








Original Article

Coping strategies among patients in a tertiary hospital: associations with quality of life and mental wellbeing

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Abstract

Background: Coping is essential for adjusting to life's stresses to optimize wellbeing. This study examined associations between coping, quality of life, and psychological wellbeing among adult patients seen in the primary care clinic of the University of Calabar Teaching Hospital.

Methods: Using a cross-sectional design, we elicited information from 230 subjects that were selected using systematic sampling. Four instruments were administered: the Hospital Anxiety and Depression Scale (HADS), the Coping Strategies Inventory – short form (CSI-SF), the World Health Organization Quality of Life-Bref (WHOQOL-Bref) and the Mini International Neuropsychiatric Interview (MINI). Pearson correlation and logistic regression were done using IBM SPSS version 23.0.

Results: Most subjects were less than 30 years old (54.3%) and female (53.0%). Problem-focused engagement positively correlated with all QOL domains and associated negatively with depression ($p < 0.05$). Emotion-focused engagement positively correlated with the psychological and environmental domains ($p < 0.05$). Emotion-focused disengagement negatively correlated with the physical, psychological, and social domains and positively correlated with anxiety and depression ($p < 0.05$). Problem-focused disengagement positively correlated with the psychological domain and negatively correlated with depression ($p < 0.05$). In logistic regression, emotion-focused disengagement was the only predictor of psychiatric diagnosis (OR: 1.05, 95%, CI: 1.01-1.09).

Conclusion: Coping strategies are linked to life quality and mental wellness. More research is advocated to explore the observed interrelationship further.

Keywords: Adaptation, Psychological; Anxiety; Depression; Quality of Life.

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Introduction

As a public health concern, mental disorder impairs individual functioning, life satisfaction, and overall wellbeing. Mental health is "a state of wellbeing in which the individual

realizes his or her abilities, can cope with the normal stresses of life, can work productively and fruitfully, and contribute to his or her community" (1). This definition conceptualizes stress as a regular

part of human life for which coping skills are needed to attain or preserve optimal mental health and general wellbeing (2).

Coping, a crucial part of behavioral adaption and survival, concerns how individuals recognize and react to stressful events. They include behavioral and cognitive skills described as strategies, styles, responses, thoughts, behaviors, or tactics (3). Coping strategies could be situational, applied in particular conditions, or dispositional as a general response tendency in an individual (4).

Previous research indicates that dispositional coping can minimize or worsen the impact of stress on mental wellbeing (3). This finding has been replicated in various populations, using multiple approaches to measuring coping (5). In a study among attendees of a breast cancer clinic, women who adopted engagement, an adaptive coping style, had lower levels of psychological distress (6). Another study from Pakistan showed that problem-focused engagement correlated with having lesser anxiety and depressive symptoms (7).

Apart from the effect of coping on mental health, it could also directly impact the quality of life. QOL is "what a person perceives of his/her position in life, based on the tenets of their culture and value system, and in association to their goals, expectations, standards, and concerns" (8). A person's QOL is an all-encompassing concept and considers how a disease or impairment constrains everyday life. The importance of QOL as an index of the impact of mental illness reflects the gradual shift from focusing only on clinical states to a more holistic approach that considers functioning in various life domains (9).

An association between coping and life quality is supported by previous research. Among college students, problem-focused engagement fosters a positive mood and improves the quality of life (10). Engagement strategies, such as positive

reframing and acceptance, have also been linked to improved life quality among women receiving treatment for breast cancer (11). In a large study among hemodialysis patients, problem-focused engagement was associated with improved functioning in the physical and mental domains of life quality, while emotion-focused disengagement worsened the life quality in psychological function (12).

The link between coping and mental wellbeing or life quality has been insufficiently explored among patients in primary care. Beyond treating disorders, health promotion approaches are needed for primary prevention with interventions that improve wellness and minimize the impact of illness. We assessed how coping strategies correlate with psychiatric symptoms (specifically depression and anxiety) and QOL. We also sought to determine if coping predicts psychiatric diagnosis.

Methods

Study setting

This study was conducted at the University of Calabar Teaching Hospital (UCTH) in Calabar, a metropolitan city in South Nigeria. The hospital has a General Outpatient Department that serves as a primary healthcare facility and a walk-in clinic, as patients do not need to be referred before being seen. The General Outpatient Department attends to an average of 180 patients daily.

New patients and follow-up adult patients at least 18 years of age attending the primary care clinic of the UCTH constituted the study population. Patients who declined consent or had severe physical debility were excluded.

This study was cross-sectional in design. A sample size of 230 adults was calculated using the Leslie Kish formula using a prevalence from an earlier study with the desired degree of accuracy set at 5% and a 95% confidence interval (13).

The daily patient register, filled as patients arrived the clinic, was used as the sampling frame. A systematic sampling technique was used for patient selection.

Research instruments

1. Socio-demographic questionnaire (SDQ)

The data collection tools included a structured questionnaire to elicit socio-demographic characteristics.

2. Hospital Anxiety and Depression Scale (HADS)

The Hospital Anxiety and Depression Scale (HADS) is a short 14-item self-administered questionnaire that is easily administered, scored, and interpreted. It was used to assess and grade the level of depression and anxiety. HADS is considered unbiased by physical illnesses as it excludes overlapping symptoms such as weight loss and sleeping difficulties, which can also be present in physical diseases. Sensitivity and specificity for its subscale for depression and anxiety are generally greater than 85% (14).

3. Mini-International Neuropsychiatric Interview (MINI) plus English version 6.0

This is a structured diagnostic interview that takes about 15 minutes to administer (15). This instrument has 26 modules (A-Z). We used only those assessing Major Depression, Generalized Anxiety Disorder, Alcohol dependence, Substance dependence, Panic Disorder, Somatization disorder, Agoraphobia, Specific phobia Social Phobia, and Hypochondriasis.

4. Coping Strategies Inventory – Short Form (CSI-S)

Coping Strategies Inventory – Short Form (CSI-S) is a 32-item self-administered tool used to assess thoughts and behaviors that individuals adopt in coping with stress (16). The CSI-SF has fourteen subscales: eight primary, four secondary and two tertiary scales. The primary subscales are problem-

solving; expressing emotions; cognitive restructuring, social contact; problem avoidance; self-criticism; wishful thinking; and social withdrawal. Combining the primary subscales yields four secondary subscales: problem-focused engagement (an aggregate of problem-solving and cognitive restructuring), emotion-focused engagement (a sum of social contact and expressing emotions); problem-focused disengagement (a composite of problem avoidance and wishful thinking), and emotion-focused disengagement (from self-criticism and social withdrawal). Furthermore, combining the secondary subscales yield two tertiary subscales: engagement and disengagement. Cronbach's alpha for CSI-S ranges from 0.71 to 0.94, and it is known to be a valid instrument (17). The focus of the analysis was on the level of the secondary and tertiary subscales. The tool does not have a cut-off; however, we used the median sample score to categorize respondents into those with high or low levels of secondary coping strategies. This was done to facilitate bivariate comparisons.

5. World Health Organization Quality of Life – Bref (WHOQOL-BREF):

WHO QOL Bref is a tool for assessing the life quality in health surveys (18). It includes four domains (physical wellbeing, psychological wellness, social relationships, and environment), incorporating various facets within each domain. Each domain represents scores in a critical component of life quality, which elevated scores indicating a better quality of life. To score the scale, the mean domain scores were computed, then multiplied by four, to foster comparability with the 100-item version.

Method of data collection

Data collection lasted six weeks. Only patients who gave informed consent participated. Pre-coded booklets containing the self-administered questionnaires were given to each of the participants to fill out

and submit. After that, the researcher, blind to scores on these questionnaires, interviewed participants using the MINI-PLUS.

Method of data analysis

Data were analyzed using IBM SPSS version 23.0. Univariate data were summarized and presented as frequency tables and proportions. Pearson product-moment correlation coefficient was done for bivariate analysis, while logistic regression was used for multivariate analysis. P-value lower than 0.05 were deemed significant.

RESULTS

The socio-demographic data of respondents is seen in Table 1. Just above half were less than 30 years of age, and the gender distribution was roughly equal. Most were employed; similarly, unmarried subjects and those with at least tertiary education were more numerous.

For the entire sample, the correlation between coping strategies, the domains of the WHO QOL BREF and psychopathological symptoms (specifically depression and anxiety) was determined (Table 2). Problem-focused engagement had weak positive correlations with all QOL domains (environmental, psychological, physical, and social) and a weak negative correlation with depression

Table 1: socio-demographic characteristics of respondents

	Variable	No.	%
Age	Less than 30	125	54.3
	Above 30	105	45.7
Gender	Male	108	47.0
	Female	122	53.0
Marital Status	Unmarried	155	67.4
	Married	75	32.6
Employment	Employed	169	73.5
	Unemployed	61	26.5
Education	Secondary	83	36.1
	Tertiary & above	147	63.9

($p < 0.05$). Furthermore, emotion-focused engagement had weak positive correlations with only the psychological and environmental domains of QOL ($p < 0.05$). Its correlations with social and physical domains were insignificant ($p > 0.05$); neither did emotion-focused engagement correlate with anxiety or depression ($p > 0.05$).

Problem-focused engagement had weak positive correlations with the psychological domain of QOL and a weak negative correlation with depression ($p < 0.05$). It was not significantly related to the environmental, physical, social and domains of life quality, nor was it associated with anxiety ($p > 0.05$). Emotion-focused disengagement had weak negative correlations with the physical, psychological, and social domains of QOL and weak negative correlations with depression ($p < 0.05$). It did not correlate with the environmental domain of life quality and anxiety ($p > 0.05$).

Table 2: Relationship between coping strategies, quality of life, anxiety and depression among subjects

Variable	1	2	3	4	5	6	7	8	9
1. PFE	1								
2. PFD	.61**	1							
3. EFE	.64**	.53**	1						
4. EFD	.18**	.32**	.19**	1					
5 Physical	.14*	.03	.06	-.13*	1				
6. Psychological	.33**	.16*	.21**	-.13*	.67**	1			
7. Social	.13*	-.06	.10	-.15*	.58**	.55**	1		
8. Environmental	.23**	.12	.25**	-.12	.56**	.60**	.57**	1	
9. Anxiety	-.03	.01	.005	.28*	-.46**	-.47**	-.34**	-.38**	1
10. Depression	-.30**	-.14*	-.12	.14*	-.48**	-.52**	-.43**	-.40**	-.48**

* $p < 0.05$; ** $p < 0.01$

Table 3. Logistic regression of coping strategies as predictors of psychiatric diagnosis

Psychiatric diagnosis	B	SE	Wald	P	OR	95% CI
PFE	.01	.01	.67	.41	1.01	.97-1.05
PFD	.01	.02	.33	.56	1.01	.96-1.05
EFE	.008	.02	.16	.68	1.00	.97-1.04
EFD	.05	.02	6.09	.01*	1.05	1.01-1.09

PFE = Problem-focused engagement; PFD = Problem-focused disengagement

EFE = Emotion-focused engagement; EFD = Emotion-focused disengagement

*p<0.05, **p<0.01, and ***p<0.001

Logistic regression (Table 3) assessed how the domains of coping predicted a diagnosis of psychiatric disorder, controlling for age and gender. Only Emotion-focused disengagement (EFD) emerged as a significant predictor of psychiatric diagnosis.

DISCUSSION

This research aimed to assess how coping strategies relate to indicators of psychiatric symptoms and QOL and how coping is associated with a psychiatric diagnosis. Our findings suggest that problem-focused and emotion-focused engagement positively relate to various QOL domains and is inversely related to anxiety and depression. Emotion-focused disengagement associated negatively with some QOL domains and was inversely related to depression. The associations with problem-focused disengagement were unexpected, as it positively correlated with psychological QOL and negatively correlated with depression. Only emotion-focused disengagement predicted psychiatric diagnosis.

This study's results are comparable to previous research showing a negative correlation between depression and adaptive coping (i.e., problem-focused and emotion-focused engagement). Dubow and Rubinlicht noted that an increase in primary control coping (problem-focused engagement) and a reduction in disengagement coping (avoidance) predicted a decrease in depressive symptoms (19). This is also similar to the results found by Völlink et al., where participants that engaged in problem-focused coping had better physical health and fewer and depressive symptoms, but

emotion-focused coping was linked to more depression and poorer physical wellbeing (20). A study of overseas university preparatory Chinese students found that their physical and mental wellbeing improved when they engaged in active strategies (i.e., problem-focused coping (21). The results from this and previous studies support the importance of employing problem-focused coping strategies to maintain psychological wellbeing in stressful conditions.

Emotion-focused disengagement predicted a diagnosis of psychiatric disorder significantly. Other studies have documented the associations between emotion-focused disengagement coping strategies and psychiatric disorders, including depression, anxiety, insomnia, and higher psychological morbidity (22). This mechanism of action was further spotlighted during the covid-19 pandemic. During this time, individuals engaged in passive strategies (i.e., Emotion-focused disengagement) rather than active strategies, which might have caused the reportedly high rates of psychological distress (23). Furthermore, emotion-focused disengagement was associated with comorbid depression in schizophrenic patients, highlighting that coping may relate to psychological wellbeing in individuals diagnosed with a mental disorder (24).

Problem-focused and emotion-focused engagement are adaptive; generally, previous research results support our findings. In a study among college students, PFE predicted a favorable QOL (10). A positive relationship between PFE and all domains of QOL was seen in a

survey among 600 Italian adults (25). In another study among patients recuperating from heart transplantation, PFE was also found to predict all domains of the WHOQOL positively (26). For emotion-focused engagement, Gattino et al. reported that it positively predicts psychological and environmental domains, similar to our findings (25). In a study of coping in the COVID-19 lockdown, social contact, a type of emotion-focused engagement improved psychological QOL(27). These, together with our results, underscore the role of adaptive coping as a determinant of QOL.

Emotion-focused disengagement links to poorer life quality in previous research. An Italian study found that self-blame, which is emotion-focused disengagement, reduces physical and psychological QOL, consistent with our report (25). In a survey among patients with multiple sclerosis, self-blame also had negative correlations with QOL (28). Hemodialysis patients using emotion-focused disengagement experienced deterioration in their mental health, and the functional dimension of QOL (physical, psychological, and social domains) was negatively correlated with emotion-focused disengagement in cancer patients (12,29). Our findings are comparable to Perez et al., who found that emotion-focused disengagement led to better life quality (psychological and environmental aspects) in primary caregivers of dependent older relations (30).

The relationship between PFD and mental health was unexpected. We found that PFD was positively correlated with the psychological domain of QOL and negatively correlated with depression. Findings from previous studies are mixed. While some found that avoidance which is PFD, negatively correlates with QOL and mental wellbeing (31,32), others report a positive association similar to ours (33,34). It has been suggested that PFD might provide some short-term benefits but becomes maladaptive with time (35).

Conclusion

Among study subjects, coping strategies correlated with anxiety, depression and aspects of life quality. While all dimensions of coping showed some relationship to psychological symptoms, only EFD significantly predicted mental disorders. EFD comprises self-criticism and social withdrawal and might be relatively more important as determinants of definite psychiatric diagnosis. However, we cannot establish this unequivocally due to our study design.

Limitations

This study has some limitations. Self-reporting instruments may cause recall or social desirability bias. Due to the study design, the presence or direction of causality cannot be established. Also, these results may not generalize to other patient groups. Furthermore, this study did not assess the chronicity of mental disorders, which might have a substantial impact on life quality.

Recommendations

Strengthening adaptive coping strategies may positively affect life quality and psychological wellbeing. These findings could guide future interventions for improving life quality and mental wellbeing among the general patient population, specifically those with a mental disorder. If coping is included in initial mental health assessments, those with maladaptive styles can be identified and provided greater psychological support to foster their recovery.

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Authors' contribution

Study conception and design: All authors; Data collection: CFA, CJO and EAE; Data Analysis: CFA, EAE; Interpretation of results: All authors; Draft manuscript

preparation: CFA, EAE, IBW; Critical revision of manuscript: All authors; Final version of the manuscript: Reviewed and approved by all authors.

Ethical considerations

Approval was gotten from the Research Ethics Committee of the University of Calabar Teaching Hospital, Calabar, Nigeria. Permission was also obtained from the Head of the Family Medicine Department. Verbal and informed consent was duly sought from participants, and confidentiality was assured.

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Conflicts of interest

The authors declare that there is no conflict of interest.

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