

Management of hopelessness and coping among breast cancer patients

J Jeffrin Margreat

NS Rohini

Department of Psychology, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, Tamil Nadu, India

Department of Psychology, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, Tamil Nadu, India

The study on "management of hopelessness and coping among breast cancer patients" was conducted in Coimbatore Cancer Foundation in Kuppuswamy Naidu Memorial Hospital, Coimbatore by purposive sampling method. 75 breast cancer patients served as the sample. They were in the age range of 35-70 years under medication. The patients with high scores in Hopelessness and low in brief coping were selected for the study. The tools used for assessment were case study schedule, Beck hopelessness scale (Beck, 1978), and brief coping scale (Carver, 1997). The psychological intervention, "rational emotive behavior therapy" (REBT) was administered to the patients. After 15 days, the re-assessment was given using the same questionnaires. The results indicated a significant reduction in the mean hopelessness with increase in coping strategies. This clearly indicates the effect of REBT in coping among breast cancer patients.

AQ3,4

AQ5

Keywords: ???

Breast Cancer

This is the most common form of cancer and is the second leading cause of cancer-related death in women. About 1 in 10 women have a risk of developing breast cancer in their lifetime. It usually presents itself as a lump, a hardening, or dimpling of breast tissues. It is usually, but not always painless. 80-90% of all breast lumps are benign, but the final diagnosis of breast cancer has to be made with a biopsy (Ciesielski, 1992).

Symptoms

A woman is far more likely to discover a sign of breast cancer than her doctor, as she knows her own body better and if she does self-examination at least once a month. A lump or mass in the breast that was not there before is one sign. Similarly, symptoms like changes in breast symmetry or size; skin temperature or color, such as a small warm, hot or pink spot; dimpling or sores on the skin, and any unusual drainage or bloody discharges from the nipple need to be investigated. Scaliness, pain, or tenderness of the nipple may also indicate cancer. Pain should always be reported to the doctor, but it is generally not a sign of breast cancer unless the tumor is advanced (Hamann, 2001).

Investigation

A diagnosis of breast cancer can be done using the following methods:

- Mammography
- Ultrasounds
- ANE needle aspiration cytology
- Core biopsy
- Localization biopsy
- Staging (Horwich, 1995).

Hopelessness

Definition

Hopelessness is defined as "the pessimistic cognition about the future and negative social desirability as a low sense of self-efficacy and coping" (Maris & Canetto, 2000).

Correspondence should be sent to J Jeffrin Margreat
Department of Psychology, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, Tamil Nadu, India. Email: ???

AQ2

Feelings of hopelessness and helplessness

Feelings of hopelessness and/or helplessness are the most frustrated feelings one experiences when depressed. A sense of hopelessness and helplessness reflects a negative view of the future that nothing will get better. Self-esteem suffers, self-confidence is affected, and one may not believe that he/she has no control toward feeling better. One may give up and think, "What's the use?"

Effects of feeling hopeless/helpless

- Continuing to ruminate on negative thoughts about oneself or the future
- Looking for evidence that such negative thoughts are true.

Coping with the feelings of hopelessness/helplessness

- Recognizing that depression gives rise to negative thoughts and feelings about one
- Using strategies or techniques like cognitive-behavioral therapy (CBT) to help one identify negative thinking and modify such thoughts toward improving one's mood
- By identifying one's negative thoughts, an earnest effort can be taken to alter the "thinking styles" through the use of CBT (Dr. P's Blog, 2010).

Coping

Coping refers to the thoughts and actions one uses to deal with stress. Thus, in large part, feeling stressed or not depends on whether one believes one has the coping resources to deal with the challenges facing one (Kelley, 2010).

Stages of coping

Shontz, (1975) described the following stages of coping that individuals often go through after a diagnosis of chronic illness:

- Shock: Initially, most people go into a state of shock following a diagnosis of serious illness. Being in shock is characterized by being stunned and bewildered, behaving in an automatic fashion and having feelings of detachment from the situation
- Encounter reaction: This is characterized by disorganized thinking and feelings of loss, grief, helplessness, and despair
- Retreat: This stage is characterized by denial of the problem and its implications and a retreat into the self (Ogden, 2007).

AQ6

Coping strategies

People who are able to shift their coping strategies to meet the demands of a situation cope better with stress than those who do not. This point is, of course, suggested by the fact that the problem-solving and emotional approaches may work better for different stressors. Overall, research suggests that people who are flexible copers may cope especially well with stress (Cheng, 2003).

Hopelessness and breast cancer

Robinson et al., (2012) studied the effect of patient-centered communication (PCC) on hopelessness in patients with breast cancer in pre- and post-consultation of surgeons. The videotaped consultations between 147 women newly diagnosed with breast cancer and nine surgeons having administered surveys to participants immediately using pre-consultation and post-consultation for the study. Multivariate regression models analyzed the association between PCC and the satisfaction of patients and between satisfaction and hopelessness. The results revealed that there was a significant decrease in hopelessness from pre-consultation to post-consultation.

Eskelinen and Ollonen (2011) in their study using hopelessness scale measured the attribute on patients with breast cancer (n=115), benign breast cancer (n=53), and healthy subjects (n=28). The results indicated that breast cancer and benign breast cancer patients reported clearer healthy hopelessness than the healthy study subjects. However, the mean score of hopelessness differed only slightly with regard to the trend grading in the 3 groups.

Coping with breast cancer

Alcalar et al., (2012) studied the relation between depression levels with coping styles and cognitive errors in women treated for breast cancer. The automatic thoughts questionnaire, cognitive errors questionnaire, mental adjustment to cancer scale, and beck depression inventory were administered to all patients. Semi-structured interview forms were used to obtain medical and demographic data. Higher cognitive errors and automatic thought scores were found in the depression group. Fighting spirit was found to be the primary coping style used in the nondepression group while helplessness/hopelessness, anxious/preoccupation, and fatalism were the coping styles were used the most in the depression group. No association between depression and socio-demographic (except for educational level) and cancer-related variables was detected. However, it was found that automatic thoughts, cognitive errors, education level, fighting spirit, and anxious/preoccupation were important indicators of depression in the sample. Therefore, the research proved that a causal relationship existed between depression and the patient's cognitive patterns and accompanying anxiety. The degree of depression was found to be inversely related to both fighting spirit coping type and educational level.

Symptoms and coping strategies

Biagatti et al., (2012) examined the relationship between cognitive appraisals, coping strategies, and depressive symptoms in a group of women with mostly advanced-stage breast cancer (n=65), who scored mostly within the normal range for depressive symptoms. Path analysis was used to determine the relationships among variables, measured with the cognitive appraisals of illness scale, the ways of coping questionnaire, and the center for epidemiological studies depression scale. The results of the path analysis showed that higher appraisals of harm/loss and greater use of escape-avoidance coping predicted higher depressive

symptoms. These findings enhanced the prediction of depression among breast cancer patients.

Rational emotive behavior therapy (REBT) for breast cancer

Elis and Steven (2012) conducted a study wherein they counseled women with breast cancer using the principles developed by Albert Bandura. For the study, 18 women receiving chemotherapy for breast cancer were randomized to efficacy-enhancing experimental (n=10) and usual-care control (n=8) groups. The experimental group then received 5 interventions monthly for 8 months. The variables quality of life, symptom distress, self-care, and self-efficacy were measured at baseline and at 4 and 8 months later. At 4 and 8 months, the interaction effects for the functional assessment of cancer treatment used to measure quality of life, ranged from small for functional concerns to large for social concerns. However, the interaction effects for symptom distress, measured by the symptom distress scale were large. Similarly, the interaction effects for self-care and self-efficacy ranged from small for enjoying life and stress reduction, medium for stress reduction, and large for making decisions. Thus, the study was able to prove that interventions to promote self-efficacy were able to increase the quality of life and decrease distress for women diagnosed with breast cancer.

Method

Participants

Hundred from Coimbatore Cancer Foundation, Kuppuswamy Naidu Memorial Hospital, Coimbatore, were initially screened for hopelessness and coping. 75 with high scores in hopelessness and low in brief coping were subsequently selected for the study. There were in the age range of 35-70 years. All were under medical treatment for breast cancer.

Instruments

- Case study schedule (2013) evolved by the investigator was used to collect the general information from the patients
- Beck hopelessness scale (Aaron & Beck, 1978) was used to measure the level of hopelessness
- Brief coping scale (Carver, 1997) was used to examine the level of coping.

Case study schedule

Case study (2013) was used to collect the personal details about the breast cancer patients such as their personal and family history. Negative emotions of the breast cancer patients were also collected.

Hopelessness scale

Hopelessness scale Beck, 1978 consisted of 20 items with two options 'true' and 'false'. The scoring was done according to the norms provided by the author. Summation of the score indicated the level of hopelessness. A score of 0-3 indicated minimal range, 4-8 is mild, 9-14 is moderate, and >14 are severe.

Brief cope inventory

Brief cope inventory developed by (Carver, 1997) presents 28-items with 14 subscales all assessing different coping dimensions: (1) active coping, (2) planning, (3) using instrumental support, (4) using emotional support, (5) venting, (6) behavioral disengagement, (7) self-distraction, (8) self-blame, (9) positive

AQ7

AQ8

reframing, (10) humor, (11) denial, (12) acceptance, (13) religion, (14) substance use. Each scale contains two items. It is rated on a 4-point scale ranging from "I don't do this at all" to "I do this a lot." Patients are asked to indicate what they usually do when they experience a stressful event. There is no right or wrong answer.

Procedure

The REBT was administered individually to manage their hopelessness and their coping for the breast cancer patients.

Techniques

The REBT has,

- A-B-C theory of personality
- Disputing irrational beliefs
- Use of humor
- Rational emotive imagery
- Shame attacking
- Doing cognitive home work
- Use of force and vigor
- Role playing
- Changing one's language

The first four techniques were used for the present study. REBT's comprehensive approach works best for individuals desiring a scientific, present-focused, and active treatment for coping with life's difficulties, rather than one which is mystical, historical, and largely passive. REBT distinguishes clearly between two very different types of difficulties: Practical problems and emotional problems. The flawed behavior, unfair treatment by others, and undesirable situations, represent practical problems. Regrettably, the human tendency is to get upset about these practical problems, thereby unnecessarily creating a second order of problems-emotional suffering. REBT helps to overcome the problem. The REBT was given to each patient individually 6 times in 2 weeks. The therapy was given to the patients on alternate days. The duration of each session was 45 min to 1 h. After 2 weeks of REBT, the entire sample was reassessed using hopelessness scale, illness perception questionnaire, and brief cope.

Results and Discussion

Alcalar et al., (2012) also revealed that the degree of depression was found to be inversely related to both fighting spirit coping type and educational level.

Table 1 depicts the negative emotions experienced by the patients in a stressful condition. Majority of samples suffer from fear and anxiety. They had fear of death and anxiety toward the treatment of pain. It shows that the fear is present in 91% of the patients, 90% experienced anxiety, 85% depression, 81% anger, and 78% had worry. In short, there are a number of negative emotions experienced by the patients. Hence, the null hypothesis "there are no negative symptoms experienced by the breast cancer patients" is rejected. Disputing irrational belief can be used to change their perception about their fear, anxiety, depression, anger, and worry.

AQ9

Brothers and Andersen (2009) identified that women who reported feelings of hopelessness and who were alone (i.e., without a partner) were especially vulnerable to later depressive symptoms.

Table 2 shows the mean difference of hopelessness before and after intervention. The mean value of hopelessness before intervention is 14.59. The mean value of hopelessness after intervention is 6.83 and the difference between mean hopelessness before and after REBT is 7.76. After the administration of REBT

for four sessions 1 h each day, the mean level of Hopelessness lowered from "high" to "average" for the group. Applying statistical test, paired sample t-test, between the two conditions of before and after, significantly differ. This is evident from the 't'-value being 23.25 significant at 0.01 level. Hence, the null hypothesis, "there is no hopelessness in the selected breast cancer patients" is rejected.

Table 3 shows the factor analysis was adopted to examine whether the coping method used by the caregivers can be grouped into few composite variables. The validation of factor analysis was done on the basis of Kaiser-Meyer-Olkin (KMO) measures and Bartlett's test of sphericity, and the results are shown in Table 3.

The KMO statistic was 0.814 signifying higher than the acceptable adequacy of sampling. The Bartlett's test of sphericity was also found to be significant at 1% level providing evidence of the presence of the relationship between variables to apply factor analysis. The communalities for each variable had a value >0.50 signifying substantial portions of the variances are accounted by the factors and hence could be included in the analysis.

Table 4 enlists the Eigen values, relative explanatory powers, and factor loading for 9 linear components identified within the dataset. The Eigen values of first five components were >1, indicating that these factors alone were appropriate for inclusion in the analysis.

The first component had significant loading on four dimensions namely "venting," "positive reframing," "planning," and "acceptance" which together represents "emotional outlet technique" to conquer the worries of the patients. These four dimensions explained nearly 42.419% of the variance. Factor 2 had significant loading on one dimension namely "self-blame" represents withdrawal behavior and explained nearly 12.650% of

Table 1: Negative emotions of breast cancer patients (N=70)

Negative emotions	Number (%)	
	Before treatment	After treatment
Fear	64 (91)	30 (42)
Anxiety	63 (90)	28(40)
Depression	60 (85)	25 (35)
Anger	57 (81)	20 (28)
Worry	55 (78)	16 (22)

Percentages are rounded off

Table 2: Significance of difference between mean hopelessness before and after REBT (N=70)

Condition	Mean (SD)	Mean difference	't'
Before	14.585 (1.876)	7.757	23.224
After	6.828 (2.166)		

*Significant at 0.01 level, SD: Standard deviation

AQ14

Table 3: KMO and Bartlett's test

Measures	Values
KMO measures of sampling adequacy	0.814
Bartlett's test of sphericity	
Approximate Chi-square	216.278
df	36
Significance	0.000

KMO: Kaiser-Meyer-Olkin

Table 4: Rotated component matrix

Variables	Component		
	1	2	3
Use of instrumental support	0.474	0.466	-0.109
Behavioral disengagement	0.519	0.106	-0.666
Venting	0.812	-0.033	-0.082
Positive reframe	0.749	0.263	0.084
Planning	0.878	0.118	0.076
Humor	0.605	-0.325	-0.128
Acceptance	0.849	-0.083	0.153
Religion	0.462	0.069	0.771
Self-blame	-0.093	0.854	0.018
Eigen value	3.818	1.139	1.108
Percentage of variance	42.419	12.650	12.307
Cumulative percentages	42.419	55.069	1.139

the variance. Factor 3 had significant loading on one dimension namely "religion" which explains nearly 12.307% of the variance.

The least value component in coping in the first order extraction indicates that the patient refrain from giving into use of instrumental support, behavioral disengagement, humor, religion, and self-blame as a burden of patient has not posed a threat. However, in factor 2, the patient have resorted to self-blame themselves and in factor 3, reconciled to religion for want of mental balance. Thus, the exercise of coping is the creation of hope in times of adversity with individual variation.

Findings and Conclusions

- The counseling technique, REBT focused on working with thinking and acting rather than primarily expressing their feeling
- Cancer is an upsetting experience because a serious illness like cancer, which by itself brings fear of death, will be annoying
- Worrying is a part of cancer. Worries about treatments and the future makes it hard for the patients to function
- Cancer patients are anxious about many things such as the treatment, efficacy of the treatment, and its side effects

- Negative emotions are common in cancer patients. The negative emotions of the patients were fear, anxiety, depression, anger, and worry
- The psychological intervention helped to reduce the negative emotions of the patients
- The psychological intervention helped to reduce the mean hopelessness from "high" (M=14.59) to "low" (M=6.83)
- The use of mixed coping strategies; denial, emotional support, instrumental support, behavioral disengagement, venting, planning, humor, and self-blame were found to be a contributory factor in managing the emotional components of the patients.

References

- Alcalar, N., Ozkan, S., Kucucuk, S., Aslay, I., & Ozkan M. (2012). Association of coping style, cognitive errors and cancer-related variables with depression in women treated for breast cancer. *Japanese Journal Clinical Oncology*, 42(10), 940-7.
- Bigatti, S.M., Steiner, J.L., & Miller, K.D. (2012). Cognitive appraisals, coping and depressive symptoms in breast cancer patients. *Stress Health*, 28(5), 355-61.
- Cheng, (2003). Cited in Taylor, S.E. (2012). *Health Psychology*. 7th ed. New Delhi: Tata-McGraw Hill Publication. p. 182. AQ10
- Ciesielski, P.F. (1992). *Grolier Wellness Encyclopedia, Major Chronic Disease*. Vol. 8. Guilford: Duskin Publishing Group. p. 55, 62-63.
- Dr. P's Blog (2010). All about depression. Available from: http://www.allaboutdepression.com/tre_21b.html. AQ11
- Eskelinen, M., & Ollonen, P. (2011). Measurement of pessimism: hopelessness scale in healthy study subjects, and in patients with benign breast disease and breast cancer: A prospective case-control study in Finland. *Anticancer Research*, 31(11), 4019-4023.
- Hamann, B. (2001). *Disease Identification, Prevention & Control*. 2nd ed. New York: Mc-Graw Hill Higher Education. p. 282, 292-293.
- Horwich, A. (1995). *Oncology a Multidisciplinary Textbook*. 1st ed. London: Chapman & Hall Publication. p. 513.
- Kelley, O. (2010). Medical Review Board. Available from: http://www.ocd.about.com/od/glossary/g/Coping_Glossary.htm. [Last updated on 2014 Jun 18].
- Kiberstis, P.A., & Marx, J. (2002). Cited in Taylor, S.E. (2012). *Health Psychology*. 7th ed. ???: Tata McGraw Hill Publication. p. 282. AQ13 AQ12
- Maris, W.R., & Canetto, L. (2000). *Review of Suicidology 2000*. New York: Guilford Press. p. 128. http://books.google.co.in/books?id=IB11NW_RNEIC&pg=PA128&lpg=PA128&dq.
- Ogden, J. (2007). *Health Psychology*. New York: McGraw Hill Publication. p. 49, 60, 325-326.
- Robinson, J.D., Hoover, D.R., Venetis, M.K., Kearney, T.J., & Street, R.L. (2012). Consultations between patients with breast cancer and surgeons: A pathway from patient-centered communication to reduced hopelessness. *Journal of Clinical Oncology*, 31(3), 351-358.

Author Queries???

- AQ1: Kindly provide running title
- AQ2: Kindly provide e-mail id
- AQ3: Kindly provide these authors details in the reference list (Beck, 1978) and also move to the text part
- AQ4: Kindly provide these authors details in the reference list (Carver, 1997) and also move to the text part
- AQ5: Kindly provide minimum three keywords
- AQ6: Kindly provide these author details in the reference list, (Shontz, 1975)
- AQ7: Kindly provide these author details in the reference list (Elis and Steven, 2012)
- AQ8: Kindly provide these authors details in the reference list (Aaron & Beck, 1978)
- AQ9: Kindly provide these authors details in the reference list (Brothers and Andersen, 2009)
- AQ10: Kindly provide author initial.
- AQ11: Kindly provide last accessed details.
- AQ12: Kindly provide publisher location
- AQ13: Kindly cite to the text part (Kiberstis & Marx, 2002)
- AQ14: Kindly provide citation