

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/331774976>

# Evaluation of Nurses' Knowledge toward Breast Self-Examination at Al-Hussien Teaching Hospital in Thi-Qar Governorate

Article in Indian Journal of Public Health Research and Development · February 2019

DOI: 10.5958/0976-5506.2019.00417.0

CITATIONS

0

READS

53

3 authors, including:



Alaa M. Tuama

University of Thi-Qar

6 PUBLICATIONS 1 CITATION

[SEE PROFILE](#)



Ahmed Abudallh

University of Thi-Qar

6 PUBLICATIONS 0 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Assessment of Nurses' Exposure to Chronic Diseases in Thi-Qar Governorate Hospitals [View project](#)



Assessment of Quality of Life for Patient with Thalassemia at Thalassemia Center in Thi-Qar Province [View project](#)

# **Evaluation of Nurses' Knowledge toward Breast Self Examination at Al- Hussien Teaching Hospital in Thi-Qar Governorate**

**\* Alaa M. Tuama,\*\* Wassan Raheem Mobark \*\*\* , Ahmed Abudallh.Abud**

*\* University of Thi\_Qar , Faculty of nursing, Department of community nursing - Nasiriyah – IRAQ*

*\*\* University of Thi\_Qar , Faculty of Medicine , Department of Medicine , Nasiriyah – IRAQ*

*\*\*\* University of Thi\_Qar , Faculty of nursing, Department of pediatric nursing - Nasiriyah – IRAQ*

*\*s.alaa25@yahoo.com*

*\*\*\*Ahmed-abud@utq.edu.iq*

## **Abstract:**

**Objective:** To evaluate nurses' knowledge toward Breast Self Examination at Al- Hussien Teaching Hospital in Thi-Qar governorate.

**Methodology:** A purposive "non-probability" sample of (238 ) nurses who were selected from Al- Hussien Teaching hospital in Thi-Qar governorate for the period from October 1<sup>st</sup> 2015 to April 1<sup>st</sup> of 2016.

**Results:** The study results indicated that the participants' age is more than half of them is within 18-27 years-old (62.2%), their gender is approximate; (69.3%) for female, and (30.7%) for male, more than half of them are married (n=131; 55%); more than half of them has  $\leq 5$  years of working in nursing (62.6%), more than half of them report that their monthly income is Enough somewhat (51.7%); the majority of them live in urban areas (90.8%); and less than quarter of them work in emergency room (23.9%); less than half of them has Academic achievement is Institute (41.2%). The majority of the participant has a high knowledge (87%). there was a significant association between the nurses' knowledge and their monthly income, address, and workplace.

**Recommendations:** Focusing on awareness of nurses working in the medical field and focusing on activating educational programs in the direction of (SBE) with regard to knowledge, skills and practices

**Keywords:** Nurses; Knowledge ; Examination of Breast Self

## Introduction

Breast cancer is an abnormal increase in the size of breast cells. The incidence of this disease in developed countries and globally is one of the leading cause of death in the world <sup>(1)</sup>.

Breast cancer spreads at certain periods and according to studies in pregnant women and rates ranging from 1-3 per case of 10,000 pregnancies <sup>(2)</sup>

Recent estimates suggest that the rate of cancer will The figure is tripled in 2030 at 20-26 million new cases of cancer and three times by 2030, with new cancer cases ranging from 20 to 26 million deaths and 17-17 million cases Death <sup>(3)</sup>.

People are more likely to die of cancer, more than 70% of breast cancer deaths are common in developed countries, technology and developing countries. <sup>(4)</sup>

Breast self examination (BSE) In the health institutions mothers are taught how to self-examination of the breast, a method by the woman to examine her nipple through her vision and feel with her fingers and the detection of her breasts, The purpose of periodic breast examination is to raise the level of knowledge of people who are expected to have the disease and know the characteristics and changes that occur in the form and size of the glands in the breast and the detection of tumors present. <sup>(5)</sup>

Self-examination Every month, breast examination, Especially on the seventh day and the tenth day of the beginning of the menstrual cycle should be the ideal and fundamental way to detect breast changes early on. <sup>(6)</sup>

BSE technique involves touching the breast to lump with tips fingers, rather than flat by hand. Women will be in erectile

position, Women are able to detect about 95% of changes in the breast early to reduce breast cancer incidence. <sup>(7)</sup>

The ages in which women's deaths range from 40 to 50 years. <sup>(8)</sup>

Global statistics indicate an increase in the rate of breast cancer in developing countries <sup>(9)</sup>

Many studies have focused on the more common breast cancer that is a threat to the world <sup>(10)</sup>

Early detection of breast changes has a role in reducing mortality <sup>(11)</sup>.

Despite the above mentioned reasons, women do not use regular breast screening to detect the disease, especially in developing countries <sup>(12)</sup>

However, there have been suggestions from some studies that the relationship between pregnancy and breast cancers is weak and that breastfeeding has been associated with the disease. The study also found that age plays an important role, as well as the use of contraceptives.. <sup>(13)</sup>

It was found that radiography is considered the best method for early diagnosis and that the focus on periodic examination of the breast is the best factor that helps early diagnosis of the disease <sup>(14)</sup>

## Methodology:

A descriptive study was conducted at Thi-Qar Governorate in Al- Hussein Teaching Hospital, from the period of the October 1<sup>th</sup> 2015 to April 1<sup>st</sup> of 2016.

A purposive sample is " Non-probability" of 238 male and female nurses participants out of 715 who work in the units from which the study sample was recruited, in the above mentioned hospitals were selected according specific criteria .

## Data Collection:

The questionnaire was used in the design of the research. Previous studies were done in two parts. The first part was related to demographic information, for example, age, educational level, etc. The other part was related to knowledge of breast examination

Data were collected by the researcher are from nurses who work at Al-Hussein Teaching Hospital in Thi-Qar governorate through interview and by filling a questionnaire format.

The reliability of the resolution through internal isotope was (0.70) and through the use of experts

The direct interview of the nurse has an important role in collecting the sample and identifying the obstacles. The data collection process had been performed from (4)<sup>th</sup> November 2015 until ( 25 )<sup>th</sup> January 2016.

A statistical analysis was performed using the Microsoft office excel 2007 and SPSS package (version 19).

Chi- square statistics were used to determine the presence of an association between the variables. These were used to accept or reject the hypothesis ,Which include the following :

- 1- Chi-Square : for testing a difference between several category nominal scales of dichotomous random variables.

$$\chi^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{E_i}$$

(Polit and Hangler, 1999).

$\chi^2$  = Pearson's cumulative test statistic, which asymptotically approaches a  $\chi^2$  distribution.

$O_i$  = an observed frequency;

$E_i$  = an expected (theoretical) frequency, asserted by the null hypothesis;

$n$  = the number of cells in the table.

- 2- The P. value indicates that the degree of significance was ( $P \leq 0.05$ ) to just significant result
- 3- Cut-off-point: 1-1.33 = High; 1.34-1.67=Moderate; 1.68-2.00 =Low; H= High; M= Moderate; L = Low.
- 4- Statistical table (Frequencies & Percentages).

$$\sum f$$

$$\% = \frac{\sum f}{n} \times 100$$

## Results:

**Table1.** Distribution of the Nurses' Knowledge by their Demographic Characteristics .

Rating		E	%
AGE	18-27	148	62.2
	28-37	70	29.4
	38-47	16	6.7
	48 and above	4	1.7
	Total	238	100.0
GENDER	Male	73	30.7
	Female	165	69.3
	Total	238	100.0
Marital Status	Married	131	55.0
	SINGLE	97	40.8
	Divorce	4	1.7
	Widowed	4	1.7
	Separated	2	.8
	Total	238	100.0
Years of Service	1-5	149	62.6
	6-10	39	16.4

	<b>11-15</b>	<b>36</b>	<b>15.1</b>
	<b>16-20</b>	<b>5</b>	<b>2.1</b>
	<b>21 and above</b>	<b>9</b>	<b>3.8</b>
	<b>Total</b>	<b>238</b>	<b>100.0</b>
<b>Monthly income</b>	<b>NOT ENOUGH</b>	<b>58</b>	<b>24.4</b>
	<b>Enough somewhat</b>	<b>123</b>	<b>51.7</b>
	<b>ENOUGH</b>	<b>57</b>	<b>23.9</b>
	<b>Total</b>	<b>238</b>	<b>100.0</b>
<b>ADDRESS</b>	<b>URBAN</b>	<b>216</b>	<b>90.8</b>
	<b>Rural</b>	<b>22</b>	<b>9.2</b>
	<b>Total</b>	<b>238</b>	<b>100.0</b>
<b>WORK PLACE</b>	<b>EMERGNCY</b>	<b>57</b>	<b>23.9</b>
	<b>BURN</b>	<b>17</b>	<b>7.1</b>
	<b>CONSULTING</b>	<b>52</b>	<b>21.8</b>
	<b>CCU</b>	<b>24</b>	<b>10.1</b>
	<b>ICU</b>	<b>19</b>	<b>8.0</b>
	<b>RCU</b>	<b>2</b>	<b>.8</b>
	<b>Wards</b>	<b>47</b>	<b>19.7</b>
	<b>Operations</b>	<b>11</b>	<b>4.6</b>
	<b>DYALSIS</b>	<b>9</b>	<b>3.8</b>
	<b>Total</b>	<b>238</b>	<b>100.0</b>

**Table 1. Continue ....**

<b>Academic achievement</b>	<b>Nursing Course</b>	<b>6</b>	<b>2.5</b>
	<b>preparatory</b>	<b>72</b>	<b>30.3</b>
	<b>Institute</b>	<b>98</b>	<b>41.2</b>
	<b>College</b>	<b>62</b>	<b>26.1</b>
	<b>Total</b>	<b>238</b>	<b>100.0</b>

Table (1) describes that the participants' age is more than half of them is within 18-27 years-old ( $n=148$ ; 62.2%), their gender is approximate; ( $n=165$ ; 69.3%) for female, and ( $n=73$ ; 30.7%) for male, more than half of them are married ( $n=131$ ; 55%); more than half of them has  $\leq 5$  years of working in nursing ( $n=149$ ; 62.6%), more than half of them report that their monthly income is Enough somewhat ( $n=123$ ; 51.7%); the majority of them live in urban areas ( $n=216$ ; 90.8%); and less than quarter of them work in emergency room ( $n=57$ ; 23.9%); less than half of them has Academic achievement is Institute ( $n= 98$ ; 41.2%).

**Table 2. Distribution of the Level of nurses' Knowledge**

Level of Knowledge		F.	%
Overall knowledge	Low	1	.4
	Moderate	30	12.6
	High	207	87.0
	Total	238	100.0

The table reveals that the majority of participant has a high knowledge (n=207; 87%), in contrast to the less than third of participants who have a moderate knowledge (n=30; 12.6%).

**Table 3. Association between the Level of Nurses' Knowledge and their Demographic Characteristics**

		Over all knowledge			Sig.
		Low	Moderate	High	
AGE	18-27	0	20	128	$\chi^2_{\text{obs.}} = 3.729^a$ $\chi^2_{\text{crit.}} = 15.5073$ df=6 P> 0.05 NS
	28-37	1	8	61	
	38-47	0	1	15	
	48 and above	0	1	3	
	Total	1	30	207	
GENDER	Male	1	12	60	$\chi^2_{\text{obs.}} = 3.765^a$ $\chi^2_{\text{crit.}} = 15.5073$ df=2 P> 0.05 NS
	Female	0	18	147	
	Total	1	30	207	
Marital Status	Married	1	16	114	$\chi^2_{\text{obs.}} = 2.310^a$ $\chi^2_{\text{crit.}} = 15.5073$ df=8 P> 0.05 NS
	Single	0	13	84	
	Divorce	0	1	3	
	Widowed	0	0	4	
	Separated	0	0	2	

		Over all knowledge			Sig.
		Low	Moderate	High	
AGE	18-27	0	20	128	$\chi^2_{\text{obs.}} = 3.729^a$ $\chi^2_{\text{crit.}} = 15.5073$ df=6 P> 0.05 NS
	28-37	1	8	61	
	38-47	0	1	15	
	48 and above	0	1	3	
	Total	1	30	207	
Years of Service	1-5	0	22	127	$\chi^2_{\text{obs.}} = 11.214^a$ $\chi^2_{\text{crit.}} = 15.5073$ df=8 P > 0.05 NS
	6-10	0	1	38	
	11-15	1	6	29	
	16-20	0	0	5	
	21 and above	0	1	8	
	Total	1	30	207	
Monthly income	Not Enough	0	11	47	$\chi^2_{\text{obs.}} = 9.673^a$ $\chi^2_{\text{crit.}} = 15.5073$ df= P< 0.05 S
	Enough somewhat	1	18	104	
	Enough	0	1	56	
	Total	1	30	207	
Address	Urban	1	23	192	$\chi^2_{\text{obs.}} = 8.185^a$ $\chi^2_{\text{crit.}} = 15.5073$ df=2 P< 0.05 HS
	Rural	0	7	15	
	Total	1	30	207	

Continue...

Workplace	Emergency	0	8	49	$\chi^2_{\text{obs.}} = 31.897^a$ $\chi^2_{\text{crit.}} = 15.5073$ df=16 P< 0.05 HS
	Burn	0	1	16	
	Consultant	0	7	45	
	CCU	0	1	23	
	ICU	0	2	17	
	RCU	0	1	1	
	Wards	0	7	40	
	Operatins	0	1	10	
	Dialysis	1	2	6	
	Total	1	30	207	



	<b>Nursing Course</b>	<b>0</b>	<b>0</b>	<b>6</b>	$\chi^2_{\text{obs.}} = 4.041^a$ $\chi^2_{\text{crit.}} = 15.5073$ df=6    P > 0.05 NS
<b>Academic achievement</b>	<b>preparatory</b>	<b>1</b>	<b>8</b>	<b>63</b>	
	<b>Institute</b>	<b>0</b>	<b>15</b>	<b>83</b>	
	<b>College</b>	<b>0</b>	<b>7</b>	<b>55</b>	
	<b>Total</b>	<b>1</b>	<b>30</b>	<b>207</b>	

The table shows, that there was significant association between the nurses' knowledge and their monthly income, address and workplace at ( $P < 0.05$ ); in contrast, there was non-significant association between the nurses' knowledge and residue demographic characteristics when analyzed by chi-square test.

### Discussion:

The participants' age ranged from 18-27 years-old. This result is consistent with the study of Ebirim Chikere, et.al, who have found that most workers in nursing, with a mean age of  $21.9 \pm 2.7$  years old.<sup>(16)</sup> This can be attributed that most nurses who are participants in this study are newly employed; they are small in age.

More than half gender of the sample was female. This result is consistent with the study of Dalal M. Nemenqani, et.al, who have found that most the study nurses were female.<sup>(17)</sup> This can be attributed that most nurses who are participants in this study are female because the unit of working consist female more than male.

More than half of them are married. This result is consistent with the study of Israa M. Alkhasawneh, who have found that most female Registered Nurses 62% were married.<sup>(18)</sup>

More than half of them have  $\leq 5$  years of working in nursing This result is consistent with the study of Israa M. Alkhasawneh, who have found that, the greatest sample have less than 5

years of clinical experience (64%).<sup>(18)</sup> This can be attributed that most nurses are newly employed, and have less than five years of working in nursing.

More than half of them report that their monthly income was enough somewhat. This result is consistent with the study of Ahmad Ayed. et. al., who have found that, More than half of the sample ( 54.6%) were enough somewhat monthly income. This can be attributed that, as mentioned earlier, most of those nurses are newly employed and need less than old workers responsibilities.<sup>(19)</sup>

The vast majority of them live in urban areas. This can be attributed that most hospitals lie in the city center where they are more close to nurses. Moreover, most of rural people prefer to work in their farms rather than looking for other jobs.

More than half of them report that their workplace was emergency. This can be attributed that the greatest proportion of study sample is drawn from emergency department, because the number of nurses who work in this department is much more the number

of nurses who work in other units of the hospitals.

The vast majority of them have Preparatory Nursing School in level of Education. This result is consistent with the study of Seideh Fatemeh Hosseini, et. al., who have found that In relation to the level of educational attainment, most nurses have high school education prevailing (41.7%) which is the minimum requirement to carry out the job.<sup>(20)</sup> This can be attributed that the number of nursing institutes increased according to start opening new institute school .

The vast majority of participants have high level of knowledge toward breast self examination. This result is consistent with the study of **Linda Akuamoah Sarfo et. al.** who have found that, majority of the female nursing students had knowledge about breast self examination. This can be attributed that most of the participants are newly employee which have fresh information from the school and high awareness help to enhance the knowledge toward the breast self examination.<sup>(21)</sup>

Regarding to association between nurses' knowledge toward BSE and their demographical characteristic the table show that, there was a significant association between nurses knowledge toward BSE and monthly income. This result is consistent with the study of Mikiyas Amare Getu, et. al., The correlation between the level of awareness and the monthly income is better. All the nurses who have a skill about the nursing profession had a better monthly income, and this gives us the higher the level of

knowledge about the nursing tasks there was an increase in monthly income.<sup>(22)</sup>

There was a significant association between nurses knowledge toward BSE and their residence. This result is consistent with the study of Ahmad Ayed. et. al., who have found that statistical significant relation between total mean knowledge of BSE and residence area.<sup>(19)</sup>

The correlation was significant between nurses' self-examination and their workplace. This study is consistent with the y vonne ten hoeve .et.al., fact that there is a statistically significant relationship between self-examination and the work place of nurses, as factors influencing the knowledge of nurses. Experience has a significant role in raising the level of knowledge and interaction On the professional side with high-class co-workers.<sup>(23)</sup>

### **Recommendations:**

The basic and important need is to create awareness and awareness about breast self-examination among nurses to increase knowledge and skill

Depending on the development of technology, the emphasis should be placed on the use of technology in the self-examination process using visual and audio media, focusing on early examination clinics, nurses should be role models for the other females in the self-examination process

### **References:**

1. Dündar EP, Ozmen D, Ozturk B, Haspolat G, Akyildiz F, Coban S, et al. The knowledge and attitudes of breast self-examination and mammography in a group of women in a rural area in

- western Turkey. *BMC Cancer* 2006;6:43.
2. BREAST CANCER, PREGNANCY, AND BREASTFEEDING This document was developed by the Breast Disease Committee and approved by Executive and Council of the Society of Obstetricians and Gynaecologists of Canada.
  3. Chang YT, Loong CC, Wang HC, Jwo SC, Lui WY. Breast cancer and pregnancy. *Chung Hua I Hsueh Tsa Chih Taipei* 1994; 54(4):223-.
  4. Petro-Nustas W, Mikhail BI. Factors associated with breast self-examination among Jordanian women. *Public Health Nurs* 2002;19:263-
  5. Deaton, J.G. (1988) How to Recognize Cancer before It's Too Late. *Herald of Health*, June, 9-11. E. C. I. Casmir *et al.* 1141
  6. Abudu, E.K., Banjo, A.A.F., Izegebu, M.C., Agboola, A.O.J., Anunobl, C.C. and Musa, A. (2007) Malignant Breast Lesions at Olabisi Onabanjo University Teaching Hospital (OOUTH) Saganu: A Histopathological Review. *Nigeria Postgraduate Medical Journal*, 14, 57-59.
  7. Brunar, L.S. and Suddarth, D.S. (1988) Textbook of Medical Surgical Nursing. J. B. Lippincott Company, Philadelphia, 890-895.
  8. Taleghani F., Yekta Z., and Nasrabadi A. (2006): Coping with breast cancer in newly diagnosed Iranian women. *J. Adv Nurs*. 54:265-72.
  9. Gilani, S., Khurram, M., Mazhar, T., Tabir. S. Ali, S., Tariq, S., and Malik, A. (2010): Knowledge, attitude and practice of a Pakistani female cohort towards breast cancer. *JPMA* 60:205; 2010,
  10. Anderson B., Yip C., Ramsey S., Bengoa R., Braun S., and Fitch M. (2006): Global Summit Health Care Systems and Public Policy Panel. Breast cancer in limited-resource countries: health care systems and public policy. *Breast J.* 2006; 12 Supple1: 154-69.
  11. Smith RA, Caleffi M, Albert US, Chen TH, Duffy SW and Franceschi D, et al. (2006): Breast cancer
  12. The LIVESTRONG Foundation, Foundation Information & Cancer Statistics: World Cancer Report Information, <http://mediaroom.livestrong.org/livestrongInformation>.
  13. WHO, "Cancer," Fact Sheet 297, WHO, Geneva, Switzerland, 2011, <http://www.who.int/mediacentre/factsheets/fs297/en/>.
  14. H. Rabia and G. Sebahat, "The effect of training on the knowledge levels and beliefs regarding breast self-examination on women attending a public education centre," *European Journal of Oncology Nursing*, vol. 12, no. 1, pp. 58–64, 2008.
  15. Polit, D.; and Hungler, B.: Nursing research, principles and methods, 6<sup>th</sup>ed, Baltimore: Lippincott, 1999.
  16. Ebirim Chikere et. al. Knowledge and Practice of Breast Self-Examination among Female Undergraduates in South-Eastern Nigeria, 2015 .
  17. Dalal M. Nemenqani, et. al. Knowledge, attitude and practice of breast self examination and breast cancer among female medical students in Taif, Saudi Arabia, 2014.
  18. Israa M. Alkhasawneh, et. al. Jordanian nurses' knowledge and practice of breast self-examination, *JOURNAL OF ADVANCED NURSING*, 65(2), 412–416, 2009.

19. Ahmad Ayed. et. al. Breast Self-Examination in Terms of Knowledge, Attitude, and Practice among Nursing Students of Arab American University/ Jenin, *Journal of Education and Practice*, Vol.6, No.4, 2015.
20. Seideh Fatemeh Hosseini. et. al., BREAST SELF-EXAMINATION AMONG WOMEN: A QUANTITATIVE STUDY, *Indian Journal of Fundamental and Applied Life Sciences*, Vol. 5 (S2), 2015.
21. Linda Akuamoah Sarfo, et. al., Knowledge, attitude, and practice of self-breast examination among female university students at Presbyterian University College, Ghana, *American Journal of Research Communication*, Vol 1(11), 2013.
22. Mikiyas Amare Getu, et. al., Assessment of Nurse's Perception Towards Their Profession and Factors Affecting It in Debre Berhan Town Governmental Health Institution, Debre Berhan, Ethiopia, *American Journal of Nursing Science*, 2015; 4(6): 297-304.
23. Yvonne ten Hoeve, et. al., The nursing profession: public image, self-concept and professional identity. A discussion paper, *Journal of Advanced Nursing* 70 (2), 295–309, 2013.