

## **Effects of Cognitive Behaviour Therapy and Emotional Intelligence Training on Marital Stability of Married Women with Breast Cancer in Ibadan Nigeria**

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**ABSTRACT:** *Using a pre-test, post-test control group quasi experimental design with 3x2x2 factorial matrix; this study investigated the effects of cognitive behaviour therapy and emotional intelligence training on marital stability of married women with breast cancer in Ibadan Nigeria. The sample of the study comprised of thirty purposively selected married breast cancer patients receiving treatment in a government owned hospital in Ibadan. The instruments used were: The Locke–Wallace Marital Adjustment Scale (.84.), The Body Image Scale (0.93) and Worry Interference Scale (WIS) (0.92). Two hypotheses were tested and data collected was analysed using Analysis of Covariance (ANCOVA). The findings of the study revealed that there was significant main effect of treatment in the pre-post marital stability scores of married women with breast cancer in the experimental and control groups ( $F(3,26) = 63.41, P < .05$ ). However, in the 3-way interactions, no significant interaction effect of treatment, anxiety and self-concept on the marital stability of married women with breast cancer was found ( $F(4, 25) = 0.251, P > .05$ ). Therefore, counselling / psychological intervention programmes should be put in place to help guide married women with breast cancer to self-rediscover their potentials, abilities and capabilities and improve on their social competence ability. This would help them develop the potentials to establish and sustain interpersonal relationship with their spouses and others.*

**KEYWORDS:** Breast Cancer, Cognitive Behaviour Therapy, Emotional Intelligence Training, Hospital and Women.

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### **INTRODUCTION**

The experience associated with the diagnosis of breast cancer among married women is often devastating and challenging considering the fact that they must learn how to cope and deal with the fear of uncertainty, emotional and physical consequences of being diagnosed with a life-threatening illness such as breast cancer. This makes breast cancer a relevant health issue as its treatment is invasive, stressful and associated with numerous side-effects that is greatly detrimental to the quality of life and social contacts of victims (Dow & Lafferty 2000). This implies that breast cancer presents one of the most widespread threats to married women's health, marriage and quality of life. This is against the backdrop of the fact that breast cancer is a significant health problem and a complex disease that negatively impacts both physically and psychologically on victims. Thus, breast cancer is the most common malignant disease among women globally with an estimated 5-year survival rate of 75%, and it is the first cause of death in women age 30–60 years. Also, the accompanying challenges associated with the diagnosis of breast cancer, more often than not, causes grave strain in the marital stability of married women with breast cancer. This is observed in relation to their experience of lengthy

treatments, trying to combine recovery with family and work commitments (Schultz, Klein, Beck, Stava & Sellin, 2005).

This further indicates that its negative implication on the psychology, physiology and wellbeing of women in all ramifications cannot be overemphasized. However, it is germane to understand how affected women experience their altered life situation and thus to know their real problems and needs. In this way, women and their families can be offered support that would really help them adjust to the reality of their experienced situation (Freedman 2003). Therefore, in the light of this perspective, this study experimentally, investigated the effects of cognitive behaviour therapy and emotional intelligence training on marital stability of married women with breast cancer in Ibadan, Nigeria. It also, considered the moderating effect of anxiety and self-concept.

### **Review of Related Literature**

With the diagnosis of breast cancer, many couples strive to overcome the accompanying challenges with the belief that divine intervention would see them through. This is in line with Taylor-Brown, Kilpatrick and Maunsell (2000) report that most married women with breast cancer do have the support of their spouse and the required resources to meet their challenge. Thus, clinical experience and some research suggest that some married women with breast cancer revealed that their marital relationship improved since the cancer episode (Thornton, 2002). Stability in marital satisfaction (or lack thereof) has also been found for those with breast cancer (Dorval, Maunsell, Taylor-Brown & Kilpatrick 1999). However, divorce and break-ups occur primarily among those reporting that marital difficulties predated their diagnosis (Dorval, Maunsell, Taylor-Brown & Kilpatrick 1999).

Often, a diagnosis of breast cancer triggers a preoccupation with the disease and anxiety (Boehmke & Dickerson, 2006). Women with breast cancer report a pronounced difficulty with thinking of anything other than their diagnosis and the ways in which it will affect their lives and those of their loved ones (Boehmke & Dickerson, 2006). Included in these anxieties are concerns about their ability to continue to function in their various roles, routines, and duties. Such anxiety may be present from the moment a woman becomes aware of suspicious symptoms and may recur long after treatment has been completed (Keitel & Kopala, 2000).

Schreier and Williams (2004) found that married women with breast cancer undergoing chemotherapy experience more anxiety than radiation therapy patients and high anxiety levels were associated with decreased quality of life both at the start of treatment and at the end of one year mark. The study highlights the need to initiate nursing interventions to reduce anxiety at the beginning of chemotherapy. Thus, it is of note that of all the symptoms, anxiety and depression are the most prevalent psychological symptoms expressed by cancer patients (Takahashi, Hondo, Nishimura, Kitani, Yamano & Yanagita, 2008), the prevalence rate ranging from 13% to 54% (Hopwood, Haviland, Mills, Sumo & Bliss, 2007). Anxiety and depression have both been shown to be negatively associated with the QOL of breast-cancer patients after diagnosis, at the start of treatment and post-treatment (Wong & Fielding, 2007).

Also, the impact of breast cancer on a woman's body image as an integral part of her self-concept was examined in a study by Mock (1993). This study looked at 257 subjects between the ages of 29 and 79. The author reported that an important component to understanding the self-concept of women with breast cancer is to look at women's responses to the importance of the breast. Mock asked women with breast cancer to respond to the importance of the

breast. They responded that their breast is an important symbol of womanliness, sexual attractiveness, and nurturance. The study further report that the loss of a breast is related to feminine identity and it often results in a negative alteration in body image and self-concept (Mock, 1993). Furthermore, the treatment of breast cancer could alter the feelings, perceptions, and attitudes of women that are undergoing breast cancer treatment towards their physical self, appearance and functionality considering the fact that breast cancer treatment often changes women's definition of self, making them feel less of a woman (Anagnostopoulos & Myrghianni, 2009). This is based on the fact that certain surgical procedures such as a mastectomy may make a woman feel unattractive and create negative body image concerns. A mastectomy can cause a complete loss of sensation in the chest area from a sexual function perspective.

Consequently, breast cancer engenders a state of prolonged stress resulting from the discovery of the disease, the process of diagnosis, surgical intervention, medical treatment and medical follow-up. However, the way and manner breast cancer patients adjust to the alterations in their life caused by these ongoing stressful experiences depends on their coping responses (Spencer, Carver, & Price, 1998). Undoubtedly, breast cancer patients are in a stressful situation as it is known to cause substantial distress (anxiety, depressed mood) in the diagnosed woman's spouse, regardless of stage of disease (Lewis, 1997). This development gives credence to the fact that married women with breast cancer needs psycho-therapeutic intervention such as cognitive behaviour therapy and emotional intelligence training that would equipped them with necessary skills that would enable them cope with the challenges of breast cancer, adjust in their marriage and maintain marital stability.

Okoiye and Falaye (2011) report, that cognitive behaviour therapy is a psychotherapeutic approach that aims to correct dysfunctional emotions, behaviours, and cognitions through a goal-oriented systematic procedure. Thus, cognitive behaviour therapy can be seen as an umbrella term for a number of psychological techniques that share theoretical basis in behaviouristic learning theory and cognitive psychology (British Association of Behavioural & Cognitive Psychotherapies, 2008). Therefore, it is of note that researchers have linked cognitive processes with adjustment to challenges of life as Beck (2001) reports that cognitive behaviour therapy seeks to help an individual or group of individuals overcome difficulties by identifying and changing dysfunctional thinking.

Also, the report of Kumar and Rooprai (2009) as cited in Adigun and Okoiye (2012) reveal that over the last decade, Emotional Intelligence (EI) has drawn significant interest from diverse individuals across the world. The development of emotional intelligence skills is important because it is an area that is generally overlooked when communication and interpersonal relationship skills programmes that are pivotal to sustaining marital stability are designed. And yet, research shows that emotions properly managed, can drive trust, loyalty and commitment required for a happy marital life among couples whose spouse has breast cancer. This is owned to the fact that emotional intelligence is social intelligence that enables people to recognise their own and other peoples' emotions. Moreover, emotional intelligence enables people to differentiate those emotions and to make appropriate choices for thinking and action (Cooper & Sawaf, 1997). It is an intelligence that can be learned, developed and improved (Sternberg, 1996).

According Salovey and Mayer (1990) emotional intelligence includes an ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions. Furthermore, Okoiye (2011) posit that

emotional intelligence embraces two aspects of intelligence: (1) understanding oneself, one's goals, intentions, responses, behavior, etc. (2) understanding others, and their feelings. Thus, emotional intelligence embraces and draws from numerous other branches of behavioural, emotional and communications theories, such as NLP (Neuro-Linguistic Programming), Transactional Analysis and empathy. Therefore, by equipping married women with breast cancer with emotional intelligence skills as noticeable with the five EQ domains of (self-awareness, self-regulation, motivation, empathy and social skills) they will be able to sustain a happy marital stability which is the trust of this study.

### **Statement of the Problem**

Breast cancer creates multiple stressors for women of all ages. When a woman is diagnosed with breast cancer, every aspect of her life is altered. The body is confronted by invasive procedures and treatment side effects, the mind has to comprehend what is happening to the body and emotions are evoked in attempts to cope with this deadly disease. This adverse health phenomenon ignites the feeling of frustration, helplessness and dismay among married women with breast cancer. Its occurrence make them feel they have come to the end of their existence on earth. Thus, breast cancer presents one of the most widespread threats to married women's health, marriage and quality of life. Its negative impact on the psychology, physiology and wellbeing of married women in all ramifications cannot be overemphasized. Therefore, it is pertinent to gather evidence and formulate assessments via research in order to investigate the effect of breast cancer on marital stability among married women in Ibadan, Nigeria.

### **Theoretical Framework**

This research work is anchored on Self-determination theory (SDT). Self-determination theory is a macro-theory of human motivation, personality development, and well-being. The theory focuses especially on volitional or self-determined behaviour and the social and cultural conditions that promote it. SDT also postulates a set of basic and universal psychological needs, namely those for autonomy, competence and relatedness, the fulfillment of which is considered necessary and essential to vital, healthy human functioning regardless of culture or stage of development. Ryan and Deci (2001) maintain that wellbeing is not best captured by hedonic conceptions of 'happiness' alone. Instead, SDT also employs the concept of eudaimonia, or wellbeing defined as vital, full functioning, as a complementary approach. Finally, because autonomy is facilitated by reflective awareness, SDT stresses the role of mindfulness in self-regulation and wellness which is applicable to the recovery process of breast cancer patients.

Self-determination theory assumes that people are active organisms with inherent and deeply evolved tendencies toward psychological growth and development. This active human nature is clearly evident in the phenomenon of intrinsic motivation – the natural tendency manifest from birth to seek out challenges, novelty and opportunities to learn. It is also evident in the phenomenon of internalization, or the lifespan propensity of individuals to take on and attempt to integrate the social practices and values that surround them.

### **Research Hypotheses**

In this study the following hypotheses were tested at 0.05 level of significance:

1. There is no significant main effect of treatment on the marital stability of married women with breast cancer.
2. There is no significant interaction effect of treatment, anxiety and self-concept on the marital stability of married women with breast cancer

**TABLE 1: A 3X2X2 Factorial Matrix Design on marital stability of married women with breast cancer.**

Treatment	Self-Concept		
	High Anxiety	Low Anxiety	Total
A1 Cognitive Behaviour	A1 B1C1n=08	A1 B1C2n=02	10
A2 Emotional Intelligence	A2 B1C1n=06	A2 B1C2n=04	10
A3 Control Group	A3 B1C1n=07	A3 B1C2n=03	10
<b>Total</b>	<b>21</b>	<b>09</b>	<b>30</b>

## RESEARCH METHODOLOGY

### Research Design

The study adopted a pre-test, post-test control group quasi experimental design with 3x2x2 factorial matrix. The design is made of three rows representing the two treatment techniques, cognitive behaviour therapy and emotional intelligence training and the Control Group (non-treatment group). There is also a column denoting anxiety and self-concept (high and low) of participants as shown in table 1

### Population

The population for this study consists of all married breast cancer patients receiving treatment at the University Teaching Hospital Ibadan.

### Sample and Sampling Techniques

The sample for the study comprised of thirty purposively selected married breast cancer patients receiving treatment at the University Teaching Hospital Ibadan.

### Instrumentation

**The Locke–Wallace Marital Adjustment Scale** (1959) was used to measure marital stability of breast cancer patients. It is a twenty item scale with a reliability coefficient alpha of .84.

**The Body Image Scale for Breast Cancer Patients** by Hopwood, Fletcher, Lee and Al Ghazal (2001) was used to measure the self-concept of breast cancer patients. The 10 item scale comprised affective items (e.g. feeling feminine, feeling attractive), behavioural items, (e.g. find it hard to look at self-naked, avoid people because of appearance), and cognitive items (e.g. satisfied with appearance, or with scar). It is a likert scale with high reliability Cronbach's alpha of 0.93 and it has being widely used across culture.

**Anxiety:** Was measured using Wellisch, Gritz, Schain, Wang and Siao (1992) Worry Interference Scale (WIS). The WIS is a seven-item self-report measure developed to assess the degree to which thoughts about breast cancer are perceived as interfering with the respondents' daily functioning. It is imbedded within a larger questionnaire that also assesses perceived risk, intent to undergo genetic testing, and frequency of worry about getting breast cancer. The WIS scale items assess disruptions in sleep, work, concentration, relationships, having fun, feeling sexually attractive, meeting family needs, and reproductive decisions. Additional items assess participants' abilities to speak with their partners about their concerns, their partners' abilities to be understanding, and frequency of participants' worries about their children's or grandchildren's chances of developing breast cancer. All items are assessed on a five-point multiple-choice scale ranging from 1 'not at all' to 5 'a lot'. As such, the range of scores on the total scale is 7–35. Examples of items include 'Fears of developing breast cancer have affected my relationships with others', 'Thoughts of breast cancer have affected my ability to sleep', and 'Worries about breast cancer have affected my ability to meet the needs of my family'. A 'not at all' response is considered to mean either that the respondent does not experience worry about getting breast cancer or that worries about breast cancer do not interfere with her functioning. The internal consistency, with Cronbach's alpha coefficients ranging from 0.89 to 0.94. Split-half reliabilities range from 0.83 to 0.92.

### **Procedure for Administration**

Permission was obtained from the hospital management and the participants themselves. The therapeutic sessions were held on participant's clinic days. Eight therapeutic sessions were held for one hour each for the experimental groups (one and two), while the control group was not exposed to any treatment programme. The pre-test materials were administered at the first meeting, while the post-test was administered at the eight week.

### **Control of Extraneous Variables**

In controlling extraneous variables that possibly could affect the results of the study, the study involved several stages of randomization of treatment to the experimental group. Also, the Rosenthal effect was controlled by keeping the control group busy with their usual clinic activities during the experimental sessions. Also, Via contaminations which are beyond the reach of the design and other procedures of the research was taken care of by using ANCOVA statistical tool for analysis.

### **Method of Data analysis**

ANCOVA (Analysis of Covariance) was used as the statistical tool for the study. Analysis of Covariance (ANCOVA) was used to compare the differential effectiveness of the treatments.

### **Summary of Treatment Package**

Experimental Group One: Cognitive Behaviour Therapy

Session One: General orientation and administration of instrument to obtain pre-test scores.

Session Two: Identification of psychological distraction

Session Three: Identification of unrealistic feeling

Session Four: Turning health failure to success

Session Five: Developing positive attitude to life

Session Six: Behaviour modification

Session Seven: Need for positive appreciation of self

Session Eight: Revision of all activities in the previous session and administration of instrument for post treatment measures.

Experimental Group Two: Emotional intelligence training

Session One: Orientation and Administration of Pre-test measures

Session Two: Need for focus in marriage

Session Three: How to overcome the feelings of marital failure

Session Four: How to overcome health and marital anxiety

Session Five: Goal setting

Session Six: Developing positive attitude to marriage

Session Seven: Behaviour modification

Session Eight: Revision of all activities in the previous session and administration of instrument for post treatment measures.

## **RESULTS**

### **Hypothesis One**

There is no significant main effect of treatment on the marital stability of married women with breast cancer.

To test this hypothesis, Analysis of Covariance (ANCOVA) was employed to analyse the post test scores of participants on marital stability, using the pre-test scores as covariates to find out if post experimental differences were significant. The result obtained was tested at 0.05 significant levels as presented in tables 2

**TABLE 2: Summary of Analysis of Covariance (ANCOVA) of pre-post test interactive effects of marital stability scores of married women with breast cancer in the Treatment Groups, Cognitive Behaviour Therapy and Emotional Intelligence**

Source	Sum of Squares	DF	Mean Square	F	Sig.
Covariates	746.348	1	746.384	138.24	.000
Main Effect:					
Treatment Group	3.371	1	3.371	0.624	.120
3-way Interactions:					
Treatment Group x Anxiety x Self-Concept	684.662	2	342.331	63.41	.000
Error	5.411	4	1.353	0.251	.312
Total	113.393	21	5.399		
	859.741	29			

The result in table 2 showed that there was significant main effect of treatment in the pre-post marital stability scores of married women with breast cancer in the experimental and control groups ( $F(3,26) = 63.41, P < .05$ ). This means that there is a significant main effect of treatment in the mean posttest marital stability scores of participants exposed to treatment and the control group. This implies that married women with breast cancer in the experimental groups benefited from the treatment package as they were able to manage their anxiety develop positive self-concept and improve on their marital relationship with their spouses. Therefore, hypothesis 1 is rejected.

### Hypothesis Two

There is no significant interaction effect of treatment, anxiety and self-concept on the marital stability of married women with breast cancer? Table 2 showed that in the 3-way interactions, no significant interaction was found ( $F(4, 25) = 0.251, P > .05$ ). This implies that the impact of the interaction of treatment, anxiety and self-concept on marital stability of married women with cancer was not significant. Therefore the null hypothesis is accepted.

### Discussion of Findings

#### Hypothesis One

The first hypothesis states that there is no significant main effect of treatment on the marital stability of married women with breast cancer. The result of the study revealed that there was significant main effect of treatment in the pre-post marital stability scores of married women with breast cancer in the experimental and control groups ( $F(3,26) = 63.41, P < .05$ ). This implies that married women with breast cancer in the experimental groups benefited from the treatment package as they were able to manage their anxiety develop positive self-concept and improve on their marital relationship with their spouses. Therefore, hypothesis 1 is rejected. This development supports Taylor-Brown, Kilpatrick and Maunsell (2000) report that most married women with breast cancer do have the support of their spouse and the required resources to meet their challenge. Thus, clinical experience and some research suggest that some married women with breast cancer revealed that their marital relationship improved since the cancer episode (Thornton, 2002). Stability in marital satisfaction (or lack thereof) has also been found for those with breast cancer (Dorval, Maunsell, Taylor-Brown & Kilpatrick 1999). However, divorce and break-ups occur primarily among those reporting that marital difficulties pre-dated their diagnosis (Dorval, Maunsell, Taylor-Brown &



Kilpatrick 1999). In this way, women and their families can be offered support that would really help them adjust to the reality of their experienced situation (Freedman 2003).

### **Hypothesis Two**

The second hypothesis states that there is no significant interaction effect of treatment, anxiety and self-concept on the marital stability of married women with breast cancer? The findings of the study revealed that in the 3-way interactions, no significant interaction was found ( $F(4, 25) = 0.251, P > .05$ ). This implies that the impact of the interaction of treatment, anxiety and self-concept on marital stability of married women with cancer was not significant. Therefore the null hypothesis is accepted. This result is consistent with the reported findings of Schreier and Williams (2004) that married women with breast cancer undergoing chemotherapy experience more anxiety than radiation therapy patients and high anxiety levels were associated with decreased quality of life both at the start of treatment and at the end of one year mark. Anxiety and depression have both been shown to be negatively associated with the QOL of breast-cancer patients after diagnosis, at the start of treatment and post-treatment (Wong & Fielding, 2007).

Also, Mock (1993) study looked at 257 subjects between the ages of 29 and 79. The author reported that an important component to understanding the self-concept of women with breast cancer is to look at women's responses to the importance of the breast. Mock asked women with breast cancer to respond to the importance of the breast. They responded that their breast is an important symbol of womanliness, sexual attractiveness, and nurturance. The study further report that the loss of a breast is related to feminine identity and it often results in a negative alteration in body image and self-concept (Mock, 1993). This is based on the fact that certain surgical procedures such as a mastectomy may make a woman feel unattractive and create negative body image concerns. A mastectomy can cause a complete loss of sensation in the chest area from a sexual function perspective and this could impair the marital stability of married women with breast cancer.

### **Implications of the study**

This study has several implications which include among others the fact that the study has proved that Cognitive Behaviour Therapy and Emotional Intelligence Training are effective intervention techniques in enhancing marital stability of married women with breast cancer. Therefore, since the two therapeutic techniques applied were effective, the skills learnt would enable married women with breast cancer develop the required confidence that would enable them succeed in developing good interpersonal relationship with their spouses and significant others. Furthermore, the study revealed the fact that married women with breast cancer face frustrated situation and as such there is the need for government to make available functional counselling services in hospitals as a means to coming to the aid of married women with breast cancer before their situation gets worst.

### **RECOMMENDATIONS**

The family, society and significant others should take time to appreciate and understand the socio-developmental challenges faced and experienced by married women with breast cancer as to device appropriate measures to help them adjust and overcome their challenges.

Counselling / psychological intervention programmes should be put in place to help guide married women with breast cancer to self-rediscover their potentials, abilities and capabilities and improve on their social competence ability. This would help them develop the potentials to establish and sustain interpersonal relationship with their spouses and others.

Husbands of married women with breast cancer should endeavour to create interactive environment that would enable them relate well with their wives. This would motivate married women with cancer to overcome their experienced health challenges.

## CONCLUSION

The study revealed that Cognitive Behaviour Therapy and Emotional Intelligence Training techniques were effective in enhancing marital stability of married women with breast cancer. This implies that the challenges of marital maladjustment experienced among married women with breast cancer can be managed. Also, marital stability of women with breast cancer can be enhanced.

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