

Prevalence and Predictors of Socio-Psychological Stress among Nursing Students in Bayelsa State, Nigeria.

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Abstract- Nursing education is widely recognized as academically rigorous and emotionally demanding, exposing students to multiple socio-psychological stressors that may adversely affect their well-being and academic performance. This study examined the prevalence and predictors of socio-psychological stress among nursing students in Bayelsa State, Nigeria. A descriptive cross-sectional survey design was employed among 400 undergraduate nursing students selected from tertiary institutions in the state. Data were collected using standardized instruments, including the Perceived Stress Scale (PSS), alongside structured questionnaires assessing stressors and coping strategies. Data were analyzed using descriptive statistics and regression analysis. Findings revealed a high prevalence of socio-psychological stress, with the majority of students experiencing moderate to severe stress levels. Key predictors identified include academic workload, financial constraints, clinical exposure, and institutional inadequacies. Students adopted both adaptive coping strategies (e.g., social support, time management, and religious practices) and maladaptive strategies (e.g., avoidance and isolation). The study concludes that socio-psychological stress is pervasive among nursing students and is influenced by multiple interrelated factors. Targeted institutional interventions are essential to improve mental health outcomes and academic performance.

Index Terms- Nursing Students, Stress, Coping Mechanisms, Mental Health, Bayelsa State

I. INTRODUCTION

The mental health of students in higher education has become a significant global concern, particularly among those in health-related disciplines such as nursing. Nursing students are exposed to a unique combination of academic, clinical, and emotional

demands that predispose them to heightened levels of stress, anxiety, and psychological distress (Labrague et al., 2021; World Health Organization [WHO], 2022). These stressors often arise from rigorous academic workloads, high expectations for clinical competence, and exposure to human suffering within healthcare settings. Globally, evidence suggests that nursing students experience higher stress levels compared to students in other disciplines due to the dual demands of theoretical learning and clinical practice (Alzayyat & Al-Gamal, 2021). Clinical placements, in particular, introduce emotional challenges such as fear of making errors, dealing with critically ill patients, and adapting to professional roles (Gibbons et al., 2020). These experiences may result in psychological outcomes such as anxiety, depression, and burnout, ultimately affecting students' academic performance and professional development. In low- and middle-income countries such as Nigeria, these challenges are further exacerbated by systemic issues, including inadequate educational infrastructure, limited access to mental health services, and financial constraints (Olagunju et al., 2021). In Bayelsa State, nursing students face additional stressors such as overcrowded classrooms, insufficient clinical supervision, and unstable academic environments, which significantly impact their psychological well-being (Eze et al., 2023). Despite increasing recognition of student mental health challenges, there remains limited empirical research focusing specifically on nursing students in Bayelsa State. Most existing studies generalize across student populations without accounting for the unique experiences of nursing students. Therefore, this study aims to determine the prevalence and

predictors of socio-psychological stress among nursing students in Bayelsa State, Nigeria.

- Inferential statistics (multiple regression analysis) to identify predictors of stress

II. RESEARCH ELABORATIONS

Research Design

This study adopted a descriptive cross-sectional survey design, which is appropriate for assessing the prevalence of stress and identifying associated predictors at a specific point in time.

Study Area and Population

The study was conducted in selected tertiary institutions in Bayelsa State, Nigeria, including Niger Delta University and the Bayelsa State College of Nursing Sciences. The population comprised undergraduate nursing students across all academic levels.

Sample Size and Sampling Technique

A total of 400 nursing students participated in the study. A stratified random sampling technique was used to ensure proportional representation across levels of study.

Instruments for Data Collection

Data were collected using:

The Perceived Stress Scale (PSS) (Cohen et al., 1983) to assess stress levels

- A structured questionnaire adapted to measure:
- Socio-demographic characteristics
- Academic and clinical stressors
- Institutional factors
- Coping mechanisms

The use of standardized tools enhances the validity and reliability of the findings.

Validity and Reliability

Content validity was established through expert review in mental health nursing. Reliability testing using Cronbach's alpha yielded acceptable coefficients (>0.70), indicating internal consistency.

Method of Data Analysis

Data were analyzed using:

- Descriptive statistics (frequencies, percentages, mean scores) to determine stress prevalence

Theoretical Framework

This study is anchored on the Transactional Model of Stress and Coping by Lazarus and Folkman (1984), which posits that stress arises from an individual's appraisal of environmental demands and their perceived ability to cope. Additionally, Erikson's Psychosocial Development Theory provides insight into developmental challenges faced by young adults in academic settings.

III. RESULTS OR FINDINGS

Socio-Demographic Characteristics of Respondents

Table 1: Socio-Demographic Characteristics of Nursing Students (n = 400)

Variable	Category	Frequency (n)	Percentage (%)
Age	16–20 years	120	30.0
	21–25 years	210	52.5
	26–30 years	55	13.8
	Above 30 years	15	3.7
Gender	Male	110	27.5
	Female	290	72.5
Level of Study	100 Level	90	22.5
	200 Level	100	25.0
	300 Level	95	23.8
	400 Level	115	28.7
Institution	NDU	230	57.5
	College of Nursing	170	42.5

Prevalence Of Socio-Psychological Stress

Table 2: Levels of Perceived Stress Among Nursing Students

Stress Level	Frequency (n)	Percentage (%)
Low Stress	60	15.0
Moderate Stress	210	52.5
High Stress	130	32.5
Total	400	100

The majority of students (85%) experienced moderate to high stress, indicating a high prevalence of socio-psychological stress among nursing students.

Major Stressors Experienced by Students

Table 3: Identified Socio-Psychological Stressors

Stressor	Yes (n)	Percentage (%)
Academic workload	320	80.0
Financial difficulties	290	72.5
Clinical exposure anxiety	275	68.8
Fear of failure	260	65.0
Poor learning environment	245	61.3
Inadequate social support	200	50.0
Lecturer attitude	210	52.5

Academic workload emerged as the most significant stressor, followed by financial constraints and clinical exposure.

Coping Mechanisms Adopted by Students

Table 4: Coping Strategies Used by Nursing Students

Coping Strategy	Frequency (n)	Percentage (%)
Prayer/Spiritual practices	310	77.5
Social support	280	70.0
Time management	250	62.5
Recreational activities	220	55.0
Exercise	180	45.0
Isolation	150	37.5
Avoidance	140	35.0

Most students adopted adaptive coping strategies, particularly spiritual practices and social support. However, a significant proportion still engaged in maladaptive coping (isolation and avoidance).

Regression Analysis of Predictors of Stress

Table 5: Multiple Regression Analysis of Predictors of Stress

Predictor Variable	Beta (β)	Std. Error	t-value	p-value
Academic workload	0.42	0.05	8.40	<0.001
Financial constraints	0.35	0.06	5.83	<0.001
Clinical exposure	0.28	0.07	4.00	<0.001
Institutional factors	0.25	0.06	4.17	<0.001
Social support (negative)	-0.20	0.05	-4.00	<0.001

Model Summary

- R² = 0.62
- F = 45.8
- p < 0.001

The model explains 62% of the variance in stress levels. Academic workload is the strongest predictor, while social support significantly reduces stress.

IV. SUMMARY OF FINDINGS

The findings of this study revealed a high prevalence of socio-psychological stress among nursing students in Bayelsa State, with approximately 85% of respondents experiencing moderate to high stress levels. This outcome is consistent with global and regional studies which indicate that nursing students are particularly vulnerable to psychological distress due to the dual demands of academic rigor and clinical exposure (Labrague et al., 2021; Rayan et al., 2022). The high prevalence observed in this study further underscores the argument that nursing education constitutes a high-risk environment for stress-related outcomes, especially in resource-constrained settings such as Nigeria. A major finding of this study is that academic workload emerged as the strongest predictor of stress among nursing students. This aligns with existing literature, which

consistently identifies heavy coursework, frequent examinations, and tight academic schedules as primary sources of stress in nursing education (Alzayyat & Al-Gamal, 2021). The demanding curriculum requires students to assimilate large volumes of theoretical knowledge while simultaneously preparing for clinical responsibilities. In the context of Bayelsa State, where institutional resources may be limited, the burden of academic workload is likely intensified, thereby exacerbating stress levels.

In addition to academic demands, financial constraints were identified as a significant predictor of stress, highlighting the socio-economic challenges faced by students. This finding corroborates previous studies conducted in low- and middle-income countries, where financial hardship has been shown to negatively impact students' psychological well-being and academic performance (Olagunju et al., 2021). The inability to meet tuition fees, accommodation costs, and other living expenses may create chronic stress, which interferes with concentration, motivation, and overall academic engagement. Furthermore, clinical exposure was found to significantly contribute to stress levels, reflecting the emotionally demanding nature of nursing training. Students reported anxiety related to clinical postings, fear of making medical errors, and emotional distress associated with patient care. This is consistent with findings by Gibbons et al. (2020), who noted that clinical environments often expose students to unfamiliar and high-pressure situations, thereby increasing psychological strain. The transition from classroom learning to real-life patient care can be overwhelming, particularly when adequate supervision and support are lacking. Institutional factors, including inadequate learning facilities, poor infrastructure, and limited access to counseling services, also emerged as significant predictors of stress. This finding supports earlier research indicating that environmental and systemic deficiencies within educational institutions contribute substantially to student stress (Eze et al., 2023). In Bayelsa State, infrastructural challenges such as overcrowded classrooms, insufficient learning materials, and unstable electricity supply may further compromise students' learning experiences and psychological well-being. An important protective

factor identified in this study is social support, which demonstrated a significant negative relationship with stress levels. Students who reported strong support systems from peers, family, and mentors experienced lower levels of stress. This finding is in line with the work of Labrague (2021), who emphasized the buffering role of social support in mitigating stress and enhancing resilience among nursing students. Social connectedness provides emotional reassurance, practical assistance, and a sense of belonging, all of which are critical for coping with academic and clinical challenges. Regarding coping mechanisms, the study revealed that students employed both adaptive and maladaptive strategies. Adaptive coping strategies such as prayer, social support, and time management were more prevalent and were associated with better psychological outcomes. The prominence of spiritual coping reflects the cultural context of Nigeria, where religious practices play a central role in managing stress (Eze et al., 2023). However, the presence of maladaptive coping strategies, including avoidance and isolation, is concerning, as these behaviors have been linked to increased psychological distress and poor academic outcomes (Lee & Jung, 2022). This suggests that while students attempt to manage stress, not all coping strategies employed are effective or beneficial in the long term. Overall, the findings highlight the multifactorial nature of socio-psychological stress among nursing students, where academic, financial, clinical, and institutional factors interact to influence stress levels. The interplay of these factors suggests that interventions aimed at reducing stress must adopt a holistic approach, addressing not only individual coping skills but also systemic and environmental challenges within educational institutions.

V. IMPLICATIONS OF FINDINGS

The high prevalence of stress and the identified predictors suggest that nursing students operate within a high-risk environment for psychological distress. Without adequate intervention, these stressors may lead to burnout, poor academic performance, and attrition from nursing programs.

VI. CONCLUSION

This study demonstrates that socio-psychological stress is highly prevalent among nursing students in Bayelsa State and is influenced by academic, financial, clinical, and institutional factors. The findings underscore the need for comprehensive institutional interventions to support students' mental health and enhance their academic performance.

Addressing these stressors is critical not only for student well-being but also for the development of a competent and resilient nursing workforce. Institutions must prioritize mental health support systems, improve learning environments, and promote adaptive coping strategies among students.

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