Assessment of the Knowledge on Breast Self-examination among Women in Selected Tertiary Hospital at Kelambakkam, Kancheepuram District, Tamil Nadu, India

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Abstract
The research approach used for the present study was descriptive research design which involves the assessment of the knowledge on breast self-examination among women in selected tertiary hospital, Kelambakkam, Kancheepuram District, Tamil Nadu, India. The sample of the study was chosen by purposive sampling technique, which includes 256 women who are in hospital.

The data collection was validated and reliability was determined and pilot study was conducted, following which the data collection was carried out. Data procured was interpreted by descriptive and inferential statistics. Analysis of data was executed in terms of frequency percentage distribution, mean and standard deviation, chi-square test for the assessment of knowledge on breast self-examination among women.

The study finding was revealed that 17.58% had inadequate knowledge, 56.64% had moderate knowledge and 25.78% had adequate knowledge. Most of the women had a moderate level of knowledge on breast self-examination practices. In assessing associate the level of knowledge on breast self-examination with the selected demographic variables among women with age 30-50 years it shows various frequency and percentages and it is very important to do find the association of level of knowledge . In regarding to any history of level of knowledge on breast self-examination among women with age 30-50 years is significant association between age, number of childrens, education and occupation (p value =<0.05). There is no significant association with the other demographic variables with the level of knowledge on breast self-examination among women.

Keywords: Knowledge, breast self-examination, women.

Introduction
Breast Self-Examination (BSE) is a screening method used in an attempt to detect early breast cancer.

The method involves the women herself looking at and feeling each breast for possible lumps, distortions or swelling.

Breast self-examination were once promoted heavily as a means of finding cancer at a more curable stage, but large randomized controlled studies were found that it was not effective in preventing death and were actually caused harm through needless biopsies, surgery and anxiety. Breast awareness is an informal alternative to structured breast self-examinations.

Breast cancer is the second leading cause of cancer deaths in women and poses a global public health concern(1). There is an increased burden of breast
cancer were in both developed and developing countries including Uganda(1,2). Globally, over one million breast cancer cases were diagnosed annually(1). These amount to a total 411,000 deaths from breast cancer accounting for 14% of female cancer deaths worldwide(3,4). It is estimated that about half (60%) of breast cancer deaths occur in economically developing countries(4,5).

The incidence of breast cancer in Uganda is unknown, although reports show that breast cancer is the third most common cancer among women with a low five-year survival rate estimated at 56%(6). This is attributed to breast cancer being an invasive and aggressive disease and is associated with a poorer prognosis in older women(6). Early detection rates were through breast self-examination (BSE) plays an important role in decreasing the morbidity and mortality rates in addition to several other factors(7). Contributory factors to breast cancer mortality rates were include genetics and poverty and unequal access to prompt quality treatment coupled with inadequate awareness and knowledge of the disease(2). Inadequate knowledge about breast cancer were documented as an important factor in preventing women visiting screening facilities, engaging in BSE and delayed treatment and thus contributes to the high morbidity and mortality rates(3,8,9).

Numerous studies have indicated the need for conducting more research on breast cancer knowledge, screening practices and factors such as lifestyle changes to address the increasing morbidity and mortality rates(10). Such studies should be extended to female university students to strengthen BSE behaviors and practice to reduce breast cancer-related deaths in women under the age of 35(11).

Hemalathakumarasamy et al, (2017) conducted study on Determinants of awareness and practice of breast self examination among rural women in Trichy, Tamil Nadu. The aim of the study is to assess knowledge and practice of breast self-examination among females. A cross-sectional study was carried out among a total sample of 200 women. And the data were collected using the structured interviewer-administered questionnaire variables. The mean age of the study group was 36.9 ± 8.8 years. Eighty percent were literates. Most of the women 89% had aware of breast cancer. Only 26% of the women were aware of breast self examination. Only 18% of the females had ever checked their breast and 5% practiced it regularly. Awareness of breast self examination was found to be significantly associated with age and educational attainment. The level of knowledge and practice of breast self examination among females were unacceptably low and efforts should be made to increase level of knowledge and practice of breast self examination through health education programs(12).

**Statement of the Problem:** Assessment of the knowledge on breast self examination among women on selected tertiary hospital at Kelambakkam, Kancheepuram District, Tamil Nadu, India

**Objectives:**

- To assess the knowledge on breast self-examination among women who came for hospital
- To determine the association between the selected demographic variables with level of knowledge on breast self-examination among women.

**Operational Definitions:**

1. **Effectiveness:** The degrees to which objectives are achieved and the extent to which targeted problems are solved. It is the capability of producing a desired result among women in selected tertiary hospital.
2. **Knowledge:** Knowledge is a familiarity with someone or something and it can include facts, information, descriptions, or skills acquired through experience or education. It can refers to the theoretical or practical understanding of a subject.
3. **Breast self-examination (BSE):** A Breast self-examination (BSE) is an inspection by a woman of her breasts to detect breast cancer early.
4. **Assess:** Determine or evaluate the knowledge on breast self-examination among women.

**Materials and Method**

**Research Approach:** The choice of the appropriate research depends on the purpose of the study. The main objective was to assess the level of knowledge on breast self-examination among women in selected tertiary hospitals with the structured questionnaires. Hence an experimental approach was adopted by the investigator.
Research Design: The term research design refers to the plan of organization of scientific investigations. The research design selected for the present study is descriptive research design. The variables are clearly identified and defined in the study.

Research Setting: The study was conducted among women on selected tertiary hospital at Kelambakkam, Kancheepuram District, Tamil Nadu, India.

Population: Population refers to comprised of women those who are getting treatment in Chettinad hospital and research institute, Kelambakkam, Kancheepuram District, Tamil Nadu, India.

Sample: The women those who are getting treatment in Chettinad hospital and research institute, Kelambakkam, Kancheepuram District, Tamil Nadu, India.

Sample Size: Sample size consist of 256 samples who fall under inclusion criteria

Sampling Technique: As the selection of sample depends on availability of patients, purposive sampling technique was adopted based on inclusion criteria.

Criteria for Sample Selection:

Inclusion Criteria:
- Women who are willing to participate
- Who can understand english/tamil

Exclusion Criteria:
- Who have underwent breast surgery.
- Who have exposed to previous teaching programme about breast self examination.

Procedure for the data collection: The investigator obtained prior permission from head of the department of medical surgical nursing to conduct the study. 256 samples were selected by non probability purposive sampling technique with minimum of 52 cases per day from 8.30am – 12.30pm and from 1.15pm – 4.00pm.

The names of the patients were obtained. The investigator introduced to each participants and explained the purpose of the study and took a written consent. The investigator administered structured questionnaire to the patients. The data collection took 10- 20 minutes for each patients. After the completion of the data collection the investigator educated the participants regarding the breast self examination and thanked the participants for their co-operation.

Findings: In assessing level of knowledge on breast self examination among women
- 45 (17.58%) of women have inadequate knowledge.
- 145(56.64%) of women have moderate knowledge.
- 66(25.78%) of women have adequate knowledge.

Figure 1: Frequency and percentage distribution of level of knowledge on breast self examination among women
Table 1: Mean, Mean% and Standard deviation of level of knowledge on breast self examination among women. N=256

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Level of Knowledge</th>
<th>Mean</th>
<th>Mean%</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INADEQUATE</td>
<td>13.01</td>
<td>13.01%</td>
<td>4.55</td>
</tr>
<tr>
<td>2</td>
<td>MODERATE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>ADEQUATE</td>
<td></td>
<td></td>
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</tbody>
</table>

**Discussion**

Most of the women had moderate knowledge (56.64%) on breast self examination. There is a significant association between age, number of children, education and occupation (p value =<0.05). There is no significant association with the other demographic variables with the level of knowledge on breast self examination among women.

In assessing associate the level of knowledge on breast self examination with the selected demographic variables among women with age 30-50 years.
26-30 years, (50%) belongs to the age group of 31-35 years, (30.86%) belongs to the age group of above 35 years.

In regarding to marital status, (92.97%) belongs to the married, (3.91%) belongs to the single, (2.73%) belongs to the divorced, (0.39%) belongs to the widow.

In regarding to number of children, (9.77%) belongs to the no children, (31.25%) belongs to the one children, (43.75%) belongs to the two children, (15.23%) belongs to the more than two child.

In regarding to education, (22.27%) belongs to the no formal education, (22.27%) belongs to the high school level, (25%) belong to the higher secondary school level and (30.46%) belongs to the graduate & above.

In regarding to occupation, (1.17%) belongs to the student, (30.47%) belongs to the business women/civil servant, (3.13%) belong to the farmer and (65.23%) belongs to the house wife.

**Conclusion**

The study findings revealed that, majority of women were having inadequate and moderate knowledge and most of the demographic variables were statistically significant and concluded the assessment of level of knowledge on breast self examination among women as an importance in determination of early prompt treatment.

**Conflict of Interest:** Nil

**Source of Funding:** Self

**Ethical Clearance:** Chettinad Academy of Research and Education, Institutional Human Ethics Committee on 04/02/2019. ([Proposal no. 318/IHEC/1-19](#)).

**References**


