



Determinants of Sexual Coercion Among Adolescents in Rivers State

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Abstract

Introduction: Adolescents are especially susceptible to sexual coercion. The factors that may affect the adolescent risk of engaging in coercive sex in Rivers State need to be further understood. We deemed it necessary to assess the factors influencing the experience of sexual coercion among adolescents in Rivers State.

Methods: A multi-staged sampling strategy was employed to survey 671 adolescents, complemented by eight focused group discussions (FGDS). Data were collected using an interviewer-administered questionnaire and analyzed using IBM SPSS version 26, while FGDS were analysed using a thematic and content analysis with Nvivo software version 11. The Chi-square (χ^2) test was utilized to assess the association between explanatory factors and the occurrence of sexual coercion. A multivariate logistic regression model was developed to assess the size and direction of the effects of predictors. Statistical tests were considered significant at $p \leq 0.05$.

Results: The mean age of the respondents was 17.7 ± 1.3 years. About 356 (53.9%) were females, and 338 (50.4%) lived in rural areas. About 49 (7.3%) of the respondents had ever experienced sexual coercion 25 (51%) of them were rape cases. Sex of respondents, the importance of religion, currently working for pay, and alcohol use were associated with sexual coercion. Females were six or more times more likely to have experienced sexual coercion (aOR=6.37; 95% CI: 2.69-15.07, $p=0.001$) compared to males, and respondents who perceived religion as not important were three or more times more likely to have experienced sexual coercion compared to those perceived religious as important (aOR=3.25; 95% CI: 1.4-7.5, $p=0.006$).

Conclusion: Sex, and religious affiliation were identified predictors of sexual coercion. There is a need to contextualize appropriate sexual and reproductive health interventions that incorporate religiosity, value-based approach and collaborate with faith-based organizations, community leaders, and schools to safeguard adolescents against sexual coercion.

Keywords: Sexual coercion, factors influencing, adolescents, Rivers State.

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Background: Adolescence represents a critical stage in human development marked by rapid physical, psychological, and social transitions. During this period, many adolescents engage in explorative behaviours that expose them to various sexual and reproductive health challenges, including early sexual initiation, teenage

pregnancy, and unsafe abortion practices.^{1,2} Adolescent sexual behaviours are not necessarily consensual as some experience forced/coerced sex. Studies from Nigeria and other countries, consistently highlights a troubling prevalence of sexual coercion and violence among adolescents.^{3,4,5} The threat that sexual victimization poses to adolescent's health and well-being as well as to human rights has been acknowledged.⁶ It directly contributes to adverse sexual and reproductive health outcomes such as HIV infection and other sexually transmitted infections as well as unintended pregnancies.⁶ Sexual coercion exists along a gamut, from overt physical assault to more subtle psychological or social pressure that compel individuals (especially girls and women) to engage in non-consensual sex. The yardstick of coercion is the absence of choice, often reinforced by fear of physical and social consequences when resisting such sexual advances.⁷

According to the Centre for Disease Control and Prevention (CDC) report, a combination of individual (early sexual debut, coercive sexual fantasies, substance use), relational (dysfunctional family dynamics, weak parental bonds--especially with fathers and childhood history of physical, sexual, or emotional abuse etc.), community, and societal factors contribute to the risk for sexual coercion/ violence.⁸ Risk factors in the community domain include lack of employment opportunities, poverty, lack of institutional support from the police and judicial system, general tolerance of sexual violence within the community, and weak community sanctions against perpetrators of sexual violence/coercion.⁸ Risk factors in the societal domain include norms that support sexual violence, male dominance, and sexual entitlement, that maintain women's inferiority and sexual submissiveness, weak legal frameworks perpetuate tolerance for sexual coercion and violence.⁸

On the other hand, protective factors include families where caregivers manage conflicts peacefully, demonstrate emotional stability, maintain strong connections with their children, and encourage empathy, academic success and awareness of how one's actions affect others.⁸ Studies have documented substantial variation in the reported rates of sexual coercion among undergraduate students to range from 4% to 46%.⁶

In Ghana, a study conducted among female adolescents revealed that 43% had experienced coerced sex, 71% had engaged in transactional sex; 36% reported sexual activity while under the influence of alcohol.⁹ Similarly, research among undergraduate medical students in South-West Nigeria showed that 41.9% of females had encountered at least one form of sexual coercion.⁴ A study among secondary school adolescent in Port Harcourt metropolis in 2014 reported that 462 (35.6%) had experienced sexual abuse.¹⁰

The burden of sexual coercion that many adolescents experience is rarely taken into account in sexual and reproductive health interventions for adolescents. According to several research, the majority of programs for adolescents focus on lowering certain sexual risk behaviours (e.g., promoting abstinence, lowering the number of sexual partners, and encouraging condom usage), but very few of these interventions address sexual coercion.⁶ Also, there is a paucity of research focusing on sexual coercion among this population subgroup, maybe due to the stigma, social desirability, and ethical issues around the subject. This underpins the importance of examining the factors that may influence the adolescent risk of engaging in coercive sex in Rivers State. We deemed it necessary to assess the factors influencing the experience of sexual coercion among adolescents in Rivers State.

Methods

Study area: The study was carried out in Rivers State, Nigeria, located in the oil-rich South-South Geo-political zone of the country. Rivers State is one of the major Niger Delta states, with an estimated population of 7,303,924 million as of 2016.¹¹ Approximately 23% of the population comprises adolescents aged 10 to 19 years, like the proportion observed across Sub-Saharan Africa.¹² The oil industry in Rivers State has a multifaceted impact on adolescent reproductive health behaviour. Adolescents in communities affected by the oil industry may be vulnerable to sexual coercion due to factors such as unemployment, poverty, and limited opportunities for personal growth. Influx of money to some groups while many remain poor can lead to social tensions and adolescents may adopt high-risk lifestyles trying to

“keep up.” They may be pressured into sexual relationships with older men in the oil economy.

Study design: The study used a mixed-method approach (quantitative and qualitative methods) for data collection. The study design for the quantitative method is cross-sectional design. A quantitative survey followed by a narrative approach to qualitative enquiry by conducting eight focused-group discussions among separate groups of male and female adolescents aged 10-14 and 15-19 years. Focus group discussions were used to interpret findings from the quantitative survey and complement the quantitative data.

Study population: The study population are adolescents, 10 to 19 years in four communities from four wards and four local government areas of Rivers State out of the 23 Local Government Areas.

Sample size and sampling technique: A sample size of 671 was used. It was derived using the Cochran's¹³ formula for sample size calculation for a cross-sectional study and applying a prevalence of risky behaviour of 31.3 %, from a previous study in South-south Nigeria¹⁴, a non-response rate of 10% and a design effect of 1.8. This is part of a larger study and the objective whose prevalence from a previous study gave the higher sample size was used.

A multi-staged sampling strategy was employed. In stage one, four Local Government Areas (LGAs) were selected from the list of 23 LGAs in Rivers State using simple random sampling technique by balloting without replacement.

Stage two involved selection of wards, four wards (one ward from each LGA). Specifically, a list of all the wards in each of the four LGAs were obtained, this served as the sampling frame, and one ward was selected each from the LGAs using simple random sampling technique by balloting without replacement. There are 17 wards in Obio/Akpor, which served as the sampling frame, ward 15 was selected. There are 15 wards in Ikwerre LGA and ward 12 was selected. There are 14 wards in Emuoha LGA, and ward 8 was selected. There are 19 wards in Etche LGA, ward 4 was chosen.

Stage three involved the selection of one community per selected ward. One community from each ward was selected making four communities, using same simple random sampling technique by balloting without replacement. The

communities were Choba in ward 15 of Obio/Akpor LGA, Igwuruta community in ward 12 of Ikwerre LGA, Bunde community in ward 8 of Emuoha LGA, and Chokocho in ward 4 of Etche LGA.

Stage 4 involved the selection of respondents. A systematic random sampling technique was then used to select participants from each of the four communities. In each of the selected communities, the starting house was randomly selected by spinning a bottle/pen in the middle of the community. Houses in the direction of the bottle were counted, and the starting house was randomly selected from the list by balloting. Then, consecutive (nth) residential houses and households were used. In each house, a sequential household with adolescents was approached, and one adolescent who met the study inclusion criteria and gave consent/assent for those less than 18 years then consent from their guardian was included in the study. If there is more than one such adolescent, one was randomly (balloting) selected for inclusion in the study till the selected number of participants per community was achieved. A total of eight FGDs were conducted, involving homogenous groups of males and females aged 10 to 14 and 15 to 19 years from the four communities (one male and female groups per community).

Study instrument and Data collection method:

An interviewer-administered structured questionnaire and a focus group discussion guide were used to obtain data on sexual coercion and factors influencing them. Face and content validity was assured by content experts (supervisors), and pretesting of the questionnaire was done, aimed at assuring the validity and reliability of the respective instruments. The pretesting of the questionnaire was done in different communities and questions difficult to answer were modified for ease of understanding.

Data analysis: The data were analysed using IBM SPSS version 26. The Chi-square (χ^2) test was utilized to assess the association between independent variables and the occurrence of sexual coercion. A multivariate logistic regression model was developed to assess the size and direction of the effects of predictors adjusting for confounding. The focus group discussions were recorded, transcribed verbatim, and coded/analysed using NVivo 11. The thematic content analysis was employed in

analysing data.

Ethical consideration: The ethical approval was obtained from the University of Port Harcourt Research and Ethics Committee, with reference number UPH/CEREMAD/REC/MM78/040.

Results

The socio-demographic characteristics of adolescent respondents in Rivers State, Nigeria showed that out of the 671 adolescents surveyed, the mean age of the respondents was 17.7 ± 1.3 years, 356, (53.1%) were females, 338 (50.4%) lived in places described as rural, 27 (4.3%) were married, and 642 (95.7%) were single. About 56 (8.4%) had no formal education, with 404 (60.2%) being out of school. Those working for pay were 228 (34.0%), and majority lived with both parents 245 (36.5%), while 60 (8.9%) lived alone.

Table 1: Sexual behaviour and experience of sexual coercion among adolescents in Rivers State, Nigeria

Variable (Sexual behaviours)	Frequency(n=671)	Percentage(%)
Ever had sex		
Yes	313	46.7
No	358	53.3
Ever experienced coercion/pressured sex		
Yes	49	7.3
No	622	92.7
If yes, number of people (n=49)		
1	40	81.6
2	5	10.2
3	2	4.1
≥4	2	4.1
Nature of coercion/pressure (n=49)		
Rape	25	51.0
Tricks/ false promise	10	20.4
Unwanted sexual comments	5	10.2
Unwanted sexual jokes	9	18.4
Number of persons who had sex for financial rewards (n=164)		
1	134	81.7
2	20	12.2
3	2	1.2
≥4	8	4.9
Sex under alcohol/drug influence (n=311)		
Yes	170	54.7
No	141	45.3

Table 1 shows that nearly half 313 (46.6 %) of the respondents were sexually experienced, of which 164 (52.4%) had sex for financial rewards, 49 (7.3%) had experienced sexual coercion, of which 25 (51.0%) were rape cases.

Table 2 shows the associations between socio-demographic factors and sexual coercion among adolescents in Rivers State. As shown, sex (p = 0.001), the importance of religion (p = 0.001), and currently working for pay (p = 0.001), were significantly associated with sexual coercion.

Table 2: Association between sociodemographic factors and sexual coercion among adolescents in Rivers State

Variables	Sexual Coercion (Freq %)		Total	Chi-square (P-value)
	Yes=49	No=622		
Age				0.35 (0.85)
15-19	47 (7.3)	593 (92.7)	640 (100.0)	
10-14	2 (6.5)	29 (93.5)	31(100.0)	
Sex				22.64 (0.001) *
Female	42 (11.8)	314(88.2)	356(100.0)	
Male	7 (2.2)	308 (97.8)	315 (100.0)	
Importance of religion				12.55 (0.001) *
Not important	13 (36.4)	62 (63.6)	75(100.0)	
Very Important/Important	36(30.9)	560(69.1)	596 (100.0)	
Educational level				2.38 (0.304)
No education/primary	11 (5.1)	206 (94.9)	217 (100.0)	
Secondary	36 (8.4)	392 (91.6)	428 (100.0)	
Tertiary	2 (7.7)	24(92.3)	26 (100.0)	
Currently attending school				0.23 (0.880)
Yes	19 (7.1)	248(92.9)	267 (100.0)	
No	30 (7.4)	374(92.4)	404 (100.0)	
Currently working for pay				10.51 (0.001) *
Yes	27 (11.8)	201 (88.2)	228 (100.0)	
No	22 (5.0)	421 (95.0)	443 (100.0)	
Resides with				3.72 (0.294)
Both Parents	12 (4.9)	233 (95.1)	245 (100.0)	
Single Parents	15(9.0)	151 (91.0)	166 (100.0)	
Relatives/Others	18 (9.0)	182(91.0)	200 (100.0)	
Self	4 (6.7)	56 (93.3)	60 (100.0)	

*Statistically significant (p<0.05)

Table 3: Bivariate and Multivariate results for Sociodemographic factors influencing Sexual Coercion among adolescents in Rivers State

Variables	Sexual Coercion (Freq %)		cOR [95% CI]	P-value	aOR [95% CI]	P-value
	Yes=49	No=622				
Sex						
Female	42(11.8)	314(88.2)	5.89 [2.60-13.30]	0.001*	6.37 [2.69-15.07]	0.001*
Male ^R	7(2.2)	308(97.8)	-	-	-	-
Importance of religion						
Not important	13(36.4)	62(63.6)	3.26 [1.64-6.48]	0.001*	3.25 [1.40-7.52]	0.006*
Very Important /Important ^R	36(30.9)	560(69.1)	-	-	-	-
Currently working for pay						
Yes	27(11.8)	201(88.2)	2.57 [1.43-4.63]	0.002*	1.84 [0.93-3.63]	0.081
No ^R	22(5.0)	421(95.0)	-	-	-	-

*Statistically significant (p<0.05); Notes: R=reference, cOR=crude Odds Ratio, aOR=adjusted Odds Ratio

As shown in table 3, females were six or more times more likely to have experienced sexual coercion (aOR=6.37; 95% CI: 2.69-15.07, p=0.001) compared to males. Those with no religious affiliations (perceived religion as not important) were three or more times more likely to have experienced sexual coercion (aOR=3.25; 95% CI: 1.40-7.52, p=0.006) compared to those with religious affiliations.

Table 4 shows the bivariate and multivariate results for factors influencing sexual coercion in the family domain. As shown, adolescents whose fathers were not alive had lower odds of sexual coercion

(aOR=0.25, 95% CI: 0.08-0.79, p=0.018) compared to those whose fathers were alive.

Table 4: Bivariate and Multivariate results for family domain factors influencing Sexual Coercion

Variables	Sexual Coercion (Freq %) n=671		cOR [95% CI]	P-value	aOR [95% CI]	P-value
	Yes=49	No=622				
Father alive						
No	4 (3.1)	126 (96.9)	0.35 [0.12-0.99]	0.048*	0.25 [0.08-0.79]	0.018*
Yes ^R	45 (8.3)	496 (91.7)	-	-	-	-
Find it difficult or easy to talk with the father						
Average/difficult/do not see him	38 (9.4)	366 (90.6)	2.42 [1.21-4.82]	0.012*	1.57 [0.72-3.46]	0.260
Very easy/easy ^R	11 (4.1)	256 (95.9)	-	-	-	-
Have older siblings						
No	32 (9.8)	296 (90.2)	2.07 [1.13-3.81]	0.019*	1.39 [0.59-3.25]	0.453
Yes ^R	17 (5.0)	326 (95.0)	-	-	-	-
She/he lives in the same household as you						
No	34 (9.1)	341 (90.9)	1.87 [0.99-3.49]	0.051	0.77 [0.32-1.85]	0.553
Yes ^R	15 (5.1)	281 (94.9)	-	-	-	-
The family is stable and has a good connection						
Yes	12 (3.9)	293 (96.1)	0.39 [0.18-0.85]	0.018*	1.33 [0.54-3.28]	0.533
No	21 (10.7)	176 (89.3)	1.14 [0.58-2.27]	0.706	1.00 [0.46-2.19]	0.999
Not sure ^R	16 (9.5)	153 (90.5)	-	-	-	-

*Statistically significant (p<0.05); Notes: R=reference, cOR=crude Odds Ratio, aOR=adjusted Odds Ratio

Table 5: Bivariate and Multivariate results for other factors influencing Sexual Coercion

Variables	Sexual Coercion (Freq %) n=671		cOR [95% CI]	P-value	aOR [95% CI]	P-value
	Yes=49	No=622				
Drink alcohol						
Often	7 (17.9)	32 (82.1)	4.39 [1.65-11.68]	0.003	0.54 [0.14-2.09]	0.374
Occasionally	28 (8.3)	309 (91.7)	1.82 [0.94-3.53]	0.076	0.68 [0.29-1.53]	0.348
Never ^R	14 (4.7)	281 (95.3)	-	-	-	-
Exposure to mass media						
Often	21 (13.0)	140 (87.0)	4.35 [1.59-11.86]	0.004	0.51 [0.14-1.83]	0.303
Occasionally	23 (6.4)	337 (93.6)	1.98 [0.74-5.31]	0.175	0.50 [0.16-1.57]	0.236
Never ^R	5 (3.3)	145 (96.7)	-	-	-	-

*Statistically significant (p<0.05); Notes: R=reference, cOR=crude Odds Ratio, aOR=adjusted Odds Ratio

Table 5 shows the bivariate and multivariate results for factors influencing sexual coercion in the community and national domains. Adolescents who often drink alcohol were four or more times more likely to have experienced sexual coercion compared to those who never (cOR=4.39, 95% CI:

1.65-11.68, p=0.003), likewise, adolescents who were often exposed to mass media were four or more times more likely to have experienced sexual coercion (cOR=4.35, 95% CI: 1.59-11.86, p=0.004), these were not shown to be significant after adjusting for cofounders.

The qualitative findings further explained the results of the quantitative, a total of eight FGDs were held with 56 adolescents. Two FGDs with males 10 to 14 years, and 15-19 years and two with the female groups aged 10-14 and 15-19 years in four communities (one male and one female group FGD per community). The FGDs were coded as JF for junior female (10-14 years), JM for junior male (10-14 years), SF for senior females (15-19 years), and SM for senior males (15-19 years males). The respondents per groups were given serial numbers with the group codes, for example JF 1-8, meaning female 10-14 years numbers 1 to 8, and so on.

The themes were grouped into protective and risky factors. The protective factors identified were higher level of education of mother and father and upper professional occupation of mother, and avoiding peer pressure, “by preventing yourself... by not following peer groups, all these bad friends in school and at home” (SF-8). Perception of religion as important, “the knowledge alone that it is against God can discourage me” “the fear of God” (JF-7 and 8). Religious participation was high, with many respondents attending services “always” or “every time.” “Always.” (JF-1, and 8) “Every time.” (JF-3). The risky factors were being female perception of religion as not important and poor communication about sex with parents. Most respondents do not have communication about sex with their parents, only a few do occasionally. “Never.” (JM 3, 4 and 7), “No.” (JF 3, 5, and 6). This communication gap may reduce adolescents’ ability to seek guidance or report experiences of sexual pressure or coercion, thereby increasing vulnerability.

Discussion

About one-tenth of the respondents had ever experienced sexual coercion half of them were rape cases. This prevalence (≈10%) is lower than some reports from other Nigerian regions such as 21.9% among secondary school students in Makurdi¹⁵ and 35.7% in Enugu,¹⁶ but, falls within the range reported in Ethiopia (7.2%).¹⁷ Variations in

prevalence could reflect differences in definitions (rape versus other coercive acts), study populations (in-school vs. out-of-school adolescents), and sociocultural openness to reporting. Lower reporting in Rivers State may also reflect under-disclosure due to stigma, or successful implementation of school-based awareness programs and faith-based youth interventions in the State.

Gender, religiosity, and currently working for pay, influenced prevalence sexual coercion in this study. Females in this study were six times more likely to experience sexual coercion compared to males. This pattern reflects enduring gender-power asymmetries in Nigeria, where girls are often economically and socially dependent, with limited sexual autonomy. Similar female preponderance was reported in Ghana.¹⁸ The higher odds observed in Rivers State may relate to local factors such as transactional relationships linked to urban poverty and oil-sector related migration dynamics, which heighten exposure of female adolescents to older male partners and coercive encounters.

Although males may also experience coercion, cultural norms often discourage disclosure, leading to underreporting.¹⁹ This gender disparity underscores the need for gender-transformative education and empowerment of adolescent girls to recognize and resist coercive advances.

In this study a higher proportion of those who experienced sexual coercion were adolescents who worked for pay compared to those who did not work for pay. This could be due exposure to environments where older employers or clients exploit their economic vulnerability. Furthermore, those who perceived religion as not important were three or more times more likely to have experienced sexual coercion compared to those who perceived religion as important. Similar findings were reported in a meta-analytic review and a study from Brazil, suggesting that religious participation may serve as a protective factor. Religious institutions often reinforce moral values, promote abstinence, and provide social oversight that may reduce exposure to coercive contexts.^{20,21}

The individual perceptions were not shown to be associated after adjusting for confounder. A greater proportion of those who experienced sexual coercion were those whose friends think sexual

intercourse is all right if a couple loves each other. Family domain factors like having the father alive, was a significant determinant. A greater proportion of those who had experienced sexual coercion were those whose fathers were alive compared to those whose fathers were not alive. A greater proportion of those who had experienced sexual coercion were those who find it difficult to talk with their fathers compared to those who find it easy. A study in Uganda similarly emphasizes that the quality of the parent-child relationship, rather than family structure alone, determines resilience against coercion.²² The experience of sexual coercion was three or more times more likely among those whose friends think that sexual intercourse is Ok if a couple loves each other. A greater proportion of those who had experienced sexual coercion were those who did not have good family connections compared to those who had good family connections. Those with good family connections lower crude odd of sexual coercion, Adolescents whose fathers were not alive had lower odds of sexual coercion compared to those whose fathers were alive.

Community domain factors such as alcohol use and exposure to mass were significantly associated with sexual coercion only at the bivariate level. A greater proportion of those who had experienced sexual coercion were those who often and occasionally drink alcohol compared to those who never drank alcohol. Specifically, adolescents who often drink alcohol were four or more times more likely to have experienced sexual coercion compared to those who never. This is consistent with findings from Thailand, where alcohol use increased exposure to risky environments and impaired decision-making. Adolescents who drink may attend social events with limited supervision, where coercion risk is heightened.²³

Therefore, the shown risk factors for sexual coercion were, the female sex, adolescents working for pay, peer perception that sexual intercourse is not all right if a couple loves each other, absence of stable/good family connections, and alcohol use. Whereas the shown protective factors were, a higher level of education of the mother and father and upper professional occupation of the mother. Having a father and older siblings alive, who live in the same household, and have stable and good family connections and poor communication about

sex with parents as buttressed from the qualitative findings.

The prevalence of sexual coercion reported in this study is lower than reported in some studies in Nigeria and elsewhere, it was within the range of studies in Tanzania.^{4,3,6} A study done in South-West Nigeria corroborated the findings that females were more likely to experience sexual coercion.⁴ Findings from studies done in Ghana are in tandem with finding from this study.⁵ The study by Ganle et al., showed that having a mother who had no formal education compared to having a mother with tertiary education and living alone (self) compared to living with parents were associated with more risk for coerced sex⁹ showed that parental behavioural control had a negative association with the risk of sexual coercion, whereas, parental conflict showed a positive association.⁵ Several studies corroborated the findings from this study that females are more affected than males.^{24,6}

Conclusion

Gender (being female), and having no religious affiliations, were determinants of sexual coercion among adolescents. Adolescents' reproductive health programmes rarely pay adequate attention to the reality of sexual coercion. This study buttresses that and provides evidence for a need to consider forced sex in the design and implementation of sexual and reproductive health programmes for adolescents given the prevalence. It will serve as a tool to advocate for a more contextualized comprehensive sexuality education for adolescents and young people.

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