The Psychological Sequel of Breast Cancer and their Relationships to Locus of Control, Fatigue, Coping Styles and Treatment

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Abstract: -

Randomly selected sample of 25 patients recruited from the oncology outpatient clinic of the Health Insurance at Port Said (76% stage III, and 24% stage II). The aim was to investigate the relationships of psychological sequel of breast cancer to the patient's locus of control, coping styles, fatigue and treatment. Each patient was assessed by clinical examination, psychiatric interview, DSM-IV criteria of diagnosis, HAD-Scale, MFI-20 Scale, Illness Coping Inventory Scale and Rotter's I-E Locus of Control (LOC) Scale. Results showed that 40% of patients had adjustment disorder with mixed anxiety and depression and 8% had post-traumatic stress disorder. Analysis of psychometric tests clarified that, patients got mild to moderate mean scores of HAD-Scale, highest mean scores of general fatigue, followed by reduce activity, physical fatigue and mental fatigue. Patients also got high mean scores in E-Loc scale compared to I-loc scale with significantly statistical differences ($P<0.002$). Coping with illness, showed that active cognitive coping was used most frequently; and active-behavior coping employed next.

Correlative studies revealed that breast cancer patients with severe fatigue were significantly more anxious and depressed and employed avoidance coping strategy. Breast cancer patients who were using active-positive involvement; cognitive positive understanding and distraction coping strategies with illness were less anxious and depressed. Conversely, patients employed avoidance-solitary / passive behavior coping was more anxious, depressed, and fatigued. Patients with E-LOC showed significantly fewer tendencies to employ active cognitive positive understanding/ create meaning of coping strategy. In conclusion, psychological response to breast cancer is both complex and varied and needs appropriate psychological intervention.

Introduction: -

A broad range of factors influence the way each women experience breast cancer and the psychosocial stressors that accompany it ***(Stuber, et al., 1994).***

The psychosocial and emotional response to the diagnosis and treatment of breast cancer has become the focus of increasing attention in recent years. The extent of the response, and the manifestations of psychosocial sequel, are dependent on many factors, including personality type, coping styles, social support, socioeconomic status, age and life stage, ethnic and cultural tradition, and concurrent stressors, among others ***(Rabinowitz, et al., 1998).***

While some women exhibit immediate signs of distress, others may appear relatively unscathed. The dimensions of emotional response may be immediately apparent, or may emerge at any of the many pivotal points of the disease diagnosis, treatment or recovery phases ***(budin, 1996).***

The physical and psychological impact of having a life-threatening disease, of undergoing cancer treatment, and of living with recurring threats to physical integrity and autonomy constitute traumatic experience for many cancer patients. ***(Stuber, et al., 1994).***

Investigators have found that 44% of patients with cancer reported some anxiety, 23% reported significant anxiety ***(Schag and Heinrich, 1989).***

Patients with cancer can present with the following anxiety disorders: adjustment disorder, panic disorder, phobias, obsessive compulsive disorder, post-traumatic stress disorder, generalized anxiety disorder, or anxiety disorder that is caused by other general medical conditions ***(Razavi and Stiefel, 1994).***

Depression is common in cancer patients and adversely affects many domains of functioning and quality of life, length of hospital stay, treatment compliance, and ability to care for oneself ***(Passik et al., 1997).***

While results from studies attempting to estimate the frequency of depressive symptoms in the cancer patients vary widely, from a low of 4.5% to a high of over 50% most studies indicate that 20% to 25% of cancer patients meet the criteria for major depressive syndrome at some point of their illness ***(Strouse, 1997).***

Once, an event or situation has been appraised as stressful, individuals apply a range of coping strategies which may be emotion-focused as well as problem-focused ***(Lazarus and Folkman, 1984).*** For example, problem-focused strategies include active coping and suppression of competing activities, both are processes of taking action to overcome or circumvent the stressor. Emotion-Focused strategies include positive reappraisal of the situation's meaning, and focusing on and venting of emotions, so as to reduce negative effects ***(Lazarus, and Folkman, 1984).*** Researchers reported that certain coping strategies are maladaptive and result in ill health ***(Endlern et al., 1993);*** while other successful coping might have an impact on the length and course of survival, the functioning of the immune system, physical symptoms, mood, role and social functioning, and one's self-concept ***(Namir et al., 1987).***

Locus of control (LOC), also, may be a predictor of health outcome. Many studies reported that, the psychological variables most predictive of good health is internal LOC, and the increase in stressors with external LOC is related to subsequent illness frequency ***(Lefcourt, 1983).*** The interaction of (LOC × stress) significantly predicts illness frequency, while LOC alone predicts illness severity ***(Lawler an Schmied, 1992).***

Interest in the problem of fatigue is growing among clinicians and researches alike and consistent with a greater awareness of the importance of quality of life as an outcome in oncology ***(Ganz, 1994).*** Fatigue has been reported in 58% to 95% of women treated for breast cancer, regardless of treatment modality ***(Cimprich, 1999).*** Fatigue, often become a chronic, unexplained post treatment problem in long term survivors of breast cancer, that persisted even years after completion of treatment ***(Ferrell, et al., 1995).***

The psychological impact of breast cancer as a life threatening disease will be evaluated in this study; in a sample of ambulatory outpatients on treatment; with the aim to investigate its relationship to

their LOC, coping strategies and fatigue with the hope to understand more about how best to intervene with people who have cancer in general, and breast cancer in particular; to help them adapt more effectively with the stressors imposed by their illness.

Subjects and Methods: -

A sample of 25 breast cancer female patients was selected randomly from the oncology outpatient clinic of the Health Insurance outpatient clinics at Port Said. They were attending the clinic regularly for treatment and follow up. Their age ranged from 28-58 years.

The selection criteria includes: -

1- Patients whose general condition allowed considerable cooperation.

2- Stages II and III of breast cancer.

Exclusion criteria include: -

1- Past history of psychiatric disorder.

2- Patients with fever or impaired level of consciousness.

Each patient was clinically assessed by semi-structured psychiatric interview and diagnosed according to DSM-IV criteria of diagnosis; and subjected to the following psychometric tools:-

1- Hospital-Anxiety Depression Scale (HAD-scale) ***(Zigmond and Snaith, 1983),*** which was designed to screen for the presence of mood disorder in medically ill patients, either in their community or hospital settings.

2- The Multidimensional Fatigue Inventory Scale (MFI-20) ***(Smet, et al., 1994).*** The scale is a multi-dimensional self-report instrument, designed to measure five aspects of fatigue: general fatigue, mental fatigue, physical fatigue, reduced activity and reduced motivation. It is short, multidimensional, dose not contain any somatic items, and provide complete description of the fatigue experience. The Arabic version of the scale was used ***(Wafaa and Hanaa, 1997).***

3- Dealing with Illness Coping Inventory ***(Namir et al., 1987),*** it is a 47-item coping inventory, which assesses cognitive and behavioral responses made in effort to cope with the illness. The scale is divided into 3 coping methods (active-cognitive active-behavior, and avoidance), and then analyzed as 8 more specific coping strategies. The arabic version of the scale was used ***(Abdel Azim, et al., 1999).***

4- Rotter's Internal-External Locus of Control Scale (I-E LOC scale) ***(Rotter, 1966).***

Statistical procedures were done by using SPSS version 9 for statistical analysis, and included frequency distribution, means, standard deviation, t-test, chi-square and correlation of variances.

Results: -

Twenty-five breast cancer female patients were recruited from ambulatory outpatient clinic of oncology of the Health Insurance outpatient clinics at Port Said. Their age ranged from 28-58 years (mean 43.84; SD ± 7.19); with mean duration of illness 50.16 months (SD ± 42.85). 19 patients (76%) were on treatment with tamoxifen citrate (anti-estrogen) and 6 patients (24%) on chemotherapy. All patients except one were subjected to surgery (either unilateral or bilateral mastectomy). As regards staging

of breast cancer; 76% of patients belonged to stage III; and 24% to stage II.

Regarding their demographic variables; 2 patients (8%) were single, 19 patients (76%) married; 3 patients (12%) widow, and one patient (4%) divorced. Their mean duration of education (table 1) was 10.52 years (± 4.47). Regarding the work, 4 patients (16%) were housewives, and 21 patients (84%) had a job before illness; yet only 6 patients continued their work after illness. One patient was manual worker, and the other 20 were clerks.

According to Davis' classification, their social class ranged from 3-5 (mean 3.96, SD ± 0.68) (table 1). Regarding current psychiatric diagnosis, according to DSM-IV criteria of diagnosis; 10 patients (40%) had adjustment disorder, chronic, with mixed anxiety and depressed mood, and 2 patients (8%) had post traumatic stress disorder-chronic.

Psychological assessment of patients, using HAD-Scale (table, 2) showed in its depression subscale that, 6 patients (24%) were normal; while, 8 patients (32%), 6 patients (24%), and 5 patients (20%), had mild, moderate and severe mood disturbances respectively. Yet their mean scores of depression (10.44 ± 4.10) classified them in the category of mild to moderate depression (table 3). The anxiety subscale, showed that, 7 patients (28%) were normal, while 9 patients (36%), 3 patients (12%) and 6 patients (24%) had mild, moderate and severe anxiety respectively. Yet, their mean scores of anxiety (10.24 ± 4.75) classified them in the category of mild to moderate anxiety (table 3).

Assessment of fatigue using the Arabic Version of MFI-20 scale (table, 3), clarified in its 5 subscales, that general fatigue got the highest mean score (14.28 ± 2.99), followed by reduced activity (13.88 ± 3.5), physical fatigue (13.52 ± 3.34), mental fatigue (13.12 ± 3.73) and lastly by reduced motivation (12.20 ± 3.84).

Correlative study between MFI-20 scale and HAD-scale (table 4) showed a highly significant positive correlation between both anxiety and depression and all the 5 subscales of fatigue.

Assessment of patients coping with illness (table 3), showed that active cognitive coping was used most frequently (mean 3.14 ± 0.44), active-behavioral coping employed next (mean 2.53 ± 0.398), and avoidance coping used least frequently (mean 1.80 ± 0.453).

Screening of cognitive strategies (table 3) clarified that active-reliance on others, cognitive-positive understanding/create meaning, passive-resignation and active-expressive were used most frequently by patients. While distraction strategy used least frequently.

Correlative studies were done between coping with illness and both depression and anxiety to explore the relationship between coping style of breast cancer patients and their psychological sufferings. Table (5) clarified highly significant negative correlation between both anxiety and depression and active cognitive and active behavior methods of coping. Table (6) showed the correlation between 8 different coping strategies and both depression and anxiety, and clarified that active-positive involvement and cognitive-positive understanding/create meaning to illness were strongly negatively correlated with both anxiety and depression. While avoidance activities were strongly

positively associated with both anxiety and depression. Distraction activities were significantly negatively correlated with depression.

Exploring the relation between 8 coping strategies and fatigue as shown in table (7) signified a strong negative correlation between cognitive positive-understanding/create meaning of illness and all the 5 subscales of MFI-20 scale. Conversely, a strong positive correlation was found between avoidance solitary/passive behavior and all the 5 subscales of MFI-20 scale.

Assessment of locus of control using Rotter's I-E scale (table 3) showed that the patients scored high mean on E-scale (12.96 ± 3.08) compared to I-scale (10.04 ± 3.08) with significant statistical differences ($P < 0.002$).

Correlative studies between LOC and both anxiety and depression were insignificant. While, negative correlation was found between E-scale and active positive involvement of coping strategy and age of the patients (table 8).

Table (9) showed the comparison (t-test) between patients on chemotherapy and hormonal treatment in coping with illness; and clarified significant tendency ($P<0.00$) of patients on chemotherapy to employ active-cognitive coping methods than patients on hormonal treatment.

Table (1): Descriptive Criteria of the Sample

Items	N	Means	SD	Range
Age	25	43.84	7.19	28-58
Duration of Education (ys)	25	10.52	4.47	2-16
Duration of Marriage (ys)	23	21.00	7.59	2-40
Social class	25	3.96	0.68	3-5
Duration of Illness (ms.)	25	50.16	42.85	4-134

Table (2): Results of Screening of Anxiety and Depression with HAD-Scale

Items	Depression N (%)	Anxiety N (%)
Normal (0 – 7)	6 (24%)	7 (28%)
Mild (8 – 10)	8 (32%)	9 (36%)
Moderate (11 – 14)	6 (24%)	3 (12%)
Severe (15 – 21)	5 (20%)	6 (24%)
Total	**25(100%)**	**25 (100%)**

(Table 3): Descriptive Statistics of Results of HAD-Scale, LOC, Coping with Illness and MFI-20 Scale

Items	Means	SD	
HAD scale			
- Anxiety	10.24	4.75	
- Depression	10.44	4.10	
Locus of control (LOC)			
- Internal LOC	10.04	3.08	P > 0.002
- External LOC	12.96	3.08	
Coping with Illness			
***I*- Coping methods**			
- Active-cognitive	3.140	0.443	
- Active-behavior	2.534	0.398	
- Avoidance	1.800	0.453	
***II*- Coping Strategy**			
- Active-positive	2.005	0.536	
- Active-expressive	3.066	0.827	
- Active-reliance	3.560	0.797	
- Cognitive-positive	3.502	0.503	
- Cognitive-passive	2.626	0.987	
- Distraction	0.497	0.147	
- Passive/resignation	3.080	0.721	
- Avoidance/passive	1.626	0.647	
Multidimensional Fatigue			
- General Fatigue	14.28	2.99	
- Mental Fatigue	13.12	3.73	
- Physical Fatigue	13.52	3.34	
- Reduced activity	13.88	3.59	
- Reduced Motivation	12.20	3.84	

Number of patients = 25

Table (4) Correlation between MFI-20 Scale and HAD-Scale

Variables	Statistics	General fatigue	Mental fatigue	Physical fatigue	Reduced activity	Reduced motivation
Depression	R	0.712**	0.660**	0.724**	0.695**	0.830**
	P	0.000	0.000	0.000	0.000	0.000
Anxiety	R	0.734**	0.570**	0.667**	0.697**	0.790**
	P	0.000	0.003	0.000	0.000	0.000

- No. of patients 25

** Correlation is significant at the 0.01 level (2 – tailed)

* Correlation is significant at.the 0.05 level (2 – tailed)

Table (5): Correlation between Coping Methods and HAD-Scale

Coping Methods	Depression		Anxiety	
	R	P	R	P
Active cognitive	- 0.591**	0.002	-0.513**	0.009
Active behavior	- 0.611**	0.001	-0.466*	0.019
Avoidance	0.320	0.119	0.331	0.106

** Correlation is significant at the 0.001 level (2 tailed)

* Correlation is significant at the 0.05 level (2 tailed)

Table (6): Correlation between Coping Strategies and HAD-Scale

Strategy	Depression		Anxiety	
	R	P	R	P
Active – positive	-0.639**	0.001	- 0.594**	0.002
Active – expressive	-0.213	0.306	- 0.156	0.456
Active – reliance	- 0.129	0.538	- 0.283	0.171
Cognitive – positive understanding	- 0.722**	0.000	- 0.511**	0.009
Cognitive – passive Ruminative	0.039	0.854	0.103	0.625
Distraction	- 0.593**	0.002	- 0.374	0.065
Passive / resignation	- 0.167	0.425	- 0.200	0.337
Avoidance	0.676**	0.000	0.645**	0.001

** Correlation is significant at the 0.001 level (2 tailed)

* Correlation is significant at the 0.05 level (2 tailed)

Table (7): Correlation between MFI-20 and Coping Strategies

Variables	Statistics	Active positive	Active expressive	Active reliance	Cognitive Positive	Cognitive passive	Distraction	Passive resignation	Avoidance
General Fatigue	R	- 0.383	- 0.283	- 0.138	- 0.512**	- 0.043	- 0.309	-0.011	0.558**
	P	0.059	0.171	0.510	0.009	0.838	0.133	0.959	0.004
Mental Fatigue	R	- 0.274	-0.057	0.019	-0.483*	0.182	-0.429*	0.316	0.467*
	P	0.186	0.788	0.929	0.014	0.384	0.032	0.124	0.19
Physical Fatigue	R	-0.337	-0.053	-0.135	-0.480*	0.091	-0.444*	0.080	0.632**
	P	0.100	0.801	0.521	0.015	0.666	0.026	0.704	0.001
Reduced activity	R	-0.216	- 0.021	-0.170	-0.476*	0.191	-0.326	0.202	0.590**
	P	0.300	0.922	0.417	0.016	0.361	0.112	0.332	0.002
Reduced motivation	R	0.520**	-0.332	-0.265	-0.614**	-0.301	-0.493*	-0.106	0.478*
	P	0.008	0.105	0.201	0.001	0.884	0.012	0.613	0.016

** Correlation is significant at the 0.001 level (2 tailed)

* Correlation is significant at the 0.05 level (2 tailed)

Table (8): Correlation between LOC and some Variables

Variables	Statistics	Age	Depression	Anxiety	Active positive understanding
Internal LOC	R	0.528**	- 0.21	- 0.70	0.433*
	P	0.007	0.30	0.30	0.031
External LOC	R	- 0.528**	0.21	0.70	- 0.433*
	P	0.007	0.3	0.30	0.031

** Correlation is significant at the 0.001 level (2 tailed)

* Correlation is significant at the 0.05 level (2 tailed)

Table (9): Comparison in Using Coping Methods between Patients on Chemotherapy and Hormonal Treatment

Coping Methods	T-test for Equality of Means			
	T	P value	Mean Differences	Std. Error Differences
Active cognitive	3.244	0.004*	0.569	0.175
Active behavior	-0.235	0.816	-4.473E	0.190
Avoidance	0.480	0.636	0.103	0.216

* P is significant at the 0.05 level

Discussion: -

The present study explored psychiatric comorbidity in a sample of 25 breast cancer female patients, presented to oncology outpatient clinic for treatment and follow-up. Their employed coping styles with illness, and their LOC were examined; also fatigue as a distressing symptom experienced by breast cancer survivors was assessed according to its 5 subtypes. Correlations between their current psychiatric morbidity and coping with illness, LOC, and fatigue were also explored.

Psychiatric diagnosis of the studied sample revealed that 40% had adjustment disorder, chronic, with mixed anxiety and depression, and 8% had PTSD, chronic according to DSM-IV criteria of diagnosis.

Assessment of the levels of anxiety and depression with HAD-scale showed that their mean scores of anxiety (10.24 ± 4.75) and depression (10.44 ± 4.10) classified them in the category of mild to moderate disorders.

Several studies had highlighted the range of psychological adjustment and the need for effective intervention by the healthcare team. ***Strouse (1997)*** found 24% had adjustment disorder with depressed mood, ***Goldberg, et al (1992)*** reported 32% prevalence of depression in breast cancer; ***Abdel Azim, et al., (1997)*** documented a rate of 55% depression irrespective of

different cancer diagnosis, ***EL Batrawi and Moussa (2000),*** using Zung Self-Rating Scale for depression found that 60% of patient without regrad to cancer type were depressed, however, the majority (50%) were in the mild to moderate range. Also, estimates from epidemiological studies suggested that on average, approximately 25% - 33% of individuals who were exposed to traumatic events, including cancer, develop PTSD ***(Yehuda, et al., 1993 and Passik, et al., 1997).***

Differences in the results may be attributed to differences in sampling, tools of assessment and other methodological variables. Both chemotherapy and tamoxifen, can disrupt the activity of the hormone estrogen in breast cancer patients, which may increase patient's risk of developing depression ***(Quigley, 1999),*** and anxiety ***(Rabinowitz, et al., 1998).*** However, a study conducted by ***Hurny et al., (1996)*** reported that, although chemotherapy had a measurable adverse effect on quality of life, this was transient and minor within the context of the patient's overall adaptation to breast cancer. In the present study, 19 patients were on hormonal treatment (tamoxifen citrate-antiestrogen) and 6 patients were on chemotherapy (2 patients on CAF "cyclophosphamide adrianyl 5-flurouracil", and 4 patients on CMF "cyclophosphamide methotrexate 5-flurouracil"). On the contrary to expectation, only active-cognitive coping methods showed statistically significant differences between both groups; which may be explained by a small number of patients on chemotherapy.So, treatment among other factors may be associated with the patient's psychological disturbances. A point which needs more depth future study.

While, the nature of the stressor may be a primary determinant in a persons response to traumatic events. Other individuals and social factors may also affect the outcome. Among the former, high levels of general psychological distress, and dysfunctional coping and attributional styles ***(Davidson and Foa, 1991).***

It is clear from the correlative relationships between levels of anxiety and depression in the present sample that patients who were using active cognitive and active behavior methods of coping and active positive-involvement and cognitive positive understanding strategies with illness were less anxious and depressed, and those who were using avoidance-solitary/passive behavior coping strategy were more anxious ($P < 0.001$) and depressed ($P < 0.00$). Also, attempts at distracting oneself, both cognitively and behaviorally (distraction strategy) also related to better mood state. The same was previously reported by ***Shapiro et al., (1997)*** who found that confrontive subjects reported significantly fewer psychological and physical symptoms than avoidant – confrontive and avoidant – resigned copers. ***Heim et al., (1997),*** also, demonstrated a positive relationship between psychosocial adaptation and strategies that can be generally categorized as good forms of coping such as support and self-control, and, to a lesser degree, diverting and denial. Conversely, poor coping exerted a negative effect on almost all illness stages and on most criteria of adjustment. ***Spiegel (1997),*** documented that coping styles were related to adjustment and may be to survival time. ***Jeney,Gammon et al., (1993),*** Clarified that behavioral and mental disengagement and self-blaming were associated with severe distress; whereas seeking social support for instrumental reasons and cognitive

restructuring strategies resulted in lower levels of distress. ***Dunkel et al., (1992)*** documented that using cognitive and behavioral escape-avoidance was associated with more emotional distress. ***Abdel Azim et al, (1999)*** found that active cognitive coping was the most used coping method by cancer patients regardless of different variables.

Fatigue is the most common symptom experienced by cancer patients; yet, it is frequently not recognized by physicians and nurses or patients as a serious treatable condition ***(Delmonte, 1996).*** Breast cancer patients in the studied sample showed greater complaints of general, physical and mental fatigue with expected impairment of their quality of life. Correlative studies, explored this expectation and found a highly positive significant relationships between all the subtypes of fatigue and mood disturbances (anxiety and depression) and avoidance coping strategy; while conversely, showed a significant negative correlation with cognitive positive understanding/create meaning. Considering that pattern of relationship, it is clear that patients who reported severe fatigue, had highest levels of depression and anxiety and employed avoidance strategy to cope with illness, which did not protect them from distressful feelings and mood disturbances.

Consistent with the present findings, ***(Delmonte, 1996),*** documented that cancer patients with fatigue are significantly more functionally impaired, depressed, distressed and hopeless than patients without fatigue, and are more likely to have thoughts of suicide. ***Piper et al., (1996)*** reported that, functional impairment (difficulties in performing everyday activities) was a common and distressing manifestation of fatigue and can lead to emotional distress ranging from anxiety and feeling of hopelessness to behavioral changes, depression, and even self-destructive ideation. ***Broeck et al., (1998),*** using the Multidimensional Fatigue Inventory Scale (MFI-20) reported that more severe fatigue was related to poorer sleep quality, greater use of catastrophizing (ie, to engage in overly negative thoughts about oneself and future), as a coping strategy. Yet, fatigue severity was unrelated to age, time since treatment completion, additional treatment with radiotherapy, or current use of tamoxifen. Recently, ***Jacobsen and Stein (1999),*** documented that patients who respond to fatigue cognitively by catastrophizing and focusing on their symptoms and behaviorally by avoiding activity and accomodating their lifestyles to illness were more likely to develop chronic forms of fatigue.

LOC as a predictor of health outcome ***(Reynoert, et al., 1995)*** was investigated in the studied sample; the results clarified significantly higher external LOC in the patients, while, correlative studies revealed significantly less tendency of individuals with external LOC to employ active-cognitive positive understanding/create meaning of coping strategy ($P<0.03$).

Results also, demonstrated high significant negative correlation between external LOC and patient's age ($P<0.007$) Consistent with the present results, ***Grassi and Rosti (1996)*** previously confirmed association between psychological disorders and abnormal illness behavior, external LOC and Low social support in favoring maladaptive response to cancer. ***Oberle (1991),*** reported that suffering denotes an extended sense of threat to self image and life, a perceived lack of options for coping with symptoms

or problems caused by cancer, a sense of personal loss, and a lack of a basis for hope.

Many literatures suggested that psychosocial and behavioral interventions, which improve the adaptive coping styles of individuals and promote an internal LOC, may be effective in alleviating emotional pain and in positively affecting the immune system ***(Redds, 1995).*** This is of particular interest because of the antitumor and antiviral functions associated with natural killer cells ***(Gruber, et al., 1993).***

Conclusions: -

It is clear that psychological response to breast cancer is both complex and varied. Health care team must provide essential intervention to assist the patient in coping with psychosocial and emotional sequelae of the disease. More research is required to offer the most effective ways of promoting an internal LOC; and to study the impact of different types of treatment on the psychosocial adaptation to breast cancer.

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النتائج النفسية لسرطان الثدى وعلاقته بالتحكم فى الذات، والارهاق وأساليب التكيف والعلاج

إن المردود النفسى لسرطان الثدى كمرض يهدد الحياة ، قد خضع للدراسة فى عينة عشوائية عددها ٢٥ مريضة من العيادة الخارجية للأورام بالتأمين الصحى ببورسعيد (٧٦% سرطان ثدى من الدرجة الثالثة و ٢٤% من الدرجة الثانية). وتم تقييم كل حالة بالفحص الاكلينيكى والنفسى والمقياس الامريكى الرابع للتشخيص النفسى، ومقياس القلق والاكتئاب بالمستشفى ، ومقياس متعدد الابعاد للارهاق ، ومقياس أساليب التكيف مع المرض ومقياس روتر للتحكم فى الذات . وأشارت النتائج الى ان ٤٠% من المرضى يعانوا من اضطراب عدم القدرة على التكيف مع قلق واكتئاب ، وان ٨% يعانوا من اضطراب ما بعد الصدمة. وتحليل نتائج الاختبارات النفسية أوضح وجود درجة بسيطة الى متوسطة من القلق والاكتئاب ، وان الارهاق العام ظهر بمتوسط حسابى عالى تبعه انخفاض فى النشاط ، ارهاق بدنى ، ثم ارهاق ذهنى. وأشارت النتائج الى فرق إحصائى دال فى مقياس التحكم الخارجى

فى الذات بمقارنته فى التحكم الداخلى بالذات . بالنسبة للتكيف مع المرض استخدم المرضى التفكير الايجابى بصورة كبيرة، ثم تليها التصرف الايجابى.

معامل الارتباط الاحصائى أوضح ان المرضى الذين يعانوا من درجة عالية من الارهاق هم اكثر اكتئابا وقلقا ويستخدموا استراتيجية التجنب مع المرض. والذين يستخدمون اسلوب الاندماج والتفهم الايجابى للمرض والتلاهى عنه كانوا أقل قلقا واكتئابا. وعلى العكس المرضى الذين يستخدمون اسلوب التباعد السلبى كانوا أكثر قلقا واكتئابا وارهاقا. المرضى ذوي التحكم الخارجى بالذات لايميلوا الى استخدام اسلوب التفكير الايجابى لفهم المرض وايجاد معانى جديدة .

الخلاصة أن المردود النفسى لسرطان الثدى متعدد ومختلف ويحتاج الى تدخل نفسى مناسب.

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