Original paper

Archives of Psychiatry Research 2025;61:161-170

DOI:10.20471/may.2025.61.02.07
Received March 06, 2024
Accepted after revision May 06, 2024

Spirituality and Emotional Dysregulation on Suicide Among Schizophrenic Patients in Nigeria

Tamuno-opubo Addah Temple[1], Uthman Tinuoye Jamiu[2], Adeniyi Victor Ojuope[3], Olufemi Talabi[4], Baba Ahmed Karatu[5]

[1]Department of Mental Health, Faculty of Clinical Science, Obafemi Awolowo University, Osun State, Ile-Ife, Nigeria, [2]Department of Psychology, Faculty of Social Science, Obafemi Awolowo University, Osun State, Ile-Ife, Nigeria, [3]Department of Psychology, Psychologist at Elite Life Management Consulting, Karsana, Nigeria, [4]Essex Partnership University Trust, London, United Kindom, [5]Department of Psychology, Federal University Gashua, Yobe State, Nigeria.

Keywords

Emotional regulation; holistic health; mental health; protective factors; resilience, psychological; schizophrenia

Abstract

Aim: Schizophrenia presents a significant public health challenge in Nigeria, with its complex interplay of symptoms often leading to profound psychological distress and functional impairment among affected individuals. Despite growing attention to mental health in Nigeria, there remains a critical gap in understanding how spirituality and emotional dysregulation interact to influence suicidal tendencies among individuals living with schizophrenia, particularly in terms of their predictive roles in this high-risk population. **Subjects and Methods:** A total of 137 people living with schizophrenia between the ages of 18 and 45 participated in an eleven-month hospital-based cross-sectional study in Nigeria. Standardised psychological measures like the Beck Scale for Suicidal Ideation (BSSI), Spiritual Well-Being Scale (SWBS), Brief Emotional Dysregulation Scale (BEDS) and medical records and socio-demographics were used to gather data. The collected data were analysed using Inferential statistics such as zero-order correlation and hierarchical regression used to test the hypothesis, all with a programme of IBM/SPSS 25.0 **Results:** The sample was predominantly males (69.3 %) with a mean age of 31.66 years. A significant negative correlation was found between spirituality and suicide ($r = -0.23$, $p < 0.01$), indicating that higher levels of spirituality are associated with lower suicide risk. Conversely, emotional dysregulation was positively correlated with suicide ($r = 0.21$, $p < 0.05$), suggesting that difficulties in managing emotions elevate the risk of suicide among schizophrenic patients. Regression analysis further revealed that emotional dysregulation independently predicts suicide risk, while spirituality serves as a protective factor, significantly negating suicide tendencies. **Conclusion:** This study underscores the significance of holistic mental health approaches for people living with schizophrenia. It highlights the need to address emotional regulation deficits and nurture spiritual well-being in clinical interventions to enhance overall well-being and reduce suicide risk.

Correspondence to:
Tamuno-opubo Addah Temple
Department of Mental Health, Faculty of Clinical Science,
Obafemi Awolowo University, Osun State, Ile-Ife, Nigeria
Phone: +2348030773809
E-mail: tamuno.addah@oouagoiwoye.edu.ng

Introduction

Schizophrenia stands as one of the most profound and demanding psychiatric conditions, presenting significant challenges to mental well-being and necessitating in-depth exploration [1]. Schizophrenia, characterised by profound thinking disruptions affecting language, perception, and the sense of self, poses a health challenge and a societal one [2]. Within the complex web of factors that worsen the severity of schizophrenia, suicidality and emotional dysregulation have emerged as areas of deep concern and study. These factors acquire even more significance in Nigeria, where societal norms, cultural practices, and spirituality profoundly influence daily life. While offering solace and purpose to many, as mentioned by Mueller, that spirituality might also inadvertently act as a double-edged sword for people living with schizophrenia [3]. Depending on personal beliefs and experiences, it may, on the one hand, offer a sanctuary, a place to escape the haunting symptoms; on the other side, it may exacerbate emotions of guilt, terror, or existential crises [4]. The incapacity to control and react to emotional experiences in a way that is considered socially acceptable is known as emotional dysregulation, which is another important axis of this research. Such dysregulation can exacerbate feelings of pessimism and loneliness in people living with schizophrenia who already struggle with a fractured sense of reality [5]. Furthermore, this is where the troubling link to suicidality rests. This study intends to explore the connections between spirituality, emotional regulation, and suicide among Nigerians living with schizophrenia.

Suicide is a tragic and complex human behaviour, which is the fourth leading cause of death, and occurs throughout the lifespan [6]. This behaviour has intrigued and challenged researchers, clinicians, and societies for centuries. Suicide is defined by the World Health Organisation, as the intentional taking of one's own life [7]. As defined by the Centre for Addiction and Mental Health, it is a tragic death that occurs when a person voluntarily and intentionally ends their own life [6]. In a bid to theorise suicide, Durkheim in his seminal work, characterises suicide as an act rooted in the interplay of societal and individual vulnerabilities [8]. Ndosi also affirmed that suicide is a complicated phenomenon influenced by social, biological, and psychological elements [9]. It is frequently caused by difficult circumstances and medical conditions that make a person feel hopeless and depressed [10]. It comes after extreme tiredness from an ongoing barrage of stimuli when the suicidal person is unable to maintain and re-establish equilibrium. Despite these diverse perspectives, there is a consensus that suicide is a grave public health concern with devastating repercussions for individuals, families, and communities.

Among the various psychiatric disorders, schizophrenia stands out for its significant association with increased suicide risk. Peritogiannes stated that schizophrenia has long been thought of as an illness that shortens life and that new research suggests that sufferers' life expectancies may be 15–20 years lower than those of the general population [11]. Furthermore, the disparity is widening with time despite significant advancements in the treatment of these conditions, which is a thing of concern [12,13]. Suicide that is completed is one of the main issues with people living with schizophrenia. Suicide has been linked to over 40 % of premature and unnatural deaths in people living with schizophrenia, and schizophrenia is responsible for about 12 % of suicide deaths globally [14-16]. A study by Oluwole and associates in Nigeria indicated that a significant lifetime prevalence of suicide ideation (3.2 %), intentions (1.0 %), and attempts (0.7 %) is seen in the community, with comparable trends seen in people living with schizophrenia [17]. Berardelli and associates reported that 25 - 50 % of people living with schizophrenia attempt suicide at some point in their lives and that suicide accounts for around 5 % of early mortality in these people living with schizophrenia [18]. Approximately 4.9 % of people living with schizophrenia die by suicide, and around 10 % of people living with schizophrenia will die by their hands within ten years of diagnosis [19,20]. The onset of schizophrenia is most often during late adolescence and the twenties, and the onset tends to happen earlier among men than among women [21]. In the context of suicide risk among this population, it is noteworthy to explore factors that can potentially ameliorate or exacerbate suicidality among individuals living with schizophrenia.

While Oluwole and associates and Berardelli and associates provided valuable insights into the prevalence of suicide-related patterns of behaviour, incorporating a spiritual dimension into the research narrative could offer a more comprehensive understanding [17,18]. Spirituality is a broad concept that refers to a belief in something beyond the self. According to Koenig and associates, spirituality encompasses an individual's beliefs, values, and practices that provide a sense of meaning and purpose [22]. It aims to answer queries concerning the purpose of life, interpersonal relationships, universal truths, and other enigmas surrounding human existence [23-25]. Spirituality, intricately woven into the fabric of human experience, serves as a bastion of strength and meaning for many, particularly those grappling with mental health challenges [26]. Spirituality has been postulated to play a protective role against suicide in the general population. However, studies suggest that heightened spiritual beliefs may act as a buffer against suicidal tendencies among people living with schizophrenia [27]. As Costello explained, spirituality is rooted

in an individual's inner spirit and quintessential human quest to persevere through life's trials [28]. This spiritual journey often intersects with religious practices, such as prayer, meditation, or engagement with sacred texts, offering solace, guidance, and resilience during the most turbulent mental health struggles [29]. Indeed, the fabric of one's identity and sense of self is often interlaced with spiritual beliefs, informing one's navigation through illness, recovery, and the search for meaning [29]. However, spirituality can also induce existential conflicts and feelings of guilt, especially when personal experiences clash with spiritual doctrines, a complex paradox observed in people living with schizophrenia that merits further examination [30-32].

On the empirical front, a Lebanese study assessing suicidality among psychiatric inpatients found a significant inverse correlation between spirituality and positive suicidal screening [33]. Complementing these findings, Kéri and Kelemen reported that people living with schizophrenia engaged in religious activities exhibited a higher quality of life than their non-religious counterparts [34]. These revelations underscore the potential of religious and spiritual affiliations to foster social interactions, instil a sense of purpose, and serve as effective coping mechanisms for individuals with schizophrenia [34]. While the relationship between religion, spirituality (R/S), and mental health is nuanced, with varying implications for different disorders, a consistent trend has been noted: R/S is generally linked with lower instances of depression, anxiety, and suicidal patterns of behaviour, while its interaction with severe mental illnesses like schizophrenia and bipolar disorder can be multifaceted, acting as either a risk or protective factor [35]. However, the relationship between spirituality and suicide risk among people living with schizophrenia is complex and requires further exploration.

Emotional dysregulation, a common challenge in people living with schizophrenia, further emphasises the complexity of mental health outcomes. Emotional dysregulation, characterised by the impaired ability to manage and modulate emotional responses, is a critical aspect of schizophrenia and plays a substantial role in exacerbating distress and suicidal behaviour [36]. People living with schizophrenia often experience significant emotional awareness deficits. They are also prone to employ emotion regulation strategies at a lower threshold of negative emotional intensity, leading to disruption in daily life and social function impairment [37-39]. Moreover, emotional dysregulation can provoke impulsive behavioural patterns that heighten suicide capability and the likelihood of a suicide attempt when ideation is present [40-41]. Blunted affect, a persistent symptom of schizophrenia, further compounds this risk by fostering isolation and hindering functional recovery, ultimately impairing the quality of life and contributing to poorer clinical outcomes [42-43].

Research sheds light on the intricate relationship between emotional dysregulation and suicidal tendencies. A systematic review by Grigoriou and Upthegrove comprising twelve papers indicates a direct or indirect association between blunted affect and suicide in people living with schizophrenia, often mediated by risk factors like emotional withdrawal and depressive symptoms [16]. Similarly, studies exploring the Interpersonal Theory of Suicide (ITS) revealed that the link between emotional dysregulation and suicide risk is mediated by perceived burdensomeness and capability for suicide, with depressive symptoms independently influencing suicide risk [44]. Rigucci and aswsociates corroborate these findings in a study involving psychiatric inpatients, demonstrating a significant association between suicidal ideation intensity and factors like affective instability, emotional impulsivity, and negative emotionality [45]. Their research further underscores the independent association of negative emotion dysregulation and the presence of lifetime suicide attempts with the intensity of suicidal ideation. These studies collectively highlight the complex interplay between emotional dysregulation, affective symptoms, and the risk of suicide among people living with schizophrenia, emphasising the need for targeted interventions.

Ile-Ife in Osun State, Nigeria, is an exemplary location for studying the interplay between spirituality, emotional dysregulation, and suicide among people living with schizophrenia due to its cultural significance, particularly its deep-rooted spiritual traditions. The city, revered as the cradle of the Yoruba civilisation, provides a unique context to explore the influence of spirituality on mental health, addressing the notable research gap in this area. Its robust healthcare infrastructure, including the Obafemi Awolowo University Teaching Hospitals Complex, offers access to patients and facilitates longitudinal studies. The close-knit community structure aids in patient recruitment and follow-up, which is essential for understanding the social dynamics affecting mental health. Findings from such a study can potentially inform culturally sensitive mental health policies and interventions, not just for Nigeria but for similar socio-cultural settings across Africa. Additionally, this research can significantly contribute to raising awareness, reducing stigma, and promoting education about schizophrenia and suicide within the community. This study explores how spirituality, emotional dysregulation, and sex dynamics affect suicide risk in persons living with schizophrenia based on the Diathesis-Stress Model. The model suggests that the susceptibility to schizophrenia, together with stresses like emotional dysregulation, increases the likelihood of negative consequences such as suicide. Spirituality in this situation could be a crucial component in resilience,

possibly reducing the effects of various stressors. The study aims to understand the intricate dynamics in order to develop targeted treatments that can reduce the risk of suicide in this vulnerable demographic group. This will improve our understanding of these phenomena in Nigeria and worldwide.

The main objective of the study was to assess spirituality and emotional dysregulation in suicide among people living with schizophrenia. The specific objectives were to:

1. Assess the prevalence of suicidality among people living with schizophrenia.
2. Assess the level of spirituality among people living with schizophrenia.
3. Evaluate the relationship between spirituality and suicide among people living with schizophrenia.
4. Evaluate the relationship between emotional dysregulation and suicide among people living with schizophrenia.

This eleven-month cross-sectional study was conducted at a hospital between June 2021 and May 2022. A set of standardised psychological instruments was administered to a convenient sample of the research population to collect primary data. Data on diagnoses and socio-demographics was also acquired from the patient's medical records. Each file contains information about the patient's age, sex, and kind of diagnosis.

Subjects and Methods

All individuals with schizophrenia (aged 17 to 45) who appeared at the Wesley Guild Hospital in Ilesa and the Obafemi Awolowo University Teaching Hospital in Ile-Ife and whose caretakers provided consent were included in the sample, with a minimum size of 137. A total of 137 individuals (95 males and 42 females) were selected for the study using the convenient sampling technique, which limited the sample to patients available for treatment, either in or outpatients.

The selection of 137 individuals as the sample size for the research project is based on the principles of comprehensive inclusion, ethical adherence achieved by the acquisition of caregiver agreement, and the practicality afforded by convenience sampling. Despite its inherent limitations, this approach ensures a thorough representation of the population under investigation within the constraints of available resources and ethical issues, augmenting the study's ecological validity. The sample size is strategically determined in order to strike a balance between the need for statistical power, which enables the identification of meaningful patterns and relationships within the data, and the logistical realities of conducting research with a vulnerable population in a clinical setting. This ensures that the findings of the study are both reliable and applicable to situations that occur in the real world.

Instruments

The 19-item Beck Scale for Suicidal Ideation (BSSI) is a self-reporting edition introduced by Beck and associates [46]. This scale evaluates the presence and intensity of suicidal thoughts in the past four weeks, including today. A 3-point rating system, ranging from 0 to 2 (strong ideation to no ideation), ranks and rates each item. Individual items evaluate traits such as wanting to die, wanting to try suicide actively or passively, how long and often one thinks about suicide, feeling in control of one's attempt, having many deterrents, and actually preparing for a planned attempt. After that, a total score between 0 and 38 is obtained by adding up all the ratings. The total of the item scores yields an overall measure of the severity of suicidal thoughts. This scoring format was used in this study. A lower score indicates less severe suicidal ideation. A BSSI $\geq$ 3 is a significant predictor of suicide death over 20 years [47]. Strong psychometric qualities of the BSSI include its predictive validity for suicide and its remarkable internal consistency. Nigerian researcher Okoro discovered that the whole scale had a reliability coefficient of 0.63 [48]. The current study found a reliability coefficient of 0.71 among people living with schizophrenia.

The Spiritual Well-Being Scale (SWBS) was originally a 20-item scale developed by Paloutzian and Ellison [49]. It was recently modified into a 10-item scale by Ai and associates [50]. It is a self-reported questionnaire that measures spiritual well-being in terms of its holistic meaning. One can use a 6-point Likert scale to rate the responses from the revised version, with '1' denoting strongly disagree and '6' denoting strongly agree. The two subscales that make up the theoretical SWBS are (1) religious well-being (RWB), which focuses on a person's subjective well-being with regard to God, and (2) existential well-being (EWB), which focuses on a person's general pleasure with life and the meaning of existence. Every subscale has five things on it. Three of them have reversible scoring—items no. 5 in the RWB and no. 1 and 8 in the EWB. The range of the overall SWBS score is 10 to 60. Psychometric features have been proven for the SWBS. According to Saunders and associates the RWB showed coefficient alphas of 0.97 and the test-retest coefficient of 0.93, whereas the EWB showed coefficient alphas of 0.90 and 0.80 [51]. The SWBS was used in Nigeria by Okoli and associates among Nursing students in Anambra state, and a higher Cronbach alpha was reported [52]. The current study found a reliability coefficient of 0.60 for people living with schizophrenia (after removing item 6, which contributed poorly to the scale).

The 8-item Brief Emotional Dysregulation Scale (BEDS) was developed by authors Wycoff and associates, based on the Carpenter and Trull multi-component model [53,54]. However, the original version of the Emotional Dysregulation Scale with 36 items was developed by Gratz and Roemer [55]. The 8-item BEDS is a unidimensional measure designed to capture the experience of emotion dysregulation. Each item's response is graded on a 4-point Likert-type scale (1 being false or not true at all, '2' being somewhat true, '3' being mostly true, and '4' being extremely true). The average of the item replies is used to get the overall score, which can have values between 8.0

and 32.0. Higher scores in this area correspond to more severe emotion dysregulation. According to Wycoff and associates the BEDS exhibits robust psychometric qualities, including good internal consistency from three samples (α = 0.89 α = 0.88 α=0.90) [53]. In Nigerian adults and adolescents, Akpunne and associates report good psychometric characteristics [41]. The current study found a reliability coefficient of 0.76 for people living with schizophrenia.

The Obafemi Awolowo University Teaching Hospital Complex (OAUTHC) Ethics and Research Committee gave their approval to the study protocol (See Appendix IV). A total of 173 patients were found to have had prior diagnoses of schizophrenia during the research period. Out of these, 36 individuals were deemed ineligible for inclusion in the study (of whom 22 had a sickness duration of less than a year and 14 had a final hospital admission lasting less than six months). Two patients declined to participate after the purpose of the study and data confidentiality were explained to each of the other patients. As a result, 137 patients consented to participate in the research.

Data collected in the study were analysed using both descriptive and inferential statistics. Descriptive statistics such as frequency, percentage, mean, standard deviation, figures, and tables were used to describe the participants. Inferential statistics such as zero-order correlation and hierarchical regression were used to test the hypothesis, all with a programme of IBM/SPSS 25.0.

Results

The data collected was systematically screened and analysed, beginning with examining the socio-demographic characteristics of 137 participants, which included variables such as age, sex, marital status, religion, educational qualification, family history of mental illness, and medical comorbidities, as presented in Table 1.

Table 1 shows the socio-demographic characteristics of the respondents in the study. The mean age of the respondents is 31.66 years, while the standard deviation is 5.99. On sex majority, 95 (69.3 %) were males while 42 (30.7 %) were females. Their marital status revealed that 39(28.5 %) were single, 93 (67.9 %) were Married while 5 (3.6 %) were Divorced. In term of religion affiliation, 99 (72.3 %) were Christians while 38 (27.7 %) practice Islam. In terms of educational qualification, 8 (5.8%) had primary education, 27 (19.7) had secondary, 37 (27.0 %) had HND, 61 (44.5 %) had B.sc while 4 (2.9%) had Master. In terms of family history, 91 (66.4 %) had a family history of mental illness, while 46 (33.6 %) did not have any family history of mental illness. Lastly, medical comorbidities revealed that 16 (11.7%) had psychopathology, 33 (24.1 %) had obsessive-compulsive disorder (OCD), 49 (35.8 %) had social phobia, 29 (21.2 %) had mood disorder while 10 (7.3 %) had phobic anxiety.

Table 1. Socio-demographic features of the participants (N = 137)

Variables	Characteristics	Frequency	Percentage (%)	Mean (SD)
Age				31.66 (5.99)
Sex	Male	95	69.3	
	Female	42	30.7	
Marital status	Single	39	28.5	
	Married	93	67.9	
	Divorced	5	3.6	
Religion	Christianity	99	72.3	
	Islam	38	27.7	
Educational qualification	Primary	8	5.8	
	Secondary	27	19.7	
	HND	37	27.0	
	B.sc	61	44.5	
	Master	4	2.9	
Family history of mental illness	Yes	91	66.4	
	No	46	33.6	
Medical comorbidities	Psychopathology	16	11.7	
	OCD	33	24.1	
	Social Phobia	49	35.8	
	Mood disorder	29	21.2	
	Phobic anxiety	10	7.3	

Table 2. Zero-order correlation showing the relationship among spirituality, emotional dysregulation, and suicide

	Variables	Mean	SD	1	2	3
1	Spirituality	32.54	3.84	-		
2	Emotional dysregulation	12.90	3.84	-0.10	-	
3	Suicide	33.19	2.84	-0.23**	0.21*	-

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The first hypothesis stated that, there will be a significant relationship between spirituality, emotional dysregulation, and suicide among people living with schizophrenia. The hypothesis was tested using zero-order correlation, and the result is presented in Table 2.

The result shows that there was a significant negative relationship between spirituality and suicide ($r = -0.23$, $p < 0.01$). This implies that an increase in spirituality tends to decrease suicide. The result further shows that there was a significant positive relationship between emotional dysregulation and suicide ($r = 0.21$, $p < 0.05$). This also means that an increase in emotional dysregulation in people living with schizophrenia tends to increase in suicide. The stated hypothesis is accepted.

The second hypothesis stated that, there will be a significant predictive role of spirituality and emotional dysregulation in suicide among people living with schizophrenia. The hypothesis was tested using Hierarchical multiple regression, and the result is presented in Table 3.

The result of hierarchical regression presented in Table 3 revealed that when emotional dysregulation was tested in the first model, it significantly independently predicted suicide ($\beta = 0.21$, $t = 2.52$, $p < 0.05$). The contribution of emotional dysregulation in explaining the variance in suicide was 3 % ($\Delta R2 = 0.03$). The model was significant, $F(1,135) = 6.34$, $p < 0.05$. In model 2, spirituality was added in the regression model. It revealed a significant independent negative predictor of suicide ($\beta = -0.25$, $t = -3.12$, $p < 0.05$). The contribution of perceived spirituality in explaining the variance in suicide was 9% ($\Delta R2 = 0.09$), and the model was significant, $F(2,134) = 8.27$, $p< 0.01$. The strongest predictor of suicide in the present study was spirituality ($\beta = -0.25$), and all the predictor variables in the study accounted for 11 % of the variance in suicide ($R2 = 0.11$). The stated hypothesis is accepted.

Discussion

The aim of this study was to investigate the relationships and predictive roles of spirituality and emotional dysregulation in suicide among people living with

Table 3. Hierarchical multiple regression analysis showing the joint and independent predictive role of emotional dysregulation and spirituality on suicide

	Model I		Model II	
Predictors	β	t	β	T
Emotional dysregulation	.21	2.52**	.23	2.91**
Spirituality			-0.25	-3.12**
R	0.21		0.33	
R^2	0.04		0.11	
Adj R^2	0.03		0.09	
Df	1.135		2.134	
F	6.34**		8.27*	
F change	6.34**		9.79**	

**$p < 0.05$, *$p < 0.01$

schizophrenia. The socio-demographic characteristics of the participants are detailed in Table 1 (Appendix 1), highlighting a diverse group with varying levels of education, religious affiliations, and a notable percentage having a family history of mental illness. Through rigorous testing of hypotheses, the study revealed several key findings.

The results offer a profound understanding of the direction of the relationship that exists between spirituality, emotional dysregulation, and suicide among people living with schizophrenia. The researchers found a significant negative relationship between spirituality and suicide. Spirituality emerges as a prominent factor in the lives of people living with schizophrenia, indicating that those with higher levels of spirituality are less susceptible to suicidal tendencies. This result is consistent with earlier studies by Dolim, Fasogbon and associates, and Nwafor and Vandenhoeck, who have also emphasised the safeguarding effect of spirituality [27,33,56]. It suggests that programmes designed to support and strengthen spirituality may be a powerful deterrent to suicide risk in people living with schizophrenia. This suggests that, in addition to other difficulties, people living with schizophrenia frequently deal with serious existential and psychological issues and that faith can be a source of comfort and resiliency. When appropriate, therapists and other medical professionals should assist patients' spiritual discovery by encouraging candid conversations and offering support. This all-encompassing method recognises that taking care of one's spiritual well-being involves more than just religion; it also involves a deeper sense of meaning and purpose in life.

However, emotional dysregulation shows up as a problematic feature in the lives of people living with schizophrenia. The study found a strong positive correlation between emotional dysregulation and suicide, suggesting that people who experience more intense emotional problems are more likely to act suicidal. Emotional dysregulation can lead to impulsive and self-destructive patterns of behaviour, as highlighted by previous research [57,58]. This study highlights the significance of treating emotional regulation deficiencies in this population. Therefore, interventions should prioritise emotional regulation skills as a crucial component of comprehensive care for people living with schizophrenia. In practice, this implies that therapy should incorporate strategies for enhancing emotional regulation. Techniques such as mindfulness, Cognitive Behavioural Therapy (CBT), and Dialectical Behaviour Therapy (DBT) can be effective in helping patients manage their emotions more effectively. By equipping individuals with the tools to navigate their emotions, clinicians can contribute significantly to suicide prevention efforts within this population.

The study also sought to explore the roles that spirituality and emotional dysregulation play as predictors of suicide among persons living with schizophrenia, aiming to illuminate their contributions to the risk within this demographic. The study revealed that emotional dysregulation stands out as a significant factor directly enhancing the likelihood of suicide among persons living with schizophrenia. This condition is characterised by the inability to effectively navigate and temper intense emotional states, often culminating in rash actions and a heightened risk of suicidal thoughts and behavioural patterns. The correlation between heightened suicide risk and emotional dysregulation underscores the necessity for targeted interventions focused on bolstering emotional regulation skills within this population. Integrating techniques from Cognitive Behavioural Therapy (CBT) and Dialectical Behaviour Therapy (DBT) could prove pivotal in cultivating these essential skills. In stark contrast, spirituality emerged as a formidable deterrent against the risk of suicide, displaying its capacity to bolster psychological resilience and infuse life with a sense of meaning and purpose. Concurrently, the protective mantle offered by spirituality against suicide risk underscores the imperative of weaving discussions of spiritual well-being into clinical encounters, encouraging patients to explore their spiritual inclinations and convictions.

These findings resonate with prior research by Anestis and associates, which links emotional dysregulation to an increased propensity for suicidal tendencies [57,58]. Likewise, the beneficial influence of spirituality on mental health, coupled with its capacity to diminish suicide risk, finds support in the works of Dolim, Nwafor and Vandenhoeck, and Esan and Lawal, all of which underscore spirituality's role in nurturing resilience and crafting a life filled with purpose [27,33,59]. It is important to note that this study highlights the existential aspects of spirituality, emphasising its significance beyond religious affiliation. This underscores the necessity of accepting life's existential questions while treating spiritual well-being in therapeutic settings. This thoughtful strategy promotes using spirituality as a tool to help people living with schizophrenia, reduce suicide risk and improve mental health in general.

The study has its limits. Cross-sectional research cannot establish causality or analyse how these correlations evolve; therefore, longitudinal studies may be more useful. Participants may give socially desirable answers on self-report measures, which could skew the results. In order to reduce this, the use of more objective or observational data may be required. The results are limited to a specific schizophrenic group. Thus, they must be replicated in clinical and non-clinical situations to be more generalizable. The study's narrow cultural analysis ignores how cultural differences may affect schizo-

phrenia patients' spirituality and emotional experiences. Lastly, sampling bias due to the overrepresentation of particular demographics like males may limit the findings' generalisability across schizophrenia.

In conclusion, this study explored the influence of spirituality and emotional dysregulation on suicide risk among people living with schizophrenia. It found that spirituality acts as a protective factor against suicide, but emotional dysregulation raises the risk. The results emphasise the necessity of professional interventions that focus on emotional regulation and include spirituality, especially in Nigeria, where socio-religious elements have a considerable impact on mental health. The research proposes enhancing therapy methods by using emotional control training and spiritual components to enhance mental health care and decrease suicide risk in individuals with schizophrenia, utilising Nigeria's cultural and religious background.

Acknowledgments

None.

Conflict of Interest

None to declare.

Funding Sources

None.

References

1. Rani A, Raman KJ, Ammapattian T, Antony S, Prabhu SG, Basavarappa C. Lived experiences of persons with chronic schizophrenia living in the community. Indian J Psychol Med. 2023;45:374-82.
2. Baba AK, Tamuno-opubo AT, Adeniyi VO, Uthman TJ. Relationship between schizophrenia and quality of life: the roles of psychiatric symptoms and sociodemographic factors in Nigeria. LGJAP. 2023;30:168-183.
3. Mueller J. An exploration into the meaning of spirituality and spiritual experience for counselling psychologists, and implications for their practice [doctoral thesis]. London (UK): University of Roehampton; 2012.
4. Pargament KI, Exline JJ. Working with spiritual struggles in psychotherapy: from research to practice. New York (USA): The Guilford Press; 2021.
5. Simitsi C. Criminal narrative experience and emotional state of schizophrenic offenders [doctoral thesis]. Huddersfield (UK): University of Huddersfield; 2020.
6. Centre for Addiction and Mental Health. Suicide? [Internet]. Toronto (CA): CAMH; 2023 [updated 2023; cited 2023 Jan 7]. Available from: https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/suicide#resources
7. World Health Organization (WHO). Preventing suicide: a resource at work [Internet]. Geneve (CH): WHO; 2006 [updated 2006; cited 2024 May 26]. Available from: https://iris.who.int/bitstream/handle/10665/43502/9241594381_eng.pdf?sequence=1
8. Durkheim É. Le suicide: Editude de sociologie. Paris (FR): F. Alcan; 1897.
9. Ndosi NK. Perspectives on suicide in Africa. Int Psychiatry. 2006;3:7-8.
10. Ibrahim O, Abiodun SJ, Garba I, Oyeyinka AJ, Olugbenga I. relationship between suicide and responsible factors among undergraduates, University Of Ilorin, Ilorin, Nigeria. J Soc Sci Hum. 2021;18:157-71.
11. Peritogiannis V, Ninou A, Samakouri M. Mortality in schizophrenia-spectrum disorders: recent advances in understanding and management. Healthcare (Basel). 2022;10:2366.
12. Aloba O, Esan O, Alimi T. Adaptation of the Beck Hopelessness Scale as a suicide risk screening tool among Nigerian patients with schizophrenia. Int J Psychiatry Clin Pract. 2018;22:19-24.
13. Lee EE, Liu J, Tu X, Palmer BW, Eyler LT, Jeste DV. A widening longevity gap between people with schizophrenia and general population: a literature review and call for action. Schizophren Res. 2018;196:9-13.
14. Bushe CJ, Taylor M, Haukka J. Mortality in schizophrenia: a measurable clinical endpoint. J Psychopharmacol. 2010;24:17-25.
15. Popovic D, Benabarre A, Crespo JM, Goikolea JM, González-Pinto A, Gutiérrez-Rojas L, et al. Risk factors for suicide in schizophrenia: systematic review and clinical recommendations. Acta Psychiatr Scand. 2014;130:418-26.
16. Grigoriou M, Upthegrove R. Blunted affect and suicide in schizophrenia: a systematic review. Psychiatr Res. 2020;293:113355.
17. Oluwole EO, Onwumelu NC, Okafor IP. Prevalence and determinants of intimate partner violence among adult women in an urban community in Lagos, Southwest Nigeria. Pan Afr Med J. 2020;36:345.
18. Berardelli I, Rogante E, Sarubbi S, Erbuto D, Lester D, Pompili M. The importance of suicide risk formulation in schizophrenia. Front Psychiatry. 2021;12:779684.
19. Simon GE, Stewart C, Yarborough BJ, Lynch F, Coleman KJ, Beck A, et al. Mortality rates after the first diagnosis of psychotic disorder in adolescents and young adults. JAMA Psychiatry. 2018;75:254-60.
20. National Institute of Mental Health (NIMH). Schizophrenia [Internet]. Bethesda (USA): NIMH; 2020 [updated 2020; cited 2023 Jan 7]. Available from: https://www.nimh.nih.gov/health/statistics/schizophrenia#part_2546
21. World Health Organization (WHO). World Health Statistics 2016. Monitoring Health for the Sustainable Development Goals (SDGs) [Internet]. Geneve (CH): WHO; 2016 [updated 2016; cited 2023 Jan 7]. Available from: https://iris.who.int/handle/10665/206498
22. Koenig HG, Larson DB, Larson SS. Religion and coping with serious medical illness. Ann Pharmacother. 2001;35:352-9.
23. Newberg A, Waldman MR. Why we believe what we believe: Uncovering our biological need for meaning, spirituality, and truth. New York (USA): Free Press; 2006.
24. Kanu IA. The dimensions of African cosmology. Filosofia Theoretica: J Afr Philosophy, Culture Religions. 2013;2:533-55.
25. Mbiti JS. Introduction to African religion. Long Grove (USA): Waveland Press Inc.; 2015.

26. Froese P. On purpose: How we create the meaning of life. Oxford (GB): Oxford University Press; 2016.
27. Dolim S. A Pilot Study to Assess the Effects of Spirituality on Social Functioning in People with Schizophrenia. Mānoa Horizons. 2018;3:44-9.
28. Costello SJ. Applied logotherapy: Viktor Frankl's philosophical psychology. Newcastle upon Tyne (GB): Cambridge Scholars Publishing; 2019.
29. Petrie K, Crawford J, LaMontagne AD, Milner A, Dean J, Veness BG, et al. Working hours, common mental disorder and suicidal ideation among junior doctors in Australia: a cross-sectional survey. BMJ Open. 2020;10:e033525.
30. Hartz GW. Spirituality and mental health: Clinical applications. Oxfordshire (GB): Routledge; 2005.
31. Clements WM, Koenig HG. Aging and God: Spiritual pathways to mental health in midlife and later years. Oxfordshire (GB): Routledge; 1994.
32. Dowek NH. Existential applications in different contexts. In: Arnold-Baker C, Wharne S, Hakim Dowek N, Gibson N, Molle J, van Deurzen E, eds. Existential Therapy: Responses to Frequently Asked Questions. Oxfordshire (GB): Routledge; 2023.
33. Nwafor CI, Vandenhoeck A. Exploring Religion as a Path to Meaning: The Role of "Pastrotherapy" in Supporting Young People's Quest for a Good Life in Nigeria. J Relig Health. 2024;63:1967-84.
34. Kéri S, Kelemen O. Christianity and schizophrenia redux: an empirical study. J Relig Health. 2020;59:452-69.
35. Khosa-Nkatini HP, Buqa W. Suicide as a sin and mental illness: a dialogue between Christianity and psychology. Verb et Eccl. 2021;42:1-6.
36. Paulus FW, Ohmann S, Möhler E, Plener P, Popow C. Emotional dysregulation in children and adolescents with psychiatric disorders. A narrative review. Front Psychiatry. 2021;12:628252.
37. Garland EL, Fredrickson B, Kring AM, Johnson DP, Meyer PS, Penn DL. Upward spirals of positive emotions counter downward spirals of negativity: Insights from the broaden-and-build theory and affective neuroscience on the treatment of emotion dysfunctions and deficits in psychopathology. Clin Psychol Rev. 2010;30:849-64.
38. Kring AM, Elis O. Emotion deficits in people with schizophrenia. Ann Rev Clin Psychol. 2013;9:409-33.
39. Lam AHY, Leung SF, Lin JJ, Chien WT. The effectiveness of a mindfulness-based psychoeducation programme for emotional regulation in individuals with schizophrenia spectrum disorders: a pilot randomised controlled trial. Neuropsychiatr Dis Treat. 2020:729-47.
40. Turton H, Berry K, Danquah A, Pratt D. The relationship between emotion dysregulation and suicide ideation and behaviour: a systematic review. J Affect Disord Rep. 2021;5:100136.
41. Akpunne BC, Akinnawo EO, Akpunne SI, Kumuyi DO. Suicidal behaviour among Nigerian undergraduates: associations with gambling disorder and emotional dysregulation. Health Scope. 2022;11:e121797.
42. Tandon R, Nasrallah HA, Keshavan MS. Schizophrenia,"just the facts" 4. Clinical features and conceptualization. Schizophr Res. 2009;110:1-23.
43. World Health Organization (WHO). World mental health report: transforming mental health for all [Internet]. Geneve (CH): WHO; 2022 [updated 2022; cited 2023 Jan 7]. Available from: https://www.who.int/publications-detail-redirect/9789240049338
44. Eaddy M, Zullo L, Horton SE, Hughes JL, Kennard B, Diederich A, et. A theory-driven investigation of the association between emotion dysregulation and suicide risk in a clinical adolescent sample. Suicide Life-Threat Behav. 2019;49:928-40.
45. Rigucci S, Sarubbi S, Erbuto D, Rogante E, Hantouche EG, Innamorati M, et al. Negative emotion dysregulation is linked to the intensity of suicidal ideation in a mixed in patient sample. J Affect Disord. 2021;281:605-8.
46. Beck AT, Steer RA, Ranieri WF. Scale for suicide ideation: psychometric properties of a self-report version. J Clin Psychol. 1988;44:499-505.
47. Brown GK, Beck AT, Steer RA, Grisham JR. Risk factors for suicide in psychiatric outpatients: a 20-year prospective study. J Consult Clin Psychol. 2000;68:371-7.
48. Okoro CM. Gender and psychological factors associated with suicidal ideation among University Students in Enugu Metropolis. EJSS. 2019;4:337-54.
49. Paloutzian RF, Ellison CW. Loneliness, spiritual well-being and the quality of life. In: Peplau LA, Perlman D, eds. Loneliness: a sourcebook of current theory, research and therapy. New York (USA): John Willey & Sons; p. 224-37.
50. Ai AL, Wink P, Paloutzian RF, Harris KA. Assessing spirituality in a diverse world. New York (USA): Springer; 2021.
51. Saunders SM, Lucas V, Kuras L. Measuring the discrepancy between current and ideal spiritual and religious functioning in problem drinkers. Psychol Addict Behav. 2007;21:404-8.
52. Okoli Uchenna J, Edet OB, Akpan-Idiok PA. Religious and existential well-being among nursing students in Anambra State, Nigeria. Global J Pure Appl Sci. 2022;28:75-81.
53. Wycoff AM, Griffin SA, Helle AC, Trull TJ. The Brief Emotion Dysregulation Scale (BEDS): Development, validation, and implications for use. 2020. PsyArXiv Preprints [Preprint]. 2020 [cited 2024 Jun 27]. Available from: https://osf.io/preprints/psyarxiv/3fnar
54. Carpenter RW, Trull TJ. Components of emotion dysregulation in borderline personality disorder: a review. Curr Psychiatry Rep. 2013;15:335.
55. Gratz KL, Roemer L. Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. J Psychopathol Behav Asses. 2004;26:41-54.
56. Fasogbon MA, Agberotimi SF, Olaseni AO, Oladele OT. Impact of religiosity and life orientation on attitude of youths towards suicide in Lagos, Nigeria: a religious-community based study. CIJP. 2019;4:25-38.
57. Anestis MD, Pennings SM, Lavender JM, Tull MT, Gratz KL. Low distress tolerance as an indirect risk factor for suicidal behavior: considering the explanatory role of non-suicidal self-injury. Compr Psychiatry. 2013;54:996-1002.
58. Anestis MD, Kleiman EM, Lavender JM, Tull MT, Gratz KL. The pursuit of death versus escape from negative affect: an examination of the nature of the relationship between emotion dysregulation and both suicidal behavior and non-suicidal self-injury. Compr Psychiatry. 2014;55:1820-30.
59. Esan O, Lawal K. Spirituality and suicidality among patients with schizophrenia: a cross-sectional study from Nigeria. J Relig Health. 2021;60:2547-59.