A Study to Assess the Knowledge regarding Breast Cancer among Reproductive Age Group Women at Urban Community of Bareilly, UP

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Abstract: *The objective of the study are to assess knowledge regarding breast cancer among reproductive age group of women. To associate knowledge of reproductive age group of women with their selected demographic variable that is age, area, qualification, occupation, religion, type of family, source of information. Nurses being one of the members in multidisciplinary health care team must have adequate knowledge of the Breast cancer. The researcher felt the need of a structured interview schedule for reproductive age group women and intended to assess the knowledge regarding breast cancer.*

Keywords: Assess; Knowledge; Breast cancer; reproduction age group women

List of abbreviations used
H: Hypothesis
SD: Standard Deviation
%: percentage
X2: Chi-square
<: Less than
>: More than

1. Introduction

There is a rising incidence of breast cancer in India. **According to the International Agency of Research** on cancer, which is part of WHO, there were approximately 79000 women per year affected by breast cancer in India in 2002 and over 87, 000 women in 2003. The **World Health Organisation (WHO)** 2006 has suggested education and screening programs as two components of early detection to improve cancer mortality.

Naif A. Alharbi. et. al. (2011) studied the knowledge, awareness, and practices concerning Breast Cancer of Kuwaiti female school teachers. Data collected from 421 samples revealed insufficient knowledge and awareness among this literate population.67.5% of the participants revealed that they had some information regarding breast cancer and the sources of information were health workers, friends, TV/Radio and print materials. None of them practiced any of the screening procedures and the reason for this was accounted to insufficient knowledge regarding Breast Cancer.

Objectives of the Study
To assess the knowledge regarding breast cancer among reproductive age group of women.

2. Methods

2.1 Research Approach

The research approach is the broad basic procedure for collecting data in a particular research institute. The research is the vehicle for hypothesis testing or answering research questions. The research approach tells the researcher what and how to collect data and how to analyze the data. To accomplish the objectives of the study a "quantitative non-experimental research approach" was considered most effective.

2.2 Research Design

The research design is concerned with overall framework for conducting the study. It helps the investigator in selection of the subjects, manipulation of independent variables, observation to be made and type of statistical analysis to be used to interpret the data, selection of research design depends on the condition under with the experiment may be conducted. A phenomenological research design was depicted to study the knowledge regarding breast cancer among reproductive age group women.

2.3 Research Variables

Variables are characteristics that vary among the subjects being studied. It is the focus of the study and reflects the empirical aspects of the concepts being studied, the investigator measures the variables. Two types of variables were identified in this study. They are

- Dependent/study variable
- Extraneous/demographic variable

- **Dependent variables:** Dependent variables are the effect of the action of independent variables and cannot exist by it. Knowledge and attitude of stroke and its prevention among hypertensive patients on health are the dependent variable in this study.
- **Extraneous variables:** Extraneous variables are uncontrolled variables that greatly influences the result of the study is called extraneous variables. The extraneous variables in this study include age, gender, religion, education, occupation, monthly income, marital status, food habits, previous history of hypertension, source of information.

2.4 Research Setting

The main study was conducted in Beharipur, Urban Community at Bareilly.

2.5 Research Population

The population is an entire aggregation of cases that meet a designated set of criteria. It is also a complete set of persons or objects that possess some common characteristic that is of interest to the research.

In this study, the population was reproductive age women who are available during the period of data collection, willing to participate in the study, above 30 years of age, who can competent to read and write in Hindi, who are mentally fit.

In this study population refers to **30 reproductive age women** who are came to follow up care at **Urban Community Centre Bareilly.**

Target population: The reproductive age women present in entire population at Bareilly.

2.6 Research Sample

Samples refer to subsets of a population selected to participate in research study. The sample size is determined based on the type of precision required, levels of significance, type of variables, type of study, purpose of the study and type of data collection procedure and feasibility of men, money and material.

In this study, samples were 30 reproductive age women at Urban Community Centre Bareilly.

2.7 Sampling Technique

Sampling technique is an important step in the research process. It is the process of selecting representative units or subsets of a population of the study in a research.

Reproductive age women were taken as target population. Non –probability convenient sampling technique was used to select the sample. The reproductive age women were selected who are under inclusion criteria and data was collected by using self administered knowledge questionnaire.

2.7.1 Criteria for Sample Selection
The criteria for sample selection are mainly depicted under two headings, which includes the inclusion and exclusion criteria.

Inclusive criteria:
Reproductive age women who are
- Only women
- 25-30 years of age.
- Available during the period of data collection.
- Willing to participate in the study.
- Who can able to read and write in Hindi.
- Who can mentally fit.

Exclusive criteria
- Reproductive age women who are having breast cancer.
- Reproductive age women who are already diagnosed with breast cancer.

Development of Tool

a) Tools
According to Chaudhary, "It is the process of instrumentation which means a process of study. "

Tools in study
For the present study structured interview schedule are used to assess the knowledge among reproductive age group women regarding Breast cancer. The tools were administered through paper and pencil method.

b) Development of tools
Structured Interview Schedule.

Following steps were taken in tool development
- Extensive review of the research and non-research literature was carried out in the areas related to the learning needs of the reproductive age group women regarding breast cancer.
- Consultation with experts in the field of "Obstetric and gynaecology in nursing related field was done.
- The experts opinion of the advisor were sought to ascertain the clearity and appropriateness of the items.
- The research guide professional knowledge and experienced to construct the tool.

c) Description of tools:-
A structured interview schedule was prepared by researcher to assess the knowledge among reproductive age group women living in urban community of beharipur, Bareilly.

The structured interview schedule consists of two part:-
Part A: Demographic Variables { Age in years, education level, occupation, religion, type of family source of information, dietary pattern.

Part B: Structured interview schedule

S. No.	Parameter	Questions
1	Basic anatomy and introduction of breast cancer.	1, 2, 3, 4, 5, 6. (6)
2	Incidence and risk factors of breast cancer.	7, 8, 9, 10, 11 (5)
3	Sign and symptoms of breast cancer.	12, 13, 14, 15, 16. (5)
4	Prevention and control of breast cancer.	17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 (14)

Content validity of the tool {Structured interview schedule}

According to Pilot and Beck,: content validity of an instrument measures what is intended to measure ". In order to measure the content validity of the tool in the present study, the tools was given to seven experts. Experts were chosen on the basis of their clinical expertise, experience, qualification and interest in the problem area.

Experts were requested to judge the items on the basis of their relevance, clarity, feasibility and organizations of the items. The response column for validating the contents were "not relevant ", " relevant to some extent", "relevant". There was 95% agreement among experts who responded to the tools with few suggestions to modify some item and to remove some items in the structured interview and the some were incorporated. The tools were found to be valid for conducting the study. The validity of the tools is **0.8** statistically after pilot study, hence they are valid for study.

Reliability of the Tools

Reliability is the degree of consistency and accuracy with an instrument measures the attribute for which it is designed to measure. The reliability of the research tools was established by the split half method. The tools was administered to 10 samples, sample were divided into two equal halves by even odd selection and correlation coefficient of half test was found by using Karl Pearson correlation coefficient formula. The reliability of whole test was established by Spearman Brown propheuy formula. The knowledge score regarding Breast Cancer knowledge was used to establish reliability. The reliability of tools was found to be **0.78.** Hence tools was found to be reliable.

Ethical Consideration

Permission to conduct the study was taken from competent authorities. Formal permission was also obtained from the PHC of Beharipur for conducting main study.

1) Information regarding study was given to the authorities as well as subjects.
2) Information consent was obtained from subjects.
3) The anonymity and confidentiality of the participants responses were maintained while reporting the findings of the study.

Process of Data Collection

The data collection was done from 24 april, 2021 to 25 april, 2021. The researcher selected 10 samples by non probability purposive sampling technique.

Phase 1-

The formal permission to conduct the study was obtained from PHC.

Phase 2-

Investigator introduced herself and developed rapport with subject. The investigator conducted the main study after getting consent from 30 samples by purposive sampling method at Beharipur Bareilly.

Phase 3-

Data collection is the gathering of information needed to address a research problem. A validated structured interview schedule was conducted to collect data about knowledge of Breast cancer in reproductive age group women since this technique is feasible and suitable to collect data from all sample total sample of main study consisted of 30 reproductive age group women. Data was collected from the sample by administering structured interview schedule after obtaining consent from participant. Each day around 4-5 women were interviewed and each section lasted for 30 to 40 minute and than afterwards 3 to 5 minute were utilized to provided verbal guidelines to the respondent by investigator regarding Breast cancer its causes incidence rate and risk factor, Breast self examination prevention. It took one week to complete the study.

Processing Data

Data collected was processed every day, missed out data was identified and immediate next day it was rectified.

Plan for Data Analysis and Interpretation

Analysis of data is a process of interpreting, cleaning, transforming and modeling data with the goal of discovering useful information, suggesting conclusions, and supporting decision making.

Data interpretation is a part of daily life for most people. Interpretation is the process of making sense of numerical data that has been collected, analyzed and presented.

Description

Both descriptive and inferential statistics will be used for the data collection

Descriptive Statistics:

Frequency and percentage distribution of reproductive age group women regarding knowledge of Breast cancer
Mean, standard deviation, diagram and graphical representation on knowledge regarding Breast cancer among reproductive age group women.
Frequency and percentage distribution of reproductive age group women to assess the knowledge on the basis of score

Inferential Statistics:

Chi square test will be used to associate the knowledge score with their demographic variables.

3. Results

The research design was used to assess the knowledge regarding Breast cancer among reproductive age group women of Beharipur urban community Bareilly, (U. P). In view of the nature of problem and to accomplish the objectives of the study, a structured interview schedule to assess the knowledge regarding Breast cancer among reproductive age group women was prepared and used.

Validity of the tool was ensured by consulting the guides and experts in the fields of statistics, medicines and Nursing and reliability (0.78) of the tool was tested. The study was carried out in Beharipur urban community Bareilly (U. P) reproductive age group women were selected by Non probability purposive sampling technique. Structured interview schedule was used to collect the needed data. Data was analysed by using descriptive and inferential statistics Reproductive age group women knowledge regarding breast cancer is very good. Divided into 4 parts Excellent 11 (36.66%), V. Good15 (50%), Good 4 (13.33%) Poor 0 (0%). Hence the total mean average is 706 and mean percentage is 78.43%. Thus by conducting this study we conclude that reproductive age group women having very good knowledge regarding breast cancer.

4. Discussion

The present study was conducted to assess the knowledge regarding breast cancer among reproductive age group women at Beharipur urban community Bareilly (U. P.) with a view to develop an information booklet.
In order to achieve the objectives of the study descriptive research design evaluative approach was adopted, non probability purposive sampling technique was used to select the sample. The data was collected form the 30 participants by using structured interview schedule. The finding of the study had been discussed with reference to the objective and hypothesis.

The study attempted to test the following hypothesis
H1. There is a significant association between knowledge score with their demographic variables.

5. Finding of the Study

Distribution and frequency and percentage of demographic variables
Findings shows that maximum number of reproductive age group women (33.33%) were in the 36-40 years of age group followed by (26.66%) belonging to age group of 20-25, (23.33%) were in the 31-35 year of age group and minimum (16.66%) in the age group of 26-30. As regard education level, maximum (30%) of subjects were in senior secondary, (26.66%) were in higher secondary, (23.33%) were up to primary, and rest (20%) were graduate and above. As regard to their occupation maximum (53.33%) of subjects were housewife, (26.66%) were government , (16.66%) were private and rest (3.33%) were in business. As regard to religion maximum (12%) were Hindu, (33.33%) were Muslim, (16.66%) were Sikh and remaining (10%) were Christian. According to type of family (56.66%) of subjects belong to joint family, (43.33%) belong to nuclear family. According to source of information (53.33%) were gain information from mass media, (33.33%) were gain information from health workers, (6.66%) were gain information from family and friends, and (6.66%) were gain information from any other source of information. According to dietary pattern maximum (60%) subjects are non vegetarian and remaining (40%) are vegetarian.

Finding reveal that maximum mean knowledge score & percentage 24.66 (82.22%) among those with education of graduate and above followed by mean knowledge score of 22.66 (75.53%) of those who were with qualification of senior secondary, mean knowledge score of reproductive age group women 22.42 (74.73%) of those who belongs to up to primary, 22.37 (74.58%) of higher secondary and 0 mean knowledge score is in up to primary.

So, it can be concluded that reproductive age group women knowledge may increase with their education level but statistically education has no impact on knowledge of breast cancer.

Findings reveal that maximum mean knowledge score & percentage 25.25 (84.16%) among those who are in government occupation followed by mean knowledge score of 23.8 (79.33%) of those who were in private occupation, mean knowledge score of reproductive age group women 23 (76.66%) of those who are in business, remaining knowledge score 22.625 (75.41%) are Housewife.

The difference in the mean knowledge score of reproductive age group women according to educational was tested and found statistically not significant at 0.05 level (p-value 0.5016)

So, it can be concluded that reproductive age group women knowledge may increase with their occupation but statistically occupation has no impact on knowledge of breast cancer

Finding depicts that mean knowledge score of reproductive age group women was highest 25.33 (84.44%) among Christian, followed by mean knowledge score of 25.2 (84%) of those who were Muslim, mean knowledge score of reproductive age group women 24 (80%) who are Sikh, and mean knowledge score is low among Hindu i. e.21.5 (71.66%).

The difference in the mean knowledge score of reproductive age group women according to religion was tested and found statistically significant at 0.05 level (p-value 0.1584)

So, it can be concluded that reproductive age group women knowledge may increase with their religion and statistically also proved.

Findings shows that mean knowledge score and percentage 23.58 (78'62%) of reproductive age group women were of joint family, followed by mean by mean knowledge score percentage23.56 (78.20%) of reproductive age group women are of nuclear family The difference in mean knowledge score was tested and found statistically Not Significant at 0.05 level (p value 0.0760).

Hence, it can be concluded that reproductive age group of women of joint family increases their knowledge may be of their experiences. But statistically Type of family has no impact on knowledge of reproductive age group women

Finding shows that maximum mean knowledge score & percentage 24.5 (81.66%) among those who gain information by family and friends followed by mean knowledge score of 23.12 (77.08%) of those who gain

information by mass media, mean knowledge score of reproductive age group women 23.9 (79.66%) of those who gain information by health workers, 22.5 (75%) gain information by any other sources.

The difference in the mean knowledge score of reproductive age group women according to source of information was tested and found statistically not significant at 0.05 level (p-value 0.6966).

So, it can be concluded that reproductive age group women knowledge may increase with their source of information but statistically source of information has no impact on knowledge of breast cancer

Findings shows that mean knowledge score and percentage 24.61 (82.03%) of reproductive age group women were non vegetarian, followed by mean knowledge score percentage 20.91 (69.7%) of reproductive age group women were vegetarian. The difference in mean knowledge score was tested and found statistically Significant at 0.05 level (p value 0.0047).

Hence, it can be concluded that reproductive age group of women of non vegetarian dietary pattern increases their knowledge may be of their experiences and statistically also dietary pattern has high impact on knowledge of reproductive age group women.

6. Conclusion

Education in evidence based care and handling gives nurses the opportunity to improve their ability to use theoretical knowledge in practice. This chapter deals with summary of the result findings along with implication and recommendations. The investigator conduct a study to assess the knowledge of reproductive age group women regarding breast cancer at Beharipur urban community Bareilly (U. P.) with a view to develop an information booklet. The research design adopted for this study was descriptive and the research approach adopted for this study was an quantitative approach. This sample consisted of 30 reproductive age group women regarding breast cancer at Beharipur urban community Bareilly (U. P.). Non probability purposive sampling technique was used in selection of 30 samples for the study. In the study data was collected using, Structured interview schedule regarding breast cancer among reproductive age group women at Beharipur urban community Bareilly (U. P.) with view to develop Information Booklet. In the study tool was used to obtain Data and data were analyzed by using descriptive and inferential statistics in terms of frequency, percentage, mean, standard deviation and Chi-square test.

7. Acknowledgements

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