Efficacy of Different Psychiatric Treatment Methods of Liaison Psychiatrist in Treatment of Women with Breast Cancer

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ABSTRACT

Being diagnosed with breast cancer is a traumatic event that can lead to development of different mental disorders and influences all aspects of affected woman’s life. Anxiety and Depressive Disorders in physically ill people still don’t have clear diagnostic criteria which make diagnosis and treatment very difficult since different psychiatric therapeutic approaches have different effects. The aim was to evaluate influence of separate and combined psychotherapeutic approach (psychodynamic and cognitive-behavioral) and psychopharmacotherapy on decrease of anxiety and depression in breast cancer patients. The sample consisted of 120 subjects divided into four groups. The first group of patients was treated with psychopharmacotherapy, the second group received psychotherapy, the third group was treated with the combination of psychopharmacotherapy and psychotherapy, and the fourth group of patients didn’t receive any kind of psychiatric treatment. We used psychotherapeutic interview with detailed clinical assessment using DSM-IV criteria for mental disorders, specially structured non-standardized questionnaire for assessment of etiological factors in development of mental disorders, Hamilton Anxiety Scale (HAM-A), Hamilton Depression Scale (HAM-D). The subjects filled the questionnaires on entry, one month and two months after the beginning of research. Psychotherapeutic treatment was conducted once a week. All of the therapeutic approaches of liaison psychiatrist applied in the treatment of women with breast cancer are successful in reduction of anxiety and depression. Liaison psychiatrist’s combined approach of psychopharmacological and psychotherapeutic treatment of breast cancer patients with depression obtained better results than separate approach.

Key words: breast cancer, liaison psychiatry, anxiety, depression

Introduction

Although treatment of breast cancer has significantly advanced in recent years, diagnosis and treatment of cancer still causes much distress¹–³. Affected women must face with future uncertainties, sometimes with very serious treatment side effects, the feeling of isolation, stigma and feeling of guilt, physical dysfunction and changes in body image⁴–¹⁰. Therapeutic approaches often additionally reinforce anxiety which then interferes with the treatment tolerance and the treatment procedure making patients more ambivalent towards therapy.

Even though anxiety is a normal reaction to stress, some people display more pronounced reactions and symptoms that overwhelm them and disrupt their everyday functioning¹¹. Enduring anxiety that induces difficulties in functioning is considered pathological if it lasts at least half a day for two weeks¹². Most studies have assessed prevalence of Anxiety Disorders in cancer patients to be between 15–28%¹³–¹⁵. There is a problem in diagnosing Anxiety Disorders in physically ill people¹⁶. The current DSM-IV classification of Anxiety and Depressive Disorders is based on physical symptoms which are not relevant in diagnosis of those disorders in somatic patients¹⁷. In cancer patients anxiety is accompanied with stronger reactions of autonomic nervous system than is the case in patients with chronic anxiety (i.e. Generalized Anxiety Disorder). Additionally, anxious and depressive symptoms usually present themselves together with an overlap¹⁸.
Physical symptoms of anxiety implicate many organ systems, particularly cardiovascular and gastrointestinal systems. Symptom overlapping may also include treatment side effects and symptoms of pain. Those symptoms include: palpitations, sweating, gastric pain, feeling of lack of air and choking, dizziness and paresthesias. Often, panic attacks appear after which there is a constant fear of their recurrence. Parasympathetic symptoms are usual as well, such as: abdominal discomfort, nausea, diarrhea, vegetative imbalance, loss of appetite and sexual interest.

Anxiety is associated with uneasy feeling, alertness, inhibition, irritability, inability to relax, sleeping difficulties. Patients are overwhelmed with ruminations concerning cancer, fears of physical destruction or death, and majority of them need help in overcoming those thoughts\textsuperscript{16,17}. Their thoughts are catastrophic and overgeneralizing. Their view of the situation is without control and with the feeling of helplessness. They seem worried and withdrawn.

Over time, after the completion of somatic treatment, patients are left without everyday support of medical staff, they are left by themselves and they develop additional mental difficulties, so that the need for psychiatric help is enhanced. Paradoxically, after the ending of somatic treatment, level of anxiety increases considerably which is connected with the loss of constant supervision over treatment and daily emotional support of medical staff\textsuperscript{17,18}.

Patients usually consider their mental problems as a normal reaction to the diagnosis of cancer, so they do not seek treatment\textsuperscript{19}. Sometimes the doctors who treat patients do not think about their mental difficulties and assume they do not require treatment which is a huge obstacle in mental wellbeing of those patients.

The patients' basic fear is the fear of painful dying. Additionally, there is a fear of disability, dependence, change of body image and physical functioning, and finally, there's a fear of losing important persons. Primary fears usually disappear after a few weeks with the help of support from family, friends and medical staff which brings hope in the treatment. Some patients retain high level of depression and anxiety that last for weeks and months. They cannot adapt and cope with the constant distress and they need psychiatric treatment.

Age of cancer onset, earlier emotional stability, coping skills, sense of control and support from the environment are of crucial importance for anxiety development\textsuperscript{20,21}. Anxiety is positively correlated with helplessness, fatality and anxious preoccupation, and negatively correlated with the fighting spirit\textsuperscript{22,23}.

Most cancer patients express anxiety as part of the Adjustment Disorder which appears at greater prevalence than is the case in chronically ill and the general population\textsuperscript{24}. Adjustment Disorder is the third most common reason for seeking psychiatric help (after depression and organic mental disorders)\textsuperscript{25}. The problem is, however, that diagnostic criteria for those diagnoses in somatic patients are also not clearly set\textsuperscript{24,25}.

There are numerous evidence of connection between cancer and development of depressive reactions, as well as of the influence of depression as a risk factor on the development of cancer\textsuperscript{26,27}. The range of mood disorders in cancer patients spans from sadness to Major Depressive Disorder\textsuperscript{28}. Frequency of depression rises with the progression of malignant disease. Some research state that 55% of terminally ill patients suffer from depression. Depression is connected with poor compliance, passivity, family dynamics disturbances, all of which additionally influences the course of cancer treatment. It is recommended that evaluation of every depressed cancer patient must include consideration of medical, endocrine and neurological factors as well as cognitive assessment\textsuperscript{29}. Patients should be actively listened to, allowing them to express all of their emotions, fears and anger in a setting which is not condemning, allowing them to experience feeling of control\textsuperscript{30–32}.

The preferred therapeutic approach to cancer patient treatment is a short supportive psychotherapy based on the crisis intervention model\textsuperscript{33,34}. This approach offers emotional support, provides information on how to overcome the crisis, emphasizes personal abilities and supports earlier successful problem solving strategies. Cancer patients (and their family members, if needed) are in treatment once a week with the aid of psychopharmacotherapy where needed\textsuperscript{35–38}. Cognitive-behavioral techniques include relaxation (most commonly progressive muscular relaxation), distraction and cognitive reprogramming\textsuperscript{39–42}. The communication with a cancer survivor who has gone through the treatment and is now considered cured is often of use\textsuperscript{43,44}.

**Purpose of research**

The object of this research is to evaluate the influence of different psychiatric treatment methods on anxiety and depression of women with newly diagnosed breast cancer.

**Subjects and Methods**

**Participants**

The sample consisted of 120 women treated at the Department of Oncology, University Hospital Center Osijek, and involved in a liaison psychiatric treatment.

Inclusion Criteria: female sex, age between 18–65, newly diagnosed breast cancer, radiotherapy as part of the cancer treatment, Hamilton depression scale (HAM-D) from $\geq 8$ to $\leq 24$ or values Hamilton anxiety scale (HAM-A) from $\geq 17$ to $\leq 30$, absence of severe physical ailments, no medical history of past or present psychotic disturbances, elementary school as the lowest educational level, adequate conversation ability, signed patients' informed consent.

Exclusion Criteria: unacceptance of participation in research as defined in patients' informed consent, presence of other severe physical diseases, pregnancy, breast-
feeding, positive history of past or present psychotic disorder, mental retardation, major personality disorder, permanent personality disorders, psychoactive substance or alcohol abuse during the last 3 months prior to the beginning of research, earlier participation in any form of psychotherapeutic treatment.

**Procedure**

Subjects were divided into four groups. Every group consisted of 30 subjects.

Subjects’ segregation was randomized by researcher-psychiatrist using the random numbers table.

First group was treated by psychopharmacotherapy.

Second group was treated by psychotherapy. This group of patients was further divided in two subgroups:
- A group of subjects treated by individual, dynamic oriented psychoanalytic therapy.
- A group of subjects treated by cognitive-behavioral psychotherapy.

Third group was treated by a combination of psychopharmacotherapy and psychotherapy. This group was further divided in two subgroups:
- A group of subjects treated by a combination of psychopharmacotherapy and dynamic oriented psychoanalytic therapy.
- A group of subjects treated by a combination of psychopharmacotherapy and cognitive-behavioral psychotherapy.

Fourth group was consisted of a control group which was not under any psychiatric treatment.

Psychotherapeutic procedures were conducted once a week for the first two months of research, and afterwards according to clinical presentation and subjects’ motivation up to a year in duration.

**Apparatus**

Prior to the beginning of the research, all subjects have signed an informed consent for the participation in research.

The research included:
1. Detailed clinical examination with psychiatric interview and implementation of diagnostic criteria according to DSM-IV for mental disorders.
2. Application of specifically structured no-standardized questionnaire for detailed assessment of possible etiological factors of subjects’ psychic disorder.
3. Assessment of subjects’ anxiety and depression using Hamilton Anxiety Scale\(^47\) and Hamilton Depression Scale\(^48\).

The measurements of anxiety and depression were performed three times: on the first day of research, one month and two months after the beginning of research. The research lasted for three years.

**Results**

**Demographic data**

The research included middle aged women. The average age of subjects was 56.52 years (minimum 24, maximum 65) with standard deviation 8.628. Most of them had a quadrant surgery on their breast (quadrantectomy) 51.67 %. Most of the questioned women had completed primary school or secondary school (90%), had steady employment (36.17%) or they were retired (28.34 %), but there were also students in the sample (2.5 %). Most subjects were from the rural area (59.17 %). Most of them were married (61.67 %) or widowed (27.5%) and had two (44.17 %) or three or more than three children (28.33 %).

Results showed there were no displaced persons or refugee’s status in most women (72.5%). Of the women who went through that traumatic experience, 36.4% have spent less than one year in refugees, and 24.2% more than seven years. Because of the small number of women who were in that category the fact is not statistically significant and, therefore, it had no greater influence on development of the strongest pathology. Most of the questioned women described the intensity of their psychical disorders as medium (48%), 26.7% of them described minimal intensity of psychical disorders, 16.7% strong, and psychical disorders that incapacitated them in their life or their activity was spotted in 9.2% of the questioned women.

**Analysis of anxiety according to HAM-A results**

The difference in results in all groups is statistically relevant between first and second measurement (p<0.0002) and between first and third measurement (p<0.0000) (Figure 1).
Statistical significance of results on HAM-A across groups and measurements is presented in Table 1.

**TABLE 1**

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<th>Statistical significance between groups (p&lt;)</th>
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*p>0.05

**Distribution of results on HAM-A depending on anxiety intensity and across groups**

The difference in results between measurements is statistically relevant (p<0.0000) (Figure 2). The difference in results between measurements is statistically relevant (p<0.0000) (Figure 3). The difference in results between measurements is statistically relevant (p<0.0000) (Figure 4). The difference in results between measurements is not statistically relevant (p=0.1889) (Figure 5).

**Analysis of anxiety according to HAM-D results**

The difference in results in all research groups was statistically significant between first and second measurement (p<0.0000) and between first and third measurement (p<0.0000) (Figure 6). Statistical significance of
results on ham-d across groups and measurements is presented in Table 2.

**TABLE 2**

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<th>Statistical significance between groups (p&lt;)</th>
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*p<0.05

**Distribution of results on HAM-D depending on depression intensity across groups**

The difference in results between measurements is statistically significant (p<0.0002) (Figure 7). The difference in results between measurements is statistically significant (p<0.0000) (Figure 8). The difference in results between measurements is statistically significant (p<0.0000) (Figure 9). The difference in results between measurements is not statistically significant (p<0.0989) (Figure 10).

**Discussion and Conclusion**

Breast cancer patients today have more treatment options, but their psychological reactions to cancer diagnosis have remained the same. Even though the breast cancer is a huge stress for any woman, there is a big difference in psychological response among them.

The subjects included in this research were in the course of their illness when they were still focused on the somatic disease and have received radiotherapy; therefore, the experience of the somatic illness was in the spotlight. They still haven’t become aware of majority of their mental difficulties, neither have they been able to verbalize them. They have considered them as a part of the ‘normal’ reaction. Anxiety is usually amplified by the perception of radiotherapy destroying their body. Many of them keep checking if the disease has returned or progressed, and they often have the need to avoid actuating situations such as vicinity of the hospital. Claustrophobic patients cannot bare treatment in small and confined spaces (radiotherapy).

At the beginning of this research, majority of patients in the combined treatment group (psychopharmacotherapy + psychotherapy) (73.37%) displayed medium level of anxiety, while at the end of the treatment, most of them were in the range of mild anxiety (86.67%). In the control
group the level of anxiety was rising (over 30%), but, never the less, some women expressed only mild symptoms of anxiety.

Analyzing the levels of anxiety according to HAM-A, the efficacy of all psychiatric therapeutic methods in treatment of women with breast cancer in comparison with the control group is evident. In the control group the anxiety level was increasing, while the intervention groups had a decrease in anxiety level over time. Combination of treatment, however, showed the best benefit.

Analyzing the levels of depression according to HAM-D, the efficacy of all psychiatric therapeutic methods in treatment of women with breast cancer in comparison with the control group is evident. In the control group the depression level was increasing, while the intervention groups had a decrease in depression level over time. Again, the combination of psychopharmacological and psychotherapeutic treatment demonstrated the best benefit.

In the group of subjects treated with the combination of psychotherapy and psychopharmacotherapy, most women (50%) belonged to a subgroup of moderate depression, followed by severe (30%) and mild (20%) depression. After only a month of treatment, the decrease of depression was evident. At the end of the research, 36.67% of women didn’t show symptoms of depression, 40% had mild depression, 20% moderate and 3.33% of patients had severe depression.

According to this research, psychopharmacological treatment demonstrated positive effect. Never the less, in comparison to combined additional psychotherapeutic treatment, the effect was smaller. Similarly, the psychotherapeutic methods showed efficiency, but to a lesser degree in comparison with combined additional psychopharmacologic treatment.

In the control group, which received no psychiatric treatment, at the beginning of research 46.67% of women showed moderate depression, 36.67% had mild depression, 13.33% had severe depression and only 3.33% of women showed no signs of depression. Over time, by the end of research 46% of women expressed severe depression, 30% moderate, 10% mild, and 15% of women were without symptoms of depression. There is an evident and worrying increase of severe forms of depressive responses which clearly require psychiatric treatment. But also, there are women who do not develop depression, and even show spontaneous remission of depressive symptoms over time!

Majority of women treated with psychopharmacotherapy received a combination of antidepressants and anxiolytics (71.67%). Anxiolytics as a monotherapy were administered in only 28.33% of cases.

Psychopharmacotherapeutics significantly reduce symptoms of anxiety and depression and as such can be of much use to patients. Therapeutic effects are even bigger if psychopharmacotherapy is understood as a tool in achieving stability of mental condition in which the patients will be more capable to accept additional psychotherapeutic treatment and assume more active attitude in treatment of their mental disorders. Considering coping mechanisms some of the subjects used in dealing with difficulties, a lot of them demonstrated the «fighting spirit» and were very active in combat with the disease using their own strengths. This study has demonstrated that additional psychotherapeutic treatment achieved even better results.

As it is often emphasized, psychiatric help cannot be provided to everybody (neither it is required by all, as the results of this study demonstrate), but it is important to diagnose women who do require treatment and offer it to them.4,5 Test ratings emphasize the need for screening so that the therapist can direct himself on women with severe mental difficulties which can be effectively treated as has been demonstrated by this research. Constant supervision and evaluation of patients’ condition is required throughout the course of illness because there are a lot of crisis states which can lead to amplification of anxiety, depression and other mental disorders.

REFERENCES

USPJEŠNOST RAZLIČITIH TERAPIJSKIH PRISTUPA KONZULTATIVNO-SURADNOG PSIHIJATRA U LIJEČENJU ŽENA S KARCINOMOM DOJKE

SAŽETAK

Obolijevanje od karcinoma dojke predstavlja traumatski događaj koji može dovesti do razvoja različitih psychiških poremećaja i utjecati na sve aspekte života oboljele žene. Anksiozni i depresivni poremećaji kod tjelesno bolesnih još uvijek nemaju jasno definirane kriterije što značajno otežava dijagnosticiranje i liječenje, a i različiti psihijatrijski terapijski pristupi imaju različite učinke. Cilj istraživanja bio je procijeniti utjecaj zasebnog i kombiniranog psihodinamske i kognitivno-bihevioralne terapije na smanjenje anksioznosti i depresivnosti u bolesnicima s karcinomom dojke. Uzorak je složen u četiri skupine.

Prva skupina ispitanica bila je liječena psihofarmakoterapijom, druga psihoterapijom, a treća kombiniranim (psihofarmakoterapijom i psihoterapijom). Četvrti skupini nije bilo potreba za psihijatrijskim terapijskim postupcima. Korišteni su psihoterapijski intervju s detaljnim kliničkim pregledom uz primjenu DSM-IV kriterija za psihičke poremećaje, posebno strukturirani nestandardizirani upitnik za procjenu etioloških primjenika u nastanku psihičkog poremećaja, Hamiltonova ljestvica za procjenu anksioznosti (HAM-A), Hamiltonova ljestvica za procjenu depresivnosti (HAM-D), koji su ispunjavale ljestvice nultog dana, nakon mjesec dana te dva mjeseca od početka istraživanja. Psihoterapijski postupci bili su provođeni jednom tjedno.

Istражникima, kombiniranim (psihofarmakoterapijom i psihoterapijom) postižu se bolji rezultati, nego zasebnom primjenom svakog od njih.