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Knowledge, Attitude and Practice toward Breast Cancer among Kurdish Women in Sulaimani Governorate/ Iraq

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Abstract: ***Breast cancer is a devastating affliction, the frequency of which is gradually increasing all over the world. Cancer may be cured if properly intervened at the right time. The correct treatment, aided by professionals and the right technology can provide critical life support to breast cancer patients. This study was conducted to assessment knowledge, attitude and practice of breast cancer among Kurdish females visited Maternity Teaching Hospital in Sulaimani. A face-to-face interview through a question¬naire to assessment of knowledge and practices toward breast cancer of 500 non-breast cancer women visited Maternity Teaching Hospital was done. Data were computerized and analyzed using Statistical Package for the Social Science (SPSS, version 22). P-value of < 0.05 was considered as statistically significant. Out of 500 participants in the current study on knowledge and practices toward breast cancer among non-breast cancer women, consequently were 227 (45.4%) and 201 (40.2%) practiced breast self-examination(BSE) and clinical breast examination respectively. In this study the participants having no symptoms and lack of knowledge about how to do BSE where regarded as the barriers of not practicing BSE (44.7%, 55.3%) respectively. The most common reason for not doing clinical breast examination (CBE) is fear of the outcome and no sign & symptom of breast cancer (28.8%, 61.9%) respectively. The high education level showed significantly more knowledge of breast self-examination and mammography than Illiterate women P≤ 0.001 and P≤ 0.03 respectively. On the other hand, the high education level women showed significantly more practice of breast self-examination P≤ 0.001. In conclusion, the present study found the facts to the inadequate knowledge of female about breast cancer and recognized the negative influence of low knowledge on the practice of BSE, CBE and mammography and the breast cancer incidence. Therefore, more determinations are needed to develop a positive attitude toward BSE, CBE and mammography screening and practice in Sulaimani.***

Keywords: Knowledge, Attitude, Practice, Breast Cancer, Kurdish Women, Sulaimani**.**

1. INTRODUCTION

Breast cancer is a major health burden in women; it is the most common cause of cancer death among women in both high recourse and low recourse countries [1]. The incidence, mortality and survival rate in different parts of the world vary from 4 to 10 fold. Recent global cancer statistics indicate that breast cancer incidence is rising at a faster rate in populations in developing countries [2, 3]. The primary risk factors for breast cancer are: genetic susceptibility, increasing age, family history, early menarche and late menopause, oral contraceptive pills, postmenopausal hormone therapy, late first pregnancy (30 years or older), lack of breastfeeding, smoking, alcohol consumption, and obstetric history [4,5]. Delayed presentation of breast cancer is associated with lower survival rate [6], moreover the late stage of disease and high mortality are seen with delayed in diagnosis and treatment of breast cancer [7]. There is data suggesting that, factors related to women's knowledge and beliefs about breast cancer and its management may contribute significantly to medical help- seeking behaviors [8,9]. The three screening methods recommended for breast cancer includes breast self-examination (BSE), clinical breast examination (CBE), and mammography. Unlike CBE and mammography, which require hospital visit and specialized equipment's and expertise, the breast self-examination is inexpensive and is carried out by the women's themselves. Several studies, based on breast cancer patient's retrospective self-report on their practices of the exam, have established that a positive association exists between performance of the exam and early detection of breast cancer [10]. There are many studies in the world showed that lack knowledge and practice about breast cancer lead to delayed presentation, on the diagnosis and treatment of the disease with lower survival rate [6,7], therefor increasing knowledge and practice toward breast cancer is very important among the individuals to decrease the incidence and increase early detection of the disease. Therefore the role of education and knowledge in decreasing delayed presentation and diagnosis has been confirmed in other study [11, 12]. So the study aimed to assess knowledge, attitude and practice toward breast cancer among Kurdish females.

2. METHODS AND MATERIALS

The cross sectional study, was conducted on 500 Kurdish Women in Sulaimani Governorate/Iraq aged from 20-74 years who attended to Maternity Teaching Hospital in Sulaimani from the 20th of December to 20th July 2016. The method of selection sampling was convenient sampling method.

Inclusion criteria

-Females with non –breast cancer aged between 20-74 years.

-Only population of the Sulaimani and it's surrounding.

-Only the Kurdish populations were included.

Exclusion criteria

-Females under 20 years old.

-Females with breast cancer and other types of cancer.

-Non Kurdish Females.

-Females out of Sulaimani-governorate.

A face-to- face interview through a questionnaire with non- breast cancer females who visited Sulaimani Maternity Teaching Hospital. Verbal consent was taken from women, after disclosure statement regarding the purpose of the study. Data were collected during the period of study. The questionnaire was consisted of two main parts: Part one: socio-demographic characteristics of the study sample. Part two: questions related to knowledge, attitude and practices. The data were collected and tabulated. The recorded data were analyzed using computer based statistical package for social science (SPSS, V.22). Simple descriptive statistics were used (frequency with percentage distribution for categorized variables). Chi-square cross tabulation was used to test the differences to get the association in proportions of categorical variable between two or more groups and assess/find correlation between the variables. The level of statistical significance was set at probability $P \leq 0.05$.

3. RESULTS

The study includes 500 participant females, were visited maternity teaching hospital.

Table 1. Showed the socio-demographic characteristics of the participants. The age of the studied female ranged from 20 to 74 years with a mean ±SD of (35.9 ±8.96) years. Majority of participants 223 (44.6%), were between 31to 40 years of age .467 (93.4%) were married. The majority of the participants 174(34.8%) of them were High education level. Regarded occupational status of the participants majority of the participants were house wife 299(59.8%). Regarding marital status, 469(93.4%) of participants were married. In addition, from 500 participants 390(78%) were with urban residency and 110 (22%) of participants had rural residency.

When we asked the participants about the risk factors for the breast cancer in **table 2** (80.2%) indicated that positive family history was the common risk factor while (75.5%) and (70%) demonstrated that smoking and alcohol consumption respectively.

Table 3. When we asked the participant about the knowledge toward the signs & symptoms of breast cancer 380 (76.0%), 370 (74%) and 366(73.2) indicated that lump in the breast, Discoloration/ dimpling of the breast and Change in the size of the breast were the common signs of breast cancer respectively.

Table1.Demographical characteristics of the participants (No.=500)

Characteristics	No.	(%)
Age (years)		
20-30	137	(27.4)
31-40	223	(44.6)
41-50	105	(21.0)
51-60	28	(5.6)
Above 60	7	(1.4)
Education		
Illiterate	127	(25.4)
Primary	108	(21.6)
Secondary	91	(18.2)
High education	174	(34.8)
Occupation		
House wife	299	(59.8)
Student	25	(5.0)
Employer	176	(35.3)
Marital status		
Married	467	(93.4)
Unmarried	33	(6.6)
Residence		
Urban	390	(78.0)
Rural	110	(22.0)
Total	500	(100)

As illustrated in **Table 4**. 175 (35.0%) of the participants were confirmed the breast self-examination (BSE) usefulness in early detection of breast cancer. On the other hand, 228 (45.6%) participants were confirmed the clinical breast examination (CBE) usefulness in early detection of breast cancer. Only 22 (4.4%) confirmed mammography usefulness in early detection; however, only 112 (22.4%) of the participants had knowledge of the correct age for screening mammography. In addition, 199 (39.8%) of the participants recognized the correct BSE frequency.

As illustrated in **table 5.** When we asked the participants about the practice of breast self – examination (BSE), out of 500 participants, only 227 (45.4%) were practiced breast self-examination, while only 74 (32.5%) identified the correct time for practice of breast self-examination. In addition 54 (23.8%) of the participants recognized the correct age for starting breast self-examination, on the other hand when we asked

about the reasons for not practicing breast self-examination the highest percentage of chosen barrier 151 (55.3%) was "I don't know how to do that" and followed by 122 (44.7%) "I don't have breast problem".

As illustrated in **table 6.** When we asked the participants about the practice of clinical breast examination (CBE) Out of 500 participants only 201 (40.2%) were admitted clinical breast examination (CBE), 121 (60.2%) of the participants visited breast clinics only one time, 57 (28.4%) and 23 (11.4%) of the participants visited breast clinics 2-3 time and 3-5 time respectively. Consequently, when we asked about the reasons for not going through consulting clinical breast examination, the highest percentage of chosen barrier 185 (61.9%) was "I don't have sign and symptom" followed by 86.0 (28.8%) "Fear of outcome".

As showed in **Tables 7**. The knowledge of breast self-examination as a method of early detection was higher in the age group (31-40) (40%), compared to the other age group (20-30) (31.4%), (41-50) (20.6%), (51-60) (7.4%), and above 60 (0.6%) respectively. However, this difference was statistically not significant. Regarding the level of education the knowledge of participants toward breast self-examination was higher among highly education level 96 (54.9%), compared to the other level of education illiterate, primary level and secondary level were 21(12.0%). 31 (17.7%) and 27 (15.4%) respectively. However, this difference was statistically significant $p \leq 0.001$. About the knowledge of participants toward breast self-examination was higher among married women 165 (94.3%), compared to the unmarried10 (5.7%) and this difference was statistically not significant.

As illustrated in **Tables 8**. The knowledge of clinical breast-examination as a method of early detection was higher in the age group (31-40) (50.4%), compared to the other age group (20-30) (28.2%), (41-50) (16.2%), (51-60) (4.8%), and above 60 (0.4%) respectively, and this difference was statistically significant $p \leq 0.02$. Regarding the level of education; the knowledge of participants toward clinical breast--examination was higher among higher education level 75 (32.9%), compared to the other level of education illiterate, primary level and secondary level 68(29.8%). 47 (20.6%) and 38 (16.7%) respectively. However, this difference was not statistically significant. The knowledge of participants toward clinical breast-examination was higher among married women 212 (93%), compared to the unmarried 16 (7.0%) and this difference was statistically not significant.

As showed in **Tables 9**. The knowledge of mammography as a method of early detection was higher in the age group (41-50) (50%), compared to the other age group (20-30) (18.2%), (31-40) (22.7%), (51-60) (9.1%), and above 60 (0%) respectively . However, this difference was statistically not significant. Regarding the level of education the knowledge of participants toward mammography was higher among high education level 14 (63.6%), compared to the other level of education illiterate, primary level and secondary level 3(13.6%). 2 (9.2%) and 3 (13.6%) respectively. However, this difference was statistically significant $p \leq 0.03$. About the knowledge of participants toward mammography was higher among married women 21 (95.5%), compared to the unmarried 1.0 (4.5%) and this difference was statistically not significant.

Table2.Information about the breast cancer risk factors identified by the participants(No.=500)

Risk factors	No.	(%)
Increase age		
Yes	198	(39.6)
No	302	(60.0)
Positive family history		
Yes	401	(80.2)
No	99	(19.8)
High fat diet		
Yes	318	(63.6)
No	182	(36.4)
Smoking		
Yes	377	(75.4)
No	123	(24.6)
Alcohol consumption		
Yes	350	(70.0)
No	150	(30.0)
Late first pregnancy		
Yes	269	(53.8)
No	231	(46.2)
Early menarche		
Yes	112	(22.4)
No	388	(77.6)
Late menopause		
Yes	207	(41.4)
No	293	(58.6)
Stress		
Yes	230	(46.0)
No	270	(54.0)
Large breasts		
Yes	166	(33.2)
No	334	(66.8)
Total	500	(100)

As illustrated in **table 10**, The practice of breast self-examination was higher in the age group (31-40) (42.7%), compare to the other age group (20-30) (26.9%), (41-50) (20.7%), (51-60) (7.1%), and above 60 (2.6%) respectively. However, this difference was statistically not significant. Regarding the level of education, the practice of breast self-examination was higher among higher education level 102 (44.9%), compared to the other level of education illiterate, primary level and secondary level 43(18.9%), 46 (20.3%) and 36 (15.9%) respectively. However, the association was statistically significant $p \leq 0.001$. About the practice toward breast self-examination was higher

among married women 211 (93%), compared to the unmarried 16 (7.0%) and this difference was statistically not significant.

Table3.Information about the sign & symptoms of Breast cancer as identified by the participants(No.=500)

Sign & symptoms	No.	(%)
Lump in the breast		
Yes	380	(76.0)
No	120	(24.0)
Discharge from the nipple		
Yes	266	(53.2)
No	234	(46.8)
Pain and soreness in the breast		
Yes	310	(62.0)
No	190	(38.0)
Change in the size of the breast		
Yes	366	(73.2)
No	134	(26.8)
Discoloration/ dimpling of the breast		
Yes	370	(74.0)
No	130	(26.0)
Ulceration of the breast\nipple		
Yes	358	(71.6)
No	142	(28.4)
Weight loss		
Yes	313	(62.6)
No	187	(37.4)
Changes in the shape of the breast		
Yes	349	(69.8)
No	151	(30.2)
Inversion retraction		
Yes	347	(69.4)
No	153	(30.6)
Lump under armpit		
Yes	305	(61.0)
No	195	(39.0)
Scaling/ dry skin in nipple region		
Yes	243	(48.6)
No	257	(51.4)
Total	500	(100)

As shown in **Tables 11**. The practice of clinical breast-examination was higher among the age group (31-40) (45.8%), compared to the other age group (20-30) (23.9%), (41-50) (23.4%), (51-60) (6.5%), and above 60 (0.5%) respectively, however, this difference was statistically not significant p=0.3. Regarding the level of education; the practice toward clinical breast--examination was higher among higher educated level 62 (30.8%), compared to the other level of education illiterate, primary level and secondary level 45(22.4%). 51 (25.4%) and 43(21.4%) respectively. However, this difference was statistically not significant p=0.1. About the practice toward clinical breast-examination was higher among marred women 189 (94%), compare to the unmarred 12 (6.0%) and this difference was statistically not significant.

Table 4. Knowledge about method of early detection of breast cancer identified by the participants(No.=500)

Method	No.	(%)
breast self- examination(BSE)		
Yes	175	(35.0)
No	325	(65.0)
Do you know at which age breast self- examination should be started		
Yes	369	(73.8)
No	131	(26.2)
Do you know how to perform self-breast examination		
Yes	300	(60.0)
No	200	(40.0)
Do you know how often breast self- examination should be done		
Daily	16	(3.2)
Weekly	102	(20.4)
Monthly	199	(39.8)
Don't know	183	(36.6)
Clinical breast examination (CBE)		
Yes	228	(45.6)
No	272	(54.4)
Do you know how often CBE should be done until a women reach 40 years		
Once in a year	466	(93.2)
Once in two years	4	(0.8)
Once in three years	1	(0.2)
Don't know	29	(5.8)
Ultra sound		
Yes	36	(7.0)
No	464	(92.8)
Mammography		
Yes	22	(4.4)
No	478	(95.6)
Do you know recommended age for mammography examination to start		
At the age of 30	107	(21.4)
At 35	87	(17.4)
At 40	112	(22.4)
At 45	33	(6.6)
Don't know	161	(32.2)

Table 5.Practice of breast self – examination(No.=500)

Practice of breast self - examination	No.	(%)
Do you practice breast self- examination (BSE)		
Yes	227	(45.4)
No	273	(54.6)
How often you practice breast –self examination		
Once a week	32	(14.1)
Once in a month	74	(32.5)
Once in 3 months	35	(15.5)
Not very often	86	(37.9)
At which age you started practicing breast –self examination		
<25 of age	54	(23.8)
25-30	73	(31.9)
30-35	31	(13.7)
>35	69	(30.6)
Breast self-examination barriers		
Don't have breast problem	122	(44.7)
Don't know how to do that	151	(55.3)

Table 6. Information about practice of Clinical breast examination (CBE)(No.=500)

Clinical breast examination (CBE) No.		(%)
Yes	201	(40.2)
No	299	(59.8)
Frequency of clinical breast examination		
Once	221	(60.2)
2-3 times	57	(28.4)
3-5 times	23	(11.4)
Why do you reluctant to participate in Clinical breast examination (CBE)		
-Concern about extra money	3	(1.0)
-Concern about extra time	10	(3.3)
-Fear of outcome	86	(28.8)
-Too young to participate	11	(3.7)
-No signs & symptoms of breast cancer	185	(61.9)
-No one recommended	4	(1.3)

Table 7 .Knowledge of breast self-examination (BSE) as a method of early detection, according to Age, Education level and Marital status.

BSE	Yes (No.=175)		No (No.=325)		(p value)
Characteristics	**NO.**	**(%)**	**NO.**	**(%)**	
Age (years)					
20-30	55	(31.4)	82	(25.2)	
31-40	70	(40.0)	153	(47.1)	
41-50	36	(20.6)	69	(21.3)	**(0.2)**
51-60	13	(7.4)	15	(4.6)	
Above 60	1	(0.6)	6	(1.8)	
Education					
Illiterate	21	(12.0)	106	(32.6)	
Primary	31	(17.7)	77	(23.7)	
Secondary	27	(15.4)	64	**(19.7)**	
High education	96	(54.9)	78	(24.0)	**(0.001)***
Marital status					
Married	165	(94.3)	302	(92.9)	
Unmarried	10	(5.7)	23	(7.1)	**(0.5)**

Table 8. Knowledge of clinical breast examination (CBE) as a method of early detection, according to Age, Education level and Marital status.

CBE	Yes (No.=228)		No (No.=(272)		(p value)
Characteristics	**NO.**	**(%)**	**No.**	**(%)**	
Age (years)					
20-30	64	(28.2)	73	(26.8)	
31-40	115	(50.4)	108	(39.7)	
41-50	37	(16.2)	68	(25.0)	**(0.02)***
51-60	11	(4.8)	17	(6.3)	
Above 60	1	(0.4)	6	(2.2)	
Education					
Illiterate	68	(29.8)	59	(21.7)	
Primary	47	(20.6)	61	(22.4)	
Secondary	38	(16.7)	53	(19.5)	**(0.2)**
High education	75	(32.9)	99	(36.4)	
Marital status					
Married	212	(93.0)	255	(93.7)	
Unmarried	16	(7.0)	17	(6.3)	**(0.7)**

Table9. Knowledge of mammography as a method of early detection of breast cancer according to Age, Education level and Marital status

Mammography characteristics	Yes (No.=22) NO.	(%)	No (No.=478) No.	(%)	(p value)
Age (years)					
20-30	4	(18.2)	133	(27.8)	
31-40	5	(22.7)	218	(45.6)	
41-50	11	(50.0)	94	(19.7)	**(0.1)**
51-60	2	(9.1)	26	(5.4)	
Above 60	0	(0.0)	7	(1.5)	
Education					
Illiterate	3	(13.6)	124	(25.9)	
Primary	2	(9.2)	106	(22.2)	
Secondary	3	(13.6)	88	(18.4)	
High education	14	(63.6)	160	(33.5)	**(0.03)***
Marital status					
Married	21	(95.5)	446	(93.3)	
Unmarried	1	(4.5)	32	(6.7)	**(0.6)**

Table11. Practice of clinical breast examination CBE, according to the Age, Education level and Marital status

CBE Characteristics	Yes (N0.=201) NO.	(%)	No (N0.=299) NO.	(%)	(p value)
Age (years)					
20-30	48	(23.9)	89	(29.8)	
31-40	92	(45.8)	130	(43.5)	
41-50	47	(23.4)	59	(19.7)	**(0.3)**
51-60	13	(6.5)	15	(5.0)	
Above 60	1	(0.5)	6	(2.0)	
Education					
Illiterate	45	(22.4)	81	(27.1)	
Primary	51	(25.4)	58	(19.4)	
Secondary	43	(21.4)	48	(16.1)	**(0.1)**
High education	62	(30.8)	112	(37.5)	
Marital status					
Married	189	(94.0)	278	(93.0)	
Unmarried	12	(6.0)	21	(7.0)	**(0.6)**

Table 10 .Practice of breast self-examination BSE according to Age, Education level and Marital status

BSE characteristics	Yes (No.=227) NO.	(%)	No (No.=273) NO.	(%)	(p value)
Age (years)					
20-30	61	(26.9)	76	(27.8)	
31-40	97	(42.7)	126	(46.2)	
41-50	47	(20.7)	58	(21.2)	**(0.1)**
51-60	16	(7.1)	12	(4.4)	
Above 60	6	(2.6)	1	(0.4)	
Education					
Illiterate	43	(18.9)	84	(30.8)	
Primary	46	(20.3)	62	(22.7)	
Secondary	36	(15.9)	55	(20.1)	
High education	102	(44.9)	72	(26.4)	**(0.001)***
Marital status					
Married	211	(93.0)	256	(93.4)	
Unmarried	16	(7.0)	17	(6.6)	**(0.204)**

4. DISCUSSION

4.1. Knowledge and practice toward breast cancer

The present study results showed that the majority of the participants were in age between (31-40) years old, 93.4% of participants were married; this high percentage of marriage was assigned to socio-demographic factors as Islamic culture trend for early marriage and economic state (Table1). This finding is nearly in accordance to the previous cross sectional study that design among female aged more than 19 years in Mosul city, Iraq (both rural and urban) in 1996 which show that 92.5 % of the sample were married [13], our' result was consistent with study done among adult Saudi women [14]. Regarding the associated risk factors for breast cancer, about 80.2% of the participants knew that positive family history is the risk factors of breast cancer (Table2), other study conducted in Nigeria have also reported similar finding where that study have presented that the incidence of breast cancer is to be slightly higher in persons that have first degree relatives with a history of breast cancer [15].

In our study 75.4% of the participants said that smoking is a risk factors of breast cancer (Table2), these results were similar to that reported in a study done in Lagos where that study had presented that the incidence of breast cancer is to be slightly higher in persons that had history of smoking [16]. While 63.6% knew that high fat diet also an implicated risk factor (Table2), this is consistent by several studies conducted in Nigeria [15,16], previous studies have presented that the incidence was also increased with increasing age of the patient, obesity, physical inactivity, radiation exposure, intake of alcohol and high fat. Most of the participants in our study didn't know the association between breast cancers and increasing age 39.6%, early menarche 22.4% and large breast 33.2% (Table2), contrary to that other studies conducted in Nigeria presented that the incidence of breast cancer is also increased with increasing age of the patient and early menarche [16]. Also, around 70.0%, 53.8% and 41.4% of participants realized the effect of alcohol consumption, delivery of first child after the age 30 and late menopause respectively were risk factors of breast cancer (Table2), our results are similar with the study conducted in Nigeria [17]. The result of our study showed that the participants have poor understanding of major breast cancer risk factors, may be due to poor knowledge, some of breast cancer risk factors can be changed with health education [18]. In the present study, 76.0% of the studied population knew that a breast lump could be a warning sign of breast cancer (Table8). In another study among a Nigerian population, only 33% of population

identified that a breast lump is the commonest symptom of breast cancer [19]. Contrary to that, other researchers conducted in Jordanian established that the warning signs of breast cancer (e.g., painless lump, nipple retraction, bloody discharge from the nipple) were not well known among their participant women [20]. In the current study, 53.2% participants answered correctly when they asked about bloody discharge from nipple and 74.0% about change in breast skin(discoloration/dimpling of breast) (Table3), Other studies conducted in Nigeria women have also reported similar findings [21]. In our study only 38.0% of the participants said that pain and soreness in the breast are not signs of breast cancer (Table 3), this luck of information may be due to poor knowledge about symptoms of breast cancer. Whereas in another study conducted in Iran only 27% said that pain is not a sign of breast cancer [22]. These wrong information's or assumptions about breast lumps may account for some of the reasons why some of our patients present late to the hospital [23]. The current study showed that 35% and 45.6% of the participants were informed about breast self-examination (BSE) as well as clinical breast-examination (CBE) respectively and little about mammography 4.4% (Table4). The high educational level was variable found to have a significant correlation ($P< 0.001$) with knowledge of breast self-examination (BSE) (Table7). On the other hand, the age was variable found to have a significant correlation ($P< 0.02$) with knowledge of clinical breast examination (CBE) (Table8). This could be explained by the limited mammography services and information. This finding is really similar to study conducted in Turkey found that the majority of the women had no knowledge about mammography [24].

The low levels of education in majority of the women who participated in the current study are another reason, in that the women may not know how to access accurate information about breast cancer. Like the study conducted in Turkey showed that majority 77.6% of the participants did not know the age range when mammography should be done nor did they know its potential in detecting early breast cancer [24]. Regarding breast ultrasound, only 7.2% of the participants thought that it is a method for early detecting breast cancer (Table4). This striking finding is contrary to study conducted in Turkey [24], but it is similar to study conducted in Uganda [25]. Regarding the aspect of practicing breast self-examination (BSE), the current study revealed that 45.4% of the participants were performed breast self-examination (BSE), only 32.5% regularly (Table5). In other studies, the percentage of monthly breast self-examination (BSE) have been found to be 32.1% among under graduated students in Nigeria[26] , 66% among nursing students in Saudi Arabia[27]. 52% among Jordanian nurses, and 38.7% among Jordanian nursing students [28], and 36.7% among selected female university students in Malaysia [29]. In the current study the participants were have no symptoms and lack of knowledge about how to do BSE were regarded as the barriers of not practicing breast self-examination (BSE) (44.7%, 55.3%) respectively (Table5). these findings are similar to findings among Malaysian, Women [29]. Lack of knowledge about how to perform breast self-examination (BSE) among participant's women might have been due to insufficient education programs for breast health awareness. Breast health awareness provides women with some knowledge of the part they can play in being empowered to fight breast disease [30].

The practice of clinical breast examination (CBE) by physician was the second step in breast screening program [31].American cancer society has recommended clinical breast examination (CBE) for women aged 20 years once every two years and at age 40 annually. In our studies 40.2% of participants were examined clinically and 59.8% were never tried clinical breast examination (CBE). However, the most common reason for not practice clinical breast examination (CBE) were the fear of the outcome and no sign & symptom of breast cancer 28.8%, 61.9% respectively (Table6). Similarly, study conducted in Vietnams found that the annual clinical breast examination (CBE) percentage was 45% in educated women [32]. This percentage was higher than the finding that reported in Iranian women in another studies [33]. On the other hand, this finding is lower than the study of Wu TY and his coauthor in (2006) the study showed that 59% of educated Asian immigrants, who living in the US performed clinical breast examination (CBE) annually [34]. The implication of all of these is poor knowledge toward method of early detection of breast cancer.

4.2. Limitation or weaknesses of the study

Our study has some limitation as well given the social and cultural circumstance; some women in our study might have hesitated to speak openly about breast cancer to a stranger, even though some of the advantages of face-to-face such as : accurate screening of question, capturing verbal and non-verbal questions, keeping the interviewee focused on track to capture emotion and behaviors, the approach may lead to many limitation like the quality of data by interviewer, manual data entry and limited sample size.

5. CONCLUSION

The present study found the facts to the effect of inadequate knowledge of females on breast cancer prevalence and recognizes the negative influence of low knowledge on the practice of BSE, CBE and mammography.

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