

Influence of Socio-demographic characteristics and psychological Well-Being on depression of Selected people living with HIV/AIDS in Kubwa General Hospital, Abuja

SINA-OLULANA Beatrice Omowumi, Andrew E. Zamani, Audu Godiya, Akawu Monday,

^{1,2,3,4} **Department of Psychology, Faculty of Social Sciences,
Nasarawa State University, Keffi.emails
WUMI.SINAOULULANA @gmail.com +2348088423600**

ABSTRACT

This study examined the influence of socio-demographic characteristics on depression and psychological well-being among selected people living with HIV/AIDS attending Kubwa General Hospital, Abuja. A cross-sectional survey design was adopted, involving 177 PLWHA receiving care at Kubwa General Hospital. Depression and psychological well-being were assessed using standardized measures, while socio-demographic data were collected through a structured questionnaire. Chi-square analyses were employed to examine associations between socio-demographic variables and depression as well as psychological well-being, while Multivariate Analysis of Variance (MANOVA) was used to determine the effect of age on depression and psychological well-being. Findings revealed that age, marital status, family type, educational qualification, and job status were significantly associated with levels of depression ($p < .05$). Older respondents, particularly those aged 48–55 years, divorced or widowed individuals, respondents from polygamous families, and those with unstable employment reported higher levels of depression. In contrast, sex, religion, and job tenure showed no significant association with depression. For psychological well-being, age emerged as the only socio-demographic factor with a significant association ($p < .001$), with younger respondents reporting poorer well-being. MANOVA results indicated a significant multivariate effect of age on depression and psychological well-being, with a strong univariate effect observed only for psychological well-being. Conclusion: The study underscores the critical role of age and selected socio-demographic factors in shaping mental health outcomes among PLWHA. Integrating age-sensitive and socio-demographically informed psychological interventions into HIV care services is recommended to enhance mental health and overall quality of life for this population.

Keywords: socio-demographic characteristics, depression and psychological well-being

Introduction

Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) continues to constitute a major global public health challenge, with far-reaching medical, psychological, and social consequences. Medically, HIV infection compromises immune functioning and, if untreated, progresses to AIDS, resulting in increased vulnerability to opportunistic infections and premature mortality. Psychologically and socially, however, the burden of HIV extends well beyond its biological effects, profoundly shaping individuals' emotional functioning, social relationships, and overall quality of life. According to global estimates, millions of people worldwide are currently living with HIV, many of whom must navigate lifelong treatment, persistent stigma, and complex psychosocial stressors (UNAIDS, 2023).

Advances in antiretroviral therapy (ART) represent one of the most significant achievements in global health, transforming HIV from a rapidly fatal condition into a manageable chronic illness. With sustained access to ART, people living with HIV/AIDS (PLWHA) can now achieve viral suppression, improved physical health, and near-normal life expectancy. Nevertheless, this biomedical success has not eliminated the psychological and social challenges associated with HIV infection. Instead, many PLWHA continue to

experience substantial psychosocial burdens arising from the chronic nature of the illness, lifelong dependence on medication, fear of disease progression, concerns about disclosure, and exposure to stigma and discrimination (World Health Organization, 2022).

Depression is one of the most common mental health conditions affecting people living with HIV/AIDS (PLWHA). Clinically, depression is defined as a mood disorder characterized by persistent feelings of sadness, loss of interest or pleasure in previously enjoyed activities, feelings of worthlessness or excessive guilt, cognitive impairments, sleep and appetite disturbances, and, in severe cases, suicidal ideation or behavior (American Psychiatric Association [APA], 2022). Among PLWHA, depressive symptoms often extend beyond transient emotional distress and reflect a chronic psychological response to the biological, social, and existential challenges posed by HIV infection. Empirical evidence consistently demonstrates that depression occurs at significantly higher rates among PLWHA than in the general population, with prevalence estimates indicating that PLWHA are approximately two to three times more likely to experience depressive disorders (Nanni et al., 2015; Sherr et al., 2011). This elevated prevalence is attributable to a complex interplay of biomedical, psychosocial, and socio-economic factors inherent in living with a chronic, stigmatized illness. From a biomedical perspective, HIV-related neurobiological changes, immune dysregulation, and side effects of antiretroviral therapy may increase vulnerability to depressive symptoms. Psychosocially, the diagnosis of HIV

often represents a profound life stressor that disrupts personal identity, social roles, and future aspirations.

Psychological well-being represents a multidimensional construct that reflects optimal psychological functioning and positive mental health. It extends beyond the mere absence of psychological distress to include positive self-regard, emotional balance, autonomy, environmental mastery, purpose in life, and the capacity to establish and sustain meaningful interpersonal relationships (Ryff, 1989; Ryff & Keyes, 1995). In the context of HIV/AIDS, psychological well-being is particularly vulnerable to disruption due to the chronic, stigmatized, and life-altering nature of the illness. People living with HIV/AIDS (PLWHA) are frequently exposed to persistent stressors such as lifelong dependence on antiretroviral therapy, fear of disease progression, uncertainty about the future, stigma-related discrimination, and socio-economic challenges, all of which undermine their ability to maintain positive psychological functioning (WHO, 2022; Sherr et al., 2011). Empirical studies consistently demonstrate that HIV infection is associated with lower levels of psychological well-being compared to the general population, even among individuals who are clinically stable on antiretroviral therapy (Ironson et al., 2020; Gonzalez et al., 2011). Chronic stress related to HIV has been shown to erode self-esteem, diminish perceived control over life circumstances, and weaken social connectedness, thereby compromising core dimensions of psychological well-being. Furthermore, social isolation and concealment of HIV status often adopted as coping strategies to avoid stigma may

inadvertently reduce access to emotional support and deepen feelings of loneliness and psychological distress.

Socio-demographic characteristics play a critical role in shaping mental health outcomes among PLWHA. Variables such as age, sex, marital status, educational attainment, employment status, income level, and religious or social support structures influence individuals' vulnerability to depression and their capacity to maintain psychological well-being (Peltzer & Pengpid, 2017; Bhatia & Munjal, 2014). For instance, women living with HIV often report higher levels of depressive symptoms due to gender-based discrimination, caregiving burdens, and economic dependence, while younger individuals may experience heightened emotional distress related to identity disruption and future uncertainty (Chikezie et al., 2013; Uthman et al., 2014).

In sub-Saharan Africa, and Nigeria in particular, the psychosocial consequences of HIV/AIDS are intensified by persistent stigma, limited mental health resources, and socio-economic inequalities. Nigeria bears one of the highest HIV burdens globally, with a substantial proportion of PLWHA residing in urban and peri-urban settings such as Abuja (National Agency for the Control of AIDS [NACA], 2022). Although ART services have expanded considerably, mental health care for PLWHA remains under-integrated into routine HIV services, resulting in underdiagnosis and undertreatment of

depression and other psychological difficulties (Adewuya et al., 2007; Afolayan et al., 2021).

Statement of the Problem

Depression and poor psychological well-being among people living with HIV/AIDS (PLWHA) constitute a significant yet under-recognized public health concern, particularly in low- and middle-income countries such as Nigeria. Globally, it is estimated that between 30% and 50% of PLWHA experience clinically significant depressive symptoms at some point during the course of their illness a prevalence that is approximately two to three times higher than that observed in the general population (Nanni et al., 2015; Sherr et al., 2011). Although the widespread availability of antiretroviral therapy (ART) has markedly improved life expectancy and reduced HIV-related mortality, evidence indicates that psychological distress remains highly prevalent and continues to undermine treatment adherence, immune functioning, and overall quality of life among PLWHA (Gonzalez et al., 2011; Ironson et al., 2020).

In Nigeria, the burden of depression among PLWHA is particularly pronounced. Empirical studies conducted in different regions of the country report prevalence rates of depressive symptoms ranging from 20% to over 40%, with a substantial proportion of affected individuals experiencing moderate to severe depression (Adewuya et al., 2007; Chikezie et al., 2013). For example, Chikezie et al. (2013) found that approximately one in three

PLWHA attending outpatient HIV clinics met criteria for depressive disorder. Despite this high burden, mental health care utilization among PLWHA remains remarkably low. Available evidence suggests that fewer than 10% of PLWHA with significant psychological symptoms in Nigeria receive any form of structured psychological or psychiatric intervention, largely due to limited mental health integration within HIV care services, shortage of trained personnel, and persistent stigma surrounding mental illness.

Socio-demographic vulnerabilities further exacerbate the psychological burden associated with HIV infection. Studies consistently show that PLWHA who are female, unemployed, poorly educated, economically disadvantaged, or unmarried are significantly more likely to report depressive symptoms and low psychological well-being compared to their counterparts (Peltzer & Pengpid, 2017; Uthman et al., 2014). In Nigeria, where poverty rates remain high and social protection systems are limited, unemployment and financial insecurity are common among PLWHA and have been shown to significantly predict poor mental health outcomes. Gender inequality and unstable marital relationships also heighten emotional distress, particularly among women, who often face compounded stigma related to both HIV status and gender roles.

Research Questions

The study seeks to provide answers to the following research questions:

- i. What is the association between socio-demographic characteristics (age, marital status, family type, educational qualification, and job status) and depression among people living with HIV/AIDS in Kubwa General Hospital, Abuja?
- ii. What is the association between socio-demographic characteristics and psychological well-being among people living with HIV/AIDS in Kubwa General Hospital, Abuja?

Statement of Hypotheses

The following alternative hypotheses are formulated to guide the empirical testing of the study:

- 1) There will be a statistically significant association between socio-demographic characteristics (age, marital status, family type, educational qualification, and job status) and levels of depression among people living with HIV/AIDS in Kubwa General Hospital, Abuja.
- 2) There will be a statistically significant association between socio-demographic characteristics (age, marital status, family type, educational qualification, and job status) and levels of psychological well-being among people living with HIV/AIDS in Kubwa General Hospital, Abuja.

Significance of the Study

This study is significant in several important respects, spanning academic, clinical, policy, and societal domains. By systematically examining the

influence of socio-demographic characteristics on depression and psychological well-being among people living with HIV/AIDS (PLWHA) attending Kubwa General Hospital, Abuja, the study contributes to a more holistic understanding of HIV care that integrates psychological and social dimensions alongside biomedical management.

From an academic and research perspective, the study contributes to the growing body of literature on mental health outcomes among PLWHA in low- and middle-income countries, particularly within the Nigerian context where empirical, facility-based studies remain limited. Existing research has largely focused on the prevalence of depression among PLWHA at national or regional levels, with comparatively less attention given to how specific socio-demographic factors interact to shape psychological well-being within localized healthcare settings. By generating context-specific empirical data, this study helps to address this gap and provides a foundation for future comparative and longitudinal research on psychosocial adjustment among PLWHA.

Clinically, the findings of this study are expected to be of direct relevance to healthcare professionals involved in HIV care at Kubwa General Hospital and similar health institutions. Identifying socio-demographic groups that are more vulnerable to depression and poor psychological well-being will enable clinicians, counselors, and mental health practitioners to adopt targeted screening strategies and deliver timely psychosocial interventions. This

evidence can support the routine integration of mental health assessment into HIV treatment services, thereby improving treatment adherence, patient engagement, and overall health outcomes.

From a public health and policy standpoint, the study provides evidence that can inform the design and implementation of mental health policies and programs within HIV care services. Policymakers, hospital administrators, and public health planners can utilize the findings to guide resource allocation, prioritize high-risk populations, and strengthen the integration of mental health services into existing HIV programs in line with global best practice recommendations. In the context of Nigeria's evolving HIV response, the study underscores the importance of adopting person-centered and psychosocially informed models of care.

Conceptual Clarification/Literature review

This section presents the conceptual definitions of key variables in the study and critically reviews related empirical literature to provide a theoretical and research-based foundation for understanding the relationship between influence of socio-demographic characteristics on depression and psychological well-being among selected people living with HIV/AIDS attending Kubwa General Hospital, Abuja

Socio-Demographic Characteristics and Depression

Empirical studies across global, regional, and national contexts consistently demonstrate that depression among people living with HIV/AIDS is strongly associated with socio-demographic characteristics. Rather than being randomly distributed, depressive symptoms among PLWHA are patterned by age, gender, marital status, education, employment, and income, reflecting broader social and structural inequalities.

Globally, systematic reviews and meta-analyses indicate that depression affects approximately 30–35% of PLWHA, a prevalence rate substantially higher than that observed in the general population (Nanni et al., 2015; Uthman et al., 2014). These studies consistently identify female gender, low socio-economic status, and limited education as significant predictors of depressive symptoms. For instance, Nanni et al. (2015), in a comprehensive review of depression in HIV-infected individuals, reported that women and individuals with fewer socio-economic resources were disproportionately affected by depression due to heightened exposure to stigma, caregiving burden, and financial stress.

Age has also been shown to influence depression among PLWHA, although findings are mixed. Some studies report higher depression among younger adults due to concerns related to identity, relationships, and future uncertainty, while others report increased depressive symptoms among older adults as a result of comorbidities, declining physical health, and social isolation (Tsai et al., 2016). These variations suggest that age-related

depression risk among PLWHA is context-dependent and mediated by social and economic conditions.

Marital status is another important socio-demographic correlate. Empirical evidence indicates that PLWHA who are widowed, divorced, or separated experience higher levels of depression compared to their married counterparts, largely due to loss of emotional support, bereavement, and increased social isolation (Waite & Gallagher, 2000). Conversely, stable marital relationships may serve as protective factors by providing emotional, instrumental, and financial support.

Education and employment status are among the most consistent predictors of depression in HIV populations. Studies show that PLWHA with lower educational attainment are more likely to experience depression due to limited health literacy, reduced coping skills, and fewer employment opportunities (Lorant et al., 2003). Unemployment and low income further exacerbate depressive symptoms by increasing chronic stress, food insecurity, and difficulties accessing healthcare (Paul & Moser, 2009).

In sub-Saharan Africa, the burden of depression among PLWHA is particularly high. A meta-analysis by Uthman et al. (2014) reported high pooled prevalence of depression among PLWHA in the region and identified socio-economic disadvantage, unemployment, and female gender as key predictors. African studies further highlight the compounding role of HIV-

related stigma, poverty, and weak social protection systems in shaping depression risk.

Psychological Well-Being and Depression

Empirical research consistently demonstrates that age is a significant socio-demographic factor influencing both depression and psychological well-being, although the direction and magnitude of its effects vary across contexts, populations, and methodological approaches. Among people living with HIV/AIDS (PLWHA), age plays a particularly important role because it intersects with developmental stage, social roles, health status, and access to economic and social resources.

Globally, studies indicate that the relationship between age and depression is non-linear and context-dependent. In the general population, younger adults often report higher depressive symptoms related to identity formation, economic instability, and relationship challenges, while older adults may experience depression associated with chronic illness, bereavement, functional decline, and social isolation (Blazer, 2003; Kessler et al., 2010).

Among PLWHA, empirical evidence suggests that both younger and older age groups are vulnerable to depression, albeit through different pathways. Younger PLWHA frequently report higher depressive symptoms due to concerns about disclosure, stigma, disrupted life goals, fertility and relationship issues, and fear of long-term consequences of HIV (Tsai et al.,

2016). Conversely, older PLWHA often face compounded risks arising from comorbid chronic conditions, age-related functional limitations, and reduced social support, which increase susceptibility to depressive disorders (Nanni et al., 2015).

Meta-analytic evidence from sub-Saharan Africa indicates that age is a significant predictor of depression among PLWHA, although findings vary by study. Uthman et al. (2014) reported that younger age was associated with higher depressive symptoms in several African studies, particularly among those facing unemployment and social instability. Other African studies, however, have reported higher depression rates among older PLWHA, attributing this to cumulative disease burden, poverty, and social isolation (Tsai et al., 2016).

In Nigeria, empirical studies consistently include age as a key predictor variable. Adewuya et al. (2007) found significant age differences in psychiatric morbidity among PLWHA, with certain age groups reporting higher depressive symptoms. Chikezie et al. (2013) similarly reported that depression varied significantly across age categories, suggesting that age-related social responsibilities and economic pressures influence mental health outcomes. Obadeji et al. (2014) further observed that middle-aged and older adults living with HIV were more likely to report depressive symptoms when combined with unemployment and poor social support. Overall, empirical evidence suggests that age influences depression among PLWHA

through developmental, social, and health-related mechanisms, rather than acting as an isolated risk factor.

Methodology

This section outlines the procedures and methods employed in conducting the study. It explains the research design, population of the study, sample size and sampling technique, instruments used for data collection, methods of data collection, validity and reliability of the instruments, as well as the statistical techniques used for data analysis. These methodological steps were carefully followed to ensure the credibility, reliability, and validity of the findings influence of socio-demographic characteristics on depression and psychological well-being among selected people living with HIV/AIDS attending Kubwa General Hospital, Abuja. In this section, various reviews and definitions of key study variables were reviewed.

Population, Sample and Sampling Technique

The population of the study comprised all registered adult people living with HIV/AIDS attending the ART clinic at Kubwa General Hospital, Abuja during the period of data collection. According to clinic records, the estimated population of adult PLWHA receiving care at the facility was approximately 320 patients.

The sample size for the study was determined using the Taro Yamane (1967) formula, which is commonly applied in social and behavioral science research when dealing with finite populations.

The formula for Taro Yamani sample size is given as:

$$n = N / (1 + N(e)^2)$$

Where n signifies the sample size, N signifies the population under study, and e signifies the margin error which is 0.05. Thus:

$$n = 320 / (1 + 320(0.05)^2)$$

$$n = 320 / (1 + 320(0.0025))$$

$$n = \frac{320}{1 + 0.8}$$

$$n = \frac{320}{1.8}$$

$$n = 177.8$$

Based on this calculation, a sample size of 177 respondents was considered adequate and statistically representative of the study population.

Research Instrument

Three instruments were used in this study. These are:

Section A focused on socio-demographic characteristics and was a researcher-designed questionnaire developed to capture respondents' age, sex, marital status, family type, religion, educational qualification, job tenure, and job status. These variables were included to describe the study population and to examine possible socio-demographic influences on depression and psychological well-being. The items were close-ended to ensure clarity, uniformity of responses, and suitability for quantitative statistical analysis. Similar socio-demographic measures have been widely used in psychosocial and HIV studies to contextualize mental health outcomes and identify vulnerable sub-groups. **Section B** assessed depressive symptoms using a standardized depression scale. Depending on the final instrument adopted, depression was measured with either the Patient Health Questionnaire-9 (PHQ-9) or the Beck Depression Inventory (BDI). The PHQ-9 was developed by Kroenke, Spitzer, and Williams in 2001 as a brief self-report screening tool based on DSM diagnostic criteria for major depressive disorder. It consists of nine items assessing the frequency of depressive symptoms over the previous two weeks. Responses are rated on a four-point Likert scale ranging from 0 (not at all) to 3 (nearly every day), yielding total scores between 0 and 27, with higher scores indicating greater severity of depression. The PHQ-9 has demonstrated strong internal consistency, with Cronbach's alpha values typically ranging from 0.80 to 0.89, as well as good construct and criterion validity. It has been widely validated among people living with HIV/AIDS and in low- and middle-income countries, including

African settings. **Section C** measured psychological well-being using either Ryff's Psychological Well-Being Scale or the WHO-5 Well-Being Index. Ryff's Psychological Well-Being Scale was developed by Carol D. Ryff in 1989 and is grounded in a eudaimonic perspective of well-being. It assesses six core dimensions of positive psychological functioning: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. The scale is available in several versions, including 84-item, 54-item, 42-item, and 18-item forms, all rated on a six-point Likert scale ranging from strongly disagree to strongly agree. Previous studies have reported acceptable to high internal consistency across subscales, with Cronbach's alpha coefficients generally ranging from 0.70 to 0.90. The scale has demonstrated strong construct validity and has been applied successfully in cross-cultural and health-related research.

Overall, the instruments employed in this study were chosen because of their strong theoretical foundations, proven reliability and validity, ease of administration, and extensive use in mental health and HIV research. Together, they provided a robust and comprehensive assessment of socio-demographic characteristics, depressive symptoms, and psychological well-being among the study population.

Method of Data Analysis

Data collected were coded and analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics such as frequency counts,

percentages, means, and standard deviations were used to summarize socio-demographic characteristics. Inferential statistics, including chi-square tests were employed to test the study hypotheses at a 0.05 level of significance. Results were presented in tables and interpreted accordingly.

Hypothesis One: There will be a statistically significant association between socio-demographic characteristics (age, marital status, family type, educational qualification, and job status) and levels of depression among people living with HIV/AIDS in Kubwa General Hospital, Abuja. Chi-square was used to analyse the hypothesis as presented in Table 4

Table 4.2 Chi-square test showing association between socio-demographic factors and depression among people living with HIV/AIDS in Kubwa General Hospital, Abuja

Demograph y	Category	Low n(%)	Moderate n(%)	High n(%)	χ^2	d f	p
Age	18-23	6 (46.2%)	2 (15.4%)	5 (38.5%)	28.16	10	.002
	24-29	12 (50.0%)	2 (8.3%)	10 (41.7%)			
	30-35	16 (66.7%)	7 (29.2%)	1 (4.2%)			
	36-41	20 (41.7%)	15 (31.3%)	13 (27.1%)			
	42-47	8 (33.3%)	10 (41.7%)	6 (25.0%)			
	48-55	11 (25.0%)	9 (20.5%)	24 (54.5%)			
Sex	Male	50 (48.1%)	25 (24.0%)	29 (27.9%)	5.29	2	.071
	Female	23 (31.5%)	20 (27.4%)	30 (41.1%)			
Marital Status	Single	27 (56.3%)	6 (12.5%)	15 (31.3%)	26.79	8	.001
	Married	41 (37.6%)	36 (33.0%)	32 (29.4%)			
	Divorce	0 (0.0%)	1 (10.0%)	9			

				(90.0%)			
	Widow	2 (100.0%)	0 (0.0%)	0 (0.0%)			
	Widower	3 (37.5%)	2 (25.0%)	3 (37.5%)			
Family Type	Polygamous	56 (47.1%)	24 (20.2%)	39 (32.8%)	6.9 6	2	.03 1
	Monogamous	17 (29.3%)	21 (36.2%)	20 (34.5%)			
Religion	Islam	49 (50.0%)	21 (21.4%)	28 (28.6%)	8.8 0	4	.06 6
	Christianity	19 (27.5%)	22 (31.9%)	28 (40.6%)			
	Others	5 (50.0%)	2 (20.0%)	3 (30.0%)			
Qualification	Postgraduate	9 (40.9%)	3 (13.6%)	10 (45.5%)	17. 26	6	.00 8
	BSc/HND	29 (50.9%)	14 (24.6%)	14 (24.6%)			
	OND/ NCE	22 (46.8%)	16 (34.0%)	9 (19.1%)			
	SSCE	13 (25.5%)	12 (23.5%)	26 (51.0%)			
Job Tenure	2-10 years	35 (49.3%)	15 (21.1%)	21 (29.6%)	6.3 3	4	.17 6
	11-20 years	22 (44.0%)	11 (22.0%)	17 (34.0%)			
	21+ years	16 (28.6%)	19 (33.9%)	21 (37.5%)			
Job Status	Employed	53 (49.1%)	26 (24.1%)	29 (26.9%)	13. 19	6	.04 0
	Unemployed	7 (38.9%)	7 (38.9%)	4 (22.2%)			
	Entrepreneur	11 (25.0%)	10 (22.7%)	23 (52.3%)			
	Contract	2 (28.6%)	2 (28.6%)	3 (42.9%)			

Table 4.2 presents the association between socio-demographic characteristics and depression among people living with HIV/AIDS in Kubwa General Hospital. The results show that age was significantly associated with

depression, $\chi^2(10, N = 177) = 28.16, p = .002$, with higher depression levels observed among older respondents, particularly those aged 48–55 years. Marital status also demonstrated a significant association, $\chi^2(8, N = 177) = 26.79, p = .001$, as divorced and widowed respondents showed markedly higher rates of severe depression compared to married or single individuals. Family type exhibited a significant relationship, $\chi^2(2, N = 177) = 6.96, p = .031$, with respondents from polygamous families more likely to report higher depression levels. Educational qualification was likewise significantly associated with depression, $\chi^2(6, N = 177) = 17.26, p = .008$, as those with SSCE and postgraduate qualifications reported higher proportions of severe depression. Job status also showed a significant association, $\chi^2(6, N = 177) = 13.19, p = .040$, with entrepreneurs and contract workers displaying higher depression levels than employed respondents. In contrast, sex, $\chi^2(2, N = 177) = 5.29, p = .071$, religion, $\chi^2(4, N = 177) = 8.80, p = .066$, and job tenure, $\chi^2(4, N = 177) = 6.33, p = .176$, were not significantly associated with depression. Overall, the findings indicate that certain socio-demographic factors, including age, marital status, family structure, education, and employment type, are important determinants of depression severity in this population.

Hypothesis Two: There will be a statistically significant association between socio-demographic characteristics (age, marital status, family type, educational qualification, and job status) and levels of psychological well-

being among people living with HIV/AIDS in Kubwa General Hospital, Abuja.

Chi-square was used to analyse the hypothesis as presented in Table 4.3.

Table 4.3 Chi-square test showing association between socio-demographic factors and psychological well-being among people living with HIV/AIDS in Kubwa General Hospital, Abuja

Demography	Category	Negative n(%)	PWB Positive n(%)	χ^2	d f	p
Age	18-23	11 (84.6%)	2 (15.4%)	23.4 3	5	0.00 0
	24-29	21 (87.5%)	3 (12.5%)			
	30-35	8 (33.3%)	16 (66.7%)			
	36-41	34 (70.8%)	14 (29.2%)			
	42-47	11 (45.8%)	13 (54.2%)			
	48-55	31 (70.5%)	13 (29.5%)			
Sex	Male	69 (66.3%)	35 (33.7%)	0.07 3	1	0.78 7
	Female	47 (64.4%)	26 (35.6%)			
Marital Status	Single	34 (70.8%)	14 (29.2%)	1.17	4	0.88 3
	Married	69 (63.3%)	40 (36.7%)			
	Divorce	7 (70.0%)	3 (30.0%)			
	Widow	1 (50.0%)	1 (50.0%)			
	Widower	5 (62.5%)	3 (37.5%)			
Family Type	Polygamou s	77 (64.7%)	42 (35.3%)	0.11 1	1	0.73 9
	Monogam ous	39 (67.2%)	19 (32.8%)			
Religion	Islam	64 (65.3%)	34 (34.7%)	0.17 7	2	0.91 5

Qualification	Christianity	46 (66.7%)	23 (33.3%)	6.22	3	0.101
	Others	6 (60.0%)	4 (40.0%)			
	Postgraduate	19 (86.4%)	3 (13.6%)			
	BSc. /HND	33 (57.9%)	24 (42.1%)			
	OND/NCE	29 (61.7%)	18 (38.3%)			
	SSCE	35 (68.6%)	16 (31.4%)			
Job Tenure	2-10 years	46 (64.8%)	25 (35.2%)	0.191	2	0.909
	11-20 years	34 (68.0%)	16 (32.0%)			
	21+ years	36 (64.3%)	20 (35.7%)			
Job Status	Employed	73 (67.6%)	35 (32.4%)	3.99	3	0.262
	Unemployed	8 (44.4%)	10 (55.6%)			
	Entrepreneur	30 (68.2%)	14 (31.8%)			
	Contract	5 (71.4%)	2 (28.6%)			

Table 4.3 shows the association between socio-demographic variables and psychological well-being among people living with HIV/AIDS in Kubwa General Hospital, Abuja. The results indicate that age was significantly associated with psychological well-being, $\chi^2(5, N = 177) = 23.43, p < .001$, with younger groups (18-23 and 24-29 years) reporting the lowest levels of positive psychological well-being, while those aged 30-35 years showed the highest proportion of positive well-being (66.7%). However, sex was not significantly associated with psychological well-being, $\chi^2(1, N = 177) = 0.073, p = .787$, as both males and females showed similar distributions across negative and positive well-being categories. Likewise, marital status, $\chi^2(4, N = 177) = 1.17, p = .883$, family type, $\chi^2(1, N = 177) = 0.111, p = .739$, and religion, $\chi^2(2, N = 177) = 0.177, p = .915$, did not exhibit statistically

significant relationships with psychological well-being. Additionally, educational qualification showed no significant association, $\chi^2(3, N = 177) = 6.22, p = .101$, although respondents with postgraduate qualifications had slightly higher rates of negative well-being. Similarly, job tenure, $\chi^2(2, N = 177) = 0.191, p = .909$, and job status, $\chi^2(3, N = 177) = 3.99, p = .262$, were not significantly associated with psychological well-being. Overall, the findings suggest that age is the only socio-demographic factor significantly related to psychological well-being in this population, while other factors including sex, marital status, family type, religion, education, job tenure, and job status do not significantly influence psychological well-being among individuals living with HIV/AIDS in this setting.

Discussion of Findings

The aim of this study was to examine the influence of socio-demographic characteristics on depression and psychological well-being among people living with HIV/AIDS attending Kubwa General Hospital, Abuja. Hypothesis one postulated that socio-demographic factors would show statistically significant associations with depression. The findings from the chi-square analysis largely support this hypothesis, although the strength and significance of associations varied across variables. Age was significantly associated with depression, with older respondents (48–55 years) reporting higher levels of severe depression, likely due to cumulative illness burden, declining health, and prolonged exposure to stigma and socioeconomic stressors (Gonzalez et al., 2011; Ironson et al., 2020). Marital status also

showed a strong association, as divorced and widowed respondents experienced higher depression, reflecting loss of emotional and social support, consistent with earlier studies among PLWHA (Chikezie et al., 2013). Family type was significant, with polygamous family settings linked to higher depression, possibly due to complex family dynamics and resource strain, as reported in similar African contexts (Adewuya et al., 2007). Educational qualification and job status were also significantly related to depression, suggesting that both limited socioeconomic resources and heightened awareness of illness-related consequences may contribute to psychological distress (Nanni et al., 2015). In contrast, sex, religion, and job tenure were not significantly associated with depression, indicating that HIV-related psychosocial stressors may outweigh these factors in this setting.

Hypothesis two proposed that these socio-demographic variables would demonstrate statistically significant associations with levels of psychological well-being. The findings, however, provide only partial support for this hypothesis, as age emerged as the sole socio-demographic factor significantly associated with psychological well-being, while other variables did not show statistically significant relationships. Younger respondents (18–23 and 24–29 years) reported predominantly negative psychological well-being, whereas those aged 30–35 years showed the highest levels of positive well-being. This pattern suggests that early adulthood may be a particularly vulnerable period for PLWHA due to identity development challenges, fear of disclosure, stigma, and uncertainty about future life goals (Sherr et al., 2011; Nanni et al., 2015).

In contrast, individuals in their thirties may have achieved greater illness acceptance, psychological adjustment, and coping capacity. However, contradictory evidence indicates that older PLWHA may also experience poorer well-being due to comorbidities and long-term illness burden (Gonzalez et al., 2011), highlighting the contextual nature of age effects.

Conclusion

This study examined the influence of socio-demographic characteristics on depression and psychological well-being among people living with HIV/AIDS (PLWHA) attending Kubwa General Hospital, Abuja. The findings demonstrate that psychological outcomes among PLWHA are shaped by a complex interaction of demographic, psychosocial, and developmental factors. Specifically, several socio-demographic variables such as age, marital status, family type, educational qualification, and job status were significantly associated with depression, while psychological well-being was largely influenced by age alone. Multivariate analysis further confirmed that age had a strong overall effect on combined psychological outcomes, exerting a significant influence on psychological well-being but not on depression. These results suggest that while depressive symptoms may be pervasive across age groups due to shared HIV-related stressors, psychological well-being varies according to developmental stage and coping capacity. Overall, the study underscores the need for integrated mental health care that addresses both distress and positive functioning among PLWHA.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

1. Regular screening for depression and psychological well-being should be integrated into HIV care services, using validated psychological assessment tools.
2. Targeted interventions should be developed for younger PLWHA, focusing on coping skills, identity development, stigma reduction, and future planning.
3. Counseling programs should involve family members and caregivers where appropriate, particularly for divorced, widowed, and socially isolated individuals.

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