
Predictors of Depression among Adolescents with Disabilities in Ibadan Metropolis, Oyo State, Nigeria

¹**Adesola, M. O.**, Departments of Education for the Gifted and Talented School of Special Education, Federal College of Education (Special), Oyo, Nigeria. Email: adesola.mutiu2271@fcesoyo.edu.ng

²**Aiyegboka Caroline Oluwatoyin**, Ministry of Defence, Command Day Secondary School, Department of Guidance and Counselling, Letmauch Cantonment, Ibadan. Oyo State, Nigeria. Email: ayegbokacaro@gmail.com

Abstract

This study explores the predictors of depression among adolescents with disabilities in Ibadan metropolis, Oyo State, Nigeria. Utilising a self-made questionnaire, 100 participants were purposively sampled from three schools catering to individuals with disabilities. Spearman's rho correlation coefficient was employed for data analysis, revealing weak positive relationships between depression and both low quality of life (correlation coefficient of 0.023) and disability-related pain. The p-values associated with these correlations (0.302 and 0.294, respectively) exceeded the conventional significance level of 0.05, leading to the failure to reject the null hypotheses. Consequently, no substantial linear relationship between depression and either quality of life or disability-related pain was found among this adolescent population. The study recommends addressing not only depression but also the broader factors influencing mental health, including quality of life and disability-related pain.

Keywords: Predictors, Depression, Adolescents, Disabilities, Ibadan Metropolis

Introduction

Adolescence is a critical stage characterised by rapid changes and emotional turmoil, with depression emerging as a prevalent mental health condition among adolescents. This complex and multi-dimensional disorder encompasses affective, cognitive, and psychosocial symptoms, with a worrisome rise in severe depressive symptoms observed in recent years. Depression during adolescence increases vulnerability to depressive episodes later in adult life, underscoring the

need for targeted interventions and support. In addition, adolescence is a crucial stage where mood disorders often go unrecognised or misdiagnosed, resulting in untreated conditions. Adolescents experiencing depressive symptoms face challenges in academic performance, absenteeism, and lower aspirations for further education. The challenges are worsened by the lack of research on mental health literacy among young people, coupled with the fact that these studies have emphasised high levels of ignorance and negative attitudes towards individuals with mental disorders, and mental illness was often attributed to spiritual causes and consulting traditional healers or religious leaders as a first point of contact in the Nigerian context (Aluh, Anyachebelu, Anosike, & Anizoba, 2018).

Mbanuzuru, Uwakwe, Adogu, Nnebue, Udigwe, & Mbanuzuru, (2021) submit that depression stands as a prominent contributor to global ill-health and disability, with particular relevance among adolescents. Its repercussions extend to adverse outcomes, encompassing suicidality and general declines in physical and mental health. The authors in Anambra State conducted a cross-sectional analytical study aimed to assess and compare the prevalence of depression disorders among in-school adolescents in both urban and rural areas. The study, involving 1187 secondary school adolescents in government-owned schools, utilized the Patient Health Questionnaire-9 (PHQ-9) as the primary instrument. The findings revealed an overall prevalence of depression at 12.5%, drawing attention to the significance of this mental health concern among the adolescent population in Anambra State. Notably, the study highlighted a significant disparity in the prevalence rates between urban and rural areas, with urban participants exhibiting a higher prevalence (14.5%) compared to their rural counterparts (9.6%). While the study sheds light on the prevalence and associated factors, it did not reveal the factors responsible for the difference in the prevalence between urban and rural areas. Consequently, there is a critical need for further research to delve deeper into the intricacies of these factors, informing the development of more effective and targeted mental health interventions for adolescents in Ibadan metropolis, Oyo state, Nigeria

There is an escalating concern about the prevalence of depression among adolescents in Nigeria, with a notable increase in depressive symptoms during early adolescence. Moreover, depression has been a multifaceted and debated topic, encompassing the normal short-lived low moods to a clinical syndrome marked by severe and prolonged symptoms. This is as Nzeakah, Onofa, Dadematthews, & Ogundare (2023) express that depression disorders pose a substantial and concerning health burden among adolescents globally, with a prevalence ranging from 15% to 21%. Further, this mental health challenge not

only affects the overall well-being of adolescents but also elevates the risk of suicide, which stands as the second leading cause of death in this age group, particularly among those aged 10 to 19. Specifically, the authors underscore the alarming prevalence of major depression (11.3%) and dysthymia (1.4%) among adolescents in Abeokuta.

Daily observations also underscore the prevalence of depression among adolescents in Nigeria, signifying a growing concern that necessitates a more profound comprehension of its manifestation and impact. This concern stands in contrast to the prevalence of other factors, such as drug abuse, poverty, and inadequate education, which also contribute to adolescents' vulnerability to depression. Amoran, Lawoyin, & Lasebikan, (2007) evaluated the contemporary prevalence of depression in Oyo State, Nigeria, focusing on discerning potential rural-urban variations. The research adopted a two-phase community-based cross-sectional design, with Ibadan North-West and Egbeda local government areas representing urban areas, and Saki-East local government area representing the rural setting. 1105 participants were recruited in total, a multistage sampling technique was used, and the General Health Questionnaire (GHQ-12) which was an interviewer-structured questionnaire, served as a screening tool. A total of 721 (65.2%) participants were from urban communities while 384 (34.8%) were from the rural community. Overall, depression was prevalent at 5.2%. Notably, depression was more prevalent among women compared to men (5.7% vs. 4.8%), and among adolescents (9.6%, $p = 0.04$). Moreover, depression was more prevalent in rural areas when compared to urban areas (7.3% vs. 4.2%, $\chi^2 = 4.94$, $p = 0.02$). Understanding and addressing the factors contributing to this rural-urban disparity are crucial for formulating effective strategies to alleviate the burden of depression in Oyo State.

Bi, Zhao, Zhou, Lao, and Jiang (2020) submit that individuals with disabilities face elevated risks for mental health challenges, attributed to living conditions, the need for specialised care, higher rates of poverty, and reduced social contacts. Disabilities encompass various dimensions like visual, hearing, speaking, limbs, intelligence, mental, and multiple disorders. Bi et. al. (2020) adds that people with disabilities are particularly vulnerable to depression, as evident in studies highlighting its prevalence among low-income females, older individuals, and military personnel with physical impairments. Depression among adolescents with disabilities is characterised by severe and persistent symptoms such as sadness, loss of interest, and reduced energy, and can significantly impact their quality of life. The economic impact of disability contributes to the substantial

relationship between disability and depression. Despite its significant impact, depression among persons with disabilities (inclusive of adolescents) is often underdiagnosed and undertreated due to factors such as stigma, limited effective therapies, and inadequate mental health resources. They note that scientific research is scarce on the factors associated with depression in this demographic. The predictors of depression among adolescents with disabilities, therefore, is a critical aspect that requires investigation. Understanding it in this population is crucial for developing targeted interventions and support systems to enhance their mental health and overall quality of life.

Shen, Huang, Kung, Chiu, and Tsai, (2017) express that the correlation between depression and physical illness or disability is well-established, with a positive association observed across different age groups and genders. Individuals experiencing physical disability face more risk of developing depression, and when depressive symptoms coexist with physical disability, there is a harmful impact on both physical and psychological health. Compared to their healthy counterparts, individuals with physical disabilities commonly report higher levels of pain, depression, and anxiety, coupled with a diminished quality of life. The prevalence of depression in adults with disabilities has been estimated to range from 24.9% to 41%, surpassing the rates observed in the general adult population. While citing a study conducted in the United States, Shen et. al. (2017) note that factors such as younger age, increased pain issues, restricted mobility, and lower satisfaction with one's social network were identified as characteristics heightening the risk of severe depression in women with physical disabilities. With over 1 billion people globally experiencing disabilities, and while the heightened risk of depression is common in this demographic, there remains a need for comprehensive studies to inform preventive measures and effective treatment strategies for depression in individuals with physical and sensory disabilities.

Salie, Eken, Donald, Fieggen, & Langerak (2022) in a study that delved into the prevalence and extent of disability-related pain, health-related quality of life, and mental health in adolescents and adults grappling with cerebral palsy (CP) in an urban South African setting revealed that those with CP reported heightened occurrences of pain in their lower limbs, increased levels of disability stemming from pain and diminished perceived physical health-related quality of life. de la Vega, Groenewald, Bromberg, Beals-Erickson & Palermo (2018) note that in the realm of adolescent health, the intersection of physical disabilities and chronic pain remains a critical yet understudied area. In their study of the prevalence and associated factors of chronic pain in adolescents with physical

disabilities, the authors delved into the experiences of 989 adolescents (4.3%) reporting physical disabilities. They found that this group exhibited a significantly higher prevalence of chronic pain (27.2%) in comparison to their able-bodied peers (15.6%). The stark contrast underscores the heightened vulnerability of adolescents with physical disabilities to the burdens of chronic pain. Conversely, the study found no significant interaction between physical disability status and chronic pain concerning depressive symptoms, anxiety, or insomnia. Contrary to expectations, the comorbidity of physical disability and chronic pain did not exacerbate mental health challenges commonly associated with chronic pain in the general adolescent population. This intriguing finding suggests that the relationship between disability-related pain and mental health complexities may differ from the patterns observed in the broader adolescent cohort. This signifies the need to study the influence of disability-related pain on depression among adolescents with disabilities due to their significant population within the Ibadan metropolis. More so, by discerning the distinct interplay between disability, pain, and mental health, healthcare professionals can develop more effective and targeted strategies to improve the overall quality of life of adolescents.

In reviewing previous studies, the literature in Nigeria lacks comprehensive research on depression among adolescents with disabilities. This indicates a dearth of literature regarding the comprehensive exploration of depression among adolescents with disabilities. This is despite that the subgroup is facing elevated risks considering the well-established correlation between depression and physical illness or disability, emphasising the harmful impact on both physical and psychological health. The choice of adolescents with disabilities in Ibadan Metropolis for this study stems from the need to address the prevalence of depression as affirmed by previous studies cited above. Despite the heightened risk, scientific research is scarce on the factors associated with depression in this demographic, necessitating targeted investigations for tailored interventions and support systems.

This knowledge gap prompted the current study, aiming to contribute to the understanding of depression within this specific demographic in the Nigerian context. Therefore, this study focuses on the influence of quality of life and disability-related pain as predictors of depression among adolescents with disabilities in Ibadan Metropolis, Oyo State, Nigeria. The study aims to fill the gap in the literature by exploring the prevalence, factors, and impact of depression in this population. By incorporating insights from Nigerian scholars, the research seeks to expand knowledge and contribute to the development of

effective interventions for improving the mental health and overall quality of life of adolescents with disabilities in Nigeria

Statement of the Problem

Adolescence is a pivotal stage characterised by rapid changes, presenting a global concern with the emergence of depression as a prevalent mental health issue among adolescents. In Nigeria, the escalating prevalence of depression during early adolescence is worrisome, ranging from 11.3% to 21% according to studies in Oyo State by Amoran, Lawoyin, & Lasebikan, (2007). Depression during adolescence is associated with adverse outcomes, including suicidality and declines in both physical and mental health. An understudied area in the Nigerian context pertains to the intersection of disabilities and disability-related among adolescents, with global research indicating elevated risks for mental health challenges, especially depression, among individuals with disabilities. The ongoing study in Ibadan Metropolis focuses on adolescents with disabilities, an at-risk subgroup, addressing a significant gap in the literature. Despite existing research on depression among adolescents in Nigeria, there is a dearth of literature that specifically explores this phenomenon among adolescents with disabilities in Ibadan Metropolis, Oyo State. Current studies emphasize the lack of mental health literacy among Nigerian youth, contributing to ignorance and negative attitudes towards mental disorders. While prevailing research highlights depression's prevalence in different Nigerian regions, it falls short in explaining rural-urban variations. The present study aims to fill these knowledge gaps by investigating the influence of quality of life and disability-related pain as predictors of depression among adolescents with disabilities in Ibadan Metropolis, Oyo state Nigeria.

Objectives of the Study

The general objective of this study was to determine the predictors of depression among adolescents with disabilities in Ibadan metropolis, Oyo State, Nigeria. Specific purposes included:

1. to investigate quality of life as a predictor of depression among adolescents with disabilities in Ibadan metropolis, Oyo state, Nigeria

2 to investigate disability-related pain as a predictor of depression among adolescents with disabilities in Ibadan metropolis, Oyo state, Nigeria

Hypotheses

1. There is no significant relationship between the quality of life and prevalence of depression among adolescents with disabilities in Ibadan metropolis, Oyo state Nigeria.
2. There is no significant relationship between quality of life and prevalence of depression among adolescents with disabilities in Ibadan Metropolis, Oyo state, Nigeria

METHODOLOGY

The descriptive methodology of the survey-type study was adopted to collect data through participants' responses to the questionnaire. All adolescents with disabilities in Ibadan metropolis comprised the population for the study. A purposive random sampling method employed the convenience technique to select 100 participants for a survey conducted across three schools catering to individuals with disabilities in Ibadan. The selected schools were the Rehabilitation Centre for the Disabled in Moniya, Ibadan, Chesire Home located in Eleyele on Poly Road, Ibadan, and Methodist Grammar School in Oju-orin, Bodija, Ibadan

The name of the research instrument used was the Quality of Life, Disability-related Pain, and Depression Questionnaire (QUDREPAQ), and a pilot test was conducted to assess its reliability and validity before its final administration. The instrument demonstrated high reliability, with a coefficient of 0.93, indicating consistency in measurement. Additionally, the validity coefficient, established at 0.78 by experts in the field of test and measurement, signifies the questionnaire's accuracy in assessing the intended constructs.

Data collection was conducted after consent was obtained, in a face-to-face presentation of the questionnaire. The data on the low quality of life and disability-related pain being predictors of depression among persons with disabilities were surveyed through the questionnaire items with 10 items each for the two predictors. The items were rated on a 4-Likert scale ranging from agree to strongly Disagree. The investigators checked the completeness of the questionnaire and confirmed with the participants in time to reduce the unqualified rate of the questionnaire.

Data collation, coding, and entry and analysis were conducted using SPSS. The Spearman's rank correlation analysis in SPSS was used to arrive at results of the relationship between quality of life disability-related pain, and depression among adolescents with disabilities.

Results and Discussion of Findings

Hypotheses

The following hypotheses were formulated and tested at a 0.05 level of significance:

1. There is no significant linear relationship between low quality of life, and depression among adolescents with disabilities in Ibadan metropolis, Oyo state, Nigeria.

2. There is no significant linear relationship between disability-related pain and depression among adolescents with disabilities in Ibadan metropolis, Oyo state, Nigeria

Spearman's rho correlation coefficient shows the relationship between quality of life, disability-related pain and depression among adolescents with disabilities in Ibadan metropolis, Oyo state, Nigeria

	Depression	Quality of Life	Disability-related pain
Depression	1.000	.023	.024
Quality of Life	.023	1.000	.024
Disability-related pain	.024	-.028	1.000
N	100		
Depression	.	.302	.294
Quality of life	.302	.	.264
Disability-related pain	.294	.264	.
N	100		

Discussion of Findings

The table above reveals the relationships between depression, quality of life, and disability-related pain. The correlation coefficient between depression and quality of life is minimal at 0.023, indicating a weak positive correlation. This indicates that adolescents with higher depression scores are likely to report a lower quality of life. Similarly, the correlation coefficient between depression and disability-related pain is also 0.023, reflecting another weak positive correlation. In both cases, the p-values associated with these correlations are 0.302 and 0.294, respectively. As both p-values surpass the conventional significance level of 0.05, the null hypotheses cannot be rejected. Consequently, there is no substantial linear relationship between depression and either quality of life or disability-related pain among this adolescent population. These results imply that the data do not provide strong evidence to support the hypotheses proposing significant relationships between depression and either quality of life or disability-related pain in adolescents with disabilities in Ibadan metropolis, Oyo state Nigeria. This finding is opposed to that Bi et. al. (2020) who reported that people with disabilities were particularly vulnerable to depression. It also opposes the findings of Amoran, Lawoyin, & Lasebikan, (2007) who reported a worrisome and escalating prevalence of depression ranging from 11.3% to 21% according to studies in Oyo State.

Conclusion

In conclusion, the findings of this study on the predictors of depression among adolescents with disabilities in Ibadan metropolis, Oyo State, Nigeria, revealed a weak positive correlation between depression and both quality of life and disability-related pain. The Spearman's rho correlation coefficients for depression and quality of life, as well as depression and disability-related pain, were minimal at 0.023, indicating a lack of substantial linear relationships. The associated p-values for both correlations exceeded the conventional significance level of 0.05, leading to the retention of the null hypotheses. These results suggest that among adolescents with disabilities in the specified population, factors beyond quality of life and disability-related pain may play a more significant role in influencing depression levels.

While the study contributes to the existing body knowledge, it is essential to interpret the findings considering a multifaceted approach. The weak correlations imply that the examined predictors alone may not fully explain the complexity of depression in adolescents with disabilities in Ibadan metropolis, Oyo state Nigeria. For an in-depth understanding, future research endeavours should consider exploring additional factors that may contribute to depressive

symptoms in this specific demographic since it is relatively scarce. Moreover, a more comprehensive understanding of the interplay between various determinants of mental health is crucial for developing effective interventions and support systems tailored to the unique needs of adolescents with disabilities in the Ibadan metropolis and similar contexts. As mental health remains a critical concern, especially among vulnerable populations, ongoing research efforts should strive to enhance the overall well-being and quality of life for adolescents with disabilities in Nigeria.

Recommendations

1. There is an urgent need to develop and implement inclusive mental health support programmes that will address the specific needs of adolescents with disabilities in Ibadan metropolis, Oyo State, Nigeria. These programmes should capture interventions addressing not only depression but also the broader factors influencing mental health, including quality of life and disability-related pain.
2. There is a need to implement inclusive mental health education initiatives targeting all categories of adolescents (those with and those without disabilities), educators, and parents in schools and communities. This should emphasise increasing awareness and understanding of mental health issues, particularly depression. This will enhance mental health literacy, programmes that can contribute to early identification, destigmatisation, and effective management of mental health challenges.

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