A Descriptive Study to Assess the Knowledge Regarding Breast Self-examination among Female Population (20-40years) in Selected Rural Area in Varanasi (U.P.)

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ABSTRACT

A Descriptive study to assess the knowledge regarding Breast Self-examination among female population (20-40years) in selected sundarpur, at Varanasi. This study aimed to assess the knowledge regarding Breast Self-examination among the female Population. **Objective -** The main objective of the study is to assess the level of knowledge regarding Breast self-examination among the female population and association between selected demographic variables and knowledge regarding Breast self-examination among female population. **Methods –** A Quantitative research approach and descriptive research design was used. the sample size of 50 females (20-40 years) were selected by using purposive sampling technique. The written consent was obtained from samples. The tool used was. Performa of demographic variables, self-structured knowledge questionnaire. Assessment of preexisting level of knowledge done by administering knowledge questionnaire. **Result -** The result of the study revealed that the majority of samples 70% of sample subjects had inadequate knowledge and 20% had moderate level of knowledge and 10% had adequate level of knowledge. **Conclusion-** The study concluded that females had inadequate knowledge regarding breast self-examination process and steps and there is a strong need to improve the knowledge level of females in rural community area.

KEYWORDS: Breast cancer, Breast self-examination, Menopause, Malignancy, Mammography

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BACKGROUND

Breast self-examination (**BSE**) is a screening method used in an attempt to detect early breast cancer. The method involves the woman herself looking at and feeling each breast for possible lumps, distortions or swelling.[1] It is a technique by which a thorough inspection and palpation of the breast is made to collect data about the breast condition of the mother.[2]

Breast cancer is the most prevalent malignancy among female populations and is responsible for the second-highest number of cancer-related deaths in American women. This activity reviews breast self-examination and highlights the role of the healthcare team in educating patients who are undergoing breast cancer screening.[3]

According to GLOBOCAN, it is the most common cancer in women, accounting for 25.1% of all cancers.[4] Breast Cancer is the most leading cause of mortality and morbidity in both developing and developed countries.[4] These days it is evidenced that the incidence of breast cancer is increasing rapidly. Female breast has been regarded as a symbol of beauty, sexuality and motherhood. Any actual or suspected disease or injury breast the threat of mutilation or loss of a breast may be devastating for the women because of psychosocial sexual and body image implication significance associated with it".[5]

Breast Self-examination although not having been shown to be effective in reducing mortality is still recommended as a general approach to increasing breast health awareness and thus potentially allow for early detection of any anomalies Furthermore, BSE continues to be recommended by the health care practioness because it is free, painless and easy to practice or sample, convenient, non-invasive minimal risk and inexpensive method Women should begin. [6]

In 2020, there were 2.3 million women diagnosed with breast cancer and 685 000 deaths globally. As of the end of 2020, there were 7.8 million women alive who were diagnosed with breast cancer in the past 5 years, making it the world's most prevalent cancer. [7] In 2022, an estimated 287,500 new cases of invasive breast cancer will be diagnosed in women in the U.S. as well as 51,400 new cases of non-invasive (in situ) breast cancer. [8]

Breast self-examination has long been recommended by health care practitioners as a complement to mammography and clinical breast examination. The individual and group training in BSE with guidest practice has showing an improvement. [9]

Need of the study
Breast self-examination is an ideal, safe effective and cost free method which can be done by every women at her leisure time with little training. [10] Breast self-examination helps women to find their breast cancer early. Despite in increase in women literacy rate and knowledge about breast cancer.

There are certain barriers to practice breast self-examination, worry about breast cancer, embracement, lack of time, unpleasant of procedure due to lack of privacy, fear of discovery a lump and unfavorable attitude fowards breast self-examination Health care providers such as nursing students are source of information to the society. [11] They need to be provided with necessary information on breast self-examination. These days incident and death rate of breast cancer is increasing rapidly which can be proven by the below graph.

Breast self-examination is easily detected by adolescent girl, so that the priority is given to all girls in which how and when to examine their breast. Early diagnosis affords a better chance of survival and better prognosis in absence of an exact etiological agent for breast cancer.

If the all groups of women are targeted with accurate information and encouragement they will learn to examine themselves and detect changes in earl ' and their later life. Many women are feel that doing a breast self-examination is an important part of their health care. It helps them to learn how their breast normally feels. So that if they find a lump they will know her something to discuss with their health provider.

OBIECTIVE OF THE STUDY
➢ To assess the level of knowledge regarding Breast self-examination among the female population.
➢ To find out the association between selected demographic variables and knowledge regarding Breast self-examination among female population.

RESEARCH HYPOTHESIS:-
The hypothesis used in the research is a tentative statement of the expected relationship between two or more variables in a specified population. [12]
➢ H1 – there will be a significant association between knowledge scores with their selected demographic variables.

ASSUMPTIONS
➢ The tool which ts prepared by the researcher will be adequate to measure the level of the know ledge of the female population about Breast self-examination.
➢ The female population may not have sufficient knowledge regarding breast self-examination.

MATERIAL AND METHODS:
➢ **Research Design** – The research design refers to the researcher's overall plan for obtaining answers to the research questions or for testing the research hypotheses. [13] The Non – Experimental Research Design used..

➢ **Setting** – the study was conducted in Sundarpur community area.

➢ **Population** – Accessible population for this study includes female in Sundarpur Community area.

➢ **Sample** - Selected 50 female samples.

➢ **Sampling technique**- the sample were selected for this study by non-probability purposive sampling technique.

➢ **Validity** – The content validity is the degree to which an instrument measures what it is intended to measures. [14] The content is valid correction is done by very expertise regarding tools.

➢ **Pilot study**- It involves a miniature, trial version of the planned study that is conducted to prepare for the main study . [15] Only 05 females were selected by the convenient sampling technique for the test from the total population.

Data Analysis-
The demographic variables were organized by using descriptive measures (frequency and percentage). The

data from the structured knowledge questionnaire will be analyzed using mean, mean percentage and standard deviation (SD). The association between the level of Knowledge and the selected demographic variables were assessed by Chi-Square test.

OPERATIONAL DEFINITIONS:

➢ **ASSESS:** to evaluate the knowledge regarding Breast Self-examination and Breast cancer as an early screening measure

➢ **KNOWLFDGE:** It refers to the correct response of respondents to the on breast self-examination achieved by the know ledge scores.

➢ **BREAST SELF-EXAMINATION**: It refers the examination of breast by self.

ORGANISATION AND PRESENTATION OF DATA:-

➢ **SECTION- I - Description of demographic variables of the female population.**

➢ **POPULATION**: It is a group of people that are living together in certain area.

ANALYSIS AND INTERPRETATION-- DISCUSSION –

The findings of the study are discussed under the following sections:-

➢ **Section I –** Description of samples characteristics according to their selected demographic variables.

➢ **Section II –** knowledge of female population regarding Breast self-examination.

➢ **Section III –** Association between selected demographic variables and knowledge score of female regarding Breast self-examination.

Table 3.1 – frequency and percentage distribution of the demographic variables of sample subjects

S.NO.	DEMOGRAPHIC CHARACTERISTICS	CATEGORY	FREQUENCY	PERCENTAGRE
1	AGE	20-25	11	22%
		25-30	9	18%
		30-35	19	38%
		35-40	11	22%
2	RELIGION	Hindu	42	84%
		Muslim	8	16%
3	EDUCATION	Illiterate	1	2%
		Primary	8	16%
		Higher Secondary	23	46%
		Graduate	18	36%
4	TYPE OF FAMILY	Nuclear	24	48%
		Joint	26	52%
5	PREVIOUS HISTORY OF BREAST CANCER	YES	2	4%
		NO	48	96%

Table 3.1 – shows that there was a association between demographic variables. Hence, tabulated value is equal to calculated values which suggest association.

* **Age**-Present study reflects that majority of females were from the age group 30-35 years around 19 (38%), 11(22%) were of 20-25 years 11(22%) were of 35-40 years and 9 (18%) were of 25-30 years. And the total calculated values 1.5 and tabulated value 7.8, it showed the age were NS*. At $P<0.05$ level of significant.

* **Religion**--Most of the samples were Hindu and Muslim about 84% and 16% respectively and the calculated value were -23.12. table value 1.0 which Showed the S** at $P<0.05$ level of significant.

* **Type of family**--In this study around 5.2 were belongs to joint family where as others were 48°o from nuclear family. And the calculated value were .08, table value were 12.71. Which showed that the level of significant were S** at P<0:05 level of significant.

* **Education-** Study findings reveals that the majority of respondents, 46% were higher secondary and 36°o were graduate, 16% were primary, and 21 were illiterate and calculated value were 24.4, table values were 7.82, which showed that the level of significant were S** at $P<0.05$ level of significant.

* **Previous history of breast cancer-**, Thu is study proves the previous history of breast cancer in which majority of respondents. 96% were not having and 4% were having the history of breast cancer. And the calculated value were 46, and table value were 12.71 which showed the S** at $P<0.05$ level of significant.
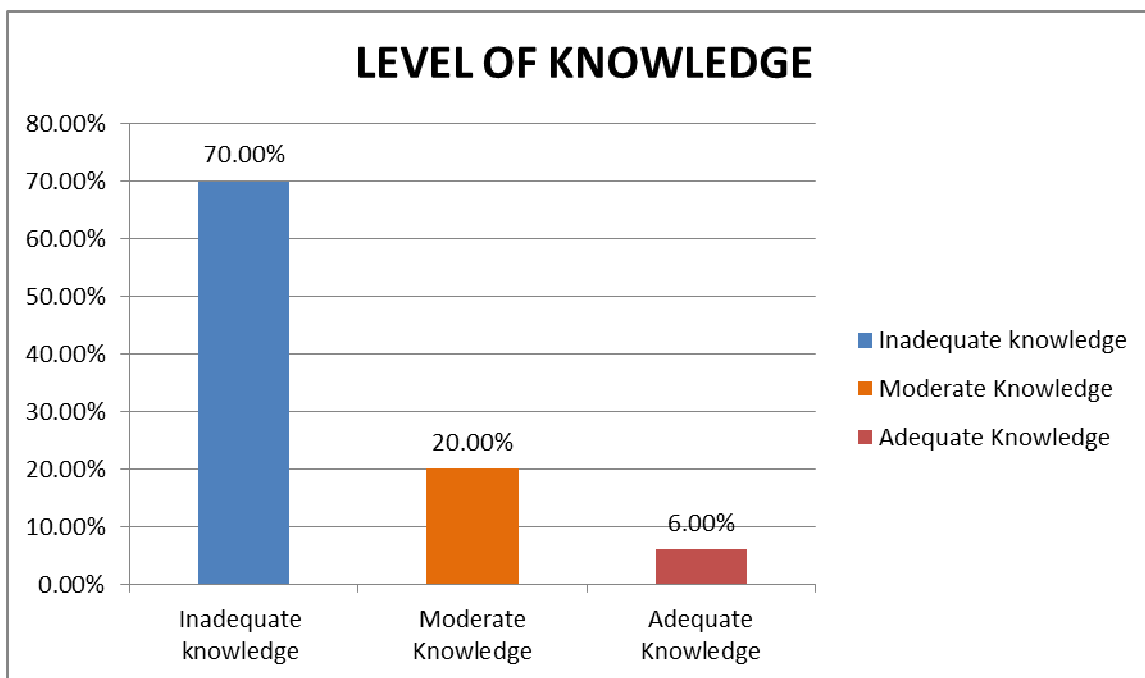
SECTION –II

Knowledge of females regarding Breast Self-examination

This section describes the frequency percentage distribution of sample subjects according to the level of knowledge regarding breast self-examination. The knowledge scores obtained through structured knowledge Questionnaire are analysed using descriptive statistics.

TABLE 4 –Frequency and percentage distribution of sample subjects according to the level of knowledge

s.no.	Level of knowledge	Frequency	Percentage
1	Inadequate knowledge (≤50%)	25	70.00%
2	Moderate knowledge (51-70%)	12	20.00%
3	Adequate knowledge (≥71%)	06	6.00%

Figure –(a) Bar diagram showing percentile distribution of sample subjects according to their knowledge regarding breast self-examination

Table 4.1 and figure 4.1 shows majority (70%) have inadequate level of knowledge and (20%) have moderate level of knowledge, (6.00%) have adequate level of knowledge regarding Breast Self-examination.

Table 4.2 FINDINGS RELATED TO KNOWLEDGE OF SAMPLES SUBJECT RELATED TO BREAST SELF SEAMINATION

Mean, Mean Percentage, standard deviation of aspect of breast self-examination

Aspect of breast self-examination	Mean	Mean %	Standard deviation
Knowledge of breast self-examination	45.46	45.46%	2.25

SECTION III ~ ASSOCIATION BETWEEN SELECTED DEMOGRAPHIC VARIABLE AND THE KNOWLEDGE SCORE OF FEMALE REGARDING BREAST SELF-EXAMINATION.

Table -5.1 Association between the age and the knowledge of the respondents about Breast self-examination

Variable	Calculated Value	Tabulated Value	Level of Significant
Age	4.7	7.8	NS*

* Not Significant at $P<0.05$ level of Significant

In table 5.1, the analysis showed that the calculated value less then tabulated value. Hence, the age is non-Significant.

Table-5.2 Association between religion and knowledge of the respondents

Variable	Calculated Value	Tabulated Value	Level of Significant
Religion	23.12	3.84	S**

** Significant at $P<0.05$ level of Significant

In table 5.2, the analysis showed that the calculated value more than the tabulated value the religion is Significant.

Table-5.3 Association between the education and the knowledge of the respondents about the breast self-examination

Variable	Calculated Value	Tabulated Value	Level of Significant
Education	24.4	3.84	S**

** Significant at P<0.05 level of Significant

In table 5.3 the analysis showed that the calculated value is more then the tabulated value. Hence the education is Significant.

Table 5.4 Association between the Types of Family and the knowledge of the respondents about the breast self-examination

Variable	Calculated Value	Tabulated Value	Level of Significant
Types of Family	.08	3.84	NS*

* Non Significant at P<0.05 level of Significant

In table 5.4 the analysis showed that the calculated value is less then the tabulated value. Hence Types of Family is non Significant.

Table 5.5 Association between the previous history of breast cancer and the knowledge of the respondents about breast self-examination

Variable	Calculated Value	Tabulated Value	Level of Significant
Previous history of Breast Cancer	46	3.84	S**

** Significant at P<0.05 level of Significant

In Table 5.5, the analysis showed that the calculated value is more then the tabulated value. Hence the pervious history of Breast Cancer is Significant.

INTERPRETATION –

These findings are consisted with the findings of a randomized sampling of a study cany out by randomly in which participants were tested with structured assessment of knowledge about the Breast self-examination and the result showed that there age, religion, education were significant. That association of knowledge score with demographic variable was done using the chi square (,") test at P<0.05 level of significant.

CONCLUSIONS –

The overall findings of the study clearly shows that there was moderate level of knowledge regarding breast self-examination among females. Thus a strong need to improve the knowledge of the females in community area.

NURSING IMPLICATIONS

1. **Nursing Education** – Research in nursing education may include study of effectiveness of educational programs, strength and weakness of teaching learning process.[16]

2. **Nursing Practice** –It explains the phenomena that must be considered in planning nursing care to predict the probable outcomes of certain nursing decisions made in relation to client care.[17]

3. **Nursing administration** – It is a current concepts of Nursing Research. it helps the nurses, become effective and efficient nursing manager, it helps to solve conflict regarding health problems and also improve human resource management skills[18].

4. **Nursing services** – the main functions in research utilization and evidence based practice in clinical settings. It leads to compensate the gap between theory and practices.[19]

REFERENCES—

[1] https://en.wikipedia.org/wiki/Breast_self-examination; Cited on 14/05/2014.

[2] Kaur Sandeep; "Textbook of Midwifery and Obstetrical Nursing"; First edition; 2021; CBS Publishers &Distributors Pvt. Ltd.; Delhi; page no-94.

[3] Micah M. Pippin; Roxanne Boyd.; https://www.ncbi.nlm.nih.gov/books/NBK565846/; Breast Self-examination; cited on15/05/2014.

[4] Mahshid Ghoncheh, Zahra Pournamdar et.al; "Incidence and Mortality and Epidemiology of Breast Cancer in the World"; https://pubmed.ncbi.nlm.nih.gov/; National Library of Medicine; 2016; 17(S3): 43-6. doi:10.7314/apjcp.2016.17.s3.43.

[5] Viji P; "Knowledge, Attitude and Practice on Breast Self-Examination among Allied Health

Students"; https: //www.gavinpublishers.com/; 2017; Journal of Nursing and Women's Health (ISSN: 2577-1450).

[6] Makanjuola O. J., Amoo. P. O., Ajibade B. L., Makinde. O. Y.; "Breast Cancer: Knowledge And Practice Of Breast Self-examination Among Women In Rural Community Of Ondo State, Nigeria.; IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS); Volume 8, Issue 1; 2013; www.iosrjournals.org.

[7] https://www.who.int/news-room/fact-sheets/detail/breast-cancer; Word Health Organization; breast cancer.

[8] Breast Cancer Statistics; 2022; U. S.; National breast cancer foundation INC; *(cancer. org)*

[9] https://www.breastcancer.org/screening-testing/breast-self-exam; Breast self-exam; Breastcancer.org. cited on 14/07/2014.

[10] www.researchgate.net/publication/327223207_ Effectiveness_of_structured_teaching_program _on_knowledge_and_practice_regarding_breast _selfexamination_among_college_girls_in_a_s elected_college_of_Bhilai_Chhattisgarh;

[11] https://www.sciencedirect.com/topics/nursing-and-health-professions/breast; breast self-examination; 2018.

[12] Sunanda and S. Ray chowdhury; "Textbook of Nursing Research"; 1st edition; 2010; New Delhi; kumar publisher house; Page no. - 83.

[13] Polit F. Denise, HunglerP. Bernadette; "Essentials of Nursing Research"; 4th Edition; Lippincott Raven Publishers; Page no- 153.

[14] Basavanthappa BT;"Nursing Research"; 2nd Edition; Jaypee Brothers Medical Publishers (P) Ltd; New Delhi; Page no-568.

[15] Nieswiadomy Rose Marie; "Foundations of Nursing Research"; 3rd Edition; Library of Congress Cataloging in publication Data; Appleton & Lange Stamford; page no – 32-33.

[16] Clement Nisha; "Textbook of nursing research and statistics"; First edition; EMMSE Medical publishers; Bangalore; page no -26.

[17] Nibbelink, Christine W, and Barbara B Brewer. "Decision-making in nursing practice: An integrative literature review." Journal of clinical nursing vol. 27, 5-6 (2018): 917-928. doi: 10.1111/jocn.14151

[18] D. Raj Bhaskara Elakkuvana; "Nursing Research and Bio Statistics"; 3rd Edition; EMMESS Medical Publishers; Bangalore; Page no- 8.

[19] Thomas, Aliki, and Mary Law. "Research utilization and evidence-based practice in occupational therapy: a scoping study." The American journal of occupational therapy: official publication of the American Occupational Therapy Association vol. 67, 4 (2013): e55-65. doi: 10.5014/ajot.2013.006395