Impact of Selected Percived Needs on Quality of Life of Breast Cancer Survivors

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Abstract

Worldwide the impact of breast cancer survivorship affects them and their caregivers, leading towards a tedious journey. Numerous perceived needs had an impact on breast cancer survivors' quality of life. Early detection of their perceived needs in terms of physical, psychological, and social is necessary to make them fittest to survive at their utmost. **Objectives: 1.**To ascertain the quality of life of breast cancer survivors.2.To elicit the perceived needs among breast cancer survivors.3. To correlate the relationship between the perceived needs and Breast Cancer survivor's quality of life. **Methodology** – A descriptive cross-sectional research design was used, and a convenient sampling technique was utilized to collect data from breast cancer survivors attending Medical Oncology OPD. Data were collected using the Perceived Stress Scale, Fatigue severity scale, Pittsburgh sleep quality index, Well-being scale, Coping scale, Multidimensional perceived social support scale, Medication Adherence rating scale, Toronto Informational needs questionnaire, and EORTC-QLQ- BC. **Results:** The Prevalence of level of perceived needs based on the QOL among breast cancer survivors were regular sleeping patients, patients with more social support, more well-being, enhanced coping, more adherence to medications, were

proved to have more QOL than others such as the high amount of stress, high fatigue, and low information will have low QOL which was significant with 95% of a confidence interval**.**

Conclusion: There was a correlation between the perceived needs, which indicates that when the psychosocial need is affected, the physical need is affected automatically. The gaining of adequate information will enhance medication adherence and reduce stress and improve their quality of life. Hence the nurses should consider the importance of quality of life of breast cancer survivors and early detection of perceived needs while planning specificcare.

Keywords: Breast cancer survivors, Perceived needs, Physical needs, Psychological needs, Quality of life.

INTRODUCTION:

Breast cancer exceeded above all cancers, and about 22,61,419 breast cancer cases were estimated in 2020 with a mortality rate of 6,84,996[1]. The projected incidence of cancer patients in India among females was 7,12,758 for the year 2020, and 1 in 29 females develop breast cancer[2].In India, the estimated increase in breast cases will be 178000 to 272000 by 2040[1]. Women diagnosed with non-metastatic invasive breast cancer have an estimated 5-year survival rate of 90%. Women diagnosed with non-metastatic invasive breast cancer have an estimated 10-year survival rate of 84 %[3]. Breast cancer alone accounts for 25% to 30% of all female cancer patients in Chennai [4].Women diagnosed with breast cancer now have a better chance of survival due to recent medical advances[5].

Hence, the age group of new cancer patients had gradually fallen from <55years to below 40years of age. The survival rates of women were also markedly low in India due to lack of awareness, fewer screening programs, and diagnosed at advanced stages of cancer[6]. The breast cancer survivorship journey leads to physical, social, and psychological turmoil, and it extends till post-treatment and recovery[7].

The impact of analysing the unmet perceived needs is essential to improve their quality of life which in turn is important in the breast cancer survivorship journey[8-10]. Early detection of unmet needs will have a detrimental effect on the breast cancer survivor's quality of life, thereby reducing their healthcare needs and costs[11-15].

Breast cancer diagnosis and treatment produces a profound effect on a woman's physical, psychological, social, and spiritual wellbeing, which in hand produces a deleterious effect on the QOL of survivors of breast cancer. Advancement in medical treatment, decreasing the mortality rate and which in turn results the individuals to survive with breast cancer for more years than before. Nowadays, breast cancer is no longer viewed as an incurable disease, but on the other hand, the trajectory of chronic diseases characterized by its symptoms leads to decreasing their QOL. Quality of life is important for a successful outcome and varies according to a system of principles, expectations, or perceptions that varies among breast cancer survivors from individual to person, group to group, and place to place. The quality of life is the sense of well-being that individuals can experience. It is the amount of objective and subjective personal feelings that individuals experience that contribute to their sense of well-being, thereby increasing the quality of life. Even though there is progress in diagnosis, treatment, care, the influence of breast cancer is negative due to various issues based on psychosocial and physical factors[16,17].

Hence the quality of life is important for dealing with survivorship; thereby, the perceived needs of them has to be met at an earlier stage. The study aimed at analyzing the perceived needs of breast cancer survivors and finding their correlation with the quality of life.

OBJECTIVES:

1. To ascertain the quality of life among breast cancer survivors.
2. To elicit the perceived needs among breast cancer survivors.
3. To correlate the relationship between the perceived needs and Breast cancer survivor's quality of life.

MATERIALS AND METHODS:

Study design: A descriptive cross-sectional research design was used. The Breast cancer survivors of 150 participants were used to obtain quantitative data. Convenient sampling methods were used to pick samples. The research was carried out in the Medical Oncology Outpatient Department of a tertiary care hospital in Chennai. The eligibility criteria were a) Only female patients diagnosed with breast cancer b) able to understand and speak Tamil c) Should be at least 18 years of age d) Breast cancer patients seeking treatment at least for six months and e) Attending In-patient and Out-patient department in the selected tertiary care center.

Data Collection: The research was conducted with formal approval from the appropriate authorities. Participants' informed consent was obtained using their chosen language. The data collection was done with a structured Bio-socio demographic questionnaire followed by Perceived Stress Scale, fatigue severity scale, Pittsburgh sleeps quality index, well-being scale, coping scale, Multidimensional perceived social support, medication adherence rating scale, Toronto informational needs questionnaire, and EORTC-QLQ- BC to elicit data. About 25 minutes were spent on each participant to elicit data using the selected tool.

Ethical Approval: Institutional Ethics Committee of Tamil Nadu Govt. Multi-Specialty Hospital vide ref. no. 1577/P&D-I/TNGMSSH/2017/PMS/ 003/07/2020 has been approved, also registered with the Indian clinical trial registry no. CTRI/2020/08/027291.

DATA ANALYSIS

Socio-demographic and clinical factors, Perceived Stress Scale, fatigue severity scale, Pittsburgh sleep quality index, well-being scale, medication adherence rating scale, Toronto informational needs questionnaire, and EORTC-QLQ- BC were analyzed using descriptive statistics. Socio-demographic and clinical data will be averaged and tabulated with percentages. The breast cancer stigma and hope Perceived Stress Scale, fatigue severity scale, Pittsburgh sleep quality index, well-being scale, coping scale, medication adherence rating scale, Toronto informational needs questionnaire, and EORTC-QLQ- BC scores were given in mean, median, percentage of the mean score, and standard deviation. Association between the Perceived Stress Scale, fatigue severity scale, Pittsburgh sleep quality index, well-being scale, medication adherence rating scale, Toronto informational needs questionnaire, and EORTC-QLQ- BC were given in univariate and multivariate analysis.

RESULTS & DISCUSSION:

The mean age of the participants was 51.57 ±9.51 years, in which majority of them were overweight (56.67%), the incidence of breast cancer was high among primary level education participants (59.33%), and also high among married women (88%), and those residing in the semi-urban region also had a higher incidence (62.67%). The clinical variables reported that

participants who have breast cancer for the past five years were 93.33%, 61.33% were living with III stages of cancer, and 76% slept for 4 to 8 hours. The present study findings had been consistent with a study in which patients' age ranged from 21 to 89 years with a mean age of 49 years[18]. It is also similar to the study insisting that the higher the weight leads to the lesser chance of survival[19].

The **participants' stress level** was **77.33% of the patients exhibited a high level of stress,** 22.67% of participants had a moderate level of stress, and none were under a low level of stress. The **well-being status of** breast cancer survivors was reported that 66.66% of the patients had **a high level of well-being**, and 33.33% of the patients were having a low level of well-being.

The **participants' perceived social support**, using four as the cut-off for the presence of social support, was that16.00% of the participants were having a low level of social support and whereas **84.00% of the participants were having a high level of social support**.

On analyzing the **coping scale score, it** was observed that 88 (58.67%) had a moderate level of coping score, 42(28%) had a poor coping score, whereas only 20(13.33%) had a good amount of coping score.

The **sleep quality** was assessed using PSQI were observed 38.00% of the patients were having a regular sleep, and **62% of the patients had poor sleep quality.** On analyzing **Fatigue Severity's level** the presence of fatigue; it was found that about **116(77.33%) participants** had fatigue.

The participants' medication adherence level showed that **74% had poor adherence**, 26% had medium, and none of them had good adherence to medication. Among 150 breast cancer survivors, none of them had low information need, **74% had medium information need**, and 26% had high information need.

Among the participants **60 % of breast cancer survivors in the study had a moderate quality of life**, 20% had a fair quality of life, and 14 % had a bad quality of life.

Thesubscale analysis showed that the global health status of the participants were with Mean =68.9, SD= 19.1. The functional scale analysis in QOL among breast cancer survivors were their physical and role functioning were high [Mean= 77.5 &76.2.,SD=19.5& 19.1]

respectively, with the cognitive functioning score [Mean=72.3,SD= 18.9], with Social functioning of[Mean= 70.5,SD= 18.2] and with the least emotional functioning score [Mean=68.5, SD= 17.5]. The symptom analysis score which acts as a significant factor in influencing the quality of life of breast cancer survivors were insomnia[Mean= 50.6 ,SD= 15.2], fatigue [Mean= 49.5,SD= 15.2] and financial difficulties[Mean= 47.3,SD= 12.6] which had an greater influence . Nausea and vomiting[Mean= 29.3,SD= 11.7] , pain[Mean= 28.6,SD= 12.0] ,constipation [Mean= 26.9,SD= 12.2] , diarrhea [Mean= 25.5,SD= 10.3] and appetite loss [Mean= 24.5,SD= 10.5] had a moderate influence while dyspnoea [Mean= 21.2,SD= 13.2] is low among the breast cancer survivors.

The quality of life of breast cancer survivors was found to be **strongly associated with perceived needs**, implying that the quality of life of breast cancer survivors could be achieved only by the fulfillment of psychosocial, physical, and informational needs.

The prevalence of perceived needs based on QOL among breast cancer survivors was higher in patients with **more social support, greater well-being, enhanced coping, and greater adherence to medications. Patients with a high level of stress, fatigue, and lack of information had a lower QOL, which was signed with a 95% confidence interval**[Figure 1]**.** A similar study reported a strong association was present between stress and cancer, involving major stressful life events[20]. Perceived social support was an essential factor for better QOL and low level of psychological distress[21].Fatigue in breast cancer survivors is related to a lower quality of life. Fatigue has a negative relationship with functioning, workability, and pain[22]. The breast cancer survivors' unmet needs showed a variance of 52.7% with QOL and physical, psychological, and social needs[23].

The univariate and multivariate logistic regression analysis showed that the regular sleeping patients, patients with more social support, more well-being, enhanced coping, more adherence to medications were proved to have more QOL scores than significant with a 95% of confidence interval [Figure 2]**.**

The study findings revealed that the physical needs such as increased sleep, decreased fatigue will in hand reduces the psychological needs such as by decreasing stress. Meanwhile the increase in social support and coping will also enhance the quality of life of breast cancer

survivors. The gravity of perceived informational needs contributes to the easier access of newer treatment modalities and the diversional therapies.

Figure 1: The Correlation Between QoL Score With Perceived Stress Score ,Pittsburgh Sleep

Quality Index ,Fatigue Severity Scale, Social Support Score, Wellness Score,
Adherence Score And Informational Score
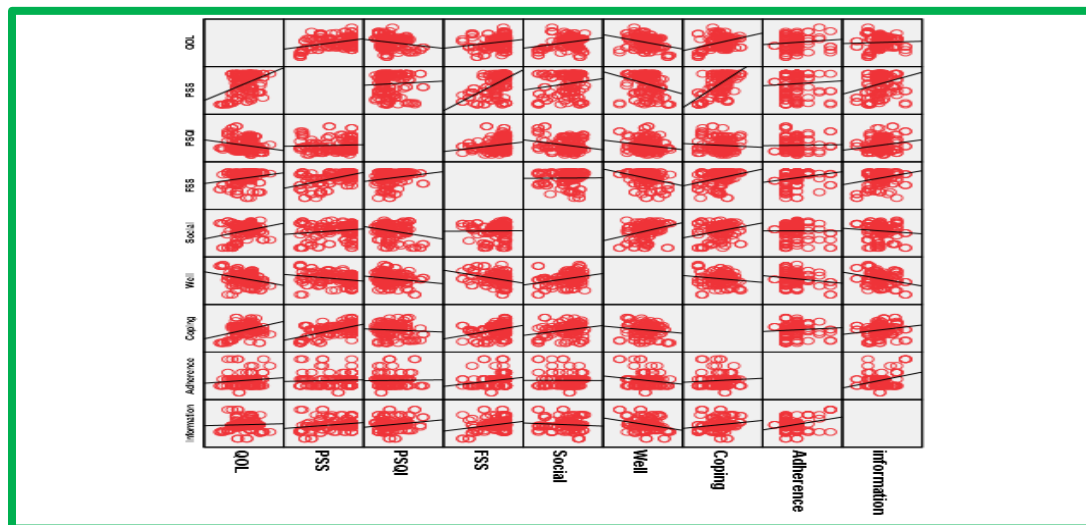
Figure 2 :Percentage bar diagram shows the level of influencing factors for better quality

of life of Breast cancer patients
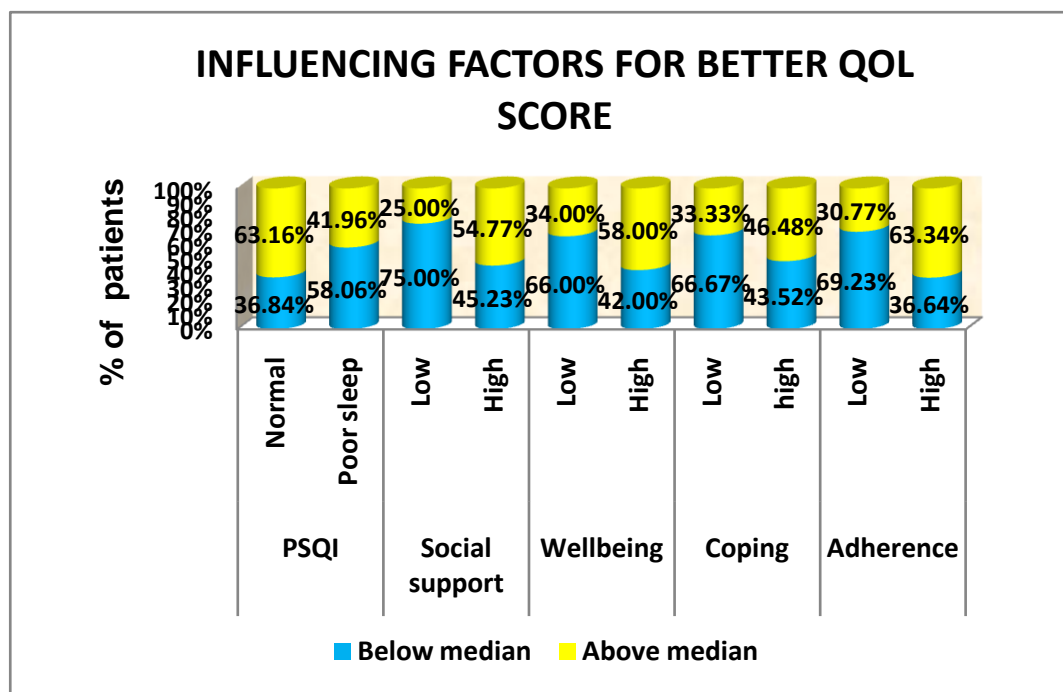
Conclusion:

The breast cancer survivor's life is based upon attaining their perception, which includes **an appreciation of new life, improvement in relations, self-improvement, and increased attention to health** which can be achieved by meeting their perceived needs. The study concluded that the breast cancer survivors who had good sleep, enough social support, high well-being, advanced coping strategies, and good adherence to medication were significantly correlated with good quality of life. The quality of life of breast cancer survivors can be improved by carefully assessing their perceived needs and developing effective intervention strategies to help them reach their desired level of well-being. Hence Nurses who were considered as holistic health care providers will help in enhancing the quality of life through assessing the perceived needs.Onco Nurses should participate in various skill training workshops and develop therapeutic communication practices to assess the perceived needs. Healthcare workers should frame policies in improving the quality of life of breast cancer survivors.

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