

Self-Efficacy, Family Support and Knowledge of Illness as Correlates of Adaptive Coping Among Breast Cancer Patients

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ABSTRACT

The study examined self-efficacy, family support and knowledge of illness as correlates of adaptive coping among breast cancer patients. A total of one hundred and twenty (120) medically diagnosed breast cancer women who were presented at Nnamdi Azikiwe University Teaching Hospital Nnewi, Anambra State, Nigeria and accepted to participate formed the sample of the study. Their ages ranged from 35 to 60 years, with a mean age of 40 years and standard deviation of 6.28. The General Self-Efficacy Scale by Jerusalem and Schwarzer (1992), Family Support Scale by Procidano and Heller (2003) and Adaptive Coping Inventory by Kohn, O'Brien-Wood, Pickering and Decicco (2003) were used for data collection. Pearson Product Moment Correlation was used to test three hypotheses which was accepted at $r < 0.5$. The first hypothesis which stated that self-efficacy will significantly correlate positively with adaptive coping among breast cancer patients was accepted ($r = .27$), the second hypothesis which stated that family support will significantly correlate positively with adaptive coping among breast cancer patients was accepted ($r = .20$) and the third hypothesis which stated that knowledge of illness will significantly correlate positively with adaptive coping among breast cancer patients was also accepted ($r = .37$). The researcher recommended the need for clinicians or health care personnel to consider the inclusion of qualitative family and social network, individual's self-efficacy and prior knowledge of breast cancer on the package for modification or treatment and management of breast cancer patients in their clinical work. Family members should support and create hope for their loved ones that have breast cancer and also breast cancer patients should be encouraged to join support groups which are formed by similar people who were diagnosed with breast cancer and experience the same level of difficulties, in order to promote their self-efficacy and adaptiveness in coping.

Keyword: Self-efficacy, Family support, Adaptive coping, Cancer and Breast cancer. Introduction

According to cancer facts and figures (2015), there will be an estimated 60,290 new cases of breast carcinoma. According to the American Cancer Society (2024), an estimated 1 in 8 women (about 13%) in the U.S. will develop invasive breast cancer over the course of their lifetime. According to World Health Organization (WHO), cancer is the second leading cause of death globally, responsible for approximately 10 million deaths in 2020, which equals to about 1 in 6 deaths (WHO, 2022). Epidemiological evidence suggests that without effective prevention and control programs, the burden of cancer, especially breast cancer, is likely to continue to increase globally (Ekpenyong, Akpan, Nyebuk, Daniel & John, 2011).

Cancer is a term used for disease in which abnormal cells divide without control and are able to invade other tissues (National Cancer Institute, 2023). It can spread to other parts of the body through the blood and lymph. (National Cancer Institute, 2023) There are many kinds of cancer, and they include: breast cancer, brain cancer, cervical cancer, colon and rectal cancer, leukemia, kidney cancer, liver cancer, cancer of the lungs, lymphoma, multiple myeloma, ovarian cancer, pancreatic cancer, prostate cancer, skin cancer, and stomach-gastric cancer. Breast cancer is one of the most challenging health problems of women in the industrialized nations and it also takes the top spot with prevalence rate of 26.28% of cancer cases (Gocgeldi, Acikel, & Hadse, 2008). The high prevalence of breast cancer compared to other types of cancer could be decreased with early diagnosis. (Early Breast Cancer Trialists Collaborative Group, 1995). In essence, the high prevalence of breast cancer, relative to other cancer types, may be mitigated through early diagnosis and detection. Breast cancer specifically is a type of cancer originating from breast tissue,

most commonly from the inner lining of milk ducts or the lobules that supply the duct with milk. It is the most common malignancy and it is the leading cause of death among women (American Breast Cancer Society, 2007). Breast cancer can be detected in earlier ages in the recent years (Cam,Saka &Gumus,2009).

It can be characterized by abnormal metabolic pathway, evading of the immune system, ability to invade surrounding tissues and progression to metastasis (Weinberg & Hanahan, 2011). During the early years of a person's life, normal cells divide faster to allow the person to grow. After the person becomes an adult, most cells divide only to replace worn-out or dying cells or to repair injured parts. However, sometimes this orderly process goes wrong. The genetic materials deoxyribonucleic acid (DNA) of a cell can become damaged or changed, producing mutations that affect normal cell growth and division. This is because the damaged deoxyribonucleic acid (DNA) is caused by aberrations that happen while the normal cell is reproducing. When this happens, cells do not die when they should and new cells form when the body does not need them. The extra cells may form mass of tissue called a tumor but not all tumors are cancerous; tumors can be benign or malignant.

Breast cancer patients can suffer many negative emotions like social isolation, hatred, anger, the fear of any potential metastases and hopelessness. These emotional responses can lead to serious psychiatric conditions, including depression, anxiety disorders or other major mental illness. Moreover, it causes some other problem like being a financial burden on the family (Ozbas, 2006; Reece, 1994). Major problems women with advanced stages of cancer usually face are excruciating pain, emotional disturbances, and disharmony in the family, work, and social roles. In addition, the intense and prolonged treatment of cancer and the heavy side effects of these treatments can also affect the daily living functions of women negatively and cause various psychological problems (Onat & Basanar, 2003).

Another problem anchors on the inability to cope adaptively with the ill-health among breast cancer patients. Breast cancer is a chronic illness; thus, most patients feel hopeless that they are not going to respond to treatment, are not going to get well, and have difficulty addressing their emotions and fears. This hopeless situation may result in frustration, denial, anger, bargaining, depression, and sometimes acceptance (Kubler-Ross, 1969). These stages may lead to disharmony in the workplace, marriage, and social interaction (Onat & Basanar, 2003). The process of breast cancer treatment also has an emotional impact, which influences the general well-being of an individual. Psychology is interested in how individuals can improve or cope adaptively with various stressors, including emotional disturbance and illness. Therefore, an adaptive coping is the key because the idea was simply that people who coped adaptively followed the principles underlying the choice of adaptive alternative responses to stressful situations and the rejection of maladaptive alternatives.

Since adaptive coping is vital for general well-being of breast cancer patients; psychologist may as well access other important factors that could improve the level of adaptive coping among breast cancer patients. Such factors may include personality, gender, age, and religious commitment (Muo, 2013). Other factors are self-efficacy, family support and knowledge of illness.

Self-efficacy may be critical to coping adaptively among breast cancer patients. Self-efficacy is a person's belief in his or her ability to overcome the difficulties inherent in a specific task or in a particular situation. It influences the choices a person makes, the effort applied to a task and how long a person will persist when confronted with obstacles or failures. People tend to pursue the tasks for which they have high self-efficacy, and repeatedly it has been found to be a significant predictor of health-related behaviour (Howells, 2002). Self-efficacy could also be seen as the extent or strength of one's belief in one's own ability to complete tasks and reach goals. High or low self-efficacy determine whether or not someone will choose to take on a challenging task or "write it off" as impossible (Judge, 2002).

According to Bandura (1982), self-efficacy beliefs come from four main informational sources: mastery experiences, vicarious experiences, verbal persuasion, and affective states. These components help individuals determine if they believe they have the capability to accomplish specific tasks. Williams and Williams (2010) stated that "individuals with high levels of self-efficacy approach difficult tasks as challenges to master rather

than as threats to be avoided” (p. 455).

Family support is another variable which may be critical to coping adaptively among breast cancer patients. Spousal positive attitude may enhance adaptiveness in coping. Moreover, positive parental and sibling attitudes may contribute to the capacity of the cancer patient to cope adaptively with the exigencies of the illness which may include excruciating pain, side effects, prolong treatment and potential death in range. Family support refers to any kind of assistance whether financially, physically or emotionally from immediate families to a family member living with illness. (Given, Kozachick & Collins, 2001).

The role of family caregivers has shifted from one of custodial care to a complex, multifaceted role which includes symptom management, monitoring for changes in hallmark symptoms, equipment care (e.g., infusion pumps), patient transport and advocacy, and management of activities and responsibilities the patient has forgotten because of illness. (Ataseven, 1990).

Wright and Katz (2020) emphasized that family involvement is often overlooked in healthcare system, despite its vital role in patient care and emotional support. During advanced stages of illness, changes in family roles and the burden placed on family caregivers may negatively affect quality of life for breast cancer patients, as well as their caregivers and this is one of the problems breast cancer patients face (Barbara, Charles & Kazachik, 2001).

Another factor that might be important or related to adaptive coping among breast cancer patients is knowledge of the illness. A good knowledge of the illness may be linked to fear, anxiety, anger, confusion, and depression related to cancer generally. Therefore, being knowledgeable about the process, stages and prognosis involve in management of breast cancer may be paramount in determining the level of adaptive coping among breast cancer patients (Moghaddam et al., 2021).

Prior knowledge of the illness may prepare the patient for the task ahead mentally, physically and psychologically. One can only feel that she is in control and make wise decision only if she has the facts and can compare the options. The better the individual understand the illness, management options, what its goals are, what the side effects may be and what can be done about them; the more the individual may tolerate it and the less ominous it may seem. Knowledge of illness may help to have a clear picture of the individual's prognosis and to realize that a diagnosis of breast cancer is not an automatic death sentence.

The present study assumes that adaptive coping is necessary for fighting breast cancer. It also assumes that adaptive coping as a psychological factor that has other moderating factors which could enhance or mare the efficiency of adaptive coping. Therefore, the present study selected some primary factors as self-efficacy (internal factor), family support (external factor) and knowledge of illness (internal and external factor) and examined if they are significantly correlated (positively or negatively) with adaptive coping.

THEORETICAL FRAMEWORK

General Adaptive Syndrome Theory (GAS)-The main theory that supports the biological mechanism of stress-related cancer experiences among breast cancer patients is the General Adaptive Syndrome (GAS) Theory. This theory was made popular by the works of a renowned endocrinologist Hans Selye (1976). He observed through his animal experiments that stress which can also be observed among breast cancer patients is a state of manifested syndrome which consist of all the nonspecifically induced changes in a biologic system. According to GAS there are three stages involved in stress symptoms manifestation:

1. The alarm reaction- This is when the adverse stress-related cancer experiences activate responses from the sympathetic and parasympathetic system (a coordinated physiological response involving the central nervous system and the peripheral nervous system of the organism). The hypothalamus-pituitary-adrenal (HPA) axis has a key role to play in physiological response to adverse stress-related cancer experiences.
2. Resistance stage- This commences if noxious stimulation or if adverse stress-related cancer experiences continue. While in normal conditions, activation of the stress system by stress-related

cancer experiences results in adaptive endocrine metabolism and cardiovascular changes that help maintain homeostasis which can lead to excessive and prolonged activation of the stress system in a quest to restore homeostasis and this process can have psychological and biological consequences (Chrousos, 2009, Pervanidou & Chrousos, 2012).

3. Exhaustion stage- This ensues when the individual's capability of adapting to the consistent adverse stress-related cancer experiences is exhausted and the symptoms of alarm stage reappear without any resistance. At this stage irreversible tissue damage appears and if the stimulation persists, the individual suffers a lot of consequences. These consequences could be reduced by an internal factor such as the individual's self-efficacy which is derived from the Social Cognitive Theory, which states that a behavioural change is made possible by a personal sense of control (Heijden, Pouwer, Romeijnders & Pop, 2012).

According to Social Cognitive Theory (1997), self-efficacy pertains to a sense of control over one's environment and behaviour. Self-efficacy beliefs are cognition that determine whether healthy behaviour change will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacle and failures. Self-efficacy influences the effort one puts forth to change risky behaviour and the persistence to continue striving despite barriers and setbacks that may undermine motivation.

Self-efficacy is directly related to healthy behaviour; Self-efficacy is addressed widely in the literature related to the management of chronic illness and is thought to be essential in effective disease management. In that it provides a foundation for personal motivation, increased well-being, and a sense of personal accomplishment (Resnick, 2004). It also affects healthy behaviour indirectly through its impact on goals. Self-efficacy influences the challenges that people take on as well as how high they set their goals, individuals with high self-efficacy select more challenging goals and they focus on opportunities not on obstacles (DeVellis & DeVellis, 2000).

This General Adaption Syndrome Theory (GAS) may not provide the entire vivid possible link between the studied variables and adaptive coping therefore a psychological, sociological and bio-psychosocial perspective which are rich in possible link between self-efficacy, family support, knowledge of illness and adaptive coping is reviewed.

Transactional Theory of Stress- Psychologically, the adverse stress-related cancer experiences is conceived as a relationship with the environment that the individual appraises as significant to his or her well-being and in which the demands tax exceed available coping resources of the individual (Lazarus & Folkman, 1986). The above conceptualization of stress is the basis for (Lazarus, 2001) transactional theory of stress. The basic themes in this transactional mechanism of stress are appraisal and coping and the basic assumptions are;

- Adverse stress-related cancer experiences are the product of the transaction between the individual and the environment.
- The power of the transaction lies in the process of appraisal that binds the person and the environment.
- Two appraisal processes (primary and secondary) operate to determine what an individual thinks and does in a stressful encounter
- Primary appraisal involves goal relevance, goal congruence; and types of ego involvement.
- Secondary appraisal involves blame or credit; coping potential and future expectation.
- These appraisal processes offers a causal pathway- a bridge to those discrete emotions that best express the nature of stress experience (Lazarus, 2001).

Transactional coping involves the following:

- Coping involves cognitive (self-efficacy) and behavioural effort (knowledge of illness) made by the individual to master, tolerate or reduce internal and external demands and conflict (Folkman & Lazarus, 1980).
- During coping individual's actions are classified according to the characteristics of coping process which in this study includes self-efficacy, family support and knowledge of illness.

- Psychologically, coping involve both behavioural (knowledge of illness) and cognitive domains (self-efficacy).
- Coping process may involve single acts, but they are organized sequentially and in episodes.
- Coping is focused on different element of adverse stress-related cancer experiences.

Sociological Theory of Stress

Pearlin, Morton, Elizabeth and Mullan (1981) conceived a sociological model to explain the mechanism of stress. According to Pearlin, et al (1981), three fundamental concepts form the core of the stress process and they include:

- Stressors: These are conceptualized as external (environment) or internal (biological or psychological factors) that challenge an individual to adapt or change.
- Moderators: These are conceptualized as the social resources (family support) or personal resources (self-efficacy and knowledge of illness) that potentiate the effects of stressors or change the situations that are producing the stressors. These mediators include coping strategies which in this study are self-efficacy, family support and knowledge of illness.
- Stress outcome: These are conceptualized as the biological and psychological conditions resulting from exposure to stressors after accounting for the moderators.

One of these moderators which are conceptualized as the social resources that potentiate the effects of stressors or change the situation that are producing the stress was buttressed by Bowen Theory of family support. Bowen (2011) originated a family system theory, a theory of human behaviour that views the family as an emotional unit and uses systems thinking to describe the complex interactions in the unit. It is the nature of a family that its member is intensely connected financially, physically and emotionally. Often people feel distant or disconnected from their families, but this is more feeling than fact. Family members so proudly affect each other's thoughts, feelings and actions that it often seems as if people are living under the same „emotional skin. “ People solicit each other's attention, approval and support and react to each other's needs, expectation, and distress.

Conclusively, given the importance of the three major perspectives, the present study adopted a combination of biological, psychological, and sociological theories- Bio-psychosocial model (Lazarus & Folkman, 1986; Pearlin, Morton, Elizabeth & Mullan, 1981; Selye, 1976). The perspective holds that the process involved in stress accumulation impact and adjustment or management could only be completely understood through the integration of the knowledge gained from biological, psychological and social mechanisms of stress.

In this paradigm, adverse stress-related cancer experiences in relation to the context of interest are conceptualized in terms of reciprocal interaction between social mechanism and psychological mechanism; psychological and biological mechanisms; biological and social mechanism; or triad reciprocal interaction among these three mechanisms. In other words, social experiences such as pressure from adverse stress-related cancer experiences among breast cancer patients can cause alarm which activates the biological autonomic process or it may involve psychological appraisal and coping strategies such as self-efficacy which uses biological mechanisms to form resistance and probably exhaustion if stressor are not managed and at this stage stress symptoms will ensue.

There are ample empirical literatures that support the assumptions of these theories. O'Baugh, Wilkes and Luk (2003), in their study, determined that the opinions of the cancer patients in relation to positivity have it that, the factors that affect the patient's attitudes to coping are the individual's self-efficacy, ample information about breast cancer, family support and social support. This finding supports the positions of the General Adaption Syndrome Theory (GAS), Transactional Theory of Stress, and Sociological Theory of Stress which were stated above.

Statement of the Problem

As the world marked the 2014 World Cancer Day on 4th February, the World Health Organization

(WHO) indicated that eighty-four (84) million people may die of the disease by 2016. The National Cancer Prevention Programme (NCP) in 2014 says that no fewer than eighty thousand (80,000) Nigerians die from various forms of cancer including breast cancer annually, with an estimated ten people dying from cancer every hour.

Cancer is an international public health issue. It has not been just a health problem but also a social and economic problem in Nigeria. It could be found in almost every population in the world. Its scourge to the society is enormous and its impact on health and economy is substantial. It is now affecting many people in the workforce, causing a major and deleterious impact on both individual and national productivity (Ekpenyong, Akpan, Nyebuk, Daniel & John, 2011). However, thanatology which is the study of the effects of death and dying, especially the investigation of ways to lessen the suffering and address the need of the terminally ill and their survivors, tries to bring in some psychological variables that can help breast cancer patients.

Pertinently, a diagnosis of cancer is one of the most psychological worries and devastating things one can hear. The possible psychological consequence or implication of breast cancer, its treatment and side effects are stressors to the individuals. After such shocking news, it is normal to feel a range of emotions, from despair to rage, even to the extent of dying yet cannot be cured. Even mastectomy and its excruciating pain has its own psychological implication, yet little attention, to the best of the researcher's knowledge, has been paid to what actually seems to be the best assistance such patients may ever receive; therefore, research effort needs to be expanded more on ways to relieve the pain and psychological suffering. One of such assistance could be finding the moderating factors that increases the patient's adaptive coping since adaptive coping is one of the mechanisms that aids survival. It also wishes to find answer to the following questions:

1. Would self-efficacy correlate positively with adaptive coping among breast cancer patients?
2. Would family support correlate positively with adaptive coping among breast cancer patients?
3. Would knowledge of illness correlate with adaptive coping among breast cancer patients?

Purpose Of the Study

The general purpose of this study is to examine self-efficacy, family support and knowledge of the illness as correlates of adaptive coping among breast cancer patients in Nnamdi Azikiwe University Teaching Hospital, Nnewi. Specifically, the objectives of this study are:

1. To determine whether self-efficacy would significantly correlate with adaptive coping among breast cancer patients.
2. To determine whether family support would significantly correlate with adaptive coping among breast cancer patients.
3. To determine whether knowledge of illness would significantly correlate with adaptive coping among breast cancer patients.

Hypotheses

1. Self-efficacy would significantly correlate positively with adaptive coping among breast cancer patients.
2. Family support would significantly correlate positively with adaptive coping among breast cancer patients.
3. Knowledge of illness would significantly correlate positively with adaptive coping among breast cancer patients.

METHOD

Participants

One hundred and twenty (120) medically diagnosed breast cancer women participated in this study. These patients were registered with Nnamdi Azikiwe University Teaching Hospital Nnewi, Anambra State and were booked to receive medical attention for three quarters of the year. The participants were between the ages of 35 and 60 years, with the mean age of 40 and standard deviation of 6.28.

The sample techniques is purposive sampling: as only those that have been diagnosed with breast cancer and have been given appointment for three quarter of the year were selected to participate in the study. This is to ensure that the patients were surveyed at their own convenient within the space of time.

Biographic data showed that all the participants were married women and Christians. Fifty-five (55) women had SSCE but had no prior knowledge of the illness while sixty-five (65) women had BSc qualifications as their highest educational levels and they had prior knowledge of the illness.

Instrument

Three instruments were used in this study. They include; general self-efficacy scale, family support scale and adaptive coping inventory.

The General Self-Efficacy Scale by Schwarzer & Jerusalem (1992):

This is a 10-item standardized scale on general self-efficacy (Appendix III, page 84). It was developed by Schwarzer and Jerusalem (1992). The self-efficacy scale was organized for scoring as a four (4) point Likert type scale with the options of 1= Not at all true; 2= Hardly true; 3= Moderately true and 4= Exactly true. For the need of the research, the researcher conducted a pilot test using twenty (20) breast cancer patients who have the same characteristics as the participants to be used in the final study from St. Charles Borromeo Hospital Onitsha, Anambra State. The items were subjected to split half reliability and each half was treated as an alternative form of the same measurement. The test has a reliability of 0.90 and a Cronbach alpha coefficient of 0.92 was obtained. A concurrent validity of .42 was obtained when correlated with index of Self-esteem Scale (ISE) by Hudson (1985). Family Support Scale by Procidano & Heller (2003):

This is a 20-item scale on family support (Appendix IV, page 85). It was developed by Procidano and Heller (2003). The family support scale was organized as a three (3) point Likert type scale with the options of 1= Yes; 2= No and 3= partially. For the need of the research, the researcher conducted a pilot test using twenty (20) breast cancer patients who have the same characteristics as the participants to be used in the final study from St. Charles Borromeo Hospital Onitsha, Anambra State. The items were subjected to split half reliability and each half was treated as an alternative form of the same measurement. The test has a reliability of 0.80 and a Cronbach alpha coefficient of 0.88 was obtained. A concurrent validity of .50 was obtained when the instrument was correlated with family support sub-scale of multi-dimensional social support scale by Zemel, et al (1988).

Adaptive coping Inventory by Kohn, O'Brien-Wood, Pickering & Decicco (2003):

This is a standardized 30-item psychological inventory on adaptive coping (Appendix V, page 86). It was developed by Kohn, O'Brien-Wood, Pickering and Decicco (2003). The adaptive coping inventory was organized as a five (5) point likert type scale with the options of 1= Strongly Disagree; 2= Disagree; 3= Unsure; 4= Agree and 5= Strongly Agree. Kohn et al (2003) provided the original psychometric properties for Canadian samples while Umeh (2004) obtained for Nigeria using 120 participants, a mean of 107.67 for males, 92.58 for females and a mean total of 100.13. Umeh (2004) also obtained a concurrent validity coefficient of .10 and .18 with extraversion and openness subscales respectively of Big Five Inventory (BFI).

Procedure

In order to gain access into Nnamdi Azikiwe University Teaching Hospital (NAUTH) Nnewi (where the main study took place for nine months) and St. Charles Borromeo Hospital Onitsha (where the pilot test took place for three months), a letter of identification was endorsed by the Head, Department of Psychology, Faculty of Social Sciences, Nnamdi Azikiwe University, Awka, which was given to the Medical Superintendent St. Charles Borromeo Hospital Onitsha and Chief Medical Director, NAUTH, Nnewi, respectively.

Before conducting the research proper, letters of recommendation for ethical approval were issued from the Director of Clinical Services, NAUTH Nnewi and the Consultant in charge of the General Surgery Unit, Department of Surgery NAUTH Nnewi. Finally, when the full ethical approval was given, the informed consent of the participants were sought and obtained.

On the agreed dates (Mondays and Fridays), the researcher went to the hospital and met the consultants during their clinic days. When they finished consulting with patients, they referred the patients to the researcher. Some of the health workers, nurses and house officers who were running the clinics with the consultants and some patients' relations assisted the researcher in the distribution of the instruments to both the in-patients and out-patients when they were numerous to handle. The researcher educated the nurses and the house officers on how to administer the instruments. The clinic consultation lasted for nine months in order to collect the data.

Out of 140 copies of the questionnaire that were administered to breast cancer patients, a total of 120 copies were collected back. Five patients that were given the questionnaire died before the completion of the research and the remaining fifteen copies of the questionnaire were incorrectly filled; therefore one hundred and twenty (120) questionnaires were used for the actual study.

Design And Statistics

This research adopted a correlation design. Based on the research design, the researcher employed the statistical tool of Pearson Product Moment Correlation for data analysis and testing the hypotheses of this study.

RESULTS

Table 1: Correlation between self-efficacy and adaptive coping among breast cancer patients

Variables	N	r	P	Sig
Self-efficacy		0.27	0.05	S
Adaptive coping	120	0.27	0.05	S

Result from Table 1 shows that self-efficacy significantly correlated positively with adaptive coping among breast cancer patients ($r=.27$, $p<.05$ and $r^2 = 0.07$ indicating 7%).

Table 2: Correlation between Family Support and Adaptive Coping among Breast Cancer Patients

Variables	N	r	P	Sig
Family Support		0.2	0.05	S
Adaptive coping	120	0.2	0.05	S

Result from Table 2 shows that family support significantly correlated positively with adaptive coping among breast cancer patients ($r=.20$, $p<.05$ and $r^2 = 0.04$ indicating 4%).

Table 3: Correlation between Knowledge of Illness and Adaptive Coping among Breast Cancer Patients

Variables	N	r	P	Sig
Knowledge of illness	120	0.37	0.05	S
Adaptive coping	120	0.37	0.05	S

Result from table 3 shows that knowledge of illness significantly correlated positively with adaptive coping among breast cancer patients ($r=.37$, $p<.05$ and $r^2 = 0.14$ indicating 14%).

DISCUSSION

From the result, it was discovered that hypothesis one, which stated that „Self-efficacy would significantly correlate positively with adaptive coping among breast cancer patients“ was accepted. This implies that an optimistic self-belief of personal capability of an individual can cope efficiently and competently with a variety of situation most especially adverse stress-related cancer experiences among breast cancer patients. In other words, high self-efficacy engenders adaptive coping mechanism. In addition, it is quite important for patients to know that their own self-efficacy can help them pass through the stress-related cancer experiences positively and they can cope adaptively with breast cancer since there is a positive correlation between self-efficacy and adaptive coping among breast cancer patients.

This is in agreement with the study of Rottmann et al (2010) which found that self-efficacy is a significant predictor of active adjustment style, adaptive coping and emotional well-being in breast cancer patients. In other words high self-efficacious individuals coped adaptively with breast cancer. The above finding is also in confirmation with another study by Mosher et al (2010); they found that self-efficacy correlated positively with adaptive coping among breast cancer patients. The finding of this study is also in line with the study of Kavanagh, Gooley, and Wilson (1993) that investigated the association between self-efficacy beliefs and treatment adherence among 63 breast cancer patients. The investigators demonstrated that self-efficacy was a significant predictor of adherence to diet and adaptive coping.

Also, the findings of this study is in concordance with the study of Hattori-Hara, Luisa and González-Celis (2013) who examined the association between adaptive coping strategies and self-efficacy in management of breast cancer patients and they concluded that there are positive relationships between self-efficacy beliefs in managing breast cancer and adaptive coping.

Similarly, Selye (1976) GAS theory of stress and coping offered some explanations on the mechanism that operate to enhance the positive relationship between self-efficacy and adaptive coping. According to Selye, three stages are involved in stress symptoms manifestation and they include: The alarm reaction, resistance stage and exhaustion stage. This exhaustion stage ensues when the individual’s capability of adapting to the consistent adverse stress-related cancer experiences is exhausted and the symptoms of alarm stage reappear without any resistance. At this stage irreversible tissue damage appears and if the stimulation persist the individual suffer a lot of consequences. Logically the individual can cope adaptively with these consequences by initiating an internal coping mechanism or strategy such as high self-efficacy.

Furthermore, hypotheses two, which stated that „Family support would significantly correlate positively with adaptive coping among breast cancer patients“ was accepted. This also implies that women with breast cancer who have strong relationships or strong family support system will usually do better and cope adaptively with breast cancer. In other words, as family support increases, adaptive coping also increases. This is in tandem with the study of Weissc (2004) who found that the more breast cancer women perceived their husbands as supportive, the more they reported adaptive coping. The study showed that people who have strong relationships or support system, whether spouse, parent, siblings or friends, usually cope adaptively than those who go through it alone. According to Weissc, support group help but they can’t completely take place of those with whom they have a very close relationship.

This study finding is in tandem with the study of Ozbas (2006), who emphasized that spouses of breast cancer patients being with them during clinical examinations periods and supporting their decisions about the treatment is quite important. It was observed that loved ones of the patients who participated in the decision-making process was informed sufficiently to help the patients in the treatment and recovery periods (Ozbas, 2006).

It also agrees with the study of Roberts and Cox (1994) who found that stress symptoms were determined to be less among breast cancer patients who have high perceived spouse support and the most important sources of support are patient's spouse, family members and close relatives.

Other study that found similar result with the present study's result includes (Cam et al, 2009; Crothers et al, 2005; O'Baugh et al, 2003; Ozkan & Turgay, 1992; Vellone et al, 2006). All found that family support, social support and factors that positively correlate with them like hope level and life satisfaction have a positive correlation with adaptive coping. The success of the patients and their families in coping adaptively with breast cancer is an important factor which influences patient's adaptive coping ability and it has been showed in this study that family support correlated positively with adaptive coping among breast cancer patients.

Additionally, to support and explain this empirical literature that family support correlated positively with adaptive coping, Pearlin et al (1981) sociological model of stress and adaptation is helpful. According to Pearlin et al three fundamental concepts form the core of the stress process and they include: stressors, moderators, and stress outcome. Logically, since moderators are conceptualized as the social resources or personal resources which potentiate or inhibit the effects of stressors or change the situations that are producing the stressors. These mediators include mechanism that enhance coping strategy which in the present study are family support (social resources) and the individual's ability to source for knowledge of breast cancer (personal resources) can inhibit the adverse stress-related cancer experiences.

Moreover, the third hypothesis which stated that „knowledge of illness would significantly correlate positively with adaptive coping among breast cancer patients“ was also accepted. This implies that a patient's prior knowledge of breast cancer can determine her adaptiveness in coping with breast cancer. Similarly, patients who had prior knowledge of breast cancer cope better than those who do not have prior knowledge of breast cancer. This is in line with the study of Tuna (1993) who determined that women with breast cancer who are graduates and had prior knowledge of the illness with graduate spouses cope adaptively with breast cancer. This resulted to the assertion that the stress and physical losses experienced by the patients are understood by themselves and their educated spouses in a better way unlike their counterparts thus, the support given is also much more.

In support of these empirical literatures, transactional theory of stress and coping proposed that coping involves cognitive and behavioural efforts made by the individual to master, tolerate or reduce internal and external demands and conflicts (Folkman & Lazarus, 1980; Nwafor, 2015). Logically, these cognitive and behavioural efforts in the context of interest includes individual's self-efficacy and deliberate effort made by individual to be cancer literate (knowledge of the illness) which help the individual to either master, tolerate or reduce the adverse stress-related experiences.

Pertinently, mental state such as fear, anxiety, anger, confusion, and repression associated with cancer are due to lack of information or prior knowledge of the illness, therefore being informed and knowledgeable on breast cancer among breast cancer patients is paramount. A well-informed patient usually does better in many ways than an uninformed patient. One can only feel that she is in control and make wise decision only if she has the facts and can compare the options. The better the individual understand the illness, what its goals are, what the side effects may be and what can be done about them, the more the individual tolerate it or cope adaptively and the less ominous it will seem. It may help to have a clear picture of the individual positive prognosis and to realize that a diagnosis of breast cancer is not an automatic death sentence. In the same light, the woman's knowledge of the illness can go a long way in affecting these factors.

Implication of the Study

This study very strongly has revealed the positive correlation between self-efficacy and adaptive coping, family support and adaptive coping and knowledge of the illness and adaptive coping among women with breast cancer. This is implicated on the positive prognostic factors that will help breast cancer patients to cope adaptively. If the patient would have died within one year, the family support which may be emotional, physical or spiritual can then elongate the patient's life. At the center of these entire model is hopefulness, which can be created by the family members. Creation of hope among breast cancer patients can go a long way to improve their adaptive coping there by elongating their life span. Another implication derived from the findings of this study is the need for clinicians or health care personnel to consider the inclusion of qualitative family and social network, individual's self-efficacy and prior knowledge of breast cancer on the package for modification or treatment and management of breast cancer patients in their clinical work. There is suggestive evidence that people who are isolated and lack family or social support or intimacy in their lives are more likely to become depressed and cope maladaptively when under stress and to remain depressed longer than people with supportive spouses or family members or warm relationships (Henderson et al, 2003).

Furthermore, breast cancer patients should also be encouraged to join support groups which are formed by similar people who were diagnosed with breast cancer and experience the same level of difficulties and government should establish a breast cancer clinic like that of antenatal clinic where an oncology nurse, a clinical psychologist etc. can render mental health care services and stress management techniques such as biological feedback, meditation, deep breathing, progressive relaxation, hypnosis and self-hypnosis, visualization and creative imaging and other therapies among breast cancer patients.

The study has provided some useful empirical basis for the need to include bio-psychosocial and emotional dimensions in the treatment package of breast cancer patients to take care of the psychological and emotional needs of the patients.

Finally, the findings may stimulate further research on adaptive coping mechanism among other kinds of cancer patients in other localities and this work therefore, serves as a reference source to researchers who will embark on a similar topic in the future.

RECOMMENDATIONS

Breast cancer patients do suffer a lot of stress and emotional turmoil but high self-efficacy, strong family support system and prior knowledge of the illness can enhance adaptive coping among breast cancer patients. The goal therefore is to improve the adaptive coping mechanism among women with breast cancer.

On the completion of this study, the researcher would like to make the following suggestions with regards to the above-mentioned limitations the following suggestions are proffered for future research on breast cancer patients:

1. Efforts should be made to accommodate cross-cultural studies for wider ecological validity. Moreover, further studies of this nature need to be conducted in Nigeria to provide grounds for comparison, and to validate the findings of the study.
2. More research should be conducted on other kinds of cancer since different kinds of cancer patients have different coping strategies. This will help to increase the availability of literature materials with respect to the above concept.
3. These results suggest that future research should explore the possibility that psychosocial treatment of breast cancer survivors is more effective.

CONCLUSION

Breast cancer, an international public health issue has not been just a health problem but also a social and economic problem in the world. It could be found in almost every population in the world. Its scourge to the society is enormous and its impact on health and economy is substantial. It is now affecting many people in

the workforce, causing a major and deleterious impact on both individual and national productivity yet cannot be cured. This necessitated the adaptive coping mechanism and the rejection of maladaptive alternatives among breast cancer patients.

Although, a good number of researches had been carried out on coping and breast cancer, not much has been done on the relatedness of self-efficacy, family support, knowledge of breast cancer and adaptive coping therefore bringing the need for the research.

Among other theories, the bio-psychosocial model intertwines and integrated the biological, psychological and social mechanism of stress and its coping strategies. This perspective holds that the process involved in stress accumulation impact and adjustment or management could only be completely understood through the integration of the knowledge gained from biological, psychological and social mechanisms of stress.

Empirical evidence for this study strongly suggests that: self-efficacy significantly correlated positively with adaptive coping among the studied breast cancer patients; Family support significantly correlated positively with adaptive coping among the studied breast cancer patients. In addition, knowledge of the illness significantly correlated positively with adaptive coping among the studied breast cancer patients. It therefore advocated the need for clinicians or health care personnel to consider the inclusion of qualitative family and social network, individual's self-efficacy and prior knowledge of breast cancer on the package for modification or treatment and management of breast cancer patients in their clinical work.

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