

Devising A Nurse Led Care Program on Breast Cancer Prevention (NLCP): Awareness among South Indian Women regarding Breast Cancer and Its Prevention: Phase I Study

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Abstract

Background: Breast cancer is the most common cancer among women in both developed and underdeveloped countries, comprising 23% of all female cancers around the globe, with an estimated 1.15 million cases diagnosed in 2002. The present study was aimed to explore the awareness of women regarding breast cancer and its prevention, with a plan to formulate A Nurse Led Care Program on Breast Cancer Prevention (NLCP) under the light of the study findings.

Method: The present study research adopted a quantitative research approach. A cross sectional survey was used to assess the knowledge and attitude of women regarding breast cancer and its prevention. The study was conducted at selected communities of South India. The data was collected from 320 samples with a help of awareness questionnaire prepared by the investigators and data was collected using Google forms. A quota sampling technique was adopted in the present study. The data were analysed with descriptive and inferential statistics.

Results: The result of the study shows less than half of the (12.81%) sample had good level of awareness regarding breast cancer. Majority (65%) of samples had average awareness. It shows, about 22.19% of samples had poor level of awareness about breast cancer. The study also indicated that there is a significant relationship between awareness regarding breast cancer and prevention with age, domicile, educational status, marital status and social media influence.

Keywords: Nurse Led Care Program, NLCP, Awareness, South Indian Women, Breast Cancer.

Introduction

In women, breast cancer is the second most prevalent type of cancer. Both men and women can develop breast cancer. People's support of breast

cancer sufferers has led to an increase in the survival rate. Because of early discovery and treatment, fewer people died as well. Breast cancer can be found at any age, however it is typically found in adults over

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50 years. You may feel a lump in your breast or notice a change in the appearance of your breast skin as signs of breast cancer. Always developing silently is breast cancer. Most patients become aware of it while being screened regularly. Breast cancer accounts for more than one in ten new cancer diagnoses each year. Breast cancer develops slowly and is typically detected through routine screenings¹. Breast cancer is made up of various subtypes, each of which is associated with a variety of clinical outcomes. The development of specific cancer-preventative and -therapeutic therapies depends on an understanding of this heterogeneity². In 2020, there were 2.3 million women diagnosed with breast cancer and 685000 died globally. One in twenty-eight Indian Women are likely to develop breast cancer during their lifetime³.

Previous research found that various immigrant groups used breast cancer screening services less frequently, which is consistent with the pattern seen among women from lower social strata. Numerous factors, such as the social, economic, employment, and health circumstances in the three destination nations as well as the country of origin, contribute to this inequality. Additionally, migration, health issues connected to movement, the importance of health and prevention in the culture of origin, language barriers, etc. all has an impact. As a result, migration represents an axis of inequality that is based on distance, social classes, and gender⁴. Women's depressed symptoms are made worse by receiving a breast cancer diagnosis, which also has a considerable negative impact on their quality of life, physical health, and mental well-being. The most difficult health issue and a top priority for binaural research is breast cancer. The creation of a strategy to enhance breast cancer prognosis is urgently required. The likelihood of discovering breast cancer can rise with early detection and screening⁵.

According to epidemiological studies, the number of people with breast cancer worldwide is predicted to reach about 2 million by the year 2030. Between 1965 and 1985 in India, the incidence rose dramatically, by about 50%. In India, there were an estimated 118000 incident cases in 2016, 98.1% of whom were female, and 526000 prevalent cases. From 1990 to 2016, the age-standardised incidence rate of breast cancer in females increased by 39.1%, and this rise was seen

in all 50 states. According to Globocan statistics 2020, breast cancer accounted for 10.6% (90408) of all cancer cases and 13.5% (178361) of all cancer cases in India⁶. A population-based strategy to reduce exposure to modifiable risk factors and a precision prevention strategy to identify women at higher risk and target them for particular therapies would likely be needed to reduce the incidence of breast cancer⁷. Studies were reported that the early identification of the breast cancer is drastically reduced among the women due to lack of their awareness regarding the breast cancer and its preventive strategies⁸. Evidences shows that an effective nurse led programs in cancer care might be beneficial to improve the preventive care approaches⁹. Hence, the present study aimed to assess the awareness among the women in the southern part of India, and it was conducted as an initial phase of developing a nurse led program in breast cancer prevention.

Materials and Methods

A cross-sectional study with a descriptive survey design used to assess the awareness among the women regarding breast cancer and its prevention. The present study conducted in selected communities of the south India residing at Kerala. The sample size calculated at 95% confidence interval and 5% margin of error. Finally, 320 women in the age group of 16-55 years with the attrition rate of 4% based on the inclusion criteria set by the investigators. A quota sampling technique used to recruit the samples for the present study.

A self-reported awareness questionnaire used to assess the awareness among the women. The investigators based on the literature review, interactions with clinical experts, healthy women, women with breast cancer and professional experiences, developed it. The content validity of the tool established with the help of the public health experts. The reliability of the tool achieved by test-retest reliability method and it seems to be reliable (correlation coefficient (R) = 0.86). The research tool having two sections: Section A- demographic profile of the participants and Section B - Awareness questionnaire (18 items). Maximum awareness score is 18.

After getting the permission from the institutional research and ethical committee, a formal permission

from the authorities, the investigators conducted a pilot study in order to find out the practicability of the study. Pilot study conducted in 30 samples, it found to be feasible, and those samples excluded from the main study. An informed consent obtained from the all study subjects before data collection and the confidentiality of the data ensured. After obtaining the informed consent from the study participants, the data collected with the help of an electronic survey form.

Results

Among the recruited samples, 85.62% belonged to the age group of 16-29 years. More than half (58.6%) of the samples were residing at panchayath area. Majority of the samples (39.2%) studied up to bachelor's level. Most of the subjects (72.1%) participated in the present study were unmarried. 59.9 % of the subjects were above the poverty line. Among the study, participants (74.0%) had a strong influence by the social media in their life.

Table 1: Awareness score of women regarding breast cancer and its prevention

Mean score	Median	Standard deviation	Range	Minimum score	Maximum Score
8.18	8	2	10	13	3

Table 1 depicts that median awareness score 8 with arrange of 10. Maximum score obtained by the participants was 13 and minimum was 3.

Table 2: Level of awareness of the women regarding breast cancer and its prevention

Level of awareness	Score	Frequency	Percentage
Poor	0-6	71	22.19
Average	7-11	208	65
Good	12-18	41	12.81

Table 2 shows more than half of the sample (65%) of samples had an average level of awareness, 22.19% of the sample had a poor level of knowledge, and 12.81% of the sample had a good level of awareness. The above shown data highlights a considerable variation in the awareness level of the women regarding breast cancer and its prevention.

Table 3: Correlation between awareness of women regarding breast cancer and its prevention with selected demographic variables

Variable	Spearman's rho	P value
Age	0.26	0.03
Domicile	0.062	0.02
Educational status	0.108	0.043
Marital status	0.038	0.501
Financial status	0.097	0.318
Social media	0.131	0.049

* Significant at $P < 0.05$

Discussion

The awareness regarding the breast cancer diagnosis and prevention varied among the women. In the present study concluded that awareness about breast cancer is low among the women in the southern part of India. This is similar to results of studies done in urban resettlement colonies of India¹⁰ and among the female school students of Turkey¹¹.

Many factors correlated with the awareness of the women regarding the breast cancer and its prevention. Age of the study participants, domicile, educational status, and their marital status. The highly educated or those from higher socioeconomic classes were those who were aware. Women with low socioeconomic status are less likely to get breast cancer than are those with higher socioeconomic status, but because of more late-stage diagnoses, they also die from the disease more frequently. Older women and women who had never held a job showed less knowledge of symptoms. Nipple eczema, alterations in the size or form of the breast, and nipple retraction were less frequently regarded as breast cancer signs by older women. It is possible that older women attribute these symptoms to getting older, as has been observed with other complaints in the past^{12,13}.

Social media act a driving force for upgrading the knowledge awareness among the public regarding the breast cancer screening and providing insight regarding the early intervention and screening^{14,15}. The present study concluded that the awareness among the women regarding breast cancer and its prevention strongly influenced by the social media campaigns or platforms.

Early detection and prevention is the key stone of the Nurse Led Care Program on Breast Cancer Prevention (NLCP). Hence, the awareness status of women regarding breast cancer and its prevention would a valuable pieces evidence for devising the operational plan of the NLCP program.

We acknowledge the following study's limitations: (1) The study is limited to 320 samples only. (2) Time constraints, and (3) this study was done in selected parts of south India; hence the findings of this study could be generalized with utmost caution.

Conclusion

The scope of nursing practice has significantly increased throughout time. Nurse-led care is one example of cutting-edge nursing practice. Since the 1960s, when the phrase "nurse-led care/service" was first used, it has been a part of the nursing discipline. Later, in the 1980s and 1990s, a number of nurse-led services were documented. These units shared the traits of having extraordinarily high standards of practice and nurses who went above and beyond to improve patients' care.

Conclusion

Treatment for breast cancer patients includes thorough education and resources to help people get ready for treatment and the possibility of side effects. A high degree of patient knowledge should be maintained via new methods of information organization. Nurse led clinics are the novel concept in cancer care, so these clinics can serve as a driving force in improving the knowledge and attitude of the public regarding breast cancer and its prevention, through early diagnosis and prompt treatment. Hence the investigators are planning to formulate a nurse-led breast cancer prevention and early referral clinic under the umbrella of JDT college of nursing based on the findings of the present study.

Conflict of Interest: None declared

Source of Funding: Self

Ethical Clearance: The study was approved by the institutional ethical committee of JDT Islam College of Nursing.

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