MANAGEMENT OF ILLNESS PERCEPTION, HOPELESSNESS AND COPING AMONG BREAST CANCER PATIENTS

By

JEFFRIN MARGREAT, J.

(11PCP06)

Thesis Submitted To the Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-641043

In partial fulfillment of the requirement for the degree of

Master of Science

in

Counselling Psychology

MAY 2013

MANAGEMENT OF ILLNESS PERCEPTION, HOPELESSNESS AND COPING AMONG BREAST CANCER PATIENTS

By

JEFFRIN MARGREAT, J.

(11PCP06)

Thesis Submitted To the Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-641043

In partial fulfillment of the requirement for the degree of

Master of Science

in

Counselling Psychology

MAY 2013

Certified as a Bonafide Research Work

Signature of the
Head of Department

Signature of the
Guide

ACKNOWLEDGEMENT

I thank **God Almighty** for his abundance grace and blessings. His felt presence gave me the strength to successfully complete this study.

I owe my sense of gratitude to the leading lights of Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, **Dr. T.S.K. Meenakshi Sundaram** M.A., M.Phill., Ph.D. **Chancellor**, **Dr. Sheela Ramachandaran**, M.Sc., P.G.Dip., Ph.D. (Avinashilingam),**Vice Chancellor**, **Dr. Gowri Ramakrishnan**, M.Sc. (Madras), M.Phil., Ph.D. (Avinashilingam), **Registrar** and **Dr. R. Parvatham**, M.Sc., Dip.Ed., M.Phil.(Madras University), Ph.D., **Dean, Faculty of Science**, for rendering an opportunity to conduct this study.

The researcher feels grateful for having worked under the remarkable guidance of her renowned guide, **Dr. N.S. Rohini**, M.A., M.Phil. (Madras), Ph.D. (Bharathiar), **Professor and Head of the Department of Psychology,** Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore. The researcher extends her deep gratitude to her guide for her critical discussion, stimulant suggestion, valuable guidance and her integrated help, which had enabled the researcher to complete the study.

The researcher greatly appreciate the support extended by the **Faculty Members** of the Department of Psychology, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, during the course of this research work.

The researcher would like to convey her sincere thanks to **Coimbatore Cancer Foundation (CCF), G. Kuppuswamy Naidu Memorial Hospital**, Coimbatore, for their kind permission and co-operation provided to conduct the action research.

Every achievement requires the Endeavour of many people and this work is not an exception. The researcher extends her deep sense of gratitude to her **Family and Friends** whose endurance, concern and invariable support have been helpful in accomplishing this task.

CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
	LIST OF TABLES	
	LIST OF FIGURES	
	ABSTRACT	
I	**INTRODUCTION**	
II	**REVIEWS OF LITERATURE** ❖ Illness perception of breast cancer ❖ Illness perception and coping strategies ❖ Hopelessness and breast cancer ❖ Symptoms and hopelessness ❖ Coping with breast cancer ❖ Symptoms and coping strategies ❖ Rational Emotive Behaviour Therapy for breast cancer	
III	**METHOD** ❖ Objectives ❖ Research Questions ❖ Null Hypotheses ❖ Area ❖ Sample ❖ Inclusion Criteria ❖ Exclusion Criteria. ❖ Tools ❖ Procedure ❖ Experiment Design ❖ Treatment ❖ Duration ❖ Re-assessment ❖ Analysis of Data	
IV	**RESULTS AND DISCUSSION**	
V	**SUMMARY AND CONCLUSION**	
	REFERENCES	
	ANNEXURE	

LIST OF TABLES

Table No.	Title	Page No.
1.	Type of Menopause of the Breast Cancer Patient	
2.	Negative Emotions of Breast Cancer Patients	
3.	Significance of Difference Between Mean Illness Perception Before and After REBT	
4.	Significance of Difference Between Mean Hopelessness Before and After REBT	
5.	Significance of Difference Between Mean Coping Before and After REBT	
6.	Correlation between illness perception and hopelessness	
7.	KMO and Bartlett's Test	
8.	Rotated Component Matrix	

LIST OF FIGURES

Figure No.	Title	Page No.
1.	Type of Menopause of the Breast Cancer Patient	
2.	Negative Emotions of Breast Cancer Patients	
3.	Significance of Difference Between Mean Illness Perception Before and After REBT	
4.	Significance of Difference Between Mean Hopelessness Before and After REBT	
5.	Significance of Difference Between Mean Coping Before and After REBT	

LIST OF ANNEXURES

Annexure	Title
1	Case Study Schedule
2.	The Brief Illness Perception Questionnaire
3	Beck's Hopelessness Scale
4.	Brief Cope

ABSTRACT

The study on "Management of Illness Perception, Hopelessness and coping among Breast Cancer Patients" was conducted in Coimbatore Cancer Foundation (CCF) in G. Kuppuswamy Naidu Memorial Hospital, Coimbatore by purposive sampling method. Seventy five breast cancer patients served as the sample. They were in the age range of 35-70 years under medication. They were screened for high scores in Hopelessness, Illness perception and low in Brief coping were subsequently selected for the study. The tools used for assessment were Case Study Schedule, Beck Hopelessness Scale (Beck, 1978),, Illness Perception Questionnaire (Broadbent et al 2006) 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 by using the same Questionnaires. The results indicated a significant reduction in the mean Illness Perception and Hopelessness with increase in coping strategies. This clearly indicates the effect of Rational Emotive Behavior Therapy in coping among breast cancer patients.

CHAPTER – I

INTRODUCTION

"Our greatest weakness lies in giving up. The most certain way to succeed is always to try just one more time"

- Thomas Edison

Cancer is a set of more than 100 diseases that have several factors in common. All cancers results from a dysfunction in DNA which is the part of the cellular programming that controls cell growth and reproduction. Instead of ensuring the regular, slow production of new cells, this malfunctioning DNA causes excessively rapid cell growth and proliferation (Kiberstis and Marx, 2002).

Thus cancer can be defined as an uncontrolled growth of abnormal cells which produces tumors called neoplasm. There are two types of tumors a) which do not spread throughout the body and b) malignant tumors, which show metastasis (the process of cells breaking off from the tumors and moving elsewhere). In the case of cancer cells, there are three types: carcinomas, which constitute 90 per cent of all cancer cells and which originate in tissue cells; sarcomas, which originate in connective tissues and leukemias which originate in the blood (Ogden, 2007).

The diagnosis of cancer has always carried frightened connotations: terminal prognosis, excruciating chemotherapy and painful demise. Recent scientific breakthrough, however, have served to increase life expectancy for cancer patients. With early detection and proper treatment many suffering from cancer recover completely and lead healthy and normal lives (Ciesielski, 1992).

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 dumpling of breast tissues. It

is usually, but not always, painless. Eighty-ninety percent of all breast lumps are benign but the final diagnosis of breast cancer has to be made with a biopsy (Ciesielski, 1992).

Although breast cancer may occur in men, it does so rarely. The disease may develop at any time of life but it is uncommon before the age of 35. Breast cancer occurs more often in the left breast than in the right and 50% occurs in the upper outer quadrant. Furthermore slow growing breast cancer can take up to 8 years before it can be detected by self-examination (Hamann, 2001).

PREDISPOSING FACTORS:

There are a number of factors that can place a woman at high risk. These include:

- A family history of breast cancer
- Long menstrual cycles or early menses
- Late menopause (after age 50)
- First pregnancy (after age 30)
- History of endometrial, ovarian or colon cancer
- Higher education and socio-economic class
- Constant stress or unusual disturbances in work life
- Never giving birth or late age at five live births
- Obesity (40% above normal)

However if a woman has been pregnant before the age of 20, has had multiple pregnancies, is Indian or Asian and/or is from a lower socio economic class, then she is at a reduced risk for developing breast cancer. Other factors are being studied including pesticides and chemical exposure, alcohol consumption, weight gain, induced abortion and physical inactivity. There is also some new genetic research going on that may lead to possible curves in treatment for breast cancer (Hamann, 2001).

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)

TREATMENT

Medical:

The treatment plan for breast cancer usually depends on several factors. The first steps doctors usually do is the removal of the lump and the surrounding lymph nodes which is called a lumpectomy, or in more advanced cases, remove the breast and the surrounding lymph nodes called mastectomy. The decision as to which surgery to perform is primarily determined by the stage of the disease which, in turn, often depends upon how early it has been detected, the patient's age and pre or post menopausal status.. The extent of the cancer and its degree of sensitivity to hormones also play a role in the type of surgery and the extent of any additional treatment.

The second step in the treatment plan includes chemotherapy wherein medications are taken orally or intravenously. Chemotherapy, immediately after the surgery, has been shown to increase the survivals rates in most breast cancer patients. X-ray treatments of the breast, from which the lump was taken, also increase the chance of cure and long-term survival (Ciesielski, 1992).

Psychological:

Psychosocial interventions have been used to alleviate symptoms of cancer and to improve the quality of life. They are:

- Pain Management
- Social support intervention
- Body image counseling
- Cognitive adaptation strategies (Ogden, 2007)

Illness Perception

Illness perception, by definition, relieves uncertainty as it replaces potentially disorganized, threatening and incomprehensible assortment of information and thoughts with a coherent theory that organizes them. Individuals are often motivated to find explanations for uncertain physiological signs and symptoms and the strength of this motivation is related to the salience and perceived personal consequences of these bodily changes (Howard, 2011).

An understanding of a patient's illness perception is necessary to help in a diagnosis. However this can be difficult as perception is highly subjective and there's no absolute method of measuring it, either from individual to individual or even within one person's perspective through time. Researchers have determined that reducing illness perception to its most basic elements can help patients describe what it is they are feeling. By organizing these components into a structure, patients can reconstruct the architecture of their beliefs about their illnesses (Wise Geek, 2003).

ILLNESS COGNITIONS

Definition:

Leventhal et al. (1980 & 1997) defined illness cognition as "a patient's own implicit common sense beliefs about his/her illness." They proposed that these cognitions provide patients with a framework or a schema for coping with and understanding their illness and telling them what to look out for if they are becoming ill (Leventhal and Nerenz 1985). The perception of illness by patients may fluctuate over time as they reflect on the changes they have made to their daily lives; these perceptions surround their chronic disease conditions there by attempting to make sense of the new challenges they face. People may reconstruct the illness perception to help them cope through these changes (Petrie et al., 2007).

COGNITIVE DIMENSIONS:

Using interviews with patients suffering from a variety of different illnesses, Leventhal et al (1980, 1997) identified five cognitive dimensions of these beliefs:

- **Identity:** The label given to the illness (the medical diagnosis) and the symptoms experienced.
- **The Perceived Cause of Illness:** Some of the causes may be biological, such as a virus or a lesion or psychosocial such as stress- or health-related behavior. In addition, patients may hold representations of illness that reflect a variety of different causal moods.
- **Timeline:** The patients' belief about how long the illness will last, whether it is acute or chronic.
- **Consequences:** The patient's perception of the possible effects of the illness on their life. Such consequences may be physical, emotional or a combination of factors.
- **Curability and Controllability:** Patients also represent illness in terms of whether they believe that the illness can be treated and cured and the extent to which the outcome of their illness is controllable either by themselves or by powerful others (Ogden, 2007).

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, 2000).

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 towards 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 such as Cognitive-Behavioral Therapy (CBT) to help one identify negative thinking and modify such thoughts towards 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, 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).

COPING RESOURCES:

Psychological resources make substantial contributions to coping and, in turn, to mental and physical health. A positive emotional style has been tied to lower cortisol levels (Polk et al., 2005). Furthermore coping is influenced, not only, by internal resources that an individual has but also by external resources. These include time, money, education, a decent job, friends, family, standard of living, and the presence of positive life events and the absence of other life stressors. The external resources facilitate in dealing with stressful events more effectively (Hobfoll, 1989).

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).

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).

COPING STYLE:

Coping style is a general propensity to deal with stressful events in a particular way. They have their origins in both genes and personal experiences. Coping styles, then, are similar to personality traits in that they characterize an individual's way of behaving in a general fashion, but are more specific than personality traits because they are thought to come into play primarily when events become stressful.

The various types of coping styles include:

Approach versus Avoidance Coping:

Some people cope with a threatening event by using an avoidant (minimizing) coping style whereas others use an approach (confrontative, vigilant) coping style, by gathering information or taking direct action. Approach related coping is most successful if one can

focus on the information present in the situation rather than on one's emotion and if specific action can be taken to reduce the stressor (Taylor and Stanton, 2007).

People who cope with threatening events through approach-related methods may engage in the cognitive and emotional efforts needed to deal with long-term threats. In short term, however, they may pay a price in anxiety and psychological reactivity (Smith, Ruiz, and Uchino, 2000).

Problem-Focused versus Emotional-Focused Coping:

Problem-focused coping involves attempts to do something constructive about stressful conditions that are harming, threatening or challenging an individual. However emotional-focused coping involves efforts to regulate emotions experienced because of the stressful event. Problem-focused coping appears to merge during childhood; emotion-focused coping skills develop somewhat later, in late childhood or early adolescence (Taylor, 2012).

Work-related problems often lead people to attempt problem-focused coping, such as taking direct action or seeking help from others. Health problems, in contrast, lead to more emotion-focused coping, perhaps because a threat to one's health is an event that must be tolerated but it is not necessarily amenable to direct action. When health problems are amenable to active coping, however, problem-focused coping is beneficial (Penley, Tomaka, and Weibe, 2002).

POSITIVE COPING OUTCOMES:

Coping is judged by the effectiveness observed in reducing psychological distress. When a person's anxiety or depression is reduced then the coping response is judged to be successful. Finally, coping can be judged in terms of whether it terminates, lessens, or shortens the duration of the stressful event itself (Harnish, Aseltine & Gore, 2000). Some of the positive coping outcomes can be:

- Reducing harmful environmental conditions and enhancing the prospects of recovery
- Tolerating or adjusting to negative events or realities
- Maintaining a positive self-image
- Maintaining emotional equilibrium

- Continuing satisfying relationships with others.

To assess successful coping, researchers have looked at variety of specific outcomes. One set of coping outcomes has included measures of physiological and biochemical functioning. Coping efforts are generally judged to be more successful if they reduce arousal and its indicators, such as heart rate, pulse and skin conductivity. A second criterion of successful coping is how quickly people can return to their pre-stress activities. Coping may be judged to be successful when stressors, such as death of the spouse or chronic ones, such as excessive noise-interference with the conduct of daily life activities, enable one to resume usual activities (Taylor, 2012).

COPING WITH CANCER:

There was a time when a cancer diagnosis was a death sentence - but it's not the terminal illness it once was. Thankfully, with advances in pharmaceuticals and treatment styles, many individuals can now expect a full recovery from almost any form of the disease, including: lung cancer, breast cancer, skin cancer and other forms of the illness. And while some are, sadly, not able to recover from the disease, there is hope for the future as new, advanced treatment methods continue to be developed.

The days and weeks following the diagnosis can be an emotional rollercoaster ride for the individual and his/ her family. When an individual enters cancer treatment counseling, one should ensure that questions about how to find the best treatment, how to cope with physical changes and figuring out the best way to care for family members during their recovery are answered. Patients can also help themselves in their treatment by ensuring that they do the following:

- Do not hide the news about one's diagnosis
- Be prepared for the changes
- Stay as healthy as possible
- Strive to maintain a normal life
- Do not push away people who want to help (Transformational Health, 2008)

NEED FOR STUDY

- Cancer is a term used for diseases in which abnormal cells divide without control and are able to invade other tissues. Cancer cells can spread to other parts of the body through the blood and lymph systems.
- Breast cancer is the most common cancer in women worldwide. It is estimated that more than 1.6 million new cases of breast cancer occurred among women worldwide in 2010. Rates of breast cancer around the world vary a great deal. In general, developed countries have higher rates than developing countries. And, women who live in developed countries tend to have a higher lifetime risk of breast cancer than women who live in developing countries. Although they don't know all the factors that make up these differences, lifestyle and reproductive factors are likely play a large role. For most patients, cancer is the most difficult and frightening experience they have ever encountered.
- The experience is itself depressing hence an attempt to develop a positive attitude would be a refined approach to fight cancer. Nevertheless the incidence of loneliness in cancer patients are on the increase with many a patient's perception of their illness, as one of traumatic and therefore their coping styles seems negativistic. There is a considerable evidence to state that care-giving for cancer patients is effective in the areas of psychological well-being and seems to lower their feeling. The realization of an effective intervention to combat the nature of illness perception and hopelessness produces an insight into expressing the therapeutic technique of REBT in present study.
- Clinical experience and a growing supply of experimental evidence show that REBT is effective and efficient at reducing emotional pain. REBT focusing on thoughts and their relationships among thinking, feeling and behavior is an effort to modify people's views and beliefs about events of the situations and help them lead more rational lives. REBT is a directive, active, didactic approach that seeks to minimize self-defeating thoughts, helping people to acquire more realistic and tolerant perspectives, and change emotions and behaviors.
- The subjects in the present study being breast cancer patients, rational emotive behavior therapy is bound to be influential in bringing about an identifiable change in

their thinking pattern and a positive attitude and thereby reduces stress levels that aggravate mal functioning cells.

CHAPTER – II

REVIEW OF LITERATURE

The reviews of earlier studies conducted in related area are of prime importance in any research to formulate an effective methodology. The literature pertaining to present study, "Management of Illness Perception, Hopelessness and Coping among Breast Cancer Patients" is reviewed and discussed on the basis of the following headings:

- Illness perception of breast cancer
- Illness perception and coping strategies
- Hopelessness and breast cancer
- Symptoms and hopelessness
- Coping with breast cancer
- Symptoms and coping strategies
- Rational Emotive Behaviour Therapy for breast cancer

ILLNESS PERCEPTION OF BREAST CANCER

Kaptein et al. (2013) conducted a study on illness perceptions and quality of life (QOL) in Japanese and Dutch women with breast cancer. The self regulation model (SRM) guided this exploratory longitudinal pilot-study. Central to SRM is the perception of health threats and their effects on QOL as observed in 22 Dutch and 21 Japanese patients with breast cancer who filled out questionnaires of QOL and illness perceptions before, 1 week, and 8 weeks after the first chemotherapy course. The sample patients' scores were then compared with groups of patients with other chronic somatic illnesses (asthma, diabetes). The patients in both samples reported major impact of chemotherapy on global health status, physical functioning, role functioning, emotional functioning, constipation and diarrhoea. The differences between the Japanese and Dutch patients were limited to social functioning and financial problems and the Japanese patients also expressed stronger concerns about their illness than the Dutch patients. The results of the Japanese and Dutch patients with breast cancer differed from the data of the patients with asthma on consequences, timeline, concern and emotional response.

Fischer, Weiesenhaan, Heijer, Kleijn, Nortier and Kaptein (2012) studied illness perception and coping in women with breast cancer. Fifty-seven women with breast cancer were assessed with Illness Perception Questionnaire Revised (illness perceptions), the COPE (coping), and the Hopkins Symptoms Check List (distress) followed by intervention wherein the intensity of general distress and breast cancer-related emotions had decreased significantly. Partial correlations showed that baseline illness perceptions were unrelated to distress at follow up. However, changes in illness perceptions showed significant associations with distress at follow up assessments. Associations of follow–up distress with coping styles were less consistent indicating that changes in illness perceptions were related to an improvement or worsening of the patients' emotional well-being over time.

Jorgensen, Frederiksen, Boesen, Elsass, Johansen and Acta (2009) conducted a study between illness perceptions, adjustment and changes after psychosocial rehabilitation in survivors of breast cancer. One hundred and seventy seven survivors of breast cancer were selected for the present study. The sample was then divided into two groups with 145 subjects assigned to descriptive study and 32 subjects to randomized study. The subjects from the descriptive study and half of the randomised subjects attended a 1-week rehabilitation course whereas the other half of the randomised subjects only received standard care (no intervention). All the subjects filled out a questionnaire 2.5 weeks before and eighteen months after the course. The results showed that no differences in the illness perceptions and the level of psychological adjustment were observed between the three groups of survivors between the baseline and eighteen months of follow-up. Baseline analyses also showed that illness perceptions were associated with distress and QOL. This study indicated that illness perceptions were associated with adjustment; however, illness perceptions did not change after participation in a one-week multi-component rehabilitation course.

The present study by Rozema, Völlink and Lechner (2009) examined the relation of cognitive and emotional representations of illness specified by the Common Sense Model of Illness Cognition. The sample consisted of 119 women within 2 years after their diagnosis of breast cancer, who completed a questionnaire containing measures of illness representations, coping strategies and perceived physical and mental health. Patients who viewed their illness as a condition with serious symptoms and consequences, patients who believed their illness

was chronic and patients who considered their illness uncontrollable were found to report poor physical and mental health than those who believed the opposite. Regression analysis showed that, after controlling for external variables, the cognitive illness representations: identity and consequences explained 57% of variance in physical health, whereas emotional illness representation and treatment control explained 47% of variance in mental health. Thus illness representations seem to play an important role in perceived health in breast cancer.

Millar, Purushotham, McLatchie, George and Murray (2005) conducted a detailed analysis of individual variation in psychological morbidity in the year following surgery of breast cancer. The salience of the patients' illness perceptions to morbidity was examined as a secondary objective. Psychological morbidity was assessed with the General Health Questionnaire (GHQ-28) in a prospective study of 371 women having surgery for primary breast cancer. Patients also completed the Illness Perception Questionnaire (IPQ), Mental Adjustment to Cancer Scale (MAC) and the Eysenck Personality Scales (EPS). Assessments were made postoperatively and at 3, 6 and 12 months after surgery. Whilst descriptive statistics indicated a general reduction in mean distress over the 12-month follow-up, close analysis showed that a quarter of all patients maintained clinically significant levels of distress throughout the period. Subgroups of patients with chronically high distress were characterised by factors including personality and negative perceptions and beliefs about their illness.

Anagnostopoulos and Spanea (2005) examined the differences between healthy women and breast cancer patients' representations of breast cancer in their research. The cross-sectional design involved 147 consecutive women free from breast diseases or with benign breast conditions and 102 patients with breast cancer. Respondents completed a modified version of the Illness Perception Questionnaire (IPQ) that assessed six dimensions of illness representations of breast cancer. Multiple comparison tests revealed that non-malignant womens' illness representations were characterized by weak beliefs concerning breast cancer curability/controllability, combined with an overestimation of the negative physical, social and economic consequences of breast cancer. Their research, thereby, showed that illness representations of breast cancer appeared to play a significant role in determining the unfavourable and exaggerated way in which laywomen perceived breast cancer.

ILLNESS PERCEPTION AND COPING STRATEGIES

McCorry et al. (2012) examined the extent to which illness perceptions and coping strategies among women diagnosed with breast cancer explained the psychological distress at diagnosis and at 6 months post diagnosis relative to demographic and illness-related variables. A total of 90 women completed study materials (Illness Perception Questionnaire-Revised, the Cancer Coping Questionnaire and the Hospital Anxiety and Depression Scale) at time of diagnosis. The same patients were then reassessed using the same tools after 6 months. Cluster analysis was used to identify groups of respondents who reported a similar profile of illness perception scores while regression analysis demonstrated that one of these clusters was more likely to experience psychological distress than the other both at diagnosis and at 6 months post diagnosis. Illness perception cluster membership and positive focus type coping were the most important and consistent predictors of lower psychological distress at diagnosis and at 6 months post diagnosis. Illness perceptions also remained relatively stable over the study period and therefore hence its associations with change in psychological symptoms were inconclusive.

HOPELESSNESS AND BREAST CANCER

Robinson and Hoover et al. (2012) studied the effect of Patient Centred 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 and administered surveys to participants immediately pre-consultation and post-consultation were the used 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.

Gumus, Cam and Malak (2011) examined the relationship between psychosocial adjustment and hopelessness in women with breast cancer in Turkey. The subjects were 90 women with breast cancer. Data were collected using an Introductory Information Form, Psychosocial Adjustment to the Illness Scale - Self-Report (PAIS-SR) and the Beck Hopelessness Scale (BHS) and analyzed by Pearson Correlation Analysis. It was found that the level of psychosocial adjustment of 63.3% of the women was 'poor'. A positive relationship was determined between PAIS-SR mean score and BHS mean score of the women with breast cancer. It was also observed that as the psychosocial adjustment worsened, the level of hopelessness of the women also increased.

Shin and Park (2007) attempted to identify the effects of hope intervention on hope and depression in cancer patients staying at home. The study design was a randomized control group design. The subjects consisted of forty cancer patients. Hope intervention, which was composed of hope assessment, hope objective setting, positive self identity formation, therapeutic relationships, spiritual and transcendental process improvement, positive environmental formation and hope evaluation was provided for about two months. The first hypothesis of the study that the experimental group which received hope intervention would have a higher score of hope than the control group was supported. The second hypothesis that the experimental group which received hope intervention would have a higher level of hope index than the control group was also supported. However the hypothesis that the experimental group which received hope intervention would have a lower level of depression than the control group was not supported.

Koopman et al. (2001) examined distress, coping and group support among a sample of rural women who had been recently diagnosed with breast cancer. There were 100 women who had been diagnosed with primary breast cancer at one of two time points in their medical treatment: either within a window up to 3 months after their diagnosis of breast cancer, or within 6 months after completing medical treatment for breast cancer. Their mean age was 58.6 years and 90% were of White/European American ethnicity. Many of the women experienced considerable traumatic stress regarding their breast cancer. The average woman considered her diagnosis of breast cancer to be among the four most stressful life events that she had ever experienced. Also, women on average reported a high level of helplessness/hopelessness in coping with their cancer. On average, women felt that they

'often' (but not 'very often') received instrumental assistance, emotional support, and informational support. The results also suggested that among these rural women with breast cancer, distress with the diagnosis of breast cancer must be carefully assessed, as women who are highly distressed about their breast cancer may not report general mood disturbance. Furthermore, the kinds of groups those rural women with breast cancer experienced as most supportive need to be identified so that psychosocial interventions could be matched to breast cancer patients' individual needs.

SYMPTOMS AND HOPELESSNESS

Brothers and Andersen (2009) examined hopelessness as a predictor of depressive symptoms for breast cancer patients coping with recurrence. The Hopelessness Theory of Depression provided the framework to test feelings of hopelessness and social support as predictors of depressive symptoms in women recently diagnosed with a recurrence of breast cancer. Patients (n=67) were assessed within weeks of receiving their recurrence diagnosis (initial) and again 4 months later (follow-up). Controlling for their current physical and depressive symptoms, hopelessness at diagnosis was a significant predictor of the maintenance of depressive symptoms among patients. A corollary of the theory was also confirmed: social support (i.e. the presence/absence of a romantic partner) interacted with hopelessness. Women who reported feelings of hopelessness and who were alone (i.e. without a partner) were especially vulnerable to later depressive symptoms. The data, thus, provided support for the Hopelessness Theory and suggested factors related to the risk of depressive symptoms for those coping with a worsened cancer prognosis.

COPING WITH BREAST CANCER

Speck et al. (2013) examined the coping strategies for taste alteration in a purposive sampling of 25 patients with breast cancer treated with docetaxal and paclitexal. The analysis of the results showed that women experiencing taste alteration chose not to eat or eat at irregular intervals. While some self-management strategies could be seen as positively adaptive, the potential for increased caloric consumption and poor eating behaviors associated with some coping strategies was a cause for concern given the observation of

weight gain during breast cancer treatment and association of obesity with poor treatment outcomes in breast cancer patients.

Watson, Homeland and Haviland (2012) studied the impact of coping responses in surviving breast cancer. Adjustment to cancer was assessed in a large cohort of breast cancer patients (n=578) followed by re-assessment in 5 years and 10 years. Survival analyses were then undertaken considering the clinical staging data and cancer treatment details. The results indicated that, after the follow up at five years, the link between negative adjustment was statistically significant to increased risk of death and relapse of breast cancer. Similarly, after 10 years, positive adjustment showed no effects on survival.

Cheng, Sit, Twinn, Cheng and Thorne (2012) studied the role of fatalism in coping in Chinese women with breast cancer. Twenty nine women participated in the study and their interview transcripts were analyzed using content analysis. The results showed that although the women were actively engaged in emotional regulation and self-care management to cope with survivorship, they believed in fatalism and accepted their inability to change the final outcome of cancer. Such contradictory behavioural and cognitive aspects of coping reported by the participants highlighted the role of complex belief systems in Chinese women.

Alcalar, Ozkan, Kucucuk, Aslay and Ozkan (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 non-depression group while helplessness/hopelessness, anxious/preoccupation and fatalism were the coping styles 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 a 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.

The study by Kang and Oh (2012) examined the effects of the Mindfulness Meditation program on perceived stress, ways of coping, salivary cortisol level and psychological stress response in patients with breast cancer. This was a quasi-experimental study with a non-equivalent control group pre-post test design. Participants in this study were 50 patients who had completed breast cancer treatment (experimental group = 25, control group = 25). The experimental group received the Mindfulness Meditation program for 3 hours/session/ week for 8 weeks. The data were then analyzed using χ^2-test and t-test for subject homogeneity verification and ANCOVA to examine the hypotheses. The experimental group had significantly lower scores for perceived stress, emotional focused coping, salivary cortisol level and psychological stress response compared to the control group. However, no significant differences were found between two groups for the scores on problem focused stress coping. According to the results, the Mindfulness Meditation program was useful for decreasing perceived stress, emotional focused coping, salivary cortisol level and psychological stress response.

Pasipanodya et al. (2012) explored the influence of social constraints on daily event sharing, individual well-being and relationship well-being in couples coping with breast cancer. Forty-five patients recently diagnosed and treated for early stage breast cancer and their spouses reported perceptions of spousal constraints on patient disclosure and completed a 7-day electronic diary. Analyses revealed that patient-reported social constraints, independent of the spouse's report, were linked to reduced patient sharing of both cancer-related and other important daily events. Patient and spouse perceptions of social constraints, independent of their shared consensus, predicted reduced daily individual well-being indexed by self-esteem and negative affect, as well as reduced daily relationship well-being indexed by relationship happiness and intimacy. The findings revealed that individual perceptions of social constraints had a negative influence on both patient and spouse's daily well-being outcomes.

Taleghani, Yekta and Nasrabadi (2006) explored how Iranian women coped with newly diagnosed breast cancer and provided a foundation for cultural-based care. Interviews were analysed using content analysis method. The main themes emerging from this qualitative study included coping using a religious approach (acceptance of disease as God's will; spiritual fighting), thinking about the disease (positive thinking: positive suggestion,

hope, intentional forgetfulness; negative thinking: hopelessness, fear, impaired body image), accepting the fact of the disease (active acceptance; passive acceptance), social and cultural factors and finally finding support from significant others. The majority of strategies used by Iranian women were positive and religious faith played a major role in this. The findings of the study could be used to design a nursing approach to improve successful coping in Iranian women suffering from breast cancer and could provide nurses and other healthcare professionals with a deeper understanding of these women as they face this diagnosis.

SYMPTOMS AND COPING STRATEGIES

Taha, Matheson and Anisman (2012) conducted a research on Canadian women treated with breast cancer (n=42) and healthy women (n=42) who responded to the experience of daily hassles and uplifts, intolerance of uncertainty, coping strategies and depressive symptoms. Although depressive symptoms and daily hassles did not differ between the two groups of women, women with previous cancer experience reported a greater amount and frequency of daily uplifts and hassle intensity. Fewer depressive symptoms were also predicted among women post treatment compared to the healthy women. Furthermore, hassle intensity mediated the relationship between intolerance of uncertainty and depressive symptoms, but only for women in the control condition. Lastly, only for the women in post treatment, the use of emotion-focused coping to deal with a fear of cancer recurrence mediated the relationship between intolerance of uncertainty and depressive symptoms, whereas problem-focused, avoidant, or cognitive-restructuring coping strategies did not help in this.

Biagatti, Steiner and Miler (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 Centre 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.

Wang X et al. (2012) conducted a study to assess possible interactive effects of coping styles and psychological stress on depression and anxiety symptoms in Chinese women shortly after diagnosis of breast cancer. Four hundred and one patients with breast cancer were interviewed face-to-face by trained research staff according to a standardized questionnaire including information on socio-demographic characteristics, psychological stress, coping styles, anxiety and depressive symptoms. Interactive effects then were assessed by hierarchical multiple regression analyses. There were significant associations of the four domains of psychological stress with anxiety and depressive symptoms except for the relationship between 'worrying about health being harmed' and depressive symptoms. Abreaction coping behaviour and escaping coping behaviour significantly increased the level of both anxiety and depressive symptoms; whereas an active coping style resulted in significant decrease. The interaction of active coping behaviour with 'worrying about health being harmed' significantly increased the risk of the anxiety symptoms, while adopting self-relaxing coping behaviour was associated with significant decrease. The interaction of 'worry about daily life and social relationship being restricted' with escaping coping behaviour significantly increased the risk of the depressive symptoms. Thus the results of this study suggested that certain coping styles might moderate the association of psychological stress with anxiety and depressive symptoms in Chinese women with breast cancer.

RATIONAL EMOTIVE BEHAVIOUR THERAPY FOR BREAST CANCER

Mahigir, Khanehkeshi and Karimi (2012) examined the influence of rational-emotive behavior therapy (REBT) on pain intensity among cancer patients in India and Iran. The study followed a quasi-experimental, pre-post test, carried out with a sample of 88 cancer patients, aged 21-52 years, referred to the Baharat Cancer Hospital of Mysore in India and Shahidzade hospital of Behbahan in Iran. They were then randomly assigned to the experimental [n=India (21); Iran (22)] and control [n=India (22); Iran (23)] groups. Pain was measured with the McGill Pain Questionnaire- MPQ (1975) and the intervention by REBT was given to the experimental group for 45 days (ten sessions). At the end of the intervention, the pain of patients was again evaluated. Regarding the hypothesis of the study, two independent sample T test and three ways mixed ANOVA was used to analyze the data. Results showed that the experimental group in post test had less pain than the control group

but there were no statistically significant differences between Indian and Iranian patients in pain perception. With respect to the outcome of the study, it has been realized that REBT can be used in hospitals and other psychological clinics to reduce the pain of cancer patients.

Elis and Steven (2012) conducted a study wherein they counselled women with breast cancer using the principles developed by Albert Bandura. For the study**,** eighteen 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 five 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 quality of life and decrease distress for women diagnosed with breast cancer.

The literature reviewed clearly indicates that a number of researches have been conducted on illness perception, hopelessness and coping among breast cancer patients and that research on REBT have indicated its impact on the same.

CHAPTER – III

METHOD

The procedure pertaining to the present study namely, "Management of Illness Perception, Hopelessness and Coping among Breast Cancer Patients" was carried out involving the following steps:

- Objectives
- Research Questions
- Null Hypotheses
- Area
- Sample
- Inclusion Criteria
- Exclusion Criteria.
- Tools
- Procedure
- Experiment Design
- Treatment
- Duration
- Re-assessment
- Analysis of Data

OBJECTIVES

1. To identify the symptoms of breast cancer in the selected patients.
2. To identify the level of Illness Perception in the patients.
3. To assess the level of Hopelessness in the patients.
4. To identify the factors that represents the relationship in coping strategy adopted by the patients.
5. To help the patients manage the Illness Perception, Hopelessness and Coping through Rational Emotive Behavior Therapy (REBT).

RESEARCH QUESTIONS

1. What are the negative emotions present in the patients?
2. What is the level of Illness Perception in the selected breast cancer patient?
3. What is the level of Hopelessness in the selected breast cancer patient?
4. What is the coping style of the selected breast cancer patient?
5. Does REBT help in the management of Illness Perception, Hopelessness and Coping?

NULL HYPOTHESIS

- ✓ There are no negative emotions present in the patients.
- ✓ There is no hopelessness in the selected breast cancer patients.
- ✓ There is no Illness Perception in the selected breast cancer patients.
- ✓ There is no Coping in the selected breast cancer patients
- ✓ REBT does not help in the management of Illness Perception, Hopelessness and Coping.

AREA

Coimbatore Cancer Foundation (CCF), G. Kuppuswamy Naidu Memorial Hospital, Coimbatore, Tamil Nadu was selected to conduct the study. The reasons for selecting the areas were as follows.

- Availability of the required number of breast cancer patients for the study.
- Permission and facilities provided by the hospital authorities to conduct the action research.
- Cooperation of the breast cancer patients to serve as the subjects in the action research.
- Easy accessibility as the hospital is situated within the city time.

SAMPLE

Hundred from Coimbatore Cancer Foundation (CCF), G. Kuppuswamy Naidu Memorial Hospital, Coimbatore, were initially screened for Hopelessness, Illness Perception and Coping. Seventy Five with high scores in Hopelessness, Illness perception 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.

INCLUSION CRITERIA

- Age range between 35-70 years
- Female patients
- Only breast cancer patients
- Under medical supervision
- Willingness to participate

EXCLUSION CRITERIA

- With any other type of cancer
- With any other chronic illness
- With any other physical disability
- Male or transgender with breast cancer
- Treated with surgery
- The patients scored low on illness perception, hopelessness and coping

TOOLS

- ✓ Case Study Schedule (2013) evolved by the investigator was used to collect the general information from the patients.
- ✓ Brief Illness Perception Questionnaire (Broadbent et al 2006), was used to identify the level of Illness Perception.
- ✓ Beck Hopelessness Scale (Aaron T. 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 greater than 14 are severe.

Brief Illness Perception Questionnaire

The Brief Illness Perception Questionnaire (Brief IPQ) is a 9-item questionnaire designed to rapidly assess cognitive and emotional representations of illness (Broadbent et al 2006). The Brief IPQ uses a single-item scale approach to assess perception on a 0–10 response scale. It is developed by forming one question that best summarizes the items contained in each subscale of the Illness Perception Questionnaire-Revised which has over 80 items. The Brief IBQ comprises 5 items on cognitive representation of illness perception: consequences, timeline, personal control, treatment control, and identity. There are 2 items on emotional representation: concern and emotions. One item is on illness comprehensibility. The last item is on perceived cause of illness, in which respondents list the three most important causal factors in their illness.

Brief Cope Inventory

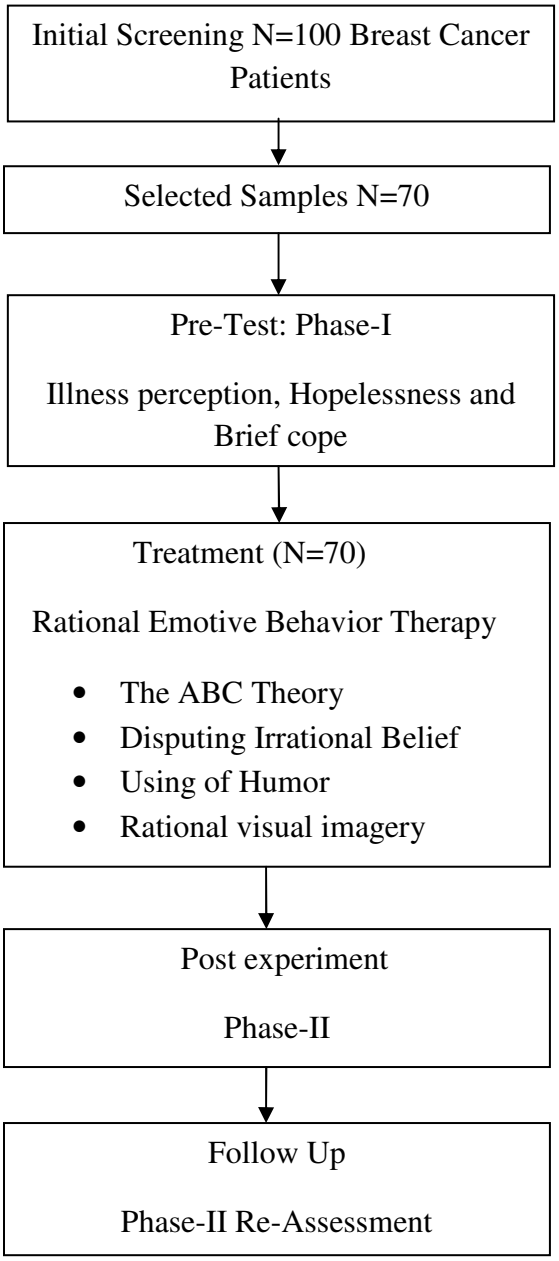
Brief Cope Inventory developed by (Carver, 1997) presents 28-items with 14 subscales all assessing different coping dimensions: 1) active coping, 2) planning, 3) using instrumental support 4) using emotional support 5) Venting, 6) behavioral disengagement,7) self-distraction, 8) self-blame, 9)positive reframing, 10) humour, 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

At the onset of the research 100 patients were screened from Coimbatore Cancer Foundation (CCF) in G. Kuppuswamy Naidu Memorial Hospital, Coimbatore by purposive sampling method. They were screened using Case Study Schedule, Beck Hopelessness Scale,

Illness Perception Questionnaire and Brief Coping Scale. Among 100 patients, 75 patients scored high in Hopelessness, Illness Perception and low in Brief coping were taken for the study. They were in the age range of 35-70 years under the medication. The psychological treatment called "Rational Emotive Behavior Therapy was administered on the patients. After 15 days the Re-assessment was given by using the same Questionnaires.

EXPERIMENTAL DESIGN



A single test group without control group was used in this study. The dependent variables were 'Illness Perception', 'Hopelessness' and 'Coping' was measured both before and after Rational Emotive Behavior Therapy.

TREATMENT

The Rational Emotive Behavior Therapy was administered individually to manage their Hopelessness, Illness Perception and their coping for the Breast Cancer patients.

TECHNIQUES

The Rational Emotive Behavior Therapy has,

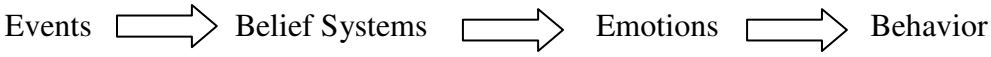
- A-B-C Theory of Personality
- Disputing Irrational Beliefs
- Use of Humor
- Rational Emotive Imagery
- Shame Attacking
- Doing Cognitive Home Work
- Use of Force and Vigor
- Role Playing
- Changing one's language

The first four technique were used for the present study

A-B-C THEORY OF PERSONALITY

The patients were having irrational belief such as fear of death, isolation, and neglection they also had the disturbed emotional reactions like depression and anxiety were present in the patients. Due to the irrational belief they used to cry, get anger and also they had the suicidal ideation. They became too introvert and they never mingle with any family members. By detecting one identifies one's irrational beliefs, particularly one's absolutistic "should" and "musts". By debating one empirically and logically questions the dysfunctional beliefs and finally learns to discriminate irrational (self-defeating) beliefs from rational (self-helping) beliefs. This behavior is changed by changing their irrational belief. The patient is

asked to lie in a bed then the general counseling is given which in turn makes the not to think about any negative thoughts and the irrational beliefs are disputed.



DISPUTING IRRATIONAL BELIEFS

The patient's are taught to challenge their irrational beliefs. For example they get the thought like "People don't treat me fairly" "I am ashamed of my illness" "will I live a long life" etc. the client's are taught to dispute these beliefs and to tell themselves "why must people treat me fairly" "What is there to be ashamed of my illness" "Many people with the same illness live for a long time so I too can live".

USE OF HUMOR

When the patients feel low their family members are asked to sit with them and have a conversation in a humorous way, which makes the patients feel more comfortable and happy. Ellis (2001) states that humour have both cognitive and emotive benefits in changing the persons. Ellis (2001) states that people lose their sense of humour and consider themselves very seriously. When the patients feel low her family members are asked to sit with her and have a conversation in a humorous way, which makes the patient feel more comfortable and happy.

RATIONAL-EMOTIVE IMAGERY

This form of intense mental practice establishes new emotional patterns. The client is encouraged to think, feel and behave the way they would like to think, feel and behave in real life. The patients were asked to lie down in a bed and were asked to imagine a worst situation where they experience a disturbing feeling. Then they were trained on how to develop healthy emotions in these cases of disturbing emotions.

DURATION

The Rational Emotive Behavior Therapy was given to each patient individually 6 times in two weeks. The therapy was given to the patients on alternate days. The duration of each session was 45 minutes to one hour.

RE-ASSESSMENT

After 2 weeks of Rational Emotive Behavior Therapy (REBT) the entire sample were reassessed using Hopelessness Scale, Illness Perception Questionnaire and Brief cope.

ANALYSIS OF DATA

The data was analyzed using SPSS version 16.

CHAPTER – IV

RESULTS AND DISCUSSION

The study on "Management of Illness Perception, Hopelessness and coping among breast cancer patients" was conducted in Coimbatore Cancer Foundation (CCF) in G. Kuppuswamy Naidu Memorial Hospital, Coimbatore by purposive sampling method. 75 breast cancer patients were selected for the study. They were in the age range of 35-70 years under medication. The assessment was done using the Case Study Schedule, Brief Illness Perception Questionnaire, Beck Hopelessness Scale and Brief Cope Inventory.

The results of the study were analyzed, tabulated and discussed.

TABLE – 1

TYPE OF MENOPAUSE OF THE BREAST CANCER PATIENT

N=70

S.No.	Type of Menopause	Number	Percentage
1.	Pre-Menopause	21	30
2.	Menopause	25	35
3.	Post-Menopause	24	34

Percentages are rounded off

Menopause also marks a period of time when health risks increase, especially for heart disease, breast cancer and osteoporosis. If it is a perimenopausal or postmenopausal it is important to see the health care professional to talk about ways to lower your risks and screen for the early signs of problems (Chang, 2013).

Perimenopause lasts from six to 10 years for most women. This stage begins gradually during regular cycles and ends when a year has passed since the final menstrual period. The onset of perimenopause is different for different women but is characterized by cycles that become closer together. Approximately 25% will begin to have night sweats. An unknown percentage of women with regular cycles will have increased breast tenderness and enlargement. About 20-30% will have abnormally heavy flow for one or more cycles. Most women experience some middle of the night sleep disturbances, mood swings and less ability to predict flow. Some women will experience nausea, new or recurrent and severe migraine headaches, weight gain, palpitations and also the chronic diseases like cancer so on (Prior, 2003).

Table 1 shows the incidence of breast cancer classified in the three types of menopause reveal that the differences in the three types are almost similar with menopause period 35%, post-menopause 34% and pre- menopause 30%. Breast cancer treatment often causes women to enter menopause prematurely. The change in hormone levels and estrogen depletion caused by stopping hormone replacement therapy or undergoing chemotherapy or hormonal therapy can trigger side effects commonly associated with menopause.

FIGURE – 1

TYPE OF MENOPAUSE OF THE BREAST CANCER PATIENT

N=70

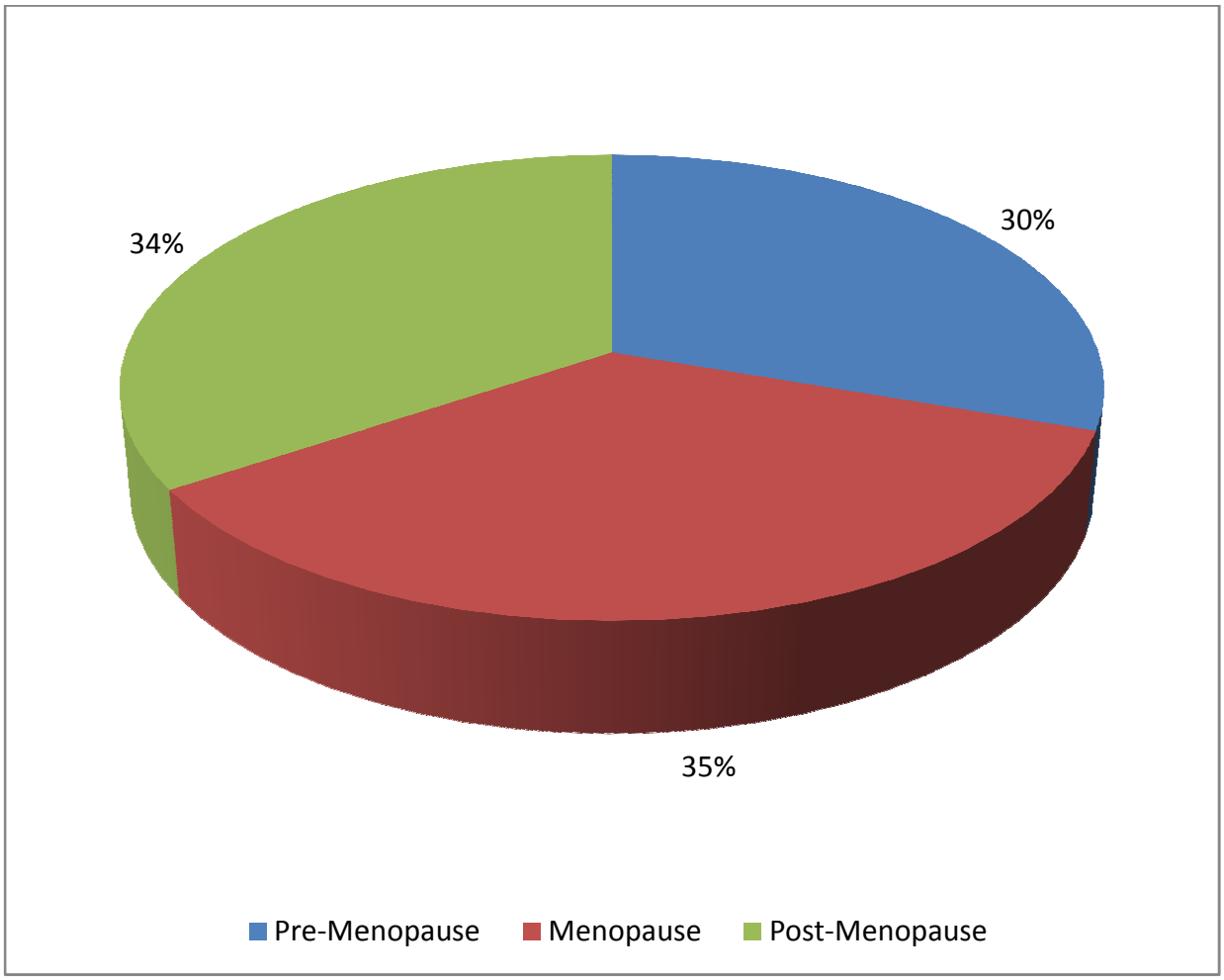


TABLE – 2

NEGATIVE EMOTIONS OF BREAST CANCER PATIENTS

N=70

S.No.	Negative Emotions	Before Treatment		After Treatment	
		Number	Percentage	Number	Percentage
1.	Fear	64	91	30	42
2.	Anxiety	63	90	28	40
3.	Depression	60	85	25	35
4.	Anger	57	81	20	28
5.	Worry	55	78	16	22

Percentages are rounded off

Negative emotions are common in cancer patients. Cancer is an upsetting experience because a serious illness like cancer, which by itself brings fear of death, will be annoying. Hence, worrying is a part of cancer. Worries about treatments and the future make 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.

Table 2 depicts the negative emotions experienced by the patients in stressful condition. Majority of samples suffer from fear and anxiety. They had fear of death and anxiety towards the treatment pain. It shows 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.

Cancer patients have fear of death, which makes them worry, depression is found to be very common among cancer patients as they are not able to adapt to the life style changes. As the patients are not able to accept their dependency on their family members, they develop hatred towards themselves and their lives. Moreover, cancer patient's perception of their health condition to be worse when compared to a normal individual triggers anger.

FIGURE – 2

NEGATIVE EMOTIONS OF BREAST CANCER PATIENTS

N=70

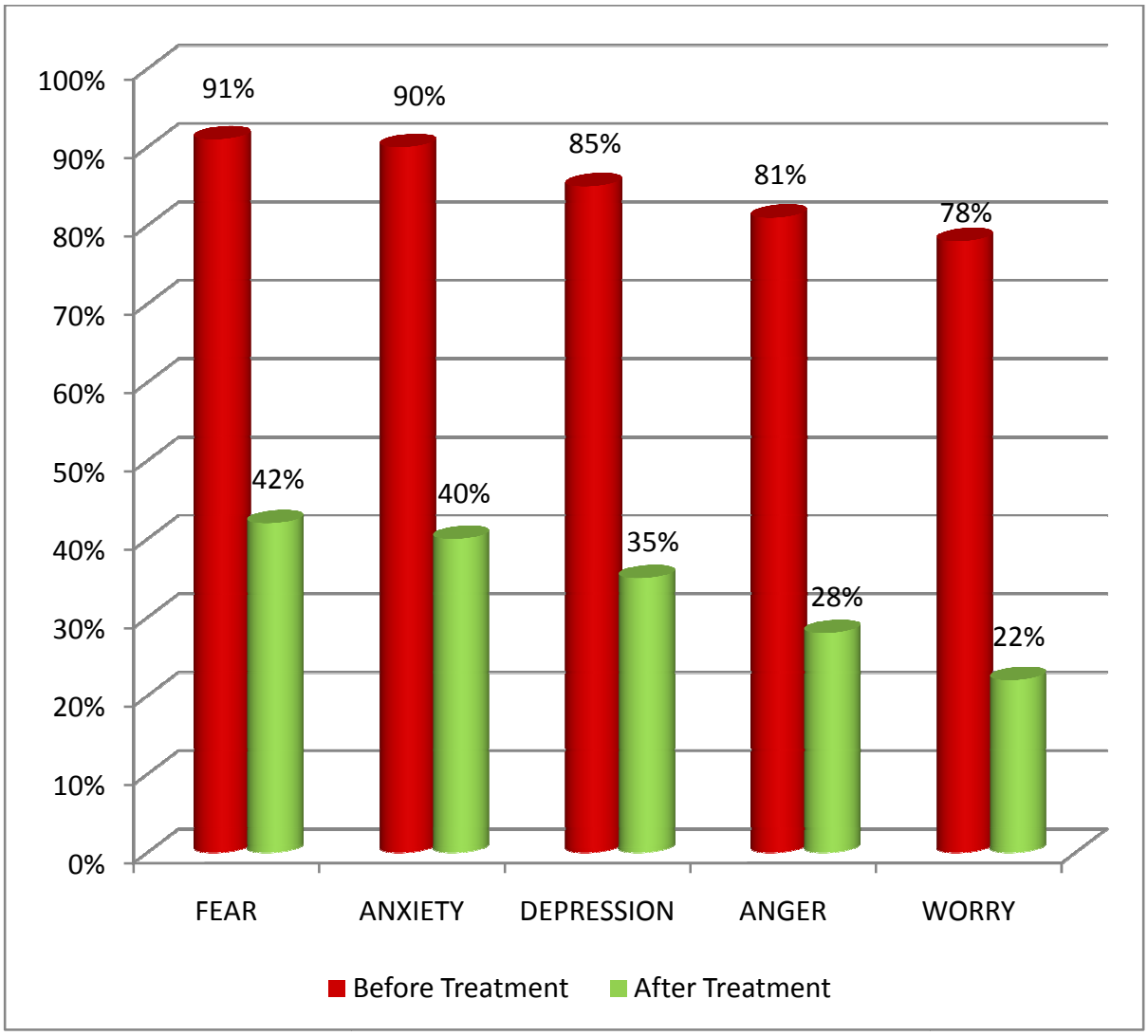


TABLE – 3

SIGNIFICANCE OF DIFFERENCE BETWEEN MEAN ILLNESS PERCEPTION BEFORE AND AFTER REBT

N=70

Condition	Mean (SD)	Mean Difference	't'
Before	63.571 (3.118)	29.229	58.926
After	34.342 (2.592)		

* ***Significant at 0.01 level***

The diagnosis of cancer brings with it, not only emotional distress as a normal response to catastrophic events the illness represents, but also a series of issues that reflect the patient's perception of the illness. Faced with diagnosis of cancer, patients commonly react at first with numbed shock and disbelief followed by illness perception, anxiety and depression (Cros, 2013).

The counselling technique, Rational Emotive Behaviour Therapy focused on working with thinking and acting rather than primarily expressing their feeling. This helped the patients to change their illness perception, which in turn, helped to change their illness belief.

Table 3 reveals that the Mean Illness Perception was lowered from 63.57 to 34.34, after administration of REBT for four sessions. The level of Illness Perception decreased from high level to moderate. From the table, it can be inferred that there is a significant difference in the mean values, before and after REBT, as the 't' value of 58.92 is significant at 0.01 level. Hence the null hypothesis, 'There is no Illness Perception in the selected breast cancer patients' is rejected.

.

FIGURE – 3

SIGNIFICANCE OF DIFFERENCE BETWEEN MEAN ILLNESS PERCEPTION BEFORE AND AFTER REBT

N=70

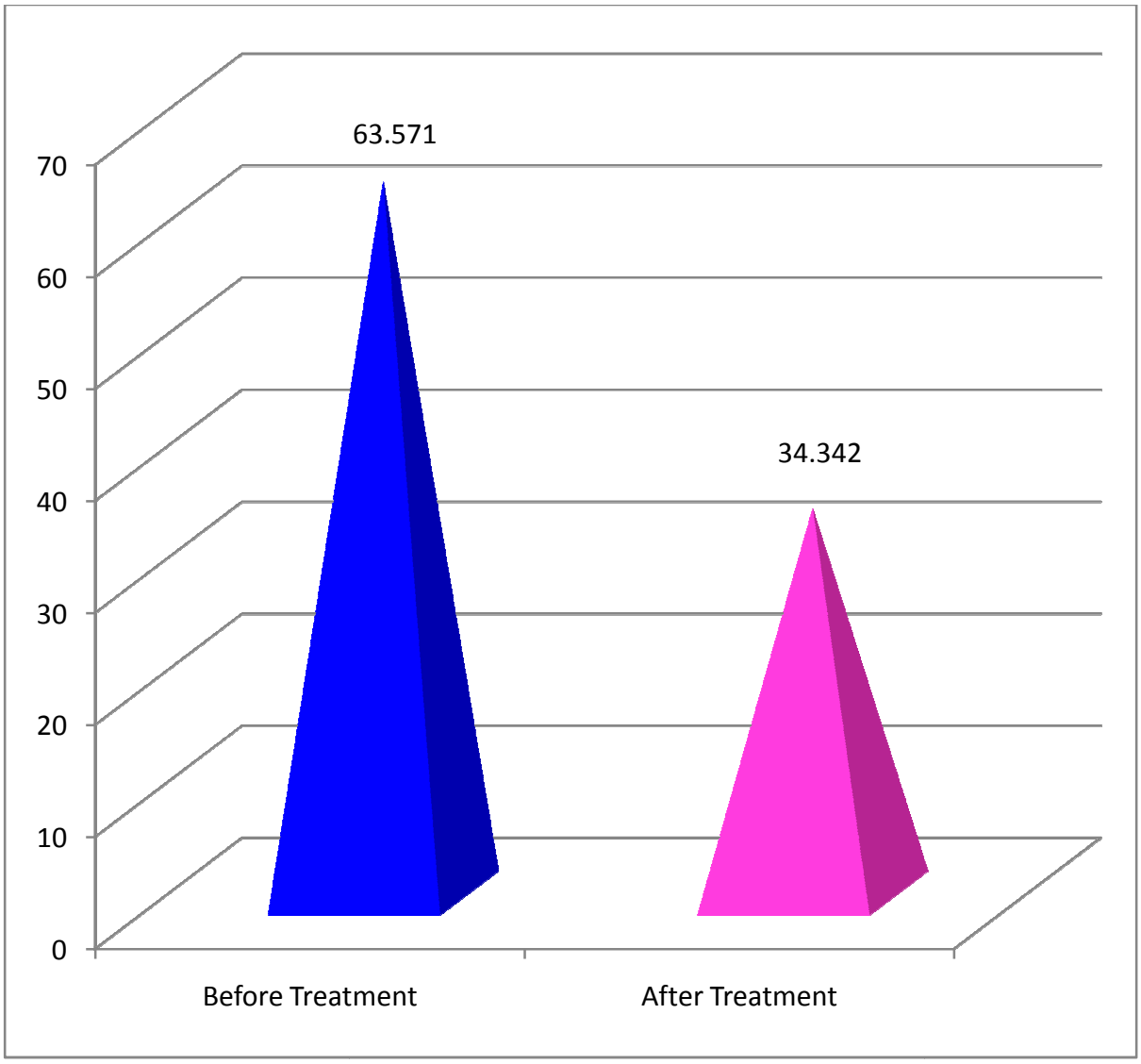


TABLE – 4

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

Some of the consequence of breast cancer includes hopelessness and despair. Hopelessness is stopping and being stuck in situations, losing grip and sinking into a narrowing existence, focusing on impossibility and losing perspective of the future. It is a possible element in the life situations of breast cancer patients. The hopelessness theory attributes depression to a pattern of negative thinking in which people blame themselves for negative life events, view the causes of those events as permanent, and over generalize specific weaknesses to many areas of their life.

The intervention of REBT works out the cognitive process and contents through a number of goal-oriented, explicit, systematic procedures, whose techniques of problem focused and action oriented. The techniques help the breast cancer patients to address the dysfunctional emotions and maladaptive behaviours. The treatment in turn showed reduction in the level of hopelessness.

Table 4 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 one hour 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.

FIGURE – 4

SIGNIFICANCE OF DIFFERENCE BETWEEN MEAN HOPELESSNESS BEFORE AND AFTER REBT

N=70

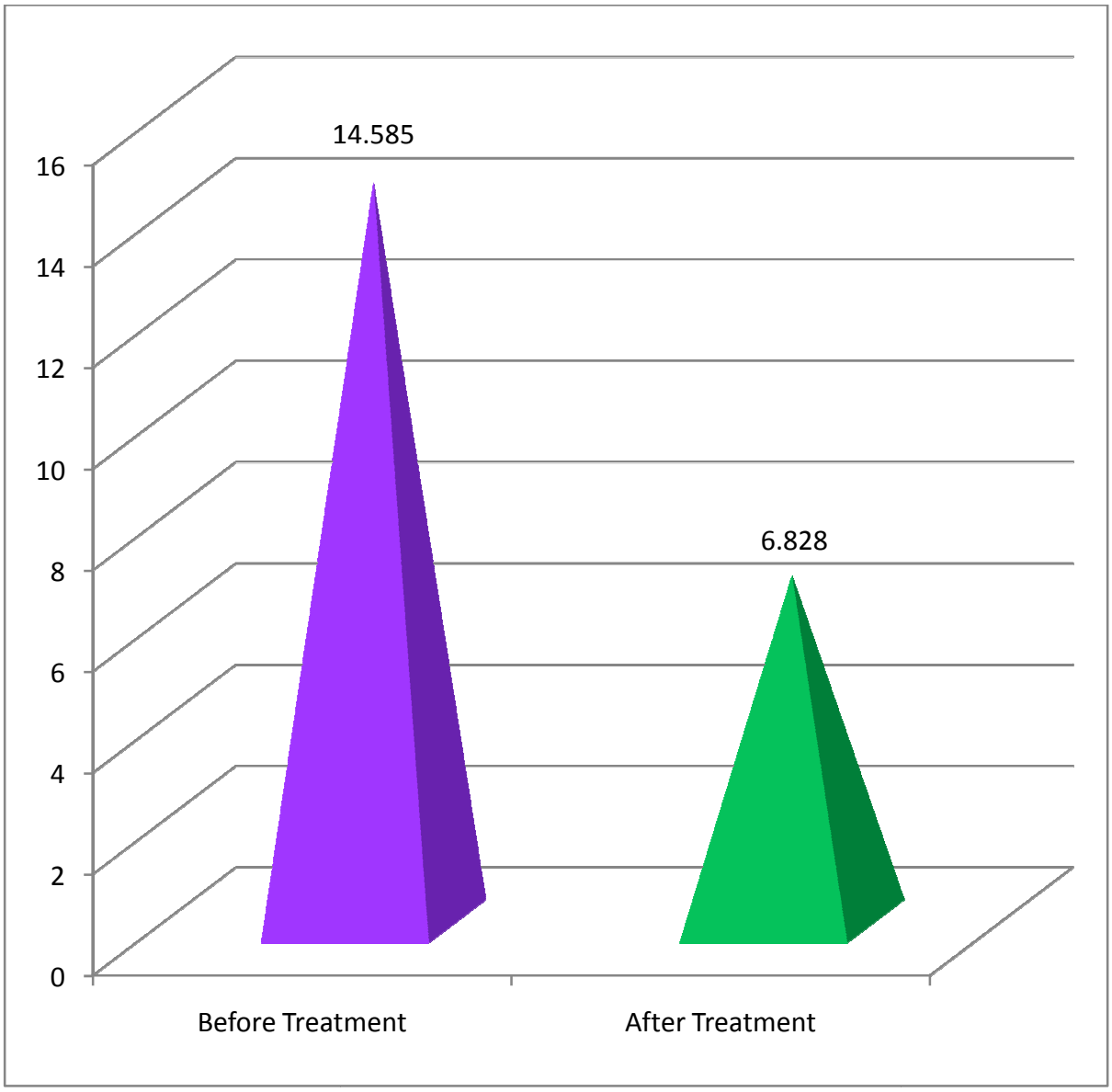


TABLE – 5

SIGNIFICANCE OF DIFFERENCE BETWEEN MEAN COPING BEFORE AND AFTER REBT

Condition	Experimental Group	Mean (SD)	Mean Difference	't'
Self-Distraction	Before Treatment	4.24 (1.09)	-0.98	-6.75
	After Treatment	5.23 (1.16)		
Active Coping	Before Treatment	3.81 (1.22)	-1.37	-8.05
	After Treatment	5.18 (1.28)		
Denial	Before Treatment	6.47 (1.07)	1.4	9.8
	After Treatment	5.07 (1.18)		
Use of Emotional Support	Before Treatment	4.56 (0.96)	-0.74	-5.87
	After Treatment	5.30 (1.02)		
Use of Instrumental Support	Before Treatment	4.41 (0.95)	-1.06	-8.23
	After Treatment	5.47 (1.02)		
Venting	Before Treatment	3.56 (1.27)	-0.85	-6.56
	After Treatment	4.41 (0.81)		
Positive Reframing	Before Treatment	3.63 (1.33)	-1.3	-9.93
	After Treatment	4.93 (1.37)		
Planning	Before Treatment	3.51 (1.25)	-1.2	-7.77
	After Treatment	4.71 (1.37)		
Humour	Before Treatment	2.61 (0.97)	-0.87	-5.63
	After Treatment	3.48 (1.11)		

Condition	Experimental Group	Mean (SD)	Mean Difference	't'
Acceptance	Before Treatment	3.57 (1.28)	-1.17	-6.69
	After Treatment	4.74 (1.31)		
Religion	Before Treatment	4.73 (1.31)	-0.68	-4.07
	After Treatment	5.41 (1.27)		
Self-Blame	Before Treatment	6.46 (1.03)	1.42	8.65
	After Treatment	5.04 (1.01)		

Coping mechanism are traits or habits employed by breast cancer patients help to come to terms with their condition. Different people cope with situation in different ways. Common coping mechanism associated with cancer patients include; indulgence into religion, emotional support from spouses and network of friends and family, self distraction and substance use. Though studies exist that identify the various coping mechanism of breast cancer patients, there are very few studies that relate these mechanisms to the prevalence psychological conditions such as depression among the breast cancer patients. Identifying coping mechanism that will assist in the reduction of depression and other psychological suffering in breast cancer patients will enhance their ability to fight the disease. Studies have indicated that ensuring psychological well being of patients will give them the spirit to physically fight a disease and therefore increase their survival chances (Vasquez, Hervas, Rahan & Gomez, 2009)

The optimism and pessimism significantly influenced distress levels of patients awaiting surgery for breast cancer. Those with a higher tendency to be optimistic experienced less distress on the day of their surgery. In contrast, those who tended to be more pessimistic displayed more distress during this time. It also indicated that certain coping strategies were related to increased distress levels prior to surgery and these were greater planning, instrumental support, humour, venting, self-blame, behavioural disengagement, positive reframing, acceptance and religion. Some of these coping strategies

are considered to be adaptive (e.g. planning, humour, venting, instrumental support), as opposed to problematic (e.g. denial, self-blame, self-distraction), and yet they were still associated with greater levels of distress. It suggested that the impact of coping responses on psychological distress was mediated by optimism and pessimism (David, 2006).

Table IV shows that mean "Self-Blame", "Self Distraction" and "Denial" of the patients was 'High' before the intervention. It is amazing to find that it had reduced to 'low' after Rational Emotive Behaviour Therapy (REBT). "Venting", "positive reframing", "planning" and "acceptance" which together represents "emotional outlet technique" are worked very well after the therapeutic intervention of the patients which increased the hope of the patient for their survival. The "use of instrumental support" and "use of emotional support" indicated that spouse and family member's support was associated with positive mood indirectly through positively-focused coping.

FIGURE – 5

SIGNIFICANCE OF DIFFERENCE BETWEEN MEAN COPING BEFORE AND AFTER REBT

N=70

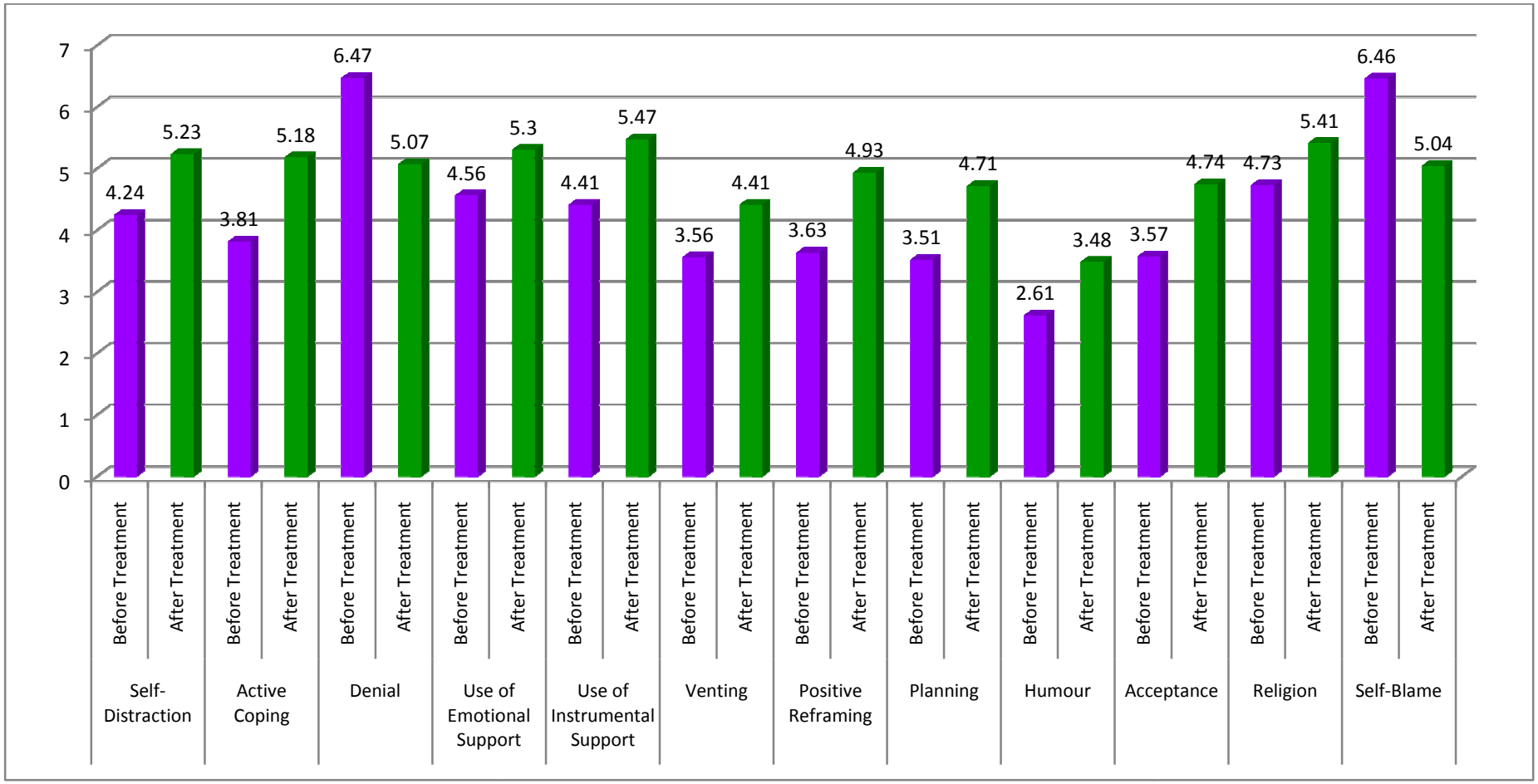


TABLE – 6

CORRELATION BETWEEN ILLNESS PERCEPTION AND HOPELESSNESS

Variables	Illness Perception	Hopelessness
Illness Perception	1.000	0.289*
Hopelessness	0.289*	1.000

** Correlation is significant at the 0.05 level*

Correlation is a statistical technique that can show whether and how strongly pairs of variables are related. Correlation between Illness Perception and Hopelessness of the sample was calculated by Pearson's Product Moment Correlation Method.

There are many different factors that come together to influence the course of our illness. Illness perceptions bear a direct relationship to several important health outcomes, including their level of functioning and ability, utilization of health care, adherence to treatment plans laid out by health care professionals, and even overall mortality. Our illness perceptions emerge out of our beliefs about illness and what illness means in the context of our lives. Understanding illness perceptions and incorporating them into health care is critical to effective treatment. (Petrie, 2012).

More than just temporary feelings of grief, depression can have a significant impact on the enjoyment of life, health and work of a person affected by cancer. Having faced the emotional trauma of receiving the diagnosis of cancer, the patients have to undergo various kinds of treatment, which may produce physical and psychological morbidity and in some, the mutilating surgery undoubtedly causes emotional distress, which in turn leads to hopelessness in cancer patients.

Table 6 shows the relation between Illness Perception and Hopelessness the calculated coefficient of correlation value is 0.28, which is significant at 0.05 levels. This is indicative that the illness perception and Hopelessness is directly proportional with each other. With the exercise of Illness perception being blown up the mind becomes devastated sinking in to depression causing hopelessness. Hence, the null hypothesis, 'There is no Illness Perception and Hopelessness in the selected Breast Cancer patients' is rejected.

Factor Analysis

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 doe on the basis of Kaiser-Meyer-Olkin (KMO) measures and Bartlett's Test of Sphericity and the results are shown in table 7.

TABLE – 7

KMO AND BARTLETT'S TEST

Measures		**Values**
KMO Measures of Sampling Adequacy		0.814
Barelett's Test of Sphericity	Approx. Chi-square	216.278
	df	36
	Significance	0.000

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

TABLE – 8

ROTATED COMPONENT MATRIX

Variables	Component		
	1	2	3
Use of Instrumental Support	0.474	0.466	-0.109
Behavioural 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
Humour	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**

Table 8 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 greater than 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 percent of the variance. Factor 2 had significant loading on one dimension namely “Self-Blame” represents withdrawal behaviour and explained nearly 12.650 percent of variance. Factor 3 had significant loading on one dimension namely “religion” which explains nearly 12.307 percent of variance.

The least value component in coping in the first order extraction indicate that the patient refrain from giving in to use of instrumental support, behavioural disengagement, humour, 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.

Schlegel, Talley, Molix and Bettencourt (2009) quantitatively examined the coping strategies employed by both rural and urban breast cancer patients while they were undergoing radiation therapy. The influence of these coping behaviours on concurrent as well as subsequent depressive symptoms (3 and 6 months later) was examined. The results revealed that the rurality of breast cancer patients was unrelated to the ways in which they coped, but did influence the relationships between some coping responses and depressive symptoms. Specifically, active coping and positive reinterpretation were negatively related to depressive symptoms for more rural breast cancer patients, but not their relatively urban counterparts. Similarly, behavioural disengagement was more strongly related to depressive symptoms for more rural patients.

CHAPTER – V

SUMMARY AND CONCLUSION

A study on "Management of Illness Perception, Hopelessness and Coping among Breast Cancer patients" was carried out involving the following objectives:

- To identify the symptoms of breast cancer in the selected patients.
- To identify the level of Illness Perception in the patients.
- To assess the level of Hopelessness in the patients.
- To identify the factors that represents the relationship in coping strategy adopted by the patients.
- To help the patients manage the Illness Perception, Hopelessness and Coping through Rational Emotive Behavior Therapy (REBT).

This study was conducted in Coimbatore Cancer Foundation (CCF) in G. Kuppuswamy Naidu Memorial Hospital, Coimbatore by purposive sampling method. They were screened using Case Study Schedule, Beck Hopelessness Scale, Illness Perception Questionnaire and Brief Coping Scale. Among 100 patients, 75 patients scoring high in Hopelessness, Illness Perception and low in Brief coping were taken for the study. They were in the age range of 35-70 years under the medication. The psychological treatment called "Rational Emotive Behavior Therapy was administered on the patients. After 15 days the Re-assessment was given by using the same Questionnaires.

CONCLUSION

- 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 illness perception from 'High' (M=63.57) to 'Low' (M=34.34).
- 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, behavioural disengagement, venting, planning, humour and self blame were found to be a contributory factor in managing the emotional components of the patients.

RECOMMENDATION

- Breast cancer patients being very sensitive group it is very essential that a psychological counselor is in constant touch with them during the treatment.
- Counseling the caregivers of breast cancer patients would facilitate in bringing about marked changes.
- In calculating coping skills in the patients help reduce the burden and maintain a good quality of life.
- Further researches can be done on breast cancer patients using REBT therapy.

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". Japnese Journal Clinical Oncology. 42(10):940-7. http://www.ncbi.nlm.nih.gov/pubmed/22859828

Anagnostopoulos, F. & Spanea, E. (2005). Assessing illness representations of breast cancer: a comparison of patients with healthy and benign controls. Journal of Psychosomatic Research. 58(4):327-34. http://www.ncbi.nlm.nih.gov/pubmed/15992568

Bigatti, S.M. Steiner, J.L. & Miller, K.D. (2012). "Cognitive appraisals, coping and depressive symptoms in breast cancer patients". Stress health: journal of international society for the investigation of stress. 28(5):355-61. http://www.ncbi.nlm.nih.gov/pubmed/22888085.

Brothers, B.M**. &** Andersen, B.L**. (2009)**. "Hopelessness as a predictor of depressive symptoms for breast cancer patients coping with recurrence". Psychology oncology. 18(3):267-75. http://www.ncbi.nlm.nih.gov/pubmed/18702065

Chang, Y.A. (2013). Menopause: Are You Pre, Peri Or Post? Healthy life style. http://www.intelihealth.com/IH/ihtIH/WSIHW000/35320/35321/398081.html?d=dmtHMSContent

Cheng, H., Sit, J.W., Twinn, S.F., Cheng, K.K. & Thorne, S. (2013). "Coping with Breast Cancer Survivorship in Chinese Women: The Role of Fatalism or Fatalistic Voluntarism" Cancer nursing. 36(3); 236-44. http://www.ncbi.nlm.nih.gov/pubmed/22964870.

Cheng. (2003) sited in Taylor, S.E.(2012). "Health Psychology". Tata-McGraw Hill Publication. 7th edition. Pp. 182.

Ciesielski, P.F. (1992). "Grolier Wellness Encyclopedia. Major Chronic disease". Duskin Publishing Group, Guilford. Vol. 8. Pp 55, 62-63.

Cros, C.J.S. (2013). "Common Psychological Problems in the Cancer Patient" H. Lee Moffitt Cancer Center & Research Institute. http://moffittcancercenter.com/moffittapps/ccj/v6n5/dept6.htm

David, D. et al. (2006). "Relations between coping responses and optimism-pessimism in predicting anticipatory psychological distress in surgical breast cancer patients". Romania & Ruttenberg Cancer Cente. 40, 203-213**.** http://www.centreforconfidence.co.uk/pp/evidence.php?p=c2lkPTQmdGlkPTImaWQ9OTA

Dr. P's Blog (2010). All about depression. http://www.allaboutdepression.com/tre_21b.html

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 http://www.ncbi.nlm.nih.gov/pubmed/22110236

Fischer, M.J., Wiesenhaan, M.E., Heijer, A.D., Kleijn, W. C, Nortier, J.W. & Kaptein, A.A. (2012). "From despair to hope: A longitudinal study of illness perceptions and coping in a psycho-educational group intervention for women with breast cancer". British Journal of Health Psychology. http://www.ncbi.nlm.nih.gov/pubmed/23006141.

Gumus, A.B. Cam, O. & Malak, A.T. (2011). "Relationships between psychosocial adjustment and hopelessness in women with breast cancer". Asian Pacific Journal Cancer Prevention. 12(2): 433-8. www.ncbi.nlm.nih.gov/pubmed/21545208

Hamann, B. (2001). "Disease identification, prevention & control". Mc-Graw Hill Higher education, New York. II Edition. Pp. 282, 292-293.

Harnish, J.D. Aseltine, R.H. & Gore, S. (2000). "Resolution of stressful experiences as an indicator of coping effectiveness in young adults: an event history analysis". Journal of health and social behavior, 41, 121-136.

Hobfoll. (1989). sited in Taylor, S.E. (2012). "Health Psychology". Tata-McGraw Hill publication. 7th edition. Pp182.

Horwich, A. (1995). "Oncology A multidisciplinary textbook". Champman & Hall Publication. 1st edition. Pp. 513.

Howard (2011). "The Oxford Handbook of Health Psychology". Pp. 93. http://books.google.co.in on 4/3/2013.

Jørgensen, I.L**.,** Frederiksen, K**.,** Boesen, E**.,** Elsass, P**. &** Johansen, C**. (2009**). "An exploratory study of associations between illness perceptions and adjustment and changes after

psychosocial rehabilitation in survivors of breast cancer". Acta Oncological. 48(8): 1119-27. http://www.ncbi.nlm.nih.gov/pubmed/19863219

Kang, G. & Oh, S. (2012) "Effects of Mindfulness Meditation program on perceived stress, ways of coping, and stress response in breast cancer patients". Journal Korean Academy of Nursing. 42(2):161-70. http://www.ncbi.nlm.nih.gov/pubmed/22699165

Kaptein, A.A. et al. (2013). "Illness perceptions and quality of life in Japanese and Dutch women with breast cancer". Journal of Psychosocial Oncology. 1. 83-102. http://www.ncbi.nlm.nih.gov/pubmed/23311973.

Kelley, O. (2010). "Medical Review Board". http://ocd.about.com/od/glossary/g/Coping_Glossary.htm.

Kiberstis, P.A. & Marx, J. (2002). Sited in Taylor, S.E (2012). "Health Psychology". Tata McGraw Hill Publication. Edition 7. Pg. 282.

Koopman,C. et al. (2001). "Distress, coping, and social support among rural women recently diagnosed with primary breast cancer". Breast journal. 7(1):25-33. http://www.ncbi.nlm.nih.gov/pubmed/11348412

Lev,E.L. & Owen,S.V.(2000). "Counselling women with breast cancer using principles developed by Albert Bandura." Perspectives in psychiatric care. 36(4). 131-8. http://www.ncbi.nlm.nih.gov/pubmed/12035205

Leventhal et al. (1980, 1997). Leventhal and Nerenz (1985). In Ogden, J (2007). "Health psychology". McGraw Hill Publication. Pp. 49.

Mahigir, F., Khanehkeshi, A. & Karimi, A. (2012). "Psychological treatment for pain among patients by rational-emotive behaviour therapy-efficacy in both India and Iran". Asian Pacific Journal of Cancer Prevention. 13(9):4561-5.http://www.ncbi.nlm.nih.gov/pubmed/23167380.

Maris,W.R. & Canetto, L. (2000). "Review of Suicidology 2000". Pg 128**.** http://books.google.co.in/books?id=lB1lNW_RNEIC&pg=PA128&lpg=PA128&dq

McCorry, N.K. et al. (2012). Illness perception clusters at diagnosis predict psychological distress among women with breast cancer at 6 months post diagnosis. Psychooncology. http://www.ncbi.nlm.nih.gov/pubmed/22389291

Menopause and Cancer Risk and Treatment (2012). American Society of Clinical Oncology cancer.net. http://www.cancer.net/coping/emotional-and-physical-

matters/sexual-and-reproductive-health/menopause-and-cancer-risk-and-treatment

Millar, K. Purushotham, A.D. McLatchie, E. George, W.D. & Murray, G. D. (2005). "A 1-year prospective study of individual variation in distress, and illness perceptions, after treatment for breast cancer". Journal of Psychosomatic Research. 58(4):335-42. http://www.ncbi.nlm.nih.gov/pubmed/15992569

Ogden, J. (2007). "Health psychology". McGraw Hill Publication. pp.49, 60, 325-326.

Pasipanodya, E.C. et al. (2012). "Social constraints on disclosure predict daily well-being in couples coping with early-stage breast cancer". Journal Family Psychology. 26(4):661-7. http://www.ncbi.nlm.nih.gov/pubmed/22686265

Penley, J.A. Thomaka, J. & Wiebe, J.S. (2002). "The association of coping to physical and psychological health outcomes: A meta analysis review". Journal of Behavioural Medicine, 25, 551-603.

Petrie, K.J. (2012). "Mind Over Matter: Patients' Perceptions of Illness Make a Difference". http://www.psychologicalscience.org/index.php/news/releases/mind-over-matter-patients-perceptions-of-illness-make-a-difference.html

Petrie, K.J., Jago, L.A. & Devcich, D.A. (2007). "The Role of Illness Perceptions in Patients With Medical Conditions". Current Opinion Psychiatry. 20(2). Pp. 163-167. http://www.medscape.com/viewarticle/552098_2

Polk et.al., (2005). "State and trait affect as predictors of salivary coristol in healthy adults". Psychoneuroendocrinology, 30, 261-272.

Prior, C.J. (2003). "Perimenopause." Centre for Menstrual Cycle and Ovulation Research http://www.cemcor.ubc.ca/help_yourself/perimenopause

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. http://www.ncbi.nlm.nih.gov/pubmed/23233706

Rozema, H. Völlink, T. & Lechner, L. **(2009)**. "The role of illness representations in coping and health of patients treated for breast cancer". Psycho-oncology. 18(8):849-57. http://www.ncbi.nlm.nih.gov/pubmed/19085973

Shin, A.M. & Park, J. S. (2007). "The effects of hope intervention on hope and depression of cancer patients staying at home". Taehan Kanho Hakhoe Chi. 37(6):994-1002. www.ncbi.nih.gov/pubmed/17992707.

Smith, T.W. Ruiz, J.M & Uchino, B.N.(2000). "Health Psychology". Vigilance, active coping, and cardiovascular reactivity during social interaction in young men. 19, 382-392.

Speck, R.M. (2013). "Taste alteration in breast cancer patients treated with taxane chemotherapy: experience, effect, and coping strategies." Support Care Cancer. 21(2): 549-55. http://www.ncbi.nlm.nih.gov/pubmed/22864536

Taha, S.A., Matheson, K. & Anisman, H. (2012). "Everyday experiences of women posttreatment after breast cancer: the role of uncertainty, hassles, uplifts and coping on depressive symptoms". Journal of Psychosocial Oncology. 30(3):359-79. http://www.ncbi.nlm.nih.gov/pubmed/22571249.

Taleghani, F. Yekta, Z.P. & Nasrabadi, A.N(2006)." Coping with breast cancer in newly diagnosed Iranian women". Journal of Advanced Nursing. 54(3): 265-72; http://www.ncbi.nlm.nih.gov/pubmed/16629910

Taylor, S.E. & Stanton, A. (2007). "Coping resources, coping processes and mental health". Annual review of clinical psychology, 3, 129-153.

Taylor, S.E. (2012). "Health Psychology". Tata-McGraw Hill Publication. 7th edition. Pp. 181.

Transformational Health. (2008). "Coping With Life during Cancer Treatment Counseling". Moonview LLC. http://moonviewsanctuary.com/transformational-health/cancer-treat ment-counseling.html.

Vasquez, Hervas, Rahan & Gomez (2009). "Coping mechanism featured". http://customwritingtips.com/component/k2/item/4517-coping-mechanism.html?tmpl=component&print=1

Wang, X. et al. (2012). "Interaction of coping styles and psychological stress on anxious and depressive symptoms in Chinese breast cancer patients". Asian Pacific Journal of Cancer Prevention. 13(4):1645-9.http://www.ncbi.nlm.nih.gov/pubmed/22799382

Watson, M. Homewood, J. & Haviland, J. (2012). "Coping response and survival in breast cancer patients: a new analysis" Stress Health. 28(5):376-80. http://www.ncbi.nlm.nih.gov/pubmed/23129557.

WebMD. (2005). Menopause Health Center. Breast Cancer and Menopause. http://www.webmd.com/menopause/breast-cancer-menopause

Wise Geek. (2003). What is Illness Perception? http://www.wisegeek.com/what-is-illness-perception.htm.

]

ANNEXURE I

CASE STUDY SCHEDULE

CASE NUMBER:

NAME	:	
AGE	:	
GENDER	:	
EDUCATION	:	
OCCUPATION	:	
INCOME	:	
MARITAL STATUS	:	MARRIED/SINGLE/DIVORCED/SEPERATED.
TYPE OF FAMILY	:	JOINED/NUCLEAR
DURATION OF ILLNESS	:	
NEGATIVE EMOTIONS	:	

ANNEXURE II

(Broadbent et al., 2006)

The Brief Illness Perception Questionnaire

For the following questions, please circle the number that best corresponds to your views:

How much does your illness affect your life?										
0 no affect at all	1	2	3	4	5	6	7	8	9	10 severely affects my life
How long do you think your illness will continue?										
0 a very short time	1	2	3	4	5	6	7	8	9	10 forever
How much control do you feel you have over your illness?										
0 absolutely no control	1	2	3	4	5	6	7	8	9	10 extreme amount of control
How much do you think your treatment can help your illness?										
0 not at all	1	2	3	4	5	6	7	8	9	10 extremely helpful
How much do you experience symptoms from your illness?										
0 no symptoms at all	1	2	3	4	5	6	7	8	9	10 many severe symptoms
How concerned are you about your illness?										
0 not at all concerned	1	2	3	4	5	6	7	8	9	10 extremely concerned
How well do you feel you understand your illness?										
0 don't understand at all	1	2	3	4	5	6	7	8	9	10 understand very clearly

How much does your illness affect you emotionally? (e.g. does it make you angry, scared, upset or depressed?										
0	1	2	3	4	5	6	7	8	9	10
not at all affected emotionally										extremely affected emotionally

THE BRIEF ILLNESS PERCEPTION QUESTIONNAIRE SCORING INSTRUCTIONS

Each item of the Brief IPQ assesses one dimension of illness perceptions:

- The **consequences** score is simply the response to item 1.
- The **timeline** score is the response to item 2
- The **personal control** scores is the response to item 3
- The **treatment control** score is the response to item 4
- The **identity** score is the response to item 5
- The **coherence** score is the response to item 7
- The **emotional representation** is the response to item 8.
- Illness **concern** is measured by item 6. This reflects a combination of emotional and cognitive representations.
- Item 9 is the **causal** item.

Reponses can be grouped into categories such as stress, lifestyle, hereditary, etc. determined by the particular illness studied. Categorical analysis can then be performed, either on just the top listed cause or all three listed causes.

In some circumstances it may be possible to compute an overall score which represents the degree to which the illness is perceived as threatening or benign. The internal consistency of this score will depend on the illness studied and it is recommended this is checked. To compute the score, reverse score items 3, 4, and 7 and add these to items 1, 2, 5, 6, and 8. A higher score reflects a more threatening view of the illness.

E. Broadbent

ANNEXURE III

(Aaron T. Beck, 1978)

BECK'S HOPELESSNESS SCALE

1. I look forward the future with hope and enthusiasm.	True	False
2. I might as well give up because there is nothing I can do about making things better for myself.	True	False
3. When things are going badly, I am helped by knowing that they cannot stay that way forever.	True	False
4. I can't imagine what my life would be like in ten years.	True	False
5. I have enough time to accomplish the things I want to do.	True	False
6. In my future, I expect to succeed in what concerns me most.	True	False
7. My future seems dark to me	True	False
8. I happen to be particularly lucky, and I expect to get more of the good things in life that the average person.	True	False
9. I just can't get the breaks, and there's no reason I will in the future.	True	False
10. My past experiences have prepared me well for the future.	True	False
11. All I can see ahead of me is unpleasantness rather then pleasantness.	True	False
12. I don't expect to get what I really want.	True	False
13. When I look ahead to the future, I expect that I will be happier than I am now.	True	False
14. Things just won't work out the way I want them to.	True	False
15. I have great faith in the future.	True	False
16. I never get what I want, so it's foolish to want anything.	True	False
17. It's very unlikely that I will get any real satisfaction in the future.	True	False
18. The future seems vague and uncertain to me.	True	False
19. I can look forward to more good times than bad times.	True	False
20. There's no use in really trying to get anything I want because I probably won't get it.	True	False

SCORING KEY

BECK HOPELESSNESS SCALE

SCORE	RANGE
0-3	Minimal
4-8	Mild
9-14	Moderate
15-20	Severe

ANNEXURE III

CARVER (1997)

Brief cope

1= I haven't been doing this at all

2= I've been doing this a little bit

3= I've been doing this a medium amount

4= I've been doing this a lot

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real".
4. I've been using alcohol or other drugs to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape.
10. I've been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.
13. I've been criticizing myself.
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.

19. I've been doing something to think about it less, such as going to movies, watching tv, reading, daydreaming, sleeping or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.
22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from others people about what to do.
24. I've been learning to live with it.
25. I've been thinking hard about what step to take.
26. I've been blaming myself for things that happened.
27. I've been praying or meditating
28. I've been making fun of the situation.

SCORINGS

SNO	SUBSCALES	ITEMS
1	Self distraction	1+19
2	Active coping	2+7
3	Denial	3+8
4	Substance use	4+11
5	Use of emotional support	5+15
6	Use of instrumental support	10+23
7	Behavioural disengagement	6+16
8	Venting	9+21
9	Positive reframing	12+17
10	Planning	14+25
11	Humours	18+28
12	Acceptance	20+24
13	Religion	22+27
14	Self-Blame	13+26