

ATTITUDE AND BELIEFS IN BREAST CANCER PATIENTS WITH MASTECTOMY

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ABSTRACT. According to rational emotional behavioral theory, the attitude and beliefs are considered to be the basis of affective disorders and an important source of emotional distress. The aim of our research is to examine how attitudes and beliefs of breast cancer patient with mastectomy impact quality of life, emotional status in terms of anxiety and depression, self-esteem, self-efficacy and post-traumatic growth. Materials and methods: the studied group was formed by 57 breast cancer patients with mastectomy. The assessment methods included psychometric tools in order to measure each dimension listed above. Results: high scores in attitudes and beliefs test (which means a high rationality) have a positive correlation with the quality of life, self-esteem, self-efficacy and post-traumatic growth. Negative correlations were found between rational attitudes and beliefs, associated with depression and anxiety. Conclusions and discussions: rational thinking decrease negative impact of mastectomy in women breast cancer; this leads to the idea that improving attitudes and beliefs of breast cancer patients through rational emotional behavioral techniques can help in adjustment to mastectomy.

Keywords: breast cancer, quality of life, attitudes and beliefs, depression, anxiety

INTRODUCTION

The trends in breast cancer surgery are directed by conservative interventions. However, a number of patients that is not qualified for conservative surgery must undergo to the mastectomy, according to surgical guidelines (BASO, 2009). Sometimes the mastectomy is not followed by the reconstruction of the breast; the women have to adapt themselves to losing one or both breasts. This can lead to emotional disturbance and stress. Researches in this field have inconsistent outcomes, but most of them underline the impact in quality of life, fears and concerns, marital status, sexual functioning, psychological and social adjustment (Polivy, 1977; Moyer, 1997) Some researchers suggest that the emotional outcome is highly individual after breast cancer surgery (Boughton, 2016). This is in agreement with cognitive-behavioral theories stating that individuals react to negative events according the way in which they process the event. (Beck, 1976; Ellis et al 2007).

Rational emotional behavioral theory (REBT) explains the psychological distress and the emotional disturbance as consequences of irrational beliefs. These are mainly demandingness from which result other irrational cognitions like awfulizing or catastrophizing, low frustration tolerance and global evaluation or self downing. Demandingness or absolutism is seen as a dogmatic and inflexible way of thinking in terms of "I

have to..", "I need...", "should", "must" (i.e. "I should not feel pain"). Awfulizing means that the individual thinks about situation as being horrible, a total disaster or a catastrophe. Low frustration tolerance is related to way of thinking like: "I can not stand it...", "I can not tolerate it...", which makes the situation to appear too difficult to be accepted. Negative global evaluation or self downing means that the person blames herself and thinks about the self as worthless and useless. Contrary, rational thinking is related to a flexible attitude towards the self, the others, the life and the world. When somebody think rational, absolute demanding are replaced by preferences; so, in stead of thinking "I need..." the individual may think "I want...", in stead "I have to...", he can think "I would like to..." and the emotional outcome will change. A negative event is evaluated rather unpleasant than a disaster or a catastrophe. Accepting unconditional the self, others and the world is the key to enhance the tolerance. Ellis said "*Rational individuals give both themselves and the others the right to be wrong*". Self evaluation without damnation and accepting the self is the rational alternative for global evaluation along with self downing (Ellis et al, 2007). Differences between irrational and rational beliefs consist in the fact that first ones do not meet the logical criteria, are inconsistent with reality and are dysfunctional (Maultsby, 1984).

In the general healthy population, the irrational attitude and beliefs (AB) are related to emotional distress, anxiety, depression and other cognitive distortions. The correlation with unconditional self-acceptance is negative (David, 2007).

In psycho-oncology field, we found qualitative studies about women's attitude and beliefs concerning mastectomy. They provide a description of women reality after mastectomy. In the studies women confess how thoughts about altered appearance shape their attitude. Patients often awfulize the diseases itself or subsequent body changes; they damned themselves and look at the self as being less feminine and worthless. Their testimonies are conclusive on how the new appearance affects quality of life and interfere psychological, sexual, social functioning

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This study is a quantitative research. We measured the rationality of our subjects and other variables like: depression and anxiety, emotional distress, quality of life, self-esteem, self-efficacy, unconditional self-acceptance, and post-traumatic growth. Our assumption is that a high rationality is related to a better emotional status and works in the case of breast cancer at women with mastectomy.

MATERIALS AND METHODS

The research took place in Clinic of Oncology Oradea, Bihor County, Romania. Screening for this research included a number of 60 breast cancer women, with unilateral or bilateral mastectomy which was not followed by breast reconstruction. Three of them did not accomplish all test and were excluded. At last, our study group was formed by 57 women.

Inclusion criteria that were taken into account: female gender, age between 22–64 yers old, non-metastatic breast cancer diagnostic, unilateral or bilateral mastectomy, least 6 month from surgery, compliance to psychological assessment, signing informed consent; exclusion criteria were: impaired hearing and eyesight, psychotic disorders, recurrence of disease during the research, withdrawal of informed consent.

Assessment methods

Attitude and Beliefs Scale, short version (ABSs) – measures the tendencies of individuals to “demandingness” and the other derived irrational beliefs. The scale refers to attitude and beliefs of an individual

about the self, the others and the life. It has 8 items (possible score vary from 0 to 32) and five classes (from very low rationality - class I to very high rationality - class V) (David, 2007).

Beck Depression Inventory (BDI) is based on Beck cognitive theory of depression in which negative thoughts about the self, the world, and the future are central. It has 21 items (Beck, 2012).

The Hamilton Anxiety Rating Scale (HRSA) assesses anxiety at four levels: cognitive, emotional, behavioral and physical. The scale has 14 items and score can vary from 0 to 48 (Hamilton, 2007).

Quality of Life Questionnaire QLQ C-30 is designed, validated and translated by EORTC and measures: global health status, physical functioning, role functioning, emotional functioning, cognitive functioning and social functioning, symptom as fatigue, nausea and vomiting, dyspnea, pain, insomnia, appetite loss, constipation, diarrhea, financial difficulties. A higher score represents a better level of functioning and a worse/higher level of symptoms (Aaronson et. al, 1991).

Quality of Life Questionnaire Breast Cancer Module QLQ – BR23 consists in 23 items in conjunction with QLQ C-30 and is designed, validated and translated by EORTC for measuring body image, sexual functioning, sexual enjoyment, future perspective and symptoms as systemic therapy side effects, breast symptoms, arm symptoms and upset by hair loss. A higher score represents a better level of functioning and a worse/higher level of symptoms (Sprangers et al, 1996).

Self-Efficacy Scale (SES) measures the beliefs that individual has the capacity to mobilize his cognitive, behavioral and motivations resources in order to reach a goal. It has 10 items (the score can vary from 10 to 40) and five classes (from very low self-efficacy - class I to very high - class V) (Schwarzer et. al, 2007).

Stress-Related Growth Scale (SRGS) is based on the idea that positive changes can occur as a result of the confrontation with the extreme negative events such is breast cancer. The scale has 15 items and possible score vary from 0 to 30 (Park et al, 2007).

Unconditional Self – Acceptance Questionnaire (USAQ) is based on Albert Ellis rational emotional behavioral theory and has 20 items. Possible scores vary between 20 (minimum score) and 140 (maximum score) and it has five classes (from very low unconditional self-acceptance - class I to very high - class V) (Chamberlain et al, 2007).

Emotional distress profile has 39 items describing two types of negative emotions: functional ones and dysfunctional. Emotions are rated on a scale from 1 to 5, according their intensity on last two weeks. Scores are divided in five normalized classes (David, 2007).

Rosenberg Self-Esteem Scale (SS) measures global and stabile self-evaluation 10 items. Scores may vary between 10 and 40 and scale has five classes (from very low self-esteem - class I to very high - class V) (Rosenberg, 2007).

Correlation calculation was made using non-parametric Spearman rank and obtaining of “rho” coefficient for each relation.

RESULTS AND DISCUSSION

The patients group has a mean age of 50.19, median age being 51.

Central tendency of our variables takes median into account because the distributions were asymmetric, and is presented in figure 1.

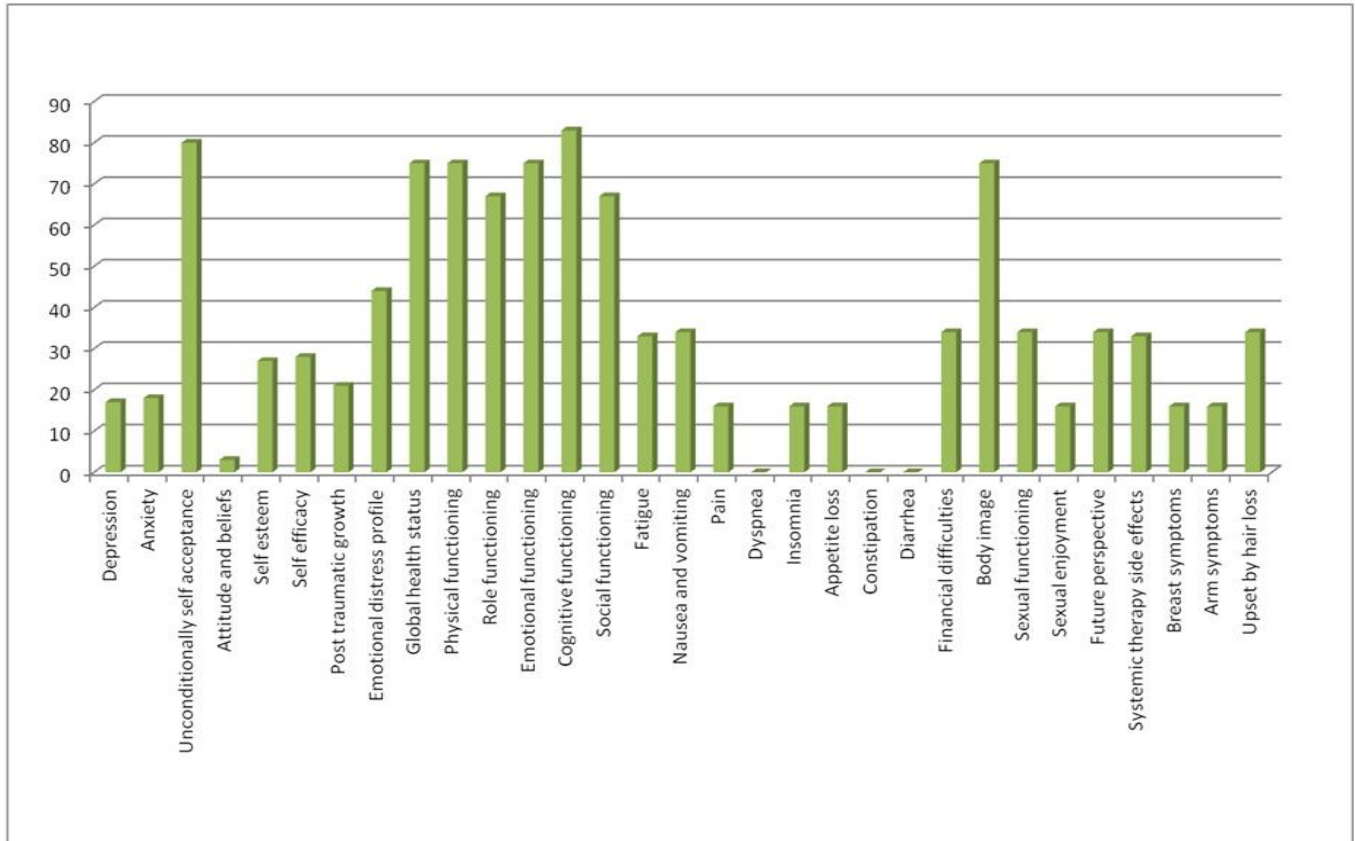


Fig. 1 Central tendency of measured variables

We can see high scores of depression and anxiety, low rationality, low self-esteem, no post-traumatic growth, high stress comparing to standards of general population. The quality of life is affected taking into account global health status, physical functioning, emotional, cognitive and social functioning, body image, financial difficulties, sexual activity and upset caused by the loss of hair. Physical symptoms as fatigue, nausea and vomiting, pain, insomnia, appetite loss are a common presence; in some cases, the patients suffer from dyspnea, constipation and diarrhea.

Higher scores of rationality have a negative correlation with depression scores, anxiety and stress. Correlations are positive with self-efficacy, unconditional self-acceptance, self-esteem and post-traumatic growth ($p < 0.001$) (table 1).

Table 1. Correlation between AB and psychological dimensions

Psychological dimensions	Attitude and beliefs
	rho
Depression	-.679**
Anxiety	-.638**

Self-esteem	.599**
Self-efficacy	.591**
Unconditional self-acceptance	.712**
Emotional stress profile	-.735**
Post traumatic growth	.644**

** $p < 0.01$

Attitude and beliefs do not correlate with physical functioning in general, but they have a strong negative correlation with fatigue, nausea and vomiting, insomnia, diarrhea, systemic therapy side-effects and breast symptoms growth ($p < 0.001$), pain and arm symptoms ($p < 0.05$). We found no correlation with dyspnea and constipation (table 2).

Table 2. Correlation between AB and physical symptoms

Physical symptoms	Attitude and beliefs
	rho
Physical functioning	.250
Fatigue	-.601**
Nausea and vomiting	-.417**
Pain	-.313
Dyspnea	-.223
Insomnia	-.590**

Appetite loss	-.471**
Constipation	-.110
Diarrhea	-.399**
Systemic therapy side effects	-.480**
Breast symptoms	-.419**
Arm symptoms	-.321

*p<0.05, **p<0.01

High rationality has a negative correlation with the upset caused by hair loss and significant correlation with the global health status and with all quality of life dimensions of functioning: role, emotional, cognitive social, sexual functioning, body image, sexual enjoyment and future perspective (p<0.001) (table 3).

Table 3. Correlation between AB and functioning

Functioning	Attitude and beliefs
	rho
Global health status	.373**
Role functioning	.502**
Emotional functioning	.583**
Cognitive functioning	.562**
Social functioning	.633**
Body image	.470**
Sexual functioning	.343**
Sexual enjoyment	.517**
Future perspective	.614**
Upset by hair loss	-.625**

**p<0.01

CONCLUSIONS

Rationality measured by attitude and beliefs may be a good predictor for how patients react to mastectomy.

The results of this study indicates that a low rationality is associated with depression, anxiety, and stress in the case of patients that have irrational cognitions. They tend to defeat themselves and awfuzing the disease; also, they often pretend that life have to be fair, do not accept what happened to them and have low tolerance to many frustrations that come along with the breast cancer and with the mastectomy.

Low rationality emphasizes even physical symptoms as pain, fatigue, diarrhea and some symptoms felt by patients in breast and arm. Chemotherapy has more intense systemic side effects and the patients with low irrationality are more upset by the hair loss.

Patients with high rationality consider themselves being more healthy, enjoy their sex-life, have a better body image and sleep well. They experience less stress, more functional emotions and better social functioning.

It is well known that we can improve patients rationality by using REBT techniques. We assume it would be better if the psychological counseling begins before the surgical intervention. In this case, the patients can be well prepared to face mastectomy and adjust to their new status.

A future research can study how attitude and beliefs influence the same variables when a conservative

surgery is done instead of radical mastectomy. We intend to study the same relations when it comes to the patients with mastectomy, followed by breast reconstruction.

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