

Factors Contributed of Breast Cancer for Women in Iraq

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Abstract

Background and aim: Breast cancer is abnormal growth of breast cells, result from spurts or abnormal changes genetic that responsible for cell growth and maintain its health. It is one of the most dangerous cancers that affect woman and reports high level of morbidity yearly if not treat early.

The study aimed to assess the Factors that Contributed of Breast Cancer for Women.

Materials and method: A descriptive design was employed through the present study from November 1st 2017 to March 20th 2018, which carried out on four Health Directorates of different Governorates; (Salah Alden, Kirkuk, Diyala and Sulaymaniyah).

Assessment questioner consist of two parts contains of women socio-demographical characteristic, the other part concerning of the assessment the risk factors that contribute breast cancer. A non-probability sample (purposive approach) is selected for the study which includes (88) women diagnosed with breast cancer were treated in Hospital or Nuclear centers, or the patients who visited the outpatient clinic in the same hospital or specialist center for medical follow-up and treatment. Data were gathered through the patients` interviewed. Content validity of the questionnaire was done through eliciting the opinions of a panel of (10) expert, while the reliability of this tool is determined through application of a pilot study by using internal consistency through the computation of the Cronbach alpha correlation coefficient of the scale on data gathered from patients.

Results: The overall results revealed that most women were adult (42.0%) married (72.7%) with low educational level and they lives in urban (64.8%) with sufficient income (40.9%). Most sample`s work was house wife (64.7 %), and about half of sample were feed his children natural feed. (35. 2 %) were normal body weight and (21.5 %) of high weight.

Conclusion: Most women depended on a style of food contain :(fat, kidneys, red meat, dairy product and salt) that will be contributed to breast cancer development. Greatest women experience of psychological problems and don`t compliance of breast self-examination every month.

Keywords: Breast, Cancer, Factor, Women

Introduction

Breast cancer starts when cells in the breast begin to grow out of control. These cells usually form a tumor that can often be seen on an x-ray or felt as a lump. The tumor is malignant (cancerous) if the cells can grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body. Breast cancer occurs almost entirely in women, but men can get it, too ⁽¹⁾.

Assessing women`s risk for the development of breast cancer is important in providing primary and secondary preventive strategies such as chemoprevention, life style changes, and enhanced surveillance that may reduce a woman`s risk for developing the disease ⁽²⁾. Risk Factor of Breast Cancer can be anything from a lifestyle choice (ex. diet) to a personal characteristic (ex. menarche [age when menstruation started]) to an environmental

exposure (ex. radiation) that can influence a person’s risk of developing a certain disease (3). Breast cancer incidence increases with age. It is rare before the age of 25, then incidence rises, increasing steeply with age 30–49. After age 50, breast cancer incidence continues to increase, although more slowly, to the oldest ages. In contrast the incidence of other adult and does not show the same dampening of increase in mid-life (3).

Globally, over one million women are diagnosed with breast cancer every year (4). It is the most frequently diagnosed cancer in women and the leading cause of cancer death in women, every year more than 500,000 women die from the disease (5). In Europe over 400,000 women are diagnosed with breast cancer every year and 120,000 women die from the disease. It accounts for 17% of female cancer deaths in this region (6).

In Iraq, breast cancer ranks the first among the commonest malignancies among all the population and accounts for approximately one-third of the registered female cancers according to the latest Iraqi cancer Registry which shows a trend for the disease to affect younger women (7).

Materials and Method

A descriptive design is adapted throughout the present study from November 1st 2017 to September 20th 2018 in order to assess the Factors that Contributed of Breast Cancer for Women.

A non-probability (purposive) sample is selected for the purpose of study which includes (88) woman

patient diagnosis of breast cancer which carried out on four Health Directorates of different Governorates that collecting from it: Salah Alden: (8) patient, Kirkuk: (22) patient, Diyala: (28) patient, and Sulaymaniyah: (30) patient.

Throughout comprehensive review of relevant literature, a questionnaire is constructed by the researchers in order to achieve the objectives of the study which comprised of the following: - Part I: Socio-Demographical Data; This part includes; Governorate, age, Occupation, Educational level, Feeding type if you have child, Weight by BMI, Monthly Income, Marital status, if she was marred, widow, or divorced; (time of married), and Residence.

Part II: Genetic and Biological domain: that include (9) items. Part III: Food style and nutrition domain: That include (6) items. Part IV: Work environment and housing domain: This part consist of (5) items. Part V: Psychological and Social domain: It consist of (6) items. Part VI: Personal and family organization domain: This part include (7) items, each items which are measured on 2 levels scale of Yes, and No and rated as Yes=2, and No=1.

Reliability and validity of this tool is determined through application of a pilot study and panel of experts. The data are collected through the interview technique as a means of data collection. Each interview takes approximately (15-20 min). Data are analyzed through the application of statistical procedures and by using (SPSS) version (25) which assist to determine the study results.

Results

Table 1: Frequencies and Percentages of Socio-Demographical Characteristics (n=88)

Items Characteristics	Groups	F	%
Governorate	Salah Alden	8	9.0
	Kirkuk	22	25.0
	Diyala	28	31.8
	Sulaymaniyah	30	34.0
Age	20-29 Y	8	9.0
	30-39 Y	10	11.3
	40-49 Y	37	42.0
	50-59 Y	23	26.1
	60 y and more	10	11.3

Cont... Table 1: Frequencies and Percentages of Socio-Demographical Characteristics (n=88)

Occupation	Don't work	3	3.4
	House wife	57	64.7
	Farmer	11	12.5
	Private works	2	2.2
	Employed	11	12.5
	Student	4	4.5
Education Level	Read & write	4	1.21
	Primary	38	11.51
	Intermediate	27	8.18
	Secondary	159	48.18
	Institution	46	13.93
	College	56	16.96

Continued

Items Characteristics	Groups	F	%
Feeding type if you have child	Breastfeeding	49	69.0
	Artificial	4	6.0
	Both	18	25.0
Body Mass Index (BMI)	Low weight	12	13.6
	Normal weight	31	35.2
	High weight	19	21.5
	Low obese	12	13.6
	Middle obese	11	12.5
	High obese	3	3.4
Monthly income	Sufficient	36	40.9
	Barely Sufficient	30	34.0
	Insufficient	22	25.0
Marital Status	Single	10	11.3
	Married	64	72.7
	Widow	4	4.5
	Divorce	10	11.3
If you married or widow or divorce: Time when married	Less than 15 year	3	4.0
	15-19 year	28	36.0
	20-24 year	23	30.0
	25-29 year	16	21.0
	30-34 year	7	9.0
	35 year and more	3	4.0
Residence	Urban	57	64.8
	Rural	31	35.2

Table 2: Mean Score with Standard Deviation for women`s genetic and biological domains.

List	Item	Yes		No		M.S	SD±	LF
		F	%	F	%			
1	None of my relations has breast cancer.	48	54.5	40	45.5	1.54	0.50	M
2	My relations do not suffer from any type of cancers.	44	50.0	44	50.0	1.50	0.50	M
3	I did not get any cancers in my body places other than my breast.	74	84.1	14	15.9	1.84	0.36	M
4	There are not tumors in the breast or other places in the body.	40	45.5	47	53.4	1.48	0.56	L
5	I was not exposed to any infection or inflammation in the breast.	53	60.2	35	39.8	1.60	0.49	M
6	Absence of abnormal secretion from breast such as blood and others.	63	71.6	25	28.4	1.71	0.45	M
7	The glands and hormones of the body were normal.	70	79.5	18	20.5	1.79	0.40	M
8	The menstrual cycle was regular.	64	72.7	24	27.3	1.72	0.44	M
9	My heart is healthy and does not suffer from any disturbance or constant acceleration in the pulse.	67	76.1	21	23.9	1.76	0.42	M
10	No medical laser was used.	76	86.4	12	13.6	1.86	0.34	M

Table 3: Mean Score with Standard Deviation for women food style and Nutrition domain.

List	Item	Yes		No		M.S	SD±	LF
		F	%	F	%			
1	Do not contain foods such as fat, kidneys, red meat, dairy product and salt.	39	44.3	49	55.7	1.44	0.49	L
2	Avoid eating fruits and vegetables that are genetically modified and immature.	55	62.5	33	37.5	1.62	0.48	M
3	My food does not contain artificial foodstuff.	64	72.7	24	27.3	1.72	0.44	M
4	I have not had shortage of vitamins over the last five years.	59	67.0	29	33.0	1.67	0.47	M
5	I did not smoker.	73	83.0	15	17.0	1.82	0.37	M
6	I did not drink alcohol.	79	89.8	9	10.2	1.89	0.30	M

Table 4: Mean Score with Standard Deviation for women's work environment and housing domain.

List	Item	Yes		No		M.S	SD±	LF
		F	%	F	%			
1	Work environment and housing free of pollutants such as smoke and chemicals.	55	62.5	33	37.5	1.62	0.48	M
2	The absence of housing and work place from the accumulated of all waste type.	54	61.4	34	38.6	1.61	0.48	M
3	The water used for drinking and washing was healthy and periodically checked.	65	73.9	23	26.1	1.73	0.44	M
4	The absence of weapons and radioactive contaminants.	53	60.2	35	39.8	1.60	0.49	M
5	Use of safe energy in cooking, healthy and domestic uses.	82	93.2	6	6.8	1.93	0.25	M

Table 5: Mean Score with Standard Deviation for women's Psychological and Social domain

List	Item	Yes		No		M.S	SD±	LF
		F	%	F	%			
1	Do not experience psychological or social shock.	42	47.7	46	52.3	1.47	0.50	L
2	The state of mental, emotional and mood stable.	47	53.4	41	46.6	1.53	0.50	M
3	Stability of relation and dealing with families and society.	77	87.5	11	12.5	1.87	0.33	M
4	I feel good about myself and deal with the community.	83	94.3	5	5.7	1.94	0.23	M
5	Do not worry about thinking about the future and fearing it.	47	46.6	41	46.6	1.53	0.50	M
6	I was not subjected to family violence.	68	77.3	20	22.7	1.77	0.42	M

Table 6: Mean of Score with Standard Deviation for women Personal and family planning domain.

List	Item	Yes		No		M.S	SD±	LF
		F	%	F	%			
1	Do not use anti axillary sweating drugs.	42	47.7	46	52.3	1.47	0.50	L
2	Avoid using tight bras.	47	53.4	41	46.6	1.53	0.50	M
3	I did not use birth control pills.	77	87.5	11	12.5	1.87	0.33	M
4	Refrain from the use of contraceptive such as uterine coil, condom, plastic ring and others.	83	94.3	5	5.7	1.94	0.23	M
5	Keep away from using chemicals cream.	47	46.6	41	46.6	1.53	0.50	M
6	Use electronic devices in limited way.	68	77.3	20	22.7	1.77	0.42	M
7	Obligate of breast self-examination every month.	43	48.9	45	51.1	1.48	0.50	L

Frequency MS: Mean Score (LF): Level of Risk Factor (H): High (<2.5) MS (M): Moderate (1.5 – 2.5) MS (L): Low (> 1.5) MS.

Discussion

Table (1) throughout the data analysis, the sample socio-demographic characteristics had showed that more samples were collected from Sulaymaniyah Governorate (34.0%) where the lowest on Salah Alden one (9.0%), this due to Sulaymaniyah Governorate contain more than a specialized center for tumors and cancer diseases in contrast of Salah al-Din Governorate, which does not contain any one.

With respect to women age, highest percentage (42.0%) was between (40-49) years. Due to the exposure of women in this period of age to menopause and stop the menstrual cycle, which is characterized by hormonal fluctuations.

According to women occupation; majority sample (64.7%) housewives and more than quadrant of women (28.4%) have primary school level of education if the study, this reflect the lack awareness toward health and how to an attempt to avoid the risk factor of the disease.

Most women (69.0%) feed her child a breastfeeding.

Normal weight (35,2%) followed by high weight (21,5%) present the large portion of the women, the reason of incident women with the ideal weight probability back to attempting to get the ideal weight through the diet food led to the gastric breast cancer. The women with overweight the reason goes back to the large number of fat in their bodies and the lack of their movement led to increase diagnosed breast cancer. Being overweight having fatter tissue can increase your chance of getting breast cancer by raising estrogen levels, that increase diagnosed breast cancer⁽⁸⁾.

The highest percentage were married (72, 7%) and have sufficient income (40.0%). Perhaps, effectively hormone prolactin which secreted from the pituitary gland in the blood more effective than not married when uses the breastfeeding incorrectly⁽⁹⁾.

Portion of (64.8%) were live in urban place, this conducted that lived of cities are more prone to breast cancer, lack of oxygen the city for rural making the cell growth weak because of lack of oxygen that's what makes it more prone to injury breast cancer for the villages⁽¹⁰⁾.

Discussion the women's genetic and biological domains (Table 2): Low Mean Score for item 4 (MS=1.48, SD±0.56) which concerned for patient have previous detection of any tumors in breast and another area in the body. Other items of this domain have moderate Mean Score one. Women who have previously suffered with benign breast cancer are at greater risk of developing breast cancer in the future⁽⁴⁾.

Discussion the women food style and Nutrition domain (Table 3): demonstrations that a large proportion of the women with breast cancer has a lot of fat this foods item (1) (MS=1.44, SD±0.9), and most him food contain (kidneys, red meat, dairy product and salt). because of the eating food and many fat and its effect fatty tissue on the physiological fat cell claim the immune in important role of metabolism endocrine⁽¹¹⁾ (12).

Discussion the women's work environment and housing domain. (Table 4): indicates that majority percent (MS=1.93, SD±0.25) of women used safety and sanitation water for drinking, cooking, washing and daily uses (MS=1.73, SD± 0.44). This due to water added to substances such as chlorine has an effect on the risk of breast cancer; some of the substances suspected to cause breast cancer are organ chlorine, a chemical industry that is manufactured from chlorine and other organic substances that contain carbon⁽¹³⁾.

Discussion women's Psychological and Social domain (Table 5): shows that a large proportion of women with breast cancer experienced of psychological and social shock (MS=1.47 SD±0.50). The psychological shock therefore double the immune system and the percentage of lumpy cells responsible for providing protection of the body cancer, and the trauma also affect the endocrine increasing or reduce the secretion hormone body suddenly for shock⁽¹⁴⁾. The chronic stress works on activate the nervous system know system killer or and or escape influential significantly job in lymph functions bland found in breast helping the spread of cancer cells⁽¹⁵⁾.

Discussion the women Personal and family planning domain (Table 6): illustrate that the majority women were not Obligate of breast self-examination every month (MS=1.47, SD±0.50).

Conclusion

The overall results revealed that most women were

adult married with low educational level and they lives in urban with sufficient income, also the result indicated that majority patients that most women have previous breast tumor and they depended on a style of food contain :(fat, kidneys, red meat, dairy product and salt) that will be contribute to breast cancer development. Most women experience of psychological problems and don't compliance of breast self-examination every month.

Recommendations

The study recommended of adopted a special health education programs for all women to learn them with the risk factors that may contribute of breast cancer development, as well as teach them the right procedure of breast self-checkup and encourage them to it every month.

Ethical Clearance: The Research Ethical Committee at scientific research by ethical approval of both environmental and health and higher education and scientific research ministries in Iraq.

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