Post-Traumatic Stress in Women with Breast Cancer

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Abstract

Objective: A diagnosis of cancer has a normal stress response characterized by shock, numbness, and denial and often including despair and hopelessness. This study examined whether the diagnosis and treatment of breast cancer produced post-traumatic stress disorder (PTSD) in adult women.

Methods: A total of 100 women with early stage breast cancer were selected from the Nuclear Medicine Hospital, Mosul, Iraq. The women answered special questionnaires that included some personal data and medical history.

Results: Overall, low rates of PTSD were observed in this sample of the study.

Conclusion: The breast cancer experience does not seem to have the immediacy of threat to life or bodily integrity usually associated with external trauma. We urge continued study of this important issue, so that future studies on the empirical data about which illnesses and medical conditions are more likely to cause PTSD.

Keywords: Breast cancer, post-traumatic stress disorder (PTSD).

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Introduction

The occurrence of post-traumatic stress disorder (PTSD) following exposure to traditional stressors such as rape, assault, or combat is well documented,[1] with numerous studies indicating that about (20% – 25%) of the people who experience such stressors meet the criteria for this diagnosis. Up to one-third of those people will continue to meet PTSD criteria for as long as the follow-up period.[1–4] Life-threatening illness was identified for the first time as a potential Criterion A stressor event for PTSD in the recent edition of DSM-IV.[5] However, few studies exist to document the empirical validity of this link.

Holland and Rowland [6] noted that following a diagnosis of cancer, a normal stress response, characterized by shock, numbness, and denial and often including despair and hopelessness, is common. Later, anger, disruptive anxiety, and depressive symptoms may be seen as well. Such early reports suggested that cancer might be a traumatic stressor. Earlier research also suggested that cancer is associated with some symptoms of PTSD. Cella and Tross [7] found that male survivors of Hodgkin's disease showed lower motivation for intimacy and higher avoidant thinking about illness than a comparison group of physically healthy men. In a later study, markedly elevated levels of intrusion and avoidance were

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found on the Impact of Event Scale [8] in a sample of 40 patients evaluated within 30 days of a cancer recurrence.[9] In that study, 78% of the patients reported that their initial diagnosis of cancer was less distressing than the recurrence, suggesting that the more imminent threat may be more strongly associated with PTSD symptoms.

Subjects

A total of 100 women with early stage breast cancer were recruited from the Nuclear Medicine Hospital, Mosul, Iraq. The women were identified through a variety of mechanisms, including tumor registries, surgical schedules, pathology rosters, and medical oncology rosters. To be eligible for the study, a woman had to be between the ages of 25 and 75 years, have no history of cancer before her breast cancer, and be 4–12 months post-cancer treatment. This period was chosen to ensure that a woman was not still experiencing the acute effects of the treatment yet was close enough in time to the diagnosis to recall her reactions to her illness and therapy. All participants had to have been diagnosed with either Stage 1 or Stage 2 node-negative breast cancer.

Instruments

The participants completed comprehensive self-report measures and underwent structured psychiatric interviews. Included in the self-report were demographic information and medical history, along with a number of standardized measures. We detail next only those instruments that were used to collect the data in this report.

Trauma History Questionnaire (THQ)

The THQ is a self-report instrument developed to gather data about a subject's lifetime history of exposure to traumatic events, including crime, sexual assault/abuse, physical assault/ abuse, war, tragic death, and disaster. This instrument was based on the high-magnitude stressor interview from the DSM-IV PTSD field trials.

Impact of Event Scale (IES)

The IES was originally developed to measure the intrusive and avoidant components of the stress response. It consists of 15 items (7 items in the intrusion subscale, and 8 items in the avoidant subscale) scored 0, 1, 3, or 5.

Brief Symptom Inventory (BSI)

The BSI19 is a 52-item short form of the Symptom Checklist-90 that asks the subject to report symptom-related distress on a scale from 0 to 4. It has nine symptom-specific scales and a Global Severity Index. It has been used in numerous studies of PTSD and of cancer, and allowed us to place our sample contextually within this literature.

Stressful Illness Experiences (SIE)

The SIE was developed by the investigators to assess a full range of experiences across the course of cancer diagnosis and treatment that might be stressful and that might be targets for intrusive thinking. Specific events were generated from our clinical experience with these patients (e.g., discovery of a mass or lump by the patient herself, having to decide between lumpectomy vs. mastectomy), with a few items being added following pilot testing. The women rated each of the 30 experiences on a scale ranging from 1 (not at all stressful) to 5 (extremely stressful), or not applicable.

Results

Table (1): Frequency of post-traumatic disorder symptoms among study subject.

Symptoms	*Women with Breast Cancer*	*%*
Avoidance		*9.8*
Hyper arousal		*27*
Avoidance + Hyper arousal		*28*
Intrusion		*8.6*
Re-experiencing		*36*

Table (2): Frequency of post-traumatic disorder symptoms among study subjects.

Disorder	*Women with Breast Cancer*	*%*
Depression		*87*
Anxiety		*77*

Discussion

Overall, relatively low rates of cancer-related PTSD were observed in this sample of breast cancer survivors: 5% at any time post cancer diagnosis (up to 20 months) or treatment (up to 1 year) with liberal criteria, and only 3% with more stringent criteria. These rates are lower than those associated with more traditional traumatic events such as rape, war, disaster, and accidents in general samples, in which the average lifetime rates of PTSD are four to five times higher in the general population.[1,2,4] For the severe traditional stressor of war, the PTSD rate was 22%.

The relatively low current PTSD rates are consistent with those of Alter et al.[12] and Cordova et al., [10] who reported current rates of 4% and 5% -10%, respectively. The slightly higher rates in Cordova et al. are likely attributable to their use of self-report measures. These measures tend to overestimate diagnoses, as there is no opportunity for an interviewer to assess the severity and/or clinical significance of a particular symptom or to determine whether symptoms arose or worsened only following the cancer.

Levels of Intrusion (806) and Avoidance (9.8) on the IES were also comparable to those found in the Cordova et al.[10] study (7.4 and 9.0, respectively), scoring the IES in the same manner (Andrykowski MA, personal communication, 1996).

Our lifetime cancer-PTSD subjects had higher GSI scores than Alter et al.'s PTSD subjects (0.83 vs. 0.59, respectively). Thus, it appears that our subjects were similarly or slightly more distressed at the time of the data collection than the subjects from the other two studies. Also, comparable among the studies was the finding that the type of treatment did not relate to the outcome. However, the younger women were at greater risk for PTSD symptoms than the older women. Less clear is an explanation for the difference between our lifetime rate of cancer-related PTSD (3% – 5%) and that reported by Alter et al.[12] (22%). While the samples had similar percentages of subjects who met lifetime re-experiencing criteria (36%) and arousal criteria (27%), only 8% of our sample met full avoidance/numbing criteria compared with 30% of Alter et al.'s sample.

Since the samples seem otherwise quite comparable, this finding suggests that avoidance was being assessed quite differently in the two studies. An alternative explanation lies in the possibility that since numbing symptoms relate specifically to the end of treatment, with a difference in time, numbing symptoms may increase over time. Indeed, as women return to their daily lives, it seems possible that avoidance or denial of their disease might become more prominent; this might even be an adaptive response. On the other hand, this trend would not fit well with other information. First, neither our study nor other studies showed a relationship between the time after diagnosis or treatment and the number of PTSD symptoms. While we believe that our study had a sufficient range to test this hypothesis, other studies had even broader ranges. If a lifetime PTSD diagnosis were a function of time, one would expect a relationship within studies between time elapsed and the number of symptoms or prevalence of diagnosis. Second, longitudinal data on PTSD from other events indicates that the risk for PTSD is highest immediately following the event and declines over time, stabilizing at about 3 months. This finding drove the acute/chronic PTSD demarcation for DSM-IV.[5] Cross-sectional studies support this finding as well.[2,3] If the risk for PTSD increases over time following cancer, this course would differ from that of PTSD associated with other types of events. Nevertheless, longitudinal studies are recommended to evaluate this and other possibilities. The Alter et al. study [12] may also be atypical. Studts and colleagues,[13] as a follow-up to the Cordova et al.[10] study, reported that in a brief telephone interview covering lifetime PTSD criteria, according to the SCID, they also found relatively low rates of lifetime cancer-related PTSD (9%). Several explanations may be advanced to account for the low incidence observed for cancer-related PTSD in all three studies.

First, it may be that the high level of resources available to the middle-class to upper middle-class subjects who participated in the three studies served to buffer the stress of diagnosis and treatment. Cordova et al.[10] found a negative correlation between income and PTSD symptoms and between educational level and PTSD symptoms, indicating that women with higher income and more education fared better.

However, a number of the findings, including those about the most stressful aspects of cancer, suggest that receiving a breast cancer diagnosis does not fit the PTSD model well. The breast cancer experience does not seem to have the immediacy of threat to life or bodily integrity usually associated with external trauma. We urge continued study of this important issue, so that future editions of the DSM may rely on empirical data about which illnesses and medical conditions are more likely to cause PTSD. Further, we urge caution in applying the PTSD diagnosis based only on symptom reports and/or on a relatively untested conceptualization.

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التعرض للصدمة لدى النساء المصابات بسرطان الثدي

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الملخص

تشخيص المصابين بالسرطان له ردة فعل طبيعية تتسم، بالصدمة، الخدر والإنكار، وفي كثير من الأحيان اليأس والقنوط، يكون أمراً شائعاً.

الهدف: هدف هذه الدراسة فحص ما إذا كان التشخيص والعلاج من سرطان الثدي أنتجت ما بعد الصدمة اضطراب (PTSD) في النساء البالغات.

الطرق: تم اختيار ما مجموعه (100) من النساء المصابات بسرطان الثدي في مرحلة مبكرة من المرض. خضعت النساء لاختبارات خاصة، بالإضافة إلى جمع بعض البيانات الشخصية والتاريخ الطبي.