப உணர்வினை கையாளும் விதம் பற்றிஅளிதல்	**கையாளும் முறை** நண்பர் மற்றும் உறவினருடன் மனம்விட்டு பேசுதல் உங்களது நோய் பற்றியதான பயத்தை உங்களுக்கு அன்பானவர்களிடம் மனம் விட்டு உரையாடுங்கள் உடற்பயிற்சி உறக்கம் மற்றும் நல்ல உணவு ஆகியவை இவ்வகை உணர்வுகளை மாற்றக்கூடியது என்பதை நினைவில் இருத்த வேண்டும் புற்று நோயானிகளுக்கு ஆதரவு அளிக்கக்கூடியகுழுவினருடன் இனைவதன் மூலம் அவர்கள் உதவலாம் ஒரு மணோதத்துவ நிபுனர் அல்லது ஆலோசகரின் பரிந்துரையை அணுகி பயன்பெறலாம் மன அழுத்தம் மற்றும் கவலைக்கும் மருந்துகளைப்பற்றி உங்கள் மருத்துவரிடம் கேட்டு தெரிந்து கொள்ளவும் மன இறுக்கத்தை குறைக்கக்கூடிய கலை. **முடிவுரை** இதுவரை நாம் புற்றுநோயினால் பாதிக்கப்பட்டவர்களுக்கு கதிரியக்க சிகிச்சை மூலம் அளிக்கப்படும் சிகிச்சையினால் ஏற்படும் பக்க விளைவுகளை எங்கனம் மேற்கொள்ளுதல் என்று பார்த்தோம். உங்களுக்கு சந்தேகம் இருப்பின் தெரிவிக்கவும் நோயாளிகள் முக்கியமாக தன்னம்பிக்கையோட எதிர் கொண்டு மேற்கொள்ளவும் இந்த அசௌரியங்கள் எல்லாம் தற்காலிகமானது மேற்கொள்ளகூடியது என்ற உணர்வு உங்களில் இருக்கவேண்டும்	கதிரியக்க சிகிச்சை பெறுபவராக இருந்தால் எனிமா சப்பாசிட்டரி மற்றும் மலக்குடல் தெர்மாமீட்டர் பயன்படுத்த வேண்டாம் ○ உப்புநீரில் நீந்துதல் குளம்குட்டை ஏரி ஆகிய இடங்களில் நீந்த வேண்டாம் ○ சிகிச்சை பெறும் இடத்தில் ஓட்டும் பிளாஸ்திரிகள் பயன்படுத்த வேண்டாம். ○ அரிப்பு அல்லது எரிச்சல் இருப்பின் மருத்துவரின் அலோசனை படி ஆயில்மென்டை பயன்படுத்தலாம்.

APPENDIX – II

LETTER SEEKING PERMISSION TO CONDUCT THE RESEARCH STUDY

From

C. Fransisca Brinda,
II Year M.Sc (N),
Dr. G. Sakunthala College of Nursing,
Thiruvanaikovil,
Trichy – 5.

To

The Principal,
Dr. G. Sakunthala College of Nursing,
Thiruvanaikovil,
Trichy – 5.

Respected Madam,

Sub: *Letter seeking permission to conduct the study.*

I am final year M.Sc., Nursing student of Dr. G. Sakunthala College of Nursing. I would like to conduct a study as a part of partial fulfillment for the degree of masters in Nursing. The statement of the problem is "A pre experimental study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding radiation therapy among patients with cancer receiving radiation therapy admitted at Dr. G.V.N cancer Cure Centre" Trichy – 2010-2011. Kindly grant me permission to conduct the study.

Thanking you in anticipation.

Your's faithfully,
C. Fransisca Brinda

APPENDIX - E

LETTER SEEKING PERMISSION TO CONDUCT STUDY

From

C. Fransisca Brinda,
II Year M.Sc (N),
Dr. G. Sakunthala College of Nursing,
Thiruvanaikovil,
Trichy – 5.

To

The director,
Dr. G.V.N. Cancer Cure Centre,
Trichirappalli.

Through

The Principal,
Dr. G. Sakunthala College of Nursing,
Thiruvanaikovil,
Trichy – 5.

Respected Sir,

Sub: *Letter requesting permission to conduct pilot study.*

I am C. Fransisca Brinda M.Sc. Nursing student of Dr. G. Sakunthala College of Nursing, Thiruvanaikovil, Trichy-5. As part of my course, I am doing study on the topic mentioned below.

'A pre experimental study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding radiation therapy among patients with cancer receiving radiation therapy admitted at Dr. G.V.N. Cancer Cure Centre, Trichy – 2010-2011.

I would like to do my pilot study of my research at your hospital, hence I request you to kindly consider my request and grant me permission to do my pilot study. Kindly do the needful. I assure you that I will abide by the institutions policies.

Thanking you,

Your's sincerely,

C. Fransisca Brinda

II Year M.Sc (N) Student

APPENDIX – III

REQUISITION LETTER TO MEDICAL GUIDE

From

Mrs.C.Fransisca brinda,
II Year M.Sc (N),
Dr.G.Sakunthala College of Nursing,
T.V.Kovil,
Trichy – 5.

To

Dr.S.Xavier, MBBS, DMRT.,
Cancer Cure Centre,
Trichy.

Through

The Principal,
Dr.G.Sakunthala College of Nursing,
T.V.Kovil,
Trichy – 5.

Respected Sir / Madam,

Sub: *Letter Requesting opinion and suggesting from Experts for establishing content valitidity of the tool.*

I am M.Sc nursing student of Dr.G.Sakunthala College of Nursing,T.V.Kovil, Trichy – 5. As part of my course, I am doing study on the topic mentioned below.

A study to assess the effectiveness of structured teaching program on knowledge and attitude regarding therapy among the patients with caner, Dr.GVN cancer cure centre during the year 2010 – 2011.

May I request you to go through and validate the content of the tool regarding knowledge and attitude of radiation therapy.

Please give your valuable suggestion for modifying the tool.

Thanking you,

Your's sincerely,
Mrs.C.Fransisca brinda
II Year M.Sc (N) Student,