Women's Knowledge and Concern about Breast Cancer

معرفة النساء والقلق حول سرطان الثدي

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ألخلاصه

يعتبر سرطان الثدي أكثر أنواع الأورام السرطانية انتشارا عند ألنساء والثاني بعد سرطان الرئة و يمثل ١٠,٤% من كل حالات ألسرطان، و ألخامس لأكثر وفيات ألسرطان [1]. يحتل سرطان ألثدي أعلى سرطان عند ألنساء ألعراقيات، حوالي ٣٤% من كل سرطانات ألنساء و ألمسبب ألثاني للوفيات عند ألنساء حاليا بعد سرطان ألرئة، ويسجل سرطان ألثدي في ألعراق حوالي ثلث ألمجموع ألكلي للسرطان.

ألهدف: تهدف ألدراسة إلى تقييم معارف ألنساء والقلق حول سرطان ألثدي، و لمعرفة ألعلاقة بين معارف ألنساء و ألخصائص ألديموغرافية ، وكذلك الملف ألإنجابي لهن.

ألمنهجية: دراسة مقطعية غرضيه أجريت على عينة عمديه متكونة من مائة (١٠٠) امرأة مصابة بسرطان ألثدي تتراوح أعمارهن بين (٣٠ سنة ـ ٥٠ سنة) تمت مقابلتهن.

ألأدوات: استمارة استبيان صممت لغرض ألمقابلة وجمع معلومات ألعينة.

مكان ألبحث: مدينة ألصدر ألطبية ـ مركز ألفحص ألمبكر لسرطان ألثدي في محافظة ألنجف الاشرف .، للفترة من (١٥ شباط لغاية ٣٠ نيسان ـ ٢٠١٢) . **ألعينة: (١٠٠)** امرأة مصابة بسرطان ألثدي في مركز ألفحص ألمبكر لسرطان ألثدي لغرض ألفحص والمتابعة صممت ألاستبيانه من (5) أجزاء وتشمل: (ألملف ألديموغرافي ، ألملف ألإنجابي، ألعوامل ألمسببة لسرطان ألثدي، ، مصادر معارف ألنساء بسرطان ألثدي و مفردات تتعلق بسرطان ألثدي).

تم تحليل ألعينة إحصائيا بطريقة ألتحليل الإحصائي الوصفي (ألتكرارات و ألنسب ألمئوية) **و**طريقة ألتحليل ألإحصائي ألاستنتاجي.

ألنتائج: أظهرت ألدراسة أن٧٥% من ألنساء ألمشمولات بالدراسة تتراوح أعمارهن ما بين(٤٥ـ٥٤ سنة) ، و أغلبية تعليمهن كان ابتدائي أو أقل و أغلبيتهن ربات بيوت وذات مستوى اجتماعي- اقتصادي متوسط.

ألاستنتاج: تشير ألدراسة إلى وجود علاقة قوية ذات فرق معنوي بين عمر المرأة وعدد ألإصابات بسرطان ألثدي ($P<0.001$) كما توجد علاقة بين عدد ألنساء ألمصابات بسرطان ألثدي و (عدم ألإنجاب أو ألولادة، تاريخ ألمريضة ألطبي، و تاريخ ألعائلة بسرطان ألثدي) $P <0.05$.

ألتوصيات: توصي ألدراسة إلى: ١. ترسيخ برامج ألثقافة ألصحية للمرأة حول سرطان ألثدي ٢. ألتأكيد على دور ألممرضة بالمشاركة ألفعالة في تعليم ألنساء طريقة ألفحص ألذاتي للثدي و إعطاء ألنصائح و ألتوجيهات للنساء خلال مراجعتهن مركز فحص ألثدي ٣. تشجيع دراسات سرطان ألثدي.

مفتاح الكلمات: معارف ألنساء، قلق ، سرطان ألثدي.

Abstract:

Background: Breast cancer is the most common malignant tumor among women and the second most common type of cancer after lung cancer, 10.4% of all cancer incidences, and the fifth most of cancer deaths. Breast cancer is the top cancer in Iraqi's women, comprising about 34% of all females cancer, and it is the second leading cause of cancer related to mortality in women today after lung cancer. In Iraq, breast cancer constitute about one third of total cancer.

Objectives: To assess women's knowledge and concern about breast cancer: and to identify the relationships between women's knowledge to demographic data and to reproductive profile. **Methodology**. Design: A cross section of a purposive study was carried out at Al-Sadder Medical City-Center of breast examination for early detection of breast cancer in Najaf Province, from the period of February 15th to April 30th -2012.

Sampling: A purposive sample of 100 women were interviewed. **Tools:** Questionnaire format was designed into **5** parts for data collection through interviewing of the attended women with breast cancer to contain the:

Demographic profile; Reproductive profile; Risk factors of breast cancer; resources of women's knowledge; Item's statements about women's knowledge. The data were statistically analyzed through

1. Descriptive statistical method

2. Inferential statistical method.

Results and Conclusions: The present results found that 75% of women's age were from 45-54 years. Most of them were with (primary educational level or less; housewives with a moderate socioeconomic status). The study concludes that aged women had the most incidences of breast cancer, P. <0.001. The incidences of breast cancer to none pregnant or delivered women; medical history; and to family history with breast cancer were increased, P.< 0.05.

Recommendations: **1**. Establishing of educational health programs for women concerning breast cancer **2.** Improving of nurse's knowledge on advising and teaching of women about breast self examination. **3.** Encouraging of breast cancer studies.

Key words: : Women's Knowledge, Concern, Breast cancer.

INTRODUCTION

Breast cancer ranks as one of the leading cancer types in the number of new cases diagnosed and is second only to lung cancer as the most prevalent cause of cancer death in women. Approximately 390 of the estimated deaths due to breast cancer in 2010 will be men.[1] Incidence of breast cancer was 32% of the total cancer cases in Iraq, which is equivalent to the existing world average, asserting that, the incidence of the disease in Iraq, much less than the countries of the Middle East.[2] Iraq is considered a moderate in the rate of injuries, noting that "Western societies have more injuries ratios of Eastern societies for the use of women in those societies hormones and contraceptives as well as a different lifestyle.[3]" The beginning of last September, specialized medical centers recorded annually between four to five thousand cases of different types of cancer, including breast cancer.[4] There is no increase in the rate of incidence in the Iraqi society, pointing out that, the incidence comes from the accuracy of the registration of such injuries year after year with growing populations.[5] The month of October of every year, month global challenge of breast cancer, where she lives all health institutions in the world events and activities, programs and workshops healthy to sensitize communities on this dangerous disease.[6] Incidence of cancer increases every year due to the major pollution in the environment of water, air and soil, as well as canned food entering the country without quality control, "noting that" a few mother culture in this area could contribute to the increase of these infections in addition to the significant role of genetic ready for the family in the incidence of this disease.[7] Lung cancer is breast cancer, which is the most prevalent type of cancer tumors in the world.[8] Tumor is of two types, breast tumors are the most common tumors in women, and if 90% of which are benign tumors only 15% of breast tumors are malignant tumors cancer.[9] In America there are about one hundred and eighty thousand new cases of breast cancer, and more than forty thousand deaths due to this cancer annually. U.S. statistics indicate that one out of every eight or ten women develop breast cancer.[10]

OBJECTIVES

1. To assess women's knowledge and concern about breast cancer
2. To identify the relationship between women's knowledge to demographic data and to reproductive profile.

METHODOLOGY: DESIGN OF THE STUDY:

A cross section of a purposive study was carried out.

Setting: At Al-Sadder Medical City, Center of breast examination for early detection of breast cancer at Al-Najaf Al- Ashraf Province during February 15th to April 30th, 2012.

Sampling: A purposive sample of 100 women were interviewed.

Tools: Questionnaire format was designed into (5) parts for data collection during interviewed of women with breast cancer were attended the center of breast cancer in Najaf. The questionnaire format consisted of **Part one:** Demographic profile (age of women from 35-64 years, levels of their education, occupation, socioeconomic status); **Part two:** Reproductive profile; **Part three:** Factors related to breast cancer; **Part four:** Resources of women's knowledge about breast cancer; **Part five:** Item's statements about women's knowledge about concern of breast cancer, each item answered by one of these (yes, no, I don't know). The collected data were statistically analyzed by two methods:

I. A descriptive statistical method (frequencies and percentages);
2. Inferential statistical method (Correlation Coefficient and P. Value).

RESULTS

Part 1. The demographic profile of the study sample

Figure 1: Age-groups of the study sample

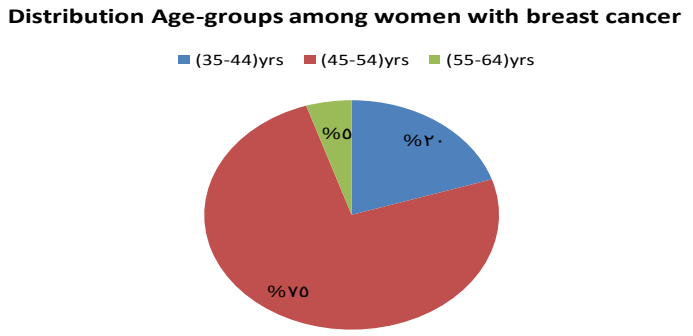

Figure **1.** Reveals that women's age between (45-54) years were highest in breast cancer (75%). Whereas, breast cancer was only (20%) among women at age (35-44) years; and lowest among women at age (55-64) years (5%).

Figure 2: Educational Status of the study

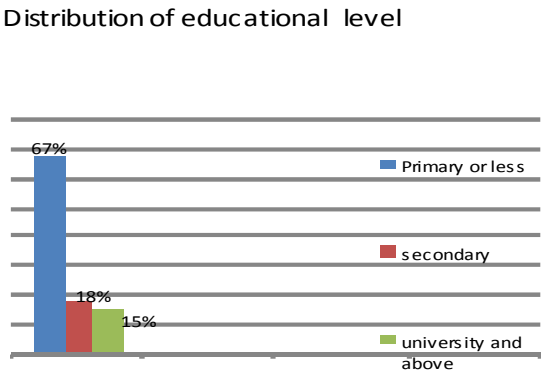

Figure 2. Shows that 67% of patients were with low level of education (primary school or less); women with secondary education were only 18%. But the lowest percentages of the involved women were with university level of education or above.

Figure 3 : Occupational Status of the sample

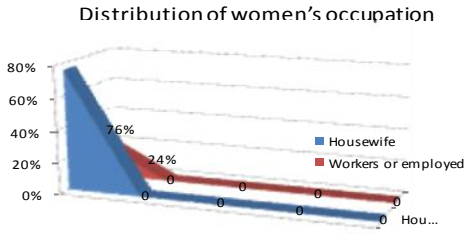

Figure 3. Explains most of the study sample were housewives (76%); while, (24%) of these women were either workers or employed.

Figure 4: Socioeconomic Status of women

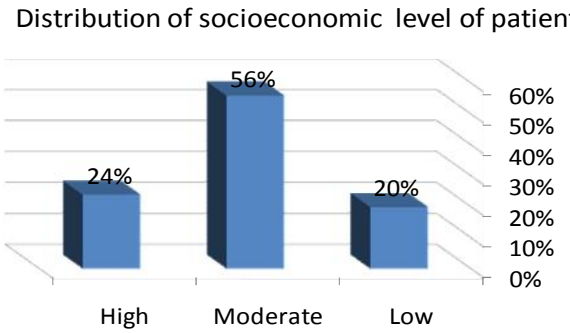

Figure 4. Shows that the socioeconomic status (SES) of the study sample were (56%) from moderate level of SES; (24%) were from high level of SES; whereas, only 20% of them were from low level of SES.

Figure 5: Marital Status of the study sample

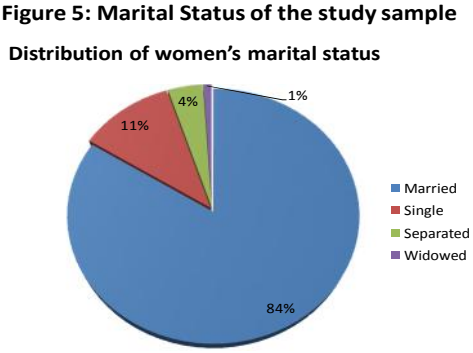

Figure 5. This figure shows that most patients of this study with breast cancer were married (84%); single (11%); separated were (4%), but the widowed was only one patient (woman) with breast cancer.

Part 2. The reproductive Profile of the study sample
Table 1. Distribution of women's reproductive profile

Reproductive profile	Frequency	Percent %
Gravidity	85 (1-13)	85
Parity	10 (1-13)	10
Previous abortion	05 (1-6)	05
Total	100	100
Method of lactation	Frequency	Percent %
Breast feeding	72	72
Bottle feeding	08	08
Mixed	20	20
Total	100	100

Table 1. Shows that **85%** of the studied women were gravid a (pregnancies) between **1-13** times; While, **10%** of them had Para from **1-13** times also. But only **5%** of them had **1-6 abortion.** The majority of them **72%** used to **breast feeding.** While **8%** of them used to **bottle feeding,** but only **20%** used to mixed method **of breast feeding and bottle feeding.**

Part 3. The risk factors of breast cancer
Table 2. Factors concern to breast cancer of the studied Women

Yes Frequency (%)	No Frequency (%)	Total %
Previous family history of breast cancer		
18	82	100
Relationship with husband		
Related 49	None 51	100
Medical history		
Absent 79	Present 21	100
Previous surgery		
Absent 60	Present 40	100
History of incidence with breast cancer		
Incidence 22	None 78	100
Time of incidence		
1 year 41	2 years 32 More 27	100
Medical consulting		
Immediately 56	After period 44	100

Table 2. Shows that (82%) had no previous family history of breast cancer; (49%)had no family relationships with husbands (consanguinity); (79%) were absent personal medical history; (60%) of patients had no previous surgery; (78%) had no history of incidence with breast cancer. The majority of involved women were (41%) with one year of incidence. This table, also explains that (56%) of these women had immediately medical consulting whenever felt with incidence (disease).

Part 4. Statements about women's knowledge of breast cancer

Table 3. Levels of women's knowledge about breast cancer

No	Statements about breast cancer	Yes %	No%	I don't know %	Total %
1	Breast Cancer: Growth of abnormal tissue	13	72	15	100
2	Breast cancer of tow type: Malignant\Benign	24	70	6	100
	C. Signs and symptoms of breast cancer				
1	Any new lump	28	62	10	100
2	Knot in axilla	19	72	9	100
3	Change in breast skin	20	77	3	100
4	Skin changes as orange peel	15	79	6	100
5	Thickening of breast	15	78	7	100
6	Itching	19	77	4	100
7	Change in nipple	19	76	5	100
8	Reds pot on breast	17	80	3	100
9	Change in ward nipple and shape nipple	16	81	3	100
10	Nipple discharge	19	76	5	100
11	Change in breast shape	21	72	7	100
12	Change in breast size	22	71	7	100
13	Breast pain	46	48	6	100
14	Pain under axillary	46	49	5	100
	D. Risk factors contributed to breast cancer				
1	Age over 40 years	16	82	2	100
2	Caused hormonal replacement	7	88	5	100
3	Early menstrual cycle	9	87	4	100
4	Late menopausal	8	89	3	100
5	Exposure to x ray	8	90	2	100
6	Smoking	14	83	3	100
7	Obesity	14	82	4	100
8	Artificial feeding	16	81	3	100
9	Trauma	15	81	4	100
	E. Breast self examination				
1	20 years and above	15	82	3	100
2	Time of exam first week after end of menstrual when the breast soft & not painful	17	81	2	100
3	Visual exam in front of mirror	22	78	0	100
4	Tactile palpation	21	77	2	100
5	Feeling	16	79	5	100
6	Women's that used contraceptive the exam was in the first day of used contraceptive	12	87	1	100
Items	F. Laboratory test	Yes%	No%	I don't know%	Total %
1	Biopsy	11	89	0	100
2	General urine exam	11	89	0	100
3	Complete blood picture	20	80	0	100
4	Ultrasound	22	78	0	100
5	X- ray	19	81	0	100
6	Mammography	5	95	0	100
	G. Protection from breast cancer				
1	Breast feeding	20	78	2	100
2	Not exposure to x ray	14	86	0	100
3	Avoid trauma	16	81	3	100
4	Good nutrition	16	80	4	100
5	Exercises	18	79	3	100
6	Taking drugs in times	13	83	4	100
7	Not used contraceptive methods (hormonal) after 35 years	13	84	3	100
	H. Treatment of breast cancer				
1	Surgical	13	87	0	100
2	Medical	11	89	0	100
3	Chemical	19	81	0	100
4	Hormonal	6	94	0	100

Table 3. A. Shows that (13%) out of one hundred studied women had previous knowledge about breast cancer as growth of abnormal tissues. B. Only (24%) said yes, for types of breast cancer. C. Shows that women's knowledge about signs and

symptoms of breast cancer were (28%) of them knew (any new lump; change in breast shape (21%); Change in breast size (22%); Breast pain (46%); and (46%) had under axillary pain. D. Reveals that only (16%) of women said yes, for age factor over 40 years, while (82%) said no, but only (2%) said I don't know. About bottle feeding was only (16%) said yes for this reason, but (81%) of them said no. E. Shows that only (22%) said yes for visual exam in front of mirror; (21%) tactile palpation while the rest of them were didn't knew. F. Shows that only 22% of the respondent women knew about the, ultrasound examination and checkup; (19%) X-ray; but only (5%) knew the mammography test. G. Reveals that only (20%) of women said yes for breast feeding protect from breast cancer, and (78%) said no protection with breastfeeding. H. Treatment of breast cancer with chemical was (19%) of women said yes, and (81%) said no. While, (6%) of them said yes for hormonal treatment and (94%) of them said no.

Part 5. Sources of women's knowledge about breast cancer

Table 4. The sources of women's knowledge about breast cancer

Sources of women's knowledge	Frequency	Percent %
Physician and nurses	18	18
Family, Friends , Relatives	26	26
Audio-Vision media	33	33
(Incidence) Individual experience	23	23

Table 4. Shows (33%) of their knowledge 's resources was from audiovisual media; (26%) from their families, friends and from their relatives; (23%) personal experience; While, (18%) of their knowledge and information were from physicians and nurses.

Table 5. The relationship between women's knowledge and women's demographic profile (correlation coefficient).

Variables	Knowledge score	P. Value
Age of women/year	**0.608**	**P > 0.5**
Level of education	**0.500**	**P . 0.5**
Occupation	**0.001**	**P < 0.001**
Socioeconomic status	**0.05**	**P < 0.05**

Table 5. Shows that age of women and their education levels were not significant with their knowledge about breast cancer, ($P > 0.5$) ; Moreover, women's occupation and their knowledge were highly significant, ($P < 0.001$); Whereas, the socioeconomic status and women's knowledge relationship were significant, ($P < 0.05$).

Table 6. The relationship between women's knowledge concerning breast cancer and women's reproductive profile and other variables (correlation coefficient).

Variables	P. Value
Marital status	**P < 0.05**
Number of pregnancy	**P < 0.5**
Number of delivery	**P < 0.5**
Number of abortion	**P < 0.3**
Number of live births	**P > 0.9**
Number of dead babies	**P < 0.5**
Personal medical history	**P > 0.8**
Family history about breast cancer	**P > 0.9**

Table 6. Reveals that the correlation coefficient between marital status of patients with breast cancer had positive relationship with women's knowledge, r =0.4, P < 0.05 . The numbers of pregnancies and deliveries had positive relationships, P < 0.5 ; Number of abortion had positive relationships with women's knowledge, P < 0.3; Number of live babies had negative relationship with women's knowledge, P > 0.5 ; While, the number of dead babies had positive relationship with women's knowledge, P < 0.5 ; Personal medical history of breast cancer, and family history with breast cancer had negative relationships with women's knowledge, P > 0.5.

DISCUSSIONS

Women at age (45-54) years were more affected with breast cancer. This agrees with **(11)** reported that risk of breast cancer increases with age. It's rare in women under 35, and 8 out of 10 breast cancers (80%) occur in women aged 50 or over.**(12)** The burden of breast cancer is unevenly distributed by geographic location and the incidence rates vary six fold between developed regions of the world and less developed countries **(13)**. The study findings showed that the marital status (married women); number of pregnancy; number of delivery, number of dead babies were significant. These results were associated with the studies of **(14, 15)** they stated that the evidence for associations between lifetime reproductive and anthropometric risk factors for postmenopausal breast cancer. The in utero experience of an infant may be associated with postmenopausal breast cancer. Increased final height and earlier age at menarche are consistently associated with increased risk for postmenopausal breast cancer. Later age at first birth, decreased parity, later menopausal age, use of hormone replacement therapy (especially progestin containing), and increased postmenopausal adiposity are well-established risk factors for postmenopausal breast cancer. A first-trimester abortion before first full term pregnancy whether spontaneous or induced, was associated with a 2.4-fold increase in breast-cancer risk (P < 0.005) **(16).** Age at first full-term pregnancy had an effect on both pre- and postmenopausal breast cancer risk, with significant tests showing increasing risk per year of increasing age (P=0.001 and (P<0.05) respectively) **(17).** In addition to confirming most of the breast cancer risk factors of Western populations in a low risk developing Asian country, this study demonstrates a clear beneficial effect on breast cancer risk of lactation in a population characterized by a long cumulative duration of nursing in the majority of women.**(18, 20)** The associations of age at menarche and menopause with cancers of the breast,

stomach and gallbladder persisted, these findings suggest that fmale hormonal factors play a significant role in the development of cancer in Korean women [19].

CONCLUSIONS

1. The study concludes that aged women had the most incidences of breast cancer, **(P. <0.001).**

2. The incidences of breast cancer to none pregnant; nulliparous or none (delivered) women; number of abortion; and dead births were positively related and significant with women's knowledge, **(P< 0.05).** There are no relationships between women's knowledge to live births; their medical history; and to family history with breast cancer were increased, **(P > 0.05).**

RECOMMENDATIONS

1. Establishing of educational health programs for women concerning breast cancer

2. Improving of nurse's knowledge on advising and teaching of women about breast self examination.

3. Encouraging of breast cancer studies.

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