Effectiveness of Empowerment Programme on Breast cancer & training on Breast Self-Examination among women in selected rural/ST areas, Tirupati AP, India

A.Padmaja, T.Rajeswari, R.Pavithra

1Vice-Principal, College of Nursing, SVIMS, Tirupati, 2,3 M.Sc(N) students, College of Nursing, SVIMS, Tirupati, Andhra Pradesh, India

Abstract
The study was aimed to assess the skill on Breast Self-Examination among women in rural/ST areas of Tirupati.

Objectives:
- To assess the knowledge on breast cancer among rural women after empowerment programme
- To assess the effectiveness of Breast Self-Examination after skill training programme among rural/ST areas women
- To find out the association between level of knowledge on breast cancer with selected demographic variables
- To find out the association between skills on Breast Self-Examination with selected demographic variables

Methodology:
A Quasi Experimental Post-Test only research design was adopted, 100 women in rural and ST areas of Tirupati was selected by using the simple random sampling technique. The data collection was done by using the procedure checklist on Breast Self-Examination, socio-demographic data & post-test questionnaire on breast cancer awareness.

Results:
The study results revealed that 6% had inadequate knowledge, 29% had moderately adequate knowledge and 65% had adequate knowledge on breast cancer and it shown that majority 100 shown good skills after post test.

Conclusion:
Breast self examination is one of the effective method to detect the breast cancer at the earlier stage which can be cured immediately but due to lack of knowledge it was not been able to carry out by the women but at present study have a shown a clear idea that by means of effective education and skill demonstration the level of knowledge can be increased and this need to practiced to have better results.

Key words: Empowerment programme, Breast cancer, Breast self-examination.

I. Introduction:
“It is health that is real wealth and not piece of gold and silver”- Mahatma Gandhi

Back ground of the study:
Breast cancer rates are increasing among all the known cancers in world. Most of the cases are diagnosed with breast cancer in India. Breast cancer had spread regardless of age/religion or gender, both in rural and urban areas. Breast cancer ranks first among Indian women. Current Indian scenario reveal that one in 22 women develop breast cancer, out of two who develop it, one dies. 1

Most often the younger women are affected with breast cancer due to lack of awareness among them. Out of them, half of the women are presented in advanced stages. Middle aged women plays pivotal role as a life partner and mother such productive women are now getting entangled with this increasing menace of breast cancer. Most probably breast cancer occurs due to lifestyle influence and by faculty gone as a hereditary factor.

Worldwide, breast cancer leads first to cause deaths among women. 1 in 22 women in India have probability in their life time to develop breast cancer no of new cases of breast cancer in India is around 115000 per year it is one of the curable cancers if detected early to prevent the breast cancer at early stages breast self-examination would be a useful diagnostic method at home itself. 2
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For many years, women have been taught methods of breast self-examination (BSE) and it is recommended that they practise this regularly (Boyle et al, 1995; Shapiro et al, 1998), usually every month. Breast self-examination is appealing as a routine screening method because the examination has no financial cost (apart from the initial instruction sessions) and can be conducted in private. Most studies on the effectiveness of BSE have been observational. They suggest that women who practise BSE are more likely to find their breast tumour themselves, that the tumour tends to be smaller and that these women have an increased survival (Hackshaw, 1996; International Agency for Research on Cancer (IARC), 2002). However, survival time as an outcome measure can be misleading because of lead-time bias, in which BSE only identifies cancers at an earlier stage but has no effect on prognosis. Using mortality rates instead of survival time can overcome much of this bias.

Recently, the International Agency for Research on Cancer (2002) published a review on breast-cancer screening that reported the individual results from observational studies of BSE in relation to survival and stage of cancer, and those from Randomised trials and cohort studies in relation to mortality. We look at three aspects of BSE; women who practise BSE, women who find their cancer during one of their regular examinations, and women who are taught BSE and advised to practise it regularly.

Thus, the present study aimed at identifying the level of knowledge and practice of BSE among rural women who are the citizens of the future and they can teach their family members, neighbours, friends, and the community which helps the people to detect breast cancer in the early stage. Hence, incorporating the BSE concept in the community and make it as a routine assessment of females.

NEED FOR THE STUDY:

Breast cancer is a non-existent entity for a majority of population until their close one’s are affected. The reasons for late detection of breast cancer includes lack of awareness, fear about the disease, low socio-economic status, stigma about the damage to physical features.

One potentially important strategy in reducing the breast cancer mortality is to use the breast self-examination (BSE), clinical breast examination and mammography as screening methods for the early identification of breast cancer among women. BSE is used to improve self-care among women, as it increases awareness regarding breast cancer, risk factors and early identification of the disease. BSE is considered as a simple, inexpensive, quick, non-invasive intervention for early identification of disease, in poor resources countries.

In India, breast cancer ranks first among all cancers today. The GLOBOCAN 2018 study by the International Agency for Research on cancer shows there were 1,62,468 new cases and 87,090 deaths were reported for breast cancer. Lack of awareness on breast cancer is the biggest challenge in reducing the disease burden. So, the awareness on breast cancer and breast self-examination study was initiated to reduce the stigma and casual wrong perceptions about the screening procedures among the women.

Subha S 2015 have conducted an experimental study to assess the effectiveness of structured teaching programme on self breast examination among the families of defence personnel, and found that there was an increase in the knowledge regarding breast cancer after the delivery of the structured teaching programme. 22.5% of the samples scored poor in the pre test whereas only 10% of the samples scored poor in the post test.

HemalathaKumarasamy, A had conducted a study on Determinants of Awareness and Practice of Breast Self Examination. Among Rural Women and found that only 26% of the women were aware of BSE. Only 18% of the females had ever checked their breast and 5% practiced it regularly. Awareness of BSE was found to be significantly associated with age and educational attainment.

Prevalence of breast cancer in India (2018)

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II. Material & Methods:

Research Design: Post test only design
Setting Of the study: Rural women in Tirupati
Population: Women who are attending to the programme
Sample Size: 100 women who are attending to the programme
Sampling technique: Simple random technique

CRITERIA FOR SAMPLE SELECTION:
Inclusion criteria:
• Women who are in the reproductive age (above 18 years)
• Women who are willing to participate
• Women who can understand the language

Exclusion criteria:
• Women who are attending the programme
• Women who cannot understand the language
• Who are mentally ill

INSRUMENT:
The instrument was organized under the following
Part-I: socio demographic data
Part-II: knowledge questionnaire on breast cancer
Part-III: Check list to assess the skill on breast self examination

Scoring interpretation:
Scoring key prepared for part-I by coding the socio demographic data. In part-II correct answer has a score of 1 mark and wrong performance scores 0. The maximum score was 10. And part-III was given 1 mark for good performance and 0 for poor performance the maximum score was 18.

Content Validity:
Tool was given to 10 experts constituting nursing personnel.

Reliability of the tool:
The reliability of the tool was established by using split-half method. The reliability of tool was r= 0.09

DATA COLLECTION PROCEDURE:
Hundred women were been taken for the study, the women were been gathered in the form of small groups and they were been educated regarding the beast cancer and breast self examination by using audio visual aids and the data was been collected by using random sampling technique, women available during the day time and it has taken 10 working days to collect the data, the permissions were priory taken from the local in charges and from the college and collected the data.

DATA ANALYSIS:
Descriptive (Percentage, Mean, Standard deviation) and Inferential (chi-square, t-test) statistics were used.

III. Findings:

SOCIO - DEMOGRAPHIC DATA

Table-1: Frequency distribution of demographic variables and association of selected demographic variables with level of knowledge. N=100

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>Frequency (%)</th>
<th>X^2</th>
<th>P value (&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age in Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) &lt;30</td>
<td>12</td>
<td>6.93</td>
<td>0.327 (NS)</td>
</tr>
<tr>
<td>b) 30-40</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) 40-50</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d)&gt;50</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Educational status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Illiterate</td>
<td>18</td>
<td>8.18</td>
<td>0.224 (NS)</td>
</tr>
<tr>
<td>b) Primary education</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Secondary education</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Intermediate and above</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Occupation</td>
<td></td>
<td>3.446</td>
<td>0.667 (NS)</td>
</tr>
<tr>
<td>a) Home maker</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Government employee</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Private employee</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Self – employee</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Marital status:
- Married: 94
- Unmarried: 1
- Divorced or widow: 5

Number of children delivered?
- Nil: 5
- One: 17
- Two: 59
- Three: 19

Age at delivery of first child?
- < 35 years: 98
- 35-44 years: 1
- > 44 years: 1

Have you had any abortions?
- Yes: 19
- No: 81

Family history of breast cancer?
- Yes: 1
- No: 99

Age at menarche?
- Less than 12 years: 28
- 13-15 years: 41
- 16 and above: 30

What is the age of your menopause?
- < 40 years: 28
- > 40: 38
- Not attained: 34

Are you taking hormones to reduce menopausal symptoms?
- Yes: 0
- No: 100

Do you have habit of consuming alcohol?
- Yes: 0
- No: 100

Have you been diagnosed as breast cancer?
- Yes: 0
- No: 100

Previous knowledge on breast cancer?
- Yes: 26
- No: 74

If yes, what is the source of information? (N=26)
- Family members or friends: 2 (7.7)
- Mass media: 4 (15.3)
- Health professionals: 20 (77)

Have you ever heard about Breast Self-Examination?
- Yes: 16
- No: 84

If yes, did you have performed Breast Self-Examination? (N=16)
- Yes: 9 (56)
- No: 7 (44)

Note: * = Significant at P<0.05   NS=No significant,   S= Significant

Interpretation: Previous knowledge about breast self examination and age and menarche has significant association with level of knowledge on breast cancer and other demographic variables was not significant.

Table-2: Frequency and mean of level of knowledge on breast cancer N=100

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Score</th>
<th>Frequency</th>
<th>Mean ±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate knowledge</td>
<td>&gt;5</td>
<td>6</td>
<td>7.78±1.98</td>
</tr>
<tr>
<td>Moderately adequate knowledge</td>
<td>5-7</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Adequate knowledge</td>
<td>&gt;7</td>
<td>65</td>
<td></td>
</tr>
</tbody>
</table>

Interpretation: table-2 showed there was good adequate knowledge on breast cancer among rural women as mean score was 7.78±1.98
Table-3: Frequency and mean of level of practice on breast self-examination

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Score</th>
<th>Frequency</th>
<th>Mean ±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor practice or skill</td>
<td>&gt;9</td>
<td>0</td>
<td>14.38±2.06</td>
</tr>
<tr>
<td>Good practice or skill</td>
<td>&lt;9</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Interpretation: table-3 showed there was good skill on practicing self-breast examination among rural women as mean score was 14.38±2.06.

(No association can be done for level of practice and demographic variables as all are having good practice only)

IV. Discussion:
Breast cancer is the most common malignancy affecting the women, it can be detected early by breast self-examination. The present study aimed at assessing the level of knowledge and practice of breast self-examination among rural women which has shown a significant results that women are lacking knowledge on breast self-examination.

The first objective of the study is to assess the knowledge on breast cancer among rural women
The present study has shown the results that 6% of the women had inadequate knowledge, and 29% had moderately adequate and 65% had adequate knowledge on breast cancer after giving required education.

Suwarnamadhukumar, has conducted a study on awareness about breast carcinoma and practice of breast self-examination among basic sciences' college students, Bengaluru and found that 58% had a knowledge of at least one of the symptoms and 59% knew at least one of the risk factors for breast carcinoma. Only 185 (18%) women knew about BSE and 107 women practice it.

The second objective of the study is to assess the effectiveness of Breast Self-Examination skill training programme among rural women
The present study shows that after giving effective education to the women the skill of the women has been assessed by using a check list and found to have 100 women are having good level of skills in performing the breast self examination

Hiwotabera had conducted a study on Effectiveness of planned teaching intervention on knowledge and practice of breast self-examination among first year midwifery students and found that the mean knowledge difference for the pre-post intervention is 0.18±0.695 (P < 0.05). The respondents’ pre- post interventions score of satisfactory practical competency were 10(16.4%) and 43(70.5%), respectively as well.

The third objective of the study is to find out the association between level of knowledge on breast cancer with selected demographic variables
The present study shows Previous knowledge about breast self examination and age and menarche has significant association with level of knowledge on breast cancer and other demographic variables was not significant.

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The fourth objective of the study is to find out the association between skills on Breast Self-Examination with selected demographic variables
The present study shows that previous knowledge about breast self examination and age and menarche has significant association with level of knowledge on breast cancer and other demographic variables was not significant.

HemalathaKumarasamy, A had conducted a study on Determinants of Awareness and Practice of Breast Self Examination. Among Rural Women and found that only 26% of the women were aware of BSE. Only 18% of the females had ever checked their breast and 5% practiced it regularly. Awareness of BSE was found to be significantly associated with age and educational attainment.

V. Conclusion:
Breast cancer is one of the most dangerous type of cancer in the developing countries like India, where the women are considered to be the vulnerable group and they were the group who were at risk for many diseases and most commonly the breast cancer affects the women, which can be identified at the earlier stage by using breast self examination, the present study aimed to reduce the mortality and morbidity rate of breast
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cancer by means of providing awareness on breast self examination among women in rural and ST areas of tirupati.
By practicing the BSE, breast cancer can be identified at the earlier stage and the treatment regimen could be possible.

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Ethical clearance: taken from scientific research ethics committee, faculty of nursing SVIMS.

Source of funding: Self
Conflicts of interest: Nil

Reference:
[2]. https://www.wci.co.in/our-activities/pinkathon
[6]. Dr. P K Julka, “Lifestyle modifications are key to reduce the risk of breast cancer”, Times of India, Dec. 19, 2019. 21:00 IST.
[7]. GLOBOCAN 2012 (IARC), Section of Cancer Surveillance (15/1/2015)