Awareness and Expectation of Breast Reconstruction Surgery among Female with Breast Cancer in Baghdad Governorate 2022

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Abstract

Background:

Breast cancer is the most common female cancer worldwide. Although mastectomy is considered the treatment of choice for the majority of cases of breast cancer; a noticeable percentage of breast cancer survivors claim they were never advised about reconstruction. It has been proven that breast reconstruction helps breast cancer survivors to overcome the trauma of their diagnosis and improve their psychological well-being.

Objectives: To assess the level of awareness and expectations regarding breast reconstruction surgery among female with breast cancer survivors in Baghdad, **and** to find if there is association between sociodemographic data and expectations of breast reconstruction.

Methodology: This is a cross sectional study that included 120 breast-cancer survivors and has been conducted in Medical City/ Oncology teaching hospital during the periodfrom 1st of May 2022 to the 30th of September 2022. A questionnaire-based patient interview was employed as the data collection method. The questionnaire consisted of two parts. The first part collected sociodemographic information, upon which a socioeconomic score was calculated. The second part of the questionnaire consisted of six sections assessing: expectations of medical team, expectations of pain, expectations of coping, expectations of appearance, expectations of implants, and expectations of abdominal function.

Results: A statistically significant association was detected between the following:
1- Expectations of medical team and both education and socioeconomic status.
2-Expectations of pain and both education and socioeconomic status.
3-Expectations of coping and each of age, occupation and socioeconomic status.
4-Expectations of appearance and each of education, occupation and socioeconomic status.
5-Expectations of implants and each of education, occupation and socioeconomic status.
6-Expectations of abdominal function and occupation.

Conclusion: More than half Iraqi women who underwent mastectomy due to breast cancer are of low socioeconomic status. Regarding their expectations toward breast reconstruction, the majority had good expectations of medical team, fair expectation of pain, good expectations of coping, good expectations of appearance, fair expectations of implants, with expectations of abdominal function varying between individuals. Although higher socioeconomic status was a predictor of better expectations regarding medical team, coping, and appearance; meanwhile, it was a predictor of poorer expectation concerning pain and implants.

Key word: Breast reconstruction surgery, Awareness and expectation, Breast cancer.

Introduction

Breast cancer is a common disease that affects millions of women, often at a young age[1], although breast conservation therapy is an excellent choice for many women with cancer, most patients have little knowledge about reconstruction surgery or the extent to which their therapies match their desires[2] In most cases, mastectomy provides the opportunity for cure, while reconstruction provides a woman with a more aesthetically pleasing result. In addition, reconstruction can be used to treat non-healing wounds and radiation ulcers[3].

Despite the fact that most forms of breast reconstruction have no effect on the oncological outcomes of breast cancer or its recurrence, and despite the positive psychological effects on the patient's self-esteem, a large proportion (80%) of these women refuse breast reconstruction. As a result, the rule of counseling these patients for breast reconstruction becomes critical[4]

A patient's desire for the procedure is an important element in the treatment decision, in addition to the medical examination made by the plastic surgeon about the kind of breast reconstruction a patient might undertake[5]. So, the overall reconstruction strategy must include an open dialogue between surgeon and patient, involving listening and education [3].

Breast reconstruction choices should be made by patients who are aware of the risks and advantages of the procedure, get therapy that is compatible with their preferences and objectives, and have a decision in the care they receive [6]

Patients who visit a plastic surgeon often have all the knowledge about their choice: prior consultation with a surgical oncologist, the internet, breast cancer support groups, and easily accessible literature all provide easy access to much information about cancer treatment and reconstruction [3].

Surgeons may be able to identify patients who have unreasonable expectations by an evaluation of those expectations, and then correct those misunderstandings through better preoperative patient education if they are able to identify such patients. Careful study of a patient's expectations may improve decision-making when many surgical choices are available. In addition to aiding in documenting the informed consent process, the elaboration of reasonable expectations in this way may be useful[4].

Surgeons are better able to identify patients who have unreasonable expectations and address those concerns before surgery. The internet and television are just few of the many places where patients may learn more about their conditions and treatment options. This information may be inaccurate[4]. Patients' preoperative expectations are a powerful predictor of their postoperative satisfaction[7]. In primary care, for instance, patients who have reasonable expectations tend to be more satisfied with their treatment and more likely to follow doctors' orders [7]. Rather, postoperative disappointment was linked to unmet or misunderstood expectations. Many studies have shown that information given to patients for breast reconstruction focuses mostly on the risks involved. This implies that patients may provide their informed permission for surgery with a full understanding of the potential risks involved, but with little knowledge of the potential benefits [7].

Study Objectives:

- To assess the level of awareness and expectations regarding breast reconstruction surgery among female with breast cancer survivors in Baghdad.
- To find if there is association between sociodemographic data and expectations of breast reconstruction.Patients and methods

Patients and Methods:

A cross sectional study has been conducted in Medical City/ Oncology teaching hospital. Data collection was complete within 5 months, from 1st of May 2022 to the 30th of September 2022. Convenient sampling has been chosen for this research as the population involved was female patients who underwent mastectomy due to breast cancer.

Exclusion criteria

- Patients with mental disabilities were excluded from the study.
- Patients who answered "Don't know".

Verbal consent has been obtained from all participants before data collection. And an approval was taken from the scientific committee at Alkindy College of Medicine/ Baghdad University, the Scientific Council of Family Medicine – Iraqi Board for Medical Specializations, and General directorate of the Medical City.

A questionnaire-based patient interview (Arabic version) was employed as the data collection method. Patients were interviewed during the administration of their scheduled chemotherapeutic doses (first and second dose). Telephone numbers of the medical staff were obtained in case one of the patients developed an urgent condition. Questionnaire form consisted of 2 parts. The first part collected sociodemographic information (Age, educational level, occupation, house ownership and car ownership). A socioeconomic score (SES) for each participant was calculated using the following equation based on a research by (Wali Omer and Tariq Al-Hadithi).[8]

SES = Education + Occupation + House ownership * 0.5 + Car ownership * 0.1 + (age-20)/100 - Retired/unemployed/deceased

After SES score calculation, patients were categorized into the following groups: Low SES (<6), intermediate SES (6-10), and high SES (>10).

The second part of the questionnaire consisted of six sections adapted from the Breast-Q questionnaire [9] with each section assessing the one of the following:

1. Expectations from medical team (This scale measures how much time and emotional support the patient is expecting to receive from the medical team and surgeon during the breast).
2. Expectations of pain (This scale measures the magnitude of pain the patient is expecting to experience in the first week after reconstruction surgery (e.g., soreness, amount of pain).
3. Expectations of coping (This scale measures how a patient is anticipating she will cope with the process of breast reconstruction during the first year after surgery (e.g., will get back to her normal life).
4. Expectations of appearance (This scale measures how a patient expects her breasts to look one year after surgery when she is clothed (e.g., look good in a bra, clothes will hang well).
5. Expectations of implants (This scale measures how a patient expects her breast implants to feel one year after surgery).
6. Expectations of abdominal function (This scale measures how a patient expects her abdomen to feel one year after surgery).

Regarding score, each answer of "very likely" was given a score of 3, an answer of "likely" was given a score of 2, and an answer of "unlikely" was given a score of 1; as illustrated in table (1).As for rating, sections reflecting negative expectations (expectation of pain, expectations of implants, and expectations of abdomen) were inversely scored; as illustrated in table (2)

Table 1: scoring of the Breast Q questionnaire

Section	Possible answers	Scoring	Maximum possible score	Minimum possible score
Expectations of medical team	Unlikely/ likely/ very likely	1/ 2/ 3	15	5
Expectations of pain	Unlikely/ likely/ very likely	1/ 2/ 3	18	6
Expectations of Coping	Unlikely/ likely/ very likely	1/ 2/ 3	15	5
Expectations of appearance	Unlikely/ likely/ very likely	1/ 2/ 3	15	5
Expectations of implants	Unlikely/ likely/ very likely	1/ 2/ 3	15	5
Expectations of abdomen (function)	Unlikely/ likely/ very likely	1/ 2/ 3	12	4

Table (2): Scoring of Breast-Q sections.

Section	Poor score	Fair score	Good score
Expectations of medical team	5-8	9-11	12-15
Expectations of pain	15-18	11-14	6-10
Expectations of coping	5-8	9-11	12-15
Expectations of appearance	5-8	9-11	12-15
Expectations of implants	12-15	9-11	5-8
Expectations of abdomen (function)	10-12	7-9	4-6

Data was recorded into different quantitative and qualitative variables for the purpose of analysis.Analysis was done using statistical package for social sciences (SPSS version 26)Data were summarized using measures of frequency (mean) and dispersion (standard deviation), tables and graphs. Chi-square was used to measure the association.A two-tailed P value of less than or equal to 0.05 was assigned as a criterion for declaring statistical significance

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Results

A total number of 120 women were included in the study sample.The age distribution of the studied sample ranged from 18-60 years with a mean of 51.8 years ± 8.6 SD. Most of the studied sample (90.0%) were >40 years. Regarding education, less than half (41.7%) was of university graduates. As for occupation, more than half (56.7%) was unemployed; as illustrated in table (3)

Table (3): Sociodemographic characteristics of the studied sample.

Sociodemographic characteristics	Frequency	Percentage
Age		
<40 years	12	10.0
>40 years	108	90.0
Total	120	100.0
Educational level		
Illiterate	10	8.3
Primary education	22	18.3
Secondary education	38	31.7
University education	50	41.7
Total	120	100.0
Occupation		
Employed	42	35.0
Unemployed	68	56.7
Student	1	.8
Retired	9	7.5
Total	120	100.0

Regarding the socioeconomic status (SES) index, 61 (50.8%) were of low score, 48 (40.4%) were of intermediate score, and 11 (9.2%) were of high score; as illustrated in figure 1.

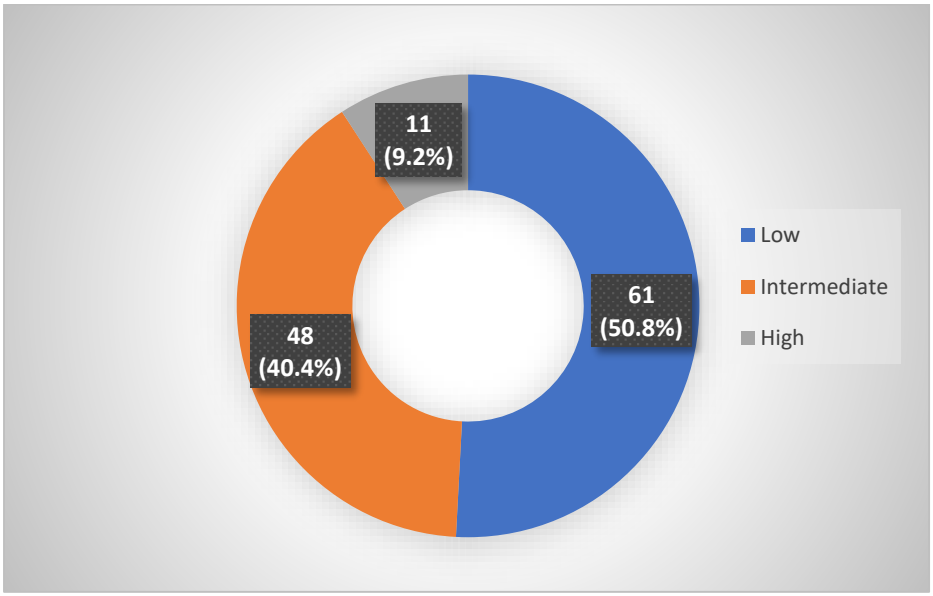

Figure (1): Socioeconomic status index of the studied sample.

Rating of the Breast-Q questionnaire sections;the rating of each section of the questionnaire is described in table (4).

A statistically significant association between expectations of medical team and both education and SES score; as illustrated in table (5).A statistically significant association was detected between expectations of pain and both education and SES score; as illustrated in table (6).A statistically significant association was detected between expectations of coping and each of age, occupation and SES score; as illustrated in table (7).A statistically significant association was detected between expectations of appearance and each of education, occupation and SES score; as illustrated in table (8).A statistically significant association was detected between expectations of implants and each of education, occupation and SES score; as illustrated in table (9).A statistically significant association was detected between expectations of abdominal function and occupation; as illustrated in table (10).

Table (4): Rating of questionnaire sections.

Breast-Q expectations	Frequency	Percentage
Expectations of medical team		
Poor	20	16.7
Fair	42	35.0
Good	58	48.3
Total	120	100.0
Expectations of pain		
Fair	78	65.0
Good	42	35.0
Total	120	100.0
Expectations of Coping		
Poor	19	15.8
Fair	18	15.0
Good	83	69.2
Total	120	100.0
Expectations of appearance		
Poor	24	20.0
Fair	30	25.0
Good	66	55.0
Total	120	100.0
Expectations of Implants		
Poor	28	23.3
Fair	63	52.5
Good	29	24.2
Total	120	100.0
Expectations of Abdomen (Function)		
Poor	41	34.2
Fair	33	27.5
Good	46	38.3
Total	120	100.0

Table (5): Association between expectations of medical team and sociodemographic characteristics.

Study parameters	Expectations of medical team			P value
	Poor	**Fair**	**Good**	
Age				
<40 years	1	4	7	0.783
	8.3%	33.3%	58.3%	
≥40 years	19	38	51	
	17.6%	35.2%	47.2%	
Total	20	42	58	
	16.7%	35.0%	48.3%	
Education				
Illiterate	6	3	1	**0.001**
	60.0%	30.0%	10.0%	
Primary education	5	4	13	
	22.7%	18.2%	59.1%	
Secondary education	7	16	15	
	18.4%	42.1%	39.5%	
University education	2	19	29	
	4.0%	38.0%	58.0%	
Total	20	42	58	
	16.7%	35.0%	48.3%	
Occupation				
Employed	3	14	25	0.184
	7.1%	33.3%	59.5%	
Unemployed	15	23	30	
	22.1%	33.8%	44.1%	
Student	0	1	0	
	0.0%	100.0%	0.0%	
Retired	2	4	3	
	22.2%	44.4%	33.3%	
Total	20	42	58	
	16.7%	35.0%	48.3%	
Socioeconomic status (SES)				
Low	18	19	24	**0.003**
	29.5%	31.1%	39.3%	
Intermediate	2	19	27	
	4.2%	39.6%	56.3%	
High	0	4	7	
	0.0%	36.4%	63.6%	
Total	20	42	58	
	16.7%	35.0%	48.3%	

Table (6): Association between expectations of pain and sociodemographic characteristics.

Study parameters	Expectations of pain			P value
	Poor	**Fair**	**Good**	
Age				
<40 years	**0**	8	4	1.000
	0.0%	66.7%	33.3%	
≥40 years	**0**	70	38	
	0.0%	64.8%	35.2%	
Total	**0**	78	42	
	0.0%	65.0%	35.0%	
Education				
Illiterate	**0**	3	7	**0.039**
	0.0%	30.0%	70.0%	
Primary education	**0**	13	9	
	0.0%	59.1%	40.9%	
Secondary education	**0**	24	14	
	0.0%	63.2%	36.8%	
University education	**0**	38	12	
	0.0%	76.0%	24.0%	
Total	**0**	78	42	
	0.0%	65.0%	35.0%	
Occupation				
Employed	**0**	29	13	0.846
	0.0%	69.0%	31.0%	
Unemployed	**0**	42	26	
	0.0%	61.8%	38.2%	
Student	**0**	1	0	
	0.0%	100.0%	0.0%	
Retired	**0**	6	3	
	0.0%	66.7%	33.3%	
Total	**0**	78	42	
	0.0%	65.0%	35.0%	
Socioeconomic status (SES)				
Low	**0**	34	27	**0.044**
	0.0%	55.7%	44.3%	
Intermediate	**0**	34	14	
	0.0%	70.8%	29.2%	
High	**0**	10	1	
	0.0%	90.9%	9.1%	
Total	**0**	78	42	
	0.0%	35.0%	48.3%	

Table (7): Association between expectations of coping and sociodemographic characteristics.

Study parameters	Coping			P value
	Poor	**Fair**	**Good**	
Age				
<40 years	0	5	7	**0.015**
	0.0%	41.7%	58.3%	
≥40 years	19	13	76	
	17.6%	12.0%	70.4%	
Total	19	18	83	
	15.8%	15.0%	69.2%	
Education				
Illiterate	5	1	4	0.051
	50.0%	10.0%	40.0%	
Primary education	4	2	16	
	18.2%	9.1%	72.7%	
Secondary education	7	6	25	
	18.4%	15.8%	65.8%	
University education	3	9	38	
	6.0%	18.0%	76.0%	
Total	19	18	83	
	15.8%	15.0%	69.2%	
Occupation				
Employed	2	7	33	**0.012**
	4.8%	16.7%	78.6%	
Unemployed	15	7	46	
	22.1%	10.3%	67.6%	
Student	0	1	0	
	0.0%	100.0%	0.0%	
Retired	2	3	4	
	22.2%	33.3%	44.4%	
Total	19	18	83	
	15.8%	15.0%	69.2%	
Socioeconomic status (SES)				
Low	16	7	38	**0.006**
	26.2%	11.5%	62.3%	
Intermediate	3	11	34	
	6.3%	22.9%	70.8%	
High	0	0	11	
	0.0%	0.0%	100.0%	
Total	19	18	83	
	0.0%	35.0%	48.3%	

Table (8): Association between expectations of appearance and sociodemographic characteristics.

Study parameters	Expectations of appearance			P value
	Poor	**Fair**	**Good**	
Age				
<40 years	2	5	5	0.389
	16.7%	41.7%	41.7%	
≥40 years	22	25	61	
	20.4%	23.1%	56.5%	
Total	24	30	66	
	20.0%	25.0%	55.0%	
Education				
Illiterate	0	3	7	**<0.001**
	0.0%	30.0%	70.0%	
Primary education	10	5	7	
	45.5%	22.7%	31.8%	
Secondary education	12	10	16	
	31.6%	26.3%	42.1%	
University education	2	12	36	
	4.0%	24.0%	72.0%	
Total	24	30	66	
	20.0%	25.0%	55.0%	
Occupation				
Employed	3	9	30	**0.017**
	7.1%	21.4%	71.4%	
Unemployed	19	19	30	
	27.9%	27.9%	44.1%	
Student	1	0	0	
	100.0%	0.0%	0.0%	
Retired	1	2	6	
	11.1%	22.2%	66.7%	
Total	24	30	66	
	20.0%	25.0%	55.0%	
Socioeconomic status (SES)				
Low	20	15	26	**0.005**
	32.8%	24.6%	42.6%	
Intermediate	4	13	31	
	8.3%	27.1%	64.6%	
High	0	2	9	
	0.0%	18.2%	81.8%	
Total	19	18	83	
	0.0%	35.0%	48.3%	

Table (9): Association between expectations of implants and sociodemographic characteristics.

Study parameters	Expectations of Implants			P value
	Poor	**Fair**	**Good**	
Age				
<40 years	4	8	0	0.084
	33.3%	66.7%	0.0%	
≥40 years	24	55	29	
	22.2%	50.9%	26.9%	
Total	28	63	29	
	23.3%	52.5%	24.2%	
Education				
Illiterate	0	3	7	**<0.001**
	0.0%	30.0%	70.0%	
Primary education	3	12	7	
	13.6%	54.5%	31.8%	
Secondary education	4	23	11	
	10.5%	60.5%	28.9%	
University education	21	25	4	
	42.0%	50.0%	8.0%	
Total	28	63	29	
	23.3%	52.5%	24.2%	
Occupation				
Employed	15	23	4	**0.010**
	35.7%	54.8%	9.5%	
Unemployed	10	34	24	
	14.7%	50.0%	35.3%	
Student	0	1	0	
	0.0%	100.0%	0.0%	
Retired	3	5	1	
	33.3%	55.6%	11.1%	
Total	28	63	29	
	23.3%	52.5%	24.2%	
Socioeconomic status (SES)				
Low	6	30	25	**<0.001**
	9.8%	49.2%	41.0%	
Intermediate	15	30	3	
	31.3%	62.5%	6.3%	
High	7	3	1	
	63.6%	27.3%	9.1%	
Total	28	63	29	
	0.0%	35.0%	48.3%	

Table (10): Association between expectations of abdomen (function) and sociodemographic characteristics.

Study parameters	Expectations of abdomen (function)			P value
	Poor	**Fair**	**Good**	
Age				
<40 years	8	2	2	0.067
	66.7%	16.7%	16.7%	
≥40 years	33	31	44	
	30.6%	28.7%	40.7%	
Total	41	33	46	
	34.2%	27.5%	38.3%	
Education				
Illiterate	2	4	4	0.125
	20.0%	40.0%	40.0%	
Primary education	4	7	11	
	18.2%	31.8%	50.0%	
Secondary education	11	9	18	
	28.9%	23.7%	47.4%	
University education	24	13	13	
	48.0%	26.0%	26.0%	
Total	41	33	46	
	34.2%	27.5%	38.3%	
Occupation				
Employed	22	12	8	**<0.001**
	52.4%	28.6%	19.0%	
Unemployed	18	20	30	
	26.5%	29.4%	44.1%	
Student	0	1	0	
	0.0%	100.0%	0.0%	
Retired	1	0	8	
	11.1%	0.0%	88.9%	
Total	41	33	46	
	34.2%	27.5%	38.3%	
Socioeconomic status (SES)				
Low	14	18	29	0.103
	23.0%	29.5%	47.5%	
Intermediate	22	12	14	
	45.8%	25.0%	29.2%	
High	5	3	3	
	45.5%	27.3%	27.3%	
Total	41	33	46	
	34.2%	27.5%	38.3%	

Discussion

According to the global cancer observatory, breast cancer is the most common cancer in females with an incidence of 2,261,419 cases diagnosed in 2020 and 684,996 deaths.[10] In Iraq, the situation is not different as the global cancer observatory documented that breast cancer constituted the majority (37.9%) of documented female cancers in 2020 with 7,515 newly diagnosed cases and 3,019 deaths.[11] The Iraqi study by Muzahem Al-Hashimi has reported that a total of 72,022 breast cancer cases were identified among women in Iraq between 2000 and 2019.[12]After mastectomy, breast reconstruction helps restore body image, sexual life, and psychosocial image, and increases women's confidence. Hence, breast reconstruction has become an integral part of the interdisciplinary management of breast cancer in developed nations.[13]

Sociodemographic characteristics

In the present study, most of the studied sample were >40 years. Less than half of them were of higher education. More than half were

unemployed; and thus, half of the studied sample was shown to be of low socioeconomic status. In Saudi Arabia, the study by AlKaff*et al.* evaluated 209 women, of whom 67.9% were >40 years and 44.5% were of college level.[14] In India, Raja *et al.* included 10,299 women, of whom 45.9% were <30 years and 63.3% were of low monthly income.[13] In India, the study by Nair et al. assessed 492 patients, of which 45.1% were >50 years, 50.4% were of school education, 72.96% housewives, 89.43% married.[15] In Iran, Shandiz*et al.* included 108 patients, of which the majority were of under diploma education, housewives, and of middle income.[16]

The relatively high age of studied samples are expected, given that breast cancer is mainly a disease of women >40 years (the average age at diagnosis of breast cancer is 63 years old); and thus, the American Cancer Society (ACS) has recommended that all women older than 40 years should gain access to annual screening with mammography.

Expectations of medical team

Around half the women participating in the current study has shown a generally "Good" expectation of the medical team, as most of them expected to receive quick medical attention and predicted the availability of medical staff. These findings are in concordance with Morzycki*et al.*, whose study also reported an overall good expectation of support from medical staff.[17]The current study has found that good expectation of medical team was associated with higher educational level. A possible explanation could be that women of lower education are more susceptible to adhere to false beliefs about doctors, and generally have poorer perception regarding medical staff.

Expectations of pain

The present study has shown that around two-thirds of women had "Fair" expectation of pain and one-third showed good expectation. A noteworthy finding of the current study is that no woman showed "poor" expectation, which can be attributed to their strong desire to restore their normal body image, since mastectomy alters women's femininity and sexuality and leaves a psychological scar which they try to overcome by seeking the available. Hence, pain is not so much of a concern for these women.[18] These findings are in line with the study by Mortada*et al.*, in which 65.8% agreed that breast reconstruction is a safe procedure.[19] Interestingly, lower SES (educational level in particular) was associated with more optimistic expectations regarding pain. This could be attributed to the reason that women with higher education tend to search and inquire about the complications of surgery; and hence, have poorer expectations concerning pain.

Expectations Coping

The present study showed that two-thirds of participants demonstrated "good" coping, as the majority had positive expectations, such as that they would get better in the future and that they would return to normal life. In Japan, the study by Nozawa *et al.* showed that 12.6 % coped very well, 38.8 % coped well, 36.3 % coped a little, and 10.6 % did not cope well.[20]It was found that higher age and being employed were associated with better coping, which is expected given that women of higher age (especially married women) and higher financial income are expected to have access to better psychological support and healthcare, which in turn will be associated with a better psychological well-being.

Expectations of appearance

In the current study, more than half of participant women showed an overall good expectation regarding appearance. The research by Mortada*et al.* reported that 76.1% believed that breast reconstruction can restore the appearance of the breast close to its preoperative state and that breast reconstruction following mastectomy is better than leaving a woman with no breast.[19] In the study by AlKaff*et al.* reported that among patients who refused breast reconstruction, only 3.8% reported that the shape of the new breast as a reason of refusal.[14] Moreover, being employed and of higher educational status was associated with better expectation of appearance, which again reflects the role of better education and financial income in a better understanding and awareness of breast reconstruction.

Expectation of implants

In the present study, slightly more than half of the studied sample reported "Fair" expectation regarding implants, as the majority expressed their concerns that the new breast will feel harder than natural breast. The study Morzycki*et al.* also reported that implant expectation was below average.[17]Higher educational level and occupation were associated with poorer expectation regarding implants. This again reflects the tendency of women with higher education and financial income to inquire about long-term outcome of surgical interventions. Although breast implants tend indeed to feel more firm than natural breast, Silicone gel implants are regarded as esthetically superior to saline implants, offering a more natural consistency[21]. It is essential to thoroughly explain management options to the patients, in order to obtain a postoperative outcome that meets their expectations.

Expectations of abdomen (function)

Expectations of abdominal function varied between individuals as around third had "Poor" expectation, one-third had "Fair" expectation, and one-third had "Good" expectations. These findings are in discordance with Morzycki *et al.* who found

generally positive expectations regarding abdominal function.[17]

From the findings of the present study, the following can be concluded:

1. More than half Iraqi women who underwent mastectomy due to breast cancer are of low socioeconomic status.
2. Regarding their expectations toward breast reconstruction, the majority had good expectations of medical team, fair expectation of pain (no patients with poor expectations were reported), good expectations of coping, good expectations of appearance, fair expectations of implants, with expectations of abdominal function varying between individuals.
3. Although higher socioeconomic status was a predictor of better expectations regarding medical team, coping, and appearance; meanwhile, it was a predictor of poorer expectation concerning pain and implants.

   This study recommends that women who underwent mastectomy should be offered the option of breast reconstruction. Moreover, women should be provided with detailed information regarding the procedure, so as that women with breast cancer can overcome the anxiety and fear associated with post-mastectomy breast reconstruction.

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