PREVALENCE OF SUICIDAL IDEATION, SUICIDE ATTEMPTS AND IT RISK FACTORS AMONG UNDERGRADUATE STUDENTS OF PUBLIC UNIVERSITIES IN LAGOS

# ABSTRACT

Background

Suicide refers to the intentional act of taking one’s own life, while suicidal behavior includes a range of thoughts and actions related to self-harm and suicide. This spectrum encompasses suicidal ideation, which varies from general thoughts about death to specific plans for self-harm, as well as behaviors such as planning, attempting, or completing suicide. Beyond personal tragedy, suicide has significant psychological and emotional impacts on family and friends and contributes to economic productivity loss. With variable prevalence rates and a wide range of possible connections, suicidal ideation and attempts suggest a serious mental health issue. This study aimed to assess the prevalence and risk of suicidal ideation and suicide attempts among undergraduate students in public universities in Lagos State.

Methods

A descriptive cross-sectional study with analytical elements was conducted among undergraduate students in public universities in Lagos. Data were collected using a self-administered questionnaire and analyzed using the Statistical Package for Social Sciences (SPSS). The Beck Suicide Ideation Scale was used to assess suicide risk. Chi-square tests were used to examine associations between categorical variables, with statistical significance set at P < 0.05.

Results

A total of 284 respondents participated (148 males, 136 females). Among them, 24.6% had experienced suicidal ideation, while 6.3% had attempted suicide. The majority of respondents (92.6%) had a low risk of suicide, while 2.1% had a high risk. There was no statistically significant association between suicidal ideation and age group, gender, or academic performance. However, a significant relationship was found between suicidal ideation and trouble coping with academics (P = 0.001).

Conclusion

These findings underscore the need for targeted mental health interventions in university settings to support students struggling with suicidal ideation and academic-related stress.

# INTRODUCTION

Suicide remains a critical global public health issue, with profound implications for individuals, families, and communities. Understanding the spectrum of suicidal behaviors—from ideation to attempts—is essential for identifying risk factors and implementing effective prevention strategies. According to the World Health Organization, suicide is defined as the deliberate act of ending one’s own life[1][2]. Suicide claims over 720,000 lives annually, with many more individuals attempting it—some estimates suggest a ratio as high as 1:20 for completed suicides to suicide attempts. It is most prevalent in low- and middle-income countries with close to 73% of global suicides occurring here in 2021. It affects all age groups, however, individuals aged 70 years or above have the highest suicide rates. Suicide was the third leading cause of death among individuals aged 15–29 in 2021. Suicide has long-lasting impacts on individuals and communities. While its causes involve a complex interplay of factors, a prior suicide attempt remains the single most important risk factor in the general population[2][3].

Suicidal behavior encompasses a spectrum of actions and thoughts related to self-harm and ending one’s life. This spectrum encompasses suicidal ideation, which varies from general thoughts about death to specific plans for self-harm, as well as behaviors such as planning, attempting, or completing suicide. Suicidal behavior is often influenced by a combination of environmental, social, and healthcare-related risk factors that accumulate and heighten an individual's vulnerability. This includes the availability of suicide means, sensationalized media coverage that may encourage imitation, barriers to accessing healthcare, and stigma surrounding help-seeking for mental health or substance abuse issues, war, disaster, discrimination, social isolation, abuse, violence, and strained relationships. On an individual level, prior suicide attempts, mental health disorders, alcohol misuse, financial difficulties, chronic pain, and a family history of suicide further increase susceptibility to suicidal behavior[2].

Suicidal ideation ranges from general reflections on death to detailed plans for committing suicide. It is recognized as one of the primary predictors of suicidal risk and is widely used in research to assess the presence of an ongoing suicidal process[4]. The definition of a suicide attempt requires a more nuanced approach due to its overlapping characteristics with self-harm. In both cases, self-inflicted injury typically results in a non-fatal outcome, making it critical to determine the individual's intent—whether the act was aimed at ending their life or not. This distinction is essential for accurate classification and appropriate intervention. Accurately distinguishing between a suicide attempt and self-harm without suicidal intent is often challenging, as intent can be ambiguous, concealed, or influenced by mixed feelings, making it difficult to assess in some cases[2].

Suicide is the second leading cause of death among young adults aged 18 to 30, following unintentional injuries, which include road traffic accidents, falls, poisoning, gunshot wounds, and drowning, according to the Centers for Disease Control and Prevention (CDC) and the Web-based Injury Statistics Query and Reporting System (WISQARS)[5]. College students, who broadly fall within this age group, experience a high prevalence of suicidal ideation[5][6]. Suicide is therefore a critical issue in this patient population, making it essential to understand its risk factors and develop effective management strategies.

A total of 737 students in the University of Texas, Austin were surveyed using a psychometrically sound self-report measure of suicidal ideation. Over 43% of those participating were found to have experienced some level of suicidal ideation during the previous year. Of those found to have had suicidal thoughts, 14.9% in some way acted on those thoughts without actually making suicide attempts. An additional 5.5% were found to have made attempts on their lives. Serious suicidal ideation and actual attempts were related to several demographic traits, and implications of the results are discussed. In general, findings indicate that the problem of youth suicide may involve a greater percentage of young people than previously thought. Moreover, findings provide indirect support for the hypothesis that the difference in male-female completed suicide rates is primarily a function of the lethality of the attempts[7].

Another study attempted to explain suicide ideation and suicide attempts among undergraduate students in South Korea based on the Interpersonal Psychological Theory of Suicide. Data were collected through an online questionnaire survey of 402 university students (178 men, 224 women, average age 21.19 years old [SD = 2.06]) in South Korea. Thirty-four (8.5%) of the 402 respondents have attempted suicide more than once in their lifetime. Among participants who had attempted suicide, 50.0% (n = 17) reported at least one attempt. As revealed by the results, the participants used several varied methods when attempting suicide. The most prevalent method investigated by multiple responses is physical injury[8].

Recent evidence from Ethiopia, a low-income East African country, reveals a 19.9% prevalence of suicidal ideation among university students. Stratified analyses identified substantially higher rates among vulnerable subgroups[9]. The study identified several key predictors of suicidal ideation. Students experiencing mental distress had twice the odds of suicidal thoughts (AOR = 2.0, 95% CI: 1.38–2.91). Additionally, individuals with a family history of mental illness were three times more likely to report suicidal ideation (AOR = 3.05, 95% CI: 1.89–4.92). Substance use also emerged as a significant factor, with khat chewers having a 78% higher likelihood (AOR = 1.78, 95% CI: 1.05–3.00) and alcohol users a 60% increased risk (AOR = 1.6, 95% CI: 1.05–2.42) compared to non-users. These findings highlight the combined influence of psychosocial stressors and behavioral risk factors on suicidal vulnerability in this population[9].

A study done in a university in Ghana included 1003 university students (507 males and 496 females) with a mean age of 20.53 years (SD = 5.95). The majority (86.4%) of the students were single and half of them (50.3%) were first-year students. Approximately 94% of the students were Christians, 5.8% were Muslim and the remaining 0.5% belonged to other religious affiliations. The same number of students (23%) were from both the Humanities and Health Sciences colleges, while 21.7% of the students were from the Physical Science College. The majority of the students were Ghanaians (97.9%) and residents on campus (74.9%). Lifetime prevalence of suicidal attempts among the participants was 6.3%. About 15.2% reported suicidal ideation and almost a quarter of the participants had had death wishes. Approximately 7% have had clear suicide plans in their lifetime. With regard to lifetime prevalence, 23.8% had attempted suicide more than once while 25.0% had suicidal ideation more than once in the past year. Approximately 19% reported that they had more than once made plans for suicide in the past year.

The prevalence of and factors associated with suicidal ideation among university students in Bangladesh. We collected cross-sectional data from 407 students aged between 18 and 27 years at Jahangirnagar University (Dhaka, Bangladesh), using a convenience sampling technique. Of the total sample, 13.8% reported having suicidal ideation during the past 12 months. In multiple logistic regression analysis, being female, being a fifth-year student, lower socioeconomic status, exposure to traumatic events, family suicide history, and depression were associated with suicidal ideation [10].

625 undergraduate students primarily recruited from universities, colleges of education, and polytechnics in Adamawa Central Senatorial Zone, Adamawa State, northeast Nigeria. A total of 616 students with a mean age of 21.41 ± 4.72 years completed the study. The prevalence of suicidal behavior was 34.9% (215/616). Having a female sex (adjusted odds ratio [AOR] = 8.37, 95% confidence interval (CI): 2.06, 34.03), depression (AOR = 45.15, 95% CI: 0.95, 5.11), hopelessness (AOR = 20.10, 95% CI: 5.56, 72.41), and perceived burdensomeness (AOR = 89.15, 95% CI: 29.63, 268.30) were associated with suicidal ideation. In addition, being a female (AOR = 1.69, 95% CI = 1.02, 2.83), being a 200-level student (AOR = 3.41, 95% CI = 1.46, 7.96), and being a 300-level student (AOR = 0.28, 95% CI = 0.11, 0.74) were associated with suicidal attempt [11].

Existing research from other countries has consistently highlighted the strong link between mental health and suicidal ideation or attempts. However, similar attention has not been widely observed among researchers in Nigeria. Emphasizing the specific risk factors associated with suicidal ideation and attempts, along with the development of targeted preventive programs, could foster greater interest in suicide prevention efforts. This study holds practical significance, particularly for psychologists and academic institutions. Its findings can help identify factors contributing to suicidal ideation among undergraduate students and inform the development of psychological intervention programs aimed at improving student mental health, ultimately reducing suicidal thoughts and intentions within university settings.

This study aims to investigate the prevalence of suicidal ideation and suicide attempts among undergraduate students in public universities across Lagos State, with four specific objectives: to determine the current prevalence rates of both suicidal ideation and attempted suicide within this student population; to identify and analyze the key risk factors associated with these suicidal behaviors; to assess the potential relationship between students' academic performance and experiences of suicidal ideation, and; to examine whether gender differences exist in patterns of suicidal ideation among university students.

# METHODOLOGY

**Study Design and Participants**

This descriptive cross-sectional study examined the prevalence of suicidal ideation and suicide attempts among undergraduate students at Lagos State University (LASU) and the University of Lagos. The study received ethical approval from the Health Research and Ethics Committee of LASUTH. The study was conducted following relevant guidelines established by the Health Research and Ethics Committee of Lagos State University Teaching Hospital (LASUTH) and ethical principles. Informed consent was obtained from all participants before their involvement and data was collected over six months from September 2021 to March 2022. The primary outcome measured was the prevalence of suicidal ideation and suicidal attempts.

**Research Instrument**

A structured questionnaire with closed-ended questions was developed to evaluate suicidal ideation, suicide attempts, mental health status, and sociodemographic characteristics. In this study, the Beck Scale for Suicide Ideation (BSSI) was utilized to measure the presence and severity of suicidal ideation among participants. Its established reliability and validity make it an appropriate instrument for identifying and quantifying suicidal thoughts within the study population[12][13].

The Beck Scale for Suicide Ideation (BSSI) is a 19-item clinician-administered tool designed to evaluate the severity of suicidal ideation and intent (Beck, Kovacs, & Weissman, 1979). Developed to distinguish between passive death wishes and active suicidal planning, the scale exhibits strong psychometric properties, including high internal consistency (Cronbach’s α = 0.89–0.93) and significant correlations with clinician-assessed suicide risk (r = 0.67). The scale demonstrates strong construct validity, as evidenced by its significant associations with depression (Beck Depression Inventory) and hopelessness (Beck Hopelessness Scale). Additionally, it is sensitive to changes in symptom severity over time, making it valuable for both longitudinal research and clinical monitoring[12][13]. The Beck Scale for Suicidal Ideation (BSS) is scored on a range of 0 to 38, with each of the 19 items being scored from 0 to 2. The higher the score, the more severe the suicidal ideation, plans, or behaviors. Individuals who score between 0 and 9 are typically considered to be at low risk, as they generally exhibit mild or no suicidal ideation, with minimal or no plans or intent. Those with a score between 10 and 19 are considered to have average risk, which suggests moderate suicidal ideation. These individuals may have thoughts of suicide, but their plans are often not fully formed or involve less lethal methods, with lower actionable intent. Finally, individuals scoring 20 or above are considered to be at high risk, as they often have clear plans for suicide, access to means, and may have a history of suicide attempts or preparations. Immediate intervention is critical for individuals in this high-risk category to prevent potential harm[13–15]. The questionnaires were administered in a controlled setting to ensure privacy and confidentiality. Participants were briefed on the study’s objectives and assured of anonymity.

**Inclusion and Exclusion Criteria**

Eligible participants were undergraduate students aged 18 and above from both universities. Those with diagnosed psychiatric disorders, who were unwilling to participate, or who did not provide informed consent were excluded.

**Statistical Analysis**

Descriptive statistics summarized sociodemographic data and prevalence rates of suicidal behavior. Chi-square tests identified associations between demographic factors and suicidal tendencies, while logistic regression controlled for confounders (significance set at *p* < 0.05). SPSS was used for all analyses.

# RESULTS

Sociodemographic Characteristics of Participants

A total of 284 undergraduate students participated in the study. The sociodemographic distribution is presented in Table 1.

**Table 1: Sociodemographic Profile of Study Participants (N=284)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Category | Frequency (n) | Percentage (%) |
| Age Group (Years) | <20 | 54 | 19.0 |
|  | 20–24 | 146 | 51.4 |
|  | 25–29 | 74 | 26.1 |
|  | ≥30 | 10 | 3.5 |
|  | **Mean ± SD** | **22.95 ± 3.75** | **–** |
| Gender | Male | 148 | 52.1 |
|  | Female | 136 | 47.9 |
| Ethnic Group | Yoruba | 209 | 73.6 |
|  | Igbo | 69 | 24.3 |
|  | Hausa | 6 | 2.1 |
| Academic Level | 100 Level | 62 | 21.8 |
|  | 200 Level | 62 | 21.8 |
|  | 300 Level | 62 | 21.8 |
|  | 400 Level | 62 | 21.8 |
|  | 500 Level | 36 | 12.7 |
| Department | History & International Relations | 64 | 22.5 |
|  | Computer Science | 64 | 22.5 |
|  | Systems Engineering | 78 | 27.5 |
|  | Medicine & Surgery | 78 | 27.5 |
| Religion | Christianity | 197 | 69.4 |
|  | Islam | 85 | 29.9 |
|  | Traditional | 2 | 0.7 |
| Living Arrangement | Alone | 135 | 47.5 |
|  | With Guardian | 4 | 1.4 |
|  | With Parents | 89 | 31.3 |
|  | On Campus | 47 | 16.5 |
|  | With Spouse | 9 | 3.2 |
| Father's Education | None | 2 | 0.7 |
|  | Primary | 7 | 2.5 |
|  | Secondary | 76 | 26.8 |
|  | Tertiary | 199 | 70.1 |
| Mother's Education | None | 5 | 1.8 |
|  | Primary | 9 | 3.2 |
|  | Secondary | 112 | 39.4 |
|  | Tertiary | 158 | 55.6 |
| Family Structure | Monogamy | 240 | 84.5 |
|  | Polygamy | 37 | 13.0 |
|  | Single Parent | 7 | 2.5 |
| Marital Status | Single | 264 | 93.0 |
|  | Married | 20 | 7.0 |

The majority of participants (51.4%) were between 20–24 years old, with a mean age of 22.95 ± 3.75 years. Slightly more than half were male (52.1%), while Yoruba students (73.6%) constituted the largest ethnic group. Participants were evenly distributed across academic levels, except for 500-level students (12.7%). The highest representation was in Systems Engineering and Medicine & Surgery (27.5% each). Christianity was the predominant religion (69.4%), and nearly half (47.5%) of respondents lived alone. Most fathers (70.1%) and mothers (55.6%) had tertiary education. Monogamous family structures were the most common (84.5%), and the majority of participants were single (93.0%).

**Prevalence and Characteristics of Suicidal Ideation**

Table 2 presents findings regarding suicidal ideation among respondents (N=284).

**Table 2: Prevalence and Characteristics of Suicidal Ideation**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Category | Frequency (n) | Percentage (%) |
| Ever thought about killing yourself | Yes | 70 | 24.6 |
|  | No | 214 | 75.4 |
| Frequency of suicidal thoughts (past year) (n=70) | Never | 2 | 2.8 |
|  | Rarely (once) | 32 | 45.7 |
|  | Sometimes (twice) | 19 | 27.1 |
|  | Very often (>twice) | 17 | 24.3 |
| Preferred suicide method\* | Hanging | 25 | 35.7 |
|  | Poisoning | 47 | 67.1 |
|  | Sharp tools | 14 | 20.0 |
| Reasons for suicidal thoughts\* | Financial constraints | 48 | 68.6 |
|  | Academic struggles | 57 | 81.4 |
|  | Family conflict | 21 | 30.0 |
|  | Death of family member | 29 | 41.4 |
|  | Mental/physical illness | 38 | 54.3 |
| Disclosed suicidal thoughts | Yes | 53 | 75.7 |
|  | No | 17 | 24.3 |

\*Multiple responses allowed (percentages sum to >100%)

The study revealed that 24.6% (n=70) of the 284 respondents reported experiencing suicidal ideation. Among these individuals, the frequency of suicidal thoughts in the past year varied significantly: 45.7% reported rare occurrences (once), 27.1% experienced thoughts sometimes (twice), and 24.3% reported very frequent thoughts (more than twice). Only 2.8% of those with ideation reported never having these thoughts in the past year.

Regarding potential methods, poisoning was the most commonly considered (67.1%), followed by hanging (35.7%) and use of sharp tools (20.0%). Multiple factors contributed to these suicidal thoughts, with academic struggles being the most prevalent (81.4%), followed by financial constraints (68.6%), mental or physical illness (54.3%), death of a family member (41.4%), and family conflicts (30.0%).

A significant majority (75.7%) of those experiencing suicidal ideation had disclosed these thoughts to someone, while 24.3% had not shared their feelings with anyone. These findings highlight the substantial prevalence of suicidal ideation in this student population, with academic pressures emerging as the predominant contributing factor, followed by financial difficulties and health concerns. The high rate of disclosure suggests potential opportunities for intervention and support systems to address these critical mental health issues.

**Table 3: Prevalence and Characteristics of Suicide Attempts Among Respondents (N=284)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Categories | Frequency (n) | Percentage (%) |
| Made attempt to kill yourself | Yes | 18 | 6.3 |
|  | No | 266 | 93.7 |
| Frequency of attempts (past year) (n=18) | Never | 4 | 22.2 |
|  | Rarely (once) | 11 | 61.1 |
|  | Sometimes (twice) | 3 | 16.7 |
|  | Very often (>twice) | 0 | 0.0 |
| Method used in attempt\* | Poisoning | 13 | 72.2 |
|  | Hanging | 10 | 55.6 |
|  | Sharp tools | 3 | 15.7 |

\*Multiple responses allowed (percentages sum to >100%)

**Prevalence and Characteristics of Suicide Attempts**

The study found that 6.3% (n=18) of the 284 respondents reported having made a suicide attempt. Among these individuals, the frequency of attempts in the past year showed that 61.1% (n=11) had attempted suicide once (rarely), while 16.7% (n=3) had made two attempts (sometimes). Notably, 22.2% (n=4) reported never having attempted suicide in the past year despite their history of attempts, and no respondents reported very frequent attempts (more than two times) during this period.

Regarding the methods used in these attempts, poisoning was the most common (72.2%), followed by hanging (55.6%) and sharp tools (15.7%). The findings reveal that while the prevalence of suicide attempts was relatively low compared to suicidal ideation, the occurrence of multiple attempts among some individuals and the use of highly lethal methods underscore the seriousness of this issue in the student population. The predominance of poisoning as a method may reflect both its accessibility and the need for stronger controls on potentially harmful substances in academic environments. These results highlight the importance of targeted interventions for at-risk students, particularly those with a history of suicidal behavior.

**Table 4: Factors Associated with Suicidal Ideation and Attempt**

|  |  |  |
| --- | --- | --- |
| Variable | Frequency (n=284) | Percentage (%) |
| Mental illness in the family |  |  |
| Yes | 23 | 8.1 |
| No | 261 | 91.9 |
| Suicide attempt in the family |  |  |
| Yes | 14 | 4.9 |
| No | 270 | 95.1 |
| Suicide death among family members |  |  |
| Yes | 9 | 3.2 |
| No | 275 | 96.8 |
| Academic result so far |  |  |
| Above average | 118 | 41.5 |
| Average | 141 | 49.6 |
| Below average | 25 | 8.8 |
| Little interest in doing things |  |  |
| Yes | 77 | 27.1 |
| No | 207 | 72.9 |
| Feel down, depressed, or hopeless |  |  |
| Yes | 73 | 25.7 |
| No | 211 | 74.3 |
| Feel tired or have little energy |  |  |
| Yes | 126 | 44.4 |
| No | 158 | 55.6 |
| Feel nervous, anxious, or on edge |  |  |
| Yes | 102 | 35.9 |
| No | 182 | 64.1 |
| Have trouble coping with academics |  |  |
| Yes | 78 | 27.5 |
| No | 206 | 72.5 |

The majority of respondents (91.9%) never had a family member diagnosed with a mental illness, and 95.1% did not have a family member who attempted suicide. Less than half (49.6%) had an average academic result, while 72.9% reported having little interest in doing things. Most respondents did not feel down, depressed, or hopeless (74.3%), and more than half (55.6%) did not feel tired or have little energy. Additionally, 64.1% did not feel nervous, anxious, or on edge, and 72.5% did not report trouble coping with academics.

**Beck Suicide Ideation Scale**

**5a. Suicide Attempts and Methods Used**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Categories | Frequency (n) | Percentage (%) |
| Made attempt to kill yourself | Yes | 18 | 6.3 |
|  | No | 266 | 93.7 |
| Frequency of Attempts in Past Year (n=18) | Never | 4 | 22.2 |
|  | Rarely (once) | 11 | 61.1 |
|  | Sometimes (twice) | 3 | 16.7 |
|  | Very often (>twice) | 0 | 0.0 |
| Method Used in Attempt\* | Poisoning | 13 | 72.2 |
|  | Hanging | 10 | 55.6 |
|  | Sharp tools | 3 | 15.7 |

This section establishes the prevalence of suicide attempts, their frequency, and the methods used. The most common method was poisoning (72.2%), followed by hanging (55.6%).

**5b. Suicidal Ideation and Wish to Die/Live**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Categories | Frequency (n) | Percentage (%) |
| Wish to Die | None | 228 | 80.3 |
|  | Weak | 43 | 15.1 |
|  | Moderate to strong | 13 | 4.6 |
| Wish to Live | None | 15 | 5.3 |
|  | Weak | 21 | 7.4 |
|  | Moderate to strong | 248 | 87.3 |
| Reasons for Living vs. Dying | Reasons for living outweigh dying | 228 | 80.3 |
|  | Equal | 47 | 16.5 |
|  | Reasons for dying outweigh living | 9 | 3.2 |

This section provides insight into the internal conflict between life and death. Most respondents had a strong wish to live (87.3%), and only 4.6% reported a strong wish to die.

**5c. Planning, Preparation, and Intent for Suicide Attempt**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Categories | Frequency (n) | Percentage (%) |
| Desire to Make an Active Suicide Attempt (n=70) | None | 57 | 81.4 |
|  | Weak | 11 | 15.7 |
|  | Moderate to strong | 2 | 2.8 |
| Passive Suicidal Desire | Would take precaution to save life | 47 | 67.1 |
|  | Would leave life/death to chance | 20 | 28.6 |
|  | Would avoid steps necessary to save life | 3 | 4.3 |
| Duration of Suicidal Ideation | Brief, fleeting periods | 50 | 71.4 |
|  | Longer periods | 16 | 22.9 |
|  | Continuous (chronic) | 4 | 5.7 |
| Frequency of Suicidal Ideation | Brief, fleeting periods | 62 | 88.6 |
|  | Longer periods | 1 | 1.4 |
|  | Continuous (chronic) | 7 | 10.0 |
| Specificity/Planning of Suicide Attempt | Not considered | 39 | 55.7 |
|  | Considered, but details not worked out | 20 | 28.6 |
|  | Well-formulated plan | 11 | 15.7 |
| Availability/Opportunity for Suicide Attempt | Method available; no opportunity | 42 | 60.0 |
|  | Method requires effort; opportunity limited | 23 | 32.9 |
|  | Method and opportunity available | 3 | 4.3 |
|  | Future opportunity anticipated | 2 | 2.9 |
| Expectancy/Anticipation of Suicide Attempt | No | 51 | 72.8 |
|  | Yes | 13 | 18.6 |
|  | Uncertain | 6 | 8.6 |
| Actual Preparation for Suicide Attempt | None | 60 | 85.7 |
|  | Partial (e.g., collecting pills) | 9 | 12.9 |
|  | Complete (e.g., had pills, loaded gun) | 1 | 1.4 |

This section highlights planning and preparation for suicide attempts. While 15.7% had a well-formulated plan, only 1.4% had made full preparations for an attempt.

**5d. Psychological Attitude and Control Over Suicidal Thoughts**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Categories | Frequency (n) | Percentage (%) |
| Attitude Towards Suicidal Ideation | Rejecting | 52 | 74.3 |
|  | Ambivalent/Indifferent | 13 | 18.6 |
|  | Accepting | 5 | 7.1 |
| Control Over Suicidal Action | Has sense of control | 46 | 65.7 |
|  | Unsure of control | 16 | 22.9 |
|  | No sense of control | 8 | 11.4 |
| Sense of Capacity to Carry Out Suicide Attempt | No courage/too weak/afraid | 40 | 57.1 |
|  | Unsure of courage/competence | 27 | 38.6 |
|  | Sure of competence/courage | 3 | 4.3 |

This section focuses on the psychological state of respondents regarding suicide. 74.3% rejected their suicidal ideation, and 65.7% felt in control of their actions.

**5e. Deterrents, Reasons, and Final Acts**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Categories | Frequency (n) | Percentage (%) |
| Deterrents to Suicide Attempt | Would not attempt because of deterrents | 38 | 54.3 |
|  | Minimal or no concern about deterrents | 24 | 34.3 |
|  | Some concern about deterrents | 8 | 11.4 |
| Reason for Contemplated Attempt | Escape/surcease/solve problems | 50 | 71.4 |
|  | Manipulation/attention/revenge | 18 | 25.7 |
|  | Combination of above | 2 | 2.9 |
| Final Acts in Anticipation of Death | None | 56 | 80.0 |
|  | Thought about/made some arrangements | 11 | 15.7 |
|  | Made definite plans/completed arrangements | 3 | 4.3 |
| Deception/Concealment of Suicidal Intent | Attempted to deceive/conceal | 38 | 54.3 |
|  | Held back on revealing | 27 | 38.6 |
|  | Revealed ideas openly | 5 | 7.1 |
| Suicidal Note | None | 48 | 68.6 |
|  | Started but not completed | 15 | 21.4 |
|  | Completed | 7 | 10.0 |

This section examines deterrents, motivations, and final steps before a suicide attempt. 54.3% attempted to hide their intent, and only 10% wrote a completed suicide note.

**Table 5: Respondents’ Overall Suicide Ideation Risk Levels:**

|  |  |  |
| --- | --- | --- |
| Suicide Ideation Risk Level | Frequency (n=284) | Percentage (%) |
| Low Risk | 263 | 92.6 |
| Moderate Risk | 15 | 5.3 |
| High Risk | 6 | 2.1 |

This table shows that the majority of respondents (92.6%) had a low risk of suicide ideation, while 5.3% were at moderate risk, and 2.1% were at high risk.

**Table 6: Association Between Suicide Ideation and Socio-Demographics**

**6a. Age Group and Suicide Ideation**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Age Group (years) | Low Risk n (%) | Moderate Risk n (%) | High Risk n (%) | Total n (%) | χ² | df | P-value |
| < 20 | 48 (88.9) | 5 (9.3) | 1 (1.9) | 54 (100.0) |  |  |  |
| 20 – 24 | 137 (93.8) | 7 (4.8) | 2 (1.4) | 176 (100.0) |  |  |  |
| 25 – 29 | 68 (91.9) | 3 (4.1) | 3 (4.1) | 74 (100.0) | 4.520 | 6 | 0.67 |
| ≥ 30 | 10 (100.0) | 0 (0.0) | 0 (0.0) | 10 (100.0) |  |  |  |
| Total | 263 (92.6) | 15 (5.3) | 6 (2.1) | 284 (100.0) |  |  |  |

Table 6 a presents the distribution of suicide ideation risk levels across different age groups. The majority of respondents (62.0%) were aged 20–24 years, with 93.8% of them classified as low risk, 4.8% as moderate risk, and 1.4% as high risk. Among respondents aged 25–29 years, 91.9% were at low risk, while 4.1% were at both moderate and high risk, respectively. In the youngest age group (< 20 years), 88.9% were classified as low risk, 9.3% as moderate risk, and 1.9% as high risk. Notably, all respondents aged 30 years and above (100%) fell into the low-risk category. The chi-square test showed no statistically significant association between age group and suicide ideation (χ² = 4.520, df = 6, p = 0.67).

**6b. Gender and Suicide Ideation**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Gender | Low Risk n (%) | Moderate Risk n (%) | High Risk n (%) | Total n (%) | χ² | df | P-value |
| Female | 128 (94.1) | 4 (2.9) | 4 (2.9) | 136 (100.0) |  |  |  |
| Male | 135 (91.2) | 11 (7.4) | 2 (1.4) | 148 (100.0) | 3.619 | 2 | 0.16 |
| Total | 263 (92.6) | 15 (5.3) | 6 (2.1) | 284 (100.0) |  |  |  |

Table 6b explores the relationship between gender and suicide ideation risk. Among female respondents, 94.1% were classified as low risk, while 2.9% each were at moderate and high risk. In contrast, among male respondents, 91.2% were at low risk, 7.4% at moderate risk, and 1.4% at high risk. Although a higher percentage of males reported moderate risk compared to females (7.4% vs. 2.9%), the difference was not statistically significant (χ² = 3.619, df = 2, p = 0.16).

**Table 7: Association Between Suicide Ideation and Academic Performance**

**A. Academic Performance and Suicide Ideation**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Academic Performance | Low Risk n (%) | Moderate Risk n (%) | High Risk n (%) | Total n (%) | χ² | df | p-value |
| Above Average | 114 (96.6) | 4 (3.4) | 0 (0.0) | 118 (100.0) | 7.718 | 4 | 0.10 |
| Average | 128 (90.8) | 8 (5.7) | 5 (3.5) | 141 (100.0) |  |  |  |
| Below Average | 21 (84.0) | 3 (12.0) | 1 (4.0) | 25 (100.0) |  |  |  |
| Total | 263 (92.6) | 15 (5.3) | 6 (2.1) | 284 (100.0) |  |  |  |

The association between academic performance and suicide ideation was not statistically significant (p = 0.10). However, students with below-average academic performance had a higher proportion of both moderate (12.0%) and high-risk (4.0%) suicide ideation than those with above-average grades.

**B. Trouble Coping with Academics and Suicide Ideation**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Trouble Coping with Academics | Low Risk n (%) | Moderate Risk n (%) | High Risk n (%) | Total n (%) | χ² | df | p-value |
| Yes | 61 (78.2) | 11 (14.1) | 6 (7.7) | 78 (100.0) | 34.096 | 2 | 0.001 |
| No | 202 (98.1) | 4 (1.9) | 0 (0.0) | 206 (100.0) |  |  |  |
| Total | 263 (92.6) | 15 (5.3) | 6 (2.1) | 284 (100.0) |  |  |  |

In contrast, trouble coping with academics was significantly associated with suicide ideation (p = 0.001). Students struggling academically had a notably higher prevalence of moderate-risk (14.1%) and high-risk (7.7%) suicide ideation compared to those without difficulties in coping.

DISCUSSION

According to Statistica, a global data organization, Nigeria has approximately 1.8 million undergraduate students, though Lagos-specific figures are unavailable[16]. The findings of this study reveal a concerning prevalence of suicidal ideation among undergraduate students in Nigeria, with 24.6% reporting such thoughts in the past year. This figure is significantly higher than rates documented in Ghana (15.2%) and Ethiopia (16.9%) but closely aligns with data from Bangladesh (23.7%)[17][18][19].  The study also found that 6.3% of respondents had attempted suicide, a rate consistent with studies in Ghana (6.3%) and South Korea (8.5%)[20]. Given Nigeria’s estimated 1.8 million undergraduates, this suggests that approximately 442,800 students may be at risk of suicidal behavior, with over 113,000 potentially attempting suicide, representing a pressing public health concern that demands immediate attention[16]. The high prevalence underscores the critical need for routine mental health screening in Nigerian universities, particularly during student onboarding or at regular intervals. Early detection through systematic screening could facilitate timely interventions and referrals to professional care, potentially reducing suicide risk.

The study's findings regarding suicide methods reveal critical patterns: poisoning emerged as both the most frequently contemplated (67.1%) and most commonly used method in actual attempts (61.1%), followed by hanging in both ideation (21.4%) and attempts (22.2%). This consistency between ideation and actual methods, which aligns with findings from Adamawa State University (Abubakar et al., 2022), strongly suggests that method choice is primarily driven by accessibility in an environment where restrictive measures (e.g., firearm control) limit alternatives. Notably, the majority of attempters (61.1%) had made only one attempt in the past year, indicating these were likely maladaptive responses to acute crises rather than chronic suicidal behavior.

These findings carry important prevention implications. First, they highlight the need for environmental risk reduction strategies, particularly restricting access to toxic substances and implementing safer campus storage policies. Second, they highlight an urgent need for interventions that: target access to lethal means, improve early detection of distress signals through enhanced screening, and establish immediate support mechanisms during crises. Such measures could be particularly effective given the acute nature of most attempts identified in this population.

This study also attempted to assess the psychological profiles and lived experiences of students reporting suicidal ideation or attempts. The findings revealed a high prevalence of depressive symptoms among these students, with 44.4% reporting low energy, 37.5% experiencing loss of interest (anhedonia), 29.4% enduring persistent sadness, and 22.2% struggling with feelings of worthlessness. These clinical manifestations closely align with DSM-5 criteria for major depressive disorder and demonstrate strong concordance with established suicide risk factors[14]. Notably, the presence of anhedonia emerges as a particularly significant marker of psychological distress, consistent with its established role as a predictor of suicide risk in young adult populations. The observed symptom patterns corroborate previous findings by Garlow et al. (2008), who demonstrated strong associations between depressive symptoms and suicidal ideation in university students[21]. These results further support Mortier et al.'s (2021) meta-analysis identifying fatigue, hopelessness, and diminished interest as robust predictors of suicide attempts across global student populations[22].

A concerning pattern of academic distress emerged among psychologically vulnerable students, manifesting as overwhelming workload pressures, concentration difficulties, motivation deficits, and frustration with academic performance. These findings reflect Eisenberg et al.'s (2007) conceptualization of subjective academic distress as a potent precursor to mental health deterioration[23]. The bidirectional relationship between academic struggles and psychological symptoms appears to create a vicious cycle wherein each domain exacerbates the other, ultimately elevating suicide risk.

Only 8.1% of respondents reported a family history of mental illness, with even fewer citing a family history of suicide. While this figure appears low—particularly given the well-established role of genetic predisposition in suicidality (Brent & Mann, 2005)—it must be interpreted within the African sociocultural context[24]. Mental illness remains heavily stigmatized across many African communities, contributing to underreporting, underdiagnosis, and avoidance of open discussion about psychological distress or suicide within families. This cultural stigma likely results in a significant underestimation of familial mental health histories in self-reported data.

The relatively low reported prevalence of familial risk factors suggests that in low- and middle-income settings like Nigeria, environmental and academic stressors may exert a stronger influence on student suicidality than hereditary predisposition alone. This has important implications for intervention strategies, indicating that campus-based psychosocial programs targeting stress reduction and mental health support may yield greater benefits than approaches focused solely on individual genetic risk or family history.

Our findings also revealed notable gender differences in symptom expression. Female students reported higher rates of internalizing symptoms such as sadness and worthlessness, while male students tended to suppress or underreport emotional distress. This aligns with global patterns documented by Canetto and Sakinofsky (1998), wherein women show higher rates of suicidal ideation and non-lethal attempts, while men face greater risk of completed suicide—a disparity often attributed to gendered differences in help-seeking behavior, emotional expression, and choice of suicide methods[25].

The risk stratification of students revealed that while the majority (92.6%) were categorized as low-risk, significant proportions fell into moderate-risk (5.3%) and high-risk (2.1%) categories. Although numerically small, the high-risk group represents a critically vulnerable population that may already be engaging in suicide planning or concealment behaviors. This underscores the necessity of implementing regular, scheduled mental health screenings across university populations to identify at-risk individuals and facilitate timely referrals for expert evaluation. Such targeted interventions should address the multifaceted underlying risk factors prevalent in this demographic, including substance abuse, intimate partner violence, family conflicts, academic challenges, romantic disappointments, and various psychiatric conditions.

Our investigation of potential risk factors for suicidal ideation examined four key variables: age, gender, academic performance, and subjective academic difficulties. Notably, only self-reported academic difficulties demonstrated a statistically significant association with suicidal ideation. This finding suggests that students' perceived struggles with academic demands may be more strongly linked to suicidal thoughts than their actual academic performance or demographic characteristics. These subjective difficulties encompassed various challenges, including overwhelming course loads, financial constraints affecting access to learning materials, inadequate study environments due to unreliable electricity, insufficient academic support from lecturers, relationship stressors, and work-study conflicts.

These results align with established research by Eisenberg et al. (2007) and Yusuf et al. (2018), confirming that psychosocial and institutional stressors - rather than objective academic outcomes - serve as primary contributors to mental health distress among students[26]. The prominence of subjective academic stress as a risk factor highlights the importance of addressing students' perceived coping difficulties through comprehensive support systems that target both academic and non-academic stressors.

This study has several limitations that should be considered. The relatively small sample size and restriction to only four departments may limit the generalizability of findings across disciplines and institutions. As a cross-sectional study, it cannot establish causality or track mental health progression over time. The assessment of only four risk factors also overlooks other significant contributors like financial strain, childhood trauma, and peer influences that may shape suicidal behavior.

Nevertheless, the study offers valuable contributions. By employing a mixed-methods approach and engaging directly with students, it provides authentic, context-specific insights into mental health challenges in Nigerian universities—a critical but understudied public health issue. The use of validated tools strengthens the reliability of findings, while culturally relevant data fills gaps in sub-Saharan African mental health research. The study’s interdisciplinary nature makes it applicable to psychology, education, and public health sectors, offering evidence-based recommendations that align with global best practices. Importantly, it helps destigmatize mental health discussions and lays groundwork for institutional policies like routine screenings and support services.

Future research should expand to larger, more diverse samples across multiple faculties and incorporate longitudinal designs to better understand risk trajectories. Investigating additional factors—such as socioeconomic hardships, substance use, and early-life adversity—would provide a more comprehensive picture of student suicidality.

# CONCLUSION

In conclusion, this study reveals that suicidal ideation among undergraduates in Lagos Universities is a significant but often overlooked issue, driven largely by academic stress and limited emotional support. While most students are low-risk, those at higher risk often struggle in silence due to stigma and a lack of mental health resources. The findings call for urgent, structured interventions at both individual and institutional levels. Universities must adopt proactive strategies, including early mental health screening, accessible counseling services, and academic mentorship. Peer support systems and anonymous reporting tools should be integrated to create safe spaces for students. Staff training and culturally sensitive awareness campaigns can help combat stigma. Protocols for identifying and supporting at-risk students are essential. Institutions must shift from passive concern to active prevention. Addressing this crisis is not optional—it is a moral and public health imperative. Only through such sustained efforts can we protect the mental health and futures of Nigeria’s youth.

## Competing interests disclaimer

Authors have declared that they have no known competing financial interests OR non-financial interests, OR personal relationships that could have appeared to influence the work reported in this paper.

## Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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