

A Study on Cancer Related Fatigue and Quality of Life (QOL) among Women Undergoing Treatment for Various Cancers in Selected Tertiary Care Hospitals of Ludhiana, Punjab

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Abstract

Cancer is a collection of illnesses marked by irregular cell proliferation that has the potential to infiltrate or metastasize to different areas of the body. Gynecological cancer specifically refers to the abnormal cell growth in the female reproductive tract, including various organs such as the endometrium, fallopian tubes, ovaries, uterus, cervix, vagina, and breast. These cancer cells have a tendency to multiply uncontrollably. The majority of individuals diagnosed with cancer experience cancer-related fatigue at some point during their illness, which is a common and distressing symptom. This fatigue has a significant impact on patients, affecting their physical capabilities, emotional state, and overall well-being. One of the most frequent reported side effects across all types and stages of the disease is cancer-related fatigue. Factors that perceived to affect the women fatigue are physical, mental, emotional, social and spiritual factors and these ultimately affect their quality of life too. The objective is to evaluate the level of cancer-related fatigue and the quality of life in women receiving treatment for different types of cancer, with the aim of enhancing their overall welfare. A quantitative research approach and cross-sectional research design was used including 100 women with cancer visiting American Oncology Institute DMCH and Mohan Dai Oswal Cancer Hospital, Ludhiana, Punjab. Data was collected by using purposive sampling technique. FACIT (Functional Assessment of Chronic Illness Therapy) Fatigue Scale (version 4) by S. Acaster, 2015 was used to assess Cancer Related Fatigue and FACT-G (Functional Assessment of Cancer Therapy-General) Scale (version 4)

by Dr. David Cella, 1993 was used to assess Quality of Life among women with various cancers. Interviews were conducted to collect quantitative data, which was then organized in a tabular format. Statistical analysis, both descriptive and inferential, was conducted using SPSS version 16 software. The findings of the study indicated that a majority of women (56%) fell within the age range of 51–60 years. All women were married and had children. Majority of women (41%) had 31–40 years of duration of marriage. Most of the women (53%) belonged to Sikh religion followed by 47% belonged to Hindu religion. Less than half (33%) of women were graduate and above. Majority of women (87%) were housewives whereas 13% were doing job/business. Maximum of women (57%) were living in the nuclear family and belonged to urban (56%) areas. Maximum of women (82%) were vegetarian and more than half (55%) of women belonged to upper middle class.

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Mean age score was found to be 52.43±8.10 years among women. The study concluded that all the women had cancer related fatigue. There was association of cancer related fatigue and quality of life with selected socio-demographic variables and also association was found between cancer related fatigue and quality of life.

Keywords: Cancer related fatigue, gynecological cancer, FACIT Fatigue Scale, FACT-G Scale

INTRODUCTION

Cancer is one among the foremost important non-infectious or non-communicable diseases. In India, cervical cancer was the third largest cause of cancer modality with incidence rate of 30.7 per 1,00,000. Nearly four lakh individuals are suffering from cancer each year, with approximately 200,000 losing their lives as a result of the disease. This is primarily attributed to the delayed identification of the condition. Many people do not seem to be awake to the first symptoms of this disease. Gynecological cancer refers to an abnormal growth of cells in female reproductive tract, including the endometrium, fallopian tubes, ovaries, uterus, cervix, vagina and breast, which tend to proliferate in an uncontrolled way [1].

Gynecological cancer is any cancer that starts in a woman's reproductive organs. Cancer is usually named for the part of the body where it begins. Gynecological cancers originate in various locations within the pelvic region of a woman's body, which is the area situated below the abdomen and between the hip bones. Among women, cervical cancer holds the position of the 4th most common type of cancer in terms of prevalence. It is estimated that in 2018, approximately 570,000 women globally received a diagnosis of cervical cancer, and approximately 311,000 women lost their lives to this disease [2].

The signs and symptoms of cervical, ovarian, uterine, vaginal, and vulvar cancers share both similarities and differences. One commonality among these gynecological cancers is the presence of abnormal vaginal bleeding or discharge, with the exception of vulvar cancer. Ovarian cancer often presents symptoms such as a feeling of fullness in the stomach, difficulty eating, bloating, and abdominal or back pain. Pelvic pain or pressure is commonly experienced in ovarian and uterine cancers, and an increased frequency or urgency of urination and/or constipation may be indicative of ovarian and vaginal cancers. Conversely, vulvar cancer is characterized by symptoms such as vulvar itching, burning, pain, or sensitivity, as well as alterations in vulva color or skin texture, such as the appearance of a rash, sores, or warts [3].

Patients with cancer often deal with severe side-effects. Gynecological cancer survivors describe several problematic late physical effects that influence their ability to function and negatively influence their overall quality of life. Pain and fatigue are common symptoms experienced by individuals with cancer, and they may continue to persist even following treatment. These symptoms may manifest during the course of the illness and continue beyond the completion of treatment. The diagnosis of cancer is usually linked to psychological morbidity. It has been reported that 47% of patients with gynecological cancer experience periods of anxiety or depression or both. Gynecological cancers are treated in several ways, depending on the type of cancer and how far it has spread. Surgical procedures, chemotherapy, and radiation therapy are among the treatment options available for gynecological cancer. It is typical for women diagnosed with gynecological cancer to undergo a combination of these treatments [4].

Cancer-related fatigue is a prevalent and distressing symptom experienced by a majority of cancer patients at some point during their illness. It significantly impacts patients' functional abilities, mood, and overall quality of life. The causes of cancer-related fatigue are complex and involve a combination of biological and systemic factors. Screening cancer patients for fatigue is of utmost importance due to its frequent coexistence with other symptoms, and its impact may be underestimated. Ongoing research is dedicated to the management of cancer-related fatigue. Current recommendations from cancer experts

and organizations emphasize the importance of patient and family education, incorporating exercise and physical activity, and providing psychosocial support as part of the treatment approach. While pharmacologic interventions may have limited effectiveness, they can still provide assistance to a specific group of individuals experiencing the symptoms [5].

It is evident that receiving a diagnosis of a life-threatening illness like cancer has a profound impact on a person's quality of life. In numerous studies, the assessment of patients' quality of life has been conducted following the diagnosis and throughout the course of treatment. However, a critical question arises regarding the influence of the knowledge of diagnosis on the obtained results. If a patient has recently received distressing news about being diagnosed with cancer, it is possible that any assessment, particularly in relation to psychological aspects such as emotional well-being, may be influenced by bias [6].

NEED OF THE STUDY

Cancer-related fatigue (CRF) is a prevalent symptom experienced by individuals with cancer, and for some, it can be highly distressing. At its most severe, CRF manifests as a persistent, draining exhaustion that hampers one's ability to engage in enjoyable activities and fully participate in life. It is also recognized as a debilitating condition that significantly impacts the quality of life (QOL) of individuals diagnosed with cancer or undergoing cancer treatment. Fatigue attributed to cancer treatment is observed in a range of 14 to 96% of patients during treatment and in 19 to 82% of patients after completing treatment. According to a study, a substantial number of patients, with up to 90% of those undergoing radiation treatment and up to 80% of those receiving chemotherapy, encounter notable fatigue [7, 8]. The consequences of cancer-related fatigue can endure for extended periods, extending beyond the completion of treatment and impacting around one-third of individuals diagnosed with cancer. Additionally, various studies have found that cancer survivors experience significantly more pronounced fatigue compared to individuals without a history of cancer [9].

According to a specific study, fatigue was documented by 76% of patients during their most recent chemotherapy, occurring for several days each month, while 30% reported experiencing fatigue on a daily basis. Among those who experienced fatigue, 91% mentioned that it hindered them from leading a "normal" life, and 88% stated that it disrupted their daily routine and made it challenging to engage in social activities and carry out regular cognitive tasks. Studies have provided evidence indicating that severe fatigue is more commonly observed in patients undergoing chemotherapy (98.30%) and concurrent chemotherapy with radiation (78.57%), compared to those receiving radiotherapy alone (with moderate fatigue reported by 45% and severe fatigue reported by 45%). Chronic fatigue related to cancer has been associated with various psychosocial issues, physical complaints, and a diminished quality of life. Additionally, it is linked to significant psychological distress and imposes a substantial financial burden by limiting the ability of patients to work [10].

OBJECTIVES

1. To assess the cancer related fatigue and quality of life (QOL) among women undergoing treatment for various cancers.
2. To find out the association of cancer related fatigue with quality of life (QOL).
3. To find out the association of cancer related fatigue and quality of life (QOL) with selected socio-demographic variables.
4. To plan and disseminate the IEC material (pamphlets) on strategies to reduce cancer related fatigue and improving quality of life.

METHOD AND MATERIAL

Target Population

Target population was the women undergoing treatment for various cancers in tertiary care hospitals of Ludhiana.

Inclusion Criteria

The inclusion criteria for the present study were women who were:

- Willing to participate.
- Above 18 years of age.
- Suffering from cancer like cancer of endometrium, fallopian tubes, ovaries, uterus, cervix, vagina and breast.
- Undergoing treatment for various cancers from last 4 months.

Exclusion Criteria

Exclusion criteria of the present study were women who were:

- Terminally ill.
- Suffering from cognitively impaired or neurosensory conditions.

Sample

In the present study, sample was women undergoing treatment for various cancers from last 4 months.

Research Variables

In the present study, independent research variables were cancer related fatigue and quality of life. As it is a descriptive study, so, there is no dependent variable.

Description of Tool

The instrument comprised three sections, which are as follows:

1. *Part-A:*
 - i. Socio-demographic profile of women.
 - ii. Clinical profile.
2. *Part-B:* FACIT Fatigue Scale (version 4) by S. Acaster, 2015 to assess cancer related fatigue.
3. *Part-C:* FACT-G Scale (version 4) by Dr. David Cella, 1993 to assess quality of life among women with cancer.

RESULT AND DISCUSSION

In the present study, cross-sectional study was undertaken to assess the cancer related fatigue and quality of life among women undergoing treatment for various cancers at American Oncology Institute DMCH & Mohan Dai Oswal Cancer Hospital, Ludhiana, Punjab. FACIT Fatigue Scale (version 4) by S. Acaster, 2015 was used to assess the Cancer Related Fatigue and FACT-G (Functional Assessment of Cancer Therapy-General) Scale (version 4) by Dr. David Cella, 1993 was used to assess Quality of Life Among Women with Cancer. All the women were interviewed for minimum 20–25 min. The data underwent analysis utilizing both descriptive and inferential statistics, facilitated by the utilization of SPSS software, specifically version 16.

In the present study, the results show that more than half of the women (56%) belonged to age group of 51–60 years. All women were married and had children. Majority of the women (41%) had 31–40 years of duration of marriage. Most of the women (53%) belonged to Sikh religion followed by 47% belonged to Hindu religion. Less than half (33%) women were graduate and above. Majority of women (87%) were housewives. Maximum of women (57%) were living in the nuclear family and belonged to urban area (56%) and were vegetarian (82%). More than half (55%) of women belonged to upper middle class.

Findings of the present study regarding clinical profile of the women revealed that majority of women (75%) had achieved menopause. Based on body mass index (BMI), over half of the women (56%) had a BMI within the normal range. The majority of women (40%) were diagnosed with breast cancer. Less than half 42% women were diagnosed from last 6–10 months. More than half (53%) women had stage I cancer. Majority (88%) were not having any family history of any cancer. A majority of women,

accounting for 65%, had undergone surgery and chemotherapy as their chosen treatment methods. Additionally, 50% of women had a treatment duration ranging from 0 to 5 months.

Objective 1: To Assess the Cancer Related Fatigue and Quality of Life (QOL) among Women Undergoing Treatment for Various Cancers

In the present study, results revealed that 38% of women had mild fatigue with mean score 39.8 ± 6.54 , 45% had moderate fatigue with mean score 23.9 ± 3.60 and only 17% of women had severe fatigue with mean score 15.1 ± 3.77 . The total mean fatigue score was found to be 28.48 ± 10.19 , among women undergoing treatment for various cancers.

In the present study, results of quality of life showed that 36% of women had excellent quality of life with mean score 85.83 ± 2.81 , 45% had good quality of life with mean score 68.02 ± 5.58 and 19% had average quality of life with mean score 47.26 ± 7.02 . The total mean quality of life score was found to be 70.49 ± 15.179 among the women undergoing treatment for various cancers.

Objective 2: To Find Out the Association of Cancer Related Fatigue with Quality of Life

Findings of the present study revealed the association of cancer related fatigue with quality of life among women undergoing treatment for various cancers. The average score for cancer-related fatigue was determined to be 28.48 ± 10.19 , while the mean score for quality of life was 70.49 ± 15.18 . The statistical analysis revealed a significant association between these two variables, indicated by a p-value of less than 0.05.

Objective 3: To Find Out the Association of Cancer Related Fatigue and Quality of Life with Selected Socio-demographic Variables

The findings of the present study related to association of cancer related fatigue with selected socio-demographic profile and clinical profile showed that mean cancer related fatigue score was found highest in the women with age group of 51–60 years (30.39 ± 10.34). Variables like duration of marriage, educational status, types of family, socio-economic status, weight, BMI and type of cancer were statistically significant as $p < 0.05$.

CONCLUSION

All the women have cancer related fatigue. 38% of women who have mild fatigue, 45% women have moderate and only 17% of women have severe fatigue. The mean fatigue score is found to be 28.48 ± 10.19 among women. About 36% of women have excellent quality of life, 45% have good and 19% have average quality of life. The mean quality of life score is found to be 70.49 ± 15.179 among the women.

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