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Coping Mechanism and Health Seeking Behaviour of Secondary School Adolescents with Suicidal Thoughts in Rivers State, Nigeria: Urban and Rural Comparison

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Abstract

Background: Suicidal thoughts among adolescents represent a significant public health concern, particularly in developing countries like Nigeria. This study aimed to investigate the prevalence of suicidal thoughts and the coping mechanisms employed by secondary school adolescents in Rivers State, Nigeria, with a comparison between urban and rural areas.

Methods: A cross-sectional survey was conducted involving 1,680 secondary school students. Data were collected using a semi-structured questionnaire adapted from the Columbia-Suicide Severity Rating Scale (C-SSRS), and the Brief COPE Questionnaire and analyzed with SPSSVs 25 with key variables being suicidal thoughts and coping mechanism.

Results: The study found that 26.5% of respondents reported experiencing suicidal thoughts, with a slightly higher prevalence in rural areas (26.9%) compared to urban areas (26.0%). Coping methods in the rural were self-denial, substance use behavioural disengagement, venting, humour, acceptance, use of instrumental support, positive reframing, and planning; while the urban areas were seen to demonstrate self-distraction, self-denial, venting, humour, positive reframing, and high intention. The most prevalent type of coping method in both areas was emotion-focused coping. There was a very high intent to seek help among respondents in both areas with suicidal thoughts. Similarly, those in rural and urban schools were 5.95 and 5.88 times more likely to seek help than those who did not have suicidal thoughts and these observed differences were statistically significant p≤0.05

Conclusion: These findings highlight the need for targeted interventions to address the unique challenges faced by adolescents in different settings, aiming to reduce the prevalence of suicidal thoughts and promote healthier coping strategies.

Keywords: Suicidal thoughts, coping mechanism, adolescents, schools,



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Introduction

Suicidal behaviour among young people including adolescents is a key public health problem that has gained significant attention in recent times. ¹ Suicidal ideation refers to thoughts of self-harm with the intent to die. Suicidal behavior is believed to results from a complex interplay of psychosocial, economic, biological, and cultural factors. ^{1,2} Globally, over 700,000 people commit suicide annually, with many more attempting it. Suicide rates vary significantly across regions, with higher incidences reported in high-income countries and among specific vulnerable groups. ^{3,4} It is interesting to note that there is a paucity of data concerning suicide in developing countries especially in Africa, these rates are often under-reported this may not be unconnected with poor record keeping and stigmatization. ¹

Suicide remains one of the leading causes of death during late childhood and adolescence globally. It results in the premature loss of countless young lives and exerts an emotional toll on the parents, siblings, families, friends and the society at large. It can be profound, often resulting in long-term psychological Adolescents experience significant physiological, psychological, and social changes that increase their vulnerability to mental health issues. This period is marked by transitions from childhood to adulthood, involving critical decisions about education, living circumstances, and peer relationships. 7-9 These challenges, coupled with high expectations from family and peers, can lead to feelings of inadequacy, stress, and loss of control. 10,11

Adolescence is a period of heightened risk for mental health disorders, including depression and anxiety, which are closely linked to suicidal behavior. The developmental changes and social pressures experienced during this time can exacerbate these conditions, increasing the risk of suicidal thoughts and behaviors. Additionally, adolescents may lack the coping mechanisms and support systems needed to navigate these challenges, further elevating their risk. 13

In Nigeria, the prevalence of suicidal behavior among adolescents is a growing concern. The country faces significant public health challenges, including limited mental health resources and stigma surrounding mental illness.¹⁴ Adolescents are particularly vulnerable due to socio-economic disparities, cultural factors, and inadequate access to mental health care.¹⁵ This study aims to investigate and compare the coping mechanisms

and intent to seek among in-school adolescents with suicidal thoughts, in rural and urban communities in Rivers State, Nigeria. By comparing urban and rural settings, the research seeks to identify the coping strategies relevant to each context. The prevalence of suicidal thoughts among adolescents have previously been reported by the authors. ¹⁶ The findings will inform targeted interventions to reduce the incidence of suicidal thoughts and promote mental well-being among adolescents in Rivers State.

Methods

The study utilized a comparative cross-sectional design. The sample size was calculated using the formula for cross-sectional studies, ¹⁷ considering an estimated prevalence of suicidal thoughts among adolescents from previous studies, a 95% confidence level, and a 5% margin of error. ¹⁸ The initial sample size was adjusted for a 10% non-response rate, resulting in a final sample size of 1680 participants, with equal representation from urban and rural areas.

A multistage sampling technique was employed to select the study participants. In the first stage, simple random sampling was used to select urban and rural local governments for the study. In the second stage, stratified random sampling was used to categorize the schools into private and public strata, then proportionate allocation was used to select secondary schools in the ratio of 4:1 (2500 registered private and 643 public secondary schools) in the selected urban as well in the rural. Finally, simple random sampling was used to select the students from each selected school, ensuring an equal number of participants from junior and senior secondary classes.

Study Population

The study population consisted of secondary school adolescents aged 10-19 years in Rivers State, Nigeria. The study was conducted in Rivers State, Nigeria. One of the oil-rich states of the Niger Delta region with history of youth restiveness. Rivers State has 23 local government areas with 2 urban and 21 rural areas. Privers State has a total number of 2500 registered private and 643 public secondary schools. 20

Study Instruments

This was divided into 2 sections. Section A had questions on socio-demographic variables. Section B had questions on coping mechanism on suicidal thoughts and intent to seek help. Data was collected using a semi-structured questionnaire adapted from the



Brief Coping Orientation for Problem Experiences (COPE) tools. ²¹⁻²³

The Brief Coping Orientation for Problem Experiences (COPE) The instrument has 28 items that measure 14 factors with 2 items each. It has a 4-point Likert scale ranging from "I have not been doing this at all (1)", "I have been doing this a little bit (2)", "I have been doing this in a medium amount (3)" to "I have been doing this a lot (4)". The Brief COPE has 14 subscales (selfdistraction, emotional support, instrumental support, active coping, denial, substance use, positive reframing, planning, behavioural disengagement, venting, humour, acceptance, self-blame, and religion) consisting of two subscales each. The strategies were categorized into Emotion-focused strategies (Use of emotional support, Venting, Self-blame, Humor, Acceptance, Religion), Problem-focused strategies (Active coping, Use of instrumental support, Positive reframing, Planning), and Avoidance coping strategies (Self-distraction, Denial, Substance use, Behavioral disengagement). The total scores on each of the scales range from 2 (minimum) to 8 (maximum). Scores were presented for the three overarching coping styles as average scores (sum of item scores divided by number of items) for each coping style. The average proportion of each of the coping styles was determined and compared. 24 The most prominent in relation to suicidal thoughts among the three coping mechanisms was determined using the principal axis factorization.

The questionnaire was pre-tested using 10% of the study population in similar schools outside the study population. Data was collected over a 4-week period by research assistants through self-administered questionnaires. The assistants were available to provide clarification if needed. The completed questionnaires were checked for completeness and accuracy before being entered into the database.

Data Analysis

Quantitative data were entered into SPSS software (version 25) for analysis. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were calculated to summarize the data. Chisquare tests were used to compare the coping mechanisms between urban and rural adolescents. Logistic regression analysis was conducted to identify significant coping mechanisms and health-seeking

behaviour associated with suicidal thoughts, with results presented as P-value (p≤0.05) and adjusted odds ratios (AOR) with 95% confidence intervals (CI). The most prominent in relation to suicidal thoughts among the three coping mechanisms was determined using the principal axis factorization.

Ethical approval was obtained from the University of Port Harcourt Teaching Hospital's ethics committee (UPTH/ADM/90/S.II/ VOL.X1/1467). Permission to carry out the study was obtained from the relevant school authorities. Assent and informed consent were obtained from all participants and their guardians.

Results

Table 1 shows that a study total of 1680 secondary school adolescents, with an equal representation from urban and rural areas of Rivers State, Nigeria. The mean ages of respondents from rural and urban schools were 13.39 years (±1.94) and 13.35 years (±1.92), respectively. There were more male participants in the rural 493(58.8%) than urban 449 (53.4 %) schools. Slightly less number of respondents in the rural 502 (59.8%) reported living with both parents when compared with the urban respondents 537 (63.9%). overall, 26.5% of the adolescents reported having suicidal thoughts, with a slightly higher prevalence in rural areas (26.9%) compared to urban areas (26.0%). All these differences were not statistically significant. (p≥0.05).

Table 2 shows that a majority of the respondents used denial under avoidance coping, 190 (84.1%) rural compared to 151 (68.9%) in the urban schools. This difference was statistically significant with (p≤0.05). Under emotion-focused coping, the most prevalent in the rural schools was use of emotional support, 146 (64.6%) while in the urban, use of self-blame 127 (58.0%) was the most prevalent. These were not statistically significant. Under problem-focused coping, active coping was the most prevalent method used among the rural respondents, 159 (70.4%) with suicidal thoughts and in the urban, use of instrumental support 97 (44.3%) was the most prevalent method used.

Table 3 shows that the proportion of respondents with lifetime suicidal thoughts in rural area 226 (26.9%) is slightly higher than the proportion in the urban area 216 (26.0%).



Table 4 shows the coping mechanism for suicidal thoughts. Following the logistic model on the coping mechanisms among respondents with suicidal thoughts, the rural areas were seen to exhibit self-denial (p \leq 0.05), substance use (p \leq 0.05), behavioural disengagement (p \leq 0.05), venting (p \leq 0.05), humour (p \leq 0.05), acceptance (p \leq 0.05), use of instrumental support (p \leq 0.05), positive reframing (p \leq 0.05), and planning (p \leq 0.05); while the urban areas were seen to demonstrate self-distraction (p \leq 0.05), self-denial (p \leq 0.05), venting (p \leq 0.05), humour (p \leq 0.05), positive reframing (p \leq 0.05), and high intention (p \leq 0.05). Respondents in both rural and urban schools who had suicidal thoughts were 3.31 and 2.85 times respectively more likely more likely to use denial as a coping method

than those who did not. Similarly, those in rural and urban schools were 5.95 and 5.88 times more likely to seek help than those who did not have suicidal thoughts and these observed differences were statistically significant $p \le 0.05$.

Table 5 shows that the most observed coping mechanism among the adolescents with suicidal thoughts in the rural region was emotional-focused coping, followed by avoidance coping and then, problem-focused coping (0.564 > 0.481 > 0.168); while in the the urban region (0.757 > 0.750 > 0.009), it is emotional-focused coping, followed by problem-focused coping and then, avoidance coping

Table 1: Socio-demographics characteristics of respondents

Variables	Rural	Urban	χ2	P
	n (%)	n (%)		
	839 (100)	841 (100)		
Adolescent age groups			8.01	0.091
10-14	600 (71.5)	599 (71.2)		
15-16	173 (20.6)	197 (23.4)		
17-19	66 (7.9)	45 (5.4)		
Mean (SD)	13.39 (±1.94)	13.35 (±1.92)	-0.40 ^t	0.688^{t}
Sex	, ,	,	1.21	0.271
Male	493(58.8)	449 (53.4)		
Female	346 (41.2)	392 (46.6)		
School type	, ,	` '	0.004	0.950
Private	165 (19.7)	163 (19.4)		
Public	674 (80.3)	678 (80.6)		
Class of students	,	,		
JSS1	141 (16.8)	139 (16.5)	0.21	0.999
JSS2	138 (16.4)	142 (16.9)		
JSS3	142 (16.9)	138 (16.4)		
SS1	138 (16.5)	142 (16.9)		
SS2	141 (16.8)	139 (16.5)		
SS3	139 (16.6)	141 (16.8)		
Religion	,	,	1.56	0.816
Christianity	800 (95.4)	795 (94.5)		
Islamic	23 (2.7)	40 (4.8)		
Traditional	16 (1.9)	6 (0.7)		
Others	0(0)	0(0)		
Family Structure	` /	` /	38.24	0.144
Monogamous	379 (45.2)	493 (58.6)		
Polygamous	244 (29.1)	184 (21.9)		
Divorced	87 (10.4)	57 (6.7)		
Separated	67 (8.0)	63 (7.5)		
Single parent	35 (4.2)	9 (1.1)		
Widowed	0 (0)	3 (0.4)		
Orphans	27 (3.1)	32 (3.8)		



Living with			9.32	0.409
Father	72 (8.6)	97 (11.5)		
Mother	199 (23.7)	138 (16.4)		
Both	502 (59.8)	537 (63.9)		
Guardians	66 (7.9)	69 (8.2)		
Family history of mental health			0.03	0.856
illness (thought/attempt)				
Yes	104 (12.4)	94 (11.2)		
No	735 (87.6)	747 (88.8)		
Exam Failure			1.82	0.177
Yes	279 (33.3)	255 (30.3)		
No	560 (66.7)	586 (69.7)		
School structure			0.01	0.927
Day	839 (100)	839 (100)		
Boarding	0 (0)	0 (0)		
Marital status			0.01	0.927
Not married	839 (100.0)	839 (100.0)		
Married	0 (0)	0 (0)		

a P value-*Statistically significant (p \leq 0.05);

Table 2: Coping mechanism and health-seeking behaviour among adolescents with suicidal thoughts

Variables	Rural	Urban	Total	
	n(%)	n(%)		
	226 (100)	219 (100)	445 (100)	χ2(P)
AVOIDANCE COPING				
Self-distraction				
Yes	178 (78.8)	134 (61.2)	312 (70.1)	10.69 (0.001)*
Denial				
Yes	190 (84.1)	151 (68.9)	341 (76.6)	20.91 (0.000)*
Substance use				
Yes	86 (38.1)	113 (51.6)	124 (27.9)	9.89 (0.002)*
Behavioural disengagement				
Yes	86 (38.1)	113 (51.6)	199 (44.7)	9.89 (0.002)*
EMOTION-FOCUSED COPING				
Use of emotional support				
Yes	146 (64.6)	88 (40.2)	234 (52.6)	0.22 (0.883)
Venting				
Yes	57 (25.2)	74 (33.8)	131 (70.6)	36.62 (0.000)*
Self-blame				
Yes	103 (45.6)	127 (58.0)	230 (51.7)	0.83 (0.774)
Humour				
Yes	33 (14.6)	42 (19.2)	75 (16.9)	44.79 (0.000)*
Acceptance		,	. ,	,
Yes	62 (27.4)	93 (42.5)	155 (34.8)	10.54 (0.001)*
Religion		,	•	•

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b $\chi 2$ -Chi-square test



Yes PROBLEM-FOCUSED COPING	62 (27.4)	72 (32.9)	134 (30.1)	6.28 (0.012)*
Active coping	450 /70 A	02 (42 5)	252 (54 4)	0.45 (0.600)
Yes	159 (70.4)	93 (42.5)	252 (56.6)	0.15 (0.690)
Use of instrumental support				
Yes	147 (65.0)	97 (44.3)	244 (54.8)	4.07 (0.044)*
Positive reframing				
Yes	50 (22.1)	65 (29.7)	115 (25.8)	20.34 (0.000)*
Planning				
Yes	56 (24.8)	63 (28.8)	119 (26.7)	14.88 (0.000)*
Health seeking behaviour				
Low intention	208 (46.7)	61 (27.0)	147 (67.1)	10.18 (0.001)*
High intention	237 (53.3)	165 (73.0)	72 (32.9)	

a P value-*Statistically significant (p≤0.05);

Table 3: Bivariate analysis of the proportion of respondents with a lifetime prevalence of suicidal thoughts among respondents in the rural and urban areas of Rivers State

Variables	Rural	Urban	Total	χ2	P
	n (%)	n (%)			
suicidal thought	841 (100)	839 (100)	1680 (100)		
Wish you were dead					
Yes	208 (24.8)	176 (20.9)	384 (22.9)		
No	631 (75.2)	665 (79.1)	1296 (77.1)		
Once thought of killing myself					
Yes	258 (30.8)	258 (30.7)	516 (30.7)		
No	581 (69.2)	583 (69.3)	1164 (69.3)		
Thought about killing myself with some				1.54	0.215
intention of acting on them (proportion of					
respondents with a lifetime suicidal					
thought)					
Yes	226 (26.9)	219 (26.0)	445 (26.5)		
No	613 (73.1)	622 (74.0)	1235 (73.5)		

a P value-*Statistically significant (p \leq 0.05);

Table 4: Binary logistic regression of significant coping mechanism and health-seeking behaviour of suicidal thoughts among the respondents

Variables	Rural AOR (95%CI)	P	Urban AOR (95%CI)	P	Total AOR (95%CI)	P
Avoidance Self-distraction						
No	(Reference)		(Reference)		(Reference)	

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b $\chi 2$ -Chi-square test

b $\chi 2$ -Chi-square test

c t-test.



Yes	0.01 (0.001-0.10)	0.997	0.40 (0.17-0.92)*	0.031*	0.24 (0.11-0.53)*	0.000*
Denial						
No	(Reference)		(Reference)		(Reference)	
Yes	3.31 (1.64-7.96)*	0.007*	2.85 (1.41-5.70)*	0.003*	3.13 (1.84-5.32)*	0.000*
Substance use						
No	(Reference)		(Reference)		(Reference)	
Yes	0.16 (0.07-0.38)*	0.000*	0.75 (0.41-1.53)	0.433	0.39 (0.22-0.66)*	0.001*
Behavioural						
disengagement						
No	(Reference)		(Reference)		(Reference)	
Yes	0.15 (0.06-0.35)*	0.000*	0.72 (0.36-1.46)	0.369	0.36 (0.21-0.61)*	0.000*
Emotion-focused						
Venting						
No	(Reference)		(Reference)		(Reference)	
Yes	0.17 (0.06-0.49)*	0.001*	0.65 (0.20-0.79)*	0.262*	0.39(0.22-0.71)*	0.002*
Humour						
No	(Reference)		(Reference)		(Reference)	
Yes	0.45 (0.18-1.10)*	0.080*	0.23 (0.10-1.42)*	0.000*	0.29(0.16-0.53)*	0.000*
Acceptance						
No	(Reference)		(Reference)		(Reference)	
Yes	0.56 (0.24-1.35)*	0.198*	0.58 (0.28-1.21)	0.148	0.53 (0.30-0.90)*	0.020*
Religion						
No	(Reference)		(Reference)		(Reference)	
Yes	0.88 (0.38-2.06)	0.769	0.75 (0.36-1.56)	0.441	0.78 (0.45-1.36)*	0.380*
Problem-focused						
Use of instrumenta	ıl					
support						
No	(Reference)		(Reference)		(Reference)	
Yes	0.28 (0.09-0.82)*	0.021*	0.64 (0.18-0.74)	0.228	0.57 (0.34-1.01)*	0.053*
Positive reframing						
No	(Reference)		(Reference)		(Reference)	
Yes	0.21 (0.09-0.51)*	0.001*	0.37 (0.18-0.74)*	0.005*	0.32 (0.19-0.54)*	0.000*
Planning						
No	(Reference)		(Reference)		(Reference)	
Yes	0.22 (0.10-0.49)*	0.000*	0.95 (0.44-2.07)	0.906	0.48 (0.28-0.83)*	0.008*
Help-seeking	•		•			
Low intention	(Reference)		(Reference)		(Reference)	
High intention	5.95 (2.67-13.29)*	0.000*	5.88 (1.75-19.73)*	0.004*	2.46 (1.18-5.10)*	0.016*

a P value-*Statistically significant (p≤0.05);

Table 5: Descriptive statistics (factorization) of the 3 categories of coping mechanisms associated risk factors with a lifetime prevalence of suicidal thoughts among respondents

Variables	Point	Rural		Urban		Total	
	(%)						
		n(%)	Compone	n(%)	Compone	n(%)	Compone
		226 (100)	nt matrix	219 (100)	nt matrix	445 (100)	nt matrix
Avoidance coping	32 (100)		0.481		0.009		0.865

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b AOR-Adjusted Odds Ratio

c CI-Confidence Interval



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Present		212 (93.8)	186 (84.9)		398 (89.4)	
Absent		14 (6.2)	33 (15.1)		47 (10.6)	
Emotion-focused	48 (100)	0.5	664	0.757		0.667
coping						
Present		115 (50.9)	133 (60.7)		248 (55.7)	
Absent		111 (49.1)	86 (39.3)		197 (44.3)	
Problem-focused	32 (100)	0.1	68	0.750		0.723
coping						
Present		188 (83.2)	118 (53.9)		306 (68.8)	
Absent		38 (16.8)	101 (46.1)		139 (31.2)	



Discussion

The findings of this study provide a comprehensive understanding of the coping mechanisms and healthseeking behaviour associated with suicidal thoughts, of secondary school adolescents with suicidal thoughts in Rivers State, Nigeria. This section discusses the observed coping strategies among adolescents in both urban and rural settings. Previous research have demonstrated that the overall prevalence of suicidal thoughts among secondary school adolescents in Rivers State was 26.5%. 16 This prevalence rate is notably high and indicates a significant mental health concern within this demographic. When broken down by locale, the prevalence was slightly higher in rural areas (26.9%) compared to urban areas (26.0%). 16 Although this difference is not statistically significant, it suggests that rural adolescents might be experiencing factors contributing to suicidal thoughts at a marginally higher rate. Most adolescents in rural areas of Africa and around the world commit suicide at disproportionately high rates compared to their peers in urban areas. ²⁵

The high prevalence of suicidal thoughts among these adolescents can be attributed to several factors prevalent in both urban and rural settings. For instance, the transition from childhood to adolescence is often accompanied by a range of emotional and psychological challenges, including identity crises, peer pressure, and academic stress. 7 In addition, this could be due to the timing of the study (post-Covid era). This in turn left psychological and economic influence on the entire population. For example, the economic recession that was seen during and after COVID-19 led to the loss of jobs followed by dropping out of schools by some adolescents because their parents could not meet up with funds. These challenges, if not properly managed, can lead to feelings of hopelessness and despair, which are known precursors to suicidal thoughts. 8,9

Coping mechanisms are critical for adolescents as they navigate various stressors and challenges in their daily lives. This study categorized coping mechanisms into avoidance coping, emotion-focused coping, and problem-focused coping. Each of these plays a distinct role in managing mental health issues among adolescents with suicidal thoughts. Coping mechanisms varied significantly between urban and rural adolescents.

Coping plays a very important role in adolescence, helping to manage several stressors and hassles in everyday life. Coping mechanisms adopted by these

adolescents, whether avoidance, emotional-focused or problem-solving, play a crucial role in their mental health. Therefore, this study was characterised by coping (self-denial, avoidance substance behavioural disengagement), emotion-focused coping (use of emotional support, venting, self-blame, humour, acceptance), and problem-focused coping (active coping, use of instrumental support, positive reframing, planning). All the above coping mechanisms among adolescents with suicidal thoughts in this study were seen to be statistically significant. This was similar to the study done in Ghana²⁶, Pakistan²⁷, China²⁸ and Spain ²⁹ where the coping mechanisms were significantly associated with suicidal thoughts. The rural areas were seen to exhibit; self-denial, substance use, behavioural disengagement, venting, humour, acceptance, use of instrumental support, positive reframing, and planning; while the urban areas were seen to demonstrate selfdistraction, self-denial, venting, humour, positive reframing.

The findings in this current study showed that avoidance coping was exhibited more by the entire adolescent population with suicidal thoughts, compared to other coping mechanisms (emotional and problem-focused coping). This was in concordance with the study done in Hong Kong³⁰, Spain²⁹, Russia³¹, France³² and the United States³³, where school adolescents were more likely to engage in avoidance coping (nonproductive coping strategies). This was most likely as a result of the features used in this study, such as the study population (school adolescents), method of data collection (interviewer administered) and study settings. Furthermore, avoidance coping techniques have been demonstrated to moderate the link between unpleasant events and mental health concerns during adolescence and to be used more frequently than other coping strategies when dealing with familial stressors. 34 Coping mechanisms targeted at changing stressful conditions (i.e., instrumental, productive, or problem-focused coping) are widely used, but their use declines during adolescence. In contrast, coping mechanisms geared at managing emotions and avoiding tension progress.31 This avoidance coping approach may alleviate stress-related short-term distress, but it may also increase the intensity and frequency of suicidal thoughts or stresses, leading to the development of subsequent suicidal behaviours (plan, attempt, and complete suicide).34 Also, the effect of avoidance coping among adolescents with suicidal thoughts worsens or progresses to suicidal attempts and then to complete suicide, as this coping mechanism contributes to poor



help-seeking behaviour.³⁵ Therefore, reducing avoidance coping strategies among adolescents with suicidal thoughts will lead to positive health outcomes and increased well-being.

Factorization of the three major grouped coping mechanisms

Following the objective of comparing coping mechanisms among secondary school adolescents with suicidal thoughts in Rivers State's rural and urban communities, this study found that emotionalfocused coping was more prevalent among both rural and urban adolescents with suicidal thoughts than other coping mechanisms (avoidance and problem-focused coping). The findings of this current research were similar to the studies done in Kenya,³⁶ and China, ²⁸ where the adolescents exhibited more emotional coping than other coping mechanisms (avoidance and problemfocused coping). The above findings may be supported by the fact that the neurochemicals in the brains of adolescents bring about physical changes and, as well, affect their moods and heighten their emotional responses. These characteristics together mean that teens are more easily swayed by emotion and have difficulty making decisions that adults find appropriate.³⁷ Emotional-focused coping is known to reduce overwhelming stressors temporarily but eventually may become ineffective. Therefore, if adolescents with suicidal thoughts, for instance, in this current study, continue to engage in emotional-focused coping, it may lead to further cascading of suicidal behaviours such as planning and attempting. The secondary school adolescents with suicidal thoughts in both urban and rural areas, in this study were seen to significantly exhibit high intention to seek help as a coping mechanism. This finding is similar to the report in the study done in the United States where more undergraduate University students (65.2%) indicated high health-seeking behaviour following their willingness to seek mental health services.38

Implications of the findings of this study: The findings of this study have significant implications for the development of targeted mental health interventions for adolescents in Rivers State. Schools play a crucial role in the early identification and support of adolescents with suicidal thoughts. Implementing school-based mental health programs that include screening,

counseling, and peer support can help address the mental health needs of students.

Family-based interventions are also essential. Educating parents about the signs of suicidal ideation and the importance of providing emotional support can help create a supportive home environment for adolescents. Additionally, community-based programs that raise awareness about mental health and provide support to families with a history of mental illness can be beneficial. Future Research Consideration: Future research should focus on longitudinal studies to better understand the causal relationships between risk factors and suicidal thoughts. Additionally, qualitative studies can provide deeper insights into the personal experiences and perspectives of adolescents, further informing the development of tailored interventions.

Strength and Limitations: The cross-sectional design limits the ability to infer causality between suicidal thoughts and coping mechanism. Additionally, self-reported data may be subject to social desirability bias. Despite these limitations, the study provides valuable insights into the coping mechanisms of suicidal thoughts among adolescents in Rivers State.

Conclusions

The study reveals a high prevalence of suicidal thoughts about 1 in 4 among secondary school adolescents in Rivers State, urban and rural areas. Coping methods in the rural were self-denial, substance use behavioural disengagement, venting, humour, acceptance, use of instrumental support, positive reframing, and planning; while the urban areas were seen to demonstrate self-distraction, self-denial, venting, humour, positive reframing, and high intention. The most prevalent type of coping method in both areas was emotion-focused coping. There was a very high intent to seek help among respondents in both areas with suicidal thoughts

The identification of key risk factors and differences in coping mechanisms highlights the need for targeted interventions that address the specific needs of adolescents in different settings. School-based mental health programs, family education, and community support are crucial components of an effective strategy to reduce suicidal thoughts and promote the mental well-being of adolescents in Rivers State



Declarations

Ethical Consideration

Ethical approval was obtained from the University of Port Harcourt Teaching Hospital's ethics committee (UPTH/ADM/90/S.II/ VOL.X1/1467). Permission to carry out the study was obtained from the relevant school authorities. Assent and informed consent were obtained from all participants and their guardians.

Authors' Contribution:

Conceptualization and design- Onyechi CC and Adeniji FO Data Collection- Both authors. Data Analysis- Both authors. Write up- Both authors

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