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Gender differences in adolescents' perceptions of condom use in Ebonyi State, Southeast Nigeria

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Chibuike Agu[1,4], Ifunanya Agu[1], Chinyere Mbachu[1,3], Ozioma Agu[1,3] God'stime Molen[1,2], Obinna Onwujekwe[1,2]*

Health Policy Research Group, Department of Pharmacology and Therapeutics, College of Medicine, University of Nigeria Enugu-Campus, Enugu, Nigeria[1]; Department of Health Administration and Management, Faculty of Health Sciences and Technology, University of Nigeria Enugu-Campus, Enugu, Nigeria[2]; Department of Community Medicine, College of Medicine, University of Nigeria Enugu-Campus, Enugu, Nigeria[3] and Department of Community Medicine, Alex-Ekwueme Federal University Teaching Hospital, Abakaliki, Ebonyi Nigeria[4]

*__For Correspondence__: Email: *aguchibuike14@yahoo.com*; Phone: +2348036957505

Abstract

This paper assessed gender differences and perceptions towards condom use among in-school adolescents in Ebonyi State, Nigeria. This was a cross-sectional study undertaken in six local government areas in Ebonyi State, Nigeria. Data were collected using a structured questionnaire and summarised using frequencies and proportions. Chi-square test and binary logistic regression were used in the analysis. The level of statistical significance was a ***p***-value of <0.05. Findings showed that a significantly higher proportion of male respondents (58.8%) had a good perception of condom use when compared to female respondents (45.8%). Gender, level of schooling, and working for pay had significant associations with good perceptions of condom use, while the significant predictors in the logistic regression model were gender, level of schooling, and working for pay. Interventions that promote the sexual and reproductive health and rights of adolescents and those that empower women with relevant skills by addressing unequal gender power relations in relationships should be prioritized. *(Afr J Reprod Health 2024; 28 [8s]: 74-82).*

Keywords: Gender; Condom use; Perception; Adolescent; In-school; Nigeria

Résumé

Cet article a évalué les différences entre les sexes et les perceptions concernant l'utilisation du préservatif parmi les adolescents scolarisés dans l'État d'Ebonyi, au Nigeria. Il s'agissait d'une étude transversale entreprise dans six zones de gouvernement local de l'État d'Ebonyi, au Nigeria. Les données ont été collectées à l'aide d'un questionnaire structuré et résumées à l'aide de fréquences et de proportions. Le test du chi carré et la régression logistique binaire ont été utilisés dans l'analyse. Le niveau de signification statistique était une valeur p <0,05. Les résultats ont montré qu'une proportion significativement plus élevée d'hommes interrogés (58,8 %) avaient une bonne perception de l'utilisation du préservatif par rapport aux femmes interrogées (45,8 %). Le sexe, le niveau de scolarité et le travail rémunéré étaient associés de manière significative à de bonnes perceptions de l'utilisation du préservatif, tandis que les prédicteurs significatifs dans le modèle de régression logistique étaient le sexe, le niveau de scolarité et le travail rémunéré. Les interventions qui promeuvent la santé et les droits sexuels et reproductifs des adolescents et celles qui donnent aux femmes les compétences nécessaires en s'attaquant aux relations de pouvoir inégales entre les sexes dans les relations devraient être prioritaires. *(Afr J Reprod Health 2024; 28 [8s]: 74-82).*

Mots-clés: Genre ; Utilisation du préservatif ; Perception; Adolescent; À l'école; Nigeria

Introduction

Adolescent sexual and reproductive health and rights (ASRHR) has been a focus of research, especially in sub-Saharan African (SSA) countries, where teenage pregnancy and other negative outcomes of unprotected sexual intercourse remain a major public health challenge. Adolescence is a transitional period from childhood to adulthood characterized by increasing sexual urges, increased social experimentation, and the development of sexuality, gender, and sex roles[1]. There are also misconceptions about sexual and reproductive health and rights (SRHR) matters, including contraception, during this period. Hence, the high rate of risky behaviors such as early sexual debut,

unprotected sexual intercourse, and multiple sexual partners often leads to teenage pregnancies and illegal abortions, which have negative implications for adolescent health and wellbeing[2]. Evidence shows that women aged 15-19 years are at greater risk of unplanned pregnancy as compared to older women, and that maternal mortality due to unsafe abortion is a leading cause of death for adolescent females in low- and middle-income countries (LMIC)[3-5].

The use of contraceptives is one approach that is proving to be effective in addressing these issues, and it is one of the most cost-effective and beneficial investments in global health[3]. In addition, consistent condom use has been described as the most effective way to prevent both sexually transmitted infections and HIV transmission[5]. However, its use is still low in most developing countries, and inconsistent condom use among young people is one of the major risk factors in the continued propagation of the HIV/AIDS epidemic[6,7]. A national think tank in Nigeria reported that 34% of Nigerians use condoms, which coincides with the national estimates that only 17% of young, never-married males used condoms at their sexual debut[8].

The inconsistent use of condoms by adolescents has been attributed to a number of factors, including, but not limited to, stigmatization of condom use in committed relationships, and ***negative perceptions*** about condoms and condom use particularly, among female adolescents[9]. Moreover, in Ebonyi State and other parts of the country, there are different roles and expectations for men, women, and youth regarding the use of SRHR[10]. Based on that, condom use among adolescent women is highly stigmatized and neither acceptable nor expected of women of 'good' moral character[9]. Consequently, community members hold the view that adolescent girls seeking SRHR care are "wayward" and promiscuous, and males believe that condom use is associated with adverse health outcomes in women[11].

According to available evidence, males generally tend to use condoms more than females[12]. Such gender disparity in condom use could be a result of ***unequal gender norms***, stereotypes, and restrictive masculinities favoring male sexual decision-making[9]. Most of these erroneous cultural beliefs that assign gender roles to adolescent boys and girls make it impossible for young girls that are sexually active to use contraceptives, including condoms, because they believe it is a man's role[13]. Adolescent girls and young women are thus typically "judged" harshly for having the "audacity" to take responsibility for condom use[14]. In line with this, several studies have reported that adolescent boys and young men play a central role in sexual decision-making, including whether or not to use condoms[13-15].

Furthermore, in spite of several years of contraception promotion in Nigeria and the risks of unprotected sex, there are still some misconceptions about condoms, and their use remains low among sexually active adolescents, while teenage pregnancy is still unacceptably high in Ebonyi State. It is difficult to explain why even many older, educated adolescents and young women with knowledge of contraceptives fail to protect themselves with condoms during sexual encounters. An earlier study Ebonyi State reported that one in five adolescents were sexually active, whereas only one in ten had used a contraceptive, and even at that, males were more likely to use them compared to females[16]. Thus, this paper aimed to assess the gender gap and perceptions towards condom use among in-school adolescents in Ebonyi State, Nigeria. The study contributes to the body of literature by giving information on different perceptions of condom use based on gendered roles and the determinants of such perceptions. Findings from this study will be useful in ASRH policy-making, planning, and implementation in the state and the country in general.

Methods

Study design and study area

The study was a cross-sectional study method conducted in Ebonyi state, which is one of the five states in the southeast geo-political zone of Nigeria. The state has the highest total fertility rate (TFR) in the Zone at 5.4 children per woman of reproductive age[10]. It has thirteen local government areas (LGAs) out of which six were purposively selected to represent the three senatorial zones and geographical locations (urban and rural) of the

State. The selected LGAs were i) Afikpo South, ii) Abakaliki, iii) Ezza South, iv) Ikwo, v) Izzi, and vi) Ohaozara local government. Two communities were selected from each local government area, and a secondary school selected from each of the community. A total of 12 public secondary schools were selected for the study.

The Nigerian formal educational structure is divided into, basic education, senior secondary school education and tertiary education. This is based on 9-3-4 formula, which means 9 years of basic education (made up of 6 years of primary school for children of ages 6 to 11 years, and 3 years of Junior Secondary School for children of ages 12 to 15 years), 3 years senior secondary school and 4 years tertiary education (including universities, polytechnics and colleges of education). The focus of the study was secondary schools.

Study population and sampling

These were in-school adolescent boys and girls who were between 13 and 18 years of age in each of the public schools selected from the six study LGAs. The formula for a single proportion was used to determine the sample size for the study[28]. Assuming a 95% confidence interval, 80% power, and 10% non-response rate, a minimum sample size of 480 was calculated. In order to check for - the robustness of data and sub-group data analysis, the sample size was increased to 503 (42 students from each school). These were selected from the class register through a simple random sampling technique using a table of random numbers generated for each class and interviewed. An equal number of students was selected from each of the classes (1-3) in the junior and senior secondary levels, giving 8–9 students per class. Where there was more than one arm of classes in a school, an equal number of students were selected per arm of the class.

Data collection

The data collection instrument was a pre-tested tool developed by the research team. The questionnaire elicited information on socio-economic and demographic characteristics of the adolescents, and their perceptions of condom use. A total of 42 research assistants were recruited and trained for four days on the objectives of the study, data collection techniques, and ethics in research. Paper and electronic copies of the questionnaire were used to collect data over a period of fourteen days. Electronic copies of the questionnaires were uploaded to Android tablets using ODK survey App. Individual matching of information on the completed paper questionnaire with the corresponding electronic questionnaire was done before and after uploading data to the server and data was viewed concurrently.

Data analysis

Data entry and analysis were done using Stata version 17. Data were summarized using frequencies and proportions for categorical variables and means and standard deviations for quantitative variables. Sex-disaggregated analysis of the variables was performed to bring out gender-specific patterns within the study group. The chi-square test and multivariate analysis using binary logistic regression were used in the analysis, and the level of statistical significance was determined by a p-value of <0.05. In determining the factors that affect perception of condom use, variables that had a p-value of $\leqslant 0.2$ on bivariate analysis were entered into the logistic regression model. The result of logistic regression analysis was reported using adjusted odds ratios (AOR) and 95% confidential intervals (CI), and the level of statistical significance was determined by a p-value of <0.05. The pperception of condom use was assessed using 9 variables. A correct answer attracted a score of 1, while an incorrect answer was scored as 0. The main outcome measure of the study was a good perception of condom use, and this was determined by the proportion of respondents who scored >50% on the variables.

Ethical considerations

Ethical approval for the study was obtained from the Health Research Ethics Committee of the University of Nigeria Teaching Hospital Enugu and the Research and Ethics Committee of Ebonyi State Ministry of Health. Ethical approval was secured from both committees before entry into the study

site. Informed written consent was obtained from parents/guardians of adolescents aged 13 to 17 years who participated in the survey and older adolescents aged 18 years also gave consent for the study.

Results

Table 1 shows the demographic characteristics of the survey respondents. The mean age of the respondents was 15.4±1.5 years. The majority (75.2%) of them were in the middle adolescence phase. Higher proportions of the respondents were females (68.3%), were in senior secondary schools (62.0%), lived with parents (94.2%), and did not work for pay (82.2%). Similar proportions lived in the urban (49.9%) and rural areas (50.1%), and participated in the intervention (48.9%).

Table 2 shows the perception of contraceptive use by the survey respondents. A higher proportion of female respondents (73.6%) either did not agree or did not know if it's all right for boys and girls to have sex with each other provided that they use methods to stop pregnancy, and the difference was found to be statistically significant (χ^2, p-value; 5.2415, 0.022).

Table 1: Socio-demographic characteristics of the respondents

Variables		n (%)
Sex	Male	159 (31.61)
	Female	344 (68.39)
Age	Early adolescent	71 (14.12)
	Middle adolescent	378 (75.15)
	Late adolescent	54 (10.74)
Level of schooling	Junior secondary	191 (37.97)
	Senior secondary	312 (62.03)
Location	Rural	252 (50.10)
	Urban	251 (49.90)
Live with parent/guardian	Yes	472 (94.21)
	No	29 (5.79)
Work for pay	Yes	89 (17.76)
	No	412 (82.24)
Intervention	Yes	246 (48.91)
	No	257 (51.09)
Mean age (std. dev.)		15.42(1.54)

Also, a higher proportion of female respondents (87.2%) either disagreed or did not know if "I feel that I know how to use a condom properly," and the difference was found to be statistically significant (χ^2, p-value; 7.8098, 0.005). On the contrary, a higher proportion of male respondents agreed that they would refuse to have sex with someone who is not prepared to use a condom (χ^2, p-value; 5.6559, 0.049).

Table 3 shows factors associated with a good perception of condom use among adolescents in school. A higher proportion of male respondents (58.8%) had a good perception of condom use when compared to female respondents (45.8%), and the difference was found to be statistically significant, p = 0.006. A significantly higher proportion of senior secondary respondents (54.8%) had a good perception towards condom use when compared to junior secondary respondents (41.9%), (p = 0.005). A significantly higher proportion of adolescents who worked for pay (62.5%) had a good perception of condom use when compared to adolescents who did not work for pay (47.5%), (p = 0.010).

Table 4 shows the predictors of good perception toward condom use. It shows that female adolescents were 1.9 times less likely to have a good perception of condom use compared to male adolescents. Senior secondary students were 1.7 times more likely to have a good perception of condom use compared to junior secondary adolescents.

Discussion

This paper assessed the gender differences and perceptions of the use of condoms among adolescents in selected secondary schools in Ebonyi State, southeast Nigeria. Our findings revealed a significant gender disparity in perceptions, which could be useful considerations in ASRHR programming. Firstly, our study showed that a higher percentage of female respondents either disagreed or were unsure of whether they felt confident in their ability to "use a condom properly." This finding may not be unconnected with the social norms that assigned gendered roles and, by so doing, put the burden of making most SRHR-related decisions on the male gender.

Table 2: Sex differences in perception of condom use

Variable	Male (n=159) N (%)	Female (n=344) N (%)	χ^2 (p-value)
A girl can suggest to her boyfriend that he use a condom			
Correct	127 (79.87)	252 (73.26)	2.5643 (0.109)
Incorrect	32 (20.13)	92 (26.74)	
A boy can suggest to his girlfriend that he use a condom			
Correct	131 (82.39)	262 (76.16)	2.4678 (0.116)
Incorrect	28 (17.61)	82 (23.84)	
If a girl suggested using condoms to her partner, it means that she does not trust her partner			
Correct	88 (55.35)	181 (52.62)	
Incorrect	71 (44.65)	163 (47.38)	0.3257 (0.568)
It's all right for boys and girls to have sex with each other provided that they use methods to stop pregnancy			
Correct	58 (36.48)	91 (26.45)	5.2415 (0.022)*
Incorrect	101 (63.52)	253 (73.55)	
Most of my friends who have sex with someone use condoms regularly			
Correct	68 (42.77)	134 (38.95)	0.6581 (0.417)
Incorrect	91 (57.23)	210 (61.05)	
I am confident that I can insist on condom use every time I have sex.			
Correct	85 (53.46)	155 (45.06)	3.0762 (0.079)
Incorrect	74 (46.54)	189 (54.94)	
It is mainly the woman's responsibility to ensure that contraception is used regularly.			
Correct	71 (44.65)	180 (52.33)	2.5598 (0.110)
Incorrect	88 (55.35)	164 (47.67)	
I feel/have confidence that I know how to use a condom properly.			
Correct	36 (22.64)	44 (12.83)	7.8098 (0.005)*
Incorrect	123 (77.36)	299 (87.17)	
I would refuse to have sex with someone who is not prepared to use a condom.			
Correct	113 (71.52)	127 (63.08)	5.6559 (0.049)*
Incorrect	26 (16.46)	56 (16.28)	

*statistically significant, ($p<0.05$)

Hence increasing men's self-efficacy and confidence in condom use, as shown in earlier studies in other parts of Nigeria, Australia, and the United States of America (USA)[1,17-18].

Similarly, a significantly higher proportion of female respondents reported that they disagreed with or did not know whether it was all right for boys and girls to have sex with each other provided that they used contraceptives. The implication is that many female adolescents may not be aware of their sexual and reproductive health and rights, and as a result, they may continue to face obstacles in achieving their SRHR needs. This finding further affirms the result of a previous study, which documented that adolescents in the state lacked adequate SRHR-related information[19]. Therefore, interventions that increase awareness, empower, and promote SRHR in adolescents and young people should be encouraged in the state.

Our study also demonstrated that a higher proportion of respondents who agreed that they would refuse to have sex with someone who is not

Table 3: Factors associated with the perception of condom use

Variable	Perception of Condom use (n=501)		χ^2 (p-value)
	Good N (%)	Poor N (%)	
Age group			
Early adolescent	28 (39.44)	43 (60.56)	4.0039 (0.135)
Middle adolescent	192 (51.06)	184 (48.94)	
Late adolescent	30 (55.56)	24 (44.44)	
Location			
Urban	123 (49.20)	127 (50.80)	0.0979 (0.754)
Rural	127 (50.60)	124 (49.40)	
Gender			
Male	93 (58.86)	65 (41.14)	7.4120 (0.006)*
Female	156 (45.77)	186 (54.23)	
Live with Parents			
Yes	232 (49.36)	238 (50.64)	0.3689 (0.544)
No	16 (55.17)	13 (44.83)	
Level of schooling			
Junior secondary	80 (41.88)	111 (58.12)	7.9327 (0.005)*
Senior secondary	170 (54.84)	140 (45.16)	
Work for pay			
Yes	55 (62.50)	33 (37.50)	6.5710 (0.010)*
No	195 (47.45)	216 (52.55)	
Intervention			
Yes	136 (53.13)	120 (46.88)	2.1776 (0.14)
No	114 (46.53)	131 (53.47)	

Cut-off point < 0.2

Table 4: Predictors of good perception towards condom use

Variable	Adjusted odds ratio	p-value	95% Confidence Interval	
			Lower	Upper
Gender				
Female	0.623	0.021	0.417	0.931
Male	1			
Education				
Senior Secondary	1.750	0.008	1.159	2.646
Junior Secondary	1			
Work for pay				
Yes	1.798	0.021	1.094	2.955
No	1			

*****Statistical significance (p<0.05)

prepared to use a condom were male, and the difference was found to be statistically significant. The fact that a lower proportion of women reported this might be a reflection of gender and power imbalance which prevents women from exercising autonomy over their sexual and reproductive health and rights choices, including sexual partners and contraception [10]. Such uneven distribution of power in relationships weakens women's ability to negotiate for safer sex, increases their vulnerability to risky sexual behaviors, and has also been linked to intimate partner sexual victimization[20]. Thus, the ability to refuse unwanted sexual relations, through negotiation is a skill that may help adolescents avoid the unwanted consequences of sexual activity if acquired[21,22].

Our findings revealed that female adolescents were approximately twice less likely to

have a good perception of condom use when compared to their male counterparts. This finding is in line with previous studies which reported that males were more likely to use contraceptives when compared to females in the state[16]. It also corroborates the findings from another study carried out in Ethiopia which reported males as having better attitudes to condom use[23].

This finding underscores the importance of designing and implementing ASRHR interventions that meet gender-specific needs. In particular, comprehensive sexuality education programs have been reported as an integrated and good approach to emphasizing gender and rights, and they have been effective in improving reproductive health outcomes[24].

We found from our study that adolescents who worked for pay were approximately twice more likely to have good perception of condom use compared to those who did not work for pay. The finding is comparable to the results from a previous study in the USA which reported that current employment was associated with a reduced risk of pregnancy among Hispanics, since the employed were more likely to know how to use condom than the unemployed[25]. This finding could also mean that working adolescents had more exposure and were more empowered to negotiate for condom use in relationships.

That students in senior secondary school were about twice more likely to have a good perception of use of condom as found in this study could be as a result of increasing knowledge, due to exposure to SRHR education, mass or social media. Our finding is similar to previous studies which reported that higher education was found to be associated with the likelihood of condom use[26,27]. A study in Nepal, reported the frequency of condom use as 3.2% among respondents in the no-schooling group compared to 24.3% among those with higher education[26]. Hence, the early provision of education about condom use for adolescents in school is crucial to improving its perception and use, thereby facilitating the prevention of teenage pregnancy among this subgroup.in the early years secondary school.

One of the limitations of our study is that, due to the sensitivity of the topic, there may have been a social desirability bias in respondents' responses to the survey questionnaire. However, an attempt was made to address this by ensuring the utmost privacy and confidentiality, as well as the anonymity of the responses to the questionnaire. In addition, our study combined paper and electronic data collection methods, which leveraged the advantages of both traditional and modern collection techniques, to improve the overall quality of our data.

Furthermore, structured questionnaires are limited to the specific questions posed and may not have encompassed all aspects of respondents' perceptions. Future studies should use the qualitative approach in order to gain a deeper understanding of the context and nuances of respondents' perceptions.

Implications of the study for policies and programming

- Policymakers can work on integrating age-appropriate, evidence-based sex education into the curriculum while addressing gender-specific issues related to the perception of condom use.
- The findings of this study can inform the development of gender-specific educational programmes that address the different perceptions of condom use among male and female adolescents. The programme can be designed to provide targeted information and support based on the unique needs of each gender.
- The findings can also guide the development of gender-specific awareness campaigns to promote condom use among adolescents. Tailored messages that take into account the diverse perceptions of males and females can be more effective in changing behaviours.

Conclusion

There is a considerable disparity in the perceptions of condom use between the male and female respondent groups. The female gender was found to decrease the likelihood of having the correct perceptions significantly. Therefore, interventions that promote and raise awareness about the sexual and reproductive health and rights of adolescents

and young people and those that empower women with relevant skills by addressing unequal gender power relations in relationships should be encouraged and prioritized in the state.

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Contributions of the authors

CM, and OO conceptualized and designed the study and data collection instruments. CA, CM, IA, OA and GO took part in data collection and analysis. CA wrote the first draft of the manuscript, while all the authors read, revised and approved the final version for submission.

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Conflict of interest

The authors declare that they have no conflicts of interest.

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