

UNDERSTANDING BODY IMAGE AND SEXUAL DYSFUNCTIONS AMONG WOMEN WITH BREAST CANCER IN PAKISTAN

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Abstract

Breast cancer often leads to significant changes in a woman's physical appearance due to treatments like surgery, chemotherapy, or radiation. These changes can profoundly affect a woman's body image, and sexual health. Breasts symbolize femininity and sexuality. Surgery affects the sexual lives of women with BC. This quantitative study was completed through correlational research design. Survey was conducted for the purpose of data collection. Sample of 172 breast cancer patients were selected through purposive sampling technique from Multan Institute of Nuclear Medicine and Radiotherapy and Combined Military Hospital Multan. Two research instruments were used; Body Image Scale (Hopwood et al., 2001) and An Integrated Sexual Function Questionnaire for Women with Breast Cancer (Jeng et al., 2020). Findings of the study reveal that negative correlation was explored among disturbed body image, breast role, sexual desire, and sexual satisfaction. In addition, there was found a significant positive relationship between disturbed body image and sexual dysfunction (sexual obstacle). Furthermore, results suggest that the main sexual dysfunctions that women experience after being diagnosed with breast cancer are dyspareunia, vaginal dryness, decreased pleasure, fear of loss of fertility, loss of femininity, loss of attractiveness, decreased sexual arousal, decreased desire and sexual interest, lack of empathy in the intimacy of the couple's relationship. Moreover, women with age range 19-50 years reported greater level of body image disturbance, breast role and sexual obstacle as compared to women with age of above 51 years old. Mass education and training on breast self-examination may reduce the mortality rate and helps for early disease diagnosis.

Keywords: Breast Cancer, Body Image, Sexual Dysfunction

Introduction

Breast cancer (BC) is the most common cancer in women worldwide, with more than 2.2 million cases in 2020, it is the leading cause of cancer mortality in women in the world (Hernández-Blanquissett et al., 2022). According to figures from the World Health Organization (WHO) in 2020, around 685,000 women died as a result of BC, with most deaths occurring in low and middle-income countries (Hernández-Blanquissett et al., 2022). There is highest incidence and prevalence of cancer in Asian countries. About 8.2 million newly diagnosed cancer cases every year in Asia, in which about 404,000 cases of BC. In Pakistan 178388 people diagnosed with all kinds of cancer in 2020, among them

25,928 newly diagnosed cases with BC which is highest ratio in Asia (Javed & Khalid, 2022). Breast cancer is the second leading cause of death among women in Pakistan. In Asia, Pakistan has highest ratio of BC. This is because of low health care facilities in Southern Punjab. Women have less knowledge about disease development process, breast self-examination and yearly mammography after age of 40 years. (Javed & Khalid, 2022). Symptoms differ in appearance on the basis of location and grading of BC. Women have less knowledge about self-breast examination and screening tests such as mammography. Breast lump most common identification of breast cancer development (Bano et al., 2016). Thickening of breast tissue, nipple changes, nipple discharge, and discoloration of nipples, skin rashes, breast pain, one breast enlargement and breast lowering are most common symptoms for early stage detection of BC. Early diagnosis and treatment leads to more prognosis of disease. Thus, reduces the case fatality and case specific death ratio. The management of BC depends on stage of diagnosis, type of BC, type of surgeries, followed by chemotherapy and radiotherapy. Mass education and training on breast self-examination may reduce the mortality rate and helps for early disease diagnosis (Javed & Khalid, 2022). There are some factors identified most commonly causing BC in Pakistan. Family history, increased BMI, marital status, lack of health care facilities, and lack of knowledge about breast self-examination are most important factors contributing in breast cancer development in Pakistan. Classification of BC with different perspectives such as origin of cancer, stages of disease development, grading and involvement of organs. It may depend upon female reproductive history and menstrual cycle history from onset of menarche, history of hormonal fluctuation, women with no live child birth, older ages, a little or less breast feeding, late marriages and late conception may enhance the risk of BC (Baig et al., 2019).

Body image is an essential aspect of femininity. Body image disturbances occurring due to breast cancer pose a difficult challenge, which can impact the quality of life of breast cancer survivors. Various treatment modalities used to cure cancer may result in major alterations of body image. Body image disturbance is an indispensable part of female health (Thakur et al., 2022). Body image is an important aspect of the sexual health of individuals. Changes in body image in patients with breast cancer can occur due to chemotherapy, radiotherapy, and surgery. Chemotherapy can cause reversible hair loss, radiotherapy can damage the body tissues, and surgery may lead to more immediate effects with partial or complete removal of the breast (Sherman et al., 2017). A previous study suggests that in patients with breast cancer, the type of treatment, primarily modified radical mastectomy, and age have a significant association with disturbed body image, resulting in physical or psychological distress, eventually leading to difficulty in partnered relationships and sexual intimacy (Thakur et al., 2022). Sexual Dysfunction is a disorder of sexual desire and encompasses psychophysiological changes in sexual desire, sexual excitement, orgasm, and satisfaction, leading to interpersonal difficulties and suffering (Antosh & Megahed, 2021). However, up to 75% of women diagnosed with breast cancer report persistent challenges in their sexual life due to the long-term effects of cancer treatment (Fahami et al., 2015). Common breast cancer treatments, including surgery, chemotherapy, radiotherapy, and hormone therapy, may result in induced menopause and decreased vaginal lubrication, affecting sexual excitement and desire (Bartula & Sherman, 2015). Moreover, changes in body image may also impact sexual function, modifying femininity and sexual identity (Guedes et al., 2018).

Sexual Dysfunctions in Women with Breast Cancer

In recent years, many studies have shown that breast cancer causes significant changes in women's sexuality. Breast cancer is a threat to female sexuality due to the symbolism of the breast in female sexuality, sexual pleasure, and femininity of women (Archangelo et al., 2019). Women who underwent mastectomy developed depression, body image disorder, and sexual dysfunction, which negatively affected their self-perception (Faria et al., 2021). The

physical and emotional effects of cancer on women and their treatment affect their sexuality. Depression, pain, vaginal dryness and sleep disturbance are factors that contribute to the onset of sexual dysfunction (Ribi et al., 2020). Women's sexual dysfunction is directly related to body image and sexual expression, which are in turn affected by mastectomy and the side effects of their treatment (chemotherapy, radiotherapy and hormone therapy), not to mention the partner's empathy with the emotional state of the woman (Cobo-Cuenca et al., 2018). Chemotherapy causes the highest rate of sexual dysfunction compared to other treatments (Runowicz et al., 2016). Side effects from treatment combined with premature menopause, loss of sexuality and vaginal dryness are major problems for women. Similarly, a study shows that sexual problems stem from psychological factors, such as a negative body image, the feeling that they are not wanted by their partners (Brédart et al., 2011).

The main sexual dysfunctions that women experience after being diagnosed with breast cancer include: dyspareunia, vaginal dryness, decreased pleasure, fear of loss of fertility, negative body image, loss of femininity, loss of attractiveness, decreased sexual arousal, fatigue, decreased desire and sexual interest, lack of empathy in the intimacy of the couple's relationship, anxiety, depression, etc. (Lopresti et al., 2018). Difficulty in communication, lack of empathy by the partner, difficulty in resolving conflicts, lack of support from the partner, distress, lack of understanding and love, are signs of aggravation of sexual functions (Speer et al., 2005). Detecting and treating sexual dysfunction requires deeper understanding, communication and training of community midwives and other health professionals involved (Albers et al., 2020). Breast cancer may be a potential threat to female sexuality; however, community midwives and other health professionals do not seem to be sufficiently aware of the impact of breast cancer on women's sexuality. Community midwives and other health professionals are often reluctant to inform women and their partners about sexuality after being diagnosed with cancer (Albers et al., 2020).

Body Image and Sexual Dysfunctions

Breast cancer (BC) diagnosis and treatment can affect women both physically and psychologically. Women with BC undergo various painful and debilitating therapies as well as emotional trauma. Additionally, treatment modalities can bring about multiple changes, causing distress and alteration in one's appearance (Thakur et al., 2022). Treatment for BC typically involves surgery, chemotherapy, radiotherapy, and hormonal tablets over an extended period (Sherman et al., 2017). A varying range of side effects are associated with the medical treatment of BC. This painful and unwelcomed treatment journey for a long period result in psychological distress. Treatment-related adverse effects, fear of death, an and adjuvant therapy result in body image issues such as hair loss, weight gain, partial or complete removal of one or both breasts, incorrect positioning of breasts and asymmetry of the breast, severe scarring, and breast alteration (Thakur et al., 2022). Body image has been validated to be associated with women's sexuality (Fang et al., 2015). Amongst BC patients, 73.4% have sexual dysfunctions, suggesting that women with BC constitute a high-risk group (Jing et al., 2019). This may be due to BC-specific treatment experiences, such as BI changes after breast surgery, hormone treatments, changes in hormone levels after ovariectomy, and the physiological and psychological effects of chemoradiotherapy. Attention should be paid to changes in sexual function affecting women with BC (Jing et al., 2019). Natural menopause, drugs, or surgical castration can all contribute to reduced estrogen levels in women with BC, and these reduced levels can induce or aggravate sexual dysfunction ultimately leading to a reduction in sexual desire, reduced sexual arousal, lack of vaginal lubrication, pain during intercourse, difficulty achieving orgasm, and genital hypoesthesia (Jing et al., 2019). Women's intrapsychic experience of changes to sexuality includes a fear of loss of fertility, negative body image, feelings of sexual unattractiveness, loss of femininity, as well as alterations to a sense of sexual self; the impact of such changes can last

for many years after successful treatment and can be associated with serious physical and emotional side effects (Vaziri & Kashani, 2012). Even if sexuality is mostly investigated in young patients, it is important to show that approximately 53% of adults between the ages of 65 to 74 are sexually active (Nelson et al., 2014). Sexuality is one of the first elements of everyday life influenced by cancer and unlike other side effects that tend to improve over time, survivors' untreated sexual problems typically persist or worsen (Bober et al., 2019). The causes of sexual dysfunction in elderly patients are related to physical changes (alopecia, hormone imbalances, pain), psychological factors (adopting the "patient role"—asexual—, altered body image, fear of death, rejection by partner), and social factors (communication difficulties regarding sexuality) (Nelson et al., 2014). Some factors can be exacerbated in the older patient, such as difficulty of speaking about sex, fear of death, or reassignment of priorities. The treatment of sexual dysfunction in the older patient includes estrogen supplements, vaginal lubricants, change in antidepressants (SSRIs can delay orgasm), dilators in conjunction with Kegel exercises, a referral to a sexual therapist, and couple-based interventions (Nelson et al., 2014).

Body Image Disturbances and Sexuality

The breasts have a social significance associated with motherhood, femininity, and sexuality (Webb et al., 2019). They are considered to be fundamental and deep pervasive aspects of one's overall personality (Andrzejczak et al., 2013). Breast cancer affects a woman's body image and sexuality. Sexuality and intimacy are as important to people suffering from breast cancer as they are to healthy adult women. Sexual difficulties, in terms of physical functioning, are associated with negative body image perceptions (Yfantis et al., 2018). Body image and sexuality interchangeably influence the quality of life of breast cancer survivors (Runowicz et al., 2016). In the male-dominated society, breasts are organs for objectifying women. The shape and size of breasts have been considered the markers of feminine attractiveness (Jeng et al., 2020). Surgery affects the sexual lives of women with breast cancer and their husbands. Moreover, women with breast cancer experience problems with loss of sexual desire, decreased sexual excitement, vaginal dryness during intercourse, and postictal pain and bleeding with subsequent adjuvant treatment, especially 1-2 years after mastectomy (Jeng et al., 2020).

Body image disturbances (BID) are associated with a woman's identity, sexuality, self-esteem, sense of self, and psychological distress (Thakur et al., 2022). A diagnosis of BC is likely to further exacerbate the women's propensity to focus on body image-related evaluation and investment (Przedziecki et al., 2016). Losing a breast is inherently linked to a woman's identity, sexuality and sense of self, with approximately one-third of BC survivors expressing distress directly related to disturbed body image after successful cancer treatment, particularly among younger women (Fobair et al., 2006). Sexual interest may be disturbed due to changes in hormone levels or decreased sensation in the affected part of the breasts. Changes in hormone levels may lead to hot flashes, vaginal dryness, atrophic vaginitis, decreased libido, and premature menopause, which can all negatively affect sexuality. Patients with breast cancer also report concerns about physical appearance, hair loss, and decreased libido (Paterson et al., 2016). Difficulties in partnered relationships are majorly reported by young women (Benton et al., 2014). In a qualitative exploration of body image disturbances among breast cancer survivors aged 50 years and younger, participants expressed issues of body disfigurement and inability to feel desirable by their partners as a result of breast surgery (Malvia et al., 2017). The prevalence of breast cancer has been increasing (Shetty et al., 2020). Treatment of breast cancer involves various external and internal bodily alterations. Moreover, the psychological and physical changes that occur due to the disease and its treatment affect sexuality and the body image of women (Cordero et al., 2015). Changes in bodily appearance can result in low self-esteem and poor self-concept

among women, leading to stress, anxiety, and other related disorders that impact the overall quality of life (Cash & Smolak, 2011).

The body image of women with breast cancer is influenced by two major events, namely mastectomy and hair loss during chemotherapy. Cherng-Jye Jeng pointed out that most sexual problems in women with breast cancer were caused by changes in their source of attraction breasts (Jeng et al., 2020). Generally, society considers breasts as the basic symbol of feminine beauty. Therefore, women worry that they would no longer obtain sexual satisfaction after mastectomy and that their partners would no longer love them. Jeng et al. (2020) determined the influence of surgery on body image and the degree of physical objectification. Patients who underwent breast-preserving surgery exhibited a superior body image compared with those who had undergone mastectomy. In addition, patients who received breast reconstruction indulged in more body monitoring and exhibited a higher degree of shame than those who underwent mastectomy or breast-preserving surgery. Most relevant research has indicated that breast cancer treatments often lead to women experiencing feelings of appearance impairment and loss of physical charm. According to the previous discussions regarding socially constructed breast image and the inference of complete breast / complete body / complete woman, changes in breast appearance (not complete and perfect anymore) may lead to feelings of loss of physical charm in women and further decrease their sexual desire, thereby affecting their sex lives.

Currently, surgery is the conventional treatment for breast cancer, followed by chemotherapy, radiotherapy, and hormonal therapy. Notably, the degree of sexual satisfaction decreases after mastectomy (Jeng et al., 2020). The reasons for this decrease could be the feeling of losing the physical charm and losing breasts that aid in the sexual function during foreplay. For most women, breasts and nipples play important roles in sexual excitement. Caressing the breasts is part of sexual behavior. Few women reach climax by touching the breasts, whereas most women experience enhanced sexual excitement through breast stimulation (Jeng et al., 2020). Therefore, the removal of breasts terminates their function in sexual behaviors. Furthermore, painful intercourse is one of the most common problems experienced by women who are breast cancer survivors. The pain is most often caused by changes in the size and degree of lubrication of the vagina. These changes may be related to vaginal ulceration caused by radiotherapy, and vaginal dryness and susceptibility to infection caused by chemotherapy (Jeng et al., 2020). The qualitative research by Cebeci et al. (2010) that involved eight women with breast cancer as subjects indicated that sexual desire and sexual satisfaction decreased due to the side effects of chemotherapy, including vaginal dryness, vaginal atrophy, and estrogen deficiency that led to early menopause. Meyerowitz et al. (1999) studied 863 women with breast cancer and revealed that in addition to hormonal changes and vaginal dryness, the obstacle of interpersonal relationships with their partners was another main factor involved in the effect of breast cancer on sex.

Statement of the Problem

Breast cancer is one of the most prevalent types of cancer among women worldwide, including in Pakistan. As the diagnosis and treatment of breast cancer often involve surgical interventions such as mastectomy, women undergoing treatment frequently experience significant changes in their physical appearance. These changes, including alterations in body shape, the loss of one or both breasts, and scarring, can have profound psychological and emotional consequences. In Pakistan, cultural factors and societal expectations regarding women's appearance and sexuality add another layer of complexity. This research aims to explore the interplay between body image and sexual dysfunction among women with breast cancer in Pakistan. By understanding the specific challenges faced by these women, the study seeks to provide insights into the psychological, emotional, and social impacts of breast

cancer, as well as to inform healthcare practices and support systems tailored to address both body image concerns and sexual health issues within the context of Pakistani culture.

Rational of the Study

Breast cancer treatment, especially mastectomy, chemotherapy, and radiation, often leads to significant physical changes in a woman's body. These changes may include the loss of a breast, weight fluctuations, hair loss, and skin changes, all of which can affect a woman's body image. For many women, breast cancer is associated with femininity, attractiveness, and sexuality. The loss of these physical traits may result in a diminished sense of self-worth and body image. Women may feel less attractive or less feminine, which can lead to issues with self-esteem and body dissatisfaction. Breast cancer treatment can result in sexual dysfunctions, including vaginal dryness, decreased libido, and pain during intercourse. These physical and emotional changes can severely impact a woman's sexual relationship with her partner. In Pakistan, traditional cultural expectations often place significant importance on women's physical appearance and sexual attractiveness. These societal pressures may intensify the challenges that women with breast cancer face, as they may feel stigmatized or less valuable due to the physical changes resulting from treatment. Breasts symbolize femininity and sexuality. The incidence of breast cancer has increased in Pakistan. Women with breast cancer who undergo mastectomies have a physical deficiency. Physical deficiency may affect women's self-confidence concerning sexual attractiveness and body image. Therefore, the main objective of the study is to investigate body image and sexual dysfunction among women with breast cancer.

Objectives of the Study

1. To explore the relationship between disturbed body image, breast role, sexual desire, sexual satisfaction and sexual obstacle
2. To investigate the impact of disturbed body image on sexual dysfunction
3. To compare the level of disturbed body image, breast role and sexual obstacle with respect to the age of breast cancer patients

Research Method

Participants

The nature of the study is quantitative that was completed through correlational research design. For the purpose of data collection survey was conducted with questionnaires. Sample of 172 breast cancer patients were selected through purposive sampling technique from Multan Institute of Nuclear Medicine and Radiotherapy and Combined Military Hospital Multan. Demographic information include; breast cancer stage (stage-0, stage-1, stage-2, stage 3-4), mastectomy range (partial mastectomy, full mastectomy), treatment situation (received chemotherapy, received radiotherapy, received targeted therapy, received traditional alternative therapy, other gynecological surgery).

Instruments

Two research instruments were used; Body Image Scale (Hopwood et al., 2001) and An Integrated Sexual Function Questionnaire for Women with Breast Cancer (Jeng et al., 2020). The body image scale was divided into 10 factors with 10 items. These factors are 1-self-conscious, 2-less physically attractive, 3-dissatisfied with appearance, 4- less feminine, 5-difficult to see self-naked, 6-less sexually attractive, 7-avoid people, 8-dissatisfied with body, 9-dissatisfied with scar and 10- body less whole. Second instrument was divided into three domains; breast role (6-items), breast role in foreplay during treatment (10-items), and female sexual function during treatment (19-items).

Data Analysis

The collected data were analyzed on SPSS. Inferential statistics was used to analyze the data. Pearson's product moment correlation coefficient, multiple regression and t-test for independent sample designs were performed to test hypotheses.

Table 1: Reliability analysis of Body Image Scale

Items	Cronbach's alpha
1 Have you been feeling self-conscious about your appearance?	
2 Have you felt less physically attractive as a result of your disease or treatment?	
3 Have you been dissatisfied with your appearance when dressed?	
4 Have you been feeling less feminine/masculine as a result of your disease or treatment?	
5 Did you find it difficult to look at yourself naked?	
6 Have you been feeling less sexually attractive as a result of your disease or treatment?	
7 Did you avoid people because of the way you felt about your appearance?	
8 Have you been feeling the treatment has left your body less whole?	
9 Have you felt dissatisfied with your body?	
10 Have you been dissatisfied with the appearance of your scar?	
Items-10	.873

Table 2: Reliability analysis of breast role

Factor: The importance of breasts for women	Cronbach's alpha
1 Breast size or shape affects self-sexual satisfaction	
2 Breast size or shape affects partners' sexual satisfaction	
3 Having complete breasts is an essential physical feature in women	
4 Having complete breasts is crucial for women	
5 Breast size represents how beautiful a woman is	
6 I care about my breast size	
Items-6	.791

Table 3: Reliability analysis of breast role in foreplay during treatment

Factor 1: Sexual attraction to breasts	Cronbach's alpha
1 Changes in sexual attraction to breasts	
2 Changes in sexual attraction to breasts for your partner	
Items-2	.749
Factor 2: Breast function in foreplay	
1 I like to touch my breasts	
2 My partner likes to touch my breast	
4 I like to caress and rub my breasts	
5 I like to caress and rub my breasts	
6 My partner likes to caress and rub my breasts	
7 I like my breasts to be sucked	
8 My partner likes to suck my breasts	
Items-8	.754

Table 4: Reliability analysis of female sexual function during treatment

Factor 1: Sexual desire		Cronbach's alpha
1	The degree of sexual drive	
2	The frequency of sexual drive or interest	
3	The frequency of being aroused during sexual activities or intercourse	
4	The degree of provoked excitement during sexual activities or intercourse	
5	The frequency of eroticism during sexual activities or intercourse	
6	The frequency of vaginal lubrication during sexual activities or intercourse	
7	The confidence of having sexual arousal during sexual activities or intercourse	
8	The frequency of reaching climax during sexual activities or intercourse	
Items-8		.891
Factor 2: Sexual satisfaction		
1	The degree of satisfaction in sexual relationship with partner	
2	The degree of satisfaction in overall sexual life	
3	The degree of satisfaction in intimacy between you and your partner	
4	The degree of satisfaction of your ability to reach climax during sexual activities or intercourse	
5	The frequency of reaching climax during sexual activities or intercourse	
6	The frequency of eroticism during sexual activities or intercourse	
7	The confidence of having sexual arousal during sexual activities or intercourse	
Items-7		.796
Factor 3: Sexual obstacle		
1	Difficulty with vaginal lubrication during sexual activities or intercourse	
2	Difficulty in keeping vagina lubricated during sexual activities or intercourse	
3	Difficulty in reaching climax during sexual stimulation and intercourse	
4	Feeling uncomfortable or painful during vaginal penetration	
Items-4		.705

Results

Table 1: Correlation among Disturbed Body Image, Brest Role, Sexual Desire, Sexual Satisfaction and Sexual Obstacle

	DBI	BR	SE	SS	SO
1 Disturbed Body Image	1	-.754**	-.631**	-.756**	.917**
2 Breast Role		1	.693**	.763**	.834**
3 Sexual Desire			1	.934**	-.692**
4 Sexual Satisfaction				1	-.723**
5 Sexual Obstacle					1

Note; Correlation is significant $p < 0.05$. Disturbed Body Image (DBI), Breast Role (BR), Sexual Desire (SD), Sexual Satisfaction (SS) and Sexual Obstacle (SO). Table 1 describes the significant negative relationship between disturbed body image, breast role, sexual desire, sexual satisfaction, and sexual obstacle.

Table 2: Impact of Disturbed Body Image on Sexual Dysfunctions

Model	Unstandardized Coefficient B	Std. Error	Standardized Coefficients Beta	t-test	p-value
(Constant)	93.341	6.435		17.435	.000
S	.621	.213	.091	11.435	.000
LPA	.471	.343	.071	13.561	.000
DA	.531	.471	.062	9.237	.000
LF	.482	.297	.080	19.675	.000
DS	3.231	.435	.197	25.632	.000
LSA	2.621	.523	.256	23.974	.000
AP	.796	.304	.321	21.013	.004
BLW	2.761	.251	.094	7.321	.000
DB	.520	.129	.097	6.023	.000
DS	.327	.103	.139	12.913	.000

$R^2 = .673$, Adjusted $R^2 = .697$.

Note; Self-conscious, Less Physically Attractive, Dissatisfied with Appearance, Less Feminine, Difficult to see Self-naked, Less Sexually Attractive, Avoid People, Body Less Whole, Dissatisfied with Body, Dissatisfied with Scar. Table 2 shows that disturbed body image of cancer patients is a significant positive predictor of sexual dysfunction. Sexual obstacle is enhanced by the factors of disturbed body image.

Table 3: Age Based Comparison of Disturbed Body Image, Brest Role and Sexual Obstacle

Variable	Age	N	M	Std.Deviation	Df	t-test	p-value
Disturbed Body Image	19-50	93	79.421	36.931	170	12.621	.000
	Above 51	79	64.632	29.432			
Brest Role	19-50	93	49.120	29.212	170	17.932	.000
	Above 51	79	37.651	21.651			
Sexual Obstacle	19-50	93	59.601	32.134	170	22.251	.000
	Above 51	79	46.756	25.675			

Table 3 shows the significant mean difference of disturbed body image, breast role and sexual obstacle between the age group of breast cancer patients. Age groups of 19-50 reported the greater level of disturbed body image, breast role and sexual obstacle (M= 79.421, M= 49.120, M= 59.601) as compared to above 51 age group (M= 64.632, M= 37.651, M= 46.756). Results suggest that there was statistically significant difference ($p < 0.05$) of disturbed body image, breast role and sexual obstacle with respect to age group of breast cancer.

Discussion

Breast cancer incidence and prevalence in Pakistan highest among all Asian countries. Due to low health care budget, family history of breast cancer, lack of knowledge about screening programs, lack of knowledge about disease development are major contributing factors. This increases the disease burden and case specific mortality in Pakistan. Many women with breast cancer report significant changes in their body image, primarily due to physical alterations

such as breast surgery, scars, or hair loss caused by chemotherapy. These changes can lead to feelings of unattractiveness, low self-esteem, and a diminished sense of femininity. Sexual difficulties, such as a decrease in libido, pain during intercourse, or lack of sexual satisfaction, are common among women with breast cancer. These issues are often linked to the physical and hormonal changes caused by cancer treatments, like chemotherapy or radiation, which may lead to vaginal dryness or hormonal imbalances. The cultural setting in Pakistan could contribute to heightened feelings of shame, stigma, and silence around body image and sexual health issues. In a society where modesty and traditional gender roles are emphasized, women may feel uncomfortable discussing their concerns with healthcare providers or loved ones. Cancer treatments often result in sexual dysfunction, but in addition to the physical changes, emotional and psychological factors contribute significantly. The fear of rejection, anxiety, depression, and the lack of communication with partners can all exacerbate sexual dysfunction. Furthermore, the lack of open discussions about sexuality in Pakistani culture means that many women may not seek help or guidance to address these problems, which further complicates their sexual well-being. Findings of the study reveal that there was significant negative correlation among disturbance of body image, breast role, sexual desire, and sexual satisfaction. Moreover, it was found significant positive relationship between body image disturbance and sexual obstacle. Research indicate that self-conscious, less physically attractive, dissatisfied with appearance, less feminine, difficult to see self-naked, less sexually attractive, avoid people, dissatisfied with body, and dissatisfied with scar are that factors of body image significantly predict sexual dysfunction. All these factors of body image are positive predictors of sexual obstacle. Furthermore, this study suggest that women with breast cancer in Pakistan experience heightened levels of body dissatisfaction and sexual dysfunction, which may lead to difficulties in intimate relationships, lower quality of life, and mental health challenges. Previous study suggested that women with breast cancer who undergo mastectomies have a physical deficiency. Physical deficiency may affect women's self-confidence concerning sexual attractiveness and body image (Jeng et al., 2020). Moreover, women with breast cancer experience problems with loss of sexual desire, decreased sexual excitement, vaginal dryness during intercourse, and postictal pain and bleeding with subsequent adjuvant treatment, especially 1-2 years after mastectomy (Jeng et al., 2020). According to the findings of the study young women have complications related to their body image due to chronic disease and reported sexual obstacle and sexual dysfunctions as compared to old women. A previous study suggests that in patients with breast cancer, the type of treatment, primarily modified radical mastectomy, and age have a significant association with disturbed body image, resulting in physical or psychological distress, eventually leading to difficulty in partnered relationships and sexual intimacy (Thakur et al., 2022). Currently, surgery is the conventional treatment for breast cancer, followed by chemotherapy, radiotherapy, and hormonal therapy. Notably, the degree of sexual satisfaction decreases after mastectomy (Jeng et al., 2020).

Conclusion

Breasts symbolize femininity and sexuality. Breast cancer affects a woman's body image and sexuality. Body image and sexuality interchangeably influence the quality of life of breast cancer survivors. Findings of the study reveal that negative correlation was explored among disturbed body image, breast role, sexual desire, and sexual satisfaction. In addition, there was found a significant positive relationship between disturbed body image and sexual dysfunction (sexual obstacle). Furthermore, results suggest that the main sexual dysfunctions that women experience after being diagnosed with breast cancer are dyspareunia, vaginal dryness, decreased pleasure, fear of loss of fertility, loss of femininity, loss of attractiveness, decreased sexual arousal, decreased desire and sexual interest, lack of empathy in the intimacy of the couple's relationship. Moreover, women with age range 19-50 years reported

grater level of body image disturbance, breast role and sexual obstacle as compared to women with age of above 51 years old. Furthermore, this study suggest that women with breast cancer in Pakistan experience heightened levels of body dissatisfaction and sexual dysfunction, which may lead to difficulties in intimate relationships, lower quality of life, and mental health challenges. The research highlights the need for greater support systems and interventions, including counseling and sexual health education, tailored to address the unique cultural and emotional needs of these women.

Recommendations

- There is a need for awareness programs targeted at both women and healthcare professionals to address body image and sexual health issues among breast cancer survivors. These programs should aim to reduce stigma and encourage open discussions about the emotional and sexual well-being of women.
- The study should emphasize the importance of integrating psychosocial support services into cancer treatment plans. These services can help women navigate the psychological challenges of breast cancer and improve their overall quality of life.
- Any interventions or support services must be tailored to the cultural context of Pakistan. These interventions could involve community-based support groups, culturally sensitive counseling, and better sexual health education.

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