

## EVALUATING GENDER AS A DETERMINANT OF KNOWLEDGE AND ATTITUDE TOWARDS SUICIDE AMONG UNDERGRADUATE IN BAYELSA STATE, NIGERIA

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### ABSTRACT

Suicide is a leading cause of death both globally, regionally and locally, with over 75% occurring in low-and middle-income Countries. This study evaluated gender as a determinant of knowledge and attitude towards suicide among Undergraduates in Bayelsa State, Nigeria. This study adopted the descriptive survey research design being that information is obtained through distribution of a questionnaire to undergraduate students in six tertiary institutions in Bayelsa State which includes; Federal University of Otuoke, Niger Delta University (NDU) Wilberforce Island, University of Africa, Toru-Orua, Federal Polytechnic, Ekowe, Bayelsa State College of Arts and Science, Elebele and Bayelsa State Medical University. Also participants were selected based on the inclusion and exclusion criteria set for the study. This design has been successfully utilized by Arnautovska, and Grad (2010) in a study on attitudes towards suicide in the adolescent population. As at the time of the study, the population of this study consists of all undergraduate students of universities in Bayelsa State. Using the Krejcie and Morgan (1970) table for sample size estimation. A total of 381 respondents were selected to participate in the study. But for the purpose of clarity and better representation of the total population the researcher employed 800 respondents to participate in the study. A self designed questionnaire was used for primary data collection. The data gathered was coded and analyzed through the Statistical Product for Service Solution (SPSS) version 25.0 and was presented on tables charts. The findings revealed that there was a significant difference in the knowledge of suicide among undergraduate in Bayelsa State based on gender ( $p$ -value = .000,  $p < 0.05$ ). The findings revealed that there was a significant difference in the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender ( $p$ -value = .000,  $p < 0.05$ ). Conclusions emerged this study that there was a significant deference in the knowledge of suicide based on gender, as well as a significant deference in the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender. Among others, the study recommended that the ministry of education at all levels (primary, secondary, and tertiary) should develop and implement educational programs aimed at increasing awareness about suicide prevention. These programs should focus on providing accurate information and dispelling myths surrounding suicide.

**Key Words:** Gender, Determinant, Knowledge, Attitude, Suicide, Undergraduate, Bayelsa State, Nigeria.



## INTRODUCTION

### Background to the Study

Suicide has become a global trend creating a devastating effect not just to the dying person but also towards the bereaved, the community and society at large. While over 90% of suicide victims have mental disorders such as depression, nonetheless for each successful suicidal act, there are many more persons with serious suicidal ideation and multiple nonfatal attempts, about 25% of people have contact with health care workers but most never receive proper suicide assessment and management before suicide attempts (Värnik, 2012).

Suicidal behaviour is one of the leading cause of death in the global population and the second leading cause of death among people between ages 15-29 globally (WHO, 2017) it has been estimated to potentially contribute to a proportion greater than 2% to the world burden of disease by 2020 particularly in sub-Saharan African (Vijayakumer et al, 2005). The weighted prevalence of suicide has been put at 7.28% (Adewuya et al, 2016). In fact, it has been established to be responsible for 9.9 out of every 100.000 (both sexes) death in Nigeria (WHO, 2017).

Suicidal behaviour could also be defined as intent to commit suicide or as having ever attempted suicide in lifetime (Walter et al, 2015). It implies all the intentions, ideations or actions pertaining to, leading to, or involving suicide. It is a conglomeration of some seemingly insurmountable personal problems of individuals which make them think that the only solution is to die. Their main purpose is to seek a solution to an overwhelming problem. Suicidal behaviour is sometimes associated with the mental health status of individuals who cannot cope with their lives (WHO, 2016). Suicidal behavior demonstrates that something is fundamentally wrong, either with an individual or with the situation in which the individual exists, or with both the individual and the situation. It does not show up without any reason. It involves not only pain, but the individual's unwillingness to tolerate that pain, the decision not to endure it, and the active will to stop it (Leming & Dickson, 2014; WHO, 2018).

Among undergraduate students, the possible factors associated with suicidal ideation include developmental processes that require maturity and autonomy to make decisions, especially in a strict economic environment. Although Nigeria comes 91<sup>st</sup> place in the ranking of happiness among 156 countries worldwide, suicide and suicide-related behaviours have been on the increase and more worrisome is the fact that the case is high among college students. For



instance, on the first lap of 2017, there were reported cases of suicide in Nigerian universities. Reason for such behaviours has become a major scientific concern to both behavioural researchers and health practitioners.

### **Hypotheses**

The following hypothesis were tested at 0.05 alpha level

1. There is no significant difference in the knowledge of suicide among undergraduate in Bayelsa State based on gender
2. There is no significant difference in the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender.

### **Theoretical Framework**

#### **Durkheim's theory of social integration and social regulation**

The philosophical foundation upon which prevalence of suicidal behaviour among undergraduates of universities in Bayelsa States of Nigeria is built is the sociological and psychological theory of social integration and social regulation enunciated by Durkheim (1897; 1991 & 1993). The theory states that there is an inverse relationship between suicidal behavior and the degree of integration an individual has with his or her social group. He proposed that suicide results, in part, from failure of social integration. The theory posits that an individual will not die by suicide unless he/she has both the desire to die by suicide and the ability to do so. He referred to social integration as the degree to which individuals in the society were bound by social ties and relationship, while social regulation referred to the degrees to which individuals have their desires and emotions controlled by the social values of the society. Durkheim held the view that suicidal behaviour would be more likely if social integration was too strong (leading to egoistic suicidal behaviour), if social regulation was too weak (leading to anomic suicidal behaviour), or if these two social forces were too strong (leading to altruistic and fatalistic suicidal behaviours respectively).

#### **Review of empirical studies**

Asaye et al. (2020) conducted a study to determine the prevalence and associated factors of postpartum depression among women who gave birth in the last six weeks in Gondar town, Northwest Ethiopia. The study was a community based cross-sectional study conducted among



526 women who gave birth in the last 6 weeks from July 1 to 30, 2018 in Gondar town. Sample for the study were drawn using Cluster sampling technique. Data were collected by semi-structured and pretested questionnaire and entered into epi-Info version 7.0 and then analyzed by SPSS version 20.0. Both bivariate and multivariable logistic regression model were conducted. Adjusted odds ratio with 95% confidence interval has been computed and variables with the value  $<0.05$  were considered statistically significant. The results revealed that the prevalence of postpartum depression among 526 postnatal women was 25% (95% CI: 21, 28). Abortion history (AOR = 1.79, 95% CI: 1.07, 2.97), birth weight  $<2.5$  kg (AOR = 3.12, 95% CI: 1.78, 5.48), gestational age below 36 weeks (AOR = 2.18, 95% CI: 1.22, 3.88) unplanned pregnancy (AOR = 2.02, 95% CI: 1.24, 3.31), relatives' mental illness (AOR = 1.20: 1.09–3.05), had no antenatal visit (AOR = 4.05, 95% CI: 1.81, 9.05), had no postnatal visit (AOR = 1.82, 95% CI: 1.11, 3.00) were factors significantly associated with postpartum depression. The study concluded that the prevalence of PPD was found to be higher. Variables like abortion history, low birth weight, gestational age below 36 weeks, unplanned pregnancy, relatives' mental illness, had no antenatal visit, and had no postnatal visit were predisposing factors to postpartum depression. Preventive measures to avoid low birth weight and pregnancy complications are also identified as proactive ways to reduce postpartum depression. The study then recommended that early identification and treatment of depression during ANC and postpartum care can mitigate the impact of PPD on the mother-baby dyad. Emphasis must be given women to have ANC and PNC follow up.

A study was by Alsayed et al. (2021) on the prevalence of postpartum depression and associated risk factors among women in Jeddah, Western Saudi Arabia. The study was a cross-sectional study conducted in infant vaccination clinics of the primary healthcare centers (PHC) of the Ministry of Health (MOH) and Ministry of National Guard (MNGHA) Jeddah, Saudi Arabia. Data were collected through a self-administered questionnaire with Edinburgh Postnatal Depression Scale (EPDS) from mothers up to four months postpartum. The results revealed that of the 172 postpartum women, the study estimated the prevalence of postpartum depression to be 20.9%. The significant risk factors predicted by multivariate regression analysis were history of previous depression (odds ratio {OR}=4.7; 95% confidence interval {CI} 1.9 to 11.5), difficult life event interval (OR=3.5; 95% CI 1.1 to 10.7), and attitude toward pregnancy (OR=2.1; 95% CI 0.9 to 4.5). The study concluded that a fairly high prevalence of postpartum depression was



revealed among the females in Jeddah. Therefore, we recommend screening of mothers after delivery to help early intervention and management along with psychosocial support.

Alasoom and Koura (2014) Predictors of postpartum depression in the eastern province capital of Saudi Arabia. The study was a cross-sectional study which was conducted in the five largest Primary Healthcare Centers of Dammam. Four hundred and fifty mothers - visiting the health centers for immunizing their children at age two to six months - were selected by proportionate allocation to the population served by each health center. The mothers were screened for PPD using the Edinburgh Postnatal Depression Scale and interviewed for the associated risk factors. The study reported that 17.8% of the women had PPD. Regression analysis revealed that the strongest predictor of PPD was a family history of depression, followed by non-supportive husband, lifetime history of depression, unwanted pregnancy, and stressful life events. It was recommended to screen all high-risk mothers for PPD, while visiting the Primary Care Well-Baby Clinics.

Rami et al. (2021) conducted an investigation on the knowledge about assessment and management of postpartum depression (PPD) among nurses and midwives in Saudi Arabia. A descriptive, cross-sectional design was used to recruit 181 nurses and 143 midwives, using a convenience sampling method. Data were collected using a self-administered questionnaire. Nurses and midwives lacked knowledge about various aspects of PPD, including its definition, prevalence, symptoms, risk factors, screening tools, and treatment. Only one third of participants were confident in their ability to provide education for women about PPD. The results revealed that the participants' self-confidence to educate women about PPD was significantly correlated with their level of knowledge about assessment and management of PPD. Continuing education is recommended for health care professionals to improve knowledge regarding PPD. Further studies are needed to determine the effectiveness of educational interventions on improving knowledge, practice, and self-confidence about PPD.

Stone et al. (2015) investigated stressful events during pregnancy and postpartum depressive symptoms. The researchers used Massachusetts Pregnancy Risk Assessment Monitoring System (MA-PRAMS) 2007–2010 data to evaluate associations between selected perinatal stressors and PDS and with subsequent help-seeking behaviors. The study categorized 12 stressors into 4 groups: partner, traumatic, financial, and emotional. We defined PDS as reporting “always” or



“often” to any depressive symptoms on PRAMS Phase 5, or to a composite score  $\geq 10$  on PRAMS Phase 6 depression questions, compared with women reporting “sometimes,” “rarely” or “never” to all depressive symptoms. The median response time to MA-PRAMS survey was 3.2 months (interquartile range, 2.9–4.0 months). We estimated prevalence ratios (PRs) and 95% confidence intervals (95% CIs) using modified Poisson regression models, controlling for socioeconomic status indicators, pregnancy intention and prior mental health visits. The findings revealed that among 5,395 participants, 58% reported  $\geq 1$  stressor (partner=26%, traumatic=16%, financial=29% and emotional=30%). Reporting of  $\geq 1$  stressor was associated with increased prevalence of PDS (PR=1.68, 95% CI: 1.42–1.98). The strongest association was observed for partner stress (PR=1.90, 95% CI: 1.51–2.38). Thirty-eight percent of mothers with PDS sought help. Mothers with partner-related stressors were less likely to seek help, compared with mothers with other grouped stressors. The study concluded that women who reported perinatal common stressors—particularly partner-related stressors—had an increased prevalence of PDS. These data suggest that women should be routinely screened during pregnancy for a range of stressors and encouraged to seek help for PDS.

A similar study was conducted by Roumieh et al. (2019) on the prevalence and risk factors for postpartum depression among women seen at Primary Health Care Centres in Damascus. The study was a descriptive cross-sectional study which was carried out between January and December 2017 in Damascus, Syria. Postpartum women seen at a convenience sample of the largest and well-utilized primary health care centres in Damascus were invited to participate in the study. The Arabic version of the validated Edinburgh Postnatal Depression Scale questionnaire was used to measure postpartum depression. A cut-off score of 13 was considered to indicate probable depression. The study revealed that out of a total of 1105 women participated in this study, 28.2% had a score of 13 (probable Depression). The multivariate analysis showed that postpartum depression was significantly associated with a reported a health problem during last pregnancy (OR = 2.2; 95% confidence interval [CI]: 1.4–3.5); displacement (OR = 1.4; 95% confidence interval [CI]: 1.04–1.97); perceived exposure to a lot of life stressors (OR = 5.04; 95% confidence interval [CI]: 2.4–10.5); while antenatal care had a protective effect (OR = 0.52; 95% confidence interval [CI]: 0.36–0.75). The study concluded that the prevalence of postpartum depression among Syrian women in this study was relatively high, as compared to



other Arab and Non-Arab countries. Displacement due to the Syrian crisis among other factors was associated with postpartum depression. The researchers recommended that bstetricians and other professionals should be sensitized about the importance of screening for the problem for better management.

A study by van-Landschoot et al. (2017) was conducted to investigate the Knowledge, Self-Confidence and Attitudes towards Suicidal Patients at Emergency and Psychiatric Departments. The study employed a multicentre cluster randomised controlled trial, involving staff from 39 emergency and 38 psychiatric departments throughout Flanders ( $n = 1171$ ). Structured self-report questionnaires was used to assess the knowledge, confidence and beliefs regarding suicidal behaviour management, and attitudes. Data were analysed through a Solomon four-group design, with random assignment to the different conditions. The findings revealed that the baseline sample consisted of 307 (55.8%) mental health professionals and 243 (44.2%) ED staff. The majority were women ( $n = 358$ , 65.1%). All age groups between 18 and 65 years were well represented, with a mean age of 38.25 years ( $SD = 11.23$ ). Participants comprised predominantly general nurses ( $n = 269$ , 48.9%) and psychiatric nurses ( $n = 135$ , 24.5%). Years of professional experience as ED or mental health care provider ranged from 0 years to 40 years ( $M = 14.5$  years,  $SD = 10.6$ ). Frequency of contact with suicidal patients varied according to department, with 64.2% of mental health professionals reporting daily contact with suicidal patients compared to 16.1% of ED providers ( $\chi^2(1) = 118.436$ ,  $p < 0.001$ ). About half (54.9%) reported having additional education or training in suicide prevention within 6 months prior to the baseline assessment of this study, with significant differences between staff of psychiatric and emergency departments (70.8% vs. 35.0% respectively;  $\chi^2(1) = 63.878$ ,  $p < 0.001$ ). A significant amount of health professionals reported experience with suicide or suicidal behaviour in their personal environment, i.e., a family member ( $n = 100$ , 37.0%), close friend ( $n = 141$ , 31.2%), colleague or acquaintance ( $n = 227$ , 47.6%). Analysis regarding the subscale of the QPR questionnaire revealed a mean score of 24.1 ( $SD = 3.8$ ;  $Min = 7$ ,  $Max = 35$ ). Almost half of the baseline sample ( $n = 241$ , 43.8%) rated their general understanding about suicide and suicide prevention as 'high' or 'very high'. Significant differences in self-perceived knowledge level were found between staff of psychiatric and emergency departments, with mental health professionals reporting higher baseline knowledge scores than ED providers ( $M = 25.2$  vs.  $M =$



21.6;  $t(507) = -12.42, p < 0.001$ ). Analysis regarding the SIT showed that baseline levels of knowledge regarding risk factors and warning signs of suicide were considerably elevated. With regard to the 3 items asking about risk factors, 81.6% of the health professionals answered at least 2 items correctly. Similar results were found for the 5 items asking about warning signs, with 75.5% of the subjects answering at least 4 items correctly. There were no significant differences in level of knowledge regarding risk factors between staff of emergency and psychiatric departments ( $M = 2.1$  vs.  $M = 2.1$ ;  $t(470) = -0.026, p = 0.98$ ). However, mental health professionals appeared to have greater knowledge about warning signs than ED providers ( $M = 4.1$  vs.  $M = 3.8$ ;  $t(468) = -4.019, p < 0.001$ ). With regard to attitudes, the mean ATTS subscore was 12.4 ( $SD = 2.0$ ;  $Min = 6, Max = 15$ ) indicating that baseline attitudes of clinical staff are quite adaptive. However, mental health professionals and ED staff significantly differed in their willingness to help suicidal patients ( $M = 12.8$  vs.  $M = 11.8$ ;  $t(510) = -5.695, p < 0.001$ ). Staff of psychiatric departments more readily endorsed that 'they are prepared to help a person in a suicidal crisis by making contact' (93.5% vs. 76.9%;  $\chi^2(1) = 29.141, p < 0.001$ ) and reported more disagreement with the statement 'if someone wants to commit suicide, it is their business and we should not interfere' (85.9% vs. 77.0%;  $\chi^2(1) = 29.141, p = 0.009$ ). At baseline, the vast majority of clinical staff reported no hesitancy in asking about patients' current suicidal ideation ( $n = 390, 76.5\%$ ) and about half reported feeling confident or very confident in its ability to successfully assess ( $n = 282, 54.8\%$ ) and treat ( $n = 256, 49.9\%$ ) suicidal patients. There were significant differences in provider confidence among staff of emergency and psychiatric departments. ED providers were less confident in the assessment and treatment of suicidal behaviour and were more hesitant to ask a patient if he or she is suicidal compared to mental health professionals ( $M = 10.0$  vs.  $M = 11.7$ ;  $t(507) = -9.581, p < 0.001$ ).

Thomas et al. (2018), Assess the Level of Knowledge and Attitude Towards Suicide Among B.Sc. Nursing Students of Selected Nursing Colleges of South Western Rajasthan. A non-experimental, descriptive exploratory survey approach was used for the study. Data was collected from 100 first year and second year B.Sc. nursing students by Non-probability consecutive sampling technique who were studying in selected nursing colleges of South Western, Rajasthan. Self-structured questionnaires were used to assess the level of knowledge of suicide and standardized Attitudes Towards Suicide Questionnaire scale (ATTS) adopted by





Renberg and Jacobson (2003) was used to assess attitude toward suicide. Findings related to level of knowledge showed that the highest percentage (51%) of students were having poor knowledge, only (2%) students having very good knowledge about suicide. Findings related to level of attitude towards suicide showed majority (67%) of students have Negative attitude. Findings related to association showed that there was significant association between currently stay and level of knowledge ( $\chi^2 -18.7$ ,  $P<0.05$ ), significant association between age and level of attitude ( $\chi^2 -7.1$ ,  $P<0.05$ ) and significant association between year of study and level of attitude ( $\chi^2 -8.56$ ,  $P<0.05$ ). Findings related to correlation between level of knowledge and level of attitude on suicide among B.Sc. nursing 1st year and 2nd year student showed that there is moderately positive correlation ( $r=0.60$ ) between level of knowledge and level of attitude. The study concluded that the negative influence of technology, poor social and coping support, maladjustment to life, depression, negative thought can lead to suicidal thoughts. There was poor knowledge and negative attitude towards suicide among those students. Hence, we provided self-instructional module (SIM) which focused on suicide prevention among adolescents

## Methodology

### i. Study area

The study is carried out in Bayelsa State. Bayelsa State is among the 36 states in Nigeria with eight (8) Local Government Areas. Bayelsa is a cardinal state in the South-South and in Nigeria as a whole bearing in mind it host the first place oil was first discovered in Nigeria. Bayelsa State is one of the states in Southern part of Nigeria, located in the core of Niger Delta region. Bayelsa was created in 1<sup>st</sup> October, 1996 and was carved out from Rivers State. Figure 3.1 shows the map of Bayelsa State showing the Local Government Councils and the Senatorial Districts Bayelsa State shares a boundary with Rivers State to the east and Delta State to the west, with waters of the Atlantic Ocean dominating its southern borders with a total area of 10,773square kilometres.

As a state in the oil-rich Niger Delta, Bayelsa State's economy is dominated by the petroleum industry. The state is the site of Oloibiri Oilfield, where oil was first discovered in Nigeria and as of 2015 was estimated to produce 30% - 40% of the country's oil. The state nicknamed "Glory of all Lands" has the largest gas reservoir (18 trillion cubic feet) in Nigeria. Though being the site



of one of the largest crude oil and natural gas deposits in the country contributes to local economic development, the state remains plagued by rampant poverty as well as pollution from oil spillage.

## ii. Research Design

### iii. Population for the Study

The population of this study consists of all undergraduate students of universities in Bayelsa State. The population constitutes 11,236 students of Federal University of Otuoke, Bayelsa State, 20,148 students of Niger Delta University, 19,032 students of University of Africa Toru-Orua, and 401 students Medical University. Therefore, the total population for the study is 50,817 undergraduate students of universities in Bayelsa State (Source: Bayelsa State-Open Education Data, 2023)

### iv. Sample and Sampling Techniques

Using the Krejcie and Morgan (1970) table for sample size estimation. A total of 381 respondents were selected to participate in the study. But for the purpose of clarity and better representation of the total population the researcher employed 800 respondents to participate in the study. This sample was selected using a multistage sampling procedure as follows;

At stage one, simple random sampling was used to select four universities (Federal University of Otuoke, Niger Delta University, University of Africa Toru-Orua, and, Medical University) in Bayelsa State.

At stage two, the non-proportionate random sampling was employed to select 200 students from each of the four selected universities in stage one.

At stage three, accidental sampling was adopted to select respondents to whom the instrument was administered to in their various universities.

**Table 1: Sample Size Distribution**

S/No	Name of School	Total Population	Sample Selected
1	Federal University of Otuoke, Bayelsa State	11,236	200
2	Niger Delta University	20,148	200
3	University of Africa Toru-Orua	19,032	200
4	Bayelsa State Medical University	401	200
	<b>TOTAL</b>	<b>0,817</b>	<b>800</b>

### v. Instrument for Data Collection



The instrument for data collection was a structured questionnaire titled “Knowledge attitude and preventive behavior towards suicide among undergraduates Questionnaire (KAPBTSUQ)”. The questionnaire was administered to a sample of eight hundred (800) undergraduate students. The questions was divided into three sections A, B and C. Section A contains demographic data of the respondents, sex, age, level of study etc, while Section B examined the student’s level of awareness/knowledge of suicide, its causes and risk factors and section C comprises of questions which explored the level of suicidal behaviour among undergraduates students in Bayelsa State.

#### **vi. Validity of the Instrument**

Validity of the instrument was ensured through the development of a draft instrument by consulting relevant literatures, subjecting the draft to independent, peer and expert reviews, particularly the supervisor and three other experts in Ignatius Ajuru University of Education, two (2) from the Department of Human Kinetics and one (1) from Measurement and evaluation Department for both face and content validity, and after the validation, the investigator incorporated the changes as per the recommendation by the evaluators. The comments of the four experts were included before sharing the tool with a known validity score, indicating it is highly valid.

#### **Vii Reliability of the Instrument**

The instruments for data collection in this study was subjected to test-re-test reliability method, using 20 copies of the instrument which was administered to undergraduate students in Rivers State, who were not part of the population, but shares the same characteristics. After two weeks, the same number of instrument was administered to the group. Responses were coded, entered, and subjected to a reliability test using Pearson Product Moment Correlation (PPMC) to determine the reliability coefficient of 0.76 and above which was suitable for the study,

#### **vii. Method of Data Collection**

A letter of introduction was collected from the Head of Department of Human Kinetics, Health and Safety Studies. The letter was presented to the Institutions. Four research assistants were employed to administer copies of the instrument to the respondents and ensure on the spot collection and editing. The data collection process lasted for the period of eight (8) weeks.

**Administrative aspects and ethical considerations:** Official permission will be secured from the institutions. Informed consents from participating respondents for the study. They will be reassured of confidentiality of any obtained information and that participation is voluntary.

#### x. Method of Data Analysis

The data gathered was coded and analyzed through the Statistical Product for Service Solution (SPSS) version 25.0 and was presented on tables charts. Research questions were answered using frequency and percentages, mean and standard deviation. Hypotheses were tested using inferential statistical tools as Pearson Correlations, and independent samples t-test.

### Results and discussion of findings

**Table 2: Demographic Data of the respondents**

S/No	Items	Option	Response F(%)
1	Age	16-20	133(19.1%)
		21-25	232(29.8%)
		26 years and above	413(53.1%)
2	Gender	Male	393(50.5%)
		Female	385(49.5%)
3	Level of Study	Year 1	129(16.6%)
		Year 2	268(34.4%)
		Year 3	181(23.3%)
		Final year	200(25.7%)
4	Religious Belief	Christianity	463(59.5%)
		Islam	237(30.5%)
		Traditional	78(10.0%)

Table 2 above revealed responses on the demographic data of the respondents. The findings revealed that majority of the respondents 413(53.1%) were within the age range of 26 years and above. The finding on the above table also revealed that majority of the respondents 393(50.5%) were male respondents while others were female respondents. Based on the level of study of the respondents, the findings revealed that majority of the respondents 268(34.4%) were year two (2) undergraduate students. Finally, the table above revealed responses on the religious belief of the respondents, the findings revealed that majority of the respondents 463(59.5%).

**Research Question 1:** What is the knowledge of suicide among undergraduate in Bayelsa State based on gender?

**Table 3: The knowledge of suicide among undergraduate in Bayelsa State based on gender.**

S/No	Items	Male		Female	
		$\bar{X}$	SD	$\bar{X}$	SD
1	Suicide is a self-inflicted death with evidence that the person intended to die	3.3	.64	3.3	.64
2	suicides are impulsive acts due to stress (such as from financial or <a href="#">academic difficulties</a> ), relationship problems (such as <a href="#">breakups</a> or <a href="#">divorces</a> ), or <a href="#">harassment</a> and <a href="#">bullying</a>	3.5	.55	3.3	.64
3	Common methods of suicide include hanging, <a href="#">pesticide poisoning</a> , and firearms.	3.4	.72	3.1	.66
4	Suicidal Ideation is thoughts of ending one's life but not taking any active efforts to do so.	3.1	.77	3.4	.49
5	Use of hard drugs is not a risk factor for suicide	3.3	.64	3.5	.68
6	Does social isolation increases suicidal risk	3.5	.55	3.7	.46
7	Are there any difference between self-harm and suicidal behavior	2.4	.71	3.3	.64
8	Socio-economic problems such as unemployment, poverty, homelessness, and <a href="#">discrimination</a> may trigger suicidal thoughts.	3.3	.64	3.0	.00
9	Trauma is a risk factor for suicidality in both children and adults.	3.3	.64	3.2	.71
10	A <a href="#">suicide attack</a> is a political or religious action where an attacker carries out violence against others which they understand will result in their own death.	3.5	.61	2.1	.77
<b>Grand Mean</b>		<b>3.3</b>	<b>.66</b>	<b>3.2</b>	<b>.55</b>

Table 3 shows the knowledge of suicide among undergraduates in Bayelsa State based on gender. The result shows that the level of knowledge on suicide possessed by the male respondents was higher ( $3.3 \pm 0.66$ ) followed by those who were female respondents ( $3.2 \pm 0.55$ ).

**Research Question 2:** What is the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender?

**Table 4: Attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender.**

S/No	Items	Male		Female	
		$\bar{X}$	SD	$\bar{X}$	SD
1	I feel comfortable discussing suicidal thoughts with someone you trust	3.5	.61	3.4	.49
2	I have sought help for suicidal thoughts or feelings	3.5	.65	3.6	.56
3	I believe that talking about suicide can help reduce its stigma	3.6	.67	3.5	.65
4	My school provides adequate support for students struggling with suicidal thoughts	3.5	.67	3.3	.80
5	The social media and online platforms play a role in influencing suicidal ideation among students	3.3	.72	3.6	.66
6	I have encountered a peer who exhibited signs of suicidal ideation, and did you intervene or seek help for them	3.5	.72	3.5	.61
7	The academic pressure students face contributes to suicidal thoughts	3.7	.53	3.5	.65
8	I have noticed some changes in my own attitude towards suicide and mental health during your time at school	3.5	.67	3.5	.64
9	I believe that friends and family play a crucial role in supporting students with suicidal ideation	3.4	.68	3.5	.44
10	I have been involved in a conversation or activity aimed at preventing suicide among students	3.6	.70	3.6	.71
11	I think that students with suicidal ideation are afraid of being stigmatized by their peers	2.5	.55	2.6	.69
<b>Grand mean</b>		<b>3.4</b>	<b>.64</b>	<b>3.3</b>	<b>.61</b>

Table 4 shows the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender. The result shows that the male respondents show higher level of positive attitude towards suicidal ideation ( $3.4 \pm 0.64$ ) compared to the female undergraduate students ( $3.4 \pm 0.64$ ).



**Results on Hypotheses**

**Hypothesis 1:** There is no significant difference in the knowledge of suicide among undergraduate in Bayelsa State based on gender

**Table 5: Independent samples t-test showing significant difference in the knowledge of suicide among undergraduate in Bayelsa State based on gender**

		F	Sig.	T	Df	Sig. (2-tailed)	Mean Dif	Std. Error Dif	p-value	Decision
Knowledge	Equal variances assumed	42.809	.000	7.831	776	.000	.972	.124	.000	H0 Rejected
	Equal variances not assumed			7.859	701	.000	.972	.123		

**\*Significant. P<0.05.**

The above table 5 revealed independent t-test statistics of significant difference in the knowledge of suicide among undergraduate in Bayelsa State based on gender. The findings revealed that there was a significant difference in the knowledge of suicide among undergraduate in Bayelsa State based on gender (p-value = .000, p<0.05). Therefore, the null hypotheses which stated that there is no significant difference in the knowledge of suicide among undergraduate in Bayelsa State based on gender was rejected.

**Hypothesis 2:** There is no significant difference in the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender.

**Table 6: Independent samples t-test showing significant difference in the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender.**

		F	Sig.	t	Df	Sig. (2-tailed)	Mean Dif	Std. Error Dif	p-value	Decision
Attitude	Equal variances assumed	15.938	.000	4.583	776	.000	2.063	.450	.000	
	Equal variances not assumed			4.588	768	.000	2.063	.449		

**\*Significant. P<0.05.**



The above table 6 revealed independent t-test statistics of significant difference in the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender. The findings revealed that there was a significant difference in the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender ( $p$ -value = .000,  $p < 0.05$ ). Therefore the null hypotheses which stated that there is no significant difference in the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender was rejected

### **Discussion of Findings**

#### **Difference in the knowledge of suicide among undergraduate in Bayelsa State based on gender**

The findings revealed that there was a significant difference in the knowledge of suicide among undergraduate in Bayelsa State based on gender ( $p$ -value = .000,  $p < 0.05$ ). This finding seems to be a positive finding because there is a scale of preference in the interest on knowing or acquiring knowledge of a particular phenomenon such as suicide between the male and female sex. This finding is not in any way conflicting, albeit, some of the females may develop interest in knowing about suicide, its causes and other related factors, it is widely agreed that the male sex found the topic of suicide to be more interesting. Other researchers who reported a similar finding are; Mirsalimi et al. (2019), Matinnia et al. (2018), Amber et al. (2015), Dagla et al. (2021), Hanach et al. (2020), and Bante, et al. (2021). Additionally, van-Landschoot et al. (2017) revealed a similar finding in their investigation on the Knowledge, Self-Confidence and Attitudes towards Suicidal Patients at Emergency and Psychiatric Departments. In an assessment of the level of knowledge and attitude towards suicide, Thomas et al. (2018), related to level of knowledge showed that the highest percentage (51%) of students were having poor knowledge, only (2%) students having very good knowledge about suicide. Findings related to level of attitude towards suicide showed majority (67%) of students have Negative attitude. Findings related to association showed that there was significant association between currently stay and level of knowledge ( $\chi^2 - 18.7$ ,  $P < 0.05$ ), significant association between age and level of attitude ( $\chi^2 - 7.1$ ,  $P < 0.05$ ) and significant association between year of study and level of attitude ( $\chi^2 - 8.56$ ,  $P < 0.05$ ). Findings related to correlation between level of knowledge and level of attitude on suicide among B.Sc. nursing 1st year and 2nd year student showed that there is moderately positive correlation ( $r = 0.60$ ) between level of knowledge and level of attitude.





### **Difference in the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender.**

The findings revealed that there was a significant difference in the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender ( $p$ -value = .000,  $p < 0.05$ ). Just as the former, there expect to be a significant difference in the attitude of male and female students towards suicidal ideation, based on the fact that their interest and knowledge level differs significantly. This finding is in line with the report of Omigbodun et al. (2018) who reported one-year prevalence of suicide attempts at 12% and over 20% of suicide ideation in Nigerian adolescents. More so, Lewinsohn et al. (2013) added that one in every five adolescents is likely to experience a diagnosable depressive episode by gender. Lester (2016) Maintained that a number of psychological factors increase the risk of suicide including: hopelessness, loss of pleasure in life, depression, anxiousness, agitation, rigid thinking, rumination, thought suppression, and poor coping skills, Lester (2016) added that the above factors differs with gender. A study by Kim et al. (2015) on suicidal ideation among undergraduates revealed that it is traceable to relationships between poor school connectedness and psychological distress. Ha (2015) also found socioeconomic status to be a significant moderator of the association between school connectedness and psychological distress, but not between school connectedness and suicidal ideation or attempts. Vedana and Zanetti (2019) revealed that most of the nursing students had contact with someone with suicidal behavior, but did not have education related to the subject. The most negative attitudes were associated with the female sex, lack of materials on suicide prevention, and lower self-perception of professional competence. Jaime and Robyn (2014) investigated the effects of gender, personal experience with suicidal others and exposure to suicide awareness education upon suicide related knowledge and attitudes of 190 young adults and 52 older adults. Results showed that both the young and older adults indicated a substantial degree of personal experience with suicidal others, and despite displaying inadequate knowledge, possessed reasonable attitudes to adolescent suicide (e.g., need for education). Lastly, Amorim et al. (2021) conducted a study aimed to understand the attitudes and perceptions of medical school students and teachers regarding suicide, who revealed that here was a significant difference regarding the Right to Suicide factor among students who said they were religious ( $p = 0.001$ ), as also among the teachers who attended religious services with a higher frequency ( $p = 0.02$ ).

## Conclusion

Conclusions emerged this study that there was a significant difference in the knowledge of suicide based on gender, as well as a significant difference in the attitude towards suicidal ideation among undergraduates in Bayelsa State based on gender.

## Recommendations

The following recommendations were made;

1. The ministry of education at all levels (primary, secondary, and tertiary) should develop and implement educational programs aimed at increasing awareness about suicide prevention. These programs should focus on providing accurate information and dispelling myths surrounding suicide.
2. Health educators should design interventions that specifically target individuals with positive attitudes towards suicidal ideation. These interventions could include counseling services, support groups, and mental health workshops to address underlying issues.

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