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Sexual dysfunction in Iraqi women with breast cancer and undergoing chemotherapy

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ABSTRACT

Breast cancer has been identified as one of the leading non-skin cancers for women in North America and the UK as well. Studies have also pointed out that women from all over the world are at equal threats of developing breast cancer. This study was aimed to determine the factors influencing breast cancer and corresponding treatment effects on sexual dysfunction. This study took into account 48 cancer patients that have undergone surgery and chemotherapy within last year. Data for comparison regarding incident rate was acquired from the Iraqi Cancer Registry covering a period of 4 years from 2011 to 2014. The treatment sample was obtained for Al-Sadder Medical City, Najaf, Iraq, and experiences related to cancer and its treatment correlated with sexual activity. The investigation was seen to be the situation by just half of the members. Notwithstanding, preceding the investigation, it was seen that 36% of the example of 48 had begun to encounter sexual brokenness before treatment. Concerning the present conditions, 47% of the members revealed they had dropped their sexual want amid the beginning of the condition until the beginning of treatment. Another 39% asserted that it has quit having intercourse following agony amid intercourse (Dyspareunia) it reasoned that age alone had a task to carry out in light of menopause given the high pervasiveness of bosom malignant growth among 50+ years' people. Based on these observations, this study concludes that sexual dysfunction among Iraqi women is a direct influence by the cumulative breast cancer diagnosis and treatment factors that alter emotions trigger loss of sexual drive.



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INTRODUCTION

Breast cancer has been identified as one of the leading non-skin cancers for women in North America and the UK as well. Studies have also pointed out that women from all over the world are at equal threats of developing breast cancer. Breast

cancer is prevalent for women aged 50 years and above. It is also observed that studies identify a consistent trend of potential development of breast cancer among women with a 13.4% rate reported in 2005. However, recent studies have pointed out that the earlier reported trends have changed concerning increased scanning of cancer at earlier ages. Women younger than 50 years are reported to have developed breast cancer as opposed to the reports that 50-year olds were at a higher risk (Alwan, 2016).

With regards to Iraqi women, the breast cancer development and treatment has targeted women of 20 to 50 years studying the number of causing factors and the side effects of the treatment. Survivors of breast cancer undergo a significant psychological change following disfigurement in treatment of the illness (Shapiro et al., 2001). This study aims to link breast cancer treatment with

sexual dysfunctions among women between the ages of 20 and 50. Reports from previous non-Iraqi treatment and control groups have associated the 20-54 age group cohorts with a potential of diagnosing 60,000 women with breast cancer. However, a gap exists on the specific factors affecting sexual dysfunction. Luckily, the survival of ladies with bosom malignant growth has expanded lately (Cordova et al., 2015). The explanation behind this is bosom malignant growth is frequently recognized at a before the stage and can in this way be dealt with all the more viable. Nonetheless, survivors encounter long haul treatment-related symptoms and diminished quality of life. Thus, the bosom disease is progressively being viewed as a perpetual sickness with impressive results for personal satisfaction. (Bakewell et al., 2005).

PATIENTS AND METHODS

Data Collection

For this study, data were obtained from the Iraqi Cancer Registry covering a period of 4 years from 2011 to 2014. The merit of selecting this data is because it provides detailed information on the effect of breast cancer treatments and diagnosis on the psychological outcomes of women in Iraq. However, since the Iraqi women population is too diverse, the patient sample was obtained for Al-Sadder Medical City, Najaf, Iraq (Iraqi Cancer Registry, 2012). In this case, the sample for this study is made of women aged between 20 and 50 and with cohorts of 5-year's intervals. The cohorts of 5-years have been observed to correspond with to population proportions published by the UN Population Division on the population pyramid website. Breast cancer for the selected region was averaged for three-year periods to identify changes in prevalence, treatment, and diagnosis in particular. The data Al-Sadder Medical City, Najaf from 2011 to 2014 was matched with data of Statistics' population in the Najaf City in which there where the five-year-olds' age-set spread was run against the proportions representation across Iraqi.

Sample Selection

Concerning the sexual outcomes of the target sample, a questionnaire concerning a variety of sexual complications was provided to a sample of 48 women selected randomly and anonymously asked to fill the questionnaire.

Variables and Data Analysis

Among the targeted factors to be observed with the questionnaire included sexual activity, the absence of sexual desire, dyspareunia, frigidity, lubrication problems, the problem with a partner, and the

correlation of sexual behaviours to chemotherapy (Wilmoth & Ross, 1997). The sample for the questionnaire included women selected from the Division of Radiation Oncology. To be eligible, participants were required to be disease-free and at the same time sexually active having undergone surgery within the last year and having completed chemotherapy or radiotherapy. Initially, 42% of the participants were identified to have undergone quadrantectomy and 8% undergone mastectomy and chemotherapy (Majid et al., 2017).

Statistical analysis

Statistical analysis was carried out using statistical package for social sciences (SPSS version 23.0) and Medcalc 15. Numeric variables were expressed as mean and standard deviation while categorical variables were expressed as number and percentage. The level of significance was considered at $P \leq 0.05$.

From the above table 1, the representation of Najaf population is estimated and incidents provided for only Najaf women. The table specifies age ranges in four-year intervals from the ages of 0 to the ages of 54. The raw data is indicated to show the prevalence of breast cancer among the population concerning years. Although the representation should match from 2011 to 2014, there lacks the availability data on Najaf women population for 2011, and the representation only accounts for 2011 and 2014 datasets.

The specific incidence rates concerning age are presented in Table 2 above as shown. According to the table, before 2014, the rate of age standardisation was observed to be approximately 30 for every 100,000 women and having a peak age of 50 to 54 years. A decline in the rate is observed with increasing age. Concerning the entire Iraqi population, specific age-related incidents were observed to be 110 for every 100,000 individuals over the ages of 50 while the standardised rate had an increase of 10 from 30 for every 100,000 to 40 for the same scale. Concerning Najaf, the incidence rate increased by four from 32 to 36 for populations of 100,000 for the two periods considered, 2006 and 2012.

Poisson Regression Analysis

Table 3 represents a Poisson regression analysis indicating that of all of Iraq from 2011 to 2014, a significant increase in breast cancer cases was registered between 2011 and 2014. For women aged above 60, the incident rate was significantly high at a p-value of 0.00099, but the same is not witnessed for younger generations. Additionally, the output also states that the Najaf population

Table 1: Najaf v. Iraqi Populations (Iraqi Cancer Registry, 2014)

The year 2011		The year 2012		The year 2013		The year 2014		1011	
population	B.C	population	B.C	population	B.C	population	B.C	population	B.C
119187.0	0.0	136091.0	0.0	1843117.0	0.0	1351411.0	0.0	1365695.0	0.0
110015.0	0.0	116440.0	0.0	1586575.0	0.0	1995955.0	0.0	1191043.0	0.0
110863.0	0.0	116788.0	0.0	1413151.0	0.0	1711195.0	1.0	1014941.0	0.0
98036.0	0.0	103176.0	0.0	1159917.0	5.0	1530119.0	6.0	1800966.0	1.0
84191.0	1.0	88798.0	1.0	1119935.0	14.0	1311396.0	18.0	1551915.0	16.0
69633.0	4.0	73355.0	4.0	956611.0	66.0	1115539.0	55.0	1181305.0	76.0
61387.0	11.0	64668.0	14.0	816619.0	111.0	953613.0	136.0	1119103.0	103.0
55890.0	11.0	58877.0	19.0	583300.0	144.0	794087.0	171.0	1016864.0	355.0
48560.0	18.0	51155.0	41.0	466640.0	334.0	638097.0	388.0	884658.0	610.0
40314.0	30.0	41469.0	37.0	419976.0	386.0	514935.0	411.0	738741.0	677.0
18403.0	18.0	19911.0	18.0	179984.0	345.0	399765.0	441.0	511486.0	581.0

Table 2: Age-Specific Incidents

	Najaf's Women Populace		Iraqi		
	The year 2011	The year 2014	The year 2011	The year 2013	The year 2014
0.0-4.0	0.0	0.0	0.0	0.0	0.0
5.0-9.0	0.0	0.0	0.0	0.0	0.0
10.0-14.0	0.0	0.0	0.0	0.0	0.0
15.0-19.0	0.0	0.0	0.0	0.0	0.0
20.0-24.0	1.0	2.0	1.0	1.0	2.0
25.0-29.0	6.0	6.0	7.0	5.0	6.0
30.0-34.0	18.0	11.0	15.0	13.0	18.0
35.0-39.0	38.0	31.0	31.0	33.0	35.0
40.0-44.0	57.0	81.0	71.0	61.0	69.0
45.0-49.0	73.0	88.0	91.0	80.0	91.0
50.0-54.0	99.0	95.0	113.0	110.0	111.0
Total rate	31.0	36.0	33.0	31.0	30.0

Table 3: Poisson Regression Analysis

Age (years)	Najaf		Iraq	
		<i>P-Value</i>		<i>P-Value</i>
20-39	0.000 (-0.147 to 0.147)	1	0.000 (-0.077 to 0.078)	1
40-49	0.0599(-0.012 to 0.115)	0.12	-0.003 (-0.0339 to 0.029)	0.869
50-59	-0.0079 (-0.061 to 0.045)	0.78	0.008 (-0.01799 to 0.035)	0.0539
60+	0.063 (0.001 to 0.127)	0.047	0.063 (0.0318 to 0.093)	0.00099

incurred an increase in breast cancer incidences for populations older than 60 years. The Poisson regression accounted for data inclusive of 50+, 60+ and 70 years to draw a difference between the elderly and the younger women.

Table 4: Sexual dysfunction analysis results

Item	Prevalence
Sexual Activity	50%
Before Treatment	36%
The absence of Sexual Desire	47%
Dyspareunia	39%
Frigidity	45%
Lubrication problems	42%
Problem with Partner	50%
Chemotherapy	49%

For the sample data relating to the sexual activity of the participants in the study, sexual activity was observed to be the case by only 50% of the participants. However, before the study, it was

observed that 36% of the sample of 48 had started to experience sexual dysfunction before treatment. Concerning the current conditions, 47% of the participants reported they had dropped their sexual desire during the onset of the condition until the start of therapy. Another 39% alleged that it has stopped having sex following pain during intercourse (Dyspareunia). The portion of the sample that was unable to respond to sexual stimuli, frigidity/anorgasmia, was 45% while another 42% reported experiencing lubrication problems. Lastly, half of the sample alleged that they had started to experience relationship complications with their partners following the diagnosis and treatment of breast cancer. A significant number of the sample, 49%, also stated that the onset of chemotherapy negatively influenced their desire for sexual relationships.

DISCUSSION

According to (Cordova et al., 2015) the study on the prevalence of breast cancer for Iraqi women, it was observed that the incident rate increased with age. In particular, the age factor plays a significant role in influencing the desire and the ability to have sexual intercourse. Additionally, since most women face the threat of breast cancer post-menopause, it is observed that the corresponding sex drive decreases with the period since menopause (Bakewell & Volker, 2005). On the specific factors associated with breast cancer, the emotional drive related to the positive diagnosis of the condition is observed to significantly alter the emotional connection between the cancer patient and the sexual partners (Burwell et al., 2016). Regarding wellbeing, most of the sexual factors associated with breast cancer onset and treatment are related to response to stimuli (Anllo, 2000). There is a general decrease in sexual activity in breast cancer patients due to associated pain experienced by as many as 39% of women. The aspect of Dyspareunia is amplified by the association of lubrication problems and frigidity (Magrath & Litvak, 1993). Any sexual activity initiated without stimulation leads to pain given the conditions for stimulating sex are not met (Griffin & Minneapolis, 2013). Inactive relationships, breast cancer survivors and patients have reported engaging in the act to satisfy the other while enduring the pain of subjecting oneself to the side effects of treatment (Mezher et al., 2017).

CONCLUSION

Sexual dysfunction among women in Iraq is observed to be reactions to the effects of cancer treatment. A few of the factors influencing limited sexual activity among breast cancer patients are reported before the commencement of treatment. However, once patients have been subjected to surgery and undergoing chemotherapy or radiation therapy, a considerable amplification of the variables hindering sexual activity is observed. Based on these observations, this study concludes that sexual dysfunction among Iraqi women is a direct influence by the cumulative breast cancer diagnosis and treatment factors that alter emotions trigger loss of sexual drive.

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