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EFFECT OF MULTICOMPONENT INTERVENTION ON HEALTH MANAGEMENT BEHAVIOUR AND ATTITUDE TOWARDS BREAST CANCER SCREENING AMONG FIRST DEGREE RELATIVES OF PATIENTS WITH BREAST CANCER

Medical Surgical Nursing

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ABSTRACT

The study aimed to assess the effect of multicomponent intervention on health management behaviour and attitude towards breast cancer screening among first degree relatives of patients with breast cancer seeking treatment from Govt. Medical College Hospital, Kozhikode. The study was based on revised health promotion model by Nola J Pender. A pre – experimental one group pre test post test design with a purposive sampling technique was used to select sample of 40 first degree relatives of patients with breast cancer on treatment from department of Radiation Oncology and department of Surgery in Govt. Medical College Hospital, Kozhikode. The tools used for data collection were semi - structured interview schedule to collect socio personal and clinical data of first degree relatives of patients with breast cancer, checklist to assess health management behaviour among first degree relatives of patients with breast cancer, Likert type scale to assess attitude towards breast cancer screening among first degree relatives of patients with breast cancer. The data were analysed by using descriptive and inferential statistics. There was statistically significant difference between the mean pre test and post test health management behaviour and attitude score before and after multicomponent intervention.The present study concluded that, multicomponent intervention was effective in improving health management behaviour and attitude towards breast cancer screening among first degree relatives of patients with breast cancer.

KEYWORDS

Multicomponent intervention; Health management behaviour; Attitude towards breast cancer screening; First degree relatives; Patients with breast cancer

INTRODUCTION

The global cancer burden is rising mostly as a result of aging and population expansion, as well as an increase in cancer- causing behaviors, particularly smoking. Of all the cancer cases, breast cancer contributes to 23% and accounts for 14% of deaths from cancer. It is also the most frequent cancer among females, with a high diagnosis rate. The incidence of breast cancer is rising quickly in many developing countries as a result of changes in lifestyle, reproductive factors, and increased life expectancy. Breast cancer has surpassed cervical cancer to become the most common malignancy among Indian women living in cities. Indian women are more likely to be diagnosed with breast cancer when it has progressed to an advanced stage, lowering their chances of survival. Early diagnosis improves survival and yields a favorable prognosis.[1] One of the most important risk factors for developing breast cancer is a family history of the disease, especially for women with first - degree relatives who have been diagnosed with the disease. Women with a first - degree female relative who has been diagnosed with breast cancer have a 2 - 4 times higher risk of developing the disease than women without a family history.[2] First - degree relatives, including siblings, children, and parents, are more likely to acquire breast cancer than the overall population. As a result, adopting proper health management behaviors and maintaining a positive attitude about breast cancer screening are critical for early identification, prevention, and better outcomes.

Objectives

- Assess the health management behaviour among first degree relatives of patients with breast cancer.
- Assess the attitude towards breast cancer screening among first degree relatives of patients with breast cancer.
- Evaluate the effect of multicomponent intervention on health management behaviour among first degree relatives of patients with breast cancer.
- Evaluate the effect of multicomponent intervention on attitude towards breast cancer screening among first degree relatives of patients with breast cancer.
- Find out the association between health management behaviour and selected variables.
- Find out the association between attitude towards breast cancer screening and selected variables.

Hypotheses

H_1 - There is a significant difference in health management behaviour among first degree relatives of patients with breast cancer before and after multicomponent intervention.

H_2 - There is a significant difference in attitude towards breast cancer screening among first degree relatives of patients with breast cancer before and after multicomponent intervention.

H_3 - There is a significant association between health management behaviour among first degree relatives of patients with breast cancer and selected variables.

H_4 - There is a significant association between attitude towards breast cancer screening
among first degree relatives of patients with breast cancer and selected variables.

Conceptual Framework

This study is based on the concepts of Revised Health Promotion Model by Nola J Pender (2006).

Methodology

A quantitative research approach was used for the study and it is considered appropriate for the present study. The research design adopted for the present study was pre - experimental one group pre test post test design. The sample of this study comprised of 40 first degree relatives of patients with breast cancer on treatment from department of Radiation Oncology and department of Surgery in Govt. Medical College Hospital, Kozhikode.

Tool And Technique

Tool 1 : Semi - structured interview schedule to collect socio personal and clinical data of first degree relatives of patients with breast cancer.
Technique : Interview
Tool 2 : Checklist to assess health management behaviour among first degree relatives of patients with breast cancer.
Technique : Self report
Tool 3 : Likert type scale to assess attitude towards breast cancer screening among first degree relatives of patients with breast cancer.
Technique : Self report

Data Analysis

The collected data would be organized, tabulated and subjected to statistical analysis with help of SPSS 18. The following methods of descriptive and inferential statistical analysis were planned with the help of experts.

RESULTS

Sample Characteristics

The present study showed that, among sample selected 45 % of participants were belonged to the age group of 40 - 49 years, 65 % of participants were from Hindu religion, 42.5 % had high school education, 67.5 % were house wive, 60 % of participants were belonged to BPL category, 97.5 % participants were taking mixed diet, 90% of participants were married, 47.5 % of participants had two children, 75 % of the participants attained menarche before 12 years of age and only 25 % participants attained menopause which was within

45 - 50 years of age.

57.5 % of the participants were daughters of patients with breast cancer while 35 % were sisters. 7.5 % of the participants were mothers of patients with breast cancer.

Only 7.5 % participants had family history of breast cancer among more than one first degree relative and 12.5 % of the participants had presence of diagnosed medical or surgical diseases.

Health management behaviour of first degree relatives of patients with breast cancer Distribution of participants based on health management behaviour by using checklist

The present study shows that 90 % of participants had fair health management behaviour and only 10 % had good health management behaviour before intervention.

Mean pre test health management behaviour score was 14.23 ± 1.66 and mean post test health management behaviour score was 20.10 ± 1.22.

Attitude Towards Breast Cancer Screening Among First Degree Relatives Of Patients With Breast Cancer

Distribution Of Participants Based On Attitude Towards Breast Cancer Screening By Using Likert type scale.

The present study shows that 95% of participants had favourable attitude towards breast cancer screening and 5% had neutral attitude before intervention.

Mean pre test attitude score was 57.88 ± 5.53 and mean post test attitude score was 67.90 ±2.41.

Table 1 Significance Of Difference Between Mean Pre Test And Post Test Scores Of Health Management Behaviour Among First Degree Relatives Of Patients With Breast Cancer Before And After Multicomponent Intervention

Health management behaviour	Mean	SD	Mean difference	't' value	'p' value
Pre test	14.23	1.66	5.87	21.33	<0.001***
Post test	20.10	1.22			

***Significant at 0.0001 level

Table 1 shows that there is significant difference between the pre test and post test mean score of health management behaviour among first degree relatives of patients with breast cancer at 0.05 level. Hence null hypothesis was rejected at 0.05 levels and it can be concluded that multicomponent intervention was effective in improving the health management behaviour among first degree relatives of patients with breast cancer.

Table 2 Significance Of Difference Between Mean Pre Test And Post Test Scores Of Attitude Towards Breast Cancer Screening Among First Degree Relatives Of Patients With Breast Cancer Before And After Multicomponent Intervention

Attitude	Mean	SD	Mean difference	't' value	'p' value
Pre test	57.88	5.53	10.02	12.33	<0.001***
Post test	67.90	2.41			

*** Significant at 0.001 level

Table 2 shows that there is significant difference between the pre test and post test mean score of attitude towards breast cancer screening among first degree relatives of patients with breast cancer at 0.05 level. Hence null hypothesis was rejected at 0.05 levels and it can be concluded that multicomponent intervention was effective in improving the attitude towards breast cancer screening among first degree relatives of patients with breast cancer.

Association Between Health Management Behaviour And Selected Variables Among First Degree Relatives Of Patients With Breast Cancer

The present study findings shows that there is no statistically significant association between health management behaviour among first degree relatives of patients with breast cancer and selected variables at 0.05 level of significance.

Association Between Attitude Towards Breast Cancer Screening And Selected Variables Among First Degree Relatives Of Patients With Breast Cancer

The study result shows that there is no statistically significant association between attitude towards breast cancer screening among first degree relatives of patients with breast cancer and selected variables at 0.05 level of significance.

DISCUSSION

The present study shows that pre - test health management behaviour score was 14.23±1.66 and mean post test health management behaviour score was 20.10 ± 1.22 which concluded that multicomponent intervention was effective in improving health management behaviour among first degree relatives of patients with breast cancer. Interestingly, this is consistent with a study finding conducted to determine the effect of health education on the health beliefs and behaviors of women with first – degree family history of breast cancer in Turkey, which showed that health education programmes were effective in improving health management behaviour.[3]

The present study confirms that mean pre test attitude score towards breast cancer screening was 57.88 ± 5.53 and mean post test attitude score was 67.90 ± 2.41 which concluded that multicomponent intervention was effective in improving health management behaviour among first degree relatives of patients with breast cancer. The result is in concordance with the result of a quasi experimental study conducted to assess effect of a preventive breast cancer guideline on attitude of healthy women with family history of breast cancer in Mansoura University Hospitals, Egypt, which revealed statistically significant improvement in the healthy women's attitude towards breast cancer screening after implementation of the preventive guideline[4].

CONCLUSION

The present study revealed that the multicomponent intervention was effective in improving health management behaviour and attitude towards breast cancer screening among first degree relatives of patients with breast cancer. The study findings could be used to train the health care workers to conduct health education activities and to provide high quality care.

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REFERENCES

1. Pal A, Taneja N, Malhotra N, Sankar R, Chawla B, Awasthi AA,. et al. Knowledge, attitude, and practice towards breast cancer and its screening among women in India: A systematic review. J Can Res Ther. 2021 Oct;17(6) : 1314 - 21.
2. Mulmi R, Shrestha G, Niraula SR, Yadav DK, Pokharel PK. Screening Practices among First Degree Relatives of Breast Cancer Patients in Nepal: A Cross sectional Study. Asian Pac J Cancer Care. 2021; 6 (3) : 297-303.
3. Olgun S, Dizer B. Evaluating the effect of health education intervention on the health beliefs and behaviors of first-degree female relatives of breast cancer patients. South Asian J Cancer. 2022 Jan; 11(01):14-8.
4. Al-Amri AM. Prevention of breast cancer. J Fam Community Med. 2005;12(2):71-4.