

Full Length Research Paper**Effectiveness of Breast Self Examination Practices among Adolescent Girls of Selected Schools in Kodhad Telugana India****Angel Rajakumari G***Professor, Department of Obstetrics and Gynecology, Annaidora College of Nursing, Aundipatty, Tamilnadu, India.***Abstract**

This study evaluates the effectiveness of structured education on knowledge regarding early detection of breast cancer. The study was conducted in Vandhana school of Nursing, Kodhad, Telugana, India. A pre - experimental one group pretest - posttest design was adopted for this study. 50 nursing students who fulfilled the inclusion criteria were selected by using simple random sampling technique. Data was collected regarding demographic variable, knowledge, attitude practice of the diploma in nursing students on breast cancer. Also assessed was the level of knowledge, attitude and practice of the diploma in nursing students by using structured questionnaire and modified three point Likert Scale and by using checklist through one to one teaching by lecture, demonstration, video clippings and verbalization. Structured teaching programme was conducted on the same day on group wise each group consists of 17members. Data collection was done in Telugu and English the questionnaire was distributed to each first year nursing students. At the end of the teaching the doubts were cleared. Then 10 minutes was allotted for discussion. The analysis finding indicates clearly that 46% of students had inadequate knowledge and 76% of them had negative attitude and 80% of them had poor practice regarding breast self examination. A well planned structured teaching programme given to the same group. The effectiveness of programme showed high level of significant at $p < 0.001$ level. It showed that structured teaching programme was an effective method to improve the knowledge, attitude and practice there by the prevention of breast cancer.

Keywords: Knowledge, attitude, practice, breast self examination, Prevention of breast Cancer

Introduction

Cancer is one of the most important diseases which threaten human health nowadays. In the world, breast cancer is the most commonly seen type of cancer in woman (Beydag and Yurugen, 2010; Ozkan et al., 2010; Sambanje and Mafuvadze, 2012). In developed and developing countries, breast cancer is shown as a major health problem (Bassey et al., 2011; Zavare et al., 2011). Breast cancer is the leading malign tumour and it consists 30% of cancers among women (Salaudeen et al., 2009). 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.

Breast cancer is the second leading cause of cancer deaths among Turkish women (Kara and Acikel, 2008; Karayurt et al., 2008). Screening methods such as mammography, clinical breast examination, and breast self-examination (BSE) are described as health improvement activities and play important roles in the early diagnosis of breast cancer. While mammography is the sole effective diagnostic method for reduction of mortality in breast cancer, it is not regarded as a suitable modality for poor countries due to its costly nature and requirement of technical specialty along with man power. Breast self examination is recommended to be performed routinely on a monthly basis in all the women aged above 20 years and the importance of raising awareness on breast cancer via breast self examination is noted. Breast self examination is an easy-to-apply, economical, safe, non-invasive procedure with no special material/tool requirements; and it is an effective diagnostic method for breast cancer which only takes five minutes to apply (Beydag and Yurugen, 2010; Ozaras et al., 2010; Ozkan et al., 2010, Yilmaz et al., 2011).

Materials and Methods

In order to accomplish the main objective of evaluating the effectiveness of an information booklet on knowledge, attitude and practice regarding breast self examination among diploma in nursing students in one group Pre test Post test design was adopted. The study was conducted in Vandhana School of nursing Kodhad, Telugana, India. 50 First year nursing students of Vandhana School of Nursing, Kodhad were selected by convenience sampling. After obtaining consent from the participants pretest was administered by using structured questionnaire and modified three point Likert Scale and by using checklist through one to one teaching by lecture, demonstration, video clippings and verbalization. After pretest researcher distributed information booklet on knowledge regarding Breast self examination to participants. Seven days later post test was administered to assess the knowledge. The collected data were analysed using descriptive and inferential statistics.

Description of Research Tool

It consists of 4 sections.

Section A

It consist of demographic variables which includes age of the individual, religion, marital status, education, type of family, previous exposure to knowledge.

Section B

Multiple choice questions to assess the knowledge of breast cancer and breast self examination which is divided into two parts.

Part I : Questions related to breast cancer.

Part II: Questions related to breast self examination.

Section C

Modified three point Likert scale to assess the attitude regarding breast self examination. This section includes 10 items with choices as agree, uncertain and disagree.

Section D

It comprised of questions related to practice regarding breast self examination.

Scoring procedure**Section B**

The total number of knowledge questions was 20. All the questions had four alternatives with one right answer. A score of “one” was given for every correct answer and score of “zero” was given for every wrong answers. The total score was converted into percentage and interpreted as follows,

| | | |
|----------------------|---|----------|
| Adequate knowledge | - | >75% |
| Moderate knowledge | - | 50 – 75% |
| Inadequate knowledge | - | <50% |

Section C

To interpret the level of attitude the score was classified as,

| | | |
|--------------------|---|----------|
| Positive attitude | - | >75% |
| Favorable attitude | - | 50 – 75% |
| Negative attitude | - | <50% |

Attitude questions consist of both positive and negative statements. The score given for positive questions were as follows,

| | | |
|-----------|---|---|
| Agree | - | 2 |
| Uncertain | - | 1 |
| Disagree- | | 0 |

Similar for attitude negative question scored as follows,

| | | |
|-----------|---|---|
| Agree | - | 0 |
| Uncertain | - | 1 |
| Disagree- | | 2 |

Section D

To interpret the students questionnaire was given to collect information regarding practice on breast self examination. It consists of 25 questions. The maximum score was 25 and minimum score was zero.

To interpret the level of practice the score was classified as,

| | | |
|---------------|---|----------|
| Poor practice | - | < 50% |
| Fair practice | - | 50 – 75% |
| Good practice | - | >75 |

Results

Section -1

Table 1: Mean and standard deviation of knowledge, attitude and practice on breast cancer and breast self examination of diploma in nursing students

N=50

| DomDomain | Pretest | | Posttest | | 't' value |
|-----------|---------|------|----------|-------|--------------|
| | Mean | S.D | Mean | S.D | |
| Knowledge | 6.68 | 0.18 | 10.11 | 0.02 | 16.11*** (S) |
| Attitude | 7.28 | 0.21 | 8.01 | 0.312 | 11.0*** (S) |
| Practice | 7.42 | 0.14 | 12.01 | 0.01 | 17.22*** (S) |

*p<0.05, **p<0.01, ***p<0.001, S – Significant

Table 1 denotes the mean and standard deviation of knowledge, attitude and practice of diploma in nursing students on breast cancer and breast self examination. Observing the pretest level of mean knowledge score was 6.68 with S.D 0.18 and posttest level of mean knowledge score was 10.11 with S.D 0.02 and the 't' value of 16.11 showed high level of significance. With respect to the pretest mean attitude score was 7.28 with S.D 0.21 and posttest mean attitude score was 8.01 with S.D 0.312 and the 't' value of 11.0 showed high level of significance. It clearly indicates that the pretest mean practice score was 7.21 with S.D 0.14 and posttest mean practice score was 12.01 with S.D 0.01 and the 't' value of 17.22 showed high level of significance.

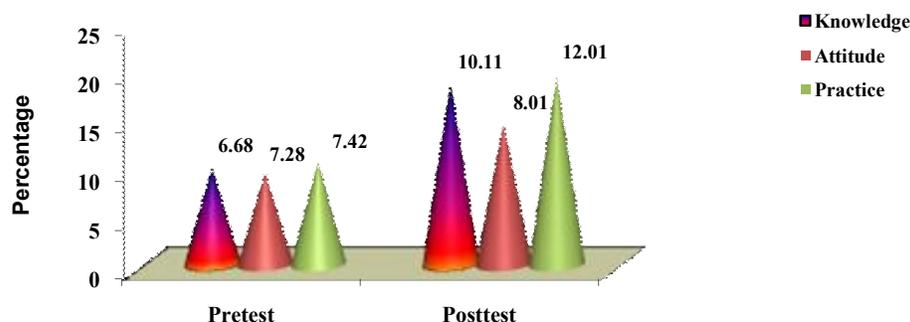


Fig 1: Mean score of pre and post test level of knowledge, attitude and practice of diploma in nursing students

Section -2

Table 2: Correlation of pre and posttest level of knowledge and attitude on breast self examination of diploma in nursing students

N = 50

| Domain | Knowledge | | Attitude | | 'r' value |
|----------|-----------|-------|----------|------|-----------|
| | Mean | S.D | Mean | S.D | |
| Pretest | 5.24 | 0.131 | 5.13 | 0.13 | 0.11* |
| Posttest | 12.11 | 0.01 | 11.12 | 0.73 | 0.31*** |

*p<0.05, ***p<0.001

Table 2 shows the correlation of pre and posttest level of knowledge and attitude on breast self examination of diploma in nursing students. The analysis reveals that the pretest level of knowledge mean score was 5.24 with S.D 0.11, the attitude mean 5.13 with S.D 0.13 and overall 'r' value was 0.31 which significant at p<0.05 level. The posttest level of knowledge mean score was 12.11 with S.D 0.01 clearly indicates a positive correlation between knowledge and attitude (r = 0.91) which is significant at p <0.001 level

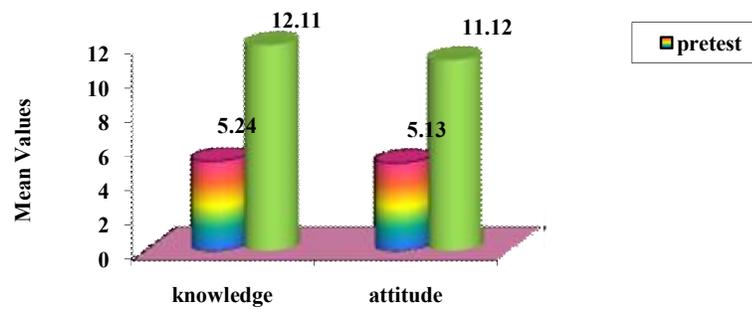


Fig 2: Correlation of pre and posttest level of knowledge and attitude on breast self examination of diploma in nursing students

Section -3

Table 3: Correlation of pre and posttest level of knowledge and practice on breast self examination of diploma in nursing students
N = 50

| Domain | Knowledge | | Practice | | 'r' value |
|----------|-----------|-------|----------|------|-----------|
| | Mean | S.D | Mean | S.D | |
| Pretest | 5.34 | 0.174 | 8.12 | 1.01 | 0.1* |
| Posttest | 12.31 | 1.02 | 11.10 | 1.12 | 0.12* |

*p<0.05

Table 3 illustrates the correlation of pre and posttest level of knowledge and practice on breast self examination of diploma in nursing students. The analysis reveals that the pretest level of knowledge mean score was 5.34 with S.D 0.174, the practice mean score was 8.12 with S.D 1.01 and Overall 'r' value was 0.1 significant at p<0.05 level. The posttest level of knowledge mean score was 12.31 with S.D 1.02 and practice means score was 11.10 with S.D 1.12 clearly indicates a positive correlation between knowledge and practice (r = 0.12) which is significant at p<0.05 level.

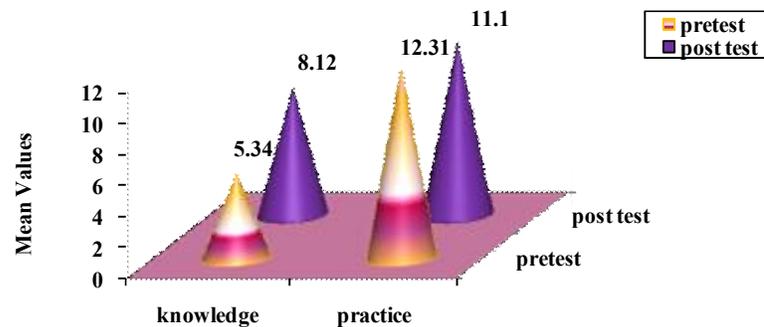


Fig 3: Correlation of pre and posttest level of knowledge and attitude on breast self examination of diploma in nursing students

Discussion

In this study, the 11.3% of participants had received mammography. This result is supported by some studies (NHMS, 2006; Chiang et al., 2011). The total mean knowledge of breast cancer screening scales (post-test) of the experimental group participants and control group participants were 14.0 and 12.06. These data indicate that participants' knowledge of breast cancer screening may be sufficient to improve early detection of cancer. The intention to seek breast cancer screening was also significantly higher in the experimental group, based on the mean intention of breast cancer screening scores (post-test), which were 13.5 and 12.4 for the experimental group and control group, respectively. Study in 2008 found that more than half of the students (62.1%) reported that they had not heard about BSE. Thirty percent (n=216) of the participants received information about breast cancer and BSE.

Media were identified as the main source of information on breast cancer by 48.6% of the participants. Health professionals were mentioned as a source of information by 44.4% of the sample (Karayurt et al., 2008). Study in Turkey, Kara and Acikel (2008) carried out with nursing students and mothers; the majority of the students (88.8%) and their mothers (71.4%) had performed BSE. However, only 90 nursing students (45.9%) and 63 of their mothers (32.1%) stated that they performed BSE on a regular monthly basis. 53.1% of the students learned about the BSE practice from printed materials, 33.2% from television, radio and the internet and 17.9% from their families and friends. Family members and friends (51.5%), television, radio and the internet (33.7%) and printed materials (12.4%) were also mentioned as sources of information by the mothers (Kara and Acikel, 2008)

This study applied an independent-t test to examine the differences of two groups pre-test and post-test. The effectiveness of programme showed high level of significance at $p < 0.0001$ level. It showed that structured teaching programme was an effective method to improve the knowledge.

Conclusion

In this study most of the students had not have knowledge about breast cancer and breast self examination practice, It is seen that half of the students have never practiced breast self examination. It is important to increase the information about breast cancer, early diagnosis and breast self examination practice given by health care staff and especially to use media effectively (such as television, magazine, newspaper) can be provide information and raise awareness about breast cancer and breast self examination practice. . In this context the health professional especially the nurses have a major role to play in helping the women to be aware about breast cancer and its early detection method, which is one of the most cost effective and most simple method that the breast self examination. Cancer education programme can be introduced at early age. It can be done at various settings.

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