

# Assessment of Knowledge Regarding Breast Cancer among Women

Dr. Wafaa Ahmed Ameen<sup>1</sup> [nur.wafaa.ahmed@uobabylon.edu.iq](mailto:nur.wafaa.ahmed@uobabylon.edu.iq)

lecturer ,Maryam Abdul-Kareem<sup>2</sup> [nur.maryam.karim@uobabylon.edu.iq](mailto:nur.maryam.karim@uobabylon.edu.iq)

A. lecturer , Mohammed Talib Abed<sup>3</sup> [nur.mohammad.talib@uobabylon.edu.iq](mailto:nur.mohammad.talib@uobabylon.edu.iq)

<sup>1</sup>Maternal and Neonate Nursing, College of Nursing, University of Babylon, Iraq

<sup>2</sup>Maternal and Neonate Nursing, College of Nursing, University of Babylon, Iraq

<sup>3</sup>Peditric Nursing, College of Nursing, University of Babylon, Iraq.

**Background** :Breast cancer in Iraq ,represents about 3<sup>rd</sup> of the percentage of cancer that have been afflicted by Iraqi women (32 percentage). As documented in the Iraqi cancer registry, this type of cancer is primarily relative to the cancerous types that Iraqi women suffer . **The aim** of the research was to assess knowledge of women toward risk factors & symptoms of breast cancer & relationship with demographic characteristics .. **Methodology**: "A descriptive-analytic non-probability study design" (convenient sam-ple) of (100) women attending Al-Emam Al-Sadiq in "Al-Hilla City". **Results**: The study findings showed that (68 percent) of them were Institute\ college level of education, the overassessment of knowledge toward risk factors & symptoms of breast cancer were Fair & high significant association between age and knowledge. **Recommendation** : .Health education through Ministry of health for encourage to do breast self examination and provide modern technique for diagnosis. Encoura-gement of women through Media/ TV, Radio, Posters, etc. Who has any risk factors for breast self-examination and mamm-ography .

**Key words:** *Assessment , women's , knowledge, Breast Cancer*

## Introduction:

"World Health Organization's (WHO) World Cancer, the most common cancers is breast cancer among women globally and it accounts for between (23–25percentage) of all cancers among .women and (1.1) million ,new cases of breast cancer occur yearly"<sup>(1)</sup> .

It is the most common kind of cancer in females and the reason of morbidity and mortality world -wide. The incidence of breast cancer is rising rapidly as well as its mortality rate. It is a malignant tumor that develops from the breast cells <sup>(2)</sup>.

There are many factors can be effect for breast cancer such as factors obesity ,lack of physical activity, being female is more susseabtable, , ionizing radiation ,menarche in early age, infertility or being grvida in late , ageing , family ,history because genes inherited risk factors for it (3).

There are many symptoms (alteration the appearance of the breast, & nipple , nipple discharge;. Awareness and identify these symptom also encouraged breast self-examination helps to detect any sign after a change occurs; like : !development or enlargement of a lump , skin irritation of the skiin, dimpling, or (turning inward of the nipple),redness <sup>(4)</sup>.

The elder; woman as well other women are more greatest chances for developing cance of breast;. . Nearly "76%" cases of breast cancer occur among women over fifty years <sup>(6)</sup>.

"Breast cancer is one of the most common cancer in females in the world" in general & at "" Eastern Mediterranean region and Iraq in particular where the incidence of it is 23% of the total cancer of women in the world , and although some believe that this cancer is a disease of the developed world, most of the death resulting from it (69%) occur in developing countries<sup>(7)</sup>

In Iraq ,breast cancer represents about a third of the percentage of cancer that have been afflicted by Iraqi women (32%). As documented in the Iraqi cancer registry . this type of cancer is primarily relative to the cancerous types that Iraqi women suffer from<sup>(8)</sup> .

Local studies have shown that the incidence of breast cancer the number of death increasing steadily, and the death rate is high, because the status is usually discovered after it reaches late stages in which recovery is not possible and that the most vulnerable ages in the countries of the middle east in general and Iraq in particular are for women of early life different from what happens in western societies<sup>(9)</sup>.

Knowledge; of breast cancer isvery important; as it will encourage women to perform- screening programs .Good information obtain on breast- cancer leads to an enhancement of early interventions because insuf-ficient knowledge; avoids women from looking for treatment, thus causative to high mortality. Early detection would result in a, better prog-nosis and treatment of the disease <sup>(10)</sup>.

**Methodology**: "A descriptive-analytic non-probability study design "( convenient sample) of (100) of women attending; Al-Emam Al-Sadiq teaching hospital: in Hilla City . A questionnaire was used as a data-gathering tool. The study carried out from (February – March 2020). Data collected through a questionnaire constructed for the purpose of this study, consists of three parts include;(5)items related to

socio. demographic(age, educational level, occupation, residence, economic state). (10) items of knowledge toward risk factors which include: "old age, family history of breast cancer, cigarette smoking, Increased fat intake, Primi gravida & primi para after "30" yrs old ., Early onset of menses (Before the age of 12 yrs., late menopause (after the age of 55 yrs.), use of oral contraceptive, obesity or genetic family, exposure to radiation" & (6) items about symptoms include: ( "painless lump in the breast or axilla, nipple retraction, bloody or any discharge, change in breast shape, dimpling of breast skin, changes in the skin of the breast).; these items are rated according to three Likert scale (I Know, I'm not sure ,Don't know ) scored (3,2,1) , cut of Point of score=0.66 . Descriptive statistical and Inferential analyses are used to analysis using the ("SPSS version 20").

**"Results":**

**Table (1) :Distribution of "Socio –Demographic" of Sample**

Items	Groups	Frequency	Percentage	Cumulative Percent
Age(years)	18-23	35	35%	35 %
	24-29	37	37%	72. %
	30-35	14	14%	86 %
	36-41	6	6%	92 %
	42-47	4	4%	96 %
	48 And more	4	4%	100%
"Educational level"	"Not -read &write Read & write"	4 8	4% 8%	4% 12%
	Primary\secondary school	20	20%	32%
	Institute\ college	68	68%	100%
	Occupation	Employed Not employed	35 65	35% 65%
Residence	Rural	22	22%	22%
	Urban	78	78%	100%
Economic status	Enough	16	16%	16%
	Not enough	84	84%	100%

Table (1) shows that the highest percentage (37%) of the study sample is at age (24-29) years & graduated from college and insinuate level of education.. The highest percentage (78%) of this study were living in urban & not employed with not enough economic status.

**Table 2: Sample's Knowledge Toward Risk Factors of Breast Cancer .**

Items	Groups	F.	%	M.S	Asses.
1. Aging	Know	59	59%	2.28	Fair
	Don't know	22	22%		
	Not sure	19	19%		
2. Family history of breast cancer	Know	22	22%	2.15	Fair
	Don't know	7	7%		
	Not sure	71	71%		
3. Smoking cigarettes	Know	25	25%	2.09	Fair
	Don't know	16	16%		
	Not sure	59	59%		
4. Increase fat intake	Know	28	28%	1.94	Fair
	Don't know	34	34%		
	Not sure	38	38%		
5. Primipara after the age of 30 years	Know	46	46%	2.07	Fair
	Don't know	39	39%		
	Not sure	15	15%		
6. Age of menarche before 12 years	Know	50	50%	2.19	Fair
	Don't know	31	31%		
	Not sure	19	19%		
7.Late Menopause after 55 years old	Know	35	35%	2.08	Fair
	Don't know	27	27%		
	Not sure	38	38%		
8. Use of oral contraceptive	Know	19	19%	1.93	Fair
	Don't know	26	26%		

	Not sure	55	55%		
<b>9. Hereditary or familial obesity</b>	Know	27	27%	1.92	Fair
	Don't know	35	35%		
	Not sure	38	38%		
<b>10. Exposure to radiation</b>	Know	5	5%	1.95	Fair
	Don't know	10	10%		
	Not sure	85	85%		
<b>Overall Women's Knowledge</b>	Know	31.6	31.6%	2.06	Fair(not sure)
	Don't know	<b>24.7</b>	<b>24.7%</b>		
	Not sure	43.7	43.7%		

"F= Frequency , %= Percentage, Asses =Assessment .M.S.= Mean of score " Cut off point (0.66), Don't know (mean of score 1-1.66), Not sure (mean of score 1.67-2.33), Know (mean of score 2.34 and more)".

Based on the statistic a Cut Off point, this table depicts that all women responses to knowledge items were fair "not sure" (mean of score 1.67-2.33)".

**Table 3: Distribution Sample's Knowledge Toward Symptoms of Breast Cancer**

Items	Groups	F	%	M.S	Asses.
<b>1 Painless lump in the breast or axilla</b>	Know	9	9%	2.06	Fair
	Don't know	3	3%		
	Not sure	<b>88</b>	88%		
<b>2. Nipple retraction</b>	Know	8	8%	1.91	Fair
	Don't know	17	17%		
	Not sure	<b>75</b>	75%		
<b>3. Change in the shape of the breast</b>	Know	5	5%	1.84	Fair
	Don't know	14	14%		
	Not sure	<b>81</b>	81%		
<b>4. Dimpling of breast skin</b>	Know	1	1%	1.94	Fair
	Don't know	7	7%		
	Not sure	<b>92</b>	92%		
<b>5. The presence of blood or secretions in the nipple</b>	Know	6	6%	1.83	Fair
	Don't know	23	23%		
	Not sure	<b>71</b>	71%		
<b>6. Change in the skin of the breast</b>	Know	3	3%	1.86	Fair
	Don't know	17	17%		
	Not sure	<b>80</b>	80%		
<b>Overall Women's Knowledge</b>	Know	5	5%	1.81	Fair
	Don't know	<b>14</b>	<b>14%</b>		
	Not sure	<b>81</b>	81%		

F= Freq-ency , %= Percentage, Asses =Assessment .M.S.= Mean of score " Cut off point (0.66), Don't know (mean of score 1-1.66), Not sure (mean of score 1.67-2.33), Know (mean of score 2.34 and more)"

Based on the statistic a Cut Off point, this table depicts that all women responses to knowledge items were fair "not sure" ("mean of score 1.67-2.33")

**Table ( 4): Association between demographical characteristics with knowledge toward Risk Factors & toward symptoms**

Relationships of Knowledge with Demographical Characteristics	Knowledge Toward Risk Factors			Knowledge Toward Symptoms		
	C.C.	Sig.	C.S.	C.C.	Sig.	C.S.
Age Groups	.917	.006	<b>HS</b>	.906	.000	<b>HS</b>
Educational level	.658	.338	NS	.644	.006	<b>HS</b>
Occupation	.421	.255	NS	.426	.023	<b>S</b>
Residency	.390	.457	NS	.315	.441	NS
Socio-Economic Status	.525	.375	NS	.452	.267	NS

**Table ( 4):** Depicts a high, significant -association age with knowledge women's toward risk factors & association between age ,educational level& occupation with knowledge toward symptoms .

#### Discussion:

The present study has reported that the highest percentage (37%) of the study sample is at age (24-29) years& graduated from college and insinuate level of education. This finding is disagreement with study<sup>(11)</sup>. Found that highest percentage of age group were (20- 26)) years ; but is consistent with<sup>(12)</sup> found that 91% were their undergraduate educational level. The highest percentage (78%) of this study were living in urban &not employed this result similarity with<sup>(13)</sup> found that (52.5%) of the participants were residence in urban area &housewives. Regarding economic status most of samples(84% ) were with not enough economic status this finding is not in the same line with<sup>(14)</sup> found that most of participants were median monthly income were 660,000 Iraqi Dinars (532 USD).Most of the participants were not sure about family history as risk factor, this result is not similarity with<sup>(15)&(12)</sup>. Found that participants have knowledge that family history was most commonly identified risk factor.

The study result found that 59%of women know that age is risk factor this similarity with<sup>(16)</sup> found that %62 of participants know breast cancer occurrence increases with age

The overall assessment knowledge of study sample toward symptoms of breast cancer were fair this is not in the same line with<sup>(16)</sup> study the participants have no knowledge about symptoms of breast cancer.

The overall assessment knowledge of study sample toward of risk factors and sign and symptoms of breast cancer of this study similarity to<sup>(12)</sup> found that the female students had limited knowledge of risk factors and sign and symptoms of breast cancer.

The result of this study found that high association between knowledge toward risk factors &symptoms with age at Pvalue (P=0.006; 0.000)this result is not in the same line with<sup>(17)</sup> (P=0.100,0.824) respectively.

The result of study shows highly significant between educational level and knowledge regarding signs and symptoms of breast cancer (P=.006) ,this in same line with<sup>(17)</sup> but not in similarity with<sup>(17)</sup> about relationship between participants' educational level and knowledge regarding risk factors breast cancer P<0.001 .The result of study found association between Knowledge Toward symptoms with occupation (P=0.023) this result is not in the same line with<sup>(17)</sup> (P=0.207).while not significant with risk factors this is agree with present study.

**Recommendation:** "Educational programs by Ministry of education during adolescence period to obtain information related to breast cancer and healthy diet & avoid obesity and other risk factors .Health education through Ministry of Health for encourage to do breast self examination and provide modern technique for diagnosis. Through encouragement of women through Media/ TV, Radio, Posters, etc. Who has any risk factors for breast self-examination and mammography".Further research regarding knowledge and practice of women towards breast cancer is recommended.

**Ethical Clearance:** Informed consent was obtained and oral permission for agreement from the pregnant women inthe interviewing face to face included in this study.

#### References:

- 1.Yaban Z, Ergin A. Breast cancer and integrative medicine approaches. *Turkiye Klinikleri J Obstet Womens Health Dis Nurs-Special Topics* 2017; 3: 134–140. <http://www.turkiyeklinikleri.com/article/en-meme-kanseri-ve-integratif-tedavi-yaklasimlari-79264.html> [Google Scholar
2. Smith RA; Cokkinides V; Eyre H J:: American Cancer Society Guidelines for the Early Detection of Cancer, CA: *A Cancer Journal for Clinicians*;2003
3. ALmutlaq BA; Almuazzi RF; Almuhayfir AA;etal:: Breast Cancer in Saudi Arabia and its possible risk factors; *Journal of Cancer Policy* 12,.,2017  
DOI: [10.1016/j.jcpo.2017.03.004](https://doi.org/10.1016/j.jcpo.2017.03.004)
4. American Cancer Society;;Cancer Facts and Figures .. Atlanta, GA: *American Cancer Society*.(2015).
- 5.Nojomi M ; Namiranian N ; Myers RE ; Razavi-Ratki SK ; Alborzi F;; Factors Associated with Breast Cancer Screening Decision Stage among Women in Tehran, Iran *Int J Prev Med*. 2014;5(2):196-202.
6. Vahabi, M;: Knowledge of Breast Cancer and Screening Practices among Iranian immigrant Women in Toronto *J. Community Health*. 2011;36(2):265-73
- 7.GLLyon G;: International Agency for Research on Cancer, 2010 (<http://globocan.iarc.fr/>, accessed 18 April 2012).
- 8.Alwan N;: Breast cancer: demographic characteristics and clinico-pathological presentation of patients in Iraq. *Eastern Mediterranean Health Journal*, 2010, 16(11):1073–1078
- 9.Iraqi cancer registry 2008. Baghdad, Iraqi Cancer Board, Ministry of Health, Iraq, 2010

10. Godfrey K; Agatha T; Nankumbi J; Breast Cancer Knowledge and Breast Self-Examination Practices Among Female University Students in Kampala, Uganda: A Descriptive Study. *Oman Med J.* 2016; 31(2):129-34.
11. **Salma K. J, Wafaa A. A, Haider T3** ;; Attitudes of nurses toward early detection of Breast Cancer at Teaching Hospitals in Hilla City/ Iraq. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)* .2016, 5( 1) PP:101-107
12. Hadi MA, Hassali MA, Shafie AA, Awaisu A. Evaluation of breast cancer awareness among female university students in Malaysia. *Pharm Pract (Granada)*. 2010; 8(1): 29–34
13. Nabil M; Ahangar A; Akhtar H; Akbar A; Mustafa S; AWARENESS AND KNOWLEDGE OF BREAST CANCER RISK FACTORS, SYMPTOMS AND SCREENING AMONG FEMALES IN A HOSPITAL IN NORTH INDIA. *J. Evolution Med. Dent. Sci.* 2016, 5( 32). PP:1717-1724
14. Hasan T; Shah S; Hassan M & et al;; Poor Knowledge and Practice Towards Breast Cancer among Women in Baghdad City, Iraq. *Asian Pacific Journal of Cancer Prevention*. 2015. 16, pp: 6669-6672
15. Grunfeld EA, Ramirez AJ, Hunter MS, Richards MA. Women's knowledge and beliefs regarding breast cancer. *Br J Cancer*. 2002;86:1373–1378. [PMC free article] [PubMed] [Google Schola
16. Singh R; Turuk A;; A study to assess the knowledge regarding breast cancer and practices of breast self-examination among women in urban area. *International Journal of Community Medicine and Public Health*. 2017 , 4(11) PP: 4344
17. Al-Mousa D ; Alakhras M; Hossain S; et al;; Knowledge, Attitude and Practice Around Breast Cancer and Mammography Screening Among Jordanian Women, *Breast Cancer: Targets and Therapy* 2020;12 231–242