

Knowledge Attitude and Practice of Breast Self Examination among Female Graduates in Princess Muna College of Nursing and Royal Medical Services College of Allied Health Professions

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ABSTRACT

Objective: The aim of our study is to evaluate the knowledge, attitude and practice of Breast Self Examination among female graduates at Princess Muna College of Nursing and Royal Medical Services College of Allied Health Professions.

Methods: self-administered questionnaire was distributed to 276 female students; the questionnaire consisted of four parts comprised of 26 items. The first part tackles socio-demographic data. Questions related to the knowledge as to breast cancer were included in the second part. The third part focused on identifying the participant's awareness of breast cancer and early detection methods. While the fourth part of the questionnaire handles Breast Self Examination practice among the participants.

Data was analyzed via SPSS software (version 19), statistical analysis were performed including Pearson chi-square test & statistical significance was set at (p) value <0.05.

Results: The overall response rate was (99.6%), while (89.7%) ranging between (20-22) years old, (99.3%) were single. Knowledge score was recognized at excellent grade for 93.1% of the participants, none of them had unsatisfactory knowledge score (0%). Despite the excellent knowledge recognized in both faculties, 18.9% of respondents admitted that they don't know how to perform breast Self Examination. TV was the most common source of information for about (65.5%) of the participants.

Eighty percent of the respondents performed Breast Self Examination in an irregular manner, while only (10.4%) performed it on monthly basis. Nearly, half of them preferred to do Breast Self Examination in the morning and in front of mirrors. About 65% of the participants showed interest to gain more knowledge about Breast Self Examination.

Conclusion: Regular Breast Self Examination proved to be inadequate and thus, efforts should be made to develop programs on increasing knowledge of breast cancer as well as practicing Breast Self Examination based on the fact that a good level of knowledge may help to perform Breast Self Examination correctly, however, it doesn't play role in performing regular Breast Self Examination on monthly basis.

Key words: Breast Self Examination ,Breast Cancer , Knowledge, Attitude, Practice.

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Introduction

All types of Cancers contribute in about 14.6% of deaths worldwide.⁽¹⁾ Breast cancer is the most common malignant neoplasm among women in developed and developing countries (WHO.2013) ;⁽²⁾ About 1.15 million women are diagnosed with breast cancer every year, the disease causes 502,000 deaths a year worldwide making it second only to lung cancer as the cause of cancer related deaths among women.⁽³⁻⁵⁾

Breast cancer is becoming an increasing urgent problem in low resources regions where incidence rates have shown to increase each year at a rate of 5 %.⁽⁶⁾

In Jordan, breast cancer is the second cause of death after Cardio Vascular Disease.⁽⁷⁾ It accounts for 20% of all total numbers of malignant tumors.⁽⁸⁾ According to the latest statistics from the National Cancer Registry (NCR) in 2012, there were (1002) breast cancer cases recorded in Jordan, where (988) cases of breast cancer affected females compared to (935) cases in 2011 and (14) cases of breast cancer affected males compared to (17) cases in 2011.⁽⁸⁾

Among females, the total recorded breast cancer since 1996 until 2012 was around 11640 cases. In 2012 the breast cancer accounted for 37.1% of cancers, compared to 37.7% in 2011.

The peak age of incidence of breast cancer among Jordanians is 40-49 years (31%), 26.4% over 60, 25.6% with age group of 50-59 and 18.8% in age group less than 40. However, in Europe and North America it was reported to be 65 years.

Even though breast cancer rate in Jordan is lower than the incidence rate in western countries, the mortality rate is very high due to late presentation of the disease. Most cases are presented at stage III and IV. In 2012, 49.7% of the cases were diagnosed in stage III & IV, 27.5% were diagnosed in stage I & II and only 43 cases were diagnosed in zero stage.

In 2012, most cases were diagnosed in Amman (616 cases, 62.5%), followed by Irbid at 110 cases (11.3%); and only 10 cases in Ma'an.

Incidence rate in Arab women have increased during the last 24 years.⁽⁹⁾ In Saudi Arabia,

the incidence rate was 22 patients out of 100,000 women at a total of 1473 confirmed patients in 2015 and this was considered the lowest breast cancer rate in the Arab world.⁽¹⁰⁾ There is evidence that the occurrence of breast cancer in Arab countries including Jordan is about 10 year younger than in USA and European countries.^(11,12) Qatar has one of the highest age adjusted breast cancer incidences in the Arab world. The prevalent age group, between patients in Qatar was 40-50 years old.⁽¹³⁾

Asia and Africa have experienced a more rapid rise in the annual incidence rate of breast cancer compared with North America and Europe.⁽¹⁴⁾ Studies conducted in many parts of Africa, such as Cameron,⁽¹⁵⁾ and Ghana⁽¹⁶⁾ revealed that breast cancer is the most common malignant cancer in women. In Cameron, the incidence of breast cancer was estimated at 2625 out of 100,000 in 2012.⁽¹⁷⁾

The control of Breast cancer in most developing countries including Jordan is under the auspices of national countries promoted by the WHO. ⁽¹⁾ In summer of 2007, The Jordan Breast Cancer Program under the leadership and support of King Hussein Cancer Foundation and the Center was physically established to coordinate closely with all stakeholders and developed a comprehensive plan to increase the public awareness, early detection, screening and referrals.

Breast cancer type is distinguished by the fact that it occurs as palpable masses in a visible organ which can be detected and treated at an early stage.⁽¹⁸⁾ The five year survival rate reached at 85% based on early detection thereof. In cases of late detection this rate is decreased to 56 %.⁽¹⁹⁾ The low survival rates in less developed countries are attributed to the lack of early detection, inadequate diagnoses and treatment facilities.

Recommended preventive techniques set out by the American Cancer Society to reduce breast cancer mortality and morbidity include breast self-examination (BSE), clinical breast examination (CBE), and mammography.⁽²⁰⁾ Although mammography remains the best diagnostic tool in the detection of breast cancer, it is very costly; requires hospital visit, specialized equipment and expertise. On the other hand breast self-examination can be

done at home, and it has been reported to benefit affected women in two ways: affected women become familiar in terms of both the appearance and the feel of their breast and detect any changes as early as possible. It is also considered the only screening method available for women that adequate health insurance or professional health care services are available thereto. ⁽²¹⁾ In the literature, it is stated that 90% of the times breast cancer is first noticed by the concerned person. ⁽²²⁾

Even though BSE is a simple, quick, cost-free procedure and only takes 5 minutes to be performed, ⁽²³⁾ the practice of BSE is low and varies in different countries; in England, a study conducted by Philip *et al* ⁽²⁴⁾ reported that only 54% of the study population practiced BSE. Furthermore, in Nigeria, the practice of BSE ranged from 19% to 43.2% ^(25,26) and in India, it varied from 0% to 52%. ^(27, 28) Several reasons like lack of time, lack of self-confidence in their ability to perform the technique correctly, fear of possible discovery of a lump, and embarrassment associated with manipulation of the breast have been cited as reasons for not practicing BSE. ^(29,30) This does not differ from what transpired among health care personnel. In one study, only 14% of nurses and midwives were observed to regularly perform BSE. ⁽³¹⁾

Considering the fact that female health workers are responsible for improvement of public health, but they can, in addition to self-care, encourage the clients and help to improve healthy goals.

The aim of our studies is to evaluate the knowledge, the attitude and practice of breast self examination among female graduates at Princess Muna College of Nursing and Royal Medical Services College of Allied Health Professions.

Material Methods.

Research design

A descriptive study was conducted in June 2015.

Research Setting:

Princess Muna College of Nursing and Royal Medical Services College of Allied Health Professions.

Princess Muna College of Nursing was established in 1962, where graduated students receive a diploma after three years of study.

In 1998, the college become a part of Mutah University and started to award its graduates with a bachelor degree in nursing after four year course.

Royal Medical Services College of Allied Health Professions was established in 1961, where graduated students receive a diploma after two years of study. This diploma enables the students to carry on their study in Jordanian university to achieve a bachelor degree in nursing.

Inclusion Criteria: All female graduates from Princess Muna College of Nursing and Royal Medical Services College of Allied Health Professions.

Exclusion Criteria: Those who were absent or couldn't complete the questionnaire for any reason

Ethical Approval: Ethical approval to conduct the study was granted by the Director of professional training and human resources development in The Directorate of Royal Medical Services.

An official permission was obtained to conduct the study from the directors of Princess Muna College of Nursing and Royal Medical Services College of Allied Health Professions.

Tool of the study

A Self-administrated close ended questionnaire which was designed and developed by two specialists in public health and epidemiology (Dr. Amal Farhan Khreisat and Dr. Ayat Al Khasawneh) to evaluate information prepared by the researcher after the reviewing related literatures; National, Regional and International.

Additional questions were adapted after modifying the questionnaire which is used in similar studies conducted earlier in other countries. Then the questionnaire was translated into Arabic language.

The questionnaire consisted of four parts comprising of 26 items. The first part was to elicit socio-demographic data on age, religion, marital status, and family history of breast cancer of each participant. Questions related to the knowledge of breast cancer were included in the second part. Participants' awareness of breast cancer and early detection methods were also evaluated in third part. The

fourth part of the questionnaire assessed the practice of BSE among participants.

The researchers held meetings with the students in each faculty to introduce themselves and briefly explained the nature and the purpose of the study. students who fulfilled the inclusion were met for criteria in the sample about 10-15 minutes. All students were informed that their participation is voluntary. After obtaining oral acceptance of students to participate in the study, the questionnaires were distributed to each student and it was filled by themselves.

Statistical Analysis :

Data were analyzed using Statistical Package for the Social Sciences (SPSS) (version 19). Categorical variables were described using frequency distribution and percentages, continuous variables were expressed by means and standard deviations 2.

Statistical analysis which is performed included the Pearson chi-square test to determine the association between knowledge and attitude stratified according to the scores and the practice of BSE. Statistical significance was set at $p < 0.05$.

Scoring system of participants' knowledge was done as follows: each question had a group of answer scores, two scores was awarded for each correct answer; I don't know answer took one and score zero for incorrect answer. Correct responses were

assumed up to get a total knowledge scores for each participant was 16.

The knowledge scores were classified into three categories. When the student's knowledge score registered between 13- 16, it was considered as excellent knowledge. Scores above 10 and less than 13 were considered as Fair, and any score below 10 was considered unsatisfactory.

Validity and reliability of the study

The questionnaire was revised and validated by a panel of Specialist in statistical analysis and two experts in academic and health field; they agreed with no comments.

Statistical analysis which is performed included the Pearson chi-square test to determine the association between knowledge and attitude stratified according to the scores and the practice of BSE. Statistical significance was set at $p < 0.05$ and it was considered within the acceptable range.

Results

Out of 276 questionnaires administered to the respondents. Two hundred and seventy five were fully completed the questionnaire with a high response rate of 99.6% .About 48.2% (133 students) where from Princess Muna Nursing College and 51.8% (143) students) were from Royal Medical Services College of Allied Health Professions.

Table I: Number of Participants

College	Count	Percent %
Princess Muna College of Nursing	133	48.2
Royal Medical Services Collage	143	51.8
Total	276	100.0

Table II: Demographic Characteristics of the Respondents

	Princess Muna College	Royal Medical Services Collage	Total	Percentage (%)
Age (Years)				
15-19	4	22	26	9.6
20-22	128	116	244	89.7
23-25	0	2	2	0.7
Total	132	140	272	100
Marital Status				
Single	133	140	273	99.3
Married	0	2	2	0.7

Total	133	142	275	100
Family History of Breast Cancer				
No,	101	127	228	82.5
Yes	32	16	48	17.5
Relation with breast cancer				
Mother	2	0	2	3.9
Aunt	19	13	30	58.8
Cousin	6	0	6	11.8
Grandmother	4	2	6	11.8
Uncles	6	0	6	11.8
Father	0	1	1	2.0
Total	37	16	51*	100

*This number (51) was not equal to yes answer in the previous question (48) since some of the respondent had more than one relative with a history of breast cancer,

Table (II) shows the demographic characteristics of the respondents, where 89.7% of the respondents represented age group ranged from (20-22) and 9.6% were younger than 20 years.

Approximately 99.3% of participants were single, while 0.7% of them were married. Only 18.3% had family history of breast cancer, (most of which was aunt 58.8%).

Table III: Respondent's knowledge of breast cancer and breast self-examination (Yes as the answer)

	Princess Muna College	Royal Medical Services college	Total	Percentage (%)
Have You Heard of Breast Cancer	133	142	275	99.6
Is it common in this environment	124	126	250	90.6
Can it be detected early?	129	140	269	97.5
Can early detection improve chances of survival?	133	138	271	98.2
Have you heard of breast self-examination?	133	139	272	98.6
How did you hear about it?				
Relatives	29	36	65	19.3
Radio	9	14	23	6.8
TV	105	115	220	65.5
News Group	12	16	28	8.3
Who should perform BSE				
Male Only	0	1	1	0.4
Female Only	24	31	55	20.1
Both Male and Female	107	110	217	79.5
At what age BSE should begin				
<19	114	125	239	87.2
>19	17	18	35	12.8
How often should perform BSE				
Daily	2	5	7	2.5

	Princess Muna College	Royal Medical Services college	Total	Percentage (%)
Weekly	9	13	22	8.0
Monthly	110	107	217	78.9
Yearly	11	18	29	10.5
How is BSE done				
Palpate with one finger	1	3	4	1.5
Palpate with palm and minimum three fingers	126	118	244	90.4
Anyhow	0	22	22	8.1

Table (III) shows the level of breast cancer and breast self examination knowledge of the respondent. As noticed in this Table 99.6% of the students heard about BC, 98.2% know that early detection increase survival, 97.5% know that it can be detected early and 90.9% know that it is common within this environment.

The TV was the commonest source of information for about 65.5% of participant. Radio was the least source at 6.8%, while relatives were the second common source of information (about 19.3%).

Around 79.5% of the respondents know that both male and female should perform BSE,

while 0.4% believed that only men should perform BSE, lastly 0.7% didn't respond to this question.

About 87% of the respondents think that BSE should start at less than 19 years old. On the other hand, 12.8% believe that starting BSE shall be after 19 years old.

Almost 79% of respondent know that BSE should be performed on a monthly basis, 8% felt that BSE should be performed weekly, while 10.5% stated that it should be done on a yearly basis.

About 90.4% are aware about the method of performing BSE in correct manner.

Table IV: Distribution of female students according to their knowledge score about BC and BSE

Score	College		Total	Percentage
	Princess Muna	Royal Medical Services Collage		
Excellent	130	127	257	93.1%
Fair	3	16	19	6.9%
Unsatisfactory	0	0	0	0.0%
Total	133	143	276	100%

The results of this study indicated that the majority of the students had an excellent knowledge regarding BC and BSE as shown in Table IV.

The average of available knowledge scored (14.93 -15.51) out of 16. About 93.1% had an excellent score degree (13-16), 6.9% had a fair level knowledge (total score of less than 13, and above or equal 10) and none of the participant had unsatisfactory knowledge (0%).

Table V: Chi-Square Tests for Knowledge Score and College.

	Value X ²	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.579 ^a	1	0.003

According to these results of this investigation there is a significant relationship between the certificate degree and knowledge (p value 0,003).

As we mentioned before the students from Royal Medical Services college graduates with diploma degree, While Princess Muna College of Nursing awards its graduates a bachelor degree in nursing

Table VI: Attitude of respondents to breast self-examination

	Princess Mona College	Royal Medical Services college	Total	Percentage %
Do you think BSE Necessary				
Yes	132	142	274	99.6
I don't Know	0	1	1	0.4
Have you done BSE Before?				
Yes	102	81	183	66.5
No	30	62	92	33.5
If yes, why?				
To examine my breasts regularly	92	68	160	87.4
Because there is breast cancer in my family	4	8	12	6.5
Others	6	5	11	6.0
*If no, why not?				
I don't know how to do it	5	13	18	18.9
I don't think it is important	4	2	6	6.3
I don't Think I should touch my body like that	3	1	4	4.2
I don't believe in the efficacy of the test	1	1	2	2.1
I don't have any symptom	18	30	48	50.5
I know I can never have cancer	2	1	3	3.2
I am scared of being diagnosed with breast cancer	3	11	14	14.7

As analyzed in Table VI, 99.6% of the respondent, stated that BSE was necessary.

About 66.5% (no.183) of the respondents performed BSE, 55.7% (no.102) where from Princess Muna Nursing College and 44.3% (no.81) where from Royal Medical Services College.

Majority of them 87.4% used BSE to examine their breast regularly, while 6.5% performed it because they have a family history of BC.

About 33.5 % (no.92) student, stated that they never performed BSE, among those students 67.4% from Royal Medical Services College and only 32.6% from princess Muna college.

About 50.5% said that the main reason for not performing BSE is attributed to lack of

symptoms, while the lowest reason 2.1% was for not believing in the efficacy of the test.

*Some participants gave more than one reason for performing or not performing BSE. For example one participant answered I don't think it is important and I don't believe in the efficacy of the test.

Despite the excellent knowledge in both faculties; 18.9% admitted that they don't know how to perform BSE.

According to these results of this investigation there is no significant relationship between positive family history and practice of breast self-examination (p value 0,335). However, the There is a significant relationship between level of Education and BSE (p value 0,

Table VII: Chi-Square Tests for Practice of BSE

	Value X ²	Df	Asymp. Sig. (2-sided)
Positive Family History	.855 ^a	1	0.335
Level of Education	13.121 ^a	1	0.000

Table VIII: Respondents' practice of breast self-examination

Practice of self-examination	Princess Muna College	Royal Medical Services college	Total	Percentage(%)
How often do you perform BSE in a year?				
10-12	14	5	19	10.4
5-9	9	5	14	7.7
<5	79	71	150	82.0

Practice of self-examination	Princess Muna College	Royal Medical Services college	Total	Percentage(%)
At what age did you start BSE?				
>19	15	24	39	21.5
<19	86	56	142	78.5
When was the last time you performed BSE?				
Less than a week ago	17	16	33	18.4
Less than three to six months	62	45	107	59.8
Less than one year	20	19	39	21.8
What time do you usually perform BSE?				
Morning	53	39	92	50.0
Afternoon	28	28	56	30.4
Evening	23	13	36	19.6
Where do you usually perform BSE?				
In front of the mirror	41	56	97	53.3
Lying on the bed	16	8	24	13.2
In the bathroom	45	16	61	33.5
Would you want to know more about BSE?				
Yes	75	104	179	65.1
No	23	9	32	11.6
Missing	35	29	64	23.3

Table VIII above shows the respondents' practice of Breast Self Examination BSE. About 82% of the respondents stated that they perform BSE in an irregular manner, while only 10.4% perform BSE on a monthly basis. 78.5% of the respondents started performing BSE at less than 19 years, while 21.5% started performing BFE after their 19 years of age. 18.4% of the respondents said that the last time they performed BSE was less than a week ago, 59.8% carried it out less than three to six months, while 21.8% carried out BSE one year ago.

About 50% of the respondents preferred to perform breast self-examination in the morning, while 30.4% in the afternoon.

53.3% of the respondents prefer to carry out BSE in front of the mirror, 33.5% in bathroom while 13.2% preferred performing BSE while lying on the bed.

About 65% of the respondents showed interest to know more about BSE

Breast Cancer is the most common life threatening cancer in woman worldwide. With the incidence of the breast cancer rising, it becomes important to assess knowledge and practice of BSE in various age groups, as regular BSE is a novel method for early detection of BC

The present study was conducted to assess level of knowledge among female nursing students.

The overall knowledge of breast cancer and BSE was very excellent, and this is expected considering the fact that they are health care providers, and must have acquired this knowledge during their educational training.

The participant's knowledge about BC and BSE was superior as to previous studies organized in Jordan; i.e. the study prepared by Amal K. Suleiman via female Jordanian students in University of Jordan in Amman, ⁽³²⁾ which stated that Jordanian women has poor levels of knowledge of BC and BSE is overstated. This finding is supported by the study of Jaradeen ⁽³³⁾ which revealed a low mean level of knowledge about BC and BSE (49%) in 150 female hospital workers in Jordan. In addition, Munir Ahmed *et al* ⁽³⁴⁾ found that knowledge of breast cancer was low among 507 Jordanian woman aged 40-69 years in six govern no rates in Jordan

Our students' knowledge proved also to be better than those referred to in studies organized in other countries; i.e. in west bank, a study conducted by Ahmad Ayed in Arab American University in Jenin among nursing students, ⁽³⁵⁾ which showed that only 15.5% of the respondent has good overall

knowledge of BSE. While in Al-Taef University, only 8.2% of the medical students had a good level of knowledge of BC and BSE.⁽³⁶⁾

Similar results were found in previous studies among nursing students of Lagos University Teaching Hospital Nigeria in 2011,⁽³⁷⁾ where respondents knowledge was very high 97.3%, another study conducted by Kayodefo, at University of Ilorin⁽³⁸⁾ found that 95.6% of the respondent were aware of BSE and a study prepared by Kalandar Ameer in Haramaya University among female medical students 2014, showed that all the participants have good knowledge about breast cancer.⁽³⁹⁾

About 99.6% of participants stated that BSE can be an important tool for early detection of cancer. This finding is in line with a study conducted in Haramaya University,⁽³⁹⁾ where 95% of participants seconded the importance of BSE role, but this is inconsistent with another study conducted by Cavdar, *et al* 2007,⁽⁴⁰⁾ where 65% - 70% of doctors and nurses respectively didn't recognize the efficacy of the BSE.

Given the benefit generated from performing regular BSE referred to herein, 66.5% of the respondents performed BSE, but only 10.4% performed there of on monthly basis while 33.5% never performed BSE.

Although these results, are similar or somehow better than the rates recognized in many other studies, this number is still unsatisfactory compared with studies performed elsewhere; for example, in a survey involving nurses in 3 large cities in Jordan, 85% reported performing BSE in the last 12 months.⁽⁴¹⁾ Osama Abu Salem reported that 52% of nurses from Prince Rashid Military Hospital performed BSE.⁽⁴²⁾

In San Polo 90.3% of health providers performed BSE,⁽⁴³⁾ Kaur and Walia, in their study found that 51.5% of the participant practiced BSE monthly,⁽⁴⁴⁾ Karhan *et al* 2002 reported that 87% of Turkish nurses performed BSE and 49% performed it regularly.⁽⁴⁵⁾ Budden reported that 96% of nursing students performed BSE, but only 49% had practiced it regularly, once a month.⁽⁴⁶⁾ In Nigeria study conducted by Rosmery showed that 80.2% of the participant carried out BSE regularly.⁽³⁷⁾

On the other hand many other studies registered similar or even less than ours; for example, in Jordan a study conducted by Aya Akel and Mohammed AL Tarawneh found that 48% of Jordanian women performed BSE irregularly.⁽⁴⁷⁾ A study concluded by Juanita(2013) among nursing students BSE performance was found to be at 39.5%.⁽⁴⁸⁾ In Ajman, study conducted by Alsharbat in 2013 22.7% of the female students performed BSE, and only 3% of them performed it monthly.⁽⁴⁹⁾ In Jenin Ahmed Ayed found in his study that only 4% practiced BSE monthly and 37.1% performed BSE irregularly.⁽³⁵⁾ Kashgari and Ibrahim in a survey of Saudi women in Jeddah noted that only 12% of respondents performed BSE⁽⁵⁰⁾ similarly Ravichandra et al reported from Riyadh region that only 23% of the subjects performed BSE,⁽⁵¹⁾ a study done in Addis Ababa university found that only 27% of participants performed BSE.⁽⁵²⁾ In recent study done by Azage et al in Ethiopia 37% of health workers had never practiced BSE and only 14.4% practiced it monthly.⁽⁵³⁾ In 2015 in Buea University another study observed that the practice of BSE was very low only 3% practiced BSE monthly and 41% performed it irregularly.⁽⁵⁴⁾ Likewise in study by Hajji Mahmud it was determined that most health care practitioners 63% 72% did not practice BSE.⁽⁵⁵⁾

Our study revealed the presence of a significant relationship between knowledge score and the academic level of education. In contrast with those studies, Saddler stated that there is no relationship between knowledge and level of education,⁽⁵⁶⁾ in line with studies made by Kaur 2007⁽⁴⁴⁾ and Ahmed Ayed⁽³⁵⁾ where their results showed that there was a statistically significant difference between knowledge score as per the professional qualification.

As far as practice and level of education, our study shows that there is a significant relationship between the level of education and the practice, this is similar to study conducted in Armenia which revealed that higher level of education is in line with higher practice⁽⁵⁷⁾. In a Quasi experimental study conducted by Salama, Elsebi results showed BSE performance improved significantly following education.⁽⁵⁸⁾ Another study in Ghana 2013 shows same in line principles as

to education and practice. Study concluded in Olabisi Onabanjo University Teaching Hospital, Sagamu by Agboolo discovered a positive association between education level, BSE frequency and practice.⁽⁵⁹⁾

The major source of information about BSE as cited by the participants was television which is not different from what has been observed in studies performed elsewhere.

Other reports show that the main source of information was from lectures as in Yemen 44%,⁽⁶⁰⁾ Ethiopia 54%,⁽³⁹⁾ other reports showed that the main source of information received from friends or family members.⁽³²⁾ In Turkey a study done among nurses and midwives in Odmis school of health 35% acquired information regarding BSE during their work experience⁽⁶¹⁾ and 30% nurses from Prince Rashid Military Hospital also learned BSE during their work experience.⁽⁴²⁾

This findings show that media; especially television, can be used to sensitize women on the importance of BSE as well as educate women on how BSE should be performed.

Moreover this study findings reveal that the present study participants are more enthusiastic to gain information and thence are interested in performing BSE similar to dental students in Hyderabad city⁽⁶²⁾ and this was in contrast with the previous studies where in unpleasant and fear were potential barriers for practicing breast self examination.

Conclusion

Regular BSE was found to be inadequate and effort should be made to develop programs to increase knowledge of breast cancer as well as practice of BSE. Moreover, good level of knowledge may help in performing BSE correctly, but it doesn't play role in performing BSE regularly on a monthly basis.

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