

"Effectiveness of Information Booklet on Knowledge Regarding the Lifestyle Modification among the Breast Cancer Patients."

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ABSTRACT

Introduction

Breast cancer is one of the most common cancers among women worldwide. Lifestyle modification plays important role in improving recovery, quality of life, and prevention from occurring diseases. However, many patients' unawareness about healthy lifestyle practices.

Material and method

A quantitative pre-experimental one-group pre-test post-test design was used. 40 breast cancer patients aged 20–60 years were selected through non-probability purposive sampling. A structured questionnaire with 15 items on diet, exercise, stress management, sleep, and avoidance of alcohol and tobacco was used. A pre-test was conducted, followed by administration of an information booklet, and later a post-test. Data were analyzed using a paired t-test.

Results

Most participants initially showed inadequate to average knowledge. Post-test scores indicated significant improvement, demonstrating the effectiveness of the information booklet at $p < 0.05$.

Conclusion

The study concludes that an information booklet is a simple, low-cost, and effective method for enhancing knowledge regarding lifestyle modification among breast cancer patients. Incorporating structured health education into routine nursing care can empower patients and promote healthier outcomes.

Keywords: Breast cancer, information booklet, knowledge, effectiveness, lifestyle Modification.

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INTRODUCTION

Malignant tumor of breast can manifest in female across all the age groups. It is characterized by the deregulated proliferation of mammary epithelial tissues which lead to the formation of new plastic masses absence of timely intervention in the cancer may spread to the other organs in the body. breast cancer constitutes serious public health challenges and raising awareness is essential for reducing social stigma, facilitating early detection, promoting lifestyle modifications, and ensuring therapeutic intervention.

Breast cancer is a disease in which abnormal breast cells grow out of control and form tumors. If left unchecked, the tumors can spread throughout the body and become fatal. [1]

Due to increasing the breast cancer affecting factors our sedentary lifestyle, deviates the reproductive pattern, lifestyle, obesity, increasing stress, drug consumption and consumption of alcohol which all are contributing to increasing breast cancer. Now advancing the treatment modalities including "Smart bomb" Antibody-drug conjugates that directly delivered to cancer cell while except the healthy cells.

According to the National Cancer institute researchers investigating on to improve understanding of how to prevent, detect and treat cancer effectively. the nci underscores, marked escalation mortality and morbidity within the below economical Nation while

simultaneously highlighting promising therapeutic advancement such as antibiotic drug conjugate (ADCs) and gene target therapies. [2]

According to I.A.R.C. shows increase in breast cancer cases and morbidity and mortality rate globally by 2050. Dis-proportionality affects countries of lower human development index. (HDI).[3]

Various screening methodologies which includes self-examination, clinical breast examination and MRI improve early detection.

NEED OF THE STUDY

Breast carcinoma represents a prevalent malignancy among the females in India and internationally. It constitutes a massive contributor to both morbidity and mortality ratio within the female demographic. A considerable proportion of patients demonstrate insufficient cognizance regarding lifestyle modifications, which are pivotal for recovery and reducing the risk of disease recurrence. This lifestyle modification initiatives are designed to bridge this knowledge deficiency by imparting the education on crucial promoting behaviors.

Research undertaken in December 2020 by Pravallika Choudhary focused on examining awareness, attitudes, and preventive practices concerning breast cancer among women in a government hospital setting in Andhra Pradesh, India.. This show that the most of participants had poor knowledge and low practice of breast cancer screening, so, their positive attitude shows

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Variables	Frequency (f)	Percentage
1. Age		
a) 20-30yrs	11	27.50%
b) 31-40yrs	17	42.50%
c) 41-50yrs	7	17.50%
d) 51-60yrs	5	12.50%
2. Marital status		
a) single	9	22.50%
b) married	20	50%
c) divorced	11	27.50%
3. Educational qualification		
a) No formal education	17	42.50%
b) primary school	12	30%
c) secondary school	6	15%
d) graduate	3	7.50%
e) post graduate	2	5%
4. Occupation		
a) homemaker	14	35%
b) service	15	37.50%
c) student	11	27.50%
5. Stage of the cancer		
a) stage I	11	27.50%
b) stage II	17	42.50%
c) stage III	7	17.50%
d) Stage IV	5	12.50%
6. Duration of treatment		
a) <6 months	12	30%
b) 6-12months	17	42.50%
c) 1-3 years	7	17.50%
d) more than 3 year	4	10%
7. Type of treatment		
a) surgery	18	45%
b) chemotherapy	13	32.50%
c) radiotherapy	6	15%
d) hormonal therapy	3	7.50%

the potential effectiveness of education programs in promoting early detection and reducing mortality.[4] A study was conducted which involved 132 female patients who were randomly allocated into a control group who are receiving support therapy and an intervention group performing home based aerobic, resistance, mobility and recreational exercises. The outcome suggest that a symmetrically organized, exercise programs can effectively enhance the body composition and holistic wellness among breast cancer

survivors, providing a safe, economically viable approach to post treatment rehabilitation.[5]

A pre- experimental study was conducted on 100 reproductive age group (15 year to 45year) old age women at district of Udupi , matte village. To assessing the knowledge was used questioners tool in pre test and post test. After receiving information leaflet shows significant differences in knowledge. Author concluded that thesis significant differences in pre test and post test mean difference 8.58 , t is 25.83. Effectively increased the knowledge among selected participants after using information booklet.[6]

Aim of the study: - Aim of the study is to evaluate the effectiveness on knowledge regarding lifestyle modification among the breast cancer patient.

MATERIALS AND METHODS

In the present study objective are to assess the effectiveness of information booklet regarding the lifestyle modification among breast cancer patients. To find the association between pretest knowledge and demographic variable. The research design for the study was quantitative research design in which pre-experimental study was done . The sample size is 40. the sample are patient who are diagnosed with breast cancer and receiving treatment and follow up care from the selected hospitals. In this study a non-probability purposive sampling technique used. The self-structured questionnaire was used. validity of the tool was conducted for checking the validity in terms and relevance and accuracy of the tool. the necessary correction and modification were done as per the advice given by the expert. reliability process of tool was conducted to determine the consistency, the instrument was reapplied to the same respondent after the specific interval. Using the Karl Pearson's coefficient of correlation formula correlation coefficient value obtained was 0.8, which was greater than 0.7. So, it indicates that the tool was highly reliable for data collection. Pilot study was also done. It confirms the clarity of items and appropriateness of the tool, the tool was found suitable for the main study. The association between the pretest knowledge and demographic variables was considered significantly at 0.05 level and below. Mean, SD, frequency and % was used.

RESULT

Table no. 1: Analysis related to Demographic Variable

n=40

According to the table no.1 most of the participants age were between 31-40years (42.5%). About 27.5% of women were from the 20- 30 years category. This shows that breast cancer cases in the sample are more common among younger women (20-30 years). Half of the respondents were married (50%). A large group of participants were no formal education (42.5%). About 30% had primary school Education level varied widely. The highest percentage were employed in service jobs (37.5%). Most participants were in Stage II (42.5%). The majority were diagnosed at Stage II, showing that many

women seek care once symptoms become more noticeable. The highest proportion had undergone treatment for 6–12 months (42.5%), followed by chemotherapy (32.5%).

Figure no. 1 Finding related to the pretest and posttest regarding lifestyle modification in breast cancer

Figure no. 1 shows a clear improvement in knowledge regarding lifestyle modifications. Baseline assessment indicated limited knowledge among participants, with over one-quarter categorized as poor and a small proportion as good, while most demonstrated average knowledge. Post-intervention results showed complete elimination of the poor knowledge category., and the number of good scorers increased sharply to 77.5%, and only 22% remained in the average range.

Table no. 2 comparison between pre test and posttest knowledge score

In table no. 2 the pretest the mean value is 6.7 and SD is 12.197901 whereas mean of posttest is 12.125 and SD value is 1.97663 so there is increase in the mean value and decrease in SD in post-test .

Calculated value of paired t test was 15.08 with P value 0.000000000000000027 so P value is less than 0.05 level of significance which means null hypothesis rejected and there is effectiveness of information booklet Regarding lifestyle modification among breast cancer patients.

The analysis shows that most demographic variables do not influence pre-intervention knowledge about breast cancer. The only variable showing significant association is marital status which is chi-square value 0.06 and calculated p value is 0.000471 which is less than the significance probability level(0.05).

DISCUSSION

The finding of the study is supported by the similar study and the purpose of the study was too see how well information booklet effective for the breast cancer patient.

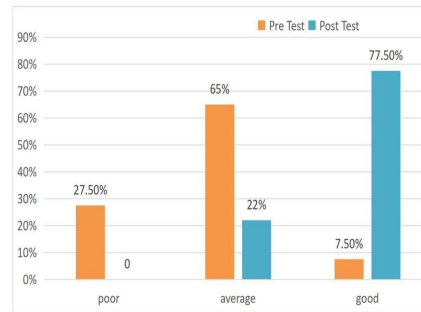
The present study was conducted among the 40 patient from the selected hospital to assess the knowledge level and assessing the association level between knowledge and selected demographic variables. In the pre-test, most breast cancer patients shows limited or inadequate knowledge regarding essential lifestyle modification practices. These findings suggest that many cancer patients often lack information about lifestyle practices that support recovery and reduce recurrence risk.

In this study majority of the patient 42.5% are end of the age group of 31 to 40 years. maximum 50% patient are married and 42% patients have no formal education. Prusty RK, Begum S, Patil A, et al. 2020 According to them Indian research women with more schooling are significantly more likely to be aware of breast cancer symptoms and risk.[7]

Above 37.5% of the patient were service women . Mulidah S, Asrin A, Ulfah AS, Riyadi S. 2025 shows that Most of the women 42.5% were diagnosed with

the stage II this finding supported by studies that many patients benefits from the education intervention [8] and 42.5% patients had treatment duration of 6 to 12 months .

Doval DC, Radhakrishna S, Tripathi R, et al. 2020



According to this Indian evidence showing that surgery is predominant treatment modality among breast cancer patients, with the majority of early breast cancer cases receiving curative surgical procedures as

Knowledge	Mean	SD	Inter Test	P value	Remark
pretest	6.7	12.197901	315.089	0.000000000000000027	Significant
Posttest	12.125	1.97663			

their initial treatment. it supports the study by the majority of the patients (45%) underwent surgical treatment [9]. The findings in this study was supported by the various previous studies. Nisha B, Murali R. 2020, patients demonstrated better understanding and clarity regarding all components included in the booklet. This is supported by an Indian study which reported that structured breast health education significantly increased post-test knowledge among women in Tamil Nadu.[10]

Statically there is no association between the demographic variable and pre test score.

CONCLUSION

In this study Data analysis was performed using frequency, percentage, paired t-test, and p-value to assess the effectiveness of the informational booklet. The pre-test findings revealed mean value 6.7 and standard deviation value is 2.1979 indicates that patients had inadequate to moderate knowledge regarding lifestyle modifications, including stress management , seek support , maintain a healthy weight, eat a balanced diet, get enough sleep, avoid alcohol and tobacco, mindful eating, embrace life after breast cancer. Following the distribution of the informational booklet, a substantial improvement was observed in the post-test knowledge mean score which is 12.125 and standard deviation was 1.976 . Analysis using a paired t-test showed a highly significant improvement in knowledge following the intervention (p < 0.05). This result provides strong evidence that

the information booklet substantially enhanced patients' knowledge levels. These results underscore the value of information booklets as a practical and accessible educational tool for promoting awareness about lifestyle modification among breast cancer patients. In summary, the informational booklet proved to be a simple yet impactful method to improve knowledge about lifestyle modification among breast cancer patients, reinforcing its potential for integration into routine nursing practice and patient care.

Conflict Of Interest

The authors certify that they have no involvement in any organization or entity with any financial or personal conflict of interest related to this study.

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