Research Paper

Influence of Illness Uncertainty and Coping on Quality of Life among Patients with Cancer in University College Hospital, Ibadan, Oyo State, Nigeria

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ABSTRACT: *Quality of life (QOL) is a concept that entails physical, psychological and social well-being of individual and is a major concern for patients living with cancer illness. Poor QOL makes patients experience greater symptoms pattern that affect their QOL and this is determined by illness uncertainty and coping level of patients. Therefore, this study assessed level of illness uncertainty and coping as well as the influence of illness uncertainty on quality of life among patients with cancer at Radio-oncology Clinic, University College Hospital, Oyo state, Nigeria. The study adopted quantitative cross-sectional research design. The sample size comprised of 219 adult cancer patients attending Radio-oncology Clinic, University College Hospital. Sample size was determined using Cochran formula. Validated Self-structured questionnaire and Adapted Mishel illness uncertainty scale were used for data collection. Cronbach's Alpha coefficients for the construct ranged from 0.65 to 0.77. Data collected were coded using Statistical Package for the Social Sciences, version 23. .Data were presented using descriptive statistical method frequency, percentage, means, standard deviation bar chart, correlation, cross tabulation chi-square and multiple regression. The findings from the study revealed the 35.6% of respondents were between ages 38-47 years with means age of 32.5 SD=1.87. 55.3% of the respondents had high level of illness uncertainty, 58.3% had low QOL. The findings further revealed that illness uncertainty was negatively related to physical and psychological well-being of the patients (QOL) (p=.001). Patients coping strategies was also significantly related to quality of life among cancer patients (p= 0.000) and coping strategies influenced respondents' psychological and physical well-being (P< 0.05). However, socio-demographic characteristics such age, gender, marital status were not significantly related to QOL (p> 0.05). The study therefore revealed high level of illness uncertainty, low level of coping style, poor physical and psychological well-being (QOL) among patients with cancer. It is therefore recommended that nurses should offer hope and discourage illness uncertainty among cancer patients as the latter deteriorates patients' quality of life and deterred coping strategies. Adequate information about the treatment of cancer should be given by Nurses.*
KEYWORDS: Coping Strategies, Illness Uncertainty, Influence, Patients with Cancer, Quality of life

I. INTRODUCTION

Illness uncertainty is a universal phenomenon majorly experience in patient with cancer and had significant effect on patient's psychological adjustment to management, outcomes of disease and quality of life (QOL). Uncertainty in cancer affects wide scope of the patient's life and daily activities. It can compromise both quality of care and overall ability to cope with the illness [1]. Mishel [2] explained Illness uncertainty as a cognitive stressor, a sense of loss of control and a perception of one's illness that change overtime which can contribute to decrease survival rate of the patients with chronic illness. Uncertainty is a major predictor of main psychological stressor that most patients seek to reduce or find ways to cope with the illness uncertainty [3][4][5]. According to [6][7][8]certain factors can affect level of illness uncertainty, coping and quality of life such as ethnicity, age, level of education and illness related factors like history of the diseases, stages of cancer and disease-related symptoms.

However, patients' response to uncertainty is shaped by social, cultural context, background and experiences of individual. Therefore, effective management of illness uncertainty and treatment of symptoms will help to relieve the suffering, enhance effective coping mechanism and improve the quality of life [8]. Ting, Shella, Ding & Lixing [9] opined that Illness uncertainty experienced by the individuals can lead to seclusion, emotional distress, anxiety, limited socialization and a damaged sense of well-being as well as negative impact on individual's behavior, mental state and social life. Overcoming the challenges associated with illness uncertainty involves effective coping strategies, which essential in adjust to stressful events and maintain their emotional well-being [10][11]. The number of symptoms and distressed experienced by the patients has been related to QOL in a number of patients with cancer which is also directly related to the effectiveness of coping strategies implemented [12][13][14][15].

Although, the symptoms experienced have major impacts on QOL of patients with cancer and greater symptoms loads have been associated with higher levels of emotional suffering and pain, physical and societal dysfunction and global QOL. Nevertheless, effective management of symptom can improve the QOL in cancer patients [15]. According to [14] quality of life assessments provide a way to evaluate the impact of cancer illness on clients and their families as well as the complex interrelationships of the associated burdens of chronic illness which are appreciated more fully when the client's overall quality of life is known. This can also be used to scrutinize the appropriateness of treatments and show progress toward attainment of treatment goals and responses to therapy among cancer patients [14]. Mishel [2] proposed that illness uncertainty influences an individual use of coping strategies and directly and indirectly influences their quality of life as cancer patients experience a variety of symptoms with high level of emotional suffering of illness re-occurrence, poor physical well-being accompany with severe pain, disfigurement and societal functioning such as low income as a result of high cost of treatment and frequent hospitalization might hamper the performance of the daily activities of an individual. As illness uncertainty increased, a patient's appraisal of his illness also increased and adversely influenced the patients' QOL.

However, according to [8], the Level of illness uncertainty, coping strategies and quality of life determine prevalence and burden of cancer as well as the outcome of the treatment, hence, it is pertinent for the researcher to study influence of illness uncertainty, coping and quality of life among cancer patients. This study is guided by the following research questions

i.   What is the level of illness uncertainty among cancer patients?
ii.   What the level of coping with illness among cancer patients?
iii.   What are the influences of illness uncertainty and coping on quality of life of cancer patients?

II.   MATERIALS AND METHODS

Design: The study utilized quantitative cross-sectional research design. The study population comprised of cancer patients attending radio-oncology clinic at University College Hospital, Ibadan, Oyo State, Nigeria. The sample consisted of 219 cancer patients using convenience sampling technique. The sample size was calculated using Cochran formula ($n=N/1+N(d)^2$. n=sample size, N=460, d=0.05 which corresponds to 95% confidence level.

Settings: The study was conducted among cancer patients attending radio-oncology clinic at University College Hospital, Ibadan, Oyo State, Nigeria using convenience sampling technique.

Instrument: A self-developed structured questionnaire, Mishel illness uncertainty scale-adult form, WHO-Coping Orientation to Problem Experienced (COPE) and World Health Organization-Quality of Life scale (QOL) were used to elicit information from the participants. The data gathering tools were; socio-demographic variables consisting of such as age, gender, religion, marital status, educational qualification, employment status; level of respondent experience with illness uncertainty using Mishel illness uncertainty scale adult form (MUIS-A) to measure level of illness uncertainty. The scale contains 32 items with four dimensions: ambiguity, complexity, unpredictability and inconsistency on five Likert scale that ranges from strongly agree to strongly disagreed. The respondents are scored on 5- Likert format with allotment of 5 for strongly agreed, and 1 for strongly disagreed. The score will range from 16-90. The higher the score the higher the level of uncertainty Ambiguity 4 items, complexity have 4 items explain disease symptoms and diverse range of complex treatment, Inconsistency contain 6 items (inconsistency about disease process). Unpredictability contains 4 items (inability to predict disease outcomes). (total number of 18 items); coping strategies was also assessed using BREF-coping oriented problem experienced scale (COPE) is a self -report questionnaire made up 28 items. The scale was used to determine patient types of coping abilities coping. Items in subscales contain 14 coping styles namely Self-distraction, denial, behavioural disengagement, substances used, self-blame, avoidant) Adaptive coping, use of emotional support, use of information support, Venting, Positive reframing, Planning, Acceptance.(Adaptive coping strategies) humors, Religion, (14 items); WHOQOL-BREF, a 26-item instrument comprised of four domains: physical health, psychological health, and social relationships was used to elicit information on quality of life of the respondents.

The instrument for data collection was subjected to face and content validity. The items in the questionnaire were presented to experts in the field and the project supervisor for review, corrections and appraisal after which the necessary corrections were made. To ensure the content validity, the tool was subjected to the experts to confirm the appropriateness of content of the instrument. Expert ensured that the item in the questionnaire represents adequately the concepts and it was able to measure the subject matter.

The corrected and validated versions of the instrument were subjected to pretests by administered 10% of sample size (22 copies) to patients on cancers treatment at Oncology Units, Olabisi Onabanjo University Teaching Hospital, Sagamu. Ogun state. These respondents were not within the coverage of the study, but share the same characteristics with the population of the study. All the copies distributed were recovered. The data collected were thereafter subjected to Cronbach's alpha to determine the reliability coefficient and the value obtained was 0.79.

Statistical Analysis: Data obtained were coded and analysed using statistical package for social sciences (IBM SPSS) version 23.0; variables were analyzed using descriptive statistics of table, frequency, mean, standard deviation and percentages while hypothesis were tested using cross-tabulation, chi-square and regression at 0.05 level of significance.

Ethical Consideration: Ethical approval for the study was collected from Babcock University Health Research Ethics Committee (BUHREC) with reference number 281/21. Approval letter with reference number UI/UCH was also obtained from study setting with reference number 21/0187. Also, the researcher had obligation to the subjects by getting their informed consent consistent with the principle of individual autonomy. Their voluntary participation, anonymity, privacy and confidentiality when collecting the data were also guaranteed. Their right to participate and not to participate was duly respected and any respondents that want to opt out during the study were allowed. All personal information about respondents were treated confidentially

III. RESULTS

Table 1: Demographic characteristics of the respondents (n=219)

Questions	Response	Frequency	Percentage
Age	18-27	52	23.7. Mean age=32.5,S.D=1.87
	28-37	63	28.8
	38-47	78	35.6
	48 – 57	19	8/7
	58- 67	7	3.2
Sex	Male	94	42.0
	Female	125	57.1
Religion	Muslim	120	54.8
	Christian	62	28.3
	Traditional	37	16.9
Marita Status	Single	39	17. 8
	Married	102	46. 6
	Separated	18	6.2
	Divorce	24	11.0
Education level	No formal education	37	16.9
	Primary education	59	26.9
	Secondary education	86	39.3
	Tertiary education	37	16.9
Employment Status	Employed	43	19.6
	Unemployed	46	21.0
	Self employed	130	59.4

Fifty-seven point one percent of the respondents were female, 78(35.6%) were within the age range of 38-47years. The mean age was 32.5 and S.D. was 1.87. Fifty-four point eight were Muslim, 39(17.8%) of the respondents were single, 102(52.8%) were married, 86(39.3%) had secondary level of education while 130(59.4%) were self-employed as presented in Table 1.

Table 2a: Assessment of Patients' Level of illness uncertainty

Ambiguity of disease symptoms	SA	D	UD	Mean	S.D
I don't know how to manage the signs and symptoms	143 (65.3%)	76 (34.7%)	0	2.65	0.48
The results of my tests are inconsistence and unclear.	95 (43.4%)	106 (48.4%)	18 (8.2%)	2.35	0.63
My symptoms are unpredictable and I know when I will feel better.	125 (57.1%)	94 (42.9%)	0	2.57	0.50
The signs and symptoms reoccur despite all the treatment	200 (91.3%)	19 (8.7%)	0	2.91	0.28
Complexity of disease treatment					
The cost of treatment is too much	113 (51.6%)	106 (48.4%)	0	2.52	0.50
My treatment is too hard for me to figure-out.	144 (65.6%)	75 (34.2%)	0	2.66	0.48
It is hard to know if the treatment I am getting are helping me.	107 (48.9%)	100 (45.7%)	12 (5.5%)	2.41	0.50
It is unclear how long the treatment will take.	139 (63.5%)	68 (31.1%)	12 (5.5%)	2.65	0.48
Unpredictability of disease prognosis					
It is not clear what is going to happen to me.	105 (47.9%)	93 (42.5%)	21 (9.6%)	2.38	0.66
I don't know how long my illness will last.	154 (70.3%)	49 (22.4%)	16 (7.3%)	2.63	0.62
I don't know if the treatment will work.	152 (69.4%)	41 (18.7%)	26 (11.9%)	2.58	0.70
I am certain that they will not find anything wrong with me.	101 (46.1%)	80 (36.5%)	38 (17.4%)	2.29	0.74
Inconsistency of information					
The purpose of each treatment was not clear to me	87 (39.7%)	114 (52.1%)	18 (8.2%)	2.32	0.64
I don't know how serious my illness is.	114 (52.1%)	75 (34.2%)	30 (13.7%)	2.38	0.72
The doctor and nurses use words that I can understand.	57 (26.0%)	144 (65.8%)	18 (8.2%)	2.51	0.64
It is unclear how long the treatment will be	125 (57.1%)	94 (42.9%)	0	2.43	0.50
Explanation of nurses is confusing.	112 (51.1%)	107 (48.9%)	0	2.51	0.50
They (nurses) have not given me specific explanation about my illness.	200 (91.3%)	19 (8.7%)	0	2.19	0.28

Table 2b. Summary of Frequency and Percentage of illness Uncertainty score categories

Categories	Frequency	Percentage	Max	Mini	Weighted means
High level	121	55.3	48	44	2.36
Moderate level	61	27.9			
Low	37	17.0			
Total	**219**	**100.0**			

Fifty-five point three percent of the respondents have high level of illness uncertainty, 27.9% had moderate level of illness uncertainty and 17.0 % having low level of illness uncertainty. This result validated that majority of the clients having high level of illness uncertainty at Radio-oncology clinic University College Hospital as presented in Table 2.

Table 3. Respondents response with use of avoidant and adaptive coping styles

	Clients Response	I have been doing it a lot	Ihave been doing it a little	I have not been doing it	Means
1	Self- distraction: I have created the habit of being punctual to work and performing other activities well to put my mind off.	19(8.7%)	94(42. 9%)	106(42.9%)	1.57
2.	Denial: I have console my mind that this is not real	200 (91.3%)	19(8.7%)	0	1.48
3	Substances abuse: I have been using other substance apart from medication	107(48.9%)	112(51.1%)	0	1.63
4.	Behavioural disengagement: I have been fed up with health management or care	163(74.4%)	56(25.6%)	0	1.47

5.	Self-Blame: I had criticizing myself several times	163(74.4%)	0	56(25.6%)	1.50
6	Self-distraction: I have been making jokes of the situations.	19(8.7%)	76(34.7%)	124(56.8%)	1.62
7	Religion: I had been prayed and meditated several times.	113(51.6%)	87(39.7%)	19(8.2%0	1.43
8	Active coping: I had taking several actions to make the situation better.	94(43%)	0	125(57%)	1.96
9	Emotional support: I had lot of emotional support significant others.	50(22.8%)	0	169(77.2%)	1.60
10	Positive Thinking: I have been getting and comfort from others	39(17.4%)	0	180(82.4%)	1.57
11	I have been getting used to my treatment.	94(43)	120 (54.7%)	5(2.3%)	1.73
12	I had strictly adhered tohealth care advise	68(31%)	19(8.7%)	132(60.3%)	1.80
13	Seeking information: I had thought deep about what steps to take.	131(68.9%)	18(8.2%)	57(26.0%)	1.60
14	Acceptance: I had accepted the reality of the fact that it has happened.	52(22.8%)	0	167(77.2%)	1.83

Note: Key: Items 1-7 measures avoidant coping strategies: which involve Self distraction, behavioural disengagement, denial, Self-blaming substances abuse. This indicates **Low level of coping.**
8-14 items measure active coping strategies which involve emotional support, Active, positive thinking, self - seeking information, Religion, acceptance. This indicates **High level of coping.**
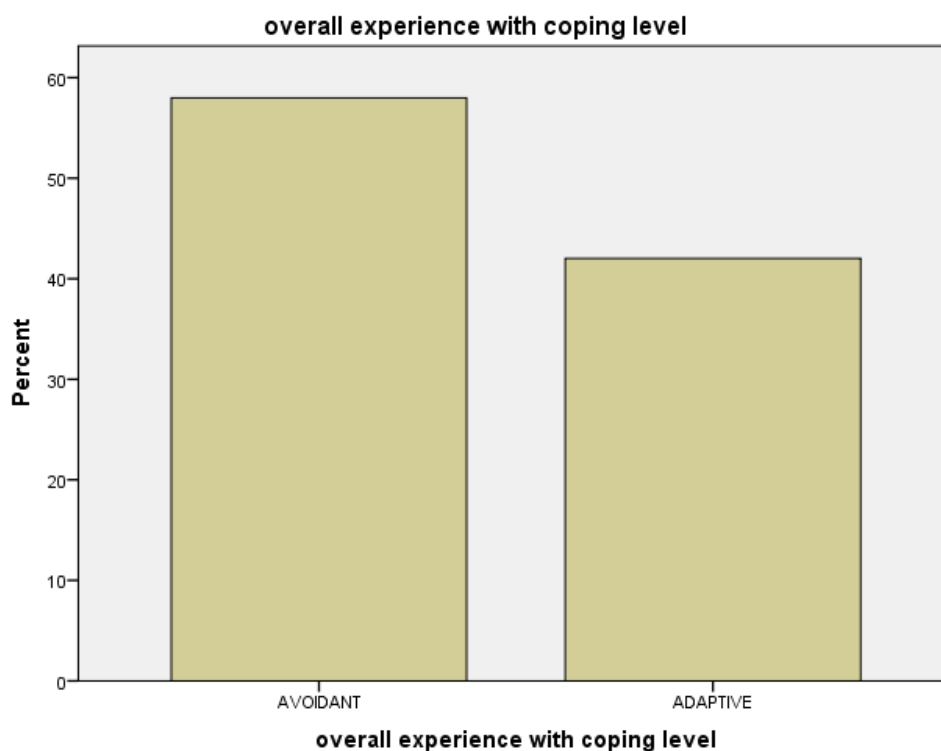

Figure 1: Summary of Respondents overall experience with coping (level of coping)

The result presents in Table 3 assesses the respondents coping level to cancer symptoms and management. The finding revealed that 58% of the respondents used more avoidant coping styles, 42% used adaptive coping style in the management of cancer illness. This showed that the respondents have low coping experience as presented in Figure 1.

Table 4: Respondents' QOL in University College Hospital Ibadan Oyo State Nigeria.

| Domains of QOL	Very much	Moderate	A little	Not at all	An extreme amount	Mean	S.D
Physical domain							
I experience any pain at present	106 (48.4)	94 (42.9)	19 (8.7)	0	0	1.60	0.64
The present of pain interfere with my day to day activities	94 (42.9)	125 (57.1)	0	0	0	1.57	0.49
I experiences fatigue with slight exercises	163 (74.4)	0	38(17.4)	18 (8.2)	0	1.59	1.04
My working capacity had reduced since occurrence of illness	95 (43.4)	106 (48.4)	0	18 (8.2)	0	1.73	0.83
The present condition reducing my sleeping patter	124 (56.6)	76 (34.7)	19 (8.7)	0	0	1.52	0.65
Psychological domains							
I had been afraid of recurrence	113 (51.6)	87 (39.7)	19 (8.7)			1.57	0.64
I used to feel lonely or remote from others	93 (42.5)	76 (34.7)	50 (22.8)			1.80	0.79
I had fear of functional disability	125 (57.1)	56 (25.6)	38 (17.4)			1.60	0.77
I always had negative feeling such as blue mood, despair, anxiety, depression	94 (42.9)	57 (26.0)	50 (22.8)	18 (8.2)	0	1.96	0.99
Social Domains							
I hadgood relationship with friends and family	94 (42.9	125 (57.1)	0	0	0	1.57	0.53
I had easy access to health care	132 (60.3)	68 (31.1)	19 (8.7)	0	0	1.48	0.65
I have good relationship with nurses	95 (43.4)	85 (38.8)	27 (12.3)	5 (2.3)	7 (3.2)	1.83	0.95
I am comfortable in attending social functions	112 (51.1)	107 (48.9)	0	0	0	1.49	0.50
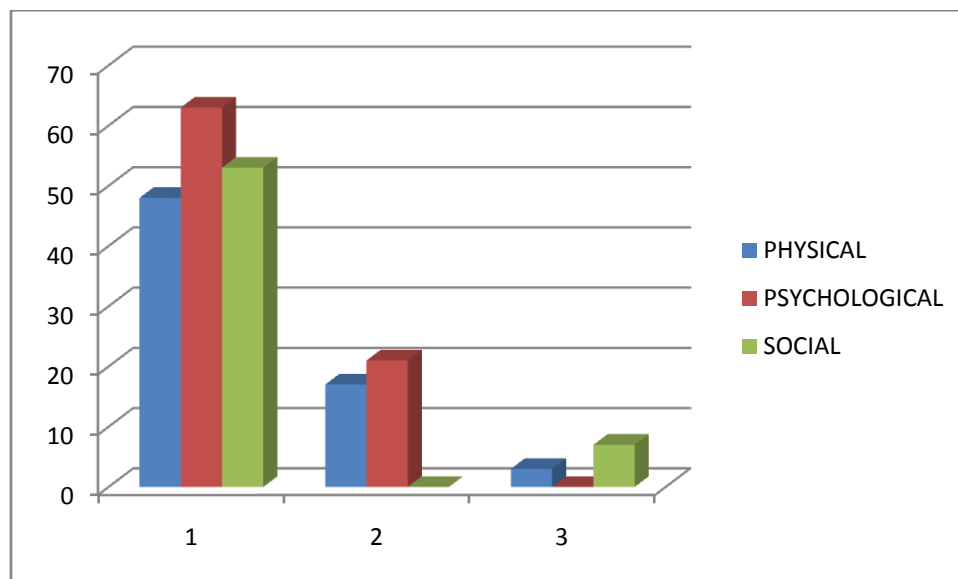
Figure 2: Respondents' overall quality of life

1 = Very much- low QOL,
2 = Moderate,
3 = Not at all- high QOL

Fifty-eight point three percent of the respondents had low quality of life, 20.3% had moderate QOL and 12.4% had high quality of life. The result also shows that physical distress affects 21% of respondent, 28.7% were affected by psychological distress and 24% of respondent having good social relationship. The result confirmed that respondents had poor physical and psychological domains as presented in Table 4 and Figure 3

Table 5: Multiple Regression Showing relationship between socio-demographic variable and respondents QOL.

Model		Unstandardized coefficients		Standardized coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	20.530	1.189		17.260	.000
	Gender	-.245	.461	-.041	-.530	.596
	Age	.184	.215	.064	.854	.394
	Marital status	-.237	.194	-.091	-1.218	.225
	Educational Status	.363	.226	.417	3.607	.003
	Religion	-.729	.314	-.262	-2.320	.021
	Employment Status	.763	.369	.664	7.067	.000

a. Dependent Variable: WHOQOLBREF

As presented in Table 5, there is a significant relationship between socio-demographic characteristics on the quality of life of patient with cancer. The socio-demographic that influence the quality of life of individual includes employment status (β=664, t=7.067, p = 0.00) educational status (β=417, r=3.607, p = 0.03) and religion, (β=-2.62, r=-2.320, p = 0.021) other variables such as age(β= -0.64, t=-0.854, p = 0.394), marital status(β=- 0.91, r= -1.218, p = 0.225) and gender(β= -0.41, t=-0.530, p = 0.596) have no significant prediction on quality of life of cancer patients.

Table 6: Relationship between patients' level of illness uncertainty and their coping strategies

Illness uncertainty	Coping		X^2	P- value	Df	Result
	Low	High				
Low	0	18(8.2%)				
Moderate	87(82.1%)	19(17.9%)	799.175	0.000	28	H_1 is rejected
High	57(60%)	19(20%)				
Total	**144**	**57**				

There is a significant relationship between the patients' level of illness uncertainty and coping strategies among cancer patients ($\chi 2$= 799.175; df=28, P = 0.000) at 0.05 level of significance as presented in Table 6. Hence, the null hypothesis was rejected and alternate was accepted. This implies that participants exhibit avoidant coping strategies at high level of illness uncertainty however, the levels of illness uncertainty determine respondents coping levels.

Table 7: Correlation between illness uncertainty on quality of life among cancer patients

Variables	Mean	SD	N	R	P	Remark
Illness uncertainty	46.5662	1.37439				
Quality of life	21.0731	2. 98070	219	0.131[**]	0.040	Sig

**. Correlation is significant at the 0.01 level (2-tailed).

As presented in Table 7 there is correlation between illness uncertainty and quality of life (r = - 0.131[**] and P = 0.04) at 0.05 level of significance. This indicates negative influence of coping strategies on quality of life. Hence, null hypothesis was rejected and alternate was accepted. Hence, deduction was made that there is significant association between illness uncertainty and respondent's quality of life

Table 8: Relationship between respondents' coping and quality of life

Variables	Mean	Standard Deviation	N	X^2	P	Remark
Coping	46.5662	1.3744	219	27.610	0.00	Sig
Quality of life	21.0065	2.98070				

As presented in Table 8, there is a significant relationship between coping strategies and patient's quality of life (X^2= 27.610 p<0.05). The p- value is less than 0.05, therefore the null hypothesis is rejected while the alternate hypothesis is accepted which states that there was a significant relationship between coping strategies and patient's quality of life in the study area.

Table 9: Correlation between respondents coping and quality of life

Variables	Mean	SD	N	R	P	Remark
Coping level	21.9178	2.46305				
Quality of life	21.0731	2. 98070	219	0.406[**]	0.000	Sig

**. Correlation is significant at the 0.01 level (2-tailed).

As presented in Table 9, there is a positive correlation between coping strategy and quality of life (r = 0.406[**]; P = 0.000), at 0.05 level of significance. Hence, null hypothesis was rejected and alternate was accepted.

IV. DISCUSSION

The finding from the study showed that patients' quality of life was significantly influenced by situations of illness uncertainty and coping. The finding revealed that majority of the respondent were between 38-47years with means age = 32.5,SD =1.87 more than half of the respondents are females, slightly below half were married, about one-fourth had secondary school education and slightly above were self employed. The findings revealed low level of illness uncertainty and coping strategy among the respondents, This finding was supported by [16] that high level of illness uncertainty are common among cancer patients which was related to undefined symptoms of disease, unpredictability of disease outcome and its therapy. The result from the study also corroborate the report of [17], that cancer patients experience moderate level of uncertainty and that information provided by health care providers was the sole predictor of illness uncertainty. Ahadaezadh & Sharif [8] also reported that lack of information on treatment contributes to illness uncertainty among patients.

Findings from the study also revealed low coping strategy among the respondents as majority of them exhibit more of avoidant coping styles like self- blaming, Self -distraction denial, Use of substances than adaptive coping strategies like emotional support, positive reframing, regular using of health facilities. This result corroborates the findings of [18] that reported low level of coping strategies among cancer patients and this affects and deteriorates their condition. Moreso, the study conducted by [8] on breast cancer pain revealed poor coping strategies towards management and symptom of cancer as the highest percentage of the participants use one or more form of avoidant coping mechanism such as self -blaming, denial and loss of control. Patients with poor quality of life manifested avoidant coping strategies such as behavioral disengagement, venting, planning and self- blame [19].

The result further revealed that majority of the respondents had low quality of life which was determined by level of illness uncertainty. This is because percentage of respondents with high level of uncertainty correspond with respondent with low quality of life. This findings is in tandem with the result of [14] in their study that majority of cancer patients experienced low quality of life in terms of physical, psychological well and good social relationship. The findings is also supported by Ryan et al (2014) in the study conducted among patients with prostate cancer that symptoms of illness influence patients QoL and coping strategies, as a result of this, patient that have poor general well-being due to difficulty in urination felt that they cannot physically perform well and were not getting support from friends and relative. Majority reported poor economic well-being. Ryan et al [19] further stated that majority of patients experienced low QoL (physical, psychological. and social well-being).

The finding from the study further revealed negative correlation between coping strategy and quality of life. Hence, null hypothesis was rejected and alternate was accepted. this was attributed to illness uncertainty experienced by the patients. This finding is supported by [9] that illness uncertainty is a significant stressor for patients with cancer and negatively affect their quality of life. The finding also corroborates the report of [20] that cancer patients that have high level uncertainty are faced many symptoms including some psychological problems such as stress, anxiety depression and physiological side-effects of drug such as hair loss, pain, tiredness, nausea, vomiting and some social side-effects such as social isolation, role and loss of control and eventual, alteration in quality of life. Additionally, the finding is supported by the result of study carried out by Ahadaezadh & Sharif [8] that uncertainty was negatively related to QOL. This confirmed that cancer patients

have major issue with disease symptoms, lack of family support and financial constraints and inconsistency of information about the management regimen [21]. Furthermore, the result from the study indicated a statistically significant relationship and positive correlation between respondents' coping level and quality of life. Hence, null hypothesis was rejected and alternate was accepted. This finding is in tandem with the study conducted by [22] that quality of life among cancer patients is influenced by symptoms pattern and complex treatment. Also, physical well-being is negatively influenced by behavioral disengagement, venting, planning and self -blame (avoidant coping strategies or low level of coping) in patients with cancer.

In addition to this, the result from the study revealed that there was significant relationship between patient level of illness uncertainty and coping strategies in patients with cancer, ($\chi 2$ (28, N=219) = 799.175, p= 0.000). This finding was in line with the position with the finding of [22] that there was inverse relationship between illness uncertainty and coping. Karim [23] affirmed that coping strategy is found to produce a positive experience; individuals' health and quality of life have been found to improve and found inverse and significant relationship between coping strategies and illness of uncertainty. In the same vein, Maryam [24] established that uncertainty of illness had a significant negative relationship with coping strategies. This finding corroborates the report of Guan Person (2020) stated a significant relationship between quality of life and their coping strategies. Similarly, the finding is in tandem with the result of [20] that showed a significant relationship between socio-demographic factors such as patient occupation, level of education, age and marital status and coping strategies. [22] also revealed an inverse relationship between illness uncertainty and coping strategies. Likewise [23] affirmed that coping strategy is found to produce a positive experience in individuals' health and socio-demographic characteristics have been found to be significantly related to coping strategies expressed by patients.

There was a positive correlation between socio-demographic characteristics and quality of life of cancer patients. The most significant socio-demographic factors identified from the study include employment status educational status and religion other variables such as age, marital status and gender have no significant prediction on quality of life of cancer patients was revealed in the study that there was no significant relationship between patient's socio-demographic variables and their coping strategies as correlation coefficient "r" = 0.58 and P = 0.691, which was greater than 0.05. This finding is in contrast with the findings that socio-demographic variable such as age, gender, education, marital status, family size and religion have significant relationship with quality of life of cancer patients. [8][19].

V.   CONCLUSION

Illness uncertainty is generally experienced by cancer patients globally and its effects on patients' well-being and adjustment to management of cancer diseases cannot be undermine as it influences the outcomes of diseases, psychological adjustment to management and quality of life (QOL). This study investigated the influence of illness uncertainty and coping on quality of life among patients with cancer. The findings revealed high level of illness uncertainty, low level of coping and poor quality of life among cancer patients. Also there was a statistically significant relationship between socio-demographic factors, level of illness uncertainty, level of coping and quality of life of cancer patients. It is therefore concluded that high level of illness uncertainty experienced predispose patients to lots of avoidant coping strategies than active coping strategies that influenced their physical and psychological well-being. Hence, t is recommended that nurses should offer hope and discourage illness uncertainty among cancer patients as the latter deteriorates patients' quality of life and deterred coping strategies. Adequate information about the treatment of cancer should be given by Nurses.

Limitation of the study: The study focused on cancer patient only therefore the result may not be generalized to other patients with chronic illness

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