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BREAST CANCER DIAGNOSIS AS A LIFE-CHANGING MATTER TO THE PATIENT AND THEIR FAMILIES

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ABSTRACT

Background: Diagnosis of a malignant disease does not affects only the individual patients, however all the close people as families could be touched by this matter. Family members may have to deliver a physical care or more financial support to the patients. Also the family members or carers themselves may experience challenging emotions and feelings or even more serious psychological problems such as depression, anxiety in addition to a significant impact on their quality of life. Method: A narrative study of seven published studies with a total number of 2848 participants, the review aimed to explore the

breast cancer diagnosis impact on the patients and their families, and how this affects their quality of life. **Results:** In three studies, 57% of family members reported mental pressure in a form of anxiety, depression and fear of the unfavourable outcome. A negative impact on the social life was seen in 11.80% of breast cancer American patients, however the rate was 90% in Indian patients. Conclusion: Breast cancer diagnosis is a genuine life-changing experience to both individual patients and their families. It is recommended to offer psychological assessment and support for breast cancer patients as well as for their family when appropriate, also the implementation of psychological therapy as a part of breast cancer management pathways is recommended.

KEYWORDS: Breast cancer, Depression, Anxiety, Post-Traumatic Stress Disorder, Generalized Anxiety Disorder.

INTRODUCTION

Cancer is a disease which may affects a significant number of people, the recent reports showed that, it is the second leading cause of all deaths in the United States after cardiovascular diseases, [1] where the unintentional injuries come in the third place (Table 1).

When the non-melanomatous skin cancers are excluded, breast cancer is known to be the most frequent cancer among both genders. [2] Regarding the mortality, it is comes in the fourth place in the cancer-related mortality list after lung (18%), colon (9.4%) and liver (8%). [3,4] The impact of the diagnosis on the family members starts from day one, this may be related to emotional status or fear of unfavourable outcome. There are many risk factors which are associated with breast cancers as genetic predisposition, early menarche, late menopause, nulliparity, smoking, use of hormonal replacement therapy, sedentary life style, exposure to radiation, high BMI, consumption of alcohol and genetically modified food.

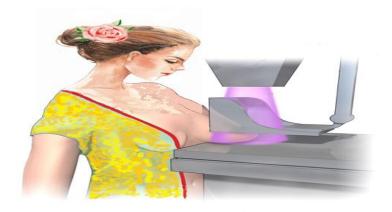


Figure 1: The mammogram, a technique widely used as breast cancer screening tool.

Table 1: Leading causes of mortality in the US in 2,813,503 death, U.S. Department of Health and Human Services 2017 data.^[1]

No.	Cause of death	Number	Incidence
01	Cardiovascular diseases	647,457	23.5%
02	Malignancy	599,108	21.3%
03	Unintentional injuries	169,936	6%
04	Chronic lower respiratory disease	160,201	5.7%
05	Cerebrovascular diseases	146,383	5.2%
06	Alzheimer's disease	121,404	4.3%
07	Diabetes	83,564	3%
08	Influenza and pneumonia	55,672	2%
09	Renal diseases	50,633	1.8%
10	Suicide	47,173	1,7%

As we see among the above mentioned factors is the familial predisposition, once the shocking news about breast cancer reaches the family, this may trigger the fear of presence of a genetic abnormality related to the breast cancer as BRCA mutation in other family members. This may direct some females in the family to have a mammogram urgently (Fig.1). The other family concern is the level of care that could be provided to the patients, as

the lack of financial resources may restrict the access to the advanced therapeutic procedure as autologous breast reconstruction,^[5] or to up-to-date diagnostic techniques needed for adjuvant treatment as Oncotype DX recurrence score.^[6]

METHOD

A narrative analysis of seven published studies with a total number of 2848 participants, studies period was between 2008-2017. Those include either breast cancer patients or their caregiving family members, the aim of the study is to explore the impact of the breast cancer diagnosis and management on the patients and their family members and how this affects their quality of life.

RESULTS

In three studies from the Middle East & Asia, about 57% of family members reported mental pressure in a form of anxiety, depression and fear of the unfavourable outcome. Regarding the financial strain, a paper from USA showed that only 08.60% faced financial difficulties when a family member had breast cancer, where in two papers, one from Iran, and the other from India revealed that, 53% of the families had financial difficulties and were unable to deal with daily living expenses. Also the review explored the impact on the daily social life of patients, the results revealed that, there is a negative impact on 11.80% of breast cancer American patients, however this figure has jumped up to 90% in Indian patients.

DISCUSSION

It is has been noticed that breast cancer diagnosis affects patients and their family members as husbands/partners, children and parents (Fig.2). Both patients and their partners tend to experience some emotional disturbances such as anxiety, depression, communication problems, sexual troubles, separation and relationship breakdown. ^[7] In 2014, Al-Azri et al, presented a study included 19 breast cancer female patients from Oman. The age range (24 - 54 years), mean age 40 and a the median age was 39. About 84% (n=16) of the group were married and other three were single. The observation period since the diagnosis ranged from 2 to 36 months and the patients had underwent different cancer treatment modalities as surgery, chemotherapy, or radiotherapy. The authors concluded that most of participants had experienced pressure by family members to seek treatment abroad, while some were also pressurized to look for help from a traditional healers. The authors also had highlighted the fact that, the patients in this cohort felt that the relationships between them and their husbands as well as other family members were strengthened after breast cancer diagnosis. ^[7]

In 2019, Alexander et al, published a study result involved 378 Indian breast cancer patients treated in the period between 2008-2012. The study aimed to understand the role played by the close family members in treatment decision and the support offered to the patients. Throughout this follow-up period, about 54% of family members were involved in the patient's well-being and continued to be supportive. In about 27% of the cohort, it was the patient's husbands who were actively involved during the management journey and were prioritizing the health of their spouse.^[8]

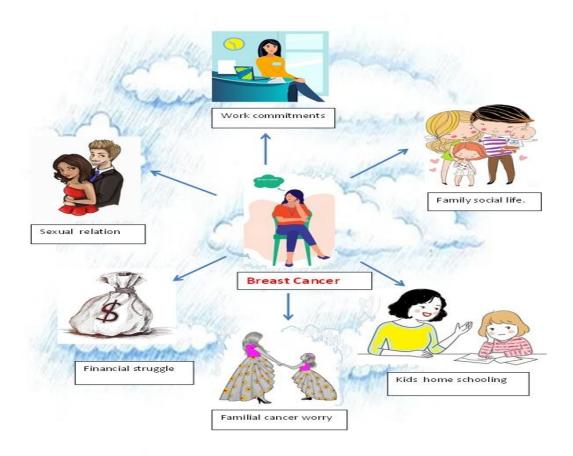


Figure 2: The impact of breast cancer diagnosis on patients and their families.

Almost all the cohort (99%) of the patients had received support from family members, however a close percentage of patients (90%), had experienced social embarrassment in dealing with the disease and its aftermath. Half of the group had expressed some concerns about their ability to fulfil their family commitments as a mother, spouse or daughter. The authors also recommend to expand the psychosocial support beyond the patients alone, this has to include the immediate family members. Also to consider the patient financial and social aspects and facilitate the required adjustments, as 43% of the cohort had financial

difficulties during their management journey and had to turn to desperate solutions such as applying for high-interest personal loans or selling their properties or other belongings.^[8]

Goerling et al in 2020, in one study involved 102 Spanish couples, had aimed to explore to the distress in breast cancer female patients and their male partners as well as the supportive care needs for them. The results showed that, the partners reported higher levels of distress (p = 0.02), and patients themselves indicated stronger needs for help (p < 0.001). The younger partners age group associated with higher levels of distress (p < 0.001), and also reported a shorter relationship duration (p = 0.001) compared to partners with lower distress level. The partners had overestimated the anxiety, depression, distress, and the need for support for the patient. On the other hand, patients overestimated their partners need for support. The partners, often (78%) reported at least one unmet need. The authors have suggested performing a psychological assessment for breast cancer patients as well as for their male partners when appropriate, and the implementation of psychological management pathways is also recommended. [9]

Fenn et al in 2010, done a survey for 2,108 cancer patients who answered the question, "To what degree has cancer caused financial problems for you and your family?," 8.6% the response was "a lot" in 8.6% whereas 69.6% responded "not at all." The group who reported "a lot" of financial difficulties due to malignancy care costs were more likely to report a poor level of their mental health, physical health, and overall satisfaction with social life and relationships as compared to those with no financial poverty. [10]

Vahidi et al in 2016, conducted a study among 150 main caregivers to breast cancer patients from Tabriz-Iran, 51.3% of the carers were male. About 13.3% of the carers had lost their jobs because they are providing care of a family member with breast cancer. A total of 68.7% of the carers had some concerns about the cost of cancer treatment and about 62.7% did not have enough financial resources to face daily living expenses. About half of the participants (49.4%) had abandoned their jobs because of family member care responsibilities^[11] (Table 2).

Table 2: Impact of burden of breast cancer on survivors' and their families' quality of life.

	Country	Cohort	Financial strain	Mental problems		Struggling
Author, Year				Patient	Family	with social relation
Fenn, 2010 ^[10]	USA	2,108	08.60%	08.30%	-	11.80%
Gorji, 2012 ^[15]	Iran	63			60%	
Al-Azri, 2014 ^[7]	Oman	19	-	47%	62%	-
Vahidi, 2016 ^[11]	Iran	150	62.7%	-	-	-
Din, 2017 ^[16]	Malaysia	130	-	-	49.2%	-
Alexander, 2019 ^[8]	India	378	43%	-	-	90%

When the devastating bad news about breast cancer diagnosis is been broken to a patient or a close family member, any one of them may face psychological impact of the breast cancer diagnosis. The range of the emotions varies from hopelessness to rage or uncontrollable anger. Patients initially may develop some signs of depression as becoming tearful most of the time in addition to having negative thoughts (Table 3).

Table 3: Depression symptoms may be noticed before, during, or after breast cancer treatment.^[12,17]

General unhappiness
Negative thoughts
Lack of interest and motivation
Inability to concentrate.
Social isolation
Guilt and low self-esteem
Feeling extremely irritable
Thoughts of self-harm
Crying all or most of the time
Sleep disturbances

Table 3: Potential serious mental health condition after knowing about breast cancer diagnosis.^[12]

Sever emotional distress		
Major depression		
PTSD: (Post-Traumatic Stress Disorder)		
GAD(Generalized Anxiety Disorder)		

As the breast cancers mainly affects women, as the management period may extend up to 18 months or longer, the patients may have concerns from day one. The worry is that, are they will be able to fulfil their role as mothers, spouses or daughters? The mothers will have concerns about the care of younger children as well their schooling where other patients are

worry about providing care to dependent parents. Other impact on the patient and her family life is the impact on the employment status in addition to financial strain in particular with patients who lack the health care insurance. The stress among the family members after facing the devastating news of breast cancer diagnosis may affect badly the wellbeing of the vulnerable close family members. In some cases the family members might perceive the breast cancer disease as a punishment for their or the patient's sins. [13] Difficulties and challenges experienced by patients and their families as a consequence of breast cancer diagnosis may be triggered at the time of knowing about the diagnosis. Initially everyone, may experience a range of emotions and confusion, later this may progress into a serious mental problem.

This may include severe emotional distress, anxiety, depression and Post-Traumatic Stress Disorder (PTSD) (Table 4). Some of those patients will require urgent and immediate psychological support especially in cases of red flag signs as suicidal thoughts or heavy drinking.^[12]

The fact of knowing about a family member with breast cancer or any type of malignancy may lead to into a chronic cancer fear even with a low risk family history.^[14]

CONCLUSION

The impact of breast cancer diagnosis is a genuine life-changing experience as it has a serious, broad and longstanding impact, not only on the individual patient, however also to close family members, friends and work colleagues. The psychological, physical, social and financial impact may involve any one of the above mentioned individuals, herby the author highlights the importance of considering every individual and each single element related to this issue. Also the implementation of psychological therapy as a part of breast cancer management pathways is recommended.

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