

P-ISSN: 2789-1623 E-ISSN: 2789-1631 Impact Factor (RJIF): 5.81 IJRP 2025; 5(2): 87-92 www.psychiatrypaper.com

Received: 04-09-2025 Accepted: 08-10-2025

### Dr. Shofu-Akanji Tomilola O Department of Clinical Services, Federal Neuropsychiatric Hospital, Yaba, Lagos, Nigeria

### Dr. Adegbaju Dapo A Department of Clinical Services, Federal Neuropsychiatric Hospital, Yaba, Lagos, Nigeria

# **Dr. Ajibare Adeola O**Department of Cardiology, Lagos State University Teaching Hospital, Lagos, Nigeria

# **Dr. Adeoye Adefemi A**Department of Clinical Services, Federal Neuropsychiatric Hospital, Yaba, Lagos, Nigeria

# Dr. Adesina Ismail O Department of Clinical Services, Federal Neuropsychiatric Hospital, Yaba, Lagos, Nigeria

# Ola Bolanle A Professor, Department of Psychiatry, Lagos State University Teaching Hospital, Lagos, Nigeria

Correspondence
Dr. Shofu-Akanji Tomilola O
Department of Clinical
Services, Federal
Neuropsychiatric Hospital,
Yaba, Lagos, Nigeria

# Quality of life and mediatory role of depression in the development of suicidal ideation among patients with congestive heart failure in Nigeria

# Shofu-Akanji Tomilola O, Adegbaju Dapo A, Ajibare Adeola O, Adeoye Adefemi A, Adesina Ismail O and Ola Bolanle A

**DOI:** https://www.doi.org/10.22271/27891623.2025.v5.i2b.85

### Abstract

**Background:** Congestive Heart Failure is a major public health challenge and a leading cause of mortality, with suicidal ideation recognized as part of the continuum of suicidal behavior in affected individuals. Poor quality of life and depression are key risk factors, yet few studies have explored their relationship with suicidal ideation in congestive heart failure patients. The exact role of depression in this context remains controversial.

**Aim:** This study explores the relationship between quality of life and suicidal ideation, also investigates the mediatory role of depression in the development of suicidal ideation among patients with congestive heart failure.

**Method:** A cross-sectional study was conducted among 98 randomly selected adult outpatients at the Cardiology clinic of Lagos State University Teaching Hospital, Lagos, Nigeria. Respondents were assessed with a sociodemographic questionnaire, Patient Health Questionnaire-9, Abbreviated World Health Organisation quality of life questionnaire, and Beck Scale of Suicidal Ideation. Data were analysed using the Pearson correlation test and regression analyses. Statistical significance was set at p < 0.05.

**Results:** Suicidal ideation was negatively correlated with overall quality of life and health (r = -0.331; p = 0.001), physical (r = -0.503; p < 0.001), psychological (r = -0.513; p < 0.001), social (r = -0.437; p < 0.001), and environmental (r = -0.315; p = 0.002) domains. Only overall quality of life and health (OR = 0.959; 95% CI: 0.926 – 0.994; p = 0.022) was significantly predictive of suicidal ideation.

Regression analysis revealed that a mediatory role of depression is unlikely in the development of suicidal ideation among patients with congestive heart failure.

**Conclusion:** Quality of life significantly influences suicidal ideation in congestive heart failure patients. Depression is a risk factor but not a mediator. Integrating routine psychological screening and supportive psychotherapy into congestive heart failure management enhances overall patient wellbeing.

**Keywords:** Congestive Heart Failure, Heart Failure, Quality of Life, Depression, Suicidal Ideation, Suicidal Behaviour

#### Introduction

Congestive Heart Failure (CHF) is a debilitating condition that poses a substantial challenge to global public health <sup>[1]</sup>. With its prevalence steadily increasing, more than 64 million people worldwide are affected by CHF <sup>[1-3]</sup>. It remains a leading cause of mortality, while those who survive often experience significant morbidity and functional limitations <sup>[1, 3, 4]</sup>. Suicide is an established outcome in those who suffer from CHF, being a known pathway to mortality among them <sup>[5-7]</sup> It was reported from meta-analyses that the odds of dying by suicide is 1.68 times higher in those with CHF compared to those who are without CHF <sup>[8, 9]</sup>. However, suicide is the fatal end of the continuum of suicidal behaviour, which includes suicidal thoughts, suicidal plans, and suicide attempts. Suicidal behaviour is thus also reported among patients with CHF <sup>[10]</sup>. For instance, a study that explored this relationship found that 17.1% - almost a sixth - of patients with CHF reported persistent suicidal ideation <sup>[7]</sup>. An effective strategy for suicide prevention involves identifying risk factors for suicidal behavior and implementing appropriate interventions <sup>[10]</sup>.

An identified risk factor for the emergence of suicidal ideation among people with CHF is

poor quality of life. According to WHO, quality of life is how individuals perceive their position in life in relation to value systems and culture in which they live, also in the context of their standards, concerns, goals, and expectations [11]. A study done in Germany among clinic patients with CHF reported that the lower a patient's quality of life, the more frequently they reported suicidal ideation [7]. CHF requires several adjustments to the disabilities that come with the disease [12]. Limitations in physical exertion during daily activities, changes in sexual health, food restrictions, challenges with social interactions, and reduction or loss of productivity in the workplace, adverse effects of medication. and frequent hospitalizations, all negatively impact quality of life in patients with CHF [12]. Moreover, the inexorable loss of independence often results in the perception of selfpowerlessness, which helplessness and contribute immensely to suicidal behaviours in these individuals [12]. Depression - a common mental disorder characterized by

sadness, loss of interest in activities, and decreased energy<sup>13</sup>
- is also another risk factor identified in the relationship between CHF and suicidal ideation. About a third of CHF patients have comorbid depression, and a lot more patients have symptoms of depression, including suicidal ideation [14]. Both lifetime and current depression have been associated with an increased risk of suicidal ideation among CHF patients. A study reported that patients with CHF and a current episode of depression were 3.9 times more likely to have suicidal ideation when compared with those without depression, and the risk is even more increased by lifetime depression as compared with first-episode depression [7].

Despite these associations, some knowledge gaps still exist. First, few studies have examined the relationship between quality of life and suicidal ideation among patients with CHF. The available study that examined this phenomenon was done in a developed country [7]. The study found that only the physical and mental components of quality of life were predictive of suicidal ideation [7]. Given that quality of life is relatively poor in developing countries such as Nigeria, it may be hypothesized that all domains of quality of life will significantly predict suicidality among patients with CHF in this population. Secondly, the exact role that depression plays in the development of suicidal ideation among patients with CHF remains controversial [15]. A study reported that only patients with cardiovascular disorders who also had depression were at risk of developing suicidal ideation [16]. This suggests a possible mediatory role of depression in the development of suicidal ideation in the patient group. However, some other studies reported that suicidal ideation was present among patients with CHF, whether or not they had depression [8, 9, 15]. The inference from this is that CHF is an independent risk factor for suicidal ideation. These studies were however, limited in that they examined the association between CHF, depression, and suicidal ideation in only one direction. Use of a proven mediatory analysis may aid establishment of the nature of the association between these phenomena

This study, therefore, aims to explore the relationship between quality of life and suicidal ideation as well as determine the possible mediatory role of depression in the development of suicidal ideation among patients with Congestive Heart Failure in Nigeria.

## Method

This was a cross-sectional study conducted at the

Cardiology outpatient clinic of Lagos State University Teaching Hospital (LASUTH). Study participants were adults with a diagnosis of CHF made by a consultant cardiologist and confirmed with an echocardiogram scan. Exclusion criteria included having a pre-existing mental illness before the CHF diagnosis and those with very severe illness that prevented them from being assessed.

The sample size was determined to be 98 from a population of 150 annual follow-up patients, based on a 17.1%<sup>7</sup> rate of suicidal ideation among CHF patients, with a confidence level of 95% in detecting a margin of error of 0.05.

#### Instruments

Data was collected using the following instruments:

- 1. Socio-demographic data: A Pro-forma questionnaire was given to study participants to collect relevant socio-demographic information: age, gender, marital status, educational level, and employment status
- 2. Patient Health Questionnaire 9 (PHQ-9) was used to screen for and also determine the severity of depression among participants. It is a concise self-administered instrument comprising nine questions. Each question is scored from 0 3; the minimum score is 0, while the maximum score is 27 [17]. To interpret, the score of 0 4 means no depression, while scores of 5 9, 10 14, 15 19, and 20 27 depict mild, moderate, moderately severe, and severe depression, respectively [17, 18]. Its brevity, coupled with its excellent psychometric properties, makes PHQ-9 an indispensable research and clinical tool [18]. It has been validated in Nigerian studies [19, 20].
- 3. World Health Organisation Quality of Life ABBREVIATED (WHOQOL-BREF) is a 26-item self-report questionnaire assessing quality of life [11, 21]. A shorter version of the WHOQOL-100, it is useful when time or detailed assessment is limited [11, 21]. The first two items measure general health and overall quality of life, while the remaining 24 cover four domains: physical (7 items), psychological (6 items), social (3 items), and environmental (8 items) [11, 21]. Each item is rated 1–5, with items 3, 4, and 26 reversely scored. Domain scores are transformed to a 0–100 scale using a standardized formula [22]. The WHOQOL-BREF has demonstrated good to excellent reliability, acceptable concurrent and discriminant validity, and has been validated in Nigeria [11, 23].
- 4. Beck Scale for Suicidal Ideation (BSSI) is a 21-item self-report tool assessing the presence and intensity of suicidal ideation over the past week. The first 19 items, rated 0–2, yield a maximum score of 38 and include five screening items [24, 25]. If a participant scores at least 1 on questions 4 or 5 (indicating passive or active suicidal ideation), they complete the remaining 14 items; otherwise, they do not. The higher the total score, the higher the severity of suicidal ideation [25]. The last two items assess previous suicide attempts and intent severity, which all the participants answered [24, 25]

The BSSI demonstrates moderately high reliability and has been used in Nigerian studies [26-28].

## Study procedure

Patients with a confirmed diagnosis of CHF by a consultant

cardiologist, supported by echocardiographic findings, were recruited for the study after providing written informed consent. Using simple random sampling, eligible participants were selected and administered the sociodemographic questionnaire, PHQ-9, WHOQOL-BREF, and BSSI, with the researcher available for clarification.

Participants identified with depressive symptoms or suicidal ideation received psychoeducation and were referred to their attending physician for appropriate intervention. Upon completion, participants were thanked for their involvement.

### Statistical analysis

Data were coded, cleaned, and analysed using SPSS version 23. Sociodemographic data, quality of life, and severity of depression were summarized using frequencies and percentages for categorical variables and means with standard deviations for continuous variables.

The correlation and direction of the relationship between quality of life domains and suicidal ideation were determined using the Pearson correlation test. Multivariate logistic regression identified which quality of life domain independently predicted suicidal ideation among individuals with CHF.

The mediating role of depression in the relationship between CHF and suicidal ideation was examined using Baron and Kenny's four-step regression approach. The variables were defined as follows: X = CHF (independent variable), Y = Suicidal ideation (dependent variable), and M = Depression (mediator). Statistical significance was set at p < 0.05.

# **Ethical consideration**

Approval (LREC/06/10/1775) was obtained from the Ethics and Research Committee of Lagos State University Teaching Hospital (NHREC04/04/2008) before the study commenced.

#### Result

## Socio-demographic characteristics of the respondents

As presented in Table 1, A higher proportion of the respondents were females (56.1%), most (78.6%) were married, and almost half (45.9%) attained a tertiary level of education while a third had secondary education. Half of the respondents were employed. More of the study participants were elderly (43.9%), while another significant proportion (31.6%) were middle-aged. The mean age was  $54.05 \pm 17.13$  years (range = 18-85 years).

Table 1: Socio-Demographic Variables of Respondents
mographic Variables (N=98)

Socio-demographic Variables (N=98)	Frequency	%
Age (years)		
Young (18-39)	24	24.5
Middle (40-59)	31	31.6
Elderly (≥60)	43	43.9
Mean $\pm$ SD = 54.05 $\pm$ 17.13		
Gender	·	
Male	43	43.9
Female	55	56.1
Level of Education		
Primary	19	19.4
Secondary	34	34.7
Tertiary	45	45.9
Marital Status	·	
Single	9	9.2
Married	77	78.6
Separated/Divorced/Widowed	12	12.2
Employment Status		
Unemployed	30	30.6
Employed	49	50.0
Retired	19	19.4

# Descriptive Statistics of the Respondents' Quality of Life and Depression Severity

The descriptive statistics of responses on quality-of-life variables are presented in Table 2. The mean overall quality of life and health of the patients was  $58.01 \pm 15.70$  years. The average scores for physical, psychological, social, and environmental domains among the patients were

57.54±13.57, 62.50±16.10, 53.74±15.05, and 47.26±12.27, respectively. The range of the scores for each domain is also shown in Table 2. Forty-two (42.9%) had no symptoms of depression, while 26 (26.5%) had mild depression. The remaining 30 (30.6%) respondents reported moderate to severe symptoms of depression.

Table 2: Descriptive Statistics of Quality of Life

Parameters	Mean± SD	Range	
rarameters	Wiean± SD	Min	Max
Overall Quality of Life and Health	58.01±15.70	13.00	88.00
Physical Domain	57.54±13.57	25.00	89.29
Psychological Domain	62.50±16.10	29.17	91.67
Social Domain	53.74±15.05	16.67	83.33
Environmental Domain	47.26±12.27	15.63	78.13

# Correlation between Quality of Life and Suicidal Ideation among Participants

Table 3 shows that BSSI score increased significantly with lower overall quality of life and health (r = -0.331, p = 0.001), lower physical domain (r = -0.503, p < 0.001), lower

psychological domain (r = -0.513, p < 0.001), lower social domain (r = -0.437, p < 0.001), lower environmental domain (r = -0.315, p = 0.002). This implies that the poorer the quality of life across all its domains, the more the intensity of suicidal ideation among the participants.

Table 3: Direction of the relationship between Quality of life and Suicidal Ideation

Variables (N=00)	Beck Scale for Suicidal Ideation (BSSI) Sc	ores
Variables (N=98)	Pearson Correlation	P-value
Quality of Life and Health	-0.331	0.001
Physical Domain	-0.503	< 0.001
Psychological Domain	-0.513	< 0.001
Social Domain	-0.437	< 0.001
Environmental Domain	-0.315	0.002

Bold p-values - significant at 0.05 significance level

# Quality of Life Domains independently associated with Suicidal Ideation among participants

The logistic regression model presented in Table 4 reveals that overall quality of life and health was the only

significant predictor of suicidal ideation among the patients. An increase in the overall quality of life of a patient with CHF will reduce the likelihood of suicidal ideation with OR = 0.959 (95% CI: 0.926 - 0.994, p = 0.022).

Table 4: Quality of life domains independently associated with Suicidal Ideation

Variables	В	Odds Ratio	95% CI	p-value
		5.87E-09		0.999
Overall Quality of Life and Health	-0.041	0.959	0.926-0.994	0.022
Physical Domain	-0.005	0.995	0.950-1.042	0.827
Psychological Domain	-0.035	0.965	0.924-1.009	0.115
Social Domain	-0.020	0.981	0.947-1.016	0.275
Environmental Domain	0.004	1.004	0.959-1.052	0.854
Nagelkerke $r^2 = 0.545$				

Bold - significant at 0.05 level of significance; Omitted categories are reference categories

# Mediatory role of Depression in the development of Suicidal Ideation among patients with CHF

Regression analysis was performed, and the significance of the coefficients was examined in Table 5. Two of the relationships in steps 1-3 were non-significant at 5% level. This implies that a mediatory role of depression is regarded as unlikely in the development of suicidal ideation among patients with Congestive Heart Failure.

**Table 5:** Mediatory Role of Depression in the Development of Suicidal Ideation

	Variable	В	S.E	p value
Step 1	CHF <sup>I.V</sup> vs Suicidal Ideation <sup>D.V</sup>	0.224	0.692	0.725
Step 2	CHF <sup>I.V</sup> vs Depression <sup>M.V</sup>	0.682	0.505	0.182
Step 3	Depression <sup>M.V</sup> vs Suicidal Ideation <sup>D.V</sup>	0.730	0.229	0.002

B: Unstandardized coefficient, S.E: Standard Error, I.V: Independent Variable, D.V: Dependent Variable, M.V: Mediatory Variable, Bold - significant at 0.05 level of significance

### Discussion

This study aimed to explore the relationship between quality of life and suicidal ideation as well as determine the possible mediatory role of depression in the development of suicidal ideation among patients with Congestive Heart Failure in Nigeria.

All the domains of quality of life, including overall quality of life and health, were significantly correlated with suicidal ideation, with higher quality of life linked to lower suicidal ideation. However, regression analysis identified overall quality of life and health as the only significant predictors of suicidal ideation.

Consistent with these findings, prior research has reported

that lower quality of life correlates with more frequent suicidal ideation <sup>[7]</sup>. However, while that study identified physical and mental components as predictive factors, the present study found the four quality of life domains to be non-significant predictors <sup>[7]</sup>. In agreement with our findings, quality of life was also significantly associated with suicidal ideation among individuals with other chronic illnesses and in the general population <sup>[29-31]</sup>.

Among patients with CHF, poor quality of life—characterized by health impairment, reduced productivity, dependence on others, and perceived helplessness—has been shown to contribute to suicidal ideation [7, 12]. Additionally, the conceptual model of physical illness and the integrated motivational-volitional model of suicidal behavior highlight the interplay of psychological factors contributing to suicidal ideation [32, 33]. These frameworks suggest that functional limitations, reduced quality of life, hopelessness, and depression in patients with CHF interact, increasing suicide risk.

This study also found that depression does not mediate the relationship between CHF and suicidal ideation. While depression significantly predicted suicidal ideation, CHF did not significantly predict depression or suicidal ideation. Previous studies that examined this relationship have reported conflicting findings [8, 12, 15]. Some research suggests CHF is linked to suicidal ideation independent of depression [15], while others have established an association between depression and CHF or found suicidal ideation primarily among patients with cardiovascular diseases who had depression [16, 34]. However, none have examined the mediatory role of depression using the four-step regression approach.

The significant association between depression and suicidal ideation in this study suggests that depression functions as a risk factor rather than a mediator in the relationship between chronic heart failure (CHF) and suicidal ideation. There is, however, a need for further studies to examine the mediatory role of depression in the development of suicidal ideation among patients with CHF. This is necessary for further comparison and to establish a definite relationship between CHF, depression, and suicidal ideation.

This hospital-based study of outpatient clinic attendees may not fully represent inpatients or the broader CHF population. Additionally, its cross-sectional design limits causal inferences, providing only correlational findings. However, the use of random sampling minimized selection bias, and standardized instruments ensured valid assessment of suicidal ideation and quality of life. These findings offer a valuable baseline for future research, particularly within this setting.

#### Conclusion

This study highlights the critical role of quality of life in suicidal ideation among patients with CHF, reinforcing the need for routine psychological evaluation and screening for early detection and intervention. While depression emerged as a key risk factor, it did not mediate the relationship between CHF and suicidal ideation, underscoring its clinical relevance in this population. Given the high prevalence of depression among CHF patients, integrating brief yet consistent supportive psychotherapy into routine clinic visits may serve as a proactive measure to mitigate its impact. Summarily, incorporating mental health care into standard CHF management fosters a holistic approach, addressing both emotional and physical well-being.

### Acknowledgements: None

**Conflict of interest:** The authors declare that there is no conflict of interest

**Funding source:** The authors declare that they have no financial relationship(s) that may have inappropriately influenced them in writing this article

## References

- Shahim B, Kapelios CJ, Savarese G, Lund LH. Global Public Health Burden of Heart Failure: An Updated Review. Card Fail Rev. 2023;9:e11.
- Yan T, Zhu S, Yin X, et al. Burden, Trends, and Inequalities of Heart Failure Globally, 1990 to 2019: A Secondary Analysis Based on the Global Burden of Disease 2019 Study. J Am Heart Assoc. 2023;12:e027852.
- 3. Savarese G, Becher PM, Lund LH, Seferovic P, Rosano GMC, Coats AJS. Global burden of heart failure: a comprehensive and updated review of epidemiology. Cardiovasc Res. 2023;118(17):3272–87.
- 4. Lahoz R, Fagan A, Mcsharry M, Proudfoot C, Corda S, Studer R. Recurrent heart failure hospitalizations are associated with increased cardiovascular mortality in patients with heart failure in Clinical Practice Research Datalink. ESC Hear Fail. 2020;7:1688–99.
- Grobman B, Kothapalli N, Mansur A, Lu CY. Suicide Risk Among Patients with Heart Disease and Heart Failure. Am J Cardiol. 2023;203:259

  –64.

- 6. Crump C, Sundquist J, Kendler KS, Sieh W, Edwards AC, Sundquist K. Risks of Depression and Suicide After Diagnosis With Heart Failure: A National Cohort Study. JACC Hear Fail. 2022;10(11):819–27.
- 7. Lossnitzer N, Müller-Tasch T, Löwe B, et. al. Exploring potential associations of suicidal ideation and ideas of self-harm in patients with congestive heart failure. Depress Anxiety. 2009;26(8):764–8.
- 8. Liu CH, Wang JH, Weng SC, *et al.* Is Heart Failure Associated With Risk of Suicide? J Card Fail. 2018;24(11):795–800.
- 9. Chen C, Feng R, Wang J, et al. Patients with cardiovascular disorders and suicidality: A systematic review and meta-analysis. Asian J Psychiatr. 2023;90(2023):103799.
- 10. Turecki G, Brent DA. Suicide and suicidal behaviour. Lancet. 2016;387(10024):1227–39.
- Skevington SM, Lotfy M, O'Connell KA. The World Health Organization's WHOQOL-BREF quality of life assessment: Psychometric properties and results of the international field trial. A Report from the WHOQOL Group. Qual Life Res. 2004;13(2):299–310.
- 12. Korkmaz H, Korkmaz S, Çakar M. Suicide risk in chronic heart failure patients and its association with depression, hopelessness and self esteem. J Clin Neurosci. 2019;68:51–4.
- 13. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: 5th Edn. Washington, DC; 2013.
- 14. Sbolli M, Fiuzat M, Cani D, O'Connor CM. Depression and heart failure: the lonely comorbidity. Eur J Heart Fail. 2020;22(11):2007–17.
- 15. Moazzami K, Dolmatova EV, Feurdean M. Suicidal ideation among adults with cardiovascular disease: The National Health and Nutrition Examination Survey. Gen Hosp Psychiatry. 2018;51:5–9.
- Kishi Y, Robinson RG, Kosier JT. Suicidal Ideation Among Patients With Acute Life-Threatening Physical Illness. Stroke, Patients With Injury, Traumatic Brain Injury, Spinal Cord. Psychosomatics. 2001;42(5):382– 90.
- 17. Kroenke K, Spitzer RL. The PHQ-9: A New Depression Diagnostic and Severity Measure. Psychiatr Ann. 2002;32(9):1–7.
- 18. Kroenke K, Spitzer RL, Williams JB. The PHQ-9 Validity of a Brief Depression Severity Measure. J Gen Intern Med. 2001;16(9):606–613.
- 19. Adewuya AO, Ola BA, Afolabi OO. Validity of the patient health questionnaire (PHQ-9) as a screening tool for depression amongst Nigerian university students. J Affect Disord. 2006;96(1–2):89–93.
- Obadeji A, Oluwole LO, Dada MU, Ajiboye AS, Kumolalo BF, Solomon OA. Assessment of Depression in a Primary Care Setting in Nigeria using the PHQ-9. J Fam Med Prim care. 2015;4(1):30–34.
- 21. WHOQOL Group. Development of the World Health Organization WHOQOL-BREF quality of life assessment. Psychol Med. 1998;28:551–558.
- 22. Mekonen G, Id T, Megersa WA, Gadisa DA. Health-related quality of life and its determinants among ambulatory patients with epilepsy at Ambo General Hospital, Ethiopia: Using WHOQOL-BREF. PLoS One. 2020;15(1):e0227858.
- 23. Mbakwem AC, Aina FO, Amadi CE, Akinbode AA,

- Mokwunyei J. Comparative analysis of the quality of life of heart failure patients in South Western Nigeria. World J Cardiovasc Dis. 2013;3(1A):8.
- 24. Ogbolu RE, Ozoh OB, Aina OF, Fadipe B, Okubadejo NU. The frequency of suicidal ideation in asthma and the relationship to asthma control and depression. African journals online. 2015;25(1):22–9.
- 25. Kliem S, Lohmann A, Mößle T, Brähler E. German Beck Scale for Suicide Ideation (BSS): psychometric properties from a representative population survey. BMC Psychiatry. 2017;17(389):1–8.
- 26. Zhang J, Brown GK. Psychometric properties of the scale for suicide ideation in China. Arch Suicide Res. 2007;11(2):203–210.
- 27. Brown GK. A Review of Suicide Assessment Measures for Intervention Research with Adults and Older Adults. Philadelphia, PA; 2001.
- 28. Busari AO. Mindfulness Based Cognitive Therapy; Impact on Depressed Outpatients of the State Hospital Oyo State Ibadan, Nigeria. Am J Med Med Sci. 2015;5(5):191–200.
- 29. Oladeji B.D, Taiwo B, Mosuro O, *et al.* Suicidal Behavior and Associations with Quality of Life among HIV-Infected Patients in Ibadan, Nigeria. J Int Assoc Provid AIDS Care. 2017;16(4):376–382.
- 30. Ogundipe OA, Olagunju AT, Adeyemi JD. Suicidal Ideation among Attendees of a West African HIV Clinic. Arch Suicide Res. 2015;19(1):103–16.
- 31. Goldney RD, Fisher LJ, Wilson DH, Cheok F. Suicidal ideation and health-related quality of life in the community. Med J Aust. 2001;175(10):546–9.
- 32. Fässberg MM, Cheung G, Canetto SS, *et al.* A systematic review of physical illness, functional disability, and suicidal behaviour among older adults. Aging Ment Health. 2016;20(2):166–194.
- 33. Cheung G, Sundram F. Understanding the Progression from Physical Illness to Suicidal Behavior: A Case Study Based on a Newly Developed Conceptual Model. Clin Gerontol. 2017;40(2):124–9.
- Adewuya AO, Ola BA, Ajayi OE, Oyedeji AO, Balogun MO, Mosaku SK. Prevalence and Correlates of Major Depressive Disorder in Nigerian Outpatients With Heart Failure. Psychosomatics. 2006;47(6):479– 85

#### **How to Cite This Article**

Shofu-Akanji TO, Adegbaju DA, Ajibare AO, Adeoye AA, Adesina IO, Ola BA. Quality of life and mediatory role of depression in the development of suicidal ideation among patients with congestive heart failure in Nigeria. International Journal of Research in Psychiatry. 2025;5(2):87-92.

# Creative Commons (CC) License

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work noncommercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.