Effect of Contributing Physical Stressors on Breast Cancer in women: A Retrospective Study in Babylon Governorate.

تأثير الضغوطات الجسمية المساهمة في سرطان الثدي عند النساء:دراسة رجعية في محافظة بابل

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الخلاصة

الهدف :. لتحديــد تأثير ضغوطات الحياة البدنية   لإيجاد العلاقة بين حدوث سرطان البدنية.

المنهجية : اختيرت عينة (غرضيه)   (400)   (200) امرأة مصابة بسرطان الثدي قمن بزيارة مركز الأورام السرطانية في مستشفى مرجان التعليمي في محافظة بابل كمجموعة للدراسة و(200) امرأة غير مصابة بسرطان الثدي جمعت من مناطق مختلفة من محافظة بابل كمجموعة ضابطة وقد نظمت استمارة استبيانيه لتحقيق الغرض من الدراسة شملت الخصائص الديموغرافية، المعلومات الإنجابية، نمط الحياة الصحية بما يخص الرياضة والتغذية، معلومات متعلقة بطبيعة المرض كالمرحلة وجهة الإصابة وفترة الإصابة والتاريخ العائلي للإصابة بسرطان الثدي، ومعلومات عن ضغوطات الحياة البدنية التي تعرضت لها المرأة (12) فقرة لعشرة سنين سابقة قسمت إلى فترتين (1-5) سنين و(6-10) سنين. وتم جمع البيانات من العينة من الفترة (5) شباط 2012 ولغاية 10 نيسان 2012 واجري عليها التحليل الإحصائي من خلال تطبيق الإحصاء الوصفي و .

النتائج :ـ أشارت نتائج الدراسة إلى أن النسبة المئويةُ الأعل   (39.5%) من عينة الدراسة كانت من الفئة العمرية (50-54) المجموعتين مقارنة بالفئات العمرية الأخرى وأن هنالك علاقة ذات دلالة معنوية عالية (0.01>P) بين ضغوطات الحياة البدنية وحدوث .

الاستنتاجات:ـ فقرات الضغوطات البدنية التي وزعت إلى فترتين زمنية (1-5)   (6-10) مستوى تقييم (65.92%) أقل من أفراد مجموعة السيطرة .   هنالك علاقة ذات دلالة معنوية عالية   (0.001> P)بين أنماط الحياة (الرياضة والتغذية)   لاتوجد علاقة بين متغيرات الخصائص الديموغرافية والإنجابية ماعدا متغيرات ( ) .

التوصيات : بتفعيل   وزارة الصحة وأجهز الإعلام لزي   لنساء وعائلاتهن حول تقليل عوامل الخطورة التي تسهم بحدوث سرطان الثدي إضافة إلى ضرورة الكشف المبكر لسرطان الثدي.

Abstract

Objective: To determine the effect of physical stressors on breast cancer occurrence, and to find out the relationship between breast cancer occurrence and the physical stressors.

Methodology:- A retrospective study, a purposive sample of (400) women; (200) women diagnosed with breast cancer were visited the Merjan Teaching Hospital Oncology Cancer Center in Babylon Governorate as a study group and (200) women free of breast cancer were collected from different districts within Babylon Governorate as a control group. An assessment tool was constructed for the purpose of the study , it was comprised of Socio-demographic data, Reproductive data, Information related to woman healthy life style (exercise & nutrition), Information related to breast cancer and Physical life stressors consist of (12) item of 10 years previous breast cancer occurrence divided to two periods (previous 1-5 years) and (previous 6-10 years). Physical measurements for measuring obesity and overweight (BMI) as well as the medical records to explain in which stage of breast cancer and other details may be assisting this study. Data were collected from 5 Feb. 2012 to 10 Apr. 2012. Analysis of data was performed through the application of descriptive and inferential statistical data analysis approach.

Results: The study demonstrates that the highest percentage (39.5%) of study sample was in age (50-54) years in comparison with the other age groups for both of study and control groups. There are a highly significant difference at P<0.01 between the physical stressors and breast cancer.

Conclusions: The physical stressor's items distributed in the two periods (1-5) years and (6-10) years , the study group's individuals were reported low assessment grade (65.92%) than control group's individuals. There are too highly significant different at P<0.001 between life aspects and breast cancer in

women and no relationship with their demographical and reproductive characteristics variables with an overall assessments at the study group except with (age, parity, and other diseases) variables.

Recommendations:- Activation of media and Ministry of Health role for increasing the awareness of women and their families about the importance of reducing the risk factors which contributing on breast cancer occurrence& importance of early detection of breast cancer

Keywords : Physical Stressors, Breast Cancer, Women, Retrospective study.

INTRODUCTION`

A study have estimated that approximately 50% of breast cancer incidence can be attributed to known genetic, physiologic, or behavioral risk factors with genetic risk factors accounting for 5 to 10% of breast cancer cases (1). Established physiological and behavioral risk factors for breast cancer include having a first-degree relative with breast cancer, early menarche, late menopause, null parity or bearing of first child at a later age, overweight after menopause, certain types of benign breast diseases, alcohol consumption, and long-term use of menopausal estrogen replacement therapy (2). In addition to these well-characterized contributors, other factors, whose effects have been more difficult to evaluate, are suspected of conferring increased breast cancer risk. These factors include smoking, certain aspects of nutrition (meat and fat consumption), physical activity, and psychological stress (3). Physical activity can modify menstrual cycle patterns and alter the production of ovarian hormones; it may reduce breast cancer risk. (4). Having a family history or family member with breast cancer, does not play a large role in most women's chances of developing breast cancer. Women with a family history of breast cancer make up only 5 to 7 percent of all women with breast cancer(5). Previous studies have shown that women with a family history of breast cancer have heightened cortisol responses to acute laboratory stressors and a slower return to baseline levels, but this is the first report of such responses in the natural environment (6). A woman with a history of cancer in one breast is three to four times likelier to develop a new breast cancer, unrelated to the first one, in either the other breast or in another part of the same breast. This is different than a recurrence of the previous breast cancer (7). The female sex hormone, estrogen, and the male hormone, testosterone, can affect the development of breast cancer. Women tend to have small amounts of the male hormone testosterone in their bodies. Studies generally show that after their menopause women with higher levels of estrogen and testosterone in their blood have a 2 to 3 times higher risk of breast cancer than women with the lowest levels of these hormones.(8)

OBJECTIVES:
 To determine the effect of physical stressors on breast cancer occurrence, and to find out the relationship between breast cancer occurrence and the physical stressors.

METHODOLOGY:
A retrospective design (a case control study) was conducted on determination of contributing physical life stressors to breast cancer in women: A retrospective study in Babylon Governorate. A purposive sample of (400) women; (200) women diagnosed with breast cancer as a study group and (200) women for the control group were free from breast cancer or any other type of cancer past and present, they collected from different districts within Babylon governorate and looks back retrospectively for two period (previous1-5 years) and (previous 6-10 years). The questionnaire was designed for the purpose of the study , it was comprised of 5 parts: socio-demographic data,

reproductive data , information related to woman healthy life style aspects(exercise& nutrition). These items rated according to scale (always, sometimes, and never), information related to breast cancer, and information related physical stressors which consist of (18 item. These items rated according to scale (Yes, No) for two periods (previous 1- 5 years) and (previous 6- 10 years).

Body mass index indicated for measuring obesity and overweight. The investigator measures the current BMI according to WHO Categories of BMI in 2002 which are: underweight $=<18.5$ kg/m^2; normal weight $= 18.5$-24.9 kg/m^2; overweight $= 25$-29.9 kg/m^2; obesity $= 30$ kg/m^2 or greater. Medical records explain in which stage of breast cancer and other details may be assisting this study. For pilot study & reliability of the questionnaire :A convenient sample of (20) breast cancer women who attended Merjan Teaching Hospital Oncology Cancer Center in Babylon Governorate for this preliminary study was conducted for the period (5 February, 2012) to (10 April, 2012) .The reliability coefficients of the pilot study (0.973). The time required for each interview ranged from (20– 30) minutes for each women and (5 –10) minutes for measuring the weight and height for estimate the BMI. Statistical data analysis approaches were used in order to analyze and assess the results of the study depended on descriptive data analysis, and inferential data analysis .

RESULTS:

Table (1): Distribution of the studied demographical characteristics variables in the (study and control) samples with comparisons significant

Demographical Characteristics	Samples	Groups	No.	Percent	Cum. Percent	Asymp. Sig. [*] (2-tailed)
Age Groups	Study	20 – 24	2	1.0	1.0	Z =0.000 P=1.000 NS
		25 – 29	1	0.5	1.5	
		30 – 34	3	1.5	3.0	
		35 – 39	4	2.0	5.0	
		40 – 44	9	4.5	9.5	
		45 – 49	30	15.0	24.5	
		50 – 54	79	39.5	64.0	
		55 -59	59	29.5	93.5	
		60 ≥	13	6.5	100.0	
	Control	20 – 24	2	1.0	1.0	
		25 – 29	1	0.5	1.5	
		30 – 34	3	1.5	3.0	
		35 – 39	4	2.0	5.0	
		40 – 44	9	4.5	9.5	
		45 – 49	30	15.0	24.5	
		50 – 54	79	39.5	64.0	
		55 -59	59	29.5	93.5	
		60 ≥	13	6.5	100.0	
BMI (Kg/m²)	Study	Underweight	35	17.5	17.5	Z =2.611 P=0.009 HS
		Normal weight	68	34	51.5	
		Over weight	89	44.5	96	
		Obesity	8	4	100	
	Control	Underweight	40	20	20	
		Normal weight	97	48.5	68.5	
		Over weight	53	26.5	95	
		Obesity	10	5	100	
Marital status	Study	Married	141	70.5	70.5	Z =0.900 P=0.368 NS
		Single	16	8	78.5	
		Widowed	27	13.5	92	
		Divorced	14	7	99	
		Separated	2	1	100	
	Control	Married	133	66.5	66.5	
		Single	18	9	75.5	
		Widowed	29	14.5	90	
		Divorced	16	8	98	
		Separated	4	2	100	
Family income	Study	Sufficient	85	42.5	42.5	Z =0.984 P=0.325 NS
		Barely sufficient	48	24	66.5	
		Not sufficient	67	33.5	100	
	Control	Sufficient	94	47	47	
		Barely sufficient	47	23.5	70.5	
		Not sufficient	59	29.5	100	

[*] **C.S. (NS: Non Sig. at P>0.05, HS: Highly Sig. at P<0.01)**

Table (1) shows the distribution of the two samples (study and control) according to their demographical characteristics variable's (age groups, marital status, family income,) reported a non significant differences at P>0.05, between the observed frequency's distributions compared with expected at the two groups, which indicated that they were corresponding proportionally /or whether the two independent groups are

seems to be drown from the same population. In addition to that, body mass index was reported a highly significant different at P<0.01, with bad assessment at the study group compared with the control. The age group (50-54) years shown to be the larger group (39.5%) in comparison with the other age groups for both of study and control groups. The highest percentage (44.5%) of study group were overweight, while (48.5%) for the control group had normal weight. (70.5%) of study, and (66.5%) of control group were married, (42.5%) (47%) respectively for both groups have sufficient family income.

Table (2): Distribution of the studied reproductive variables in the (study and control) samples with comparisons significant

Reproductive Characteristics	Samples	Groups	No.	Percent	Cum. Percent	C.S P-value
Gravidity	Study	0	30	15	15	$\chi^2 = 1.985$ P = 0.921 NS
		1-2	54	27	42	
		3-4	76	38	80	
		5-6	37	17.5	98.5	
		7 and more	3	1.5	100	
	Control	0	32	16	16	
		1-2	44	22	38	
		3-4	78	39	77	
		5-6	41	20.5	97.5	
		7 and more	5	2.5	100	
Parity	Study	0	30	15	15	$\chi^2 = 2.588$ P = 0.858 NS
		1-2	78	39	54	
		3-4	62	31	85	
		5-6	28	14	99	
		7 and more	2	1	100	
	Control	0	32	16	16	
		1-2	64	32	48	
		3-4	66	33	81	
		5-6	34	17	98	
		7 and more	4	2	100	
The women in reproductive age	Study	Rep. age	37	18.5	18.5	FEPT P =0.704 NS
		Post-Rep. age	163	81.5	100	
	Control	Rep. age	40	20	20	
		Post-Rep. age	160	80	100	
Breast feeding	Study	Yes	125	62.5	62.5	FEPT P =0.000 HS
		No	45	22.5	100	
	Control	Yes	151	75.5	75.5	
		No	17	8.5	100	
The use of contraception	Study	Not use	73	36.5	36.5	$\chi^2 = 7.179$ P = 0.066 NS
		Pills	67	33.5	70	
		Helix	28	14	84	
		Surgery	20	10	94	
		Condom	12	6	100	
	Control	Not use	76	38	38	
		Pills	46	23	61	
		Helix	41	20.5	81.5	
		Surgery	20	10	91.5	
		Condom	17	8.5	100	

Table (2) shows that the highest percentage of study and control group (38%) (39%) respectively were having (3-4) gravida. Regarding parity (39%) of study group were having(1-2) para , while for control group (33%) of them were having (3-4) para,. The

highest percentage of both study and control groups (81.5%)(80%) of study and control group respectively were in post-reproductive age, 62.5%), (75.5%) respectively were breast feed their babies for those who were married and having babies. Regarding the use of contraceptive the highest percentage of study and control group were using different types of contraceptives, and the highest percentage of the users(33.5%) (23%) respectively were using pills.

Table (3): Descriptive of reproductive characteristics (study and control) groups

Reproductive characteristics	Groups	No.	M.S.	Std. Dev.	Std. Error Mean
Age at menarche	Study	200	12.48	0.81	0.06
	Control	200	12.59	0.83	0.06
Age at first pregnancy	Study	170	27.01	11.81	0.08
	Control	168	23.53	11.52	0.08
Pregnancy interval	Study	170	1.32	0.72	5.10
	Control	168	1.20	0.69	4.92
Age at menopause	Study	112	52.90	1.97	0.19
	Control	112	52.54	1.92	0.18
Age at last menstrual cycle	Study	112	56.81	42.30	4.00
	Control	112	56.54	42.32	4.00
Duration of contraception	Study	130	7.44	1.70	0.15
	Control	125	7.03	2.00	0.18

Table (3): demonstrates the means of some reproductive variables. The mean age at menarche for study sample was (12.48 ±0.81) years which was lower than the age at menarche for control group (12.59±0.83) years. The mean age at first pregnancy (27.01±11.81) years for study sample, while (23.53±11.52) years for the control. Pregnancy interval means (1.32±0.72) years for study sample, and (1.20±0.69) years for control. Regarding age at menopause (52.90±1.97) years for study sample, and (52.54±1.92) years for control. The mean age at last menstrual cycle (56.81±42.30) years for study sample, and (56.54 ±42.32) years for control , and regarding the duration of contraception use (7.44±1.70) years for the study group, and (7.03±2.00) years for the control.

Table (4): Distribution of the study sample according to the breast cancer history:

About Breast Cancer	Stage	Freq.	Percent	Cum. Percent	C.S.
Breast cancer stage	Stage 1	8	4	4	$\chi2$ = 187.36 P = 0.000 HS
	Stage 2	70	35	39	
	Stage 3	120	60	99	
	Stage 4	2	1	100	
Breast cancer side	Right	94	47	47	$\chi2$ = 94.840 P = 0.000 HS
	Left	104	52	99	
	Both of them	2	1	100	
Family history	Non Applicable	186	93	93	$\chi2$ = 3.143 P = 0.534 NS
	mother	5	2.5	95.5	
	sister	3	1.5	97	
	daughter	1	0.5	97.5	
	aunt	3	1.5	99	
	grandma	2	1	100	
Period of disease in years	1-2	45	22.5	22.5	$\chi2$ = 94.070 P = 0.000 HS
	3-4	102	51	73.5	
	5-6	51	25.5	99	
	7 and more	2	1	100	

Table (4): Shows that the majority (60%) of cases had third stage of breast cancer, (52%) of cases had left breast cancer, (93%)of cases had no family history, and (51%) of cases had (3-4) years period of breast cancer. High significant differences were found between breast cancer stages, breast cancer side, period of breast cancer, while no significant differences were found in family history.
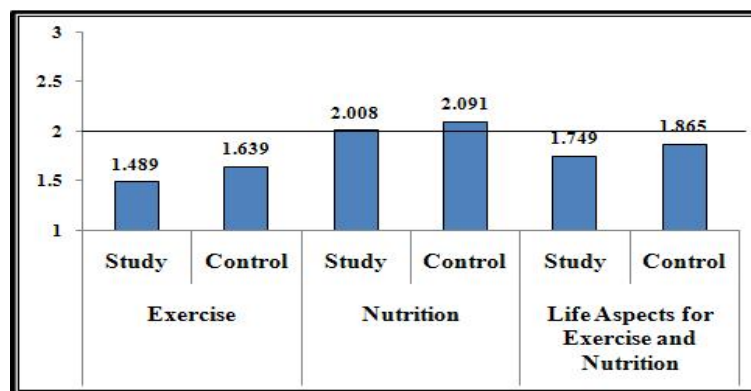

Figure (1): Bar chart for mean of score at the sub and main domain of life aspects (exercise & nutrition) at the (study and control) groups

Table(5) Comparisons significant for the studied sub and main domains of " life aspects to breast cancer in women "between (study and control) groups

Sub and Main Domains	Levene's Test for Equality of Variances		t-test for Equality of Means			C.S.
	(F) Statistic	Sig.	(t) Statistic	d.f.	Sig. (2-tailed)	
Exercise	4.385	0.037	-4.878	390.5	0.000	HS
Nutrition	0.161	0.688	-4.272	398.0	0.000	HS
Life Aspects for Exercise and Nutrition	0.692	0.406	-6.405	398.0	0.000	HS

C.S. : (S: Sig. at P<0.05 , HS: Highly Sig. at P<0.01)

Table (5) showed the results of testing coincidence's responding between different of the studied groups according to sub and main domain of "life aspects to breast cancer in women "through equality of variances and equality of mean value's parameters. The results of testing indicating that there are too highly significant different at P<0.001 were obtained, and that concluded a meaningful differences had been reported however that both of groups full their mean of score under cutoff point.

Table(6): Descriptive statistics for the studied stressors domains with percentile transformed scoring for the two different groups

Stressors Domains	Groups	No.	Mean	Std. Dev.	Std. Error	95% C. I. for Mean		Min.	Max.
						L. B.	U. B.		
Physical	Study	200	13.75	12.19	0.86	12.05	15.45	0	50
	Control	200	10.29	10.60	0.75	8.81	11.77	0	58.3

Table (6): The table shows that the means of physical stressors in study group was higher than that of control group.

Table (7) : Comparisons significant for the studied sub and main domains of " life stressors to breast cancer in women " between (study and control) groups

Sub and Main Domains	Levene's Test for Equality of Variances		t-test for Equality of Means			C.S. [*]
	(F) Statistic	Sig.	(t) Statistic	d.f.	Sig. (2-tailed)	
Physical Stressors	5.663	0.018	3.028	390.5	0.003	HS

[*] C.S. : (NS : Non Sig. at P>0.05 ; S: Sig. at P<0.05 , HS: Highly Sig. at P<0.01)

Table (7) showed the results of testing coincidence's responding between different of the studied groups according to sub and main domain of " physical life stressors to breast cancer in women" through equality of variances and equality of mean value's parameters with percentile transformed scoring. The results of testing indicating that there are a highly significant different at P<0.01 were obtained at the physical.

Table (8): Distribution of applicable respondent's frequencies for the questionnaire's items of life stressors (physical domain) in the two groups with their study to control ratio score and grand weighted mean of percent

Items	Study			Control			SCR(*) %
	(1-5) Yrs.	(6-10) Yrs.	Total	(1-5) Yrs.	(6-10) Yrs.	Total	
Hormonal disturbance	9	7	16	6	6	12	33.3
Thyroid work disturbance	13	3	16	6	6	12	33.3
Sleep less than 7 hours per day	6	20	26	0	15	15	73.3
Exposure to stress	13	17	30	16	20	36	- 16.7
Exposure to physical violence	23	4	27	15	8	23	16.7
Wear a bra breast narrow for more than 12 hours a day.	2	7	9	6	11	17	- 47
Severe physical illness	23	6	29	18	4	22	27.3
Chronic physical illness	6	24	30	6	21	27	7
Use of medication for a long time	28	29	57	20	23	43	33
Passive smoking	2	0	2	15	15	30	- 93
Smoking positive	23	23	46	2	8	10	360
Other reminders	11	31	42	-	-	-	-
Overall Assessment (Grand Weight Mean of Score)	-	-	34	-	-	22	**65.92**

Table (8): Concerning with the nature of scoring (yes or no) of (applicable or non applicable) respectively due to studying items of life stressors with breast cancer for ten years before occurrence, which needed for making overcharge or excluded the numbers of whom were answered non applicable, the table (11) shows the observed frequencies of respondents with respect to the physical stressor's items distributed in the two categories responding (1-5) years and (6-10) years as well as, total numbers, their percentages out of the studied individuals group, study to control ratio score, and overall assessment (grand weight mean of score). The result indicated that the study group's individuals were reported low assessment grade (65.92%) than control group's individuals concerning with the physical stressor's items.

Table (9): Association among demographical characteristics and some related variables with an overall assessments due to life stressors to breast cancer in women

predicted variables	Study			Control		
	C.C.	P-value	C.S.	C.C.	P-value	C.S.
Age Groups	0.287	0.021	S	0.193	0.461	NS
BMI : Kg/m²	0.165	0.135	NS	0.133	0.308	NS
Marital status	0.121	0.560	NS	0.098	0.749	NS
Family income	0.033	0.643	NS	0.025	0.719	NS
Age of mother in the marriage	0.182	0.333	NS	0.155	0.552	NS
Gravidity	0.208	0.264	NS	0.154	0.669	NS
Parity	0.267	0.041	S	0.082	0.983	NS
Age at menarche	0.106	0.685	NS	0.161	0.259	NS
Age in first pregnancy	0.238	0.068	NS	0.174	0.386	NS
Interval between pregnancies	0.008	0.918	NS	0.018	0.819	NS
Age at menopause	0.294	0.225	NS	0.251	0.584	NS
Age of last menstrual cycle	0.315	0.265	NS	0.247	0.698	NS
The women in reproductive age?	0.058	0.413	NS	0.129	0.067	NS
Breast feeding	0.022	0.776	NS	0.013	0.864	NS
The use of contraception	0.154	0.348	NS	0.081	0.846	NS
Other diseases	0.345	0.000	HS	0.299	0.000	HS

[*]**Improvement Status in high light classification.**

Table (9):The results has reported that the distribution of the life stressors to breast cancer in women through the two dichotomous of responding had no relationship with their demographical characteristics variables and as well as of their reproductive characteristics variables with an overall assessments at the study group except with (age, parity, and other

diseases) only and we can concluded that the studied questionnaire can be amend for all individuals of the population concerning with breast cancer of women whatever a differences with their (demographical and reproductive) characteristics variables would be.

DISCUSSION:

The result indicated that the study group's individuals were reported low assessment grade (65.92%) than control group's individuals concerning with the physical stressor's items (Table 9).

Stress can cause or promote cancer development indirectly, e.g. by initiation of high fat diets, alcohol intake, or tobacco smoking (9). There is evidence that chronic stress increases cortisol level, which disturbs immune function (10). Life stress may also promote breast cancer through DNA damage, faulty DNA repair, or inhibition of apoptosis. In addition, stress may alter endocrine characteristics (11) that are considered to be important in the development of reproductive cancer (12).

Santos and others, (13) who found a statistically significant relationship between stressful life events of high intensity and breast cancer (14). Hormones play an important role in the development of breast cancer. Thus, multiple stressful life events in the absence of social support may influence cancer risk through activation of the autonomic nervous system and the hypothalamic-pituitary-adrenal axis resulting in an increase in endogenous estrogens. Prolonged exposure to sex hormones, especially estrogen, results in an increased incidence of breast cancer.(15)

One of the most compelling pieces of evidence demonstrating the significance of sleep disturbances in relation to breast cancer comes from a study conducted with (16), which found an association between disruption of diurnal sleep-wakefulness cycles due to night shift work and an increased risk for breast cancer. The recent research provides evidence that disrupted circadian rhythms, including hormonal patterns and sleep, are associated with increased risk of breast cancer incidence and faster progression to mortality. We have observed that a loss of normal diurnal cortisol rhythm associated with more awakenings during the night predicts early mortality with metastatic breast cancer.(17)

Both smoking and exposure to secondhand smoke appear to increase the risk for breast cancer among postmenopausal women, new research shows. Although earlier studies had found little or no connection between breast cancer and smoking, as more women smokers reach menopause the connection may be surfacing for the first time, experts noted(18). Premenopausal women who smoke have an increased risk of breast cancer as well as lung cancer. Women who stop smoking can decrease their risk of breast cancer to average that of nonsmokers' after 10 years. After menopause, when estrogen levels decline, an active or long-term female smoker who started smoking before age 65 and before her first child was born has a 30 to 40% increased risk of breast cancer. If a postmenopausal woman smoked for 20 years or more and used hormone replacement therapy (HRT), which boosts estrogen levels, her risk is 50% greater than average. While the correlation ships between life aspects and life stressors for control group 75(92.6 %) their overall assessment were under the cutoff point , 6 (7.4%) were under life aspects- upper life stressors , 97(81.5%) of them having upper life aspects- under life stressors ,
while 22(18.5%) of them having upper life aspects- upper life stressors. The total overall assessment for life aspects and life stressors 172 (86%) were under cutoff point ,and 28
 (14%) upper the cutoff point. Significant correlation (0.027) were found between the overall assessments related to life aspects and life stressors with (Odd ratio= 1:2.835) (19).

CONCLUSIONS:

The present study shows the observed frequencies of respondents with respect to the Physical, distributed in the two categories responding (1-5) years and (6-10) years ,the result indicated that the study group's individuals were reported low assessment grade than control group's individuals concerning with the physical stressor's items. The study also shows that the means of physical stressors in study group was higher than that of control group. The results of testing indicating that there are a highly significant different at P<0.01 were obtained at the physical stressors. No relationship with their demographical characteristics variables and as well as of their reproductive characteristics variables with an overall assessments at the study group except with (age, parity, and other diseases) only and we can concluded that the studied questionnaire can be amend for all individuals of the population concerning with breast cancer of women whatever a differences with their (demographical and reproductive) characteristics variables.

RECOMMENDATIONS:

1. Activation of media and Ministry of Health role for increasing the awareness of women and their families about the importance of reducing the risk factors which contributing on breast cancer occurrence through :

2. Monthly breast self-examination and regular mammography for age   40 years are the recommended methods of breast cancer early detection.

3. Sleep at least 8 hours daily.

4. Exercising regularly at least one hour three times a week.

5. Encourage the breast feeding and maintaining a healthy weight.

6. Increasing the awareness about chemical products and radiation hazards.

7. Coping with the stress.

8. Further study on large population.

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