

www.gsjpublications.com Journal of Global Scientific Research (ISSN: 2523-9376) 9 (2020) 803-813 Journal of Global Scientific Research

www.gsjpublications.com/jgsr

# Evaluation of Knowledge among Libyan Women about Breast Cancer and its Risk Factors

Habsa A. A. Amshahar<sup>\*1</sup>, Sana Taher Ashur<sup>2</sup>

<sup>1</sup>Pathology Department, Faculty of Medicine, Sirte University, Sirte, Libya. <sup>2</sup>Department of Family and Community Medicine, Faculty of Medicine, Tripoli University, Tripoli, Libya.

> Email Address: \*<u>habsa33@su.edu.ly</u> (Habsa), <u>drsana04@yahoo.com</u> (Sana)

Received: 9 Sep 2020, Revised: 17 Sep 2020, Accepted: 26 Sep 2020, Online: 5 Nov 2020

#### Abstract

**Introduction**: Breast cancer is the most common female malignancy, and its incidence is on rise in Libya. The aim of this study is to assess the prevalence of inadequate knowledge about cancer breast and its risk factors among Libyan women resident in Sirte, and to examine if any of their socio-demographic characteristics (age, occupation, marital status, educational level and income) are associated with having inadequate knowledge status. Methods: A cross-sectional study of a 200 Libyan females was conducted from January to June 2019 at Sirte city. Women were interviewed using a specifically designed questionnaire to gather data relevant to breast cancer and its risk factors. Data were analyzed using SPSS software. Results: The mean age of the respondents was 48.0±12.1, and those who reported having no formal education constituted 46.5% of the sample. Overall, the frequency of inadequate knowledge about breast cancer was considerable (59.5%). Up to 90.0% know that the statement "Cancer has no treatment" is incorrect. The most known risk factor for breast cancer was "lack of breast-feeding" (86.0%). However, the least known risk factors of breast cancer were the hormonal replacement therapy (22.0%) and use of contraceptive pills (26.5%). No significant association between level of knowledge towards breast cancer and any of the studied socio-economic characteristics. Conclusion: The findings show a fairly considerable rate of inadequate knowledge about several aspects of breast cancer and its risk factors. Therefore, there is a need to plan for and implement educational programs to improve the level of knowledge about breast cancer and its risk factors among women in Sirte. Such actions are foreseen to contribute to cancer breast prevention among Libyan woman.

Keywords: Breast cancer, risk factors, socio, demographic, screening, Libya

# 1. Introduction

Breast cancer is the most common cancer in women [1], and the second leading cause of cancer death in both, developed and developing countries [2]. The mortality rate and incidence of breast cancer are on increase [3]. Moreover, the incidence of breast cancer is soaring in developing countries [4]. The majority of female patients in developing countries, particularly in Middle East and North Africa, are younger than those in European countries [5].

In Libya, a number of studies have shown that breast cancer constitutes about 20% of all cancer types [6-11]. Most of diagnosed cases are young, and approximately a half of them at advanced stage [12].

Breast cancer is a clinically heterogeneous disease [13]. Several and complex hereditary and non-hereditary factors are known to affect the risk of development of breast cancer, with some of these factors are protective. The majority of hereditary breast cancer cases are related to the BRCA1 and BRCA2 gene mutation [14], while the most important factors among the non-hereditary cases are female sex and aging above 40. Other factors include; endogenous hormonal factors like early age at menarche and late menopause; exogenous hormonal factors like oral contraceptives and hormone replacement treatment; reproductive factors like no or late pregnancies after age of 30 years and no breast feeding; family history of breast cancer; exposure to ionizing radiation; obesity and dietary factors [14-16].

Knowing the protective and the risk factors of breast cancer, and awareness about personal risk are essential for healthier practices, early detection and management of the disease [4, 17]. Therefore, our study, aimed to assess the prevalence of inadequate knowledge about cancer breast and its risk factors among Libyan women resident in Sirte, and to examine if any of their socio-demographic characteristics (age, occupation, marital status. educational level and income) are associated with having inadequate knowledge status.

#### 2. Material and Methods

# Study design and selection of participants

This study was a cross-sectional survey conducted over a 6-months period from January to June 2019 at Sirte city. Sirte is one the most important coastal cities in Libya. A sample of 200 Libyan women was recruited using convenient sampling method. Only those whose age is above 18 years old were eligible. Recruitment was done on voluntary bases, and consents to participate were considered. Women diagnosed with breast carcinoma where excluded. Women who have psychiatric problems that could interfere with their comprehension of the questions were also excluded.

#### **Research instruments**

A self-reporting questionnaire, comprised of two parts, was used to collect data. The first part intended to collect data about the socio-demographic characteristics of the respondents including; age, occupation, marital status, educational level and income. The second part was constructed based on literature [18-20] to assess knowledge about breast cancer. The questions cover knowledge aspects relevant to breast cancer epidemiology, risk factors, early detection and its importance, and breast cancer treatment. Each question in the second part is attached to a "yes" and "no" scale, whereby a "yes" answer was given a score of 1 and a "no" answer scored as 0. Some items code was reversed as needed before calculating the total Knowledge score (A sample item: Cancer has no treatment). The possible total score range is 0 to 28. To define Knowledge status, the total score was dichotomized into the binary variable; inadequate knowledge and adequate knowledge. Since the total score in this study was normality distributed, mean was used as the cut-off point. Accordingly, respondents whose total knowledge score is equal to, or below the mean was defined as having inadequate knowledge about breast cancer, and those who scored above the mean was defined as having adequate knowledge.

#### Data analysis:

The statistical package of social sciences (SPSS) version 24 was used to run the analysis. Frequency and percentages were used to describe the categorical data, while mean and standard deviation were used to describe the continuous data. Chi-square test, Fisher's Exact test and independent t test were used as appropriate to test for any bivariate association between the socio-demographic characteristics and cancer breast knowledge status. The significance level of p less than 0.05 was considered in the interpretation of the significance of the final results.

# 3. Results

As shown in Table 1, the ages of the females involved in this study ranged from 30 to 70 years, with the mean age of the respondents was  $48.0\pm12.1$ . The majority of respondents were married (80.5%) and 37% of them have paid work. All educational levels were representative in the sample, with those who reported having no formal education constituted 46.5% of the sample. A total of 61 % of the women belonged to the lower income category (less than 500 LD/month).

Overall, the frequency of inadequate knowledge about breast cancer was

considerable (59.5%). The findings showed a high knowledge rates on some aspects of breast cancer. The highest rate of correct responses was to the statement "Cancer has no treatment", where 90.0% of the respondents reported a negative response. The results also showed that 82.5% of the respondents know that they have to perform breast self-examination. The most known risk factor for breast cancer among respondents was "lack of breast-feeding" (86.0%). A total of 164 (82.0%) knows that breast cancer affects women of all racial and economic classes. However, the least known risk factors of breast cancer were the hormonal replacement therapy (22.0%), use of contraceptive pills (26.5%) and having family history of breast cancer (28.0%). Not surprisingly, only 30.0% of the respondents know that Cytodiagnosis is a method that helps in early detection and management (Table 2).

As shown in table 3, none of the studied socio-demographic characteristics significant displayed a statistical association with the knowledge status. Although there is a difference in the mean age of the respondents across the inadequate knowledge group (47.6±12.3) the adequate knowledge and group  $(48.5\pm11.9)$ , the difference is small and insignificant (p > 0.05).

#### 4. Discussion

Knowledge of risk factors, screening and treatment of breast cancer is very important for primary prevention of breast cancer and decrease breast cancer related morbidity. In the present study, more than half of the respondents exhibited inadequate knowledge about breast cancer. This may partly explain the delay in presentation among Libyan breast cancer patients. Like in this study, literature showed a low level of knowledge in several Arab countries in comparison with developed countries [21, 12, 22]. However, El-Hamadi and colleagues research showed a relatively higher knowledge of breast cancer screening and risk factors among Libyan Women [23].

Our study demonstrated that, knowledge of respondents about reproductive risk factors was better than their knowledge about lifestyle related risk factors. For instance, 86% of women recognized breastfeeding as a preventive behavior. Contrary to the findings from a previous study in the Libyan context [18], hormonal replacement therapy and use of oral contraceptive were the least frequently correctly identified risk factors. Respondents reported a lower knowledge about the consumption of unhealthy food, smoking and lack of exercise as risk factors for breast cancer compared to that reported in an Egyptian setting [20]. In the current study, women had a poor knowledge regarding family history as a risk factor, this is consistent with previous studies among Libyan female [18, 20, 24 -26]. Less than a half of women in the present study were aware about the role of mammography for early detection of breast tumors. Moreover, considerable proportion of them holds negative thoughts about mammogram that ranges between being not important to that it may cause cancer. These findings are consistent with those reported in several Libyan studies [18, 27-30]. In line with this, a Nigerian study found that, women are not familiar with mammography screening as one of the breast cancer screening method. [31]. Only a few of the participants were not aware that they need to perform breast self-examination for early detection of breast cancer, This is consistent with the previous research in the Libyan settings [23]. This is to some extend also studies comparable to several in neighboring countries [32, 33, 29], and contrary to others [30-35]. Surprisingly, the highest rate of adequate knowledge status was among women who reported primary education compared to other educational level categories. This is not in line with El-Hamadi and colleagues findings among Libyan women [23]. The

current study showed poor knowledge of Libyan female about role of cytological and histopathological examination and hormonal receptors in diagnosis and treatment of breast cancer; this is perhaps related to that higher educational levels are not highly represented in the current sample. Furthermore, a small number of the respondents believes that adherence to doctor's instructions is important for prolonged survival.

There is a no significant relation between any of the studied socio-economic characteristics and the knowledge towards breast cancer. This is consistent with colleagues Angela and study [28]. However, several previous studies and/or identified higher income occupational status as being associated with better knowledge about breast cancer risk factors [36-38]. In the same context, other studies demonstrated association between the stable union and knowledge [36, 39].

# 5. Conclusion

Women participated in this study had overall fairly low knowledge about several important risk factors for breast cancer. Besides, the study demonstrates no association between knowledge and studied socio-economic characteristics. of simple and clear information are needed to improve knowledge level and avoid misconceptions about the breast cancer, its screening methods and management options. Such modules could contribute positively to women health through promoting healthier practices and early detection of breast cancer. Further research is recommended to identify the factors that contribute to adequate knowledge level

# 6. Acknowledgment

We are thankful to all the participants for their cooperation.

Variable	f	(%)	
Age(years)			
Mean±SD	48	$\pm 12.1$	
30-39	68	34.0	
40-49	31	15.5	
50-59	59	29.5	
≥60	42	21.0	
Marital status			
Single	161	80.5	
Married	11	5.5	
Divorced	8	4.0	
Widow	18	9.0	
Educational level			
Illiterate	93	46.5	
Primary	25	12.5	
Secondary	13	6.5	
Higher school and more	64	32.0	
Occupation			
Housewife	126	63.0	
Employed	74	37.0	
Income(LD/month)*			
<500	122	61	
500-1000	57	28.5	
>1000	19	9.5	

Table 1: Socio-demographic characteristics of the respondents (n=200)

\*LD= Libyan Dinars

 Table 2: Knowledge about breast cancer, n=200

	Variable	Yes		
		f	(%)	
1	Breast cancer is the most common cancer in women	130	65.0	
2	Breast cancer affects women of all racial and economic classes	164	82.0	
3	Age of 35 or more is a risk factor for breast cancer	138	69.0	
4	Early menarche is a risk factor for breast cancer	113	56.5	
5	Late menopause is a risk factor for breast cancer	129	64.5	
6	First pregnancy at 30 is a risk factor for breast cancer	99	49.5	
7	Lack of breast feeding is a risk factor for breast cancer	172	86.0	
8	Obesity is a risk factor for breast cancer	92	46.0	
9	Non healthy food consumption is a risk factor for breast cancer	112	56.0	
10	Lack of physical activity is a risk factor for breast cancer	60	30.0	

11	Smoking is a risk factor for breast cancer	65	32.0
12	Use of oral Contraceptive Pills	53	26.5
13	Hormonal replacement therapy is a risk factor for breast cancer	44	22.0
14	Exposure to radiation is a risk factor for breast cancer	154	77.0
15	Having had a previous history of breast cancer is a risk factor for breast cancer	100	50.0
16	Family history of breast cancer is a risk factor for breast cancer	56	28.0
17	Early detection of breast cancer increases survival	127	63.5
18	Mammography, ultrasound, Physical Breast Examination, Self-Breast Examination are	92	46.0
	used for early detection of breast cancer		
19	I did not know I need to perform Breast self-examination (BSE)	35	17.5
20	Mammography screening is not important*	136	68.0
21	Mammography may cause cancer*	137	68.5
22	Cytodiagnosis is a method that helps in early detection and management	60	30.0
23	Cancer has no treatment*	20	10.0
24	Treatment options for breast cancer include surgery, chemotherapy, radiotherapy and	88	44.0
	hormonal manipulation		
25	Mammogram treats cancer*	88	44.0
26	Histopathology is important for diagnosis and management plan	78	39.0
27	Hormonal receptors are important for management plan	114	57.0
28	Following medical instructions is important for long survival	121	60.5
	Total Knowledge Score (27 item)		
	Mean±SD	13.1	±2.6
	Observed range**	7-22	
	Knowledge Status		
	Inadequate	119	59.5
	Adequate	81	40.5

\* Score was reversed for these responses before calculating the total knowledge score,

\*\* Possible range: 0-27,

Table 3: Association between socio-demographic characteristics and breast cancer knowledge status, n=200

Variable	Knowledge status				$\chi^2$	P-value
	Inadequate		А	Adequate		
	f	(%)	f	(%)		
Age(years)	47.6	±12.3	48.5	±11.9	$0.546^{a}$	0.586
Marital status					1.479 <sup>b</sup>	0.721
Single	8	72.7	3	27.3		
Married	92	57.1	69	42.9		
Divorced	5	62.5	3	37.5		
Widow	12	66.7	6	33.3		
Educational level					4.523	0.210
Illiterate	58	62.4	35	37.6		
Primary	10	40.0	15	60.0		
Secondary	8	61.5	5	38.5		
Higher school and more	40	62.5	24	37.5		
Occupation					0.084	0.772

Housewife	74	58.7	52	41.3		
Employed	45	60.8	29	39.2		
Income(LD/month) <sup>c</sup>						
<500	75	61.5	47	38.5	1.146	0.587
500-1000	26	53.1	23	46.9		
>1000	12	63.2	7	36.8		

<sup>a</sup> Independent t test statistic, <sup>b</sup> Fisher's Exact test statistic, <sup>c</sup> LD= Libyan Dinars

#### 7. References

[1]. Fearly, J., Shin, H.R., Bray, F., Forman, D., Mathers, C. and Parkin, D.M. Estimates of World Wide Burden of Cancer in 2008: GLOBOCAN 2008, International Journal of Cardiology. 2010; 127; 2893-2917.

[2]. Sadler GR, Ko CM, Cohn JA, White M, Weldon RN and Wu P. Breast cancer knowledge, attitudes, and screening behaviors among African American women: the Black cosmetologists promoting health program. BMC Public Health. 2007; 7; 57.

[3]. Bray F, McCarron P and Parkin DM. The changing global patterns of female breast cancer incidence and mortality. Breast Cancer Res. 2004; 6: 229-239.

[4] Todd A and Stuifbergen A. Breast cancer screening barriers and disability. Rehabil Nurs. 2012; 37; 74-79.

[5]. Najjar H, Easson A: Age at diagnosis of breast cancer in Arab nations. Int J Surg. 2010; 8 (6):448–452.

[6]. Elzouki, et al.: Cancer Incidence in Western Region of Libya: Report of the Year 2009 from Tripoli Pathology-based Cancer Registry Libyan Journal of Medical Sciences. 2018; 2(2); 45-50.

[7]. Elzouki AN, Alkomsi S. Pattern of gastrointestinal tract cancer in the Eastern part of Libya. Garyounis Med J. 2005; 22; 27-31.

[8]. El-Mistiri M, El-Mangush M, El-Sahli N, El-Hamri F, Habil S, Bugrara F, et al. Cancer incidence in Eastern Libya: Preliminary result of the year 2003, Tunis Med. 2005;83 Suppl 12:18-9.

[9]. El-Mistiri M, Pirani M, El Sahli N, El Mangoush M, Attia A, Shembesh R, et al. Cancer profile in Eastern Libya: Incidence and mortality in the year 2004. Ann Oncol. 2010; 21(9):1924-6.

[10]. Elzouki AN, Buhjab SI, Alkialani A, Habel S, Sasco AJ. Gastric cancer and Helicobacter pylori infection in the Eastern Libya: A descriptive epidemiological study. Arab J Gastroenterol. 2012; 13:85-8.

[11]. Taha Beyased, Firyouz Altrjoman, Nabil Enattah , FaragnEltaib, Nureddin Ashammakhi, Adam Elzagheid, Cancer Incidence in Western Libya: First Results from Tripoli Medical Center, Ibnosina J Med BS. 2017; 9(2); 37-45.

[12]. Boder JME, Abdalla FBE, Elfageih MA, Abusaa A, Buhmeida A, Collan Y. Breast cancer patients in Libya: Comparison with European and central African patients. Oncology Letters. 2011; 2: 323–330

[13]. Einbeigi, Z., Bergman, A., Kindblom, L.G., et al. A Founder Mutation of the BRCA1 Gene in Western Sweden Associated with a High Incidence of Breast and Ovarian Cancer. European Journal of Cancer. 2001; 37; 1904-1909.

[14]. Park MJ, Park EC, Choi KS, Jun JK, Lee HY. Sociodemographic gradients in breast and cervical cancer screening in Korea: the Korean National Cancer Screening Survey (KNCSS) 2005-2009. BMC Cancer. 2011; 11: 257.

811

[15]. Steiner E, Klubert D, Knutson D. Assessing breast cancer risk in women. Am Fam Physician.2008; 78: 1361-1366.

[16]. Collaborative Group on Hormonal Factors in Breast Cancer. Breast cancer and breast feeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50302 women with breast cancer and 96973 women without the disease. Lancet. 2002; 360: 187-195.

[17]. Stuckey A. Breast cancer: epidemiology and risk factors. Clin Obstet Gynecol. 2011; 54:96-102.

[18]. Taher YA, Samud AM, Benhusein GM. Knowledge towards breast cancer among Libyan women in Tripoli. LIMUJ. 2016; 1; 58-68.

[19]. NH Nik Rosmawati, Knowledge, Attitude and Practice of Breast Self-examination

Among Women in a Suburban Area in Terengganu, Malaysia, Asian Pacific J Cancer. Prev. 11; 6; 1503-1508.

[20]. Heba M. Mamdouh, Hazzem El-Mansy, Ibrahim F. Kharboush, Hanaa M. Ismail, May M. Tawfik, Mohamed Abdel El-Baky, and Omnia G. El Sharkawy.

Barriers to breast cancer screening among a sample of Egyptian females. J Family Community Med. 2014; 21(2): 119–124.

[21]. Coleman MP, Quaresma M, Berrino F, Lutz JM, De angelis R, Capocaccia R, et al. Cancer survival in five continents: A worldwide population based study. Lancet Oncol. 2008; 9(8); 730-560.

[22]. Boder JME, Abdalla FBE, Elfageih MA, Abusaa A, Buhmeida A, Collan Y. Breast cancer patients in Libya: Comparison with European and central African patients. Oncology Letters. 2011; 2: 323–330.

[22]. Ziuo FY, Twoier A, El-Khewisky FS. Awareness of women about breast self-examination and risk factors for breast cancer in Benghazi, Libya. European Journal of Cancer. 2014; 50: 60-61.

[23]. Meluda R. El-Hamadi, Mukhtar Gusbi, Mukhtar Aisa and Hajer Elkout, Breast Cancer Awareness, Knowledge and Beliefs among Libyan Women. Journal of Scientific Research & Reports 2019; 24(1):1-8.

[24]. Hadi M, Hassali M, Shafie A, Awaisu A Evaluation of breast cancer awareness among female university students in Malaysia. Pharma Pract. 2010; 8: 29-34.

[25]. Ahmed F, Mahmud S, Hatcher J, Khan SM. Breast cancer risk factor knowledge among nurses in teaching hospitals of Karachi, Pakistan: a crosssectional study. BMC nursing. 2006; 5:6.

[26]. Siti Radziah Binti Sheikh Alaudeen1 and Kumar Ganesan, Knowledge, attitude, and practice of malaysian medical students towards breast cancer: A cross-sectional study, Int Med Care. 2019; 3: 1-7.

[27]. Adebamowo CA, Ajayi O . Breast cancer in Nigeria. West Afr J Med. 2000;19 ;3:179-91.

[28]. Ângela Gabrielly Quirino Freitas and Mathias Weller, Women's knowledge about risk factors of breast cancer in a Brazilian community. Women & Health 2019; 59 (5) 558-568.

[29]. Oluwatosin OA, Oladepo O. Knowledge of breast cancer and its early detection measures among rural women in Akinyele Local Government Area, Ibadan, Nigeria. BMC Cancer. 2006; 6:271 doi:10.1186/1471-2407-6-271.

[30]. Adekemi E. Olowokere , Adenike C. Onibokun and Abimbola O. Oluwatosin, Breast cancer knowledge and screening practices among women in selected rural communities of Nigeria. J. Public Health Epidemiol. 2012; 4(9)238-245.

[31]. Tayo O. George, Tolulope Abiola Allo,Emmanuel O. Amoo, Olawale Olonade,

Knowledge and Attitudes about Breast Cancer among Women: A Wake-Up Call in Nigeria. Macedonian Journal of Medical Sciences. 2019; 7(10):1700-1705.

[32]. Jahan S, Al-Saigul M, Abdelgadir H. Breast cancer: Knowledge, attitudes and practices of breast self-examination among women in Qassim region of Saudi Arabia. Saudi Med J. 2006;27:1737-41.

[33]. Abu-Shammala BI, Abed Y. Breast cancer knowledge and screening behavior among female school teachers in Gaza City. Asian Pac J Cancer Prev. 2015;

16(17):7707-7711.

[34]. Sadler GR, Ryujin LT, Ko CM, Nguyen E. Korean women: cancer knowledge, attitudes and behaviors. BMC Public Health. 2001; 1:7.

[35]. Ahuja S, Chakrabarti N. To determine the level of knowledge regarding breast cancer and to increase awareness about breast cancer screening practices among a group of women in a tertiary care hospital in Mumbai, India. The Internet J. Public Health. 2010; 1:1. [36]. Cyrus- David, M. S. Knowledge and Accuracy of Perceived Personal Risk in Underserved Women Who are at Increased Risk of Breast Cancer. Journal of Cancer Education: The Official Journal of the American Association for Cancer Education. 2010; 25 (4):617–23.

[37]. Dey, S., . A., J. Mishra, Govil, and P. K. Dhillon. Breast Cancer Awareness at the Community Level among Women in Delhi, India. Asian Pacific Journal of Cancer

Prevention. 2015; (13):5243-51.

[38]. Dinegde, N. G., and L. Xuying. Awareness of breast cancer among female Care Givers in Tertiary Cancer Hospital, China. Asian Pacific Journal of Cancer Prevention. 2017; 18 (7):1977–83.

[39]. Tazhibi, M., and A. Feizi. Awareness levels about breast cancer risk factors, early warning signs, and screening and therapeutic approaches among Iranian adult women: a large population based study using latent class anlaysis. Biomed Researcher International. 2014; doi:10.1155/2014/306352

#### الملخص باللغة العربية

دراسة مستعرضة حول تقييم معرفة النساء الليبيات بسرطان الثدي وعوامل الخطر المهيئة له

حبصة على أحمد أمشهر<sup>1</sup> ، سناء طاهر عاشور<sup>2</sup>

- قسم علم الأمراض ، كلية الطب ، جامعة سرت ، سرت, ليبيا،
- قسم طب الأسرة والمجتمع ، كلية الطب ، جامعة طر ابلس ، طر ابلس ، ليبيا.

الملخص

**المقدمة**: سرطان الثدي هو أكثر أنواع الأورام الخبيثة شيوعًا ، ويزداد معدل حدوثه في ليبيا. تهدف هذه الدراسة إلى تقييم مدى انتشار عدم كفاية المعرفة حول سرطان الثدي وعوامل الخطر الخاصة به بين النساء الليبيات المقيمات في سرت ، ومعرفة ما إذا كان أي من خصائصهن الاجتماعية والديمو غرافية (العمر ، المهنة ، الحالة الاجتماعية ، المستوى التعليمي والدخل) ) مرتبطة بالحالة المعرفية غير الكافية.

**الطرق:** أجريت دراسة مستعرضة لـ 200 أنثى ليبية من يناير إلى يونيو 2019 في مدينة سرت. تمت مقابلة النساء باستخدام استبيان مصمم خصيصًا لجمع البيانات المتعلقة بسرطان الثدي وعوامل الخطر الخاصة به. تم تحليل البيانات باستخدام برنامج SPSS.

النتائج: كان متوسط عمر المشاركات في الدراسة 48.0 ± 12.1 ، وشكلت الفئة الغير متعلمة 46.5٪ من العينة. بشكل عام ، كانت المعرفة الغير الكافية بسرطان الثدي معتبرة (59.5٪). ما يصل إلى 90.0٪ يعرفون أن عبارة "السرطان ليس له علاج" غير صحيحة. وكان عامل الخطر الأكثر شيوعًا لسرطان الثدي هو "نقص الرضاعة الطبيعية" (86.0٪). ومع ذلك ، كانت عوامل الخطر الأقل شيوعًا لسرطان الثدي هي العلاج بالهرمونات البديلة (22.0٪) واستخدام حبوب منع الحمل (26.5٪). لا يوجد ارتباط واضح بين مستوى المعرفة بسرطان الثدي وأي من الخصائص الاجتماعية والاقتصادية المدروسة.

ا**لخلاصة**: أظهرت النتائج نسبة كبيرة إلى حد ما من المعرفة غير الكافية حول جوانب عديدة من سرطان الثدي وعوامل الخطر. لذلك ، هناك حاجة للتخطيط لبرامج تعليمية وتنفيذها لتحسين مستوى المعرفة حول سرطان الثدي وعوامل الخطر الخاصة به بين النساء في سرت. ومن المتوقع أن تسهم هذه الإجراءات في الوقاية من سرطان الثدي بين النساء الليبيات.

**الكلمات المفتاحية**: سرطان الثدي - عوامل الخطر - اجتماعي - ديمو غرافي – فز او تمحيص - ليبيا

مراسلة حبصة علي أحمد أمشهر ، كلية الطب ، جامعة سرت ، سرت ، ليبيا ، البريد الإلكتروني: habsa33@su.edu.ly