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# A STUDY TO ASSESS THE SUPPORTIVE CARE NEED AND HEALTH RELATED QUALITY OF LIFE OF PATIENTS RECIVING RADIATON THERAPY IN SELECTED HOSPITAL CALICUT

By

**Ms. SOORYA SREE**

**Ms. SHAHANA MP**

**Ms. SRAVYA SUNIL**

**Ms. AADHILA FARZANA KT**

Kerala University of Health Sciences, Thrissur

Under the guidance of

**Ms. Aneesha M.M**

Senior Lecturer

MIMS College of Nursing

Puthukode

**ABSTRACT**

**Background:** radiation therapy plan involves a radiation oncologist carefully selecting the most appropriate type, dose, and delivery method to maximize cancer cell destruction while minimizing damage to healthy tissue. **Research question:** what are the supportive care need and change in health related quality of life of patients receiving radiation therapy. **Objectives:** The objective of the study was to assess the supportive care needs of patients receiving radiation therapy,To determine the health- related quality of life (HRQoL) of patients receiving radiation therapy, To examine the association between supportive care needs and health-related quality of life (HRQoL) of patients receiving radiation therapy, To assess the association between supportive care needs, quality of life, and selected sociodemographic variables among patients undergoing radiation therapy. **Methodology**: The present study aimed to assess the quality of life and health related quality

of life patients receiving radiation therapy. A non-experimental descriptive approach was adopted. **Results and Discussion**: In total sample (44.3%) belongs to self-employed. Most of the subject belongs to age group 5566 years (33.8%). Equal size of the samples was both males and females (50%). Most of the samples belong to secondary education (32.9%). Majority of the samples belong to nuclear family (75.7%). (51.4%) belongs to rural. 20 samples from <5000(28.6%samples from 5001-10,000(28.6%). 52.9% belongs to no. From the figure that 98.6% belongs to yes, that (32.9%) belongs to leukemia. That 75.7% belongs to greater than 12 months. That majority belongs to no (47.1%) and (35.7%) belongs to yes and (16.3%) belongs to if yes, specify. that majority of the samples belongs to yes (54%) and (46%) belongs to no.

**Conclusion:** Radiation therapy is a cornerstone of cancer treatment, offering curative and palliative benefits by shrinking tumors, managing pain, and often combining with other therapies like surgery and chemotherapy. While it is a highly controlled and effective treatment, its use requires careful planning to minimize side effects, which can include fatigue, skin changes, and organ damage, though many are temporary. Ongoing advancements are focused on improving its effectiveness and reducing toxicity, while comprehensive support and follow-up care are crucial for patients' outcomes.

**Keywords:** supportive care need, health related quality of life, radiation therapy

## CHAPTER 1

## INTRODUCTION

Cancer continues to be one of the most challenging health problems of our time, demanding effective methods of diagnosis and treatment. Among the many approaches available, radiation therapy has played a central role in cancer care for more than a century. The discovery of X-rays in the late 19th century opened a new era in medicine, and by the early 20th century, radiation began to be widely used to both detect and treat cancers. In its early days, radiation therapy often harmed not only cancer cells but also the surrounding healthy tissues, limiting its safety and effectiveness. However, with remarkable progress in medical science and technology, radiation therapy has evolved into a highly precise and accurate treatment option. Modern techniques now allow doctors to target cancer cells with great accuracy, sparing nearby healthy tissue and reducing side effects. This precision has transformed radiation therapy into a powerful tool, not only for controlling the spread of cancer but also for curing many cases[1].

Radiation therapy has become one of the three major pillars of cancer treatment, alongside surgery and chemotherapy. With continuous advancements in imaging techniques, computerized planning systems, and precise radiation delivery, it has developed into a safe, effective, and often life-saving treatment for patients across the world. These ongoing improvements are expected to further increase the ability of radiation therapy not only to cure different types of cancer but also to enhance the overall quality of life of patients[2].

The way radiation therapy works is by damaging the DNA, or genetic material, inside cells. DNA is essential because it controls how cells grow, function, and divide. When radiation damages this material, cancer cells lose their ability to multiply and eventually die. Although radiation may also affect healthy cells

surrounding the tumor, these cells usually have a stronger ability to repair themselves compared to cancer cells. This natural repair mechanism makes it possible for radiation therapy to specifically weaken or destroy tumors while minimizing long-term damage to normal tissue.

Ultimately, the goal of radiation therapy is to achieve the maximum destruction of cancer cells while causing the least possible harm to healthy cells. With every new technological advance, radiation therapy is becoming more precise, leading to better treatment outcomes, fewer side effects, and improved survival rates for patients with cancer[3].

Many patients with advanced cancer have numerous medical complications and multiple sites involving metastases that cause distressing symptoms. Radiotherapy is often used for the palliative treatment of these patients, especially those with bone metastases. There is a lack of information about the types of supportive care needs these patients experience, the services that are available for them, and whether people want help with their needs[4]

## BACKGROUND OF THE STUDY

Radiation therapy (RT) is a well-recognized treatment option for cancers, including oral cancer, where it may be used as a primary therapy or in combination with other treatments such as surgery (neoadjuvant therapy). While radiation therapy plays an important role in improving survival, it is also known to have considerable side effects that negatively impact patients' quality of life. These effects may be physical, such as fatigue, mucositis, or skin changes; psychological, such as anxiety or depression; and social, including difficulties in communication and relationships. Despite its widespread use, limited research has explored how radiation therapy affects both the mental and physical well-being of cancer patients[5]

Quality of life (QoL) is defined as a person's perception of their overall well-being in relation to their cultural background, value system, personal goals, expectations, and concerns. When it comes to health, health-related quality of life (HRQOL) focuses on how illness and its treatment affect both the physical and emotional aspects of a patient's daily living. Cancer continues to be one of the leading global health problems, and according to the World Health Organization (WHO), it was responsible for 9.6 million deaths worldwide in 2018, making it the second most deadly disease. In India, cancer affects about 97 out of every 100,000 people, with a higher prevalence in urban areas. Treatment costs further increase the burden, as patients spend an average of Rs. 29,066 in public hospitals and up to Rs. 84,320 in private healthcare settings, leading to significant financial strain on individuals and families[6].

Hospitalizations caused by complications from radiotherapy (RT) place a major financial burden on healthcare systems and negatively affect the quality of life of cancer patients. A study using national data from 2005 to 2016 aimed to examine trends in these hospitalizations, their underlying causes, and the economic impact. Researchers used ICD- 9 and ICD-10 codes to identify RT-related complications. During the study period, there were about 443 million hospitalizations, of which 482,525

(0.11%) were linked to radiotherapy. The most frequent reasons for admission were cystitis (4.8%), gastroenteritis or colitis (3.7%), and esophagitis (3.5%). Some complications became more common over time, with aspiration pneumonitis increasing 1.4 times and mucositis increasing 1.3 times. In contrast, esophagitis (0.58 times) and rectal or anal disorders (0.67 times) showed the greatest decline[7].

Rapid progress in cancer care and radiation oncology have contributed to longer survival in many cancer patients and thus are contributing to the transformation of cancer into a chronic disease. Every second patient diagnosed with cancer will receive radiotherapy (RT) during their treatment history. Recent studies have shown that improved overall survival of many cancer patients is experiences and satisfaction (PRES), and psychological distress to provide optimal cancer care associated with an increasing number of patients treated with multiple repeat RT (MRRT), in curative or palliative intent. This ongoing transformation of cancer into a chronic disease requires an increased consideration of quality-of-life (QoL), long-term and cumulative toxicity of multiple anti- cancer interventions, patient-reported[8].

However, it is especially important to consider QoL for this patient group. QoL entails global health status, as well as emotional, physical, social and cognitive functioning changes. Various patient- and disease-specific factors and RT modality may affect QoL. Fatigue, a major component of QoL, is one of the most common side effects reported by cancer patients during and after treatment. In many cases evaluation of QoL in patients having received RT remains challenging, since symptoms of cancer may deteriorate before improvement, and pre-treatment mental and physical status vary between patient populations. Due to heterogeneity of cancer diseases and their clinical manifestations, evaluation of QoL after RT in different cancer patient populations remains problematic to generalize[9].

Supportive care refers to the type of care that helps cancer patients and their families cope with the challenges of the disease and its treatment. It provides assistance during all stages—from diagnosis and treatment to end-of-life care and bereavement. Supportive care covers a wide range of services, including managing symptoms, providing health information, preparing meals, assisting with daily activities, offering transportation, and giving psychological support and counseling. Today, supportive care is considered an essential part of healthcare for cancer patients, as it has been linked to better outcomes such as longer survival in early-stage patients, better symptom management, and improved functional ability[10].

When supportive needs are not met, patients may experience intestinal problems, sleep disturbances, stress-related stomach discomfort, reduced adherence to treatment, and increased physical and emotional distress. For this reason, it is crucial to identify what kind of supportive care patients require. Health professionals play a key role in assessing these needs and ensuring that appropriate resources and interventions are integrated into the overall treatment plan Over the past decades, the reporting of health-related quality of life (HRQoL) results and other patient-related outcome measures have become a norm in modern oncological research, including in EBRT for PC Although PC had global the fourth highest incidence of all cancers in 2020, and the highest incidence of all cancers in Finland in 2019, the independent effects of external beam therapy on HRQoL have been relatively poorly studied in the absence of other treatments. Androgen-

deprivation therapy (ADT) seems to have a detrimental effect on HRQoL, which implies that the results of studies consisting of men receiving hormonal treatment cannot be generalized to men not receiving AD. This study aimed to examine changes in physical symptom severity, functional status, supportive care needs, and related factors in oral cavity cancer patients during 6 months after beginning radiation therapy (RT) or concurrent chemotherapy and radiation therapy[11]

The late effects of RT are not well reported in patients with oral tongue cancer (OTC). This study reports the incidence of late effects and factors associated with the development of late effects in OTC patient. Aimed at determining the incidence of mandibular osteoradionecrosis (ORN) after radiotherapy, possible risk factors, and mandibular dose-volume effects in a large cohort of head and neck cancer patients

Supportive care needs can contribute to emotional distress and reduced quality of life for cancer patients. We undertook a supportive care needs assessment for patients undergoing radiation therapy to provide a basis for program planning. A self-report supportive care needs survey was completed by a convenience sample of 115 patients on days five, seven and 16 during their course of radiation. The most frequently identified physical unmet needs at all three times were fatigue (33%-49%), dry and itchy skin (24%- 37%), and sleep difficulties (23%-30%). The number of patients citing these unmet needs increased significantly over the study time period. Within the emotional domain, worry (34.5%) was cited most frequently on day five. The number of individuals expressing worry did not decrease significantly by day 16. Across all domains and individual items, there was wide variation in the percentage of individuals who had an unmet need and also indicated they wanted help with that unmet need. This pattern remained consistent over time. This study emphasizes the need for a defined or intentional process to assess supportive care needs and patient desire for assistance or help with unmet needs[12].

## NEED AND SIGNIFICANCE

Addressing health-related quality of life (HRQoL) has become a vital aspect of cancer care, as it directly influences patient outcomes and overall well-being. Paying attention to the physical, emotional, and social challenges associated with both cancer and its treatment can reduce distress and help improve the quality of life of patients undergoing therapy. In recent years, digital health tools such as wearable devices and mobile applications have shown promise in monitoring HRQoL. Devices like smartwatches and fitness trackers can track physical activity, heart rate, and sleep quality, providing valuable information that can guide treatment decisions and improve patient-centered outcomes. Digital platforms also allow patients to report symptoms such as pain, fatigue, and emotional distress in real time, offering healthcare providers insights into their daily well- being. However, while these technologies enhance care, they may also place additional time and effort burdens on patients. Therefore, strategies to reduce patient burden are essential to ensure that digital health interventions remain supportive rather than overwhelming[13].

Radiation therapy (RT) is a cornerstone in the management of many cancers, but it is also associated with side effects that affect patients' physical, psychological, and social well-being. These side effects often lead to unmet supportive care needs, such as managing fatigue, nutritional difficulties, sleep disturbances, and emotional distress. If not addressed, these unmet needs can reduce treatment compliance, impair recovery, and worsen HRQoL. Despite the recognized importance of supportive care, many patients report that their needs are either under-identified or insufficiently addressed during RT. This highlights a clear gap in cancer care delivery.

Studying HRQoL and supportive care needs in patients receiving RT is therefore essential for multiple reasons. First, it provides insights into how treatment impacts daily functioning and emotional health. Second, it identifies specific areas where supportive interventions—such as counseling, symptom management, and nutritional support—are required. Finally, it helps healthcare providers design patient-centered care plans that not only aim at curing cancer but also focus on enhancing quality of life during and after treatment. Such research is significant as it ensures that cancer care evolves beyond survival outcomes to include the holistic well-being of patients.

**STATEMENT OF THE PROBLEM**

A study to assess the supportive care needs and health related quality of life among patient receiving radiation therapy at selected hospital, Calicut.

**REASRACH QUESTIONS**

Is there any significant association between supportive care needs and health related quality of life in patient undergoing radiation therapy.

**AIMS**

Aim of the study to assess the supportive care needs of patient receiving radiation therapy

**OBJECTIVES**

- To assess the supportive care needs of patients receiving radiation therapy.
- To determine the health-related quality of life (HRQoL) of patients receiving radiation therapy.
- To examine the association between supportive care needs and health-related quality of life (HRQoL) of patients receiving radiation therapy.
- To assess the association between supportive care needs, quality of life, and selected sociodemographic variables among patients undergoing radiation therapy.

## OPERATIONAL DEFINITIONS

### Radiation therapy

A cancer treatment that uses high energy radiation, like x-rays or gamma rays to kill cancer cells and shrink tumors.[5] Radiation therapy is the use of directed X-rays or subatomic particles primarily for cancer management in both curative and palliative settings. It can be delivered either externally or internally.

### Supportive care needs

The physical, emotional, psychological, social, and spiritual support required by patients receiving radiation therapy to manage the side effects of treatment and improve their overall well-being.

### Health related quality of life

The overall well-being of patients undergoing radiation therapy, reflecting their physical, emotional, and social functioning during radiation therapy

### Research approach

Quantitative research approach

### Research design

Non experimental descriptive design

### Variables

- Supportive care needs
- Health related quality of life **Setting:**

Radiation therapy department of aster MIMS Hospital, Calicut

**Population:**

Patients who receiving radiation therapy in Radiation therapy department of Aster

MIMS Hospital, Calicut

## ASSUMPTRIONS

- Supportive care needs and health-related quality of life of patients receiving radiation therapy are influenced by a variety of factors.
- Supportive care needs and health-related quality of life may vary among individuals receiving radiation therapy.
- Supportive care needs and health-related quality of life may change based on the duration and phase of radiation therapy.

## HYPOTHESIS

$H_0$ : There is no significant relationship between supportive care needs, health- related quality of life, and selected sociodemographic variables among patients undergoing radiation therapy.

$H_1$ : There is a significant association between supportive care needs and health- related quality of life with selected sociodemographic variables among patients undergoing radiation therapy.

$H_2$ : There is a significant association between health-related quality of life and selected sociodemographic variables among patients receiving radiation therapy.

H□: There is a significant association between supportive care needs and selected sociodemographic variables among patients receiving radiation therapy

## REVIEW OF LITERATURE

### Studies related to supportive care needs

A prospective longitudinal study was conducted on 82 oral cavity cancer patients receiving RT/CCRT in Taiwan. Supportive care needs and symptoms were assessed at five time points over six months using standardized tools. Results showed moderate to high care needs, peaking at 2 months, with higher needs linked to anxiety, fatigue, swallowing difficulty, and mucositis. The study emphasized the need for timely assessment and support.[1]

A study was conducted to assess a radiation therapist opinion survey as Phase I of the study "Identifying, Measuring and Addressing Radiation Therapy Patient Supportive Care Needs" at Sunnybrook's Odette Cancer Centre, Canada. An online survey with opinion statement questions along with a treatment record audit was used to gather data from radiation therapists on supportive care issues, comfort levels, and perceived barriers. Results showed that while RTs demonstrated a strong commitment to supportive care, they reported concerns regarding documentation, limited time, and barriers to optimal care delivery. The study identified four key strategies to overcome barriers: staff education and training, system change, additional time, and role clarification, emphasizing the importance of improving supportive care practices.[2]

A descriptive longitudinal study was conducted on "Unmet supportive care needs and desire for assistance in patients receiving radiation treatment" at a large urban tertiary cancer centre in Canada. A convenience sample of 115 patients completed the Supportive Care Screening Tool on days 5, 7, and 16 of radiation therapy. Results showed that the most frequent unmet physical needs were fatigue (33–49%), dry/itchy skin (24–37%), and sleep difficulties (23–30%), with these needs increasing over time. Worry was the most common emotional need (34.5%) and persisted throughout treatment. The study emphasized the need for systematic assessment and tailoring care to patients' specific desire for assistance with unmet needs.[3]

A cross-sectional study was conducted on 90 women undergoing radiotherapy for breast cancer in Australia using an online survey to assess physical activity patterns and support needs. Results showed that 56% were less active than desired and 30% lacked adequate PA information, with many reporting reduced attentiveness in daily activities. The study highlighted the need for support and guidance on physical activity to improve patient well-being during treatment.[4]

A cross-sectional, descriptive study was conducted to assess "Supportive care needs of patients with advanced disease undergoing radiotherapy for symptom control" at a Palliative Radiation Therapy Rapid Response Clinic in a comprehensive ambulatory cancer centre. A total of 69 patients completed a self-report questionnaire assessing physical, emotional, social, spiritual, psychological, and practical needs. Results showed that lack of energy, pain, and concerns for loved ones were the most common unmet needs, and many patients expressed difficulty managing these needs. While many desired assistance, some patients declined help for certain issues. The study emphasized the importance of tailored supportive care and provided recommendations for nursing practice and future research.[5]

A cross-sectional, descriptive study was conducted on 69 advanced cancer patients at a Palliative Radiation Therapy Rapid Response Clinic using a self-report questionnaire to assess physical, emotional, social, spiritual, psychological, and practical needs. Results showed that lack of energy, pain, and concerns for loved ones were the most common unmet needs. Many patients wanted help managing these needs, though some declined assistance for certain issues. The study emphasized the importance of tailored supportive care for patients receiving palliative radiotherapy.[6]

A prospective cohort study was conducted to assess the 242 radiation oncology patients using a psychosocial needs screening survey. Results showed 62% had at least one need, mainly supportive/palliative care, exercise/PT, or advance care planning. Although 74% were referred, only 47% attended appointments. The study emphasized that screening with social work triage can help connect patients to supportive care.[7]

A narrative review was conducted on supportive care for toxicities in children undergoing radiation therapy, summarizing evidence from published literature. The review highlighted that RT can cause acute and long-term side effects, affecting quality of life and treatment outcomes. Studies are often small and uncontrolled, emphasizing the need for prevention, early detection, and optimal management of toxicities. The authors stressed the importance of further research and coordinated efforts to improve supportive care for pediatric patients. [8]

A cross-sectional stud was conducted on 403 colorectal cancer patients in four tertiary hospitals in Suzhou, China, using the Comprehensive Needs Assessment Tool. Latent class analysis identified two subgroups: high-need (52%) and low-need (48%), with healthcare staff and information needs being the highest in both groups. Unmarried patients and those with rectal cancer had greater supportive care needs. The study emphasized focusing on these high-need groups to improve care.[9]

A cross-sectional study was conducted to assess 98 breast cancer patients in Istanbul using the Supportive Care Needs Survey. Results showed that younger women and those receiving chemotherapy or radiotherapy had higher overall needs, with greater physical, psychological, and sexuality needs in specific subgroups. The study highlighted the importance of individualized holistic care for high-need patients.[10]

A retrospective study was conducted to assess 23 head and neck cancer patients to examine the correlation between maximum PTV dose and the need for in-hospital supportive care during radiotherapy. Results showed that 35% needed a treatment gap and 52% required hospitalization during treatment, with higher PTV doses in those needing gaps. The study concluded that maximum PTV dose can predict the need for supportive care.[11]

A cross-sectional survey study was conducted on "The supportive care needs of men with prostate cancer" in Queensland, Australia. A total of 206 men from prostate cancer self-help groups completed the Supportive Care Needs Survey (SCNS), assessing psychological, informational, physical, patient care, and sexuality needs. Results showed that one-third of men reported moderate to high needs, particularly in sexuality, psychological, and health system domains. Younger age, urban residence, recent diagnosis, active disease, radiation therapy, and lower education were associated with higher needs in specific domains. The study highlighted the importance of targeted interventions addressing sexuality, psychological support, and informational needs for men with prostate cancer.[12]

A retrospective study was conducted on 1,129 breast cancer patients in central Taiwan to examine unmet supportive care needs across cancer stages and treatment phases. Newly diagnosed patients had higher health, care, and nutritional needs, while relapse and terminal patients reported higher psychosocial needs. The study emphasized tailored supportive care to reduce unmet needs and improve quality of life.[13]

A retrospective quality indicator study was conducted to assess "The quality of supportive care among inpatients dying with advanced cancer" at a large university medical center in the USA. Medical records of 118 adult inpatients with advanced cancer who died between April 2005 and April 2006 were reviewed using 15 piloted quality indicators from the Cancer Quality ASSIST tool. Results showed an overall quality indicator pass rate of 80%, with consistent pain assessment and management, but gaps in care for nausea, dyspnea, and bowel management. Discussions about patient preferences were timely in 64–69% of cases. The study highlighted areas needing improvement in supportive and end-of-life care for hospitalized patients with advanced cancer.[14]

A descriptive longitudinal study was conducted on 115 radiation therapy patients at a Canadian cancer centre using a self-report survey on days 5, 7, and 16. The most common unmet needs were fatigue, dry/itchy skin, sleep difficulties, and worry, which persisted or increased over time. The study emphasized the importance of assessing unmet needs and patients' desire for assistance to guide supportive care.[15]

**Studies related to Health Related Quality of Life**

The scoping review was conducted to assess the HRQOL in adolescents and young adults (15–39 years) with cancer receiving radiation therapy. From 286 records, six studies met criteria, using patient-reported outcome tools. Most assessed physical and mental health, while AYA-specific needs like fertility, body image, sexuality, and finances were rarely studied. No study compared HRQOL during vs. after RT or collected longitudinal data, showing major research gaps.[16]

The systematic review was conducted on 19 studies with 3643 patients on active surveillance (AS), 14,651 on surgery/radiotherapy, and 2478 controls using patient- reported outcome tools over ≥5 years. Results showed AS patients had better sexual function, fewer urinary issues, and overall HRQOL comparable to treated patients and men without cancer. The study concludes that AS maintains good long-term quality of life in low-risk prostate cancer.[17]

The meta-analysis reviewed 49 studies from 6067 articles assessing HRQOL in curatively treated esophageal and gastric cancer using patient-reported questionnaires. Short-term HRQOL was better with neoadjuvant chemo(radio)therapy and surgery than with definitive chemoradiotherapy. Over 12 months, no significant HRQOL differences were found, though esophagectomy reduced HRQOL unlike gastrectomy. The study concludes that long-term HRQOL is comparable across treatments.[18]

The cross-sectional study was conducted on 452 cervical cancer patients in South Korea and the tool used was the EQ-5D-3L to assess HRQOL. Analysis showed HRQOL was highest in CIN (0.93), lower in invasive cancer (0.87), and lowest in recurrent cases (0.78). HRQOL was reduced within the first year of treatment, with older age, recurrence, and chemotherapy or radiotherapy associated with lower scores.[19]

The prospective study was conducted on 125 esophageal cancer patients receiving proton (62) or photon (63) chemoradiation and assessed HRQOL using the FACT- E questionnaire before and after treatment. Analysis showed a mean decline in FACT- E scores of -16.7, with less decline in the proton group (-12.7) than photon (-20.6). Proton therapy was associated with better preservation of quality of life during treatment.[20]

The cross-sectional study was conducted on patients with multiple myeloma in Palestine and used the EORTC QLQ-MY24 questionnaire to assess HRQOL. Results showed high symptom burden, including bone pain, back pain, and treatment side effects. Lower HRQOL was linked to low satisfaction with daily activities and overall health, while social support was higher in patients with university education and those not receiving radiotherapy. The study highlights the heavy disease and treatment burden in this resource- limited setting.[21]

The cross-sectional study was conducted on 607 cancer patients in Bangladesh and used the EQ-5D-5L questionnaire to assess HRQOL. Analysis showed lower HRQOL in advanced-stage patients, certain cancer types, physically inactive individuals, and those with lower socioeconomic status, while private hospital patients scored higher. The study highlights the need for early detection, tailored treatments, and promotion of physical activity to improve HRQOL.[22]

The review was conducted on HRQOL in low-grade glioma patients, using adapted multidimensional patient-reported instruments. It highlights treatment-related complications like cognitive deficits and neurotoxicity. Patient self-report was emphasized for accurate assessment, and multidimensional scales provided a comprehensive view of patient concerns. The study calls for more sensitive, long-term assessments of cognitive, functional, and quality-of-life outcomes.[23]

The longitudinal study was conducted on 90 oral cancer patients in Sri Lanka and used the EORTC QLQ-OH15 to assess OHRQOL at baseline, end of radiotherapy, and three months post-treatment. OHRQOL worsened during radiotherapy, especially in eating and gum/speech domains, and partially improved by three months but did not return to baseline. Baseline OHRQOL, civil status, and tumor site influenced outcomes.[24]

The clinical trial study was conducted on 112 lung cancer patients and used the EORTC QLQ-C30 to assess QoL at diagnosis and 12 months. Add-on Viscum album L.

(VA) therapy with radiation improved pain and nausea/vomiting, while VA alone improved role, physical, cognitive, and social functioning. The study shows supportive

effects of VA on quality of life in lung cancer patients.[25]

This 5-year prospective study was conducted on 211 head and neck cancer patients receiving radiotherapy, assessing HRQL with EORTC QLQ-C30 and QLQ-HN35. Most domains deteriorated at 3 months, partially recovered by 12 months, but several HN- specific domains remained worse at 5 years. The study identified short-term deterioration, long-term deterioration, and long-term improvement trends in HRQL.[26]

This cross-sectional study was conducted on 150 Iraqi women with breast cancer, assessing HRQoL using EORTC QLQ-C30 and QLQ-BR23. Analysis showed working patients and those receiving radiation or systemic therapy had better global and physical functioning, while emotional and role functioning were affected by disease. The study emphasizes the need for social and psychological support to improve quality of life.[27]

A phase II single-arm study was conducted on 107 oligometastatic patients receiving SBRT, assessing HRQoL with EORTC QLQ-C30 at baseline and 12 months. Patients were grouped as progressors (n=66) and nonprogressors (n=41). Progressors showed significant declines in HRQoL, while nonprogressors had minimal change. The study suggests disease progression post-SBRT worsens HRQoL.[28]

A Prospective clinical trial was conducted on 127 brain metastasis patients to assess HRQoL using EORTC QLQ-C15-PAL and QLQ-BN20 before and after RT.

Analysis showed SRS gave better QoL than whole-brain RT, and systemic therapy improved emotional function. Melanoma, nonmarried status, male sex, and older age were linked to better QoL in some domains.[29]

A prospective multicenter cohort study was conducted on 1,003 early-stage ER+ breast cancer patients on adjuvant RT + ET, stratified as younger (<70) and older (≥70). Using propensity score weighting and tools like EORTC QLQ-C30, QLQ-BR23, and MFI-20, HRQoL was assessed over 3 years. Results showed older patients had more comorbidities and persistent declines in QoL, while younger patients recovered better in physical, social, and emotional domains. The study highlights the need for age-specific survivorship care.[30]

# CHAPTER 2

# METHODOLOGY

## Research Approach

The present study aimed to assess the quality of life and health related quality of life patient receiving radiation therapy. A non-experimental descriptive approach was adopted.

## Research Design

The research design selected for this study was descriptive survey design.

**Settings**

Aster mims hospital calicut

**Population**

Patients who receiving radiation therapy in aster mims hospital

**Sample**

70 patients

**Sampling Technique**

Multistagerandom sampling technique

**Inclusion criteria**

- Between 18-75 years of Age
- Must be currently undergoing Radiation therapy as part of their cancer treatment.

**Exclusive criteria**

- Patients who are absent during data collection
- Patients who are not willing to participate in the study
- Patients who has any type of mental disorder

study includes patients who are receiving radiation therapy

**Tool and technique**

- Socio economic data

**Variable**

Patients receiving radiation therapy

Develop an instructional module on relationship between supportive care needs and health related quality of life

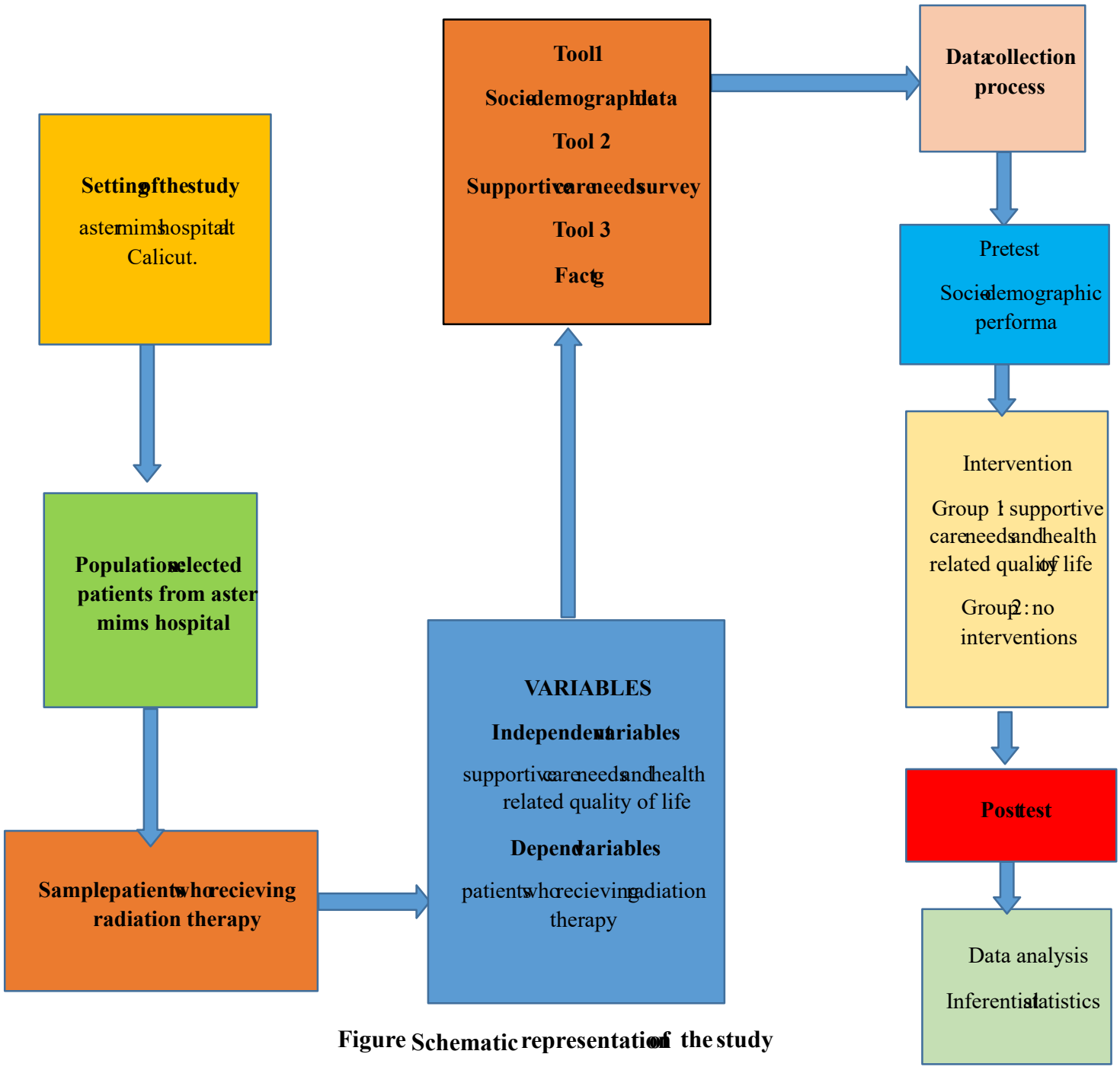



**Figure Schematic representation of the study**

## Setting of the study

The study was conducted among patients in Aster MIMS of hospital in Calicut.

## Population

The selected population was patients undergoing radiation therapy.

## Sample and sampling technique

The sample consisted of 70 patients between the age group 18-75 years and the sampling technique selected for the study was multistage random sampling technique.

**Inclusion criteria**

1. Patient between 18-75 years of age
2. Must be currently undergoing radiation therapy as part of their cancer treatment
3. Aware of cancer diagnosis
4. Able to speak and write Malayalam.
5. Willing to participate in all aspect of the study

**Exclusive criteria**

1. Those who are having speech or hearing problem
2. Those who are cognitive impairment or psychiatric illness

**Tools**

The tool used for study was socio – demographic performance, supportive care needs survey and FACT-G version 4.

**Development/selection of tool**

The following steps were taken for the development and selection of the tool

Review of research and non-research literature was made in related areas. Formal discussions were held with experts in Community Health Department and their valuable suggestions were utilized for developing tools. Professional experience of investigators along with guidance from experts helped in development of tools. To ensure content validity, the tool was submitted to experts and necessary modification were made in the tool as per the advice. Validity of social media questionnaire was checked.

Description of the tool

There are mainly 2 tools

**Tool 1**: tool 1 consists of 2 sections fact g Section A : demographic variables

It consisted of age, education, occupation, religion, socioeconomic status, hours spent for social media usage per day

Section B : clinical variables

It consisted of 5 questions regarding the cancer

**Tool 2: supportive care needs survey**

It is a standardized tool and it consisted of 34 questions regarding the emotional intelligence

**Tool 3: FACT-G version 4**

**Content validity**

In order to establish content validity of the tool, it was submitted to experts. The experts were from the different departments. As per the suggestions of experts some of the questions were modified and the tool was given for editing.

**Pilot study**

Pilot study was conducted at MIMS College of Nursing after getting permission from college authorities. The purpose of the study was informed and explained. The consent was taken from sample. 70 samples who satisfied the inclusion criteria and exclusion criteria were selected for study. The results of the study were discussed with experts and necessary modifications were made in the questionnaire. The pilot study didn't show any major problems in the collection and analysis of data

**Data collection process**

After getting permission from the radiology department, the study was conducted among 70 samples. Written consent was taken from subjects, assured the confidentiality of the information and anonymity by the researchers. The data were collected from college students by administering the tool consisting of questionnaire on sociopersonal data.

**Plan for data analysis**

The data were analyzed using demographic and inferential statistics. Demographic variables are analyzed by frequency and percentage. Association of health-related quality of life and supportive care need were analyzed using chi square and spearman correlation coefficient

## SCOPE FOR FUTURE STUDIES

This study aims to assess the supportive care needs and health-related quality of life (HRQoL) of patients undergoing radiation therapy, with a focus on identifying unmet needs and factors influencing patient well-being. The research will explore physical, psychological, social, practical, and informational support requirements during treatment. It will also evaluate how these needs impact HRQoL across various domains, including emotional, functional, and social well-being. The study will include diverse patient populations, with special consideration for rural and remote patients who may face unique challenges due to displacement from home, cultural differences, and limited access to services. Mixed methods—quantitative surveys and qualitative interviews—will be used to capture both measurable outcomes and lived experiences. Findings from this research will inform the development of tailored, patient- centred interventions to enhance supportive care delivery, improve quality of life, and guide future policy and service design in oncology care.

## ANALYISIS AND INTERPRETATION

This chapter presents the analysis and interpretation of data collected from sixteen students at MIMS College of Nursing. The data analysis is the systemic organization and synthesis of research data and testing of research hypothesis using the data. The data were analyzed according to the objectives and hypothesis formulated for the study. The aim of the analysis was to reduce, organize and giving meaning to the data.

OBJECTIVES:

.To assess the supportive care needs of patients receiving radiation therapy. . To determine the health-related quality of life (HRQoL) of patients receiving radiation therapy.

. To examine the association between supportive care needs and health-related quality of life (HRQoL) of patients receiving radiation therapy.

. To assess the association between supportive care needs, quality of life, and selected sociodemographic variables among patients undergoing radiation therapy.

HYPOTHESIS :

$H_0$ : There is no significant relationship between supportive care needs, health- related quality of life, and selected sociodemographic variables among patients undergoing radiation therapy.

$H_1$ : There is a significant association between supportive care needs and health- related quality of life with selected sociodemographic variables among patients undergoing radiation therapy.

$H_2$ : There is a significant association between health-related quality of life and selected sociodemographic variables among patients receiving radiation therapy.

H□: There is a significant association between supportive care needs and selected sociodemographic variables among patients receiving radiation therapy.

***1]*** **FREQUENCY AND PERCENTAGE**

**OCCUPATION**

| | **Frequency** | **Percent** |
|---|---|---|
| Nil | 15 | 21.4 |
| Homemaker | 16 | 22.9 |
| Private job | 31 | 44.3 |
| Self employed | 8 | 11.4 |
| Total | 70 | 100.0 |

**Table frequency and percentage distribution of samples according to demographic characteristics(occupation).**

In this table data shows that (21.4%) belongs to nil category,(22.9 %)belongs to homemaker,(44.3%)belongs to self employed.

**AGE**

| | Frequency | Percent |
|---|---|---|
| 22-36 | 20 | 28.2 |
| 37-51 | 16 | 22.5 |
| 52-66 | 24 | 33.8 |
| 67-80 | 10 | 14.1 |

**Table frequency and percentage distribution of samples according to demographic characteristics (Age).**

It is evident from table 1:1 that most of the subject belongs to age group 55-66 years (33.8%) and 28.2%where from 22-36 years and 22.5%belong to 31- 51 years.

**GENDER**

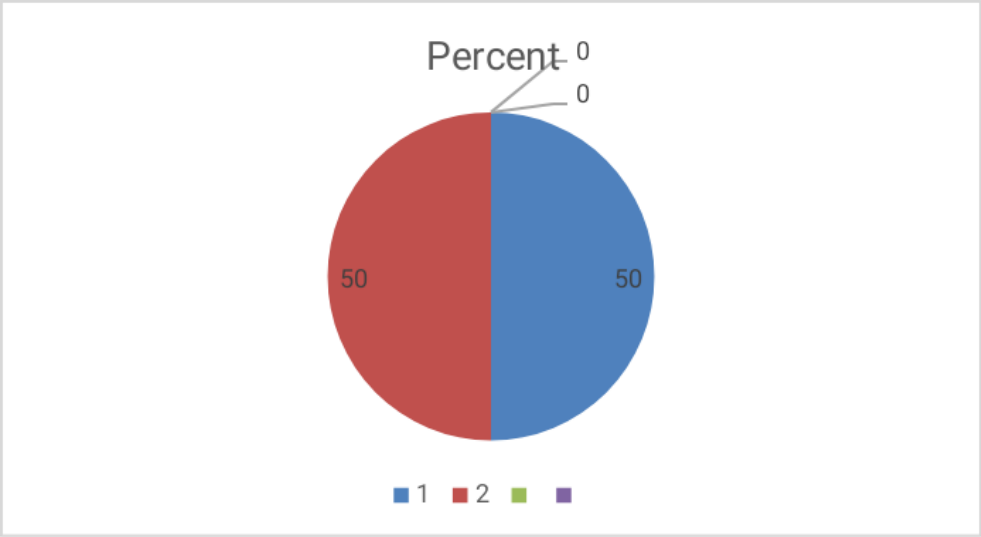



**Figure frequency and percentage distribution of samples according to demographic characteristics (GENDER)**

Data depicted in figure shows that equal size of the samples were both males and females (50%)

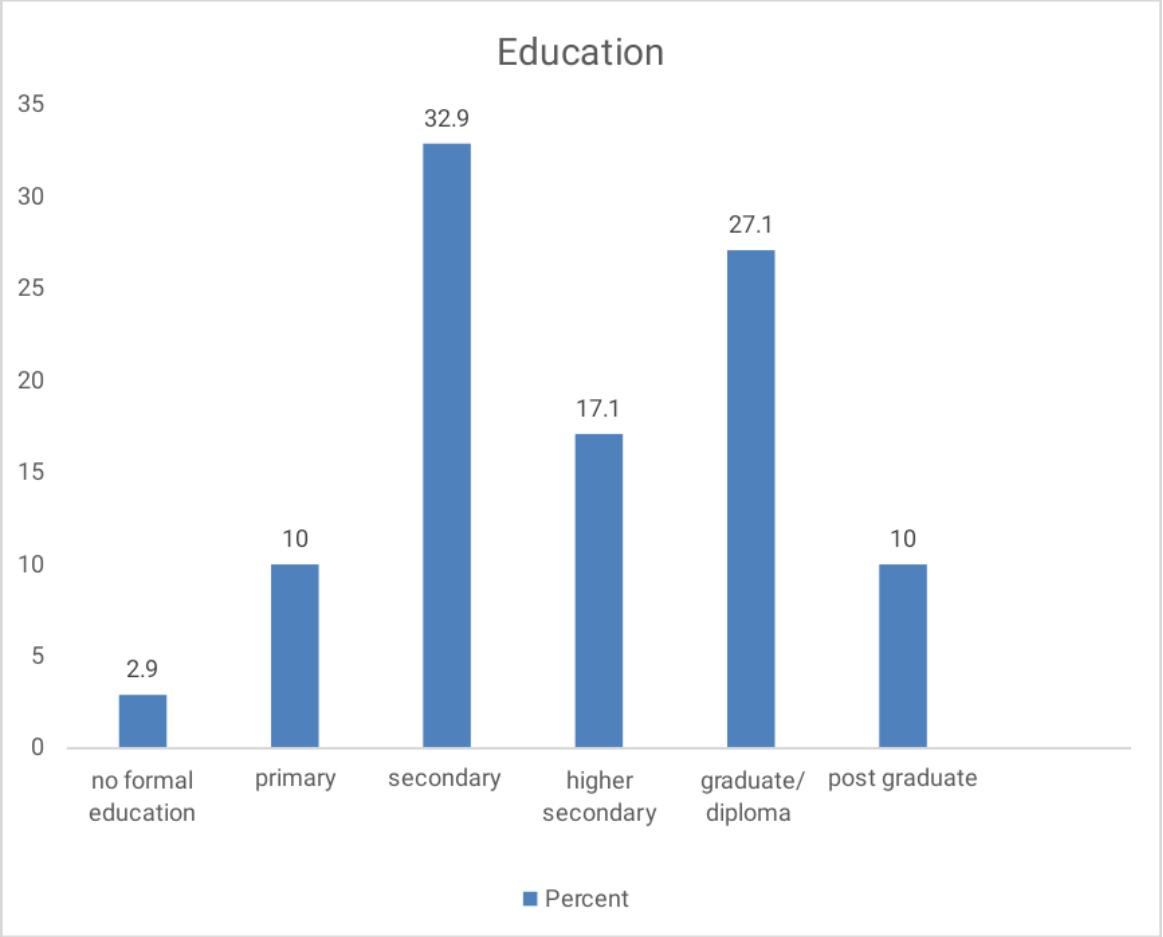



**Figure frequency and percentage distribution of samples according to demographic characteristics (educational qualification )**

Most of the samples belongs to no formal education (2.9%),primary education (10%) , secondary education (32.9%),higher secondary education (17.1%), graduate diploma (27.1%),and post graduate (10%).

**Type of family**

| | Frequency | Percenagt |
|---|---|---|
| Nuclear family | 53 | 75.7 |
| Joint family | 17 | 24.3 |

**Table frequency and percentage distrbution of samples according to demographic characteristics (type of family)**

It is clear from table that ,majority of the sample belong to nuclear family (75.7%),24.3% were join family.

**PLACE OF RESIDENCE**

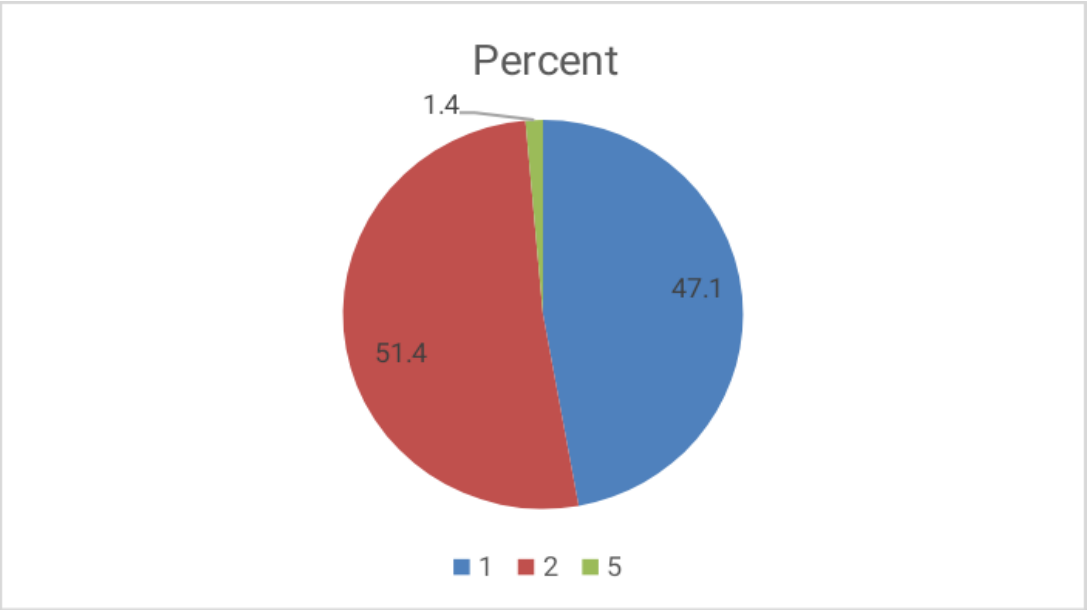



**Figure frequency and percentage distribution of samples according to demographic characteristics (Place of residence )**

It is clear from the figure that (51.4%) belongs to rural ,47.1%belongs to urban and (1.4%)belongs to semi-urban.

**MONTHLY INCOME**

| | Frequency | Percenagt |
|---|---|---|
| <5000 | 20 | 28.6 |
| 5001-10000 | 20 | 28.6 |
| 10001-15,000 | 20 | 28.6 |
| 10,001-20,00 | 9 | 12.9 |
| >20,001 | 1 | 1.4 |

**Table frequency and percentage distribution of samples according to demographic characteristics (monthly in come )**

**It is clear from the table that 20samples from <5000(28.6%),20 samples from 5001-10,000(28.6%),20 samples from 10,001-15,000(28.6%)and 9 samples belongs to 10,001-20,000(9%) and 1 sample belongs to>20,001 (1%)**

**HEALTH INSURANCE**

| | Frequency | Percenagt |
|---|---|---|
| Yes | 33 | 47.1 |
| No | 37 | 52.9 |
| Total | 70 | 100.0 |

**Table frequency and percentage distribution of samples according to demographic characteristics (HEALTH INSURANCE )**

It is clear from the table shows (47.1%) belong s to yes and 52.9% belongs to no Health insurance

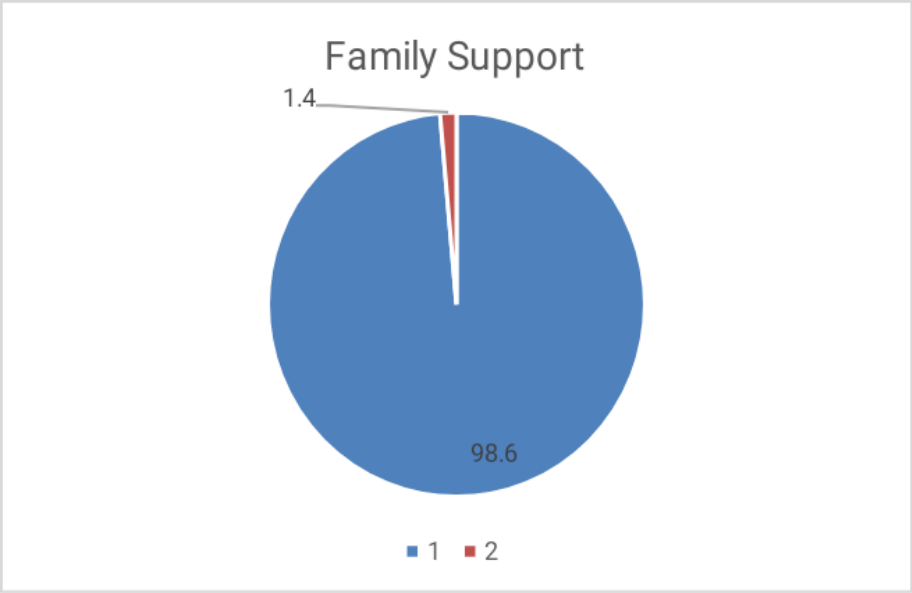



**Table frequency and percentage distribution of samples according to demographic characteristics (family support )**

It is clear from the figure that 98.6% belongs to yes and 1.4% belongs to no Family support

**TYPE OF CANCER**

| | Frequency | Percenagt |
|---|---|---|
| Breast cancer | 20 | 28.6 |
| Cervicalcancer | 15 | 21.4 |
| Leukemia | 23 | 32.9 |
| Multiple myeloma | 12 | 17.1 |
| Total | 70 | 100.0 |

**Table frequency and percentage distribution of samples according to demographic characteristics( TYPE OF CANCER )**

Data shows that (28.6%)belongs to breast cancer,(21.4%)belongs to cervical cancer ,(32.9%)belongs to leukemia(17.1%)belongs to multiple myeloma.

**STAGE OF CANCER**

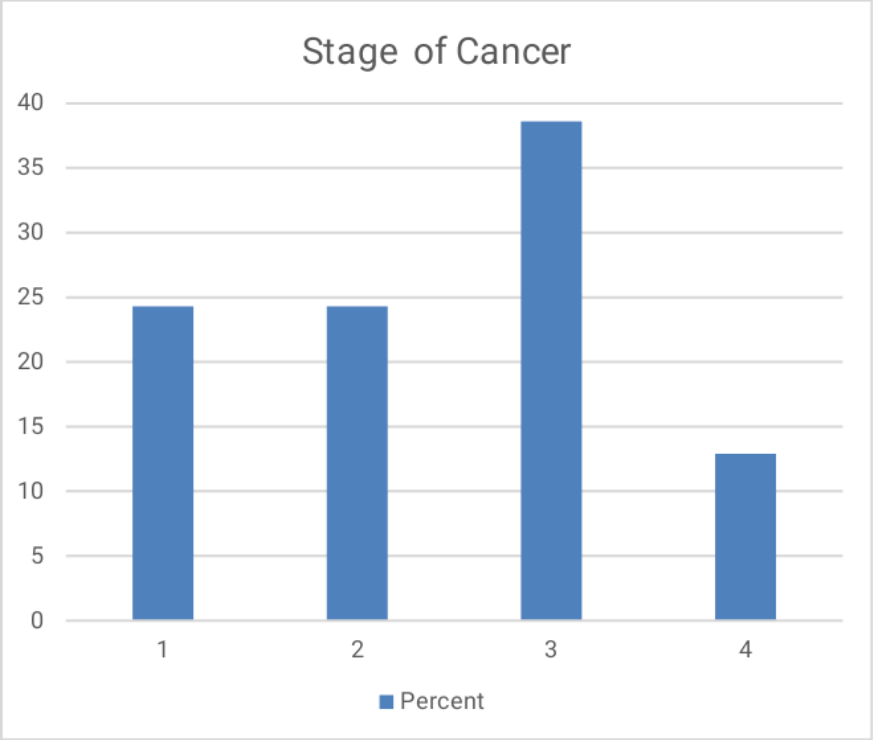



**Table frequency and percentage distribution of samples according to demographic characteristics( STAGES OF CANCER )**

Data shows that (24.3%)belongs to stage1and stage 2,(38.7%)belongs to stage3 and (13.5%)belongs to stage 4 cancer.

**DURATION OF RADIATION**

| | Frequency | Percent |
|---|---|---|
| <12 months | 29 | 41.4 |
| >12 months | 41 | 58.6 |
| Total | 70 | 100.0 |

**Table frequency and percentage distribution of samples according to demographic characteristics(duration of radiation ) .**

data shows that 41.4% belongs to less than 12 months and 75.7% belongs to greater than 12 months .

**ADVERSE REACTION**

| | Frequency | Percent |
|---|---|---|
| Yes | 25 | 35.7 |
| No | 33 | 47.1 |
| If yes specify | 12 | 16.3 |
| Total | 70 | 100.0 |

**Table frequency and percentage distribution of samples according to demographic(ADVERSE REACTION )**

table shows that majority belongs to no (47.1%) and (35.7%) belongs to yes and (16.3%) belongs to if yes , specify

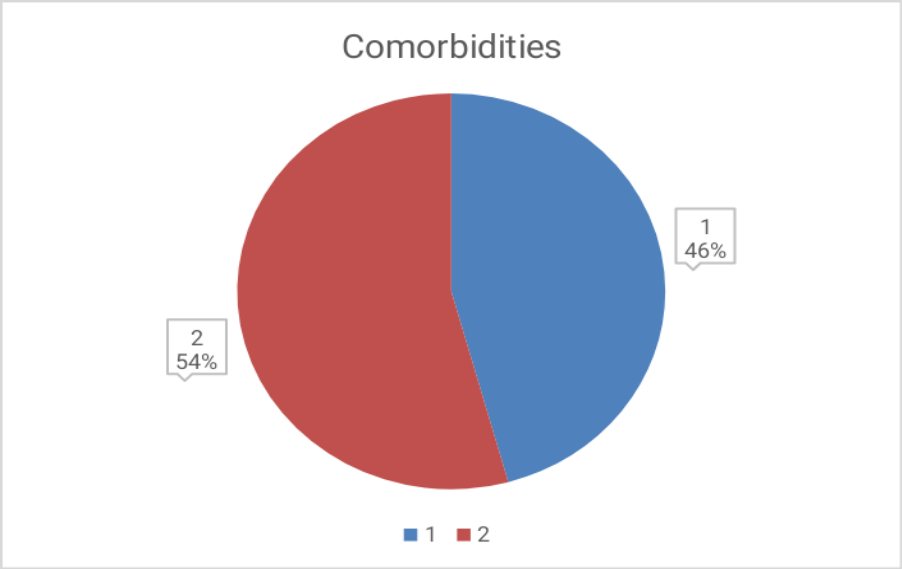



**Figure frequency and percentage distribution of samples according to demographic characteristics (COMORBIDITIES)**

Figure shows that majority of the samples belongs to yes (54%) and (46%) belongs to no comorbidities

II. Analysis of supportive care needs

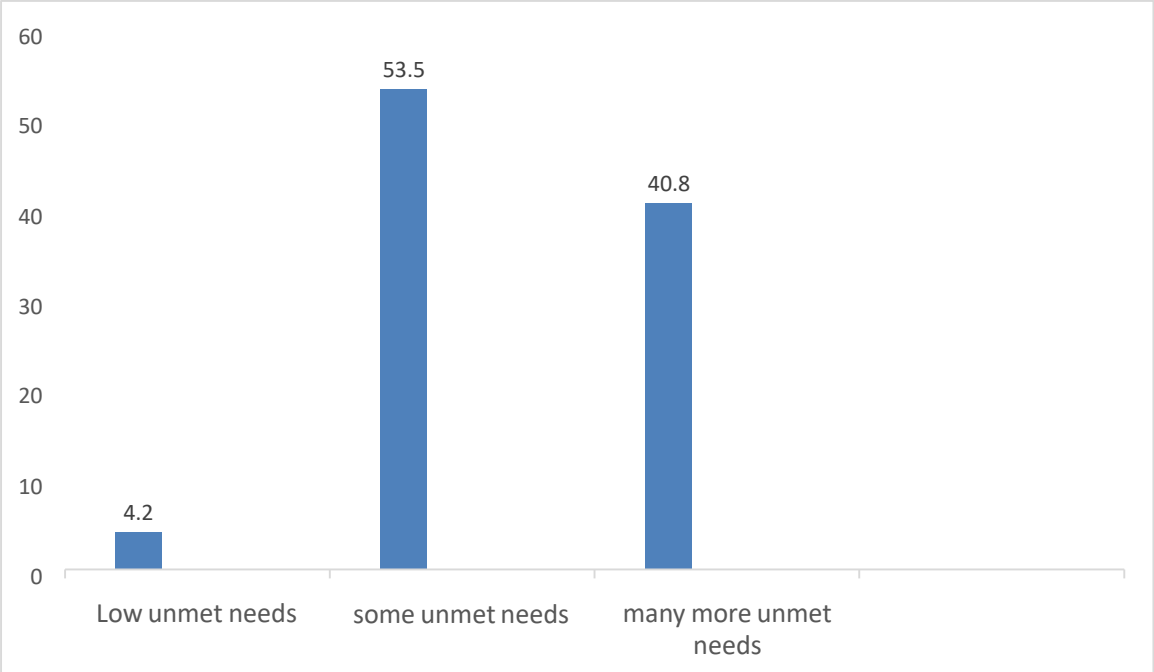
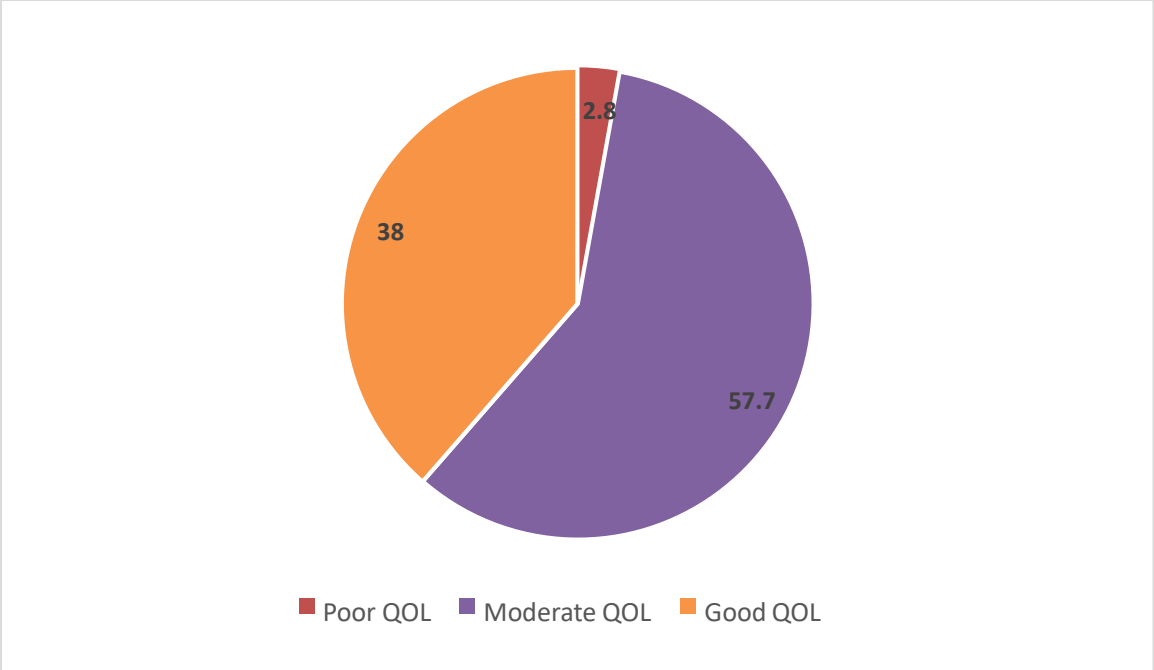



Figure shows that 4.2% belongs to low unmet needs 53.5% belongs to some unmet needs and 40.8%belongs to more unmet needs.

III. Analysis of Health Related Quality of Life of patients receiving radiation therapy




38% belongs to good quality of life ,57.7% belongs to moderate quality of life , 2% poor quality of life

V. Association of HRQOL and Demographic variables

| Variable AGE | Chi square | df | P value | Inference |
|---|---|---|---|---|
| GENDER | 5.417 | 6 | .492 | NS( Not signifi) |
| EDUCATION | 2.943 | 2 | .230 | NS( Not signifi) |
| RELIGION | 7.457 | 10 | .682 | NS( Not signifi) |
| OCCUPATION | 7.334 | 4 | .119 | NS( Not signifi) |
| TYPE OF FAMILY | 6.120 | 6 | .410 | NS( Not signifi) |
| PLACE OF RESIDENCE | 3.187 | 2 | .203 | NS( Not signifi) |
| MONTHLYINCOME | .724 | 4 | .948 | NS( Not signifi) |
| HEALTH INSURANCE | 6.116 | 8 | .634 | NS( Not signifi) |
| FAMILY SUPPORT | 3.658 | 4 | .454 | NS( Not signifi) |
| | .718 | 2 | .699 | NS( Not signifi) |

P≤0.05 = significant p≥0.05=not significant

Table shows that there is not significant relationship with health related quality of life and demographic variables .

V.B Association of HRQOL and Clinical variables

| variable | Chi square | df | P value | Inference |
|---|---|---|---|---|
| TYPEOFCANCER | 7.366 | 6 | .288 | NS( Not signifi) |
| STAGEOFCANCER | 4.944 | 6 | .551 | NS( Not signifi) |
| DURATIONOFRADIATION | 2.380 | 4 | .666 | NS( Not signifi) |
| ADVERSEREACTION | 3.714 | 6 | .715 | NS( Not signifi) |
| COMORBIDITIES | 3.546 | 2 | .170 | NS( Not signifi) |

P≤0.05 = significant p≥0.05=not significant

Table shows that there is not significant relationship with health related quality of life and clinical variables . .

VI. Association of Supportive care needs and HRQOL

Spearman correlation coefficient.

| Varables | r value | P value |
|---|---|---|
| SCN & HRQOL | 0.443 | 0.000 |

There is a moderate positive correlation between scn and hrqol, which is significant at 0.01 level.

## RESULT

The result is aimed to asses the supportive care needs and health related quality of life patients who i s receiving radiation therapy in Aster Mims hospital, Calicut. The data obtained from 70 patients from Aster Mims Hospital.

**OBJECTIVE**

- To assess the supportive care needs of patients receiving radiation therapy.
- To determine the health-related quality of life (HRQoL) of patients receiving radiation therapy.
- To examine the association between supportive care needs and health-related quality of life (HRQoL) of patients receiving radiation therapy.
- To assess the association between supportive care needs, quality of life, and selected sociodemographic variables among patients undergoing radiation therapy.

**HYPOTHESIS**

$H_0$: There is no significant relationship between supportive care needs, health-related quality of life, and selected socio demographic variables among patients undergoing radiation therapy.

$H_1$: There is a significant association between supportive care needs and health-related quality of life with selected socio demographic variables among patients undergoing radiation therapy.

$H_2$: There is a significant association between health-related quality of life and selected socio demographic variables.

$H_3$: There is a significant association between supportive care needs and selected socio demographic variables among patients receiving radiation therapy.

**Objective 1:** To assess the supportive care needs of patients receiving radiation therapy.Figure shows that 4.2 % belongs to low unmet needs ,53.5% belongs to some unmet needs and 40.8% belongs to many more unmet needs.

**Objective 2:** To determine the health-related quality of life (HRQoL) of patients receiving radiation therapy, 38% belongs to good quality of life , 57.7% belongs to moderate quality of life, 2% poor quality of life.

**Objective 3:**To examine the association between supportive care needs and health-related quality of life (HRQoL) of patients receiving radiation therapy,

There is a moderate positive correlation between scn and hrqol, which is significant at 0.01 level.

## DISCUSSION

The intent of the study was to assess the supportive care need and health related quality of life of patients receiving radiation therapy. The result of the study suggest that there is a positive change in the sample. The findings of the study was discussed below in relation to findings of other studies reviewed by investigator. The data collected from the findings of present study was compared and contrasted with those of other similar studies conducted in the setting.

**Discussion is organized under following section**

- Supportive care needs
- Health related quality of life
- Association between supportive care needs and health related quality of life **Sample characteristics** data shows that (21.4%) belongs to nil category,(22.9 %)belongs to homemaker,(44.3%)belongs to self employed . that most of the subject belongs to age group 55-66 years (33.8%) and 28.2%where from 22-36 years and 22.5%belong to 31- 51 years. that equal size of the samples were both males and females (50%). Most of the samples belongs to no formal education (2.9%), primary education (10%) , secondary education (32.9%),higher secondary education (17.1%), graduate diploma (27.1%),and post graduate (10%).

table that ,majority of the sample belong to nuclear family (75.7%),24.3% were join family.

that (51.4%) belongs to rural ,47.1%belongs to urban and (1.4%)belongs to semi-urban. **the table that 20samples from <5000(28.6%),20 samples from 5001-10,000(28.6%),20 samples from 10,001-15,000(28.6%)and 9 samples belongs to 10,001-20,000(9%) and 1 sample belongs to>20,001 (1%).** the table shows (47.1%) belong s to yes and 52.9% belongs to no. from the figure that 98.6% belongs to yes and 1.4% belongs to no.. that (28.6%)belongs to breast cancer,(21.4%)belongs to cervical cancer ,(32.9%)belongs to leukemia(17.1%)belongs to multiple myeloma. that 41.4% belongs to less than 12 months and 75.7% belongs to greater than 12 months . that majority belongs to no (47.1%) and (35.7%) belongs to yes and (16.3%) belongs to if yes , specify. that majority of the samples belongs to yes (54%) and (46%) belongs to no.

**Supportive care needs**

- 4.2% belongs to low unmet needs 53.5% belongs to some unmet needs and 40.8%belongs to more unmet needs.

**Health related quality of life**

- 38% belongs to good quality of life ,57.7% belongs to moderate quality of life , 2% poor quality of life.

**Association between supportive care needs and health related quality of life**

- There is a moderate positive correlation between scn and harl which is significant at 0.01.

## LIMITATIONS

- A limited number of participants can reduce the generalizability of the findings.
- Assessments done only during or shortly after radiation therapy may miss long- term changes in supportive care needs or hrQoL.
- Patients willing to participate may differ systematically (e.g., healthier, more motivated) from those who refuse.
- Questionnaires can be influenced by patient mood, memory, or misunderstanding of questions.
- Dropout of participants over time can skew results, especially if sicker patients are more likely to drop out.
- If conducted at only one hospital or radiation center, the findings may not apply to other settings or populations.
- Without a comparison group (e.g., patients not receiving radiation), it is hard to attribute changes specifically to radiation therapy.
- Differences in cancer types, stages, and treatments could confound the results and make conclusions less clear.
- Assessing patients at predefined times might miss important fluctuations in symptoms or needs.
- Variables like family support, financial burden, or psychological resilience may not be adequately captured but heavily influence hrQoL.

## SCOPE FOR FUTURE STUDIES

This study aims to assess the supportive care needs and health-related quality of life (HRQoL) of patients undergoing radiation therapy, with a focus on identifying unmet needs and factors influencing patient well-being. The research will explore physical, psychological, social, practical, and informational support requirements during treatment. It will also evaluate how these needs impact HRQoL across various domains, including emotional, functional, and social well-being .The study will include diverse patient populations, with special consideration for rural and remote patients who may face unique challenges due to displacement from home, cultural differences, and limited access to services. Mixed methods—quantitative surveys and qualitative interviews— will be used to capture both measurable outcomes and lived experiences. Findings from this research will inform the development of tailored, patient-centerd interventions to enhance supportive care delivery, improve quality of life, and guide future policy and service design in oncology care.

# CHAPTER 4 CONCLUSION AND POLICY IMPLICATION

## CONCLUSION

it can be concluded that the majority of the study participants were in the age group of 55–66 years (33.8%), indicating that middle to older adults formed the largest portion of the sample. In terms of education, most participants had secondary education (32.9%), followed by those with graduate or diploma qualifications (27.1%), suggesting a moderately educated population overall.

### Nursing implications

Findings of the studies have Health Education and Awareness, Tailored
Communication, Socioeconomic Considerations, Individualized Care Planning, Health Promotion Activities, Community Involvement

### Nursing education

Based on the findings, nursing education should emphasize the importance of health promotion and disease prevention among middle-aged and older adults. Since the majority of participants are within the 55–66 years age group, nursing students and professionals should be trained to develop effective educational strategies for geriatric populations, focusing on age-related health issues such as hypertension, diabetes, and mobility problems.

### Nursing administration

Based on the findings, nursing administration should focus on developing and implementing health programs that address the specific needs of middle to older adults (55–66 years), who form the majority of the study population. Administrative policies should ensure adequate staff training, resource allocation, and supervision to provide quality geriatric care and promote healthy aging.

# CHAPTER 5

## SUMMARY

Research methodology plays a vital role in guiding the entire research process, from identifying a problem to drawing meaningful conclusions. It ensures that the study is carried out systematically, with careful planning and rigorous techniques that enhance the validity and reliability of the findings. This chapter includes research approach, research design, variables, setting of the study, population, sample, sample size , sampling technique, sampling criteria, ethical considerations, tools, techniques, content validity, Reliability of tool, pilot study, data collection process and plan for data analysis.

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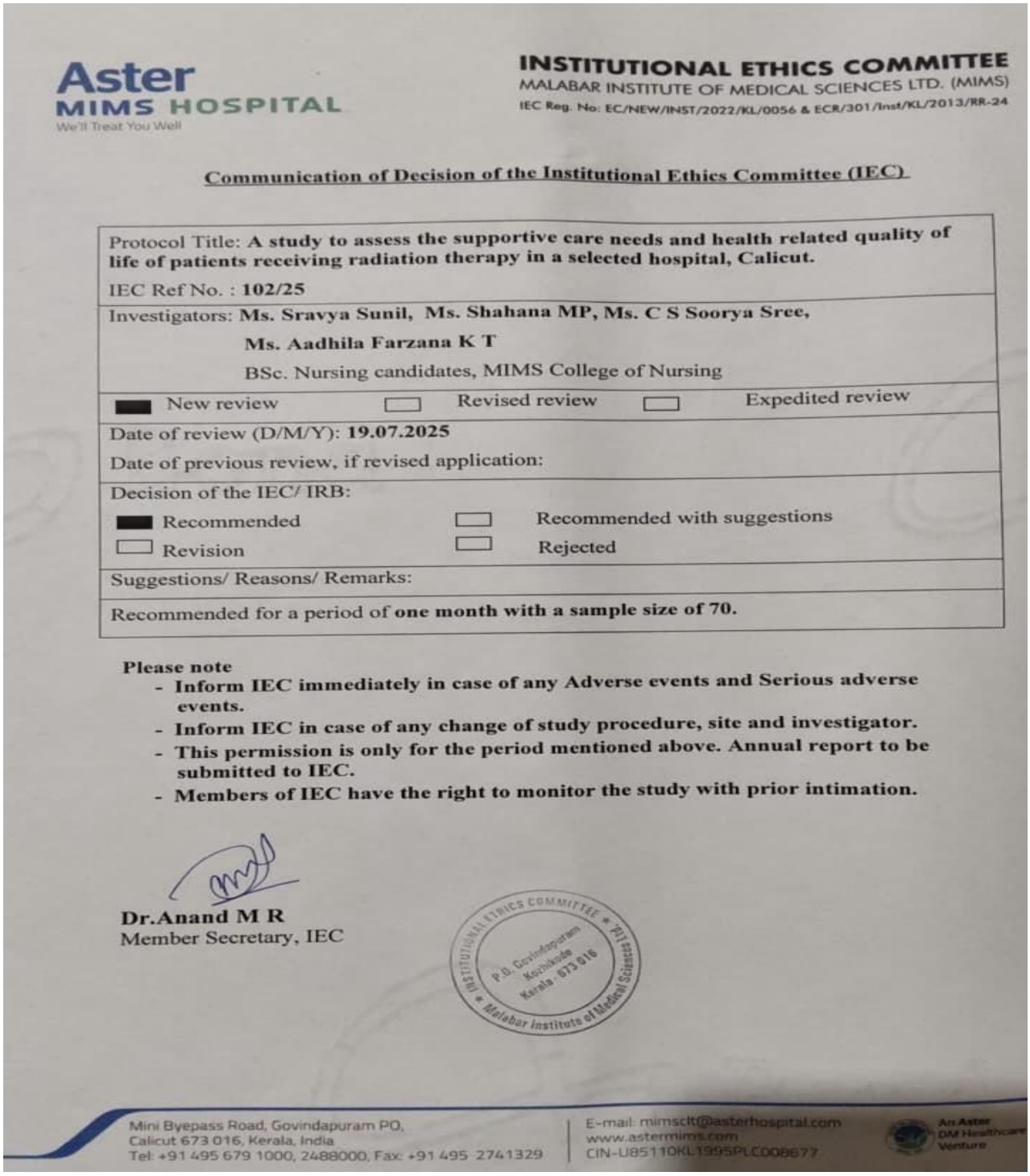
## APPENDIX A

### Approval letter from institutional ethical committee



Aster MIMS HOSPITAL
We'll Treat You Well

**INSTITUTIONAL ETHICS COMMITTEE**
MALABAR INSTITUTE OF MEDICAL SCIENCES LTD. (MIMS)
IEC Reg. No: EC/NEW/INST/2022/KL/0056 & ECR/301/Inst/KL/2013/RR-24

**Communication of Decision of the Institutional Ethics Committee (IEC)**

Protocol Title: **A study to assess the supportive care needs and health related quality of life of patients receiving radiation therapy in a selected hospital, Calicut.**

IEC Ref No. : **102/25**

Investigators: **Ms. Sravya Sunil, Ms. Shahana MP, Ms. C S Soorya Sree, Ms. Aadhila Farzana K T**
BSc. Nursing candidates, MIMS College of Nursing

■ New review ☐ Revised review ☐ Expedited review

Date of review (D/M/Y): **19.07.2025**

Date of previous review, if revised application:

Decision of the IEC/ IRB:

■ Recommended ☐ Recommended with suggestions
☐ Revision ☐ Rejected

Suggestions/ Reasons/ Remarks:

Recommended for a period of **one month with a sample size of 70.**

**Please note**
- **Inform IEC immediately in case of any Adverse events and Serious adverse events.**
- **Inform IEC in case of any change of study procedure, site and investigator.**
- **This permission is only for the period mentioned above. Annual report to be submitted to IEC.**
- **Members of IEC have the right to monitor the study with prior intimation.**

**Dr.Anand M R**
Member Secretary, IEC

INSTITUTIONAL ETHICS COMMITTEE * P.O. Govindapuram Kozhikode Kerala - 673 016 * Malabar Institute of Medical Sciences

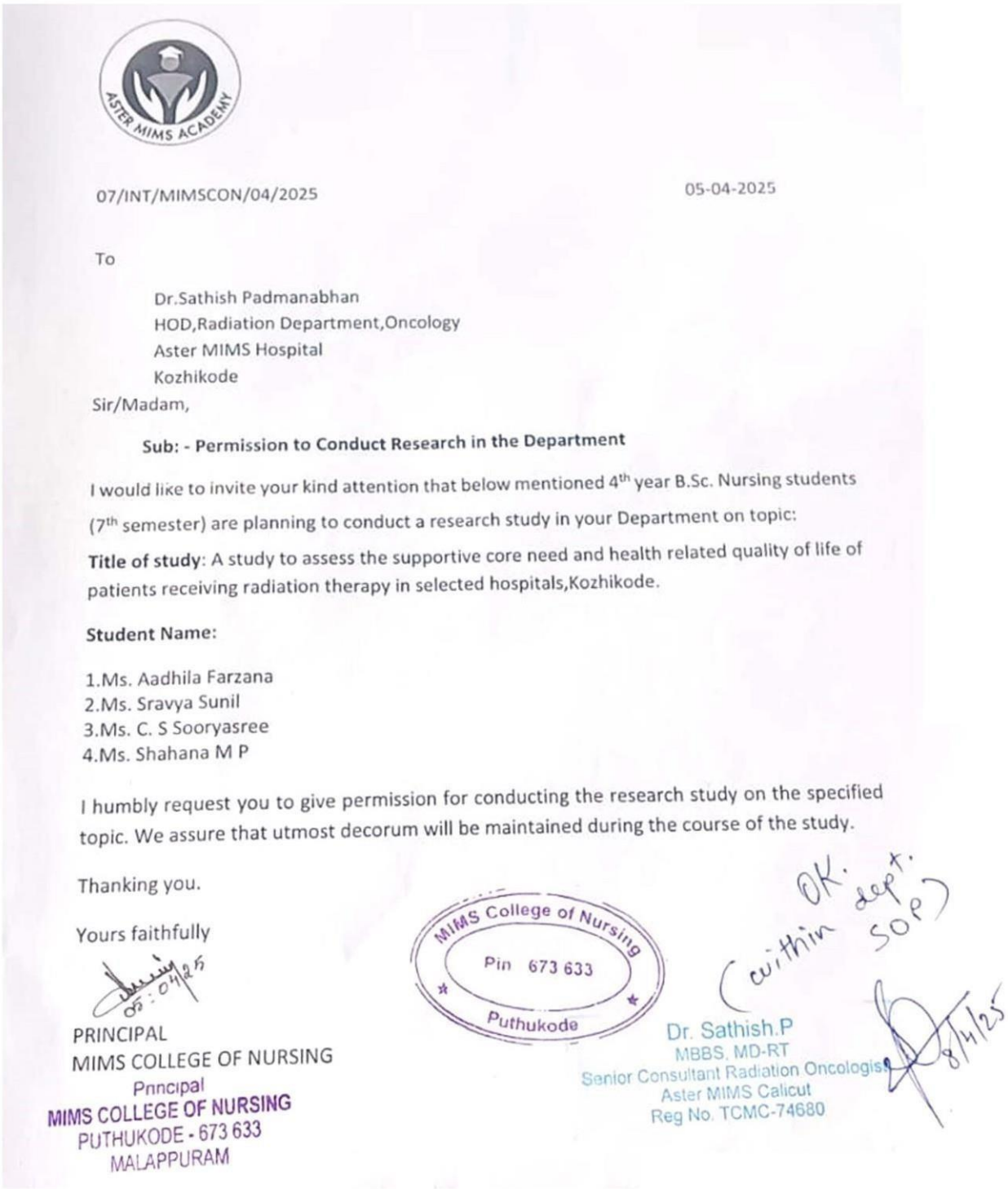
Mini Byepass Road, Govindapuram PO,
Calicut 673 016, Kerala, India
Tel: +91 495 679 1000, 2488000, Fax: +91 495 2741329

E-mail: mimsclt@asterhospital.com
www.astermims.com
CIN-U85110KL1995PLC008677

An Aster DM Healthcare Venture

## APPENDIX B

## PERMISSION LETTER FROM HOSPITAL



07/INT/MIMSCON/04/2025 05-04-2025

To

Dr.Sathish Padmanabhan
HOD,Radiation Department,Oncology
Aster MIMS Hospital
Kozhikode

Sir/Madam,

**Sub: - Permission to Conduct Research in the Department**

I would like to invite your kind attention that below mentioned 4th year B.Sc. Nursing students (7th semester) are planning to conduct a research study in your Department on topic:

**Title of study**: A study to assess the supportive core need and health related quality of life of patients receiving radiation therapy in selected hospitals,Kozhikode.

**Student Name:**

1.Ms. Aadhila Farzana
2.Ms. Sravya Sunil
3.Ms. C. S Sooryasree
4.Ms. Shahana M P

I humbly request you to give permission for conducting the research study on the specified topic. We assure that utmost decorum will be maintained during the course of the study.

Thanking you.

Yours faithfully

PRINCIPAL
MIMS COLLEGE OF NURSING
Pnncipal
MIMS COLLEGE OF NURSING
PUTHUKODE - 673 633
MALAPPURAM

MIMS College of Nursing
Pin 673 633
Puthukode

OK. dept. (within SOP)

Dr. Sathish.P
MBBS, MD-RT
Senior Consultant Radiation Oncologist
Aster MIMS Calicut
Reg No. TCMC-74680

8/4/25

## APPENDIX C

## REQUEST FOR VALIDATION OF RESEARCH TOOL

From,

Ms. C s soorya sree

Ms.sravya sunil

Ms.shahana mp

Ms aadhila farzana kt

7th semester BSc Nursing
MIMS College Of Nursing, Puthukode To,
Subject: Request for opinion and suggestion for establishing content validity of tool.

Respected madam,

We are 7th semester B.Sc. nursing students of MIMS College of Nursing, Puthukode. For the practical fulfillment of course, we need to undertake a research project and the problem statement of the selected research topic "a study to assess the supportive care needs and health related quality of life patients who receiving radiation therapy , calicut ," We kindly request you to go through the content of tool and validate in terms of the relevance, appropriateness and accuracy. I also request you to give your valuable suggestion which will enable us to establish the content validity of tool.

Enclosed:

1:Proposal of the study

2:Tool Thanking you.

Yours sincerely,
Ms. C s soorya sree
Ms.sravya sunil
Ms.Shahana mp
Ms. Aadhila farzana kt

Place: Puthukode
Date:5/3/25

**APPENDIX D**

**CERTIFICATE OF CONTENT VALIDITY**

**Certificate of content validity of the data collection tool from experts**

Certificate of content validity of data collection tool, "a study assess the supportive care needs and health related quality of life patients who receiving radiation , calicut ". This is to certify that the tool for assessing the knowledge regarding exclusive breastfeeding and lactation management among primigravida women attending antenatal clinics prepared by Ms cs soorya sree , Ms. Sravya sunil , Ms shahana mp , Ms aadhila farzana kt , seventh semester BSc Nursing students, Mims college of nursing to be used in the study has been validated by meant can be used for data collection.

Suggestion:

Adequacy of tool:

Organization of tool:

Feasibility of tool:

Validation Details

Signature:

Name:

Designation:

## APPENDIX E

### LIST OF EXPERTS FOR CONTENT

1. Ms. Rakhi
   Seban professor
   Department of Obstetrics and Gynecology nursing Mims College of nursing, Puthukode.

2. Mr. Naseem Assistant professor
   Department of Obstetrics and Gynecology nursing Mims College of nursing, Puthukode.

3. Ms. Jipsa.K Associate professor
   Department of Community health nursing Mims College of nursing, Puthukode.

4. Ms.Dinshaml Senior lecturer
   Department of medical surgical nursing Mims College of nursing, Puthukode.

5. Ms.Nikhila Lakshmi
   Assistant professor
   Department of mental health nursing Mims college of nursing.

## APPENDIX F

### INFORMED CONSENT (ENGLISH)

**Project title ;** to assess the supportive care needs and health related quality of life patients who receiving radiation therapy , Calicut

I confirm I have read the Participant Information Sheet for the above study and it's contents were explained and I have had the opportunity to ask questions and received satisfactory answers. Understand that my participation in the study is voluntary and that I have the right to withdraw at any time without giving any reason, without my medical care or legal rights being affected.I agree to take part in the above study. I confirm that I have received a copy of the participant Information Sheet along with this signed and dated informed consent form.

Name of the Research Participant:

Ms. cs soorya sree

Ms sravya sunil Ms shahana mp

Ms aadhila farzana kt

Age of the Research Participant:

Address of the Research Participant:

Seventh semester bsc nursing Mims college of nursing Puthukode

Signature of the research subject:

Date:

Name & Signature of the person explaining the consent:

Date:

**PARTICIPANT INFORMATION SHEET- ENGLISH**

**Protocol title**: A study to assess the Supportive Care Needs and Helath Related Quality Of Life Patients Who Receiving Radiation Therapy Aster Mims Hospital, Calicut. **Principal Investigator:**

Ms. C. S Sooryasree

Ms. Shahama M. P

Ms. Sravyasunil

Ms. Aadhila Farzana K. T

**Designation:** BSc Nursing Student

**College:** MIMS College of Nursing, Malappuram

**Contact number:** 9074967049

8921607716

9072208541

8075418585

Please read this form carefully. If you don't understand the language or any information in this document, please discuss with principal investigator. If you decide to volunteer to take part in this study you must sign the end of this form.

1. **Introduction to the research study:** This study aims to assess the supportive care need and health related quality of life of patients receiving radiation therapy.

2. **Purpose of the study:** The purpose of the study is to identify the supportive care need and health related quality of life of patients receiving radiation therapy.
3. **Who can take part:** Patients who recieves radiation therapy.

4. **Information about the study:** Total number of patients expected to participate is 70, you have to fill up a questionnaire related to the study.
5. **Your role/responsibility in the study**:

- Provide accurate information whenever asked.

- Follow the investigators instruction.

- Inform the study investigator about any problem experienced during the study.
- If you want to discontinue from the study, principal investigator should be informed.

6. **What are the risks:** There are no risks involved in participating in the study.

7. **What are the potential benefits of participating in the study:** You may or may not get benefit from participating in this study. It is possible that you will get better or stay the same.
8. **What are the alternative treatments available:** There are no specific alternative treatments available.

9. **Cost of participating in the study:** There is no cost involved in participating in this study.

10. **Compensation for injury:** There are no risks involved in participating in the study. If a medical problem arises during this research study as a direct result of the study the investigator will be responsible for making sure that proper medical care is provided to you.
11. **Confidentiality of information:** Information from the study including your name, address, medical records will be reviewed only by authorized personnel. Information and results from this study may be presented at meetings or published in journals without including your name and personal identifications.
12. **Voluntary participation:** Entering the research study is voluntary. If you volunteer for the research study, you have the right to stop at any time and you need not give any reason for the same.
13. **Whom to contact in case of any questions:** If you have any questions about this form or any study related issue, you may contact the following person.

Name: Ms. Aneesha M.M Address: Senior Lecturer, MIMS College of Nursing Telephone No: 8547399323

## TOOL 1: SOCIO – DEMOGRAPHIC PROFORMA

### Section A: Socio personal proforma of patients receiving radiation therapy

1. Age in years:
2. Gender

a) Male

b) Female

3. Education

a) No formal education

b) Primary

c) Secondary

d) Higher secondary

e) Graduate /Diploma

f) Post graduate

4. Religion

a) Hindu

b) Muslim

c) Christian

d) Others

5. Occupation

a) Nil

b) Home maker

c) Private job

d) Self employed

e) Government

f) Retired

6. Types of family

a) Nuclear family

b) Joint family

c) Extended

7. Place of residence

a) Rural

b) Urban

c) Semi-urban

8. Monthly income in rupees

a) <5000

b) 5001 – 10,000

c) 10,001 – 15,000

d) 15,001 – 20,000

e) >20001

9. Health insurance

a) Yes

b) No

10. Family support

a) Yes

b) No

c) Sometimes

Section B: Clinical proforma of patient receiving radiation therapy

1. Type of cancer
2. Stage of cancer

a) Stage 1
b) Stage2
c) Stage 3
d) Stage 4
e) Stage 5

3. Duration of radiation therapy

a) <12 months
b) >12 months

4. Adverse reaction

a) Yes
b) No
c) If yes specify

5. Co morbidities

a) Yes
b) No
c) If yes specify

TOOL 2: SUPPORTIVE CARE NEEDS SURVEY (SCNS -SF34)

Specific Instructions

For every item on the following pages, indicate whether you have needed help with this issue within the last month as a result of having cancer. Put an x next to the number which best describes whether you have needed help with this in the last month. There are 5 possible answers to choose from:

| | |
|---|---|
| NO NEED | 1. Not applicable - This was not a problem for me as a result of not having cancer. |
| | 2. Satisfied - I did need help with this, but my need for help was satisfied at the time |
| SOME NEED | 3. Low need - This item caused me concern or discomfort. I had little need for additional help |
| | 4. Moderate need - This item caused me concern or discomfort. I had some need for additional help. |
| | 5. High need - This item caused me concern or discomfort. I had a strong need for additional help. |

Now please complete the survey on the next 2 pages.

| In the last month, which was your level of need for help with: | No need | | Some need | | |
|---|---|---|---|---|---|
| | Not applicable | Satisfied | Low need | Moderate need | High need |
| 1. Pain | | | | | |
| 2. Lack of energy/ tiredness | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 3. Feeling unwell a lot of the time | | | | | |
| 4. Work around the home | | | | | |
| 5. Not being able to do the things you used to do | | | | | |
| 6. Anxiety | | | | | |
| 7. Feeling down or depressed | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 8. Feelings of sadness | | | | | |
| 9. Fears about the cancer spreading | | | | | |
| 10. Worry that the results of treatment are beyond your control | | | | | |
| 11. Uncertainty about the future | | | | | |
| 12. Learning to feel in control of your situation | | | | | |
| 13. Keeping a positive attitude | | | | | |
| 14. Feelings about death and dying | | | | | |
| 15. Changes in sexual feelings | | | | | |
| 16. Changes in your sexual relationships | | | | | |
| 17. Concerns about the worries of those close to you | | | | | |
| 18. More choice about which cancer specialists you see | | | | | |
| 19. More choice about which hospital you attend | | | | | |
| 20. Reassurance by medical staff that the way you feel is normal | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 21. Hospital staff attending promptly to your physical needs | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 22. Hospital staff acknowledging, and showing sensitivity to, your feelings and emotional needs | | | | | |
| 23. Being given written information about the important aspects of care | | | | | |
| 24. Being given information (written, diagrams, drawings) about aspects of managing your illness and side-effects at home | | | | | |
| 25. Being given explanations of those tests for which you would like explanations | | | | | |
| 26. Being adequately informed about the benefits and side-effects of treatments before you choose to have them | | | | | |
| 27. Being informed about your test results as soon as feasible | | | | | |
| 28. Being informed about cancer which is under control or diminishing (that is, remission) | | | | | |
| 29. Being informed about things you can do to help yourself to get well | | | | | |
| 30. Having access to professional counseling (eg, psychologist, social worker, counsellor, nurse specialist) if you, family or friends need it | | | | | |
| 31. To be given information about sexual relationships | | | | | |
| 32. Being treated like a person not just another case | | | | | |
| 33. Being treated in a hospital or clinic that is as physically pleasant as possible | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 34. Having one member of hospital staff with whom you can talk to about all aspects of your condition, treatment and follow-up | | | | | |

**TOOL 3: FACT-G (Version 4)**

Below is a list of statements that other people with your illness have said are important. **Please circle or mark one number per line to indicate your response as it applies to the past 7 days.**

| | **PHYSICAL WELL-BEING** | **Not at all** | **A little bit** | **Somew hat** | **Quite a bit** | **Very much** |
|---|---|---|---|---|---|---|
| GP 1 | I have a lack of energy | 0 | 1 | 2 | 3 | 4 |
| GP 2 | I have nausea | 0 | 1 | 2 | 3 | 4 |
| GP 3 | Because of my physical condition, I have trouble meeting the needs of my family | 0 | 1 | 2 | 3 | 4 |
| GP 4 | I have pain | 0 | 1 | 2 | 3 | 4 |
| GP 5 | I am bothered by side effects of treatment | 0 | 1 | 2 | 3 | 4 |
| GP 6 | I feel ill | 0 | 1 | 2 | 3 | 4 |
| GP 7 | I am forced to spend time in bed ..... | 0 | 1 | 2 | 3 | 4 |
| | **SOCIAL/FAMILY WELL-BEING** | **Not at all** | **A little bit** | **Somew hat** | **Quite a bit** | **Very much** |
| GS 1 | I feel close to my friends | 0 | 1 | 2 | 3 | 4 |
| GS 2 | I get emotional support from my family | 0 | 1 | 2 | 3 | 4 |
| GS 3 | I get support from my friends | 0 | 1 | 2 | 3 | 4 |
| GS 4 | My family has accepted my illness | 0 | 1 | 2 | 3 | 4 |
| GS 5 | I am satisfied with family communication about my illness | 0 | 1 | 2 | 3 | 4 |

| | | | | | | |
|---|---|---|---|---|---|---|
| GS 6 | I feel close to my partner (or the person who is my main support) | 0 | 1 | 2 | 3 | 4 |
| Q1 | Regardless of your current level of sexual activity, please answer the following question. If you prefer not to answer it, please mark this box and go to the next | ☐ | | | | |
| GS | I am satisfied with my sex life | 0 | 1 | 2 | 3 | 4 |

.....

| | **EMOTIONAL WELL-BEING** | **Not at all** | **A little bit** | **Somew hat** | **Quit e a bit** | **Very muc h** |
|---|---|---|---|---|---|---|
| GE1 | I feel sad | 0 | 1 | 2 | 3 | 4 |
| GE2 | I am satisfied with how I am coping with my illness | 0 | 1 | 2 | 3 | 4 |
| GE3 | I am losing hope in the fight against my illness | 0 | 1 | 2 | 3 | 4 |
| GE4 | I feel nervous | 0 | 1 | 2 | 3 | 4 |
| GE5 | I worry about dying | 0 | 1 | 2 | 3 | 4 |
| G | I worry that my condition will get worse | 0 | 1 | 2 | 3 | 4 |

| | **FUNCTIONAL WELL-BEING** | **Not at all** | **A little bit** | **Somew hat** | **Quit e a bit** | **Very muc h** |
|---|---|---|---|---|---|---|
| GF1 | I am able to work (include work at home) | 0 | 1 | 2 | 3 | 4 |
| GF2 | My work (include work at home) is fulfilling | 0 | 1 | 2 | 3 | 4 |
| GF3 | I am able to enjoy life | 0 | 1 | 2 | 3 | 4 |
| GF | I have accepted my illness | 0 | 1 | 2 | 3 | 4 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4 | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| GF 5 | I am sleeping well | 0 | 1 | 2 | 3 | 4 |
| GF 6 | I am enjoying the things I usually do for fun | 0 | 1 | 2 | 3 | 4 |
| GF | I am content with the quality of my life right now | 0 | 1 | 2 | 3 | 4 |

പങ്കാളി വിവര ഷീറ്റ്

പ്പാപടാപകാൾ തലക്കകെട്: കാലികറ്റിക്കല തിരക്കക്കടുത്ത ഒരു ആശുപ്ിയിൽത , പപഡിപയഷൻ ക്കപതാപ്പി സ്വീകരികുന്ന പരാഗികളുക്കട സ്്ഹായകരമായ പരിചരണ ആവശയങ്ങളുള്ളും ആപരാഗയവുമായി ബന്ധക്കപ്പട ജീവിത നിലവാരവുള്ളും വിലയിരുത്തുന്നതിനുള്ള ഒരു പഠനുള്ളും.

്പിൻസ്് ിപ്പൽ ഇൻക്കവസ്റ്റിപഗറ്റർ:
മിസ്് ആദില ഫർസ്്ാന
മിസ്് സ്്ി. എസ്് സ്് രശ്മീ മിസ്് ഷഹാന എുള്ളും. പി മിസ്് ്ശവയ സ്് ുനിൽ

പദവി: ബിഎസ്സ്് ി നഴ്സ്് ി്ുുംഗ് സ്റ്റുഡന്റ് പകാപളജ്: മിുള്ളുംസ്് പകാപളജ് ഓഫ് നഴ്സ്്ി്ുുംഗ്, മലപ്പുപ്്ുുംഗ്

ബന്ധക്കപ്പടണ്ട നമ്പർ:
8075418585
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9072208541

ദയവായി ഈ പഫാള്ളും ്ശദ്ാാപ ർ്ുുംഗ് വായികുക. ഈ ്പമാണത്തിക്കല ഭാഷപയാ ഏക്കതങ്കിലുള്ളും വിവരപമാ നിങ്ങൾക് മനസ്സിലാകുന്നിക്കക്കലങ്കിൽ, ദയവായി ്പിൻസ്് ിപ്പൽ അപനവഷകനുമായി ചർച്ച ക്കചയ്യുക. ഈ പഠനത്തിൽ പക്കങ്കടുകാൻ നിങ്ങൾ സ്ന്നദ്ാത ്പകടിപ്പികാൻ തീരുമാനികുകയാക്കണങ്കിൽ, ഈ പഫാമിന്റപക്ക അവസ്് ാനുള്ളും നിങ്ങൾ ഒപ്പിടണുള്ളും.

1. ഗപവഷണ പഠനത്തിന്റപക്ക ആമുഖുും: പപഡിപയഷൻ ക്കപതാപ്പി സ്വീകരികുന്ന പരാഗികളുക്കട സ്പ്പാർടീവ്പ ക്കകപയിന്റപക്ക ആവശയകതയുും ആപരാഗയവുമായി ബന്ധക്കപ്പട ജീവിത നിലവാരവുും വിലയിരുത്തുക എന്നതാണ് ഈ പഠനുും ലക്ഷ്യമിടുന്നത്.

2. പഠനത്തിന്റപക്ക ഉപപശയുും: പപഡിപയഷൻ ക്കപതാപ്പി സ്വീകരികുന്ന പരാഗികളുക്കട സ്പ്പാർടീവ്പ ക്കകപയിന്റപക്ക ആവശയകതയുും ആപരാഗയവുമായി ബന്ധക്കപ്പട ജീവിത നിലവാരവുും തിരിപച്ചിയുക എന്നതാണ് പഠനത്തിന്റപക്ക ലക്ഷ്യുും.

3. ആർക്കകാക്കക പക്കങ്കടുകാുും: പപഡിപയഷൻ ക്കപതാപ്പി സ്വീകരികുന്ന പരാഗികൾക് പഠനത്തിൽ പക്കങ്കടുകാുും.

1. പഠനക്കത്തകുപ്്ിച്ചുള്ള വിവരങ്ങൾ: പക്കങ്കടുകുക്കമന്ന് ്്പതീക്ഷ്ിുംകുന്ന ആക്കക പരാഗികളുക്കട എണ്ുുുംം 60 ആണ്, പഠനവുമായി ബന്ധക്കപ്പട ഒരു പചാദയാവലി നിങ്ങൾ പ രിപ്പികണുും.

2. പഠനത്തിക്കല നിങ്ങളുക്കട പങ്ക്/ഉത്തരവാദിത്തുും:

- ആവശയക്കപ്പടുപമ്പാക്കക്കക്കലാുും കൃതയമായ വിവരങ്ങൾ നൽകുക.
- അപനവഷകരുക്കട നിർപപശങ്ങൾ പാലികുക.
- പഠനത്തിനിക്കട അനുഭവക്കപ്പടുന്ന ഏക്കതങ്കിലുുും ്്പശ്ക്കത്തകുപ്്ിച്ച്ന പഠന അപനവഷകക്കന പത്തിയികുക.
- പഠനത്തിൽ നിന്ന് പിന്മാപ്്ാൻ നിങ്ങൾ ആ്ഗഹികുന്നുക്കവങ്കിൽ, ്്പധാന അപനവഷകക്കന പത്തിയികണുും.

6. അപകടസ്്് ാധയതകൾ എക്കതാക്കകയാണ്: പഠനത്തിൽ പക്കങ്കടുകുന്നതിൽ ഒരു അപകടസ്്് ാധയതയുമിക്കല.

7. പഠനത്തിൽ പക്കങ്കടുകുന്നതിന്റപക്ക സ്്്ാധയതയുള്ള പനടങ്ങൾ എക്കതാക്കകയാണ്: ഈ പഠനത്തിൽ പക്കങ്കടുകുന്നതില ക്കട നിങ്ങൾക് ്്പപയാജനുും ലഭിപച്ചകാുും അക്കക്കലങ്കിൽ ലഭിച്ചിക്കലായിരികാുും. നിങ്ങളുക്കട ആപരാഗയുും ക്കമച്ചക്കപ്പടാപനാ അപതപടി തുടരാപനാ സ്്് ാധയതയുണ്ട്.

 8. ലഭയമായ ഇതര ചികിത്സകൾ എക്കതാക്കകയാണ്: ്്പപതയക ഇതര ചികിത്സകക്കളാന്നുും ലഭയമക്കല.

- 9. പഠനത്തിൽ പക്കങ്കടുകുന്നതിനുള്ള ക്കചലവ്: ഈ പഠനത്തിൽ പക്കങ്കടുകുന്നതിന്റ യാക്കതാരു ക്കചലവുുും ഉൾക്കപ്പടുന്നിക്കല.

10. പരികിനുള്ള നഷ്ടപരിഹാരുും: പഠനത്തിൽ പക്കങ്കടുകുന്നതിൽ ഉൾക്കപ്പടുന്ന അപകടസ്്്ാധയതകക്കളാന്നുമിക്കല. പഠനത്തിന്റപക്ക പനരിടുള്ള ഫലമായി ഈ ഗപവഷണ പഠനത്തിനിടയിൽ ഒരു ക്കമഡികൽ ്്പശ്ുുുംം ഉണ്ടായാൽ, നിങ്ങൾക് ശരിയായ വവദയസ്്ഹായുും നൽകുന്നുക്കണ്ടന്ന് പഉപ്പാപകണ്ടത് അപനവഷകന്റപക്ക ഉത്തരവാദിത്തമായിരികുും.

11. വിവരങ്ങളുക്കട രഹസ്യാത്മകത: നിങ്ങളുക്കട പപര്, വിലാസ്ം ുംുംം, ക്കമഡികൽ പരഖകൾ എന്നിവയുൾക്കപ്പെക്കട പഠനത്തിൽ നിന്നുള്ള വിവരങ്ങൾ അുംഗീകൃത ഉപദയാഗസ്ഥർ മാ്തപമ അവപലാകനുംും ക്കചയ്യ . ഈ പഠനത്തിൽ നിന്നുള്ള വിവരങ്ങളുംും ഫലങ്ങളുംും നിങ്ങളുക്കട പപരുംും വയക്തിഗത തിരിപച്ചിയലുകളുംും ഉൾക്കപ്പെടുത്താക്കത മീറ്റിുംഗുകളിൽ അവതരിപ്പികുകപയാ പജണലുകളിൽ
ംപസ്ം ിദ്ാീകരികുകപയാ ക്കചയ്യാുംും.

12. സ്വപമധയാ ഉള്ള പങ്കാളിത്തുംും: ഗപവഷണ പഠനത്തിൽ ംപവശികുന്നത് സ്വപമധയാ ഉള്ളതാണ്. നിങ്ങൾ ഗപവഷണ പഠനത്തിന്റ സ്ന്ദ്ാത ംപ് കടിപ്പികുകയാക്കണക്കിൽ, എപപ്പാൾ പവണക്കമക്കിലുംും നിർത്താൻ നിങ്ങൾക് അവകാശമുണ്ട്, അതിനുള്ള ഒരു കാരണവുംും നിങ്ങൾ നൽപകണ്ടതിക്കല.

13. എക്കതക്കിലുംും പചാദയങ്ങളുക്കണ്ടക്കിൽ ആക്കരയാണ് ബന്ധക്കപ്പെപടണ്ടത്: ഈ പഫാമിക്കനകുപ്ംിപച്ചാ പഠനവുമായി ബന്ധക്കപ്പെട ഏക്കതക്കിലുംും വിഷയക്കത്തകുപ്ംിപച്ചാ നിങ്ങൾക് എക്കതക്കിലുംും പചാദയങ്ങളുക്കണ്ടക്കിൽ, നിങ്ങൾക് ഇനിപപ്പയുന്ന വയക്തിക്കയ ബന്ധക്കപ്പെടാുംും. പപര്: ംശ് ീമതി അനീഷ വിലാസ്ംുംും: സ്ം ീനിയർ ലക്ചർ, മിുംസ് പകാപളജ് ഓഫ് നഴ് സ്ംിുംും ക്കടലിപഫാൺ നമ്പർ:8547399323

സ്മതപ്ുുംം

- പമൽപപ്പക്ക് പഠനത്തിനായുള്ള പങ്കാളി വിവര ഷീറ്റ് ഞാൻ വായിച്ചുക്കവന്നുംും അതിന്റപക്ക ഉള്ളടകുംും വിശദീകരിച്ചിടുക്കണ്ടന്നുംും പചാദയങ്ങൾ പചാദികാൻ എനിക് അവസസ്ുുംം ലഭിച്ചിടുക്കണ്ടന്നുംും തൃപ്ികരമായത ഉത്തരങ്ങൾ ലഭിച്ചിടുക്കണ്ടന്നുംും ഞാൻ സ്ഥിരീകരികുന്നു

പഠനത്തിക്കല എന്റപക്ക പങ്കാളിത്തുംും സ്വപമധയാ ഉള്ളതാക്കണന്നുംും ഒരു കാരണവുംും നൽകാക്കത എപപ്പാൾ പവണക്കമക്കിലുംും പിന്മാപ്ാൻ എനിക് അവകാശമുക്കണ്ടന്നുംും ഞാൻ മനസ്സിലാകുന്നു, മുകളിൽ പപക്ക് പഠനത്തിൽ പക്കങ്കടുകാൻ ഞാൻ സ്മതികുന്നു. എന്റപക്ക വാകുകൾ അസക്ഷ്ാർത്ഥത്തിൽ പരഖക്കപ്പെടുത്താൻ ഞാൻ സ്മതികുന്നു.

ഈ ഒപ്പിടതുംും തീയതിയുള്ളതുമായ വിവരമുള്ള സ്മതപ്പത്താക്കടാപ്പുംും വിഷയ വിവര ഷീറ്റിന്റപക്ക ഒരു പകർപ്പ് എനിക് ലഭിച്ചിടുക്കണ്ടന്ന് ഞാൻ സ്ഥിരീകരികുന്നു.

പക്കങ്കടുകുന്നയാളുക്കട ഒപ്പ്……. തിയ്യതി
…….

പക്കങ്കടുകുന്നയാളുക്കട പപര് ……. തിയ്യതി ……. സ്ംാക്ഷ്ംിയുക്കട ഒപ്പ് ……..
തിയ്യതി ……. സ്ംാക്ഷ്ംിയുക്കട പപര് തിയ്യതി ……..

## സാമൂഹിക ജനവിജ്ഞാനീയ വിവരണം

1.വയസ്സ് :

2.ലിംഗം:

a)ആൺ

b) പെൺ

3.വിദ്യാഭ്യാസം:

a. ഔപചാരിക വിദ്യാഭ്യാസം ഇല്ല

b. പ്രൈമറി

c. സെക്കൻഡറി

d. ഹയർ സെക്കണ്ടറി

e. ബിരുദം / ഡിപ്ലോമ

f. ബിരുദാനന്തര ബിരുദം

4. മതം

a. ഹിന്ദു

b. മുസ്ലീം

c. ക്രിസ്ത്യൻ

d. മറ്റുള്ളവ

5. തൊഴിൽ

a. ഇല്ല

b. വീട്ടുജോലി

c. സ്വകാര്യ ജോലി

d. സ്വയം തൊഴിൽ

e. സർക്കാർ

f. വിരമിച്ചവർ

6. കുടുംബ തരങ്ങൾ

a. അണുകുടുംബം

b. സംയുക്ത കുടുംബം

c. വിപുലീകൃതം

7. താമസസ്ഥലം

a. ഗ്രാമം

b. നഗര

c. അർദ്ധ നഗരം

8. പ്രതിമാസ വരുമാനം രൂപയിൽ

a. <5000

b. 5001 – 10,000

c. 10,001 – 15,000

d. 15,001 – 20,000

e. >20001

9. ആരോഗ്യ ഇൻഷുറൻസ്

a. അതെ

b. ഇല്ല

10. കുടുംബ പിന്തുണ

a. ഉണ്ട്

b. ഇല്ല

c. ചിലപ്പോൾ

വിഭാഗം ബി: റേഡിയേഷൻ തെറാപ്പി സ്വീകരിക്കുന്ന രോഗിയുടെ ക്ലിനിക്കൽ പ്രൊഫോർമ

1. കാൻസറിന്റെ തരം

2. കാൻസറിന്റെ ഘട്ടം

a) ഘട്ടം 1

b) ഘട്ടം 2

c) ഘട്ടം 3

d) ഘട്ടം 4

e) ഘട്ടം 5

3. റേഡിയേഷൻ തെറാപ്പിയുടെ ദൈർഘ്യം
a) 12 മാസത്തിൽ താഴെ
b) >12 മാസം

4. പ്രതികൂല പ്രതികരണം
a) അതെ
b) ഇല്ല
c) അതെ എങ്കിൽ വ്യക്തമാക്കുക

5. അനുബന്ധ രോഗങ്ങൾ
a) അതെ
b) ഇല്ല
c) അതെ എങ്കിൽ വ്യക്തമാക്കുക

## TOOL 3: SUPPORTIVE CARE NEEDS SURVEY (SCNS -SF34)
## പരിചരണ ആവശ്യങ്ങൾ അറിയുന്നതിനുള്ള സർവ്വേ

പ്രത്യേക നിർദ്ദേശങ്ങൾ

താഴെ പറയുന്ന പേജുകളിലെ ഓരോ ഇനത്തിനും, കഴിഞ്ഞ ഒരു മാസത്തിനുള്ളിൽ നിങ്ങൾക്ക് കാൻസർ ബാധിച്ചതിന്റെ ഫലമായി ഈ പ്രശ്നത്തിൽ സഹായം ആവശ്യമുണ്ടോ എന്ന് സൂചിപ്പിക്കുക. കഴിഞ്ഞ ഒരു മാസത്തിൽ നിങ്ങൾക്ക് ഇതിൽ സഹായം ആവശ്യമുണ്ടോ എന്ന് ഏറ്റവും നന്നായി വിവരിക്കുന്ന നമ്പറിന് അടുത്തായി ഒരു (✓) ഇടുക. തിരഞ്ഞെടുക്കാൻ 5 സാധ്യമായ ഉത്തരങ്ങളുണ്ട്:

| | |
|---|---|
| ആവശ്യമില്ല | 1. ബാധകമല്ല – കാൻസർ ഇല്ലാത്തതിനാൽ ഇത് എനിക്ക് ഒരു പ്രശ്നമായിരുന്നില്ല. |
| | 2. സംതൃപ്തി – എനിക്ക് ഇതിൽ സഹായം ആവശ്യമായിരുന്നു, പക്ഷേ ആ സമയത്ത് എന്റെ സഹായത്തിന്റെ ആവശ്യം തൃപ്തികരമായിരുന്നു. |
| കുറച്ച് ആവശ്യമുണ്ട് | 3. കുറഞ്ഞ ആവശ്യം – ഈ ഇനം എനിക്ക് ആശങ്കയോ അസ്വസ്ഥതയോ ഉണ്ടാക്കി. എനിക്ക് അധിക സഹായം ആവശ്യമില്ലായിരുന്നു. |
| | 4. മിതമായ ആവശ്യം – ഈ ഇനം എനിക്ക് ആശങ്കയോ അസ്വസ്ഥതയോ ഉണ്ടാക്കി. എനിക്ക് കൂടുതൽ സഹായം ആവശ്യമായി വന്നു. |
| | 5. ഉയർന്ന ആവശ്യം – ഈ ഇനം എനിക്ക് ആശങ്കയോ അസ്വസ്ഥതയോ ഉണ്ടാക്കി. എനിക്ക് കൂടുതൽ സഹായം ആവശ്യമായി വന്നു. |

ഇനി അടുത്ത 2 പേജുകളിലെ സർവേ പൂർത്തിയാക്കുക.

| കഴിഞ്ഞ മാസത്തിൽ, നിങ്ങൾക്ക് സഹായം ആവശ്യമായി വന്നതിന്റെ അളവ് | ആവശ്യമില്ല | | ചിലത് ആവശ്യമാണ് | | |
|---|---|---|---|---|---|
| | ബാധകമല്ല | തൃപ്തിയായി | കുറഞ്ഞ ആവശ്യം | മിതമായ ആവശ്യം | ഉയർന്ന ആവശ്യം |
| 1. വേദന | | | | | |
| 2. ഊർജ്ജക്കുറവ്/ ക്ഷീണം | | | | | |
| 3. പലപ്പോഴും അസ്വസ്ഥത അനുഭവപ്പെടുന്നു | | | | | |
| 4. വീടിനു ചുറ്റും ജോലി ചെയ്യുക | | | | | |
| 5. മുമ്പ് ചെയ്തിരുന്ന കാര്യങ്ങൾ ചെയ്യാൻ കഴിയാതെ വരിക | | | | | |
| 6. ഉത്കണ്ഠ | | | | | |
| 7. നിരാശയോ വിഷാദമോ അനുഭവപ്പെടുന്നു | | | | | |
| 8. ദുഃഖം | | | | | |
| 9. കാൻസർ പടരുന്നതിനെക്കുറിച്ചുള്ള ഭയം | | | | | |
| 10. ചികിത്സയുടെ ഫലങ്ങൾ നിങ്ങളുടെ നിയന്ത്രണത്തിന് അതീതമാണെന്ന് വിഷമിക്കുക | | | | | |
| 11. ഭാവിയെക്കുറിച്ചുള്ള അനിശ്ചിതത്വം | | | | | |

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| 12. നിങ്ങളുടെ സാഹചര്യം നിയന്ത്രണത്തിലാണെന്ന് തോന്നാൻ പഠിക്കുക | | | | | |
| 13. പോസിറ്റീവ് മനോഭാവം നിലനിർത്തുക | | | | | |
| 14. മരണത്തെയും മരിക്കുന്നതിനെയും കുറിച്ചുള്ള വികാരങ്ങൾ | | | | | |
| 15. ലൈംഗിക വികാരങ്ങളിലെ മാറ്റങ്ങൾ | | | | | |
| 16. നിങ്ങളുടെ ലൈംഗിക ബന്ധങ്ങളിലെ മാറ്റങ്ങൾ | | | | | |
| 17. നിങ്ങളുടെ അടുത്തുള്ളവരുടെ ആശങ്കകളെക്കുറിച്ചുള്ള ആശങ്കകൾ | | | | | |
| 18. നിങ്ങൾ കാണുന്ന കാൻസർ സ്പെഷ്യലിസ്റ്റുകളെ കുറിച്ച് കൂടുതൽ ചോയ്സ് | | | | | |
| 19. ഏത് ആശുപത്രിയിൽ പോകണം എന്നതിനെക്കുറിച്ച് കൂടുതൽ ചോയ്സ് | | | | | |
| 20. നിങ്ങൾക്ക് തോന്നുന്ന രീതി സാധാരണമാണെന്ന് മെഡിക്കൽ സ്റ്റാഫിന്റെ ഉറപ്പ്. | | | | | |
| 21. ആശുപത്രി ജീവനക്കാർ നിങ്ങളുടെ ശാരീരിക ആവശ്യങ്ങൾ കൃത്യമായി നിറവേറ്റുന്നു. | | | | | |
| 22. ആശുപത്രി ജീവനക്കാർ നിങ്ങളുടെ വികാരങ്ങളെയും വൈകാരിക ആവശ്യങ്ങളെയും അംഗീകരിക്കുകയും അവയോട് സംവേദനക്ഷമത കാണിക്കുകയും ചെയ്യുന്നു. | | | | | |
| 23. പരിചരണത്തിന്റെ പ്രധാന വശങ്ങളെക്കുറിച്ചുള്ള രേഖാമൂലമുള്ള വിവരങ്ങൾ നൽകൽ. | | | | | |
| 24. വീട്ടിൽ നിങ്ങളുടെ രോഗത്തെ എങ്ങനെ കൈകാര്യം ചെയ്യണമെന്നതിനെക്കുറിച്ചും അതിന്റെ പാർശ്വഫലങ്ങളെക്കുറിച്ചും വിവരങ്ങൾ (എഴുതിയത്, ഡയഗ്രമുകൾ, ഡ്രോയിംഗുകൾ) നൽകുന്നു. | | | | | |
| 25. നിങ്ങൾക്ക് വിശദീകരണം ആവശ്യമുള്ള രോഗനിർണയ പരിശോധനകളുടെ വിശദീകരണം ലഭിക്കുന്നു. | | | | | |
| 26. ചികിത്സകൾ തിരഞ്ഞെടുക്കുന്നതിന് മുമ്പ് അവയുടെ ഗുണങ്ങളെയും | | | | | |

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| പാർശ്വഫലങ്ങളെയും കുറിച്ച് വേണ്ടത്ര അറിവുണ്ടായിരിക്കുക. | | | | | |
| 27. നിങ്ങളുടെ പരിശോധനാ ഫലങ്ങളെക്കുറിച്ച് എത്രയും വേഗം അറിയിക്കുക | | | | | |
| 28. നിയന്ത്രണത്തിലോ കുറഞ്ഞുവരുന്നതോ ആയ കാൻസറിനെക്കുറിച്ച് (അതായത്, ആശ്വാസം) അറിവുണ്ടായിരിക്കുക. | | | | | |
| 29. സുഖം പ്രാപിക്കാൻ നിങ്ങളെ സഹായിക്കുന്നതിന് നിങ്ങൾക്ക് ചെയ്യാൻ കഴിയുന്ന കാര്യങ്ങളെക്കുറിച്ച് അറിഞ്ഞിരിക്കുക. | | | | | |
| 30. നിങ്ങൾക്കോ കുടുംബാംഗങ്ങൾക്കോ സുഹൃത്തുക്കൾക്കോ ആവശ്യമെങ്കിൽ പ്രൊഫഷണൽ കൗൺസിലിംഗ് (ഉദാ: സൈക്കോളജിസ്റ്റ്, സോഷ്യൽ വർക്കർ, കൗൺസിലർ, നഴ്സ് സ്പെഷ്യലിസ്റ്റ്) ലഭ്യമാക്കൽ. | | | | | |
| 31. ലൈംഗിക ബന്ധങ്ങളെക്കുറിച്ചുള്ള വിവരങ്ങൾ നൽകുന്നതിന് | | | | | |
| 32. വെറുമൊരു കേസ് പോലെയല്ല, മറിച്ച് ഒരു വ്യക്തിയെപ്പോലെയാണ് പരിഗണിക്കപ്പെടുന്നത്. | | | | | |
| 33. കഴിയുന്നത്ര ശാരീരികമായി സുഖകരമായ ഒരു ആശുപത്രിയിലോ ക്ലിനിക്കിലോ ചികിത്സ തേടുക. | | | | | |
| 34. നിങ്ങളുടെ അവസ്ഥ, ചികിത്സ, തുടർനടപടികൾ എന്നിവയുടെ എല്ലാ വശങ്ങളെക്കുറിച്ചും സംസാരിക്കാൻ കഴിയുന്ന ഒരു ആശുപത്രി ജീവനക്കാരൻ ഉണ്ടായിരിക്കുക. | | | | | |

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നിങ്ങളുടെ മാതിരി അസുഖമുള്ള മറ്റു ചിലർ പറഞ്ഞ വളരെ പ്രധാനമായ ചില പ്രസ്താവനകളാണ് താഴെ കൊടുത്തിരിക്കുന്നത്. കഴിഞ്ഞ 7 ദിവസങ്ങളിൽ അനുഭവമായ നിങ്ങളുടെ പ്രതികരണത്തെ സൂചിപ്പിക്കാൻ ഓരോ വരിയിലേയും ഒരു സംഖ്യയിൽ ദയവായി വൃത്തം വരയ്ക്കുകയോ അടയാളപ്പെടുത്തുകയോ ചെയ്യുക.

| | ശാരീരികമായ കാര്യങ്ങൾ | ഒട്ടും തന്നെ ഇല്ല | ഒരൽപ്പം കുറച്ച് | വല്ലപ്പോഴും | കുറച്ചധികം | വളരെ അധികം |
|---|---|---|---|---|---|---|
| GP1 | എനിക്ക് ഉന്മേഷം തീരെ കുറവാണ്..... | 0 | 1 | 2 | 3 | 4 |
| GP2 | എനിക്ക് ഓക്കാനമുണ്ടാകാറുണ്ട്..... | 0 | 1 | 2 | 3 | 4 |
| GP3 | എന്റെ അനാരോഗ്യം മൂലം കുടുംബകാര്യങ്ങൾ നോക്കാൻ പ്രയാസമുണ്ട്..... | 0 | 1 | 2 | 3 | 4 |
| GP4 | എനിക്ക് വേദനയുണ്ട്..... | 0 | 1 | 2 | 3 | 4 |
| GP5 | ചികിത്സയുടെ പാർശ്വഫലങ്ങൾ എന്നെ അലട്ടുന്നു..... | 0 | 1 | 2 | 3 | 4 |
| GP6 | എനിക്ക് തീരെ സുഖമില്ല..... | 0 | 1 | 2 | 3 | 4 |
| GP7 | കിടക്കയിൽ തന്നെ കിടക്കാൻ ഞാൻ നിർബന്ധിതനാണ്..... | 0 | 1 | 2 | 3 | 4 |
| | **സാമൂഹികവും കുടുംബപരവുമായ കാര്യങ്ങൾ** | ഒട്ടും തന്നെ ഇല്ല | ഒരൽപ്പം കുറച്ച് | വല്ലപ്പോഴും | കുറച്ചധികം | വളരെ അധികം |
| GS1 | എന്റെ സുഹൃത്തുക്കളുമായി എനിക്ക് കൂടുതൽ അടുപ്പം തോന്നുന്നു..... | 0 | 1 | 2 | 3 | 4 |
| GS2 | എനിക്ക് കുടുംബത്തിൽ നിന്ന് വൈകാരികമായ പിന്തുണ ലഭിക്കുന്നുണ്ട് | 0 | 1 | 2 | 3 | 4 |
| GS3 | സുഹൃത്തുക്കളിൽ നിന്നും എനിക്ക് സഹായം ലഭിക്കുന്നു..... | 0 | 1 | 2 | 3 | 4 |
| GS4 | എന്റെ രോഗത്തെ എന്റെ കുടുംബം സ്വീകരിച്ചിട്ടുണ്ട്..... | 0 | 1 | 2 | 3 | 4 |
| GS5 | എന്റെ രോഗത്തെക്കുറിച്ചുള്ള വീട്ടുകാരുടെ ആശയവിനിമയത്തിൽ ഞാൻ സംതൃപ്തനാണ്..... | 0 | 1 | 2 | 3 | 4 |

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| GS 6 | പങ്കാളിയുമായി/പ്രധാന സഹായിയുമായി എനിക്ക് അടുപ്പമുണ്ട് ..... | 0 | 1 | 2 | 3 | 4 |
| Q 1 | ഇപ്പോഴത്തെ നിങ്ങളുടെ ലൈംഗികജീവിതം പരിഗണിക്കാതെ ദയവായി താഴെപ്പറയുന്ന ചോദ്യത്തിന് ഉത്തരം നൽകുക. ഈ ചോദ്യത്തിന് ഉത്തരം പറയാൻ താൽപ്പര്യമില്ലെങ്കിൽ ബോക്സിൽ ചെക്ക് അടയാളം ഇട്ടിട്ട് | | | ☐ | | |
| GS 7 | എന്റെ ലൈംഗിക ജീവിതത്തിൽ ഞാൻ സംതൃപ്തനാണ് ..... | 0 | 1 | 2 | 3 | 4 |

| | വൈകാരികമായ കാര്യങ്ങൾ | ഒട്ടും തന്നെ ഇല്ല | ഒരൽപ്പം കുറച്ച് | വല്ലപ്പോഴും | കുറച്ചധികം | വളരെ അധികം |
|---|---|---|---|---|---|---|
| GE1 | ഞാൻ ദുഃഖിതനാണ്..... | 0 | 1 | 2 | 3 | 4 |
| GE2 | ഞാൻ എന്റെ രോഗവുമായി പൊരുത്തപ്പെടുന്നതിൽ സംതൃപ്തിയുണ്ട് ..... | 0 | 1 | 2 | 3 | 4 |
| GE3 | രോഗത്തോട് മല്ലിടാനുള്ള എന്റെ പ്രതീക്ഷ നഷ്ടപ്പെടുന്നു ..... | 0 | 1 | 2 | 3 | 4 |
| GE4 | ഞാൻ ഉത്കണ്ഠാകുലനാണ് ..... | 0 | 1 | 2 | 3 | 4 |
| GE5 | മരണത്തെക്കുറിച്ച് എനിക്ക് വേവലാതിയുണ്ട് ..... | 0 | 1 | 2 | 3 | 4 |
| GE6 | എന്റെ അവസ്ഥ വളരെ മോശമാകുമെന്ന് ഞാൻ വേവലാതിപ്പെടുന്നു ..... | 0 | 1 | 2 | 3 | 4 |

| | പ്രവർത്തനങ്ങളിലുള്ള ക്ഷേമം | ഒട്ടും തന്നെ ഇല്ല | ഒരൽപ്പം കുറച്ച് | വല്ലപ്പോഴും | കുറച്ചധികം | വളരെ അധികം |
|---|---|---|---|---|---|---|
| GF1 | എനിക്ക് എല്ലാ ജോലികളും (വീട്ടു ജോലികൾ ഉൾപ്പെടെ) ചെയ്യാൻ കഴിയുന്നുണ്ട്..... | 0 | 1 | 2 | 3 | 4 |
| GF2 | എന്റെ ജോലികൾ (വീട്ടു ജോലികൾ ഉൾപ്പെടെ) എല്ലാം സംപൂർണ്ണമാകുന്നു ..... | 0 | 1 | 2 | 3 | 4 |
| GF3 | ജീവിതം ആസ്വദിക്കാൻ എനിക്ക് കഴിയുന്നുണ്ട്..... | 0 | 1 | 2 | 3 | 4 |

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| G F4 | എന്റെ രോഗത്തെ ഞാൻ അംഗീകരിക്കുന്നു..... | 0 | 1 | 2 | 3 | 4 |
| G F5 | എനിക്ക് നല്ല ഉറക്കമുണ്ട്..... | 0 | 1 | 2 | 3 | 4 |
| G F6 | വെറും രസത്തിനു വേണ്ടി ചെയ്യുന്ന കാര്യങ്ങൾ എന്നെ സന്തോഷിപ്പിക്കുന്നുണ്ട് (വിനോദപരിപാടികൾ ആസ്വദിക്കാൻ എനിക്ക് കഴിയുന്നുണ്ട്)..... | 0 | 1 | 2 | 3 | 4 |
| G F7 | എന്റെ ഇപ്പോഴത്തെ ജീവിത മേന്മയിൽ ഞാൻ സംതൃപ്തനാണ്..... | 0 | 1 | 2 | 3 | 4 |