Prevalence and Psychosocial Factors of Anxiety and Depression in Breast Cancer Patients

Peeraphon Lueboonthavatchai MD*

** Department of Psychiatry, Faculty of Medicine, Chulalongkorn University*

Background: *Breast cancer is the most common cancer in women. It is seen as a terrifying disease due to a high mortality rate, its impacts on self-image, and the sexual relationship. Many patients experience psychological reactions, and may have psychiatric morbidities, especially anxiety and depressive disorders. Although anxiety and depressive disorders are common in breast cancer and worsen the disease course and treatment outcomes, these psychiatric disorders are ignored and left untreated. Understanding these common psychiatric disorders and associated psychosocial factors can help to plan for treatment and may result in more treatment success.*
Objectives: *The present study was aimed to identify the prevalence and associated psychosocial factors of anxiety and depressive disorders in breast cancer patients. The psychosocial factors in the present study focused on social support, family relationship and functioning, and problem and conflict solving.*
Material and Method: *Three hundred female breast cancer patients, aged above 18 years old from the Surgical Outpatient Department, King Chulalongkorn Memorial Hospital, were recruited into the study from December 2006 to May 2007. All samples completed five questionnaires; 1) Demographic data and history form, 2) Thai Hospital Anxiety and Depression Scale (Thai HADS), 3) Social Support Questionnaire, 4) Family Relationship and Functioning Questionnaire, 5) Problem and Conflict Solving Questionnaire. The prevalence of anxiety and depressive disorders was reported in percentage. The association between psychosocial, demographic, and clinical factors and anxiety and depression was analyzed by ANOVA test (for continuous data) and chi-square test (for categorical data). Logistic regression was performed to identify the potential predictors of anxiety and depression. A p-value of less than 0.05 was considered statistically significant.*
Results: *The prevalence of anxiety disorder was 16.0%, and that of anxiety symptoms was 19.0%. The prevalence of depressive disorder was 9.0%, and that of depressive symptoms was 16.7%. Factors associated to anxiety and depression were psychosocial factors (social support, family relationship and functioning, and problem and conflict solving) ($p < 0.01$), number of hospital admissions, and presence of disturbing symptoms: pain, respiratory symptoms, and fatigue ($p < 0.01$). By regression analysis, the significant predictors of anxiety and depression were poor family relationship and functioning ($p < 0.05$), maladaptive problem and conflict solving ($p < 0.05$), and symptoms of pain ($p < 0.01$) and fatigue ($p < 0.05$).*
Conclusion: *Anxiety and depressive disorders are two common psychiatric disorders in breast cancer. Strong predictors of anxiety and depression in breast cancer patients were poor family relationship and functioning, maladaptive problem and conflict solving, and presence of pain and fatigue. Promoting patients' social support, especially emotional support from family, and enhancing patient's coping skills may reduce the patients' psychological stress and psychiatric morbidities. Treatment of breast cancer patients should focus on reduction of patients' disturbing symptoms such as adequate pain control, and lessening the treatment complications. Moreover, being alert on patients' emotional reactions and potential psychiatric disorders is essential.*

Keywords: *Prevalence, Anxiety, Depression, Psychosocial factors, Breast cancer*

J Med Assoc Thai 2007; 90 (10): 2164-74
Full text. e-Journal: *http://www.medassocthai.org/journal*

Correspondence to : Lueboonthavatchai P, Department of Psychiatry, Faculty of Medicine, Chulalongkorn University, Bangkok 10330, Thailand. E-mail: peeraphon_tu@yahoo.com

Breast cancer is the most common type of cancer among women worldwide[1-3]. For women, breast cancer is seen as a terrifying disease due to a high mortality rate[1-3]. Moreover, the breast is considered as a symbol of womanhood and women's sexuality[3]. Having breast cancer or receiving treatment; either surgical or adjuvant treatment, has been seen as a traumatic experience to women due to its impacts on their self-image and sexual relationship[3]. Most of the breast cancer patients have psychological reactions such as denial, anger, or intense fear toward their disease and treatment process[4,5]. Many patients have psychiatric morbidities, especially anxiety and depressive disorders[4,5]. Besides psychological problems in patients themselves, breast cancer also brings about a broad range of psychological reactions of their spouses or partners, and their families[6].

Among psychiatric morbidities, anxiety and depressive disorders are two psychiatric disorders commonly found in breast cancer patients. The prevalence of anxiety disorder in breast cancer ranged from 1 to 49%[7], while that of depressive disorder ranged from 1.5 to 46%[7,8]. The varied prevalence of anxiety and depressive disorders was due to the different time of evaluation, the different measurements, and different population studied[7,8]. For example, Morris et al found that the prevalence of depression in women who had a mastectomy for breast cancer was 22%[9]. Meyer and Aspergren reported that ambulatory women after five-year treatment of breast cancer had 30% of anxiety or depressive symptoms[10].

Some previous studies reported the clinical and psychosocial factors associated with anxiety and depressive disorders in breast cancer patients. Demographic factors predicting anxiety or depressive disorders in breast cancer included advanced age, postmenopausal period, and previous history of anxiety or depressive disorders[7]. Some clinical factors such as tumor size, pathological nodes, and histology were not found to predict the psychiatric morbidities[11]. Relationship between type of surgical treatment and psychological distress was reported[12]. The breast-conservative surgery seems to be associated with the better illness adjustment. However, the studies comparing the psychosocial outcome of mastectomy and conservative surgery found little difference in psychiatric morbidities[13,14]. No association was found between hormonal receptor status and psychological distress[7]. Psychosocial factors seem to be more associated with the patients' illness adjustment than demographic and clinical factors.

Among psychosocial factors, factors relating to patient's environment such as social support and family functioning, and problem solving or coping styles were highly associated to anxiety and depressive disorders[15]. Social support contains a multidimensional concept including resources available to an individual, and social ties to other individuals and groups[16-19]. By the Schaefer's concept, social support was composed of three domains; 1) emotional support, 2) informational support, and 3) tangible or material support[19]. Strong social support, high family functioning, and adaptive problem-solving patterns are positive personal resources. These resources are considered as the protective factors. They help to moderate psychosocial stress and lessen psychiatric morbidities. From the previous studies, strong social support, high family functioning, and adaptive problem-solving patterns reduced the psychiatric morbidities such as anxiety and depressive disorders in breast cancer patients[20-25].

As the above, anxiety and depressive disorders are two common psychiatric disorders in breast cancer patients. These psychiatric disorders lead to patients' maladaptive illness behavior, and worsen the disease course and the treatment outcomes[26]. However, these psychiatric disorders in cancer patients seem to be ignored and left untreated[27]. Understanding these common psychiatric disorders and associated psychosocial factors found in breast cancer patients can help to plan for effective treatment of these patients and may result in more treatment success.

The present study was aimed to identify the prevalence and associated psychosocial factors of anxiety and depressive disorders in breast cancer patients. The psychosocial factors in the present study focused on social support, family relationship and functioning, and problem and conflict solving.

Material and Method

The samples consisted of 300 female breast cancer patients, aged above 18 years old, recruited from the Surgical Outpatient Department, King Chulalongkorn Memorial Hospital from December 2006 to May 2007. The approval for the present study was obtained from the Ethical Committees, the Institutional Review Board of Faculty of Medicine, Chulalongkorn University. All the samples were informed of the objectives and method of the present study. They volunteered to participate in the study and gave their written, informed consents. All the samples completed five questionnaires; 1) Demographic data and history form, 2) Thai Hospital Anxiety

and Depression Scale (Thai HADS), 3) Social Support Questionnaire, 4) Family Relationship and Functioning Questionnaire, 5) Problem and Conflict Solving Questionnaire.

Thai Hospital Anxiety and Depression Scale (Thai HADS) was translated from the HADS, a widely used instrument for detection of anxiety and depression in hospital medical clinics[28,29]. The validity and reliability test of Thai HADS showed that it had good validity and reliability for use in Thai cancer patients[27]. It is composed of 14 items; seven items for anxiety subscale (Chronbach's alpha coefficient, $\alpha = 0.86$) and seven items for depression subscale ($\alpha = 0.83$). The total scores of each subscale range from 0 to 21. The scores 0-7 indicate no anxiety or depression, 8-10 indicate anxiety or depressive symptoms (doubtful cases), and 11-21 indicate cases of anxiety or depressive disorders. Social Support Questionnaire, developed by the Schaefer's concept of social support[19], is composed of three subscales; 1) emotional support (7 items, $\alpha = 0.91$), 2) informational support (4 items, $\alpha = 0.88$), and 3) tangible or material support (5 items, $\alpha = 0.87$). Family Relationship and Functioning Questionnaire, composed of seven items, was developed from literature review and already tested for its validity and reliability ($\alpha = 0.93$). Problem and Conflict Solving Questionnaire, composed of five items, was adapted from the Baseline Interpersonal Questionnaire (Interpersonal Role Disputes) of Weissman and Verdeli's[30] and already tested for its validity and reliability ($\alpha = 0.88$). Higher scores of three psychosocial variables indicate strong social support, good family relationship and functioning, and adaptive problem and conflict solving.

The data analysis was performed by using SPSS version 11.5 software. The prevalence of anxiety and depression in breast cancer was presented in proportion and percentage. Three groups of breast cancer patients; 1) no anxiety / depression, 2) anxiety / depressive symptoms, 3) anxiety / depressive disorder, were compared on psychosocial factors (social support, family relationship and functioning, and problem and conflict solving) by one-way analysis of variance (ANOVA) test, demographic and clinical factors by Chi-square test. Significant factors from theoretical review and univariate analysis were entered into binary logistic regression model (Odds ratio: OR and 95% CI) in order to identify the potential predictors of anxiety and depression in breast cancer. A p-value of less than 0.05 was considered statistically significant.

Results

There were 300 female breast cancer patients, aged 20-80 years, in the present study. Most of them (193 patients, 64.3%) were in the age range of 41-60 years (mean age 50.09, SD 11.01). One hundred and sixty-six patients (55.3%) lived with their spouses, 89 (29.7%) were single, and 45 (15.0%) were separated, widowed, or divorced. Most of them were educated (secondary school: 111 patients, 37.0%; bachelor's degree and higher: 130 patients, 43.3%) and employed (government and state enterprise: 112 patients, 37.3%; business, employee, and laborer: 134 patients, 44.7%). Two hundred and seven patients (69.0%) had an income of 10,000 baht per month or above. Most of them lived in Bangkok and central region (264 patients, 88.0%).

About the history of breast cancer, 138 patients (46.0%) had duration of illness less than two years; 162 (54.0%), 2 years or more. Most of them (88.0%) had 1-2 times of hospital admission. The disturbing symptoms of breast cancer, i.e. fatigue, anorexia, bone pain, ulcers; were found in 147 patients (49.0%). Two hundred and eight patients (69.3%) experienced the treatment complications, such as hair loss, anorexia, nausea and vomiting, fatigue, and flushing.

Regarding prevalence of anxiety and depression by using Thai HADS, 48 patients (16.0%) had anxiety disorder and 57 (19.0%) had anxiety symptoms

Table 1. Psychosocial variables (social support, family relationship and functioning, and problem and conflict solving) of breast cancer patients

Score (n = 300)	Minimum	Maximum	Mean	Standard deviation
Social support (0-80)	32	80	62.20	9.37
1) Emotional support (0-35)	14	35	28.09	4.66
2) Informational support (0-20)	6	20	16.81	3.13
3) Tangible support (0-25)	5	25	17.31	4.35
Family relationship and functioning (0-35)	9	35	28.25	4.93
Problem and conflict solving (0-25)	6	25	17.18	4.00

(doubtful cases). Twenty-seven patients (9.0%) had depressive disorder and 50 patients (16.7%) had depressive symptoms (doubtful cases). Therefore, the prevalence of anxiety disorder was 16.0%, and that of anxiety symptoms was 19.0%. The prevalence of depressive disorder was 9.0%, and that of depressive symptoms was 16.7%.

The scores of psychosocial variables (social support, family relationship and functioning, and problem and conflict solving) are shown in Table 1. The mean score of social support was 62.20 (full score = 80) (SD = 9.37); family relationship and functioning, 28.25 (full score = 35) (SD = 4.93); problem and conflict solving; 17.18 (full score = 25) (SD = 4.00). All the mean scores of psychosocial variables were in high moderate level.

Regarding associated factors, three groups of breast cancer patients; 1) no anxiety / depression, 2) anxiety / depressive symptoms, 3) anxiety / depressive disorder, were compared on three psychosocial variables

Table 2. Psychosocial and clinical factors in three groups of anxiety in breast cancer patients

Factors	No anxiety (n = 195)	Anxiety symptoms (n = 57)	Anxiety disorder (n = 48)	p-value
	Mean, SD	Mean, SD	Mean, SD	
Psychosocial factors				
- Social support (full score = 80)	63.92, 9.04	60.11, 8.25	57.73, 10.09	<0.001**
1) Emotional support (full score = 35)	28.72, 4.47	27.12, 4.71	26.64, 4.95	0.005**
2) Informational support (full score = 20)	17.13, 3.11	16.70, 2.58	15.63, 3.59	0.011*
3) Tangible support (full score = 25)	18.06, 4.19	16.28, 4.53	15.46, 4.03	<0.001**
- Family relationship and functioning (full score = 35)	29.44, 4.60	27.33, 3.89	24.52, 5.34	<0.001**
- Problem and conflict solving (full score = 25)	18.04, 3.90	16.33, 3.93	14.71, 3.23	<0.001**
Clinical factors				
- Number of hospital admission				
1- 2	182 (93.3%)	49 (86.0%)	33 (68.8%)	<0.001**
3 or more	13 (6.7%)	8 (14.0%)	15 (31.3%)	
- Disturbing symptoms				
Pain:				
No	126 (64.6%)	27 (47.4%)	16 (33.3%)	<0.001**
Yes	69 (35.4%)	30 (52.6%)	32 (66.7%)	
Respiratory symptoms:				
No	134 (68.7%)	31 (54.4%)	19 (39.6%)	<0.001**
Yes	61 (31.3%)	26 (45.6%)	29 (60.4%)	
Ulcers:				
No	177 (90.8%)	45 (79.0%)	36 (75.0%)	0.004**
Yes	18 (9.2%)	12 (21.1%)	12 (25.0%)	
Fatigue:				
No	168 (86.2%)	42 (73.7%)	29 (60.4%)	<0.001**
Yes	27 (13.8%)	15 (26.3%)	19 (39.6%)	
- Treatment complications				
Arm paresthesia:				
No	124 (63.6%)	28 (49.1%)	21 (43.8%)	0.016*
Yes	71 (36.4%)	29 (50.9%)	27 (56.3%)	
Hair loss:				
No	113 (58.0%)	25 (43.9%)	19 (39.6%)	0.027*
Yes	82 (42.1%)	32 (56.1%)	29 (60.4%)	
Anorexia:				
No	121 (62.1%)	22 (38.6%)	19 (39.6%)	0.001**
Yes	74 (38.0%)	35 (61.4%)	29 (60.4%)	

* $p < 0.05$, ** $p < 0.01$

by one-way ANOVA test, clinical and demographic variables by Chi-square test. The results of associated factors of anxiety and depression are presented in Table 2-3. The mean scores of all psychosocial variables in three groups of anxiety / depression were statistically different ($p < 0.01$). This showed that social support, family relationship and functioning, problem and conflict solving were associated to anxiety and depression in breast cancer patients. Among clinical factors, the number of hospital admissions and the presence of disturbing symptoms were associated with both anxiety and depression in breast cancer patients ($p < 0.01$). Pain, respiratory symptoms: cough and dyspnea, and fatigue were disturbing physical symptoms associated with anxiety and depression in breast cancer patients ($p < 0.01$). The presence of treatment complications was associated with anxiety ($p < 0.05$), but not to depression. No association was found between demographic variables and anxiety and depression in breast cancer patients.

Table 3. Psychosocial and clinical factors in three groups of depression in breast cancer patients

Factors	No depression (n = 223)	Depressive symptoms (n = 50)	Depressive disorder (n = 27)	p-value
	Mean, SD	Mean, SD	Mean, SD	
Psychosocial factors				
- Social support (full score = 80)	63.78, 8.89	58.78, 8.19	55.56, 10.85	<0.001**
1) Emotional support (full score = 35)	28.63, 4.51	26.66, 4.42	26.26, 5.47	0.002**
2) Informational support (full score = 20)	17.20, 2.94	16.46, 2.98	14.26, 3.73	<0.001**
3) Tangible support (full score = 25)	17.95, 4.28	15.66, 4.09	15.04, 3.88	<0.001**
- Family relationship and functioning (full score = 35)	29.25, 4.45	26.26, 4.18	23.70, 6.35	<0.001**
- Problem and conflict solving (full score = 25)	17.96, 3.95	15.00, 3.02	14.85, 3.73	<0.001**
Clinical factors				
- Number of hospital admission				
1- 2	204 (91.5%)	45 (90.0%)	15 (55.6%)	<0.001**
3 or more	19 (8.5%)	5 (10.0%)	12 (44.4%)	
- Disturbing symptoms				
Pain:				
No	142 (63.7%)	19 (38.0%)	8 (29.6%)	<0.001**
Yes	81 (36.3%)	31 (62.0%)	19 (70.4%)	
Respiratory symptoms:				
No	147 (65.9%)	27 (54.0%)	10 (37.0%)	0.007**
Yes	76 (34.1%)	23 (46.0%)	17 (63.0%)	
Anorexia:				
No	134 (60.1%)	23 (46.0%)	11 (40.7%)	0.047*
Yes	89 (39.9%)	27 (54.0%)	16 (59.3%)	
Fatigue:				
No	186 (83.4%)	37 (74.0%)	16 (59.3%)	0.007**
Yes	37 (16.6%)	13 (26.0%)	11 (40.7%)	
- Treatment complications				
Arm paresthesia:				
No	136 (61.0%)	25 (50.0%)	12 (44.4%)	0.126
Yes	87 (39.0%)	25 (50.0%)	15 (55.6%)	
Hair loss:				
No	124 (55.6%)	23 (46.0%)	10 (37.0%)	0.117
Yes	99 (44.4%)	27 (54.0%)	17 (63.0%)	
Anorexia:				
No	128 (57.4%)	23 (46.0%)	11 (40.7%)	0.120
Yes	95 (42.6%)	27 (54.0%)	16 (59.3%)	

* $p < 0.05$, ** $p < 0.01$

After performing the univariate analysis, the statistically significant factors ($p < 0.05$) were entered into the logistic regression model to identify the predictors of anxiety and depression. In this stage, poor social support and number of hospital admissions was dropped from the model. The four remaining predictors of anxiety and depression were poor family relationship and functioning ($p < 0.05$), maladaptive problem and conflict solving ($p < 0.05$), and symptoms of pain ($p < 0.01$) and fatigue ($p < 0.05$) (Table 4-5).

Discussion

From the demographic characteristics, most of the breast cancer patients in the present study were educated and employed. Most of them had affordable money and lived in Bangkok and central region. From the clinical data, nearly half of the patients (46.0%) had duration of illness less than two years while the other half (54.0%) had duration of illness of 2 years or more. This showed that the samples in the present study had rather good socioeconomic status, and varied duration of illness.

Regarding psychiatric disorders in breast cancer, anxiety and depressive disorders are the two common psychiatric disorders[4,5,31]. From one study, prevalence of anxiety in breast cancer patients was high up to 49%, and that of depressive disorder was high up to 46%[7,8]. Breast cancer is considered as the dreadful disease for women due to high mortality rate. Besides, all the stages of disease and treatment procedures, surgical or adjuvant treatments, result in women's psychological reactions[4,5,22]. Women with breast cancer may perceive the grief or loss of their femininity, or their damaged body, self-image, sexuality,

Table 4. Psychosocial and clinical predictors of anxiety in breast cancer patients

Factors	Adjusted OR	95% CI of OR		p-value
		Lower	Upper	
Psychosocial factors				
Poor social support	2.06	0.89	4.78	0.093
Poor family relationship and functioning	2.04	1.24	5.81	0.024*
Poor problem and conflict solving	6.11	2.76	13.56	<0.001**
Clinical factors				
Number of hospital admission	1.03	0.38	2.82	0.950
Disturbing symptoms				
Pain	2.81	1.40	5.65	0.004**
Fatigue	2.58	1.02	6.68	0.045*

* $p < 0.05$, ** $p < 0.01$

Table 5. Psychosocial and clinical predictors of depression in breast cancer patients

Factors	Adjusted OR	95% CI of OR		p-value
		Lower	Upper	
Psychosocial factors				
Poor social support	1.82	0.77	4.29	0.169
Poor family relationship and functioning	2.51	1.08	5.81	0.032*
Poor problem and conflict solving	2.67	1.21	5.87	0.015*
Clinical factors				
Number of hospital admission	1.04	0.34	3.17	0.952
Disturbing symptoms				
Pain	3.84	1.81	8.15	<0.001**
Fatigue	3.44	1.17	10.10	0.024*

* $p < 0.05$, ** $p < 0.01$

or even intimate relationships[4,22]. They may have various psychological reactions at different stages of illness[4,5,22], such as denial and anger at the initial stage; anxiety and depression at the later stage. During the stages of disease or treatment, many breast cancer patients may suffer from their symptoms and may experience the treatment complications. Many patients are afraid of the disease's relapse or recurrence and may live with these uncertainties[22]. From previous studies, the prevalence of anxiety disorder in breast cancer patients ranged from 1 to 49%[8], and that of depression in breast cancer ranged from 1.5 to 46%[7,8]. The wide range prevalence of anxiety and depression found in breast cancer was due to the different stages of disease, the different time of evaluation, the different measurements, and different population studied[7,8]. The prevalence of anxiety and depressive disorders was high up to 50% from the studies of the hospitalized breast cancer patients[32], while those of the ambulatory breast cancer patients ranged from 9 to 20%[33-37]. For the present study, the study was conducted by using Thai HADS and the samples were the ambulatory outpatients. The results showed that the prevalence of anxiety disorder was 16.0%; depressive disorder, 9.0%. The prevalence of anxiety symptoms (or doubtful cases) was 19.0%; depressive symptoms (or doubtful cases), 16.7%. The result of the present study was similar to to previous studies of ambulatory patients[33-37].

Regarding psychosocial factors, all the scores of psychosocial variables were in high moderate level. This reflected that the patients in the present study had rather good social support, family relationship and functioning, and adaptive problem and conflict solving. Comparing these psychosocial variables among three groups of anxiety and depression, the mean scores of all psychosocial variables were statistically different ($p < 0.01$). The patients with anxiety or depressive disorders had the lowest mean scores of these psychosocial variables, while those without anxiety or depressive symptoms had the highest mean scores of these variables. The lower scores of these psychosocial variables were associated with higher anxiety or depression. The results of these associations were consistent with previous studies concerning associated psychosocial factors of anxiety and depressive disorders.

Regarding clinical and demographic factors, the factors associated with anxiety or depressive disorders were the number of hospital admissions, the presence of disturbing symptoms, and the presence of treatment complications ($p < 0.01$). The disturbing physical symptoms associated with anxiety and depression were pain, respiratory symptoms, and fatigue ($p < 0.01$). These findings were consistent with previous studies[7]. The higher number of hospital admissions and the presence of disturbing symptoms may indicate the advanced stage of disease, and may increase the risk of anxiety and depression[7]. The presence of disturbing physical symptoms and treatment complications increases the patients' discomfort, suffering, or body disfiguring, and limits patients' activities and social contact. This may increase the patients' risk of anxiety and depression.

By the binary logistic regression analysis, the remaining predictors of anxiety and depressive disorders were poor family relationship and functioning ($p < 0.05$), maladaptive problem and conflict solving ($p < 0.05$), and symptoms of pain ($p < 0.01$) and fatigue ($p < 0.05$). Social support was dropped from the model when performing regression analysis. The present result may be explained by the significantly positive correlation between social support and family relationship and functioning ($r = 0.455$, $p < 0.01$), and coping or problem solving ($r = 0.552$, $p < 0.01$). This means strong social support was correlated to good family relationship and functioning, and adaptive problem or conflict solving. From the previous study, strong social support promotes the person's adaptive coping and ability to encounter the life changes or stressful life events[25]. Although social support may help to reduce psychological stress, some emotionally distressed women may not be able to effectively use their positive social resources, and seem not to benefit from this network[38]. Emotionally distressed women may receive greater benefit from their families' support than general social support. From these reasons, family relationship and functioning and problem and conflict solution were stronger predictors of anxiety and depression than social support. When entering all these psychosocial variables into the regression analysis, the social support was dropped from the regression model.

Regarding the disturbing symptoms, pain and fatigue were the predictors of anxiety and depression in breast cancer patients. From the previous studies, pain, fatigue, tiredness, weakness, and reduced energy were common somatic symptoms found in cancer patients[39-43]. Pain and fatigue were the two leading symptoms reported by cancer patients, with a prevalence of nearly 80% in some tumor types[41]. All these symptoms could be symptoms related to cancer, or symptoms after surgery or chemotherapy or radiotherapy, or symptoms of anxiety or depression or

somatization in cancer patients[41-44]. All these somatic symptoms make difficulty in diagnosis of anxiety and depression, and complicate the treatment and outcome of cancer[40]. Besides that increasing patients' discomfort and suffering, these symptoms were reported as the major obstacles to patients' normal functioning and a good quality of life[41-43]. From these reasons, symptoms of pain and fatigue increase the risk of anxiety and depression.

Strong social support, good family relationships or high family functioning, and adaptive problem or conflict solving style are positive person's resources and protective factors of psychiatric morbidities. Social support helps to buffer the impacts of stress on a person's life, especially when experiencing a life crisis such as a serious illness or cancer[25]. However, the most important support that a person's needs when experiencing a cancer was the emotional support, especially from their spouses or partners, children, and relatives. Good family relationship and functioning seems to be very important for cancer patients[21,45]. Adaptive problem solving or coping style also helps to reduce psychological stress when experiencing life stress, such as having cancer. Therefore, strong social support, good family relationship and functioning, and adaptive problem solving were associated with less anxiety and depression[22-25]. Promoting patients' social support, especially emotional support from family, and enhancing patient's coping skills may help to reduce the patients' psychological stress and psychiatric morbidities. Treatment procedures in the breast cancer patients should also focus on reduction of patients' disturbing symptoms such as adequate pain control, and lessening the treatment complications. Moreover, being alert to patients' emotional reactions and potential psychiatric disorders is essential, and if necessary, referring them to the psychiatrists. Besides adequate psychopharmacological treatment, psychosocial interventions and psychotherapies help to reduce anxiety and depression, and symptoms of pain or fatigue[26].

Regarding limitations of the study, the findings of the present study should be interpreted or generalized in the context of ambulatory, outpatient setting in which the disease severity may have some influence on the patients' level of anxiety or depression.

Conclusion

In the present study, the prevalence of anxiety disorder in breast cancer patients was 16.0% and that of depressive disorder was 9.0%. Poor social support, poor family relationships and functioning, and maladaptive problem and conflict solving, higher number of admissions, presence of disturbing symptoms, and presence of treatment complications were associated with anxiety and depression in breast cancer patients. By logistic regression analysis, the strong predictors of anxiety and depression in breast cancer patients included poor family relationship and functioning, maladaptive problem and conflict solving, and presence of pain and fatigue.

Acknowledgement

The author wish to thank Assistant Professor Dr. Thana Nilchaikovit, MD and his colleagues who allowed the use of the Thai Hospital Anxiety and Depression Scale (Thai HADS) for the present study.

References

1. Hortobagyi GN, de la Garza SJ, Pritchard K, Amadori D, Haidinger R, Hudis CA, et al. The global breast cancer burden: variations in epidemiology and survival. Clin Breast Cancer 2005; 6: 391-401.
2. Key TJ, Verkasalo PK, Banks E. Epidemiology of breast cancer. Lancet Oncol 2001; 2: 133-40.
3. Yankaskas BC. Epidemiology of breast cancer in young women. Breast Dis 2005; 23: 3-8.
4. Schover LR. The impact of breast cancer on sexuality, body image, and intimate relationships. CA Cancer J Clin 1991; 41: 112-20.
5. Oktay JS. Psychosocial aspects of breast cancer. Lippincotts Prim Care Pract 1998; 2: 149-59.
6. Rabinowitz B. Psychosocial issues in breast cancer. Obstet Gynecol Clin North Am 2002; 29: 233-47.
7. Morasso G, Costantini M, Viterbori P, Bonci F, Del Mastro L, Musso M, et al. Predicting mood disorders in breast cancer patients. Eur J Cancer 2001; 37: 216-23.
8. Massie MJ. Prevalence of depression in patients with cancer. J Natl Cancer Inst Monogr 2004; 57-71.
9. Morris T, Greer HS, White P. Psychological and social adjustment to mastectomy: a two-year follow-up study. Cancer 1977; 40: 2381-7.
10. Meyer L, Aspegren K. Long-term psychological sequelae of mastectomy and breast conserving treatment for breast cancer. Acta Oncol 1989; 28: 13-8.
11. Taylor SE, Lichtman RR, Wood JV, Bluming AZ, Dosik GM, Leibowitz RL. Illness-related and treatment-related factors in psychological adjustment to breast cancer. Cancer 1985; 55: 2506-13.

12. Dean C. Psychiatric morbidity following mastectomy: preoperative predictors and types of illness. J Psychosom Res 1987; 31: 385-92.
13. Fallowfield LJ, Baum M, Maguire GP. Effects of breast conservation on psychological morbidity associated with diagnosis and treatment of early breast cancer. Br Med J (Clin Res Ed) 1986; 293: 1331-4.
14. Dorval M, Maunsell E, Deschenes L, Brisson J. Type of mastectomy and quality of life for long term breast carcinoma survivors. Cancer 1998; 83: 2130-8.
15. Harrison J, Maguire P. Predictors of psychiatric morbidity in cancer patients. Br J Psychiatry 1994; 165: 593-8.
16. Weinert C, Tilden VP. Measures of social support: assessment of validity. Nurs Res 1990; 39: 212-6.
17. Brandt PA, Weinert C. The PRQ - a social support measure. Nurs Res 1981; 30: 277-80.
18. Cobb S. Presidential Address-1976. Social support as a moderator of life stress. Psychosom Med 1976; 38: 300-14.
19. Schaefer C, Coyne JC, Lazarus RS. The health-related functions of social support. J Behav Med 1981; 4: 381-406.
20. Williams TR, O'Sullivan M, Snodgrass SE, Love N. Psychosocial issues in breast cancer. Helping patients get the support they need. Postgrad Med 1995; 98: 97-104, 107-8.
21. Sternai E, D'Avanzo B, Di Giulio P, Ferrario R. Psychological and social support for patients with mastectomies. Riv Inferm 1996; 15: 131-41.
22. Ashby MA, Kissane DW, Beadle GF, Rodger A. Psychosocial support, treatment of metastatic disease and palliative care. Med J Aust 1996; 164: 43-9.
23. Makabe R, Nomizu T. Social support and psychological and physical states among Japanese patients with breast cancer and their spouses prior to surgery. Oncol Nurs Forum 2006; 33: 651-5.
24. Ozono S, Saeki T, Inoue S, Mantani T, Okamura H, Yamawaki S. Family functioning and psychological distress among Japanese breast cancer patients and families. Support Care Cancer 2005; 13: 1044-50.
25. Drageset S, Lindstrom TC. Coping with a possible breast cancer diagnosis: demographic factors and social support. J Adv Nurs 2005; 51: 217-26.
26. Spiegel D. Cancer and depression. Br J Psychiatry Suppl 1996; 109-16.
27. Nilchaikovit T, Lotrakul M, Phisansuthideth U. Development of Thai version of Hospital Anxiety and Depression Scale in cancer patients. J Psychiatr Assoc Thai 1996; 41: 18-30.
28. Zigmond AS, Snaith RP. The hospital anxiety and depression scale. Acta Psychiatr Scand 1983; 67: 361-70.
29. Snaith RP, Zigmond AS. The hospital anxiety and depression scale. Br Med J (Clin Res Ed) 1986; 292: 344.
30. Weissman MM, Markowitz JC, Klerman GL. Comprehensive guide to interpersonal psychotherapy. New York: Basic Books; 2000: 75-88.
31. Okamura M, Yamawaki S, Akechi T, Taniguchi K, Uchitomi Y. Psychiatric disorders following first breast cancer recurrence: prevalence, associated factors and relationship to quality of life. Jpn J Clin Oncol 2005; 35: 302-9.
32. Lasry JC, Margolese RG, Poisson R, Shibata H, Fleischer D, Lafleur D, et al. Depression and body image following mastectomy and lumpectomy. J Chronic Dis 1987; 40: 529-34.
33. Fallowfield LJ, Hall A, Maguire GP, Baum M. Psychological outcomes of different treatment policies in women with early breast cancer outside a clinical trial. BMJ 1990; 301: 575-80.
34. Maguire GP, Lee EG, Bevington DJ, Kuchemann CS, Crabtree RJ, Cornell CE. Psychiatric problems in the first year after mastectomy. Br Med J 1978; 1: 963-5.
35. Silberfarb PM, Maurer LH, Crouthamel CS. Psychosocial aspects of neoplastic disease: I. Functional status of breast cancer patients during different treatment regimens. Am J Psychiatry 1980; 137: 450-5.
36. Hopwood P, Howell A, Maguire P. Screening for psychiatric morbidity in patients with advanced breast cancer: validation of two self-report questionnaires. Br J Cancer 1991; 64: 353-6.
37. Hopwood P, Howell A, Maguire P. Psychiatric morbidity in patients with advanced cancer of the breast: prevalence measured by two self-rating questionnaires. Br J Cancer 1991; 64: 349-52.
38. Palesh OG, Shaffer T, Larson J, Edsall S, Chen XH, Koopman C, et al. Emotional self-efficacy, stressful life events, and satisfaction with social support in relation to mood disturbance among women living with breast cancer in rural communities. Breast J 2006; 12: 123-9.
39. Winell J, Roth AJ. Psychiatric assessment and symptom management in elderly cancer patients. Oncology (Williston Park) 2005; 19: 1479-90.
40. Chaturvedi SK, Peter MG, Somashekar BS.

Somatization in cancer. Int Rev Psychiatry 2006; 18: 49-54.
41. Theobald DE. Cancer pain, fatigue, distress, and insomnia in cancer patients. Clin Cornerstone 2004; 6(Suppl 1D): S15-21.
42. Tavio M, Milan I, Tirelli U. Cancer-related fatigue (review). Int J Oncol 2002; 21: 1093-9.
43. Barnes EA, Bruera E. Fatigue in patients with advanced cancer: a review. Int J Gynecol Cancer 2002; 12: 424-8.
44. Spiegel D, Giese-Davis J. Depression and cancer: mechanisms and disease progression. Biol Psychiatry 2003; 54: 269-82.
45. Picard L, Dumont S, Gagnon P, Lessard G. Coping strategies among couples adjusting to primary breast cancer. J Psychosoc Oncol 2005; 23: 115-35.

ความชุกและปัจจัยทางจิตสังคมของโรควิตกกังวลและโรคซึมเศร้าในผู้ป่วยมะเร็งเต้านม

พีรพนธ์ ลือบุญธวัชชัย

ภูมิหลัง: *มะเร็งเต้านมเป็นมะเร็งที่พบบ่อยที่สุดในเพศหญิง ถือว่าเป็นโรคที่น่ากลัวจากอัตราการเสียชีวิตที่สูง และผลกระทบที่มีต่อภาพลักษณ์ของตนเองและเพศสัมพันธ์ ผู้ป่วยหลายรายมีปฏิกิริยาทางจิตใจและอาจจะเกิดการเจ็บป่วยทางจิตเวช โดยเฉพาะโรควิตกกังวลและโรคซึมเศร้า แม้ว่าโรควิตกกังวลและโรคซึมเศร้าจะพบบ่อยในมะเร็งเต้านม และทำให้การดำเนินของโรคและผลการรักษาแย่ลง แต่ก็ยังถูกละเลยและไม่ได้รับการดูแลรักษา การเข้าใจโรคทางจิตเวชเหล่านี้รวมถึงปัจจัยทางจิตสังคมที่เกี่ยวข้องจะช่วยในการวางแผนรักษาผู้ป่วยให้ประสบความสำเร็จยิ่งขึ้น*

วัตถุประสงค์: *เพื่อค้นหาความชุกและปัจจัยทางจิตสังคมที่เกี่ยวข้องของโรควิตกกังวล และโรคซึมเศร้าในผู้ป่วยมะเร็งเต้านม ปัจจัยทางจิตสังคมที่สำคัญในการศึกษาครั้งนี้ ได้แก่ การสนับสนุนทางสังคม ความสัมพันธ์และหน้าที่ของครอบครัว รวมถึงการแก้ไขปัญหาและความขัดแย้ง*

วัสดุและวิธีการ: *ศึกษาในผู้ป่วยหญิงที่เป็นมะเร็งเต้านม อายุตั้งแต่ 18 ปีขึ้นไป ในแผนกผู้ป่วยนอกของศัลยกรรม โรงพยาบาลจุฬาลงกรณ์ ตั้งแต่เดือนธันวาคม พ.ศ. 2549 – พฤษภาคม พ.ศ. 2550 จำนวน 300 ราย โดยการตอบแบบสอบถามทั้งหมด 5 ชุด ได้แก่ 1) แบบสอบถามข้อมูลส่วนบุคคลและการเจ็บป่วย 2) แบบสอบถามอาการวิตกกังวลและอาการซึมเศร้าในโรงพยาบาลฉบับภาษาไทย 3) แบบสอบถามการสนับสนุนทางสังคม 4) แบบสอบถามความสัมพันธ์และหน้าที่ของครอบครัว 5) แบบสอบถามการแก้ไขปัญหาและความขัดแย้ง นำเสนอความชุกของโรควิตกกังวลและโรคซึมเศร้าเป็นค่าร้อยละ วิเคราะห์ความสัมพันธ์ระหว่างปัจจัยทางจิตสังคม ทางข้อมูลส่วนตัว และทางคลินิกกับอาการวิตกกังวลและซึมเศร้า โดยใช้ ANOVA test สำหรับข้อมูลต่อเนื่อง และ Chi-square test สำหรับข้อมูลเชิงลักษณะ และวิเคราะห์ความถดถอยโลจิสติค เพื่อหาปัจจัยทำนายโรควิตกกังวลและซึมเศร้า โดยกำหนดนัยสำคัญทางสถิติไว้ที่ระดับน้อยกว่า 0.05*

ผลการศึกษา: *พบความชุกของโรควิตกกังวลเป็นร้อยละ 16.0 อาการวิตกกังวลเป็นร้อยละ 19.0 และความชุกของโรคซึมเศร้าเป็นร้อยละ 9.0 อาการซึมเศร้าเป็นร้อยละ 16.7 ปัจจัยที่สัมพันธ์กับอาการวิตกกังวลและอาการซึมเศร้า ได้แก่ ปัจจัยทางจิตสังคม (การสนับสนุนทางสังคม ความสัมพันธ์และหน้าที่ของครอบครัว และการแก้ไขปัญหาและความขัดแย้ง) ($p < 0.01$) จำนวนครั้งของการอยู่โรงพยาบาล และอาการที่รบกวน ซึ่งได้แก่ อาการปวด อาการของทางเดินหายใจ และอาการเหนื่อยล้า ($p < 0.01$) ผลการวิเคราะห์ความถดถอยโลจิสติค พบว่า ปัจจัยทำนายอาการวิตกกังวลและอาการซึมเศร้า ได้แก่ ปัญหาความสัมพันธ์และหน้าที่ของครอบครัว ($p < 0.05$) วิธีการแก้ไขปัญหาและความขัดแย้งที่ไม่เหมาะสม ($p < 0.05$) อาการปวด ($p < 0.01$) และอาการเหนื่อยล้า ($p < 0.05$)*

สรุป: *โรควิตกกังวลและโรคซึมเศร้าเป็นโรคทางจิตเวชที่พบบ่อยในผู้ป่วยมะเร็งเต้านม ปัจจัยทำนายอาการวิตกกังวลและอาการซึมเศร้าที่สำคัญ ได้แก่ ปัญหาความสัมพันธ์และหน้าที่ของครอบครัว วิธีการแก้ไขปัญหาและความขัดแย้งที่ไม่เหมาะสม อาการปวด และอาการเหนื่อยล้า การส่งเสริมการสนับสนุนทางสังคมโดยเฉพาะการสนับสนุนด้านอารมณ์จากครอบครัว และการส่งเสริมทักษะการแก้ปัญหาที่เหมาะสมจะช่วยลดความเครียดทางจิตใจและการเจ็บป่วยทางจิตเวช การรักษาผู้ป่วยมะเร็งเต้านมควรมุ่งเน้นการลดอาการทางกายที่รบกวนผู้ป่วยด้วย เช่น การดูแลอาการปวดอย่างเต็มที่ และลดภาวะแทรกซ้อนของการรักษา และควรให้ความสนใจในปฏิกิริยาทางอารมณ์ที่เกิดขึ้นรวมถึงโรคทางจิตเวชที่อาจจะเกิดขึ้นด้วย*