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Coping Strategies and its Perceived Effect on Cancer Patients' Quality of Life in a Tertiary Health Institution in Nigeria

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Abstract

Background: Cancer is a disease that not only affects the physical health, but also distresses the mental and emotional state of an individual. If beneficial coping strategies are not employed, the life quality of patients could be deteriorated. The present study seeks to examine various coping strategies adopted by cancer patients and design health promotion interventional strategies that will ameliorate the life quality of cancer patients.

Methods: Between February 2017 and March 2017, a descriptive cross-sectional study was conducted to assess the various coping strategies employed by cancer patients and its perceived effect on the quality of life. 90 cancer patients attending the cancer registry in Federal Teaching Hospital, Ido-Ekiti, within the study time frame were recruited. Data were analyzed and presented using descriptive statistics.

Results: Various coping strategies as identified by respondents were attendance of social gathering (73.3%), engaging in physical activities (85.6%), spending time with family members (87.8%), participating in religious programs (88.9%), and solitude (50%). Overall, 88.9% and 87.8% respectively believed that attending religious programs and spending time with family members played a vital role in coping with cancer. However, only a few (37%) of these patients belonged to cancer support groups.

Conclusion: Few patients belong to cancer support groups, hence the recommendation that cancer patients be enlightened and encouraged to become members of cancer support groups.

Keywords: Neoplasm, Adaptation, Self-help groups, Quality of life

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Introduction

Cancer is the one of the most life-threatening illnesses that may appear at any point in a person's life and is usually viewed in African context as a 'death sentence'. This disease has the innate characteristics of tissue proliferation, obliterating, or displacing the surrounding tissue in the body.[1] People living with cancer experience multiple symptoms that affect their quality of life, caused either by the disease itself or its treatment.[2] The range of challenges experienced by cancer patients in their daily life significantly impacts their quality of life. In 2008, Nigeria contributed 15% of cancer cases to the estimated 681,000 cancer cases in West Africa, but the incidence has not significantly changed.[3]

Cancer diagnosis affects every aspect of a patient's life and disrupts family life, thereby causing emotional and psychological trauma to the affected client and negatively/ adversely impacting the life quality.[1] The individual's "psyche' and behavioral coping responses following cancer diagnosis is crucial in enhancing patients' quality of life all through the treatment phase.[1] Distresses, which more often arise in most cancer patients, are attributable to unpleasant symptoms accompanying cancer treatment such as pain, nausea, vomiting, and fatigue to mention coupled with the huge financial/cost implication. Further complicating situation is the fear of living or dying, which is usually a part of cancer treatment and management in poor resource settings, like ours. Problems such as loss of job due to diminished job productivity, family worries, and social stigma often pose more distressing scenarios than the diagnosis of cancer itself.[1,2,3]

Cancer treatment, which includes radiotherapy, chemotherapy, and surgical intervention, may entail significant demands and limitations in the lifestyles of both patients and their families. The diagnosis of cancer often brings a lot of emotional, physical, and social responses to the patient, inducing various degrees of stress that can negatively impact life quality.[4] Coping is a multifactorial mental dynamics, which involves individual's resilience to stressors and ability to tackle challenges and make a rational judgment. It is an inner feeling that culminates into psychosocial change in response to the disease.[5] Coping processes are conducive to deal with distress by either helping tackle the problem inducing the distress (problem-focused coping), or finding ways to regulate stressful emotions (emotion-focused coping).[6] There is no perfect coping strategy, and neither of the two forms (problem focused and emotion-focused coping) could be tagged as the most optimal ; however, successful coping is dependent on coping flexibility,[7] which is the ability of an individual to adapt to various coping strategies over time and across different stressful events.[7, 8]

A holistic care that fully integrates patients and their families with the society at large can effectively tackle this problem and help cancer patients adapt appropriately, hence the improvement in their quality of life. Investigating the coping strategies and its perceived effect on the quality of life among cancer patients can assist in managing their condition appropriately. This study aimed to determine the coping strategies employed by cancer patients and its perceived effect on the quality of life among patients attending Federal Teaching Hospital Ido-Ekiti.

Materials and Methods

A descriptive cross-sectional study was conducted at Federal Teaching Hospital Ido-Ekiti (FETHI), Ekiti State, Nigeria. FETHI, formerly known as Federal Medical Center, which was commissioned as a tertiary health institution in July 1998 by the Federal Government of Nigeria and was later upgraded to a status of a Teaching Hospital in September 2014 in order to facilitate the training of medical students. The hospital is among the teaching hospitals in Ekiti State, and the health institution is located in Ido-Osi Local Government Area of Ekiti State. FETHI is a 280-bedded tertiary institution comprised of 24 functional wards with other ancillary units. The target population of this study consists of patients diagnosed with cancer receiving treatment at FETHI. Data were collected from patients who

Table 1. Sociodemographic characteristics of respondents

Socio demographic Characteristics	Frequency(n=90)	Percentage (%)
Gender		
Female	59	34.4
Male	31	65.6
Age distribution		
15-24	10	11.1
25-34	19	21.1
35-44	31	34.3
45 and above	30	33.3
Mean age± SD	29± 5.1 years	
Marital Status		
Single	10	11.1
Married	19	21.1
Divorced	31	34.4
Widowed	30	33.3
Ethnicity		
Yoruba	75	83.3
Hausa	5	5.6
Igbo	8	8.9
Others	5	2.2
Year of diagnosis		
2006-2010	11	12.2
2011-2015	43	47.8
2016 and above	32	35.6
Missing	4	4.4

SD=Standard deviation

attended the cancer registry of the hospital between February and March 2017. A purposive sampling method was used for selecting the respondents for the study. Most subjects were available but accessibility was difficult as many patients declined to participate in the study. For data collection, a validated semi-structured questionnaire adapted from the survey tools developed by Endler and Parker, 1990 was used. The questionnaire is comprised of three sections: Section A assesses sociodemographic profile, section B assesses the coping strategies adopted by cancer patients, and section C examines the perceived effect of the adopted coping strategies on the quality of life. The asked questions were aimed at evaluating what strategies and activities helped patients manage the diagnosis of cancer and the effects of the treatment regimen. Various coping strategies were listed and patients were asked to check the coping strategy they utilized. The questionnaire was pretested among five participants from another health facility in Ekiti State. The sample size was specified using Yamane Taro's formula ($n= N/1+N(e)^2$) with a sampling error of 0.05 and a population size of 150. Following necessary adjustments and considerations of attrition rate, it was determined that a sample size of 100 was needed for the study. Prior to data collection, ethical clearance was obtained from the Ethics Review Committee of FETHI (Protocol Number: ERC/2017/02/20/11B), after which informed consent was obtained from individual participants. Their rights to decline participation were clearly explained and participants filled out the questionnaire anonymously, so as to ensure confidentiality and anonymity. The data were collected over a period of four weeks (February to March 2017) and the questionnaires were further checked for completeness and consistencies. Data were then coded, entered, cleaned, analyzed using SPSS software version 20 and presented in tables and charts. Descriptive statistics of frequency counts and percentages were used for data analysis.

Table 2. Coping strategies used by cancer patients

Coping strategy	Frequency(n=90)	Percentage (%)
Attending religious programs		
Yes	80	88.9
No	10	11.1
Missing	1	1.1
Engaging in daily living activities		
Yes	77	85.6
No	9	10.0
Missing	4	4.4
Engaging in sport activities		
Yes	31	34.4
No	58	64.6
Missing	1	1.1
Attending counseling section in hospitals		
Yes	66	73.3
No	24	26.7
Attending social gatherings		
Yes	66	73.3
No	24	26.7
Enjoying spending time alone		
Yes	45	50.0
No	44	48.9

Results

Table 1 shows the characteristics of the 90 patients. The mean age of the respondents was 29 years, the majority (65.6%) were female and almost half (47.8%) of the cancer cases were diagnosed between 2011-2015. The findings revealed the different coping strategies used by cancer patients: attending religious activities

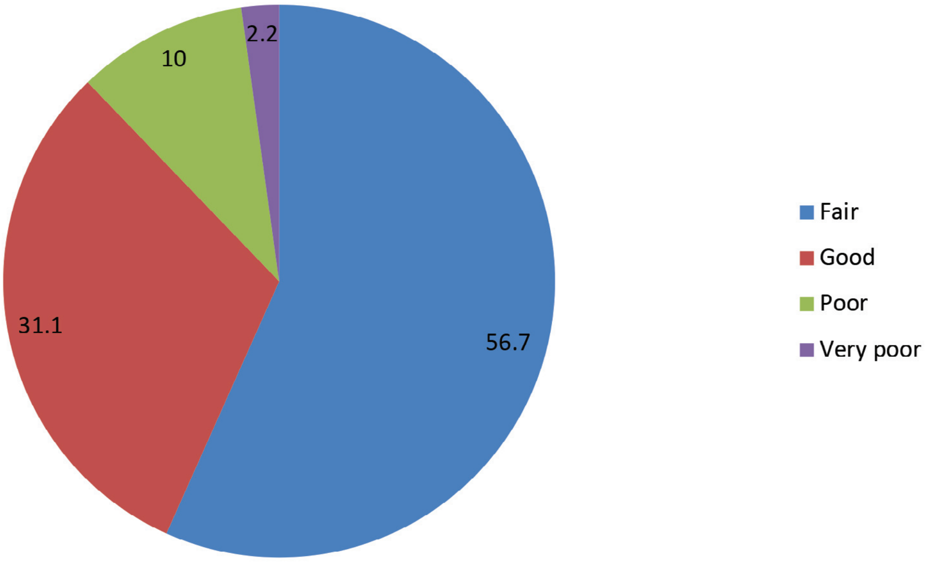

Figure 1. Summary of overall health of cancer patients.

Table 3. Awareness of cancer support groups among participants

Item	Yes (%)	No (%)
Aware of any cancer support group	46(51.1%)	43(47.8%)
Member of any cancer support group	33(37.1%)	56(62.9%)

(88.9%), participating in social gatherings (73.3%), spending time with family members (87.8%), attending counseling sessions in the hospital (61.1%), solitude (50%), and engaging in sports activities (34.4%) (Table 2). Furthermore, table 3 shows the awareness and involvement of respondents in cancer support groups, where only half (51.1%) were aware of cancer support groups with only a few (37%) belonging to a cancer support group. The participants had varied perceived effects, as to the coping strategies they adopted; 51.1% of the respondents who attended religious gatherings believed that the coping strategy only fairly affected them; more than half (55.6%) of the participants stated that spending time with family members was effective for them, and a few (22.2 %) participants held that attending counseling sections in the hospital did not improve their perception of health. This is presented in table 4.

Table 5 underlines the role of the participants following cancer diagnosis. A few (27.8%) of the participants still went to work, with half of the participants (50%) not finding it easy to concentrate at work.

The life quality of respondents was assessed after cancer diagnosis, where 51% reported that pain interfered with their daily activities, 47.7% had trouble performing strenuous activities, 63.3% had trouble sleeping and half (50%) of the participants reported that their state of health interfered with their family life. This is presented in table 6.

Overall, only a few (31.1%) rated their overall health and well-being as good (Figure 1).

Discussion

The various coping styles adopted by cancer patients were identified in this study, which ranged from attending religious and social programs and participation in counseling sections in hospitals to spending time with family members, showing up at work and communicating with others; of note, most (88.9%) of the participants utilized religious programs as a strategy to cope with cancer diagnosis and treatment.

Coping with cancer is a physical, mental, and emotional battle that necessitates patients to develop or adopt various coping strategies. There exist various strategies for coping, among which mention can be made of seeking or using social support, focusing on the positive, distancing, solitude, cognitive escape-avoidance, and behavioral escape-avoidance.[9] In the present research, the identified coping styles used by respondents were attending religious and social programs, attending counseling sections in hospitals, spending time with family members, going to work and communicating with others, with the highest percentage (88.9%) of respondents seeking help from religion as a coping strategy. The respondents participated in religious programs, engaged in religious activities and believed that God is in full control of their situation, the disease is the will of God and submitting to him is the only way to find peace. This finding is similar to a study conducted among breast cancer patients in Egypt, where the preponderance of subjects used religious coping strategy as a means of dealing with the diagnosis.[4] Similarly, a report on Iranian women with breast cancer revealed that a religious approach was commonly utilized by respondents, where positive suggestions, hope, and prayer were the elements of coping.[9] Furthermore, 44.4% reported that religion helped them to a great extent.

Emotion-focused coping strategy (spending time with family members/loved ones) was the second most common coping strategy adopted by the respondents. This strategy is a type of stress management that seeks to reduce negative emotional responses that occur due to exposure

Table 4. Perceived effects of coping strategies used by cancer patients

Items	Frequency	Percentage
Do you think attending religious programs has affected you positively?		
Not at all	4	4.4
Fairly	46	51.1
Very much	40	44.4
Do you feel spending time with your family members has affected you positively?		
Not at all	6	6.6
Fairly	34	37.7
Very much	50	55.6
Do you think attending counseling sections at the hospital is improving your perception about your present condition?		
Not at all	20	22.2
Fairly	51	56.7
Very much	19	21.1
Do you think attending social gatherings is helpful to you?		
Not at all	18	20
Fairly	58	64.4
Very much	14	15.6

to stressors.[5] Emotion-focused coping can be positive or negative.[10, 11] The majority (87.8%) of respondents indulged in positive emotion-focused coping by spending time with family members and loved ones and expressing their fears and worries. 55% of the participants utilizing this coping strategy reported that they felt loved and had a sense of belonging when they spent time with their family members. In line with the present finding, a study examined the coping strategies used by children hospitalized for cancer and observed that 70% employed emotion-focused coping strategies.[10]

Attending support groups is also a coping strategy adopted by cancer patients. Support groups bring together people who are going through or have gone through similar experiences and provide an opportunity for people to share personal experiences, feelings, and coping strategies.[12] The results for the present study showed that only 37.1% were members of a cancer support group. Similarly, a study reported that only 32% of the respondents participated in a support group.[13]

Perceived effects of coping strategies adopted by cancer patients

The majority of respondents reported that religious programs positively affected their lives. This is not far-fetched in African community, where most people resort to divine intervention when it comes to illnesses, believing there is a supernatural being that can solve the problem. The findings of the present research are in accordance with a study conducted by Nápoles et al.,[14] in 2007 where the main coping strategies among 87.57% of cancer patients in a religion-oriented environment were spiritual. Some studies have attempted to link the issue of spirituality to religiosity in cancer patients as regards coping with cancer conditions.[10,11,14] It can be deduced from these literatures that spirituality helps patients positively define and cope with the condition. According to both concepts,[13] "religiosity and spirituality" are antidotes to stress, which could compound the patients' problem.

The issue of social support for the patient is also embedded in the family social network as a coping strategy for cancer patients.[15, 16, 17] More than half (55.6%) of the respondents from the study stated the highly positive impact of family

Table 5. Role performance of respondents after cancer diagnosis

Items	Frequency (n=90)	Percentage (%)
Do you still attend your job?		
Not at all	29	32.2
Fairly	35	38.9
Very much	25	27.8
Do you find it difficult to concentrate at work?		
Not at all	32	35.6
Fairly	45	50
Very much	10	11.1
Does this condition affect your daily living activities? e.g. bathing, sweeping, washing, etc		
Not at all	23	25.6
Fairly	60	66.7
Very much	7	7.8

members. Social support seeks to cooperate with cancer patient in developing an action plan towards pulling through periods of illness with a clear-cut self-concept and self-integration.[15] A strong positive relationship has been found to exist between family support and social coping with illness in cancer patients.[16]

About 57% of the respondents asserted that counseling sections fairly improved their perception of illness. There are different physical illnesses associated with cancer, which may pose a psychological trauma and bring about depression in patients, in which case counseling could be of help. Studies have revealed that there are gaps in meeting the psychosocial need of about two-thirds of cancer cases and that counseling sessions have shown a remarkable cut-down in the level of associated psychological issue linked with cancer.[17] A similar study reported an increase in the quality of life and a reduction in depression among the cancer patients receiving counseling, which is in consistence with the present results.[18] It is therefore encouraged that counseling sections be integrated into cancer care, so as to better improve the physical and psychological well-being of patients.[18]

The preponderance (64.4%) of respondents stated that attending social gatherings was fairly conducive. There is an innate opportunity towards self-growth in a cancer patient who receives this form of social support.[19] Self-help group is a social support system which fosters recovery through the presentation of information required for self-healing. In Nigeria, there are still no self-help groups, as a support system, for most conditions. According to a study, the supports in term of information regarding the illness are more derived from the health professionals than any other social gathering.[19] The spiritual setting of worship can be likened to a place where patients visit to receive a sense of succor since certain activities there depict a collective social responsibility aiming at helping the patients.[11]

Role performance following cancer diagnosis

Only a few (27.8%) of the respondents still showed up at work and half (50%) fairly concentrated on their jobs. The associated medical attentions caused by some physical illnesses linked with cancer could debar an individual from focusing on their job. About half of the respondents (50%) also stated that it was fairly difficult for cancer patients to concentrate. The psychological impact of the illness, depicting a form of depression, could also negatively impact the individual's mood, thereby reducing concentration at work.[20]

The majority (66.7%) of patients stated that their daily activities were fairly affected by the illness. This is in congruence with a study in

Table 6. Quality of life of cancer patients following cancer diagnosis

Items	Frequency (n=90)	Percentage (%)
Do you have any trouble doing strenuous activities like carrying a heavy bag or a suitcase?		
Not at all	17	18.9
Fairly	43	47.7
Very much	30	33.3
Do you have any trouble taking a long walk?		
Not at all	10	11.1
Fairly	57	63.3
Very much	22	24.4
Have you had trouble sleeping?		
Not at all	19	21.1
Fairly	37	41.1
Very much	34	37.8
Does pain interfere with your daily activities?		
Not at all	6	6.7
Fairly	46	51.1
Very much	36	40
Has your physical condition or medical treatment interfered with your social activities?		
Not at all	9	10.0
Fairly	51	56.7
Very much	30	33.4
Has your physical condition or medical treatment interfered with your family life?		
Not at all	18	20.0
Fairly	45	50
Very much	27	30

which a debilitating condition such as cancer was a long standing case that compromised the daily activities of the victims. The associated conditions, such as fatigue and pain, reported in cancer, could also be limiting factors in terms of performing daily activities.[20] Only 6% of cancer patients do not experience respiratory issues and about 98% experience fatigue, which renders activities/role performance intolerable.[21] The reduction in the performance of daily activities further disrupts the quality of life in general.[22] Another study stated an obvious distress in one-third of patients suffering from cancer, which reduced the daily activities and the quality of life.[23]

Quality of life of Cancer patients following Cancer diagnosis

Physical activity is another measure for the assessment of quality of life. It provides the opportunity to determine the interference with patient's health. The majority of respondents reported difficulty in the performance of strenuous activities. Features such as fatigue, dyspnea, loss of appetite, and pain are attributed to the challenge associated with carrying out demanding activities in a cancer patient.[21] The most reported critical effect that interferes with activities is fatigue, which affects about 70% of the cancer patients, of whom only 4% never complain about the challenges of performing activities.[24] The majority (63.3%) of respondents also stated that they had trouble with taking long walks. This corroborates the associated 98% fatigue due to the 94% account of respiratory problems associated with cancer.[21] Oxygen delivery to the muscle cells enhances contractility, which is measured in terms of movement, and impairment in oxygen delivery entails fatigue and limitation in functions, such as walking among other activities. Although exercises, such as walking, are found to improve the quality of life, associated variables in cancer illness could prevent a patient from initiating the exercise.[22]

Sleep is an important factor contributing to survival in cancer patients. 78% of the respondents had issues with their sleep pattern. Cancer patients experience a change in circadian rhythm due to an obvious change in physiology which tends to impact their sleep pattern. In a study,[19] 50% of cancer cases reported night sweat and hot flushes interfering with their sleep pattern. Some studies have been conducted to find out the correlation between sleep pattern in cancer patients and different variables such as fatigue, work related stress, etc. A strong positive correlation has been observed between sleep pattern and the fatigue experienced by cancer patients, although one study reported excessive sleepiness in 28% of patients, while sleeplessness was seen in 31%.[25] In another study, it was reported that 30%-75% of new cases of treated cancer patients reported having sleeping disorders. This percentage is stated to be almost twice in increase rate as compared to the general population.[26] Furthermore, 56.7% of the respondents stated that there was a change in their social functioning due to the progression of the illness. Social functioning could be linked with the presence of physical illnesses that may be presented by the condition. Most of the cancer patients under treatment also suffer from associated physical conditions, which continue even after years of treatment, always taking a negative toll on the patients' quality of life and survival rate.[27] In this study, half (50%) of the patients stated that the physical aspect of cancer fairly affected their familial relationships, while only a few (20%) reported that cancer treatment did not interfere with their familial relationship and others (30%) believed that it affected them to a great extent.

Study Limitations

The sample size may limit the results of this study and not allow their generalization to the entire cancer patients in Ekiti state. Additional research should be conducted to examine the relationship between coping strategies adopted by cancer patients and their quality of life.

Conclusion

This study showed that cancer patients adopt various coping strategies, yet utilizing religious strategies is the main coping strategy. It was further observed that a high number of patients utilized emotion-focused coping strategies, with only few being members of cancer support groups. Coping strategies are highly effective in terms of patient adjustment to the effects of cancer; hence the fact that it is important that researchers and clinicians encourage the establishment of cancer support groups and the participation of patients along with their family members.

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Conflict of Interest

None declared.

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