# ASSESS THE LEVEL OF KNOWLEDGE AND ATTITUDE REGARDING BREAST SELF EXAMINATION AMONG COLLEGE STUDENTS 

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## ABSTRACT:

## BACKGROUND:

Breast cancer has been ranked number one leading cause of death among women globally. Breast cancer is distinct from other types of cancer it can be detected and prevented at an early stage. Breast self examination is an inexpensive and simple procedure, it can be carried out by women herself. A study to assess the level of knowledge and attitude regarding breast self examination among college students at Dayananda Sagar University, Bengaluru, with a view to develop an information pamphlets.

## METHODS:

The present study adopted a descriptive design. Simple random sampling technique was used to collect data from 60 college students at college of arts, science and commerce, Dayananda Sagar University, Bengaluru by using self administered structured knowledge questionnaire and attitude scale.

## RESULTS:

The mean value of knowledge level is 10.75 with standard deviation 2.84 and mean percentage is 17.9 , where as mean value of level of attitude is 40.95 with standard deviation 6.81 and mean percentage is 68.2 . There was a significant association between level of knowledge and attitude with their selected socio demographic variables.

CONCLUSION: Our findings reveals that, majority $48 \%$ (29) had moderate knowledge, $37 \%$ (22) had adequate knowledge and $15 \%$ (9) had inadequate knowledge regarding breast self examination. Majority $70 \%$ (42) had moderately favorable attitude, $25 \%$ (15) had favorable attitude and 5\% (3) had unfavorable attitude regarding breast self examination.

Keywords: Knowledge, Attitude, Breast Self Examination.

## INTRODUCTION

Breast cancer has been known to mankind since ancient times. It has been mentioned in almost every period of recorded history. Ancient Egyptians were the first to discover the diseases more than 3,500 years ago. Breast cancer has been ranked number one leading cause of death among women globally. In India, in the year of 2018 breast cancer accounts for $14 \%$ of cancers in women. Breast cancer is distinct from other types of cancer it can be detected and prevented at an early stage.

The 5-year surviyal rate reached to $85 \%$ with early detection, whereas later detection decreased the survival rate to $56 \%$. Women who diagnosed with breast cancer at stage 0 or stage I has higher survival rate, as high as $98.8 \%$. When the diagnosis occurs at stage II the rate falls down to $93 \%$ and at stage III diagnosis has a survival rate of $72 \%$, while the survival rate for stage IV diagnosis decreases to $22 \%$.

Breast self examination is the most recommended sereening method used to detect breast cancer at early stage. This technique includes women assess their each breast to detect for possible lumps, distortions or swelling to detect carcinomas at the earliest. Breast self examination is an inexpensive and simple procedure; it can be carried out by women herself. Breast self examination makes women more aware about their breast, which may lead to an early diagnosis of breast cancer. The preventive techniques to reduce breast cancer's morbidity and mortality includes breast self examination, clinical breast examination and mammography. BSE is an in-expensive tool which can be done by women themselves without any equipment or hospitalization.

## OBJECTIVES OF THE STUDY:

1. To assess the level of knowledge regarding breast self examination among college students.
2. To assess the level of attitude regarding breast self examination among college students.
3. To associate the level of knowledge and attitude regarding breast self examination among college students with that of their socio demographic variables.

## HYPOTHESES:

$\mathrm{H}_{1}$ : There is a significant association between level of knowledge and selected socio demographic variable.
$\mathrm{H}_{2}$ : There is a significant association between level of attitude and selected socio demographic variable.

## REVIEW OF LITERATURE

A cross- sectional study was conducted on knowledge and practice of breast self examination among women in Yavatmal, India. The study was done for period of 3 months among women and gynae OPD of rural medical college. A total of 460 study participants were enrolled during the study period. About $85 \%$ women were aware about the disease, $41 \%$ said it's due to obesity $24.74 \%$ said it's because of genetic, and $16.32 \%$ said it's due to inadequate breastfeeding. It was observed that $52.80 \%$ were aware that the biopsy is the first modality of diagnosing breast cancer and $59.48 \%$ were aware about breast self examination.

A descriptive research study was conducted to assess the knowledge regarding breast self examination among the nursing students of RP Inderaprastha Institute of medical sciences with the view to provide education through video. In the study, the sample size comprised of 60 students of GNM and ANM. The sample for the study was drawn by non-probability purposive sampling technique. Tools prepared for the study was structured questionnaire. The study revealed that majority of nursing student $48.3 \%$ had good knowledge regarding breast self examination and among them $41.7 \%$ had a average knowledge and only $10 \%$ had below ayerage knowledge regarding breast self examination. The knowledge of breast self examination was low even though majority of them have good attitude the ministry of health is recommended to promote awareness about breast self examination.

## MATERIALS \& METHODS

## RESEARCH APPROACH

Research approach used in the study is descriptive approach.

## RESEARCH DESIGN

The present study adopted a descriptive design to assess the level of knowledge and attitude regarding breast self examination among college students at Dayananda Sagar University, Bengaluru.

RESEARCH VARIABLE: The research variable in this study was to assess the level of knowledge and attitude regarding breast self examination.

## SETTING OF THE STUDY

The investigators selected college of arts, science and commerce, Dayananda Sagar University, Bengaluru as the setting for the present study.

## POPULATION

Population of the present study was B.com students at Dayananda Sagar University, Bengaluru.

## SAMPLE

College students studying B.com degree at Dayananda Sagar University, Bengaluru.

## SAMPLE SIZE

The sample size taken for this study was 60 B.com students at Dayananda Sagar University, Bengaluru.

## SAMPLING TECHNIQUE

In this study random sampling technique was adopted.

## CRITERIA FOR SAMPLE SELECTION

Inclusion criteria: College students:
$>$ who were available at the time of data collection.
$>$ who were willing to participate in study
Exclusion criteria: College students:
$>$ who already exposed to this information earlier.

## DATA COLLECTION INSTRUMENT:

Development and description of tool
The tool consists of three sections.

## Section-A: Socio-demographic data

It consists of age, year of study, religion, age at menarche, family history of breast cancer, previous knowledge and source of information.

## Section-B: Structured knowledge questionnaire

It consists of 15 objective type questions covering the knowledge regarding breast self examination. Each correct answer carries one mark and wrong answer carries zero mark.

| Score in percentage | Interpretation |
| :--- | :--- |
| $<50 \%$ |  |
| $50 \%-75 \%$ | Inadequate Knowledge. |
| $>75 \%$ | Moderately adequate Knowledge. |

## Section-C: Attitude scale on breast self examination

It consists of 12 attitude response statements in which 7 are negative and 5 are positive statements. There were 5 response columns in this scale namely Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D) and Strongly Disagree (SD). The distribution of marking was based on statement. In positive statement marks was given for SA-5, A-4, N-3, D-2, and SD-1 and for negative statement SA-1, A-2, N-3, D-4, and SD-5.

| Score in percentage | Interpretation |
| :--- | :--- |
| $<50 \%$ | Unfavourable Attitude |
| $50 \%-75 \%$ | Moderately Favourable Attitude |
| $>75 \%$ | Favourable Attitude |

## ETHICAL CLEARANCE

Formal permission was obtained from the principal of college of arts, science and commerce and informed consent was obtained from the B.Com students at Dayananda Sagar University, Bengaluru.

## DATA COLLECTION PROCEDURE

Formal written permission was obtained from concerned authorities for collecting the data. The investigators was introduced themselyes to the subjects and notifies about objectives, steps of study and consent was obtained from the subjects.

## PHASE 1

In this phase the data was collected from a total of 60 samples by distributing the structured knowledge questionnaire and attitude scale regarding breast self examination. Instructions were given on answering the questions and doubts were clarified. 35-40 minutes was given to answer the socio-demographic data, knowledge questionnaire and attitude scale.

## PHASE 2

In this phase information pamphlet regarding breast self examination was distributed to the subjects after data collection.

## DATA ANALYSIS

The data was analyzed by using both descriptive and inferential statistics based on the objectives and hypotheses of the study. The plan of data analysis was as follows.

## DESCRIPTIVE STATISTICS

Socio-demographic variable was analyzed by using frequency and percentage distribution. The level of knowledge and attitude regarding breast self examination among college students was calculated by using descriptive statistics like frequency, mean, mean percentage and standard deviation.

## INFERENTIAL STATISTICS

Association between pretest level of knowledge and attitude with selected socio-demographic variables was analyzed by chi-square test.

## RESULTS

The findings of data has been finalized and organized in accordance with the plan for data analysis. These are presented under the following sections:
Section A-Distribution of socio demographic variables of college students.

Section B-Distribution of level of knowledge and attitude regarding breast self examination among college students.

Section C-Association between level of knowledge and attitude with selected socio demographic variables

## SECTION-A

Table 1 - Frequency and percentage distribution of socio demographic variables of college students


Table -1 shows that majority $96.7 \%$ (58) of subjects aged belongs to (22-24 years), and none of them belongs to the age group between 16-18 years. Majority $75 \%$ (45) studying $2^{\text {nd }}$ year B. Com and $1.7 \%$ (1) studying $1^{\text {st }}$ year B.Com. Majority $86.7 \%$ (52) are belongs to Hindu and none of them belongs to Christian and others religion. Majority $66.7 \%$ (40) got menarche at the age of $12-14$ years, and none of them got menarche after 17 years. Majority $95 \%$ (57) are not having family history of breast cancer. $100 \%$ (60) students are having previous knowledge of breast self examination. Majority $38.3 \%$ (23) had source of information from friends and family, $26.7 \%$ (16) had source of information from other sources, $20 \%$ (12) had source of information from mass media and $15 \%(9)$ had source of information from health workers.

## SECTION-B

Distribution of level of knowledge and attitude regarding breast self examination among college students


Fig. 1 Percentage distribution of level of knowledge regarding breast self examination among college students


Fig. 2 Percentage distribution level of attitude regarding breast self examination among college students

Table 2: Mean and standard deviation regarding breast self examination among college students $\mathrm{N}=60$

| Sl. No. | Description | Mean | Mean \% | Standard deviation |
| :--- | :--- | :--- | :--- | :--- |
| 1. | Level of knowledge | 10.75 | 17.9 | 2.84 |
| 2. | Level of attitude | 40.95 | 68.2 | 6.81 |

Table 2: Shows that mean value of level of knowledge 10.75 with standard deviation 2.84 and mean percentage is 17.9 , whereas mean value of level of attitude is 40.95 with standard deviation 6.81 and mean percentage is 68.2.

## SECTION-C

Association between level of knowledge and attitude with selected socio demographic variables

Table 3.1- Association between level of knowledge and the selected socio demographic variables
$\mathrm{N}=60$

| S.NO | Socio demographicvariables | Levels of knowledge |  |  | $\chi^{2}$ | P Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Inadequate | Moderate | Adequate |  |  |
| 1. | Age in years |  |  |  | $\begin{aligned} & 3.3 \\ & \mathrm{df}=4 \\ & \mathrm{NS} \end{aligned}$ | $\mathrm{P}>0.05$ |
|  | 16-18 | 0 | 0 | 0 |  |  |
|  | 19-21 | 21 | 27 | 10 |  |  |
|  | 22-24 | 2 | 0 | 0 |  |  |
| 2. | Year of study |  |  |  | $\begin{aligned} & 2.3 \\ & \mathrm{df}=4 \\ & \mathrm{NS} \end{aligned}$ |  |
|  | $1{ }^{\text {st }}$ | 1 | 0 | 0 |  |  |
|  | $2^{\text {nd }}$ | 16 | 23 | 6 |  | 5 |
|  | $3{ }^{\text {rd }}$ | 5 | 6 | 3 |  | $\mathrm{P}>0.05$ |
| 3. | Religion |  |  |  | $\begin{aligned} & 2.06 \\ & \mathrm{df}=6 \\ & \mathrm{NS} \end{aligned}$ | $\mathrm{P}>0.05$ |
|  | Hindu | 18 | 27 | 7 |  |  |
|  | Muslim | 4 | 2 | 2 |  |  |
|  | Christian | 0 | 0 | 0 |  |  |
|  | Others | 0 | 0 | 0 |  |  |
| 4. | Age at menarche |  |  |  | $\begin{aligned} & 3.9 \\ & \mathrm{df}=6 \\ & \mathrm{NS} \end{aligned}$ | $\mathrm{P}>0.05$ |
|  | Before 12 years | 0 | 1 | 1 |  |  |
|  | 12-14 years | 13 | 21 | 6 |  |  |
|  | 15-17 years | 9 | 7 | 2 |  |  |
|  | After 17 years | 0 | 0 | 0 |  |  |
| 5. | Family history of breast cancer |  | - |  | $\begin{aligned} & 6.06 \\ & \mathrm{df}=2 \\ & \mathrm{~S}^{*} \end{aligned}$ | $\mathrm{P}<0.05$ |
|  | Yes | 1 | 1 | 1 |  |  |
|  | No Previous knowledge | 21 | 27 | 9 |  |  |
| 6A |  | $\square$ | $29$ |  | $\begin{aligned} & 0 \\ & \mathrm{df}=2 \\ & \mathrm{NS} \end{aligned}$ | $\mathrm{P}>0.05$ |
|  | Yes | 22 |  |  |  |  |
|  | No | $0$ | 0 |  |  |  |
| 6B | Source of information |  |  |  | $\begin{aligned} & 14.29 \\ & \mathrm{df}=6 \\ & \mathrm{~S}^{*} \end{aligned}$ |  |
|  | Friends and family | 7 | 15 | 1 |  |  |
|  | Health-Workers | 6 | 2 | 1 |  |  |
|  | Mass-Media | 1 | 7 | 4 |  | $\mathrm{P}<0.05$ |
|  | Others | 8 | 5 | 3 |  |  |

NS: Not significant
*S: Significant
Table 3.1 Depicts that there is a significant association between level of knowledge with family history of breast cancer and source of information, whereas no significant association with other variable like age in year, year of study, religion, age at menarche and previous knowledge. Hence $\mathrm{H}_{1}$ is accepted.

Table 3.2- Association between level of attitude and selected socio demographic variables

*S: Significant
NS: Non significant
Table 3.2 Depicts that there is a significant association between level of attitude with source of information, whereas no significant association with other variables like age in years, year of study, religion, age at menarche, family history of breast cancer and previous knowledge. Hence $\mathrm{H}_{2}$ is accepted.

## SECTION - A

Distribution of socio demographic variables of college students
Majority $97 \%$ (58) of subjects aged belongs to (22-24 years), $3 \%$ (2) belongs to (19-21 years) and none of them belongs to the age group between 16-18 years.
Majority $75 \%$ (45) studying $2^{\text {nd }}$ year B.com, $23 \%$ (14) studying $3^{\text {rd }}$ year B.com and $2 \%$ (1) studying $1^{\text {st }}$ year B.com.

Majority $87 \%$ (52) are belongs to Hindu, $13 \%$ (8) are belongs to Muslim and none of them belongs to Christian and other religion.
Majority $67 \%$ (40) got menarche at the age of 12-14 years, $30 \%$ (18) got at the age of $15-17$ years, $3 \%(2)$ got menarche before 12 years, and none of them got menarche after 17 years.
Majority $95 \%$ (57) are not having family history of breast cancer and 5\% (3) are having family history of breast cancer.
$100 \%$ (60) students had previous knowledge of breast self examination.
Majority $38 \%$ (23) had source of information from friends and family, $27 \%$ (16) had source of information from other sources, $20 \%$ (12) had source of information from mass media and $15 \%$ (9) had source of information from health workers.

## SECTION - B

Distribution of level of knowledge and attitude regarding breast self examination among college students Majority $48 \%$ (29) had moderate knowledge, $37 \%$ (22) had adequate knowledge and $15 \%$ (9) had inadequate knowledge regarding breast self examination.
Majority $70 \%$ (42) had moderately favorable attitude, 25\% (15) had favorable attitude and 5\% (3) had unfavorable attitude regarding breast self examination.
The mean value of knowledge level is 10.75 with standard deviation 2.84 and mean percentage is 17.9 , where as mean value of level of attitude is 40.95 with standard deviation 6.81 and mean percentage is 68.2.

A similar study was conducted on breast self examination to assess the knowledge, attitude and practice among ethnic kashmiri females. The study was done among 250 women in the age group of 20 to 60 years was selected from SMHS hospital. The results showed that only $26 \%$ of the participants had ever heard of breast cancer and among them for $50.8 \%$ the source of information was media. Regarding knowledge of breast self examination $92.4 \%$ had never heard of it. Only $5.6 \%$ participants had self examine their breast. The study points to the insufficient knowledge of kashmiri females about breast cancer and its simplest screening method of self examination.

## SECTION - C

Association between level of knowledge and attitude with selected socio demographic variables.
There was a significant association between level of knowledge with family history of breast cancer and source of information; whereas no significant associations with other variables like age in years, year of study, religion, age at menarche and previous knowledge. Hence $\mathrm{H}_{1}$ is accepted.

There was a significant association between level of attitude with source of information; whereas no significant association with other variables like age in years, year of study, religion, age at menarche, family history of breast cancer and previous knowledge. Hence $\mathrm{H}_{2}$ is accepted.

## CONCLUSION

The main conclusions drawn from this study are Majority $48 \%$ (29) had moderate knowledge, 37\% (22) had adequate knowledge and $15 \%$ (9) had inadequate knowledge regarding breast self examination. Majority $70 \%$ (42) had moderately favorable attitude, $25 \%$ (15) had favorable attitude and 5\% (3) had unfavorable attitude regarding breast self examination.

## RECOMMENDATIONS:

A similar study can be replicated in different settings with large samples.
A comparative study can be conducted to assess the level of knowledge and attitude regarding breast self examination among two colleges.

A similar study can be conducted to assess the practice of breast self examination.

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