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Original Research Article

Assessment of knowledge and attitude towards suicidal ideation, and suicidal risk of adults in Benin City, Edo State, Nigeria

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ABSTRACT

Background: The World Health Organization (WHO) estimates that about 804,000 persons die annually from suicide. Suicidal ideation in adults results from a complex interplay of biological, psychological, and social factors.
Methods: This was a descriptive cross-sectional study among 450 adults in Benin City, Edo State, Nigeria. A multistage sampling technique was used to select respondents. Data were obtained using pretested structured self-administered questionnaires which were adopted from the adult suicidal ideation questionnaire. Data analysis was by IBM statistical package for the social sciences (SPSS) version 22.0, and the level of significance was set at $p<0.05$.
Results: A total of 450 respondents participated in this study, mean age±standard deviation (SD)=23.7±5.3. One hundred and forty-six (66.4%) respondents had good knowledge of suicidal ideation and 207 (94.1%) had a positive attitude towards suicidal ideation. One-tenth of respondents were at risk of committing suicide.
Conclusions: One-tenth of the respondents were at risk of committing suicide. The government and medical personnel need to put in concerted efforts to ensure that suicidal ideation among adults is promptly addressed.

Keywords: Knowledge, Attitude, Suicide, Ideation, Risk

INTRODUCTION

Suicide is a major cause of mortality, it accounts for an estimated 804,000 annual deaths worldwide. For every suicide, there are many more people who contemplate or attempt suicide.[1] Pesticide, hanging and firearms are among the most common means of suicide globally. Pesticides account for an estimated one-third of the world's suicides.[2] Women 'prefer' the means of lower effectiveness, like exsanguinations or abuse of hypnotics, while men tend to use more violent methods like firearms or jumping from a height.[3]

Suicide research and prevention require accurate evaluation of suicide phenomena. Sound knowledge of and proper attitude to suicidal ideation promotes optimal suicide prevention outcomes. Approaches to suicide prevention may include restrictions to lethal weapons or substances and physician education to assess the suicidal risks of individuals. This would go a long way in reducing suicide deaths worldwide.[4] Communities play a critical role in suicide prevention by providing social support to vulnerable individuals, providing help in crises, engaging in follow-up care, fighting stigma and supporting those bereaved by suicide. World Suicide Prevention Day is celebrated on the 10th of September every year.[3]

METHODS

A descriptive cross-sectional study design was utilized for this study and was carried out between June 2018 and December 2019. The study population were adults (18-60 years) residing at Ekosodin community, Ovia North East local government area (LGA) of Edo State. Ovia North East LGA is located in Edo South senatorial district with its headquarters in the town of Okada. The LGA has a population of 155,344 based on the 2006 national census,

with a projected population of 223,556 in 2019 at a growth rate of 2.8%.[5]

A minimum sample size of 450 was calculated using the Cochrane formula considering a prevalence rate of 20%, which refers to the prevalence of suicidal thoughts in a study conducted among adults of South Western Nigeria in 2008 and a 10% non-response rate.[6,7] Respondents were selected using a multistage sampling technique comprising three stages. In stage 1, a simple random sampling technique by balloting was used to select Ovia North East out of the seven LGAs that make up Edo South senatorial district. In stage 2, out of the 13 wards that make up Ovia North East LGA, the Oluku ward (ward 7) was chosen using a simple random sampling technique by balloting. In stage 3, the cluster sampling method was utilized; each community served as a cluster and the Ekosodin cluster was selected using simple random sampling by balloting. All persons who met the inclusion criteria (aged 18-60 years) and gave consent were included in the study. Data were collected using a pretested structured self-administered questionnaire written in the English Language.

The questionnaire was pretested among adult residents of Oredo LGA, Benin City, Edo State. Ten per cent of the study sample size was used for pretesting. The aim was to test the questionnaire for correctness and appropriate understanding by the respondents and to aid appropriate collection of data. Appropriate corrections were made where application to the questionnaire before the commencement of this survey.

Questionnaires were screened for completeness and analysis of the data done using IBM statistical package for the social sciences (SPSS) version 22.0 software.

Knowledge of suicidal ideation was assessed using the myths on suicidal ideation quiz required respondents to identify twelve statements (myths) about suicidal ideation as either true or false. The true statements are: there is a strong link between alcoholism and suicide, suicide rates are increasing among the young, most people who attempt suicide fail to kill themselves, suicide rarely happens without warning, and suicide usually happens during the day. The false statements are: asking directly about suicidal intention will lead to suicidal attempt, nothing can be done to stop a person from making the attempt once they have made up their mind to kill themselves, suicide is most common among lower socioeconomic groups, the suicidal person wants to die and is fully intent on dying if seen by a psychiatrist, everyone who commits suicide will be diagnosed as depressed, suicide rates are higher among the young than the old, and people who talk about suicide do not complete it.[8] A score of 0 was awarded for every incorrect answer and 1 for every correct answer. The total score for each respondent was computed with a minimum score of 0 and a maximum score of 26, scores were converted to percentages and grouped as poor knowledge: 0-12 (<50%) and good knowledge: 13-26 (≥50%).

Attitude towards suicidal ideation was assessed using the attitudes towards suicide scale (ATSS) which was developed from the suicide opinion questionnaire (SOQ) and it uses a 5 point Likert scale to assess attitude towards suicidal ideation using twelve statements. The positive attitudinal statements were: suicide can never be justified, human duty is to stop someone from suicide, prevention of suicide can always help, and I am prepared to help prevent suicide. The negative attitudinal statements were: suicide is one's own business, people have right to commit suicide, sometimes suicide is the only solution, suicidal attempt is a cry for help, suicide attempts to revenge or punish, people should rather not talk about suicide, most suicide attempts are impulsive, and once suicidal, always suicidal.[9] A score of 0 was awarded for the least correct answer and 4 for the most correct answer, and in instances where the negative response is was the correct one, the reverse was the case. The total score for each respondent was computed with a minimum of 0 and maximum of 48, and converted to percentages. Scores between 0 and 49.9% were adjudged negative attitude (supportive stance towards suicidal ideation), while scores 50.0% and above was adjudged positive attitude (non-supportive stance towards suicidal ideation).

The risk of suicide was assessed using the SAD PERSONS questionnaire.[10] The SAD PERSONS questionnaire is a 10 – item screening tool where each letter corresponds to a risk factor for suicide (sex – male, age ≤20 years or ≥45 years, depression, previous attempt, ethanol abuse, rational thinking loss, social supports lacking, organized plan, no spouse, and sickness). Each factor is scored as 1 if present, 0 if absent, resulting in a cumulative score that is interpreted as conveying a specified level of risk. The scores were computed and grouped for proposed clinical action as 0–2: send home, 3–4: close monitoring, 5–6: strongly consider hospitalization and 7–10: hospitalization for further assessment.[11]

Ethical approval to conduct the study was sought from the research ethics committee, University of Benin, Benin City, Nigeria. The respondents were informed that participation in the study was voluntary and that information provided in the survey was anonymous and confidential. Verbal consent was obtained before participation.

RESULTS

Four hundred and fifty respondents were surveyed in this study. The mean age±standard deviation (SD) was 23.7±5.3 years. A higher proportion of respondents 231 (51.3%) were aged between 21-25 years with a mean age of 23.7 years (SD=5.3) Two hundred and thirty-eight (52.9%) of respondents were females while 212 (47.1%) were males. Majority of the respondents, 400 (88.9%)

were single. Two hundred and seventeen (48.2%) respondents had secondary level of education, 207 (46.0%) respondents had tertiary level of education, while 26 (5.8%) respondents had primary level of education. Three hundred and seventeen (70.4%) respondents had an average monthly income of less than ₦18,000 (Table 1).

Table 1: Socio-demographic characteristics of respondents.

Variable	Frequency (n=450)	Percent
Age group (in years)		
18-20	124	27.6
21-25	231	51.3
26-30	60	13.3
31-35	16	3.6
36-40	6	1.3
41-45	9	2.0
46-50	4	0.9
Mean±SD=23.7±5.3		
Sex		
Female	238	52.9
Male	212	47.1
Marital status		
Single	400	88.9
Married	44	9.8
Cohabiting	5	1.1
Separated/divorced	1	0.2
Level of education		
Primary	26	5.8
Secondary	217	48.2
Tertiary	207	46.0
Average monthly income		
<₦18000	317	70.4
₦18000–₦36000	84	18.7
₦37000–₦54000	28	6.2
₦55000–₦72000	4	0.9
>₦72000 Median=₦10,000 Range = ₦898,000	17	3.8

Two hundred and twenty (48.9%) respondents were aware of suicidal ideation while 230 respondents (51.1%) were not (Figure 1). One hundred and sixty-one (73.7%) respondents had their source of information from the internet, 126 (57.3%) respondents had electronic media as their source of information, 97 (44.1%) respondents had school as their source of information, 66 (32%) respondents had their peers as their source of information while 48 (21.8%) respondents had information from religious bodies (Table 2).

Subsequent knowledge and attitudinal interviews on suicidal ideation were carried out on the 220 participants who were aware of suicidal ideation.

On knowledge of the myths about suicide, 97 (44.1%) respondents correctly identified as true that 'there is a strong link between alcoholism and suicide'. One hundred and sixty nine (76.8%) respondents correctly identified as false that 'asking directly about suicidal intention will lead to suicidal attempt'; 201 (91.4%) respondents correctly identified as true that 'suicide rates are increasing among the young'; 175 (79.5%) respondents correctly identified as false that 'nothing can be done to stop a person from making the attempt once they have made up their mind to kill themselves'; 85 (38.6%) respondents correctly identified as true that 'most people who attempt suicide fail to kill themselves'; 107 (48.6%) correctly identified as false that 'suicide is most common among lower socioeconomic groups'; 62 (28.2%) respondents correctly identified as false that 'the suicidal person wants to die and is fully intent on dying'; 83 (37.7%) respondents correctly identified as false that 'if seen by a psychiatrist, everyone who commits suicide will be diagnosed as depressed'; 132 (60.0%) correctly identified as true that 'suicide rarely happens without warning'; 60 (27.3%) respondents correctly identified as true that 'suicide usually happens during the day'; 26 (11.8%) respondents correctly identified as false that 'suicide rates are higher among the young than the old'; 127 (57.7%) respondents correctly identified as false that 'people who talk about suicide do not complete it' (Table 3).

Table 2: Source of information among respondents.

Variable*	Frequency (n=220)	Percent
Internet	161	73.7
Electronic media	126	57.3
School	97	44.1
Peers	66	32.0
Religious bodies	48	21.8

*Multiple response question.

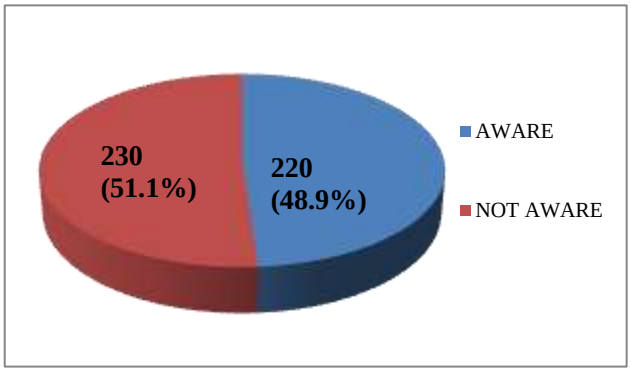

Figure 1: Awareness of suicidal ideation.

On knowledge of suicidal ideation, 158 (71.8%) respondents correctly identified the meaning of suicidal ideation (thoughts involving a desire, intention and methods of committing suicide as the meaning of suicidal ideation), 104 (48.2%) respondents correctly identified

the factors responsible for suicidal ideation (depression, emotional abuse, poverty, death of a loved one , previous suicide attempt and hereditary), 129 (58.6%) respondents correctly identified the methods used to commit suicide (poisons, drugs, hanging and firearms) and 139 (63.2%) identified the correct myths about suicide (Table 4).

Table 3: Knowledge of myths about suicidal ideation.

Myths about suicidal ideation (n=220)	Correct freq. (%)	Incorrect freq. (%)
There is a strong link between alcoholism and suicide (T)	97 (44.1)	123 (55.9)
Asking directly about suicidal intention will lead to suicidal attempt (F)	169 (76.8)	51 (23.2)
Suicide rates are increasing among the young (T)	201 (91.4)	19 (8.6)
Nothing can be done to stop a person from making the attempt once they have made up their mind to kill themselves (F)	175 (79.5)	45 (20.5)
Most people who attempt suicide fail to kill themselves (T)	85 (38.6)	135 (61.4)
Suicide is most common among lower socioeconomic groups (F)	107 (48.6)	113 (51.4)
The suicidal person wants to die and is fully intent on dying (F)	62 (28.2)	158 (71.8)
If seen by a psychiatrist, everyone who commits suicide will be diagnosed as depressed (F)	83 (37.7)	137 (62.3)
Suicide rarely happens without warning (T)	132 (60.0)	88 (40.0)
Suicide usually happens during the day (T)	60 (27.3)	160 (72.7)
Suicide rates are higher among the young than the old (F)	26 (11.8)	194 (88.2)
People who talk about suicide do not complete it (F)	127 (57.7)	93 (42.3)

T=True, F=false.

Table 4: Knowledge of suicidal ideation among respondents.

Variable	Frequency (n=220)	Percent
Meaning of suicidal ideation		
Correct	158	71.8
Incorrect	62	28.2
Factors responsible for suicidal ideation		
Correct	104	48.2
Incorrect	114	51.8
Methods used to commit suicide		
Correct	129	58.6
Incorrect	91	41.4
Myths about suicidal ideation		
Correct	139	63.2
Incorrect	81	36.8

Overall, 146 (66.4%) respondents had good knowledge of suicidal ideation while 74 (33.6%) had poor knowledge (Figure 2). Concerning attitude towards suicidal ideation, 99 (45.0%) respondents strongly disagreed that suicide is one's own business; 58 (26.4%), 23 (10.5%), 22 (10.0%) and 18 (8.1%) respondents disagreed, were undecided, agreed and strongly agreed respectively with a mean attitudinal score of 1.10±1.299 (Table 5).

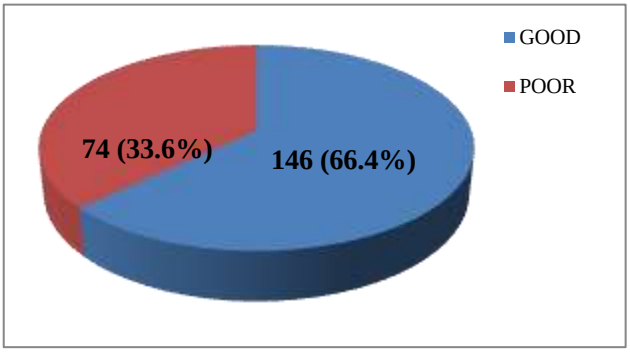

Figure 2: Overall knowledge of suicidal ideation.

Overall, 207 (94.1%) of the respondents had positive attitude towards suicidal ideation while 13 (5.9%) had a negative attitude (Figure 3).

Table 5: Attitude towards suicidal ideation.

Variable (n=220)	Strongly disagree freq. (%)	Disagree freq. (%)	Undecided freq. (%)	Agree freq. (%)	Strongly agree freq. (%)	Mean (SD)
Suicide is one's own business	99 (45.0)	58 (26.4)	23 (10.5)	22 (10.0)	18 (8.1)	1.10 (1.299)
People have right to commit suicide	135 (61.4)	35 (15.9)	22 (10.0)	16 (7.3)	12 (5.4)	0.80 (1.208)
Suicide can never be justified	32 (14.5)	13 (5.9)	30 (13.6)	65 (29.5)	80 (36.4)	2.67 (1.395)
Sometimes suicide is the only solution	122 (55.5)	35 (15.9)	29 (13.2)	20 (9.1)	14 (6.3)	0.95 (1.276)
Human duty is to stop someone from suicide	17 (7.7)	13 (3.9)	32 (14.5)	78 (35.5)	80 (36.4)	2.87 (1.196)

Continued.

Variable (n=220)	Strongly disagree freq. (%)	Disagree freq. (%)	Undecided freq. (%)	Agree freq. (%)	Strongly agree freq. (%)	Mean (SD)
Suicidal attempt is a cry for help	26 (11.8)	32 (14.5)	27 (12.3)	67 (30.5)	68 (30.9)	2.54 (1.369)
Suicide attempts to revenge or punish	59 (26.8)	62 (28.2)	52 (23.6)	34 (15.5)	13 (5.9)	1.45 (1.206)
People should rather not talk about suicide	73 (33.2)	49 (22.3)	34 (15.5)	39 (17.7)	25 (11.3)	1.52 (1.399)
Prevention of suicide can always help	12 (5.5)	10 (4.5)	23 (10.5)	83 (37.7)	92 (41.8)	3.06 (1.094)
I am prepared to help prevent suicide	8 (3.6)	10 (4.5)	19 (8.6)	89 (40.5)	94 (42.8)	3.14 (1.004)
Most suicide attempts are impulsive	31 (14.1)	40 (18.2)	48 (21.8)	69 (31.4)	32 (14.5)	2.14 (1.276)
Once suicidal, always suicidal	56 (25.5)	59 (26.8)	34 (15.5)	42 (19.1)	29 (13.1)	1.68 (1.382)

From a total of 10 suicidal risk points, 403 respondents (89.6%) had 0–2, 38 (8.4%) had 3–4, 8 (1.8%) had 5–6 and 1 (0.2%) had 7–10 (Table 6).

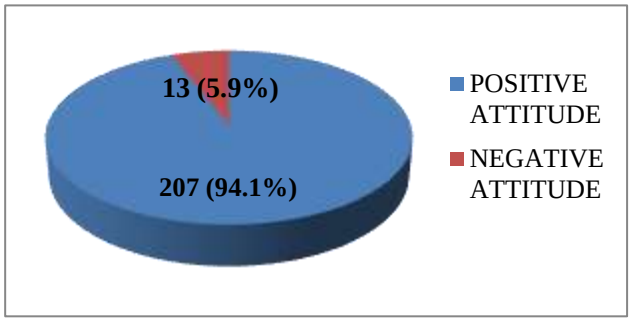

Figure 3: Overall attitude of respondents towards suicidal ideation.

Table 6: Assessment of suicide risk of respondents.

Total points	n=450 (%)	Proposed clinical action
0–2	403 (89.6)	Send home
3–4	38 (8.4)	Close monitoring
5–6	8 (1.8)	Strongly consider hospitalization
7–10	1 (0.2)	Hospitalize

DISCUSSION

About half of the respondents were aware of suicidal ideation with the internet being the major source of information. The level of awareness recorded from this study may be because the study was conducted among residents in an urban area as well as the fact that a high proportion of the respondents had a good educational background. This is important for the reason that it connotes the absence of ignorance on suicidal ideation and behaviour. The finding of the internet being the major source of information among the respondents could be as a result of the preponderance as well as the ease of access to the internet in the modern era. Various hotlines for suicide prevention are found on the internet, with online support groups for persons with suicidal ideation available. This would have a downstream effect on persons who are aware of being able to seek help when they notice signs of suicidal ideation in themselves and in others. On the other hand, the internet is also disadvantageous because it also gives various access to information on means of committing suicide, cyberbullying and suicide frenzy can be generated. Overall, about three-fifths of the respondents had good knowledge of suicidal ideation. This may be due to their good level of awareness and it is significant because it portrays adequate exposure on the topic of suicide hence supporting suicide prevention behaviours. These findings agree with a study carried out in Alwar, India in 2009 where a little less than half of the respondents were aware of suicidal ideation but half of the respondents got information from newspapers.[12]

The majority of respondents had a positive attitude towards suicidal ideation which means they do not support suicidal ideation. This might be due to the stigma attached to suicide in Nigeria and to the fact that suicide is an offence punishable by law in Nigeria. Various communities stigmatize suicide victims and their relatives. In addition, a majority of the respondents practised Christianity, this may have contributed to their non-supportive stance as the Christian religion believes in the sanctity of life.[13] Positive attitude often connotes a lesser likelihood to engage in suicidal ideation and behaviour hence it would correlate with a low prevalence of suicidal ideation among the studied population. Findings in this study are similar to a study done in South-East Nigeria in 2015 where discoveries in Igbo culture show that suicidal acts or tendencies are vehemently prohibited, and not tolerated in any form, and at any age or stage, as the solution to any problem, regardless of life's difficulties.[14] A study carried out in Ghana in 2011 also revealed a similar aversion to suicidal tendencies largely hinged on religious beliefs.[15] These findings are in contrast to a study carried out in Yoruba communities in South-West Nigeria in 2015 where suicide was perceived as an honourable escape from dishonour.[16]

As regards the assessment of suicidal risk among the participants, approximately one-tenth of the respondents had suicidal risks of varying degrees. This finding is consistent with expectations because suicidal ideation

was present in one-sixth of the respondents. This may be due to varied reasons such as lack of social support, alcohol abuse, and being unmarried. The finding is of great significance because it would prompt the implantation of targeted interventional schemes by relevant authorities. This contrasts with a study carried out in Northern Nigeria in 2016 where 71.4% had a suicidal risk.[17] Most of the respondents who had suicidal were at low risk of committing suicide. There have been recent mental health campaigns in a bid to curb the menace of suicide. This and the increase in awareness of suicidal risk might have contributed to this.

CONCLUSION

One-tenth of the respondents were at risk of committing suicide. The government and medical personnel need to put in concerted efforts to ensure that suicidal ideation among adults is promptly addressed.

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