EFFECT OF BREAST SELF-EXAMINATION TRAINING PROGRAM ON KNOWLEDGE AND PRACTICE OF WORKING WOMEN AT SECONDARY SCHOOLS IN ASSIUT AND EL -MINIA CITIES

By
Hoda Diab Fahmy*, Soad Abd Elhmed Sharkawy*, Jehan Sayyed Ali**, Lobna Mohamed Gamal Ali***, Awatif Abd Alrazk Mohamed****
Departments of *Community Health Nursing, Assiut Faculty of Nursing;
**Adult Care Nursing, Medical Surgical Nursing, ***Critical Nursing Medical Surgical Nursing, and ****Community Health Nursing, El-Minia Faculty of Nursing.

ABSTRACT:

Abstract: Breast cancer is a serious disease with potential high morbidity and mortality. It is the commonest malignancy in women. Approximately one million new cases of breast cancer are diagnosed each year wide world.

Aim :to evaluate the effect of breast self-examination training program on knowledge and practice of working women at secondary schools in Assiut and El-Minia Cities.

Sample& setting: study was conducted in four work places (4 schools) at Assuit and El-Minia Cities. The equivalent sample included in the study 104 of a group of working women.

Tools: used for data collection were. First tool is self-administrated questionnaire to assess socio-demographic data. Second tool are pre & post knowledge assessment sheet related to breast cancer and breast self examination. Third tool an observation checklist to assess the practice of the participants related to breast self examination. Two constructive BSE training sessions were carried out, in the form of lectures, group discussions demonstration and re-demonstration.

Results: this study reveals that, (62.5%) were < 30 years and (11.5%) were age >45 years, more than one third (36.5%) of them are single. While (52.9%) of the sample were university level of education. Also statistically significant differences were observed in woman's knowledge about breast cancer and breast self examination in pre-and post test.

Recommendation: Periodic breast chick up for female workers and health education through mass media to increase public awareness about early detection and management of cancer breast.

KEY WORDS:

    Breast cancer   Breast-self examination
    Hormone replacement therapy.

INTRODUCTION:

Breast cancer (BC) is the most commonly associated with high level of morbidity and mortality in developing countries of malignant disease in women and it is the second leading cause of death due to cancer in women. American cancer society, 2011) The incidence of breast cancer varies markedly between countries highest being in the United States and North South America and lowest in Asia (Parsa & Kandiah, 2005).

Breast cancer is influenced by multiple risk factors, which can be classified into 4 groups: first, family history/genetic background, which accounts for approxi-mately 15% of all breast cancer cases. The second and the most well-known risk factor for breast cancer can be linked to the

hazardous effects of hormonal exposures such as early age at menarche, late age at menopause, fewer number of children and null parity, late age at first birth. (Jemal et al., 2009, Martin &, Weber, 2009).

Little or no breastfeeding and long-term use of hormone replacement therapy (HRT), some studies have shown that breast-feeding slightly lowers breast cancer risk, especially if the breast-feeding lasts 1½ to 2 years. This could be because breast-feeding lowers a woman's total number of menstrual periods, as doe's pregnancy. But this has been hard to study because in countries such as the United States, breast-feeding for this long is uncommon (Hacihasanoğlu & Gözüm, 2008, American Cancer Society, 2011).

Studies have found that women who are using birth control pills have a slightly greater risk of breast cancer than women who have never used them. (El-Saghir et al., 2007 Anderson et al, 2005).

Recently, there is emerging evidence that overall caloric intake and obesity with weight gain in particular are related to increased breast cancer risk with different effects for preme-nopausal and postmenopausal women. (Aboalkair et al., 2010).

The rising incidence of breast cancer and increasing mortality from this disease are major health concerns, all over the world. A primary reason for escalating mortality is lack awareness, lack of early detection program and late diagnosis of the disease (Osteen, 2011, Martin &, Weber, 2009).

Some signs of breast cancer can be detected before testing. The most common of these symptoms is new lump or mass in the breast. When a lump has uneven edges, is painless, hard and immobile it is more likely to be cancerous. When a lump is tender, soft and round it is less likely to be cancerous. It is important to have any unusual lump checked out by a doctor. There are other symptoms of breast cancer may include: swelling of all or part of the breast, skin irritation or dimpling, breast pain, nipple pain or nipple turning inward, redness, scaliness, or thickening of the nipple or breast skin. A nipple discharge other than breast milk, a lump is the underarm area sometimes breast cancer can spread to the lymph nodes under the arm before a breast tumor is a large enough to be felt (Mayo Foundation for Medical Education and Research (MFMER), 2011), The American Heritege. Dictionary of the English language, 2009):

Early detection of breast cancer is one of the best ways to save a woman's life. Breast Self exam comprises one portion of the triad of early detection of breast abnormalities, the other two being professional breast exams and screening mammography. This is appropriate, as most breast abnormalities are first discovered by the woman (Jemal et al., 2006, Seif &, Maziz, 2000).

Breast self-examination (BSE) is a diagnostic technique regularly performed by a woman, independent from a physician, both by feeling for anything suspicious in her breasts and by observing any changes through the use of a mirror. BSE should be performed monthly in order to discover changes in breast tissue (Smith et al., 2006).

The best time for BSE is about a week after a woman's period ends

when breasts are not tender or swollen. Women who do not have regular periods should do BSE on the same day every month. Women who are pregnant, breast-feeding, or have breast implants also need to regular breast self-examination (Seah & Tan, 2007).

The Royal College of Nursing (RCN) emphasized that nurses play an important role in teaching BSE and they are in an appropriate position to teach breast cancer awareness with no extra cost (Vurur et al., 2005) Many studies have shown that nurses have positive influence on women's breast cancer knowledge and BSE practice (Soyer et al., 2007, Babu, et al., 2011).

Significance of the study:

According to the National Cancer Institute in Cairo, many Egyptian women fail to seek medical treatment or preventive screening, making it more difficult to treat cancers. Worldwide, breast cancer accounts for 22.9% of all cancers excluding non-melanoma skin cancers in women (El-Saghir et al., 2007). In 2008, breast cancer caused 458,503 deaths worldwide and is more than 100 times more common in women than men (Yousuf, 2010). According to official statistics of the National Cancer Institute (Cairo University), breast cancer accounts for 35.1% of the cases of cancer in Egypt and is the most prevalent cancer among Egyptian women. In Egypt, the median age at diagnosis for breast cancer is ten years younger than in the United States and Europe (El-Saghir et al., 2007).

Challenges for Egyptian doctors treating cancer include late detection and the lack of awareness about the disease. To combat these challenges, several active foundations and program are working to raise awareness of breast cancer (yousuf, 2010).

The Aim:

To evaluate the effect of breast self-examination training program on knowledge and practice of working women at secondary schools in Assiut and El-Minia Cities

SUBJECT AND METHODS:
Research Hypothesis:

The mean knowledge and practice score of breast self-exami-nation after training program will be higher.

Research design:

A Quiz -experimental research desi-gned was utilized to fulfill the aim of the study.

Setting:

The study was conducted in two secondary female schools from each Assiut City it named El Khaiat School and khadiga yousef and two secondary schools from El -Minia City it named El salaam School and Girls secondary School.

Sample:

A random sample was utilized in this study selected from working women at the previous setting. The total sample size included 104 women divided to 52 women from each City.

Tools for data collection:

Based on designed question-nnaire sheets which were prepared by the researcher to collect data about the following:
Three tools were used for data collection; they were developed by the researchers.

First Tool - Self-administrated ques-tionnaire which include two parts:

Part I: socio-demographic chara-cteristics including: age, education, residence, and marital status.

 Part II: includes 4 question about the risk factors of breast cancer such as family   history, breast feeding, using contraceptive methods, types of contraceptive methods.

Second Tool - Pre/Post knowledge test:

include 11 question about the knowledge of the participants related to breast cancer such as composition of the breast, definition of breast cancer, types, predisposing factors, women who most exposure to breast cancer, signs and symptoms, methods of treatment, side effect of chemotherapy, side effect of radiotherapy , side effect of hormonal therapy, and methods of prevention.

3- Observation checklist:

was developed and filled by the researchers to assess the practice of the participants related to breast self examination. The observation checklist includes 22 steps .The constructive training sessions were carried out, in the form of lectures, group discussions demonstration and re-demonstration.

Ethical and administration conside-ration:

     An official permission and official letter was obtained from the administrator of   the pre-mentioned settings to get the permission for data collection and program implementation .The purpose and the nature of the study was explained to the participants. The participants were informed that they had the right to withdraw from participation and were assured that the results would be used only for the purpose of the study.

Pilot study: A pilot study was carried out after the development of the tools.

It carried out on 10% of the study sample to test applicability of the tools of the study. The necessary modifications prior to final application of the study tools were done. These women's were not included in the actual study.

Field work:

     After making the necessary modification to ensure the clarity of the study tools, the actual data collection was started from the first of October 2010 to the end of January 2011. According to each group of the working women was divided into subgroups, each group consisted of 3-4 participants, the theoretical part of the program presented in two days per week, the researcher did the interview with the participants the first day contains three sessions one session for assessing their knowledge (pre test) and giving handout before start the sessions of the program. The second session for explaining the program and the third session for doing post test. The second day include three session the first session for demonstration of breast self examination. The second session for doing re-demonstration of the breast self examination and the third session for doing post test. Three teaching methods were used: lecture and discussion for theoretical part and demonstration for practical part.

Statistical analysis:

     The obtained data were reviewed, prepared for computer processing, coded, analyzed and tabulated. While statistical analysis was done using the SPSS 16.0 statistical software package. Data was presented using descriptive statistics in the form of frequencies and percent-tages, means, standard deviations and chi square test. Statistical significance was considered at P- value <0.05.

Evaluation of the program

Was completed by using the (pre and post-program). This evaluation based on scoring system as following: The participant knowledge was assessed by using scoring system, score of one grad was given for each correct answer and zero grad for each incorrect or don't answer. Scoring system: the state of participants knowledge in the pre and post tests were judged as following: poor = <50%, good 50%: 70% and very good = >70%. To assess the participant practice of breast self examination by using the observation checklist the scoring system, score of one grad was given for each correct doing the steps and zero grad for each incorrect or don't do. Scoring system: the state of participants practice in the pre and post tests were judged as following: poor = <50%, good 50%: 70%, very good = >70% (khalaf, 2009).

Limitations:

Some of employs are busy for teaching and some of them not have a time so we wait a lot of time to start a session and repeated the sessions many times.

RESULTS:

Table (1): Distribution of the Study Sample Regarding Their Some Socio-demographic Characteristics**.**

Items	(No.=104)	
	No.	%
Age (years):		
• < 30	65	62.5
• 30 ≥ 45	27	26.0
• <45	12	11.5
• Range	23 – 52	
• Mean ± S.D	30.25 ± 9.22	
Resident:		
• Rural	77	74.0
• Urban	27	26.0
Marital status:		
• Single	38	36.5
• Married	55	52.9
• Widow	6	5.8
• Divorced	5	4.8
Educational status:		
• Secondary	32	30.7
• University	55	52.9
• Others#	17	16.4

#others means technical and master degree of education

Table (2): Distribution of the Participants According to Their Exposure to Risk Factors of Breast Cancer (n=104).

| Risk Factors	No	%
Family History		
- had history of breast caner	12	11.5
- Hadn't history of breast caner	92	88.5
Types of Feeding: #		
- breast	3	4.7
- Artificial	9	14.1
- Complementary	52	81.2
Use Contraceptive Methods		
- Used	50	78.1
- Not used	14	21.9
Types of Contraception:##		
- Tablets	26	52.0
- Loops	18	36.0
- Others	6	12.0

        # N= 64   **## N= 50**

Table (3): Relation Between Pre & Post Program with Socio-demographic Characteristics

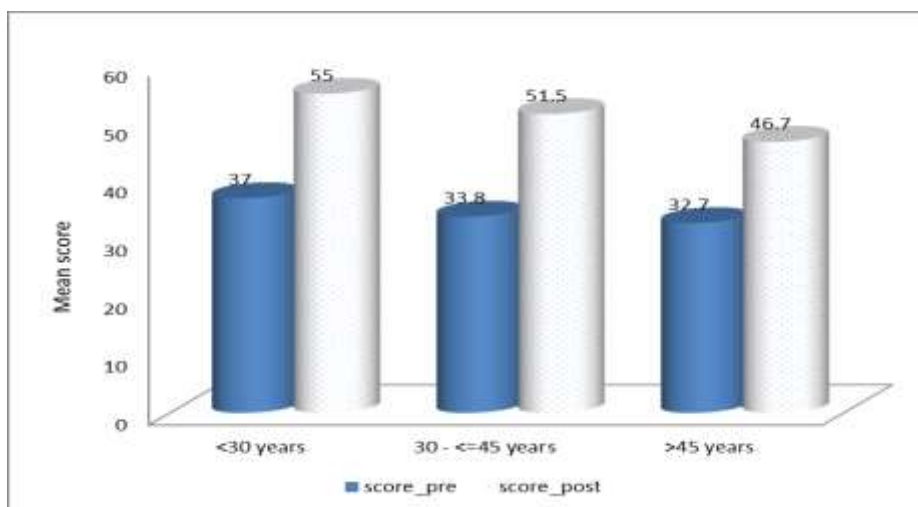|	Assiut			El-Minia		
	pre program	post program		pre program	post program	
Item	**Mean & SD**	**Mean & SD**	**P. value**	**Mean & SD**	**Mean & SD**	**P. value**
Age Groups						
<30	37.5± 7.3	54.9 ± 9.3	0.001*	36.5± 8.0	55.1± 11.6	0.001*
30 ≤45	34.0± 6.4	51.5 ±10.2	0.001*	33.5± 4.4	51.5 ± 9.8	0.001*
>45	33.2± 6.1	44.8 ±11.9	0.075*	32.2± 4.2	48.5 ± 8.5	0.001*
Level of Education						
Secondary	35.3± 7.0	48.3± 9.7	0.001*	35.2± 5.7	57.9± 10.6	0.001*
University	36.3± 7.4	55.1± 9.8	0.001*	36.4± 7.6	51.4± 10.4	0.001*
Others	37.9± 6.4	55.4± 9.9	0.001*	32.1± 6.8	52.5± 12.2	0.003*
Marital Status						
Single	38.3± 7.7	53.7 ± 9.7	0.001*	35.5± 7.7	52.5± 13.4	0.002*
Married	33.9± 6.7	52.9 ± 9.5	0.001*	35.6± 6.9	55.3 ± 8.9	0.001*
Divorced	38.0± 1.4	62.5 ± 4.9	0.065	27.5± 0.7	38.0 ± 4.2	0.149
Widow	36.3± 2.6	43.3± 13.8	0.376	34.0 ± 0	36.0 ± 0	NA

* There is significant differences   Test of significance chi-square test
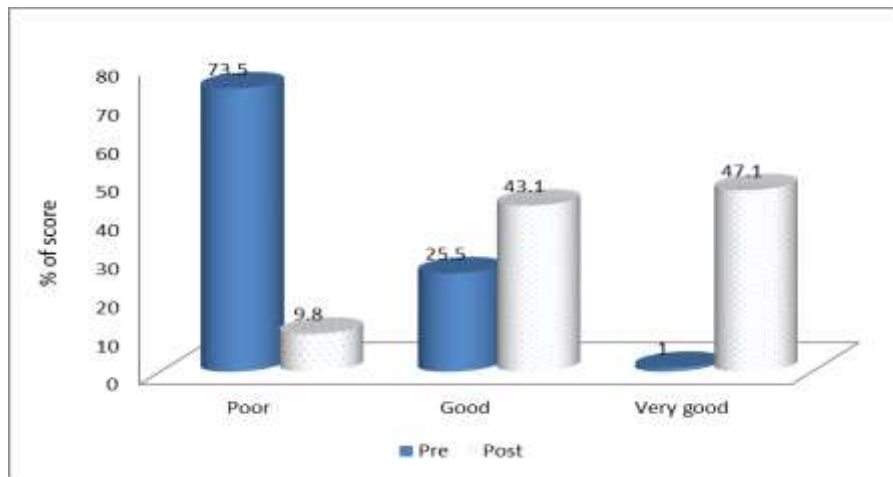
Fig. (1): Percent of Total Score Knowledge According to Pre and Post Program
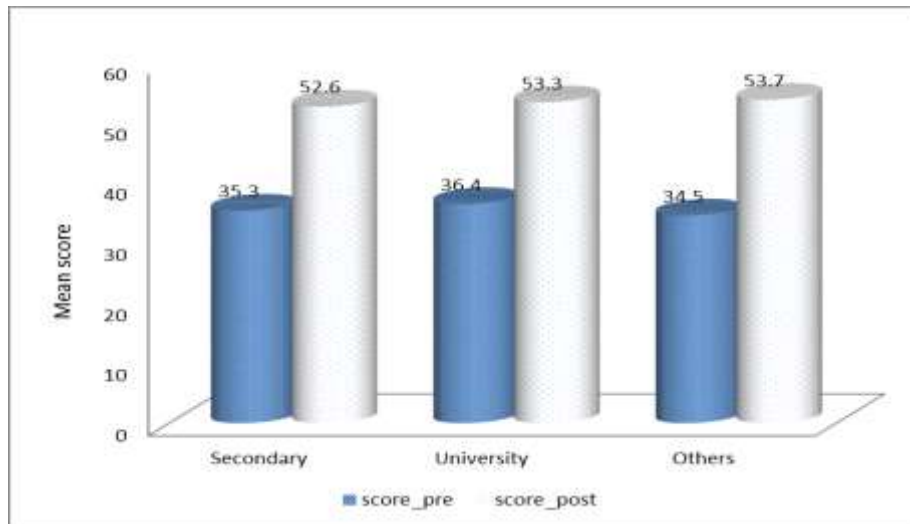
Fig. (2): Relation Between Total Score of Knowledge and Levels of Education.

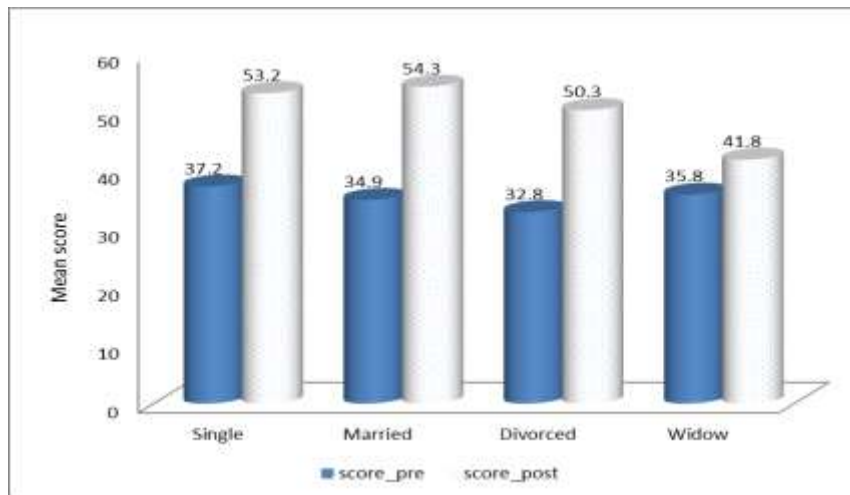**Fig.   (3):** Relation Between Total Score of Knowledge and Age n= 104.

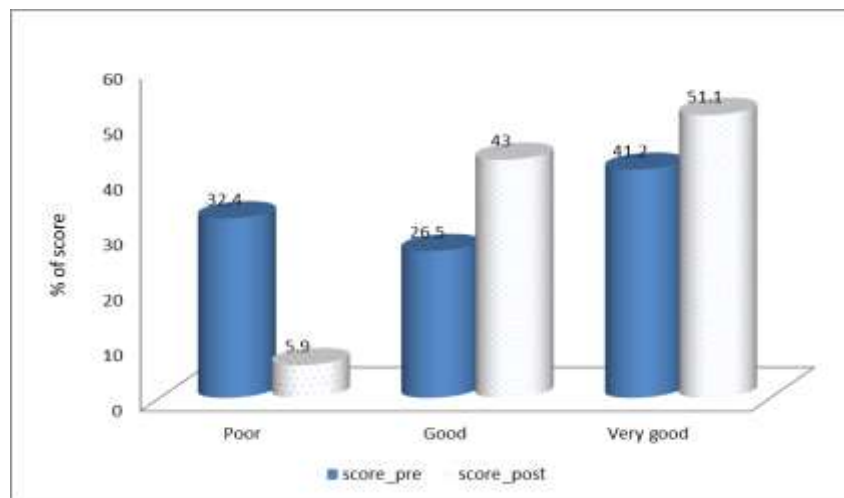**Fig. (4):** Relation Between Total Score of Knowledge and Marital Status n= 104.

Fig. (5): Total Score of Performance of the Participant n= 104

Table (4): Relation Between Total Score of Performance and Socio-demographic Characteristics n= 104.

Item	Assiut			Elminia		
	Pre program Mean&SD	**Post program** Mean&SD	**P.value**	**Pre program** Mean&SD	**Post program** Mean&SD	**P.value**
Age Groups						
<30	14.5 ± 5.4	15.7 ± 3.5	0.185	14.1 ± 5.8	16.3 ± 2.3	0.013
30 ≤45	16.0 ± 4.4	16.8 ± 2.4	0.257	13.0 ± 4.7	16.0 ± 2.4	0.008
>45	12.7 ± 4.7	15.3 ± 2.8	0.005*	10.3 ± 5.7	17.0 ± 2.0	0.001*
Level of Education						
Secondary	14.2 ± 5.0	15.5 ± 3.0	0.114	13.5 ± 6.0	16.1 ± 2.7	0.001*
University	14.6 ± 5.2	16.0 ± 3.6	0.117	12.6 ± 5.8	16.1 ± 2.3	0.001*
Others	15.7 ± 5.5	16.7 ± 2.2	0.231	15.3 ± 3.8	17.0 ± 1.5	0.003
Marital Status						
Single	14.0 ± 5.4	15.6 ± 3.7	0.083	11.9 ± 5.6	16.2 ± 2.3	0.001*
Married	15.9 ± 4.9	16.0 ± 2.9	0.091*	14.4 ± 5.3	16.2 ± 2.3	0.001*
Divorced	17.5 ± 0.7	18.5 ± 0.7	0.001*	11.0 ± 8.5	18.5 ± 3.5	0.001*
Widow	9.8 ± 1.7	15.8 ± 2.9	0.001*	7.0 ± -	16.0 ± -	NA

* There is significant differences　　　　Test of significance chi-square test

Findings clarified the socio-demographic characteristics of the working women at secondary schools in Assiut and El-Minia cities. **Table (1)** shows that nearly two third of them (62.5%) aged < 30 years, while (26.0%) of them in the age group from 30 ≥ 45 years. Slightly more than three quarter of them (74.0%) from urban areas. Also, (52.9 %) of them were married and (4.8%) of them were divorced. Regarding the educational status, it was observed that more than half of the study sample (52.9%) had university level of education. While (16.4%) of them had technical institute and master degree.

Table (2) represents the distribution of the women regarding their exposure to risk factors of breast cancer. It was found that the majority (88.5%) of them hadn't history of breast cancer, while (11.5%) of them had a family history of breast cancer. Regarding the breast feeding, it was clear that (14.7%) of them had artificial feeding while the majority of them (81.2%) had complementary feeding, and (2.9%) of them had breast feed only. As regards the history of use contraceptive methods, it was observed that (21.9%) of them didn't use contraceptive methods, while (78.1%) of them had use contraceptive methods. And (52.0 %) use contraceptive pill.

Table (3) displays the relation between socio-demographic charac-teristics and total sore of knowledge among studied women at Assiut and El-Minia. It was observed that a statistically significant difference between the level of education the age group and marital status of women at Assiut and El-Minia (P = 0.001*) except the widowed and divorced women.

Fig (1): Shows the distribution of the studied sample in relation to their total score of knowledge pre and after the program it was found that, (73.5%) of women had poor score of practice in pre test while on post test, it was found that (43.1%) of them had good score. and (47.1%) of them had very good score.

Figure (2): Shows that there is improvement in study participant's knowledge immediately after the program than pre program and there is statistically significance difference between level of education and their total sore of knowledge (P = 0.001).

Figure (3): Shows that there is improvement in study participants knowledge immediately after the program than pre program and there is statistically significance difference between age group and their total sore of knowledge (P = 0.001).

Figure (4): Shows that there is improvement in study participant's knowledge immediately after the program than pre program and there is statistically significance difference between marital status and their total sore of knowledge (P = 0.001).

Figure (5): Shows the distribution of the studied sample in relation to their total score of practice pre and after the program it was found that, (32.4%) of women had poor score of practice in pre test while on post test, it was found that (43.0%) of them had good score. and (51.1%) of them had very good score.

Table (4): Represented the relation between socio-demographic charac-teristics and total sore of performance among studied women at Assiut and El-Minia. It was observed that a statistically no significant difference

between the age group except women aged >45 years (P = 0.001) and statistically significant difference between level of education among women in El-Minia (P = 0.001) except technical and master degree of education. Also statistically significant difference between marital status of women at Assiut and El-Minia (P = 0.001) except the widowed women at El-Minia and single women at Assiut.

DISCUSSION:

The Breast Health Global Initiative 2007 emphasized education and cultural values for promoting breast cancer screening in developing countries (Rasu et al., 2011). To day, the etiology of breast cancer is uncertain and adequate primary prevention is not possible. Thus, early detection measures remain the first priority. More than 50% of the total breast cancer diagnosed annually is found in premenopausal patients, creating the need to initiate breast cancer screening programs in this population. These measures include BSE, which is inexpensive, noninvasive, involves little time and physical energy, is simple and does not depend on professional help.

However, the effectiveness of BSE remains controversial. It is argued that a significant number of women find masses when they are bathing or dressing, and BSE once a month may contribute to a woman's heightened (Yucel, et al., 2005, Howard & Scott-Findlay 2006). The evidence of primary awareness of what is normal for her cancer prevention is slowly growing; its strategies cannot yet be implemented in clinical prevention programs, therefore, secondary prevention and early detection of cancer remains the main focus for reducing breast cancer mortality (Ertem & Kocer 2009).

The present study aimed to evaluate the effect of breast self-examination training program on knowledge and practice of working women at secondary schools in Assiut and El-Minia cities. This study illustrated that the majority of the participants were age ranged 30-52 years. Those who should be targeted group that needs assistance with compliance and regular BSE. Also added that it was essential that all women should be informed about BSE and covered by systematic education, in the present study more than three quarter of women (75.7%) live in urban areas. Also, (53.8%) of them were married and (3.9%) of them were divorced.

Regarding the educational status, it was observed that more than half of the study sample (52.9%) had university level of education. While (16.6%) of them had technical institute and master degree either teachers or administrative.

In this study was found that the majority (89.2%) of them had not history of breast cancer, while (10.8%) of them had a family history of breast cancer. This finding disagree with Memis et al., (2009) who reported that (39%) of sample not having any history of problems in the breast, while it agree with Ertem & Kocer (2009) who reported that 5% of the participants had a history of familial breast cancer. As regards participants level of knowledge the majority of the women in Assiut and El-Minia had poor knowledge about the BC and BSE before the program this due to poor awareness related to the value of the health and the importance of BSE, also the women afraid from discovering BC. After the educational training program their knowledge markedly improved nearly half of the women had very good score. There were

statistically significant differences between pre and post test regarding their knowledge about breast cancer (p < 0.001). This due to the participant's redness to promoting and maintaining their health status.

This is agree with the result of Alkhasawneh et al., (2009) who revealed that statistically improvements in women knowledge about breast cancer and early detection methods after implementation of the program. also agree with Yusuf, (2010) who reported that participants felt that their knowledge improved significantly and the researcher believes that the participants, knowledge significant improvement in post-test may enhance their actual confidence .

Also the present study showed a improvement in BSE performance, from about 25% in the pre test to 95% had good and very good score in both group (Assiut & El-Minia) and their a statistically significant difference between pre and post test for performance of the sample in relation to age and education (p <0.001). In addition the participants with a university level of education were better in performance and highly statistically of the breast self exam than others levels of education. Its agree with Khalili & Shahnazi (2010) who reported that BSE had a significant correlation with the educational level of the study subjects (P < 0.001) as well as performance of those who had higher academic educational level.

This results was consistent with Alkhasawneh et al., (2009) who found a significant relation between practice and women's age, education level agree with the present study and agree with Haji-Mohamoodi et al., (2002)

and his collegues which their study showed a significant association between BSE practice and the age, level of education. Oezaras et al., (2010) reported that the difference being significant (z=-7.75, p<0.001) the training given to the women had a very important effect on increasing information of women about BSE.

The present study showed that had a statistically significant difference between pre and post performance of the sample in Assiut and El-Minia in relation to marital status (p <0.001) except for widowed and divorced women which may be attributed by this women facing much stressors in her life. Therefore, the teaching training program was effective for improving markedly the knowledge needed for accurate performance

Conclusion:

The results of this study concluded that Knowledge and performance about breast cancer and BSE was poor among working women in both groups (Assiut and El- Minia) in pre test. The developed training program of BSE showed improvement with significant impact in the form of a remarkable increase in the participants' level of knowledge, and BSE perfor-mance in both group.

Recommendations:

1- Further health education programs for students, teachers, and women work in female secondary schools about the benefits of breast self-exam (BSE) and how to examine the breast.

2- Continues educational health programs for women in different work-place about the benefits of breast self-exam (BSE) and how to do it.

3- Upgrade the national programs to fight cancer, early detection of breast cancer and support the

promotion of public awareness to reach all segments of Egypt society.

4- All women should be encouraged to do monthly breast self-examinations

REFERENCES:

1. Aboalkhair, O., Al Tahan, F.A., Young, S.E., Musaad, S.A (2010): From the King Saud bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia from the Kendle International, Cincinnati, Ohio, USA, 30(5):350-357.

2. Alkhasawneh, I., Akhu-Zaheya, I., Suleiman, S (2009): Jordanian nurses knowledge and practice of breast self-examination. Journal of Advanced Nursing, 65(2):412–416.

3. American cancer society., (2011): The breast cancer resource center.http://www.cancer.org.cancer info/load, website accessed on Augest 9,2009.

4. Anderson, BO., Shyyan, R., Eniu, A., Smith, RA., Yip, CH., Bese, NS., Chow, LW., Masood, S., Ramsey, SD., Carlson, RW (2005): Breast cancer in limited-resource countries: An overview of the Breast Health Global Initiative 2005 Guidelines.

5. Babu, GR., Samari, G., Cohen, SP., Mahapatra, T., Wahbe, RM., Mermash, S., Galal, OM (2011): Breast cancer screening among females in Iran and recommendations for improved practice: a review. Asian Pac J Cancer Prev. 12 (7):1647-55.

6. Demirkiran, et al., (2007): How do nurses and teachers perform breast-self examination; are they reliable sources of information?

7. El–Saghir, et al., (2007): Trends in epidemiology and management of breast cancer in developing Arab countries: A literature and registry analysis.

8. Ertem, G., & Kocer, A (2009): Breast self-examination among nurses and midwives in Odemis health district in Turkey. Indian J Cancer [serial online] 2009 [cited 2012 Nov 7]46:208 -13. Available from: http:// www. indianjcancer.com/text.asp?2009/46/3/ 208/52955

9. Hacihasanoğlu, R., & Gözüm, S (2008): The effect of training on the knowledge levels and beliefs regarding breast self-examination on women attending a public education centre. Eur J Oncol Nurs. 2008 Feb;12(1):58-64.

10. Haji-Mahmoodi, M., Montazeri, A., Jarvandi, S., Ebrahimi, M., Haghighat, S., Harirchi, I (2002): Breast self-examination: Knowledge, attitudes, and practices among female health care workers in Tehran, Iran. Breast J 2002, 8:222-225.

11. Howard, F., & Scott-Findlay, S (2006): Breast self-examination when research contradicts accepted practice. AWHONN Lifelines 2006, 10:66-70.

12. Jemal, A., Siegel, R., Ward, E., Hao, Y., Xu, J., Thun, MJ. (2009): Cancer Statistics, 2009. CA Cancer J Clin; 54:225-49.

13. Jemal, A., Siegel, R., Ward, E., Murray, T., Xu, J., Smigal, C., Thun, MJ (2006): Cancer statistics 2006. CA: A Cancer J Clin , 56(2):106-130.

14. Khalaf, SH (2009): knowledge, attitude and practice of mother about chicken pox. Thesis submitted for partial fulfillment of requirements for Master Degree in Community Health Nursing. Faculty of nursing in Assiut, P73.

15. Khalili, AF., & Shahnazi, M (2010): Breast cancer screening (breast self-examination, clinical breast exam, and mammography) in women referred to health centers in Tabriz, Iran. Indian J Med Sci [serial online] 2010 [cited 2012 Nov 7]; 64:149-62. available from: http://www. Indianjmedsci. org/text.asp?2010/64/4/149/97355

16. Martin, AM., Weber, BL (2009): Genetic and hormonal risk factors in breast cancer. J Natl Cancer Inst; 92:1126-35.

17. Mayo Foundation for Medical Education and Research (MFMER (2011): A single copy of these materials may be reprinted for noncommmercial personal use only. "Mayo," "Mayo Clinic," "Mayo Clinic. com," "Embody Health," "Enhance your life," and the triple-shield Mayo Clinic logo are trademarks of Mayo Foundation for Medical Education and Research. Nov. 29, 2011.

18. Memis S., Balkaya, NA., Demirkiran, F (2009): Knowledge, attitudes, and behaviors of nursing and midwifery students regarding breast self-examination in Turkey. Oncol Nurs Forum. Jan; 36 (1):E39-46.

19. Oezaras, G., Durualp, E., Civelek, FE., Gül, B., Uensal, M (2010): Analysis of breast self-examination training efficiency in women between 20-60 years of age in Turkey. Asian Pac J Cancer Prev.;11(3):799-802.

20. Osteen, R. (2011): Breast Cancer. In: Lenhard, R.E., Osteen, R.T., Gansler, R., eds. Clinical Oncology. Atlanta, GA: American Cancer Society; 251–268.

21. Parsa, P., & Kandiah, M (2005): Breast cancer knowledge, perception and breast self-examination practices among Iranian women. 4 (2) Dec 2005.

22. Rasu, RS., Rianon, NJ., Shahidullah, SM., Faisel, AJ., Selwyn, BJ (2011): Effect of Educational Level on Knowledge and Use of Breast Cancer Screening Practices in Bangladeshi Women.DOI: 57: 177-189.

23. Seah, M., &Tan, SM (2007): AmI breast cancer smart; Assessing breast cancer knowledge among health care professional. Singapore Med j;48:158-162.

24. Seif, NY., & Aaziz, MA (2000): Breast Self-Examination training program on knowledge and practice of a group of working women Journal of Egyptian Nat.Cancer.|Inst., 12(2):105-115.

25. Smith, RA., Cokkinides, V., Eyre, HJ (2006): American Cancer Society Guidelines for the Early Detection of Cancer, 2006.

26. CA: A Cancer J Clin , 56(1):11-25.

27. Soyer, MT., Ciceklioglu, M., Türk, M., Meltem, MD., Ceber, E (2007): Breast cancer awareness and practice of breast self examination among primary health care nurses: influencing factors and effects of an inservice education, Journal of Clinical Nursing. 16(4): 707–715.

28. The American Heritege. Dictionary of the English language (2009): Fourth Edition @ 2000 by Houghton Mifflin Company. Updatedin 2009. Published by Houghton Mifflin company.

29. Yousuf, S. A (2010): Breast cancer awareness among Nursing Students; JkAU:Med.Sci. 17(33):67-78.

30. Yucel, A., Degirmenci, B., Acar, M., Ellidkuzm, H., Albayrak, R., Haktanir, A (2005): Knowledge about breast cancer and mammography in breast cancer screening among women awaiting mammography. Turk J Med Sci 35:35-42.

31. Vurur, S., Kaya, F., Ünüvar, R., Sezgin, H (2005): The evaluation of knowledge and behaviours of nurses and midwives on breast self-examination. In Presented at 4th international reproductive health and family planning congress: 20–23 April. Ankara, Turkey.

الملخص العربى
تاثير برنامج تدريبى عن الفحص الذاتى للثدى على معلومات وممارسات السيدات العاملات بالمدارس الثانوية فى مدينتى أسيوط والمنيا

هدى دياب فهمى* ـ سعاد عبد الحميد شرقاوى* ـ جيهان سيد على** ـ لبنى محمد جمال على **ـعواطف عبد الرازق محمد***

أقسام *تمريض صحة المجتمع بكلية التمريض جامعة أسيوط ـ
**التمريض الباطنى والجراحى بكلية التمريض جامعة المنيا ـ
***تمريض صحة المجتمع بكلية التمريض جامعة المنيا

سرطان الثدي هو مرض خطير يزيد من احتمالية ارتفاع معدلات الأمراض والوفيات .وهو اكثر الأورام الخبيثة حدوثاً في السيدات .ويتم تشخيص حوالي مليون حالة جديدة من سرطان الثدي كل سنة بالعالم.

هدف الدراسة: هو تقييم برنامج تدريبى للفحص الذاتي للثدي على معرفة وممارسة السيدات العاملات في المدارس الثانوية في مدينتى أسيوط والمنيا .

وقد أجريت الدراسة في أربع مدارس بمدينتى أسيوط والمنيا .واشتملت عينة الدراسة على 104 من السيدات العاملات.

واستخدمت ثلاث أدوات لجمع البيانات: الأداة الأولى شملت استبيان لتقييم البيانات الاجتماعية والديمغرافية و الأداة الثانية لمعرفة معلومات المشاركات المتعلقة بسرطان الثدي والفحص الذاتي للثدي (ما قبل الاختبار) والأداة الثالثه. شملت قائمة الملاحظة لتقييم ممارسات المشاركات المتعلقة بالفحص الذاتي للثدي .تم جمع البيانات وتنفيذ البرنامج من الأول من أكتوبر 2011 إلى نهاية يناير2012 .وتم تطبيق البرنامج باستخدام دورات تدريبية في شكل محاضرات ومناقشات و تطبيق عملى .

نتائج هذه الدراسة وجد أنه يتراوح عمر المشاركات ما بين 20-52 سنة 62.5٪ اقل من 30 عاما، وكان 11.5٪ أكثر من 45 سنة، أكثر من ثلث العينة 36.5٪ لم يسبق لهن الزواج .وكان 52.9٪ من العينة مستوى التعليم الجامعي .ونسبة كبيرة من السيدات مستوى معرفتهن و أدائهن ضعيف في الاختبار القبلى و بعد تنفيذ البرنامج قد لوحظت تحسن ذات دلالة إحصائية على معرفة و ممارسة السيدات عن سرطان الثدي وطرق الفحص الذاتي الثدي.

وأوصت الدراسة بزيادة واستمرار برامج التثقيف الصحى للطالبات والمدرسات والسيدات بالمدارس وأيضا أماكن العمل المختلفة عن ضرورة الفحص الذاتي وكيفية عمل الفحص شهريا والاستعانة بوسائل الإعلام لزيادة الوعي العام للوصول إلى جميع شرائح المجتمع المصرى حول الكشف المبكر عن سرطان الثدي و الحد من انتشاره.