BREAST CANCER & SEXUAL SATISFACTION; AN EXPLORATORY SEQUENTIAL MIXED METHOD RESEARCH

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Abstract

Breast cancer is the most prevalent cancer worldwide with an estimation of 7.8 million females alive with it at the end of 2020. In 2020, 25,928 cases of female breast cancer were reported in Pakistan making it the highest among all other malignancies. This research paper is part of a larger research study using an exploratory sequential mixed method research to broadly investigate the impact of breast cancer on a couple's marital satisfaction; this paper highlights the relationship between breast cancer and sexual satisfaction and then its impact on couples' married life. The data collected in the qualitative data collection phase was thematically analyzed and the outcomes were verified in the second phase of quantitative data collection and analysis. The findings of both data approved the prior assumption that the sexual satisfaction of both cancer patients and their spouses is impacted by breast cancer and its resulting in relationship strains.

Key Words: Breast cancer, Sexual Satisfaction, phenomenological approach

INTRODUCTION

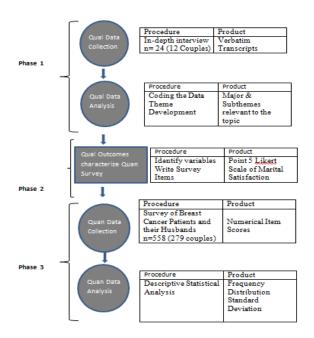
Breast cancer is most prevalent cancer worldwide with an estimation of 7.8 million females alive with it in the end of 2020 (WHO, 2021). In 2020, 25,928 cases of female breast cancer were reported in Pakistan making it the highest among all other malignancies. As a disease breast cancer can potentially affect numerous dimensions of a woman's life. A number of disciplines have examined these effects including medicine, psychology, as well as sociology. Researchers have explored several issues resulting from breast cancer treatment diagnosis and treatment including stressful condition and psychological weakness (Linley, 2006), psychological distress resulting in dis-functioning, emotional turmoil in patients in females undergone biopsy (Montgomery & McCrone, 2010), feelings of shame and embarrassment (Kayser & Sormanti, 2002: Venter et al., 2008), psychological impacts of losing a breast and cosmetic as side effects of mastectomy (Giuliano & Hurvits, 2013) and reduced social as well as social, psychological, vocational, and economic problems (Cheville et al, 2008). The negative effects of breast cancer and its treatment on sexual and married life of individuals are stated in many studies (Krok, Telka, & Moroń, 2023; Mushtaq & Ali, 2019; Ruiz-Marin et al., 2021). Sexual satisfaction is defined as an implicit feeling rising from an individual's subjective assessment of both the positive as well as negative dimensions related to his/her sexual relationship (Ji & Norling, 2004). The strong relationship between sexual satisfaction and marital satisfaction is established in several studies and marital satisfaction is indispensible in building durable besides strong family relations (Aktaş & Bahar, 2022; Bakhshayesh & Mortazavi, 2010; Bilal & Rasool 2020; Schoenfeld et al., 2017; Yoo et al., 2014). Female cancer patients may confront with changes during or after treatment that may disturb their sexual life. All oncology treatments including chemotherapy, radiotherapy and surgery affect sexual health in some ways (Shankar et al., 2017). Studies have shown that disturbed psychological body image besides decreased sexual self-concept as side effect of cancer treatment may result in breast cancer patients' impaired sexual health (Cobo-Cuenca et al., 2018; Teo et al., 2016), vaginal dryness, suppressed libido, infrequent sex and decreased sexual satisfaction are a few problems experienced by female breast cancer patients (Chang et al, 2019;

Shandiz et al., 2016). Some studies (Chang et al., 2019; Harirchi et al., 2012) have established approximately 85% patients suffer from sexual dysfunction after breast cancer treatment, fairly similar results were found by Jing et al., (2019) as their research confirmed the high prevalence of sexual dysfunctions (73.4%) in women with breast cancer.

Nasiri, Taleghani, & Irajpour., (2012) concluded that most couples didn't converse with one another about their feelings and thoughts attributable to the feelings of shame and overlooked their sexual necessities subsequent to cancer diagnosis. Consequently, sexual complications resulted from cancer treatment negatively affected their marital relations. Flynn et al., (2012) established that the discussions of sexual side effects of cancer are often neglected during cancer treatment resulting in lack of anticipated knowledge and support for couples (Gilbert et al., 2013) often attributed to patients and their partners refusing to talk about sexual issues with medical professionals due to cultural taboos (Hill et al., 2011; Wendt, 2017) and healthcare providers' fear of invading patient's privacy (Stilos, Doyle, & Daines., 2008).

RESEARCH GAP

Sexual satisfaction is proved to be a major contributor in marital satisfaction and breast cancer affects the sexual performance of females (Mushtaq & Ali., 2019), nevertheless sexual issues are considered as taboos and have a conservative view in most Asian countries. Moreover, discussion of sexual issues is regarded as shameful and misconduct (Zangeneh et al., 2023). While research has focused on several impacts of breast cancer patients including psychological, emotional, social, spiritual, and economic issues, studies on the sexual effect of breast cancer both on patients and their partners is limited and barely existent in Pakistan. This study therefore aimed to explore the phenomenon from the perspective of both patients and their husbands to add to available knowledge of how patients and their spouses experience sexual issues after breast cancer; individually as well as a couple.



RESEARCH METHODOLOGY

The qualitative phase of the study focused on exploring the couples' unique experience of breast cancer and identifying the factors influencing their sexual relationship by applying phenomenological approach. The data in qualitative phase was collected in one-to-one in-depth interviews of 24 respondents (12 couples) using a developed interview guide along with added open ended questions. In-depth interviews were audio-recorded, transcribed and analyzed professionally to identify emerging themes. Once the analysis of qualitative data was completed, emerged themes were adopted to develop a 5 point Likert scale including 47 items, for quantitative data collection. The

Alpha test was applied to test the reliability of data collection tool nevertheless present research paper merely includes analysis of 09 items measuring sexual satisfaction of patients and their husbands. The quantitative data was collected from a sample of n=558 through convenience sampling. The sample of study participants was drawn from Nuclear Medicine, Oncology and Radiotherapy Institute (NORI) hospital, Islamabad.

DATA ANALYSIS AND RESULTS

Table 2. Survey participant demographics and clinical characteristics (n = 558).

Variable Page 1999.

Variable	Response	Frequency			
Age					
Male	34-39 years	1 (0.4%)			
	46-51 years	118 (42.3%)			
Female	Above 57	0 (.0%)			
	40-45 years	122 (43.7%)			
Level of Education					
Male	Diploma	19 (6.8%)			
	Middle - Metric	76 (27.2%)			
Female	Diploma	14 (5.0%)			
	Illiterate-Primary	86 (30.8%)			
Employment Status					
Male	Unemployed	15 (5.4%)			
	Employed	264 (94.6%)			
Female	Employed	64 (22.9%)			
	Unemployed	215 (77.1%)			
Years of Marriage					
Male	Above 21 years	9 (3.2%)			
	10-15 years	173 (62%)			
Female	Above 21 years	9 (3.2%)			
	10-15 years	173(62%)			
Breast Cancer Stage					
Female	Stage III	84 (30.1%)			
	Stage I	22 (7.8%)			

Data is presented as mean of minimum and maximum correspondingly. The age of male respondents was in the range of 34-57 years with a majority of 118 (42.3%) were in the age group of 46-51 years while for the same range the majority female respondents 122 (43.75) were in the 40-45 years of age. The data shows that 86 (30.8%) females were illiterate while only 14 female respondents (5.0%) had a professional degree or diploma. The majority of male respondents 76 (27.2%) were in the category of middle to metric and 66 male participants of study were illiterate or had primary level education. Among 279 female respondents of study, majority 215 participants were unemployed which made them (77.1%) of the sample while only 22.9% (64 females) were employed however only 15 male respondents (5.4%) were unemployed and 94.6% (264 males) were employed. Majority respondents 347 (62%) were married for 10-15 years while 9 couples were married for more than 21 years. There are 5 stages of caner categorized on the basis of locality, size and spread in body. The above data demonstrates that majority women were patients of stage 3 cancer at the time of data collection.

Themes from

Qualitative



Table 3. Emerged themes of Sexual Satisfaction and Resultant Survey Items

Sample Phrase Codes

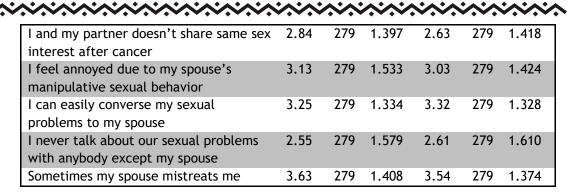
Data A salada	Sumple I mase codes	Resultant Salvey Items			
Data Analysis					
Sexual Frustration	I get irritated, like it's not something new we have been married for so many years and she has suddenly started reacting as this is a new thing. I feel frustrated and annoyed. I can understand that it is difficult for her but she should also understand my	3. My spouse discourages me sexually.6. I feel annoyed due to my spouse's manipulative sexual behavior			
	situation. "Every time I ask my wife for sex she refuses by saying she has pain or it hurts that definitely annoys me. I haven't enjoyed sex for last 3-4 years"				
Affection misinterpreted with sexual advance	"I am often reluctant to show my affection because she habitually misinterpret it as a sexual advance and reacts strangely which destroys my mood."	4.My spouse frequently confuses love with sexual advance			
Distressed Sexual Experiences	"she has got an excuse of her disease which she uses as a weapon to get sympathy and to avoid sex at the same time"	 After cancer, my spouse despises sex. and my partner doesn't 			
	"She has much pain and makes noise that I get irritated"	share same sex interest after cancer			
Sexual Dissatisfaction	My sexual needs and desire don't matter to her, I want to live a normal life but it is not possible for me obviously I am stressed and this affects my family and marital life."	 My sexual relationship with my spouse is satisfactory. Sometimes my spouse mistreats me 			
Hazily Informed about Sexual Complexities	"My wife and I didn't know if we can still have sex or not after my wife was diagnosed with breast cancer but no doctor guided us in this matter and we were so ashamed of asking any question then during our hospital visits we exchanged information with other patients and their spouses but they had diverse opinions.	8. I never talk about our sexual problems with anybody except my spouse 7. I can easily converse my sexual problems to my spouse			

Table 3. demonstrates the process of developing survey questions. Once the data analysis of qualitative phase was completed, survey items representing specific themes were developed by considering participants' views and experiences.

Table 4. Indicating Mean and Standard Deviation for Sexual Relationship & Issues

	Sexual Relationship & Issues		Female			Male		
lte	Statement	Mean	N	St.De	Mean	N	St.De	
m No.				V			٧	
	My sexual relationship with my spouse is satisfactory.	3.35	279	1.517	3.43	279	1.518	
	After cancer, my spouse despises sex.	2.61	279	1.469	2.80	279	1.450	
	My spouse discourages me sexually.	3.59	279	1.488	2.61	279	1.475	
	My spouse frequently confuses love with sexual advance	2.80	279	1.513	2.89	279	1.424	

Resultant Survey Items



The 9 items presented above are sorted from the complete scale on the basis of their relatedness to sexual issues and relationship. The mean scores of female respondents were found for satisfactory sexual relationship (3.35), spouse doesn't enjoy sex (2.61), sexual frustration (3.59), misinterpreted affection (2.80), unequal sexual interest (2.84), unfair use of sex (3.13), discussion of sexual issues (3.25), sexual discussion with third person (2.55), and inappropriate treatment (3.63). However, male respondents showed mean score as satisfactory sexual relationship (3.43), spouse doesn't enjoy sex (2.80), sexual frustration (2.61), misinterpreted affection (2.89), unequal sexual interest (2.63), unfair use of sex (3.03), discussion of sexual issues (3.32), sexual discussion with third person (2.61), and inappropriate treatment (3.54). High similarity was found in the responses of both male and female respondents as both scored highest for inappropriate treatment from spouse (3.63 for female respondents with a standard deviation of 1.408) and (3.54 for male respondents with a standard deviation of 1.374).

DISCUSSION

The study findings revealed that against the common perception, breast cancer is not really infrequent in younger females. As for current study, 4.3% and 43.7% patients were between the age group of 34-39 and 40-45 years respectively, indicating the occurrence of breast cancer in young age. Partridge (2018) established that females developing breast cancer at comparatively young age viz. below the age of 45, defy with different issues special to their life phase including the outcome of disease on their careers, personal besides social relationships, sexual functioning, along with ability to give birth and raise children. The results also exhibited that both partners in couples confronting breast cancer experienced several issues alone or together in sexual relationships as emerged themes directed by data analysis. The frequency and quality of sexual activity besides satisfaction were categorically deteriorated attributed to either psychological effects of cancer including temperamentality, resentfulness, depression or loss of sexual desirability or it can resulted from physical complications induced by breast cancer for instance pain, fatigue, nausea, dyspareunia because of the vaginal dryness (in case of menopause), trouble in reaching to orgasm, difficulties in arousing mentally and physically. Loss of sexual interest and painful intercourse is mentioned by patients in prior studies too (Aktaş & Bahar, 2022; Mushtaq & Ali, 2019; Tahir & Khan, 202). Graziottin (2008) indicated the frequent neglect of the biological issues in the clinical settings consequently disturbing physical intimacy besides sexual satisfaction of breast cancer patients immensely. Sexual dissatisfaction is reported by both male and female study participants. Tahir & Khan (2021) stated that married females in Pakistani society are considered legitimately responsible for fulfilling their spouse' sexual needs and failing in doing so results in marital problems, present study found similar results.

RECOMMENDATIONS

Sexual dissatisfaction plays a vital role in straining married couples thus resulting in marital dissatisfactions and despite the well-known effect of breast cancer on sexual satisfaction, every oncology treatment focuses on physical cure of the patients overlooking their emotional and psychological complications. The results of present in accordance with previous studies (Carroll,

Baron, & Carroll, 2016; Den Ouden et al., 2019; Rottmann et al., 2022) suggest including couple-based sexual counseling in treatment phase.

DISCLOSURE

The authors reports no conflict of interest in this work.

AUTHORS CONTRIBUTIONS

All authors contributed in data analysis, drafting and revising the article and final approval of the version to be published.

REFERENCES

- [1] Aktaş, D., & Bahar, A. (2022). The relationship between sexual satisfaction and marital satisfaction in women with ovarian cancer and their spouses. *Cancer Nursing*, 45(6), 473-480.
- [2] Ashdown, B. K., Hackathorn, J., & Clark, E. M. (2011). In and out of the bedroom: Sexual satisfaction in the marital relationship. *Journal of Integrated Social Sciences*, 2(1), 40-57.
- [3] Bakhshayesh, A. R., & Mortazavi, M. (2010). The relationship between sexual satisfaction, general health and marital satisfaction in couples.
- [4] Bilal, A., & Rasool, S. (2020). Marital satisfaction and satisfaction with life: mediating role of sexual satisfaction in married women. *Journal of Psychosexual Health*, 2(1), 77-86.
- [5] Carroll, A. J., Baron, S. R., & Carroll, R. A. (2016). Couple-based treatment for sexual problems following breast cancer: A review and synthesis of the literature. Supportive Care in Cancer, 24, 3651-3659.
- [6] Chang, Y. C., Chang, S. R., & Chiu, S. C. (2019). Sexual problems of patients with breast cancer after treatment: a systematic review. *Cancer nursing*, 42(5), 418-425.
- [7] Cheville, A. L., Troxel, A. B., Basford, J. R., & Kornblith, A. B. (2008). Prevalence and treatment patterns of physical impairments in patients with metastatic breast cancer. *Journal of clinical oncology: official journal of the American Society of Clinical Oncology*, 26(16), 2621.
- [8] Cobo-Cuenca, A. I., Martín-Espinosa, N. M., Sampietro-Crespo, A., Rodríguez-Borrego, M. A., & Carmona-Torres, J. M. (2018). Sexual dysfunction in Spanish women with breast cancer. *PloS one*, *13*(8), e0203151.
- [9] Den Ouden, M. E., Pelgrum-Keurhorst, M. N., Uitdehaag, M. J., & De Vocht, H. M. (2019). Intimacy and sexuality in women with breast cancer: professional guidance needed. *Breast Cancer*, 26, 326-332.
- [10]Flynn, K. E., Reese, J. B., Jeffery, D. D., Abernethy, A. P., Lin, L., Shelby, R. A., ... & Weinfurt, K. P. (2012). Patient experiences with communication about sex during and after treatment for cancer. *Psycho-oncology*, 21(6), 594-601.
- [11]Gco.iarc.fr. [Online] [Cited 2021 April 04]. Available from: URL: https://gco.iarc.fr/today/data/factsheets/populations/586-pakistan-fact-sheets.pdf
- [12] Gilbert, E., Ussher, J. M., Perz, J., Wong, W. T., Hobbs, K., & Mason, C. (2013). Men's experiences of sexuality after cancer: a material discursive intra-psychic approach. *Culture*, *Health & Sexuality*, 15(8), 881-895.
- [13] Giuliano, A. E., & Hurvits, S. A. (2013). Breast disorders. In: PAPADAKIS, M.A. & McPHEE, S.J. (eds), *Current Medical Diagnosis & Treatment 2013*. (52nd ed). The McGraw-Hill Companies, Inc.
- [14] Graziottin, A. (2008). How breast cancer can affect sexual function and intimacy. *Sexologies*, 17(1), S22.
- [15] Harirchi, Iraj, Ali Montazeri, Fereshteh Zamani Bidokhti, Nina Mamishi, and Kazem Zendehdel. "Sexual function in breast cancer patients: a prospective study from Iran." *Journal of Experimental & Clinical Cancer Research* 31 (2012): 1-6.
- [16]Hill, E. K., Sandbo, S., Abramsohn, E., Makelarski, J., Wroblewski, K., Wenrich, E. R., ... & Lindau, S. T. (2011). Assessing gynecologic and breast cancer survivors' sexual health care needs. *Cancer*, *117*(12), 2643-2651.

- [17] https://www.who.int/news-room/fact-sheets/detail/breast-cancer#:~:text=In%202020%2C%20there%20were%202.3,the%20world's%20most%20prevalent%20cancer.
- [18] Ji, J., & Norling, A. M. (2004). Sexual satisfaction of married urban Chinese. *Journal of Developing Societies*, 20(1-2), 21-38.
- [19] Jing, L., Zhang, C., Li, W., Jin, F., & Wang, A. (2019). Incidence and severity of sexual dysfunction among women with breast cancer: a meta-analysis based on female sexual function index. Supportive Care in Cancer, 27, 1171-1180.
- [20] Kayser, K., & Sormanti, M. (2002). A follow-up study of women with cancer: Their psychosocial well-being and close relationships. *Social Work in Health Care*, 35(1-2), 391-406.
- [21] Krok, D., Telka, E., & Moroń, M. (2023). Marital satisfaction, partner communication, and illness acceptance among couples coping with breast cancer: A dyadic approach. *Psycho-Oncology*.
- [22]Linley, P. A. (2006). Counseling psychology's positive psychological agenda: A model for integration and inspiration. *The Counseling Psychologist*, 34(2), 313-322.
- [23] Montgomery, M., & McCrone, S. H. (2010). Psychological distress associated with the diagnostic phase for suspected breast cancer: systematic review. *Journal of advanced nursing*, 66(11), 2372-2390.
- [24] Mushtaq, N., & Ali, R. (2019). Marital Satisfaction Of Breast Cancer Patients And Their Spouses: A Qualitative Study. *Pakistan Journal of Women's Studies*, 26(2).
- [25] Nasiri, A., Taleghani, F., & Irajpour, A. (2012). Men's sexual issues after breast cancer in their wives: a qualitative study. *Cancer nursing*, 35(3), 236-244.
- [26]Partridge, A. (2018, May 3). Ten Things to Know About Young Women with Breast Cancer. Retrieved from https://blog.dana-farber.org/insight/2018/05/ten-things-know young-women-breast-cancer/
- [27]Rottmann, N., Larsen, P. V., Johansen, C., Hagedoorn, M., Dalton, S. O., & Hansen, D. G. (2022). Sexual Activity in Couples Dealing With Breast Cancer. A Cohort Study of Associations With Patient, Partner and Relationship-Related Factors. *Frontiers in psychology*, 13.
- [28] Rottmann, N., Larsen, P. V., Johansen, C., Hagedoorn, M., Dalton, S. O., & Hansen, D. G. (2022). Sexual activity in couples dealing with breast cancer. A cohort study of associations with patient, partner and relationship-related factors. *Frontiers in Psychology*, 13.
- [29] Ruiz-Marin, C. M., Molina-Barea, R., Slim, M., & Calandre, E. P. (2021). Marital adjustment in patients with cancer: association with psychological distress, quality of life, and sleep problems. *International Journal of Environmental Research and Public Health*, 18(13), 7089.
- [30]Schoenfeld, E. A., Loving, T. J., Pope, M. T., Huston, T. L., & Štulhofer, A. (2017). Does sex really matter? Examining the connections between spouses' nonsexual behaviors, sexual frequency, sexual satisfaction, and marital satisfaction. *Archives of sexual behavior*, 46, 489-501.
- [31]Shandiz, F. H., Karimi, F. Z., Rahimi, N., Abdolahi, M., Anbaran, Z. K., Ghasemi, M., ... & Kheirabadi, A. N. (2016). Investigating sexual function and affecting factors in women with breast cancer in Iran. *Asian Pacific Journal of Cancer Prevention*, *17*(7), 3583-3586.
- [32] Shankar, A., Prasad, N., Roy, S., Chakraborty, A., Biswas, A. S., Patil, J., & Rath, G. K. (2017). Sexual dysfunction in females after cancer treatment: an unresolved issue. *Asian Pacific journal of cancer prevention: APJCP*, 18(5), 1177.
- [33]Stilos, K., Doyle, C., & Daines, P. (2008). Addressing the sexual health needs of patients with gynecologic cancers. *Clinical Journal of Oncology Nursing*, 12(3).
- [34] Tahir, K., & Khan, N. (2021). Mediating role of body image between sexual functioning and marital intimacy in Pakistani women with breast cancer. *Psycho-Oncology*, *30*(2), 260-266.
- [35]Teo, I., Reece, G. P., Christie, I. C., Guindani, M., Markey, M. K., Heinberg, L. J., ... & Fingeret, M. C. (2016). Body image and quality of life of breast cancer patients: influence of timing and stage of breast reconstruction. *Psycho-Oncology*, 25(9), 1106-1112.
- [36] Venter, M., Venter, C., Botha, K., & Strydom, M. (2008). Cancer patients' illness experiences during a group intervention. *Journal of Psychology in Africa*, 18(4), 549-560.



- [37] Wendt, C. (2017). Perception and assessment of verbal and written information on sex and relationships after hematopoietic stem cell transplantation. *Journal of Cancer Education*, 32, 681-689.
- [38]Yoo, H., Bartle-Haring, S., Day, R. D., & Gangamma, R. (2014). Couple communication, emotional and sexual intimacy, and relationship satisfaction. *Journal of sex & marital therapy*, 40(4), 275-293.
- [39]Zangeneh, S., Savabi-Esfahani, M., Taleghani, F., Sharbafchi, M. R., & Salehi, M. (2023). A silence full of words: sociocultural beliefs behind the sexual health of Iranian women undergoing breast cancer treatment, a qualitative study. Supportive Care in Cancer, 31(1), 84.