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Sexual risk-taking behaviors among adolescent students in a major municipality in Ghana

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Abstract

Sexual risk-taking behaviours (SRTB) are highly prevalent among young people worldwide. The relationship between SRTB and sexually transmitted infections (STIs) has also been documented. This study assessed the prevalence of SRTB and associated factors among adolescents in the Wa Municipality of Ghana. A sample of 361 adolescents was conveniently selected for the study. A quantitative, cross-sectional survey design was used to collect the data. The results showed that 48.2% of respondents had engaged in some form of sexual activity. Among those who were sexually active, the majority (59.8%, n = 104) were aged 10 to 15 years, while 40.2% (n = 70) were between 16 and 19 years. In addition, 69% of sexually active respondents had multiple sexual partners, and 60% had never used condoms with their partners. Furthermore, 17.4% had sexual intercourse the first time they met a previously unknown person. Predictors of condom use included drug use and peer communication about sex. Being female was associated with a decreased likelihood of having multiple sexual partners. These findings underscore the need for strategies to prevent adolescent SRTB in the Wa Municipality, including education about contraceptives, STIs, and the harmful effects of substance use and alcohol consumption.

Keywords: Adolescents, Ghana, Sexual risk-taking behaviors, Sexually active students, Wa Municipality.

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Contribution of this paper to the literature

This study contributed to knowledge in the sense that it is one of the first to assess the important subject of the prevalence of sexual risk-taking behaviours and the factors associated with it among adolescent students in the Wa municipality, thus providing baseline data for future research and intervention strategies.

1. Introduction

According to the World Health Organization, adolescence is the period of life between childhood and adulthood, occurring from ages 10 to 19. It involves rapid physical, cognitive, and psychosocial growth, including hormonal changes, sexual development, new and conflicting emotions, moral development, and evolving relationships with peers and family members (World Health Organization, 2022). According to Azeze, Gebeyehu, Wassie, and Mokonnon (2021), Sexual Risk-Taking Behaviours (SRTB) include activities such as having multiple sexual partners, not using condoms during sexual intercourse, engaging in casual or commercial sex, and using substances. The term SRTB is used interchangeably with Sexual risk behaviour (SRB) or risk sexual behaviour (Buttmann, Nielsen, Munk, Liaw, & Kjaer, 2011) in this paper to mean the same thing. Sexual- risk taking behaviors (SRTBs) can negatively affect family relationships and health. Evidence shows that unsafe sex is the second-leading cause of disability-adjusted life years worldwide (Zheng et al., 2022).

Several factors, including peer influence, alcohol and drug use, determine SRB among adolescents (Wakasa, Oljira, Demena, Regassa, & Daga, 2021). Studies in the United States (US) reported that the sexually transmitted infection (STI) epidemic in the US among adolescents is strongly associated with individual, psychosocial and cultural phenomena (Cabral et al., 2023). A systematic review of risk factors of HIV and other STIs revealed that high income among males, social expectation and alcohol use are significant threats increasing the HIV and other STIs situation in China (Zhou et al., 2022). However, a study in Ghana found that perceived peer norms favoring sex increased the odds of transition to first sex and having more friends increased the odds among younger respondents of acquiring multiple new sexual partners (Abiiro, Annor, & Alatinga, 2022). The study also revealed that among males, perceived peer norms favoring sex were associated with an increased likelihood of acquiring multiple partners and recommended that peer-based interventions may help address the needs of at-risk adolescents.

Though sexual and reproductive health services are generally physically available in Ghana (Agyei, Kaura, & Bell, 2025), the utilization of reproductive health services among adolescents is low and only about one-third (33.8%) of adolescents utilize at least one of the reproductive health services (Abdurahman, Oljira, Hailu, & Mengesha, 2022). This is attributed to some individual and environmental challenges that prevent adolescents from utilizing available reproductive health services (Sidamo, Kerbo, Gidebo, & Wado, 2023). The available evidence shows that adolescents are more vulnerable to many reproductive health problems, including STIs, unwanted pregnancies, and unsafe abortion (Meherali, Rehmani, Ali, & Lassi, 2021). The determinants of adolescent SRTBs have largely been multi-dimensional and require a range of context-specific research in order to suggest strategies for the development of sensitive and efficacious sexual risk behavior prevention programs (Cho & Yang, 2023). Some of the determinants of adolescent SRTB are deeply embedded in the system of local values, beliefs and practices (Seguya & Mgaya, 2021). In Ghana's Upper West Region, particularly, data on adolescents' sexual risk-taking behaviors are limited. Therefore, this study was conducted to assess sexual risk-taking behaviors among adolescent students in the Wa Municipality.

Evidence from past studies indicates that among adolescents who had practiced sex, 19.8% of them had always used condoms during their sexual intercourse with their partners, while 58% of them never used condoms (Voyiatzaki et al., 2021). The evidence suggests that though awareness regarding sexual risk behaviours was high among adolescents, a good number of them practiced risky sexual behaviours. Peer pressure has been identified as a key factor that influences adolescents towards their first sexual intercourse and peers are seen to have greater influence on the positive and negative behaviour of their friends (González-Casals et al., 2025; Voyiatzaki et al., 2021). According to Habeeb Omoponle and Veronica (2023), family or home level factors such as parent risk behaviour, peer level factors such as peer risk behaviour, feeling more pressure from peers to have sex, and lower community level factors such as lower social cohesion were all associated with increased likelihood of sexual risk behaviour. According to Llamosas-Falcón, Hasan, Shuper, and Rehm (2023) alcohol is associated with sexually transmitted infections through increased sexual risk-taking behaviour. The results indicate that alcohol consumption is associated with higher intentions to have unprotected sex. People who consumed alcohol were more likely to exhibit intentions to engage in unprotected sex with a potential sexual partner compared to non- consumers of alcohol.

The study of Baraki and Thupayagale-Tshweneagae (2023) identified that socio-cultural, environmental and economic factors including peer influence, unwanted sexual advances from adult males, coercive sexual relations, unequal gender power relations, poverty, religion, early marriage, lack of parental counseling and guidance, parental neglect, absence of affordable or free education, lack of comprehensive sexuality education, non-use of contraceptives, male's responsibility to buy condoms, early sexual debut and inappropriate forms of recreation as factors associated with sexual risk behaviour. Individual factors, which include excessive use of alcohol, substance abuse, educational status, low self-esteem, and inability to resist sexual temptation, curiosity, and cell phone usage were found to be associated with sexual behavior (Camacho-Ruiz, Galvez-Sánchez, Galli, & Limiñana-Gras, 2025; Ongero, 2021). The study of Asamoah and Agardh (2018) revealed that being a young male was significantly associated with a high risk of engaging in sex without a condom and having sexual intercourse with a previously unknown person on the first night, and having two or more sexual partners in the last 12 months, and early sexual debut. Parental education level showed significant association with sexual intercourse on the first night and early sexual debut among Swedish-born youth. Youth whose parents have a low-level education had about 40% reduced risk of having sex on the first night with a previously unknown person. They had a 40% increased risk of early sexual debut compared to their peers whose parents have high educational level (Asamoah & Agardh, 2018). Kahn and Halpern (2018) reported that the correlations between talking to a parent about sex, age at first intercourse and number of partners are marginally significant. Teens who talked to a parent about initiating sex tend to initiate sex at a later age and tend to have fewer partners (Kahn & Halpern, 2018).

Some of the determinants of adolescent SRTB are deeply embedded in the system of local values, beliefs and

practices (Asamoah & Agardh, 2018). However, the literature does not seem to provide a comprehensive understanding of adolescents' SRTB that is necessary for total adoption for the creation of sexual risk-reduction efforts in specific contexts. For instance, in the Upper West Region of Ghana especially, data is lacking about adolescents' sexual risk-taking behaviors. In view of this, the present study was undertaken to assess the prevalence of sexual risk-taking behaviors among adolescent students in the Wa Municipality and to examine the factors associated with their sexual risk-taking behaviors.

2. Method

2.1. Research Design

The study employed a quantitative cross-sectional survey design. This approach was considered more appropriate because it allowed for a comprehensive understanding of adolescents' SRTBs and the factors influencing them.

2.2. Participants

The sample consisted of 361 adolescent students aged 10 to 19 years within the Wa municipality who were able to read and write in English. Minors were not selected where there was no legally authorized person to give consent. A total of 138 and 223 had ages ranging from 10-15 and 16-19 years, respectively. Out of the sample, 42.1% (n = 152) were males while 57.9% (n = 209) were females. In terms of ethnicity, 49.0% (n = 177) were Dagaabas, 31.9% (n = 115) were Waalas and 19.1% (n = 69) belonged to other ethnic groups. A little more than half (56.0%, n = 202) of the respondents were Christians, while 44.0% (n = 159) were Muslims. More than half of the sample (54.0%, n = 195) were in Senior High School (SHS), while the remaining (46.0%, n = 166) were in Junior High School (JHS). A convenience sampling technique was employed to select the respondents within the Wa Municipality who consented to participate. Participants were recruited either at their homes or outside them. It should be noted that as part of a larger study involving quantitative and qualitative aspects, this study reported on only the quantitative aspect of the study.

2.3. Instrument

Data were collected using an adapted version of a standardised questionnaire, namely the National Survey of Sexual Attitudes and Lifestyles 3 (NATSAL 3) (Erens et al., 2013; Mirzaei, Ahmadi, Saadat, & Ramezani, 2016). This instrument was originally designed in Britain to provide up-to-date estimates of sexual behavior among adolescents and adults. NATSAL 3 is based on NATSAL 2, which was a revision of NATSAL 1. The questionnaire consisted of two main sections comprising seven subsections. The first section involved a self-administered questionnaire. The subsections included: (1) socio-demographic characteristics; (2) general health; (3) family; (4) learning about sex; (5) first sexual experiences; (6) sexual behavior covering sexual practices, condom use, number of sexual partners, and age at first sexual intercourse; and (7) contraception use, while the second section involved face-to-face interviews. The reliability and validity of the NATSAL scale are adequate and have been demonstrated in previous studies (Erens et al., 2001; Erens et al., 2013).

The adapted version of NATSAL 3 involved trimming down the bulky questionnaires based on the objectives of the present study to a total of 45 items that collected data on the SRTBs and associated factors. The adapted version included 6 items on socio-demographic characteristics, 9 items on general health, 3 items on family information,10 items covering learning about sex, 2 items on sexual experience, 11 items on sexual behavior and 4 items on contraception. The adapted version was pretested on a small sample similar to the study population to ensure clarity, relevance, and reliability. During this process, respondents provided feedback on question comprehension, wording, and overall flow. The instruments were generally found to be comprehensible and devoid of ambiguities.

2.4. Data Collection Procedure

The researchers used KoBo Collect Toolbox to administer the questionnaire to respondents. KoBo Collect Toolbox is a type of free open-source tool used for mobile data collection. It allows for data collection in the field using mobile devices such as mobile phones or tablets. The purpose of the study was explained to participants and their consent was sought verbally prior to questionnaire administration. Ethical approval for the study was obtained from the Institutional Review Board of the University for Development Studies, Tamale, prior to data collection.

2.5. Data Analysis

With the aid of the Statistical Package for Social Sciences (SPSS) version 22, data were analysed using frequencies and percentages as well as a bivariate test (Logistic regression analysis).

3. Results

The results of the study are presented based on the objectives of the study as follows.

3.1. Assessing the Prevalence of Sexual Risk-Taking Behaviors among Adolescent Students in the Wa Municipality

The study examined the sexual experiences of 361 adolescents. Nearly half (48.2%, n= 174) of the participants had engaged in some form of sexual activity, such as kissing, touching genitals, or cuddling with someone of the opposite sex. Among those with sexual experience, the majority (59.8%, n =104) were aged 10-15 years, while the remaining (40.2%, n = 70) were between 16 and 19 years old.

As shown in Table 1, 42.9% (n = 155) of adolescents reported having had sexual intercourse. Of these, a large number (91.6%, n = 142) engaged in vaginal sex, while others engaged in oral sex (5.8%, n = 9), and anal sex (2.6%, n = 4). Additionally, 23 (14.8%) exchanged sex for money. At their first sexual encounter, most adolescents (56.1%, n = 87) were aged 10-15 years, with the remaining (43.9%, n = 68) aged 16-19. During their first sexual experience, a good number of participants (37.4%, n = 58) did not use any form of contraception, while 53.5% (n = 83) used condoms and 9% (n = 14) used pills or other contraceptives. Among those who ever engaged in sexual activity, (25.8%, n = 40) reported being coerced, persuaded, or forced into sex, and (14.8%, n = 23) exchanged sex for money. Notably,

a large number (69%, n= 107) had multiple sexual partners, and 17.4% (n = 27) reported having sexual intercourse on their first night with someone previously unknown to them. Over half (60%, n = 94) never used condoms during sexual encounters with their partners.

Table 1. Prevalence of sexual practices and experiences of adolescents in Wa municipality.

Variables	Response	Number (N)	Percent (%)
Ever had any type of sexual experience	No	187	51.8
	Yes	174	48.2
	Total	361	100
Age at any type of sexual experience	10-15years	104	59.8
	16-19 years	70	40.2
	Total	174	100
Type of sexual intercourse	Vaginal	142	91.6
	Oral	9	5.8
	Anal	4	2.6
	Total	155	100
Money for sex	No	132	85.2
	Yes	23	14.8
	Total	155	100
Ever had sexual intercourse	No	206	57.1
	Yes	155	42.9
	Total	361	100
Age at first sexual intercourse	10-15years	87	56.1
	16-19 years	68	43.9
	Total	155	100
Precaution at first sexual intercourse	Condom	83	53.5
	Pills/other contraception	14	9
	None	58	37.4
	Total	155	100

3.2. Sexual Practices of Sexually Active Adolescents

In examining the sexual practices of sexually active adolescents, results show that out of a total of 155 adolescents who ever had sexual intercourse, almost three-quarters, 107 (69.0%, n = 107), had multiple sexual partners and more than half 94 (60%, n = 94), never used a condom with their partner during sexual intercourse (see Table 2).

Also, among the adolescents who ever had sexual intercourse, 27 (17.4%) had sexual intercourse on the first night or day they met someone they did not previously know.

Table 2. Sexual practices of adolescents who ever had sexual intercourse.

Variables	Response	Number (N)	Percent (%)
Multiple sexual partners	No	48	31
	Yes	107	69
	Total	155	100
Condom use with a partner during sexual intercourse	No	93	60
	Yes	62	40
	Total	155	100
Sexual intercourse at "first night" with previously unknown person	No	128	82.6
	Yes	27	17.4
	Total	155	100

3.3. Factors Associated with Adolescent Sexual Risk-Taking Behaviors

Binary logistic regression was conducted to identify factors influencing condom use with a partner during sexual intercourse among 155 adolescent students (see Table 3). The analysis considered eleven explanatory variables: Age, sex, level of education, mother's occupation, drug use, parenting style during upbringing, peer communication about sex, knowledge about contraceptives, awareness of pregnancy prevention, motivation for condom use, precautions taken at first sexual intercourse, and reasons for condom use. The final model explained between 38.8% and 52.5% of the variance in condom use and demonstrated good fit to the data (Hosmer and Lemeshow $\chi2 = 5.056$, $p = 0.752$). It also showed significant predictive ability (Omnibus $\chi2$ (18) = 76.175, $p < 0.000$), correctly classifying 80.0% of cases. Eleven predictors were included using the enter method, with four variables significantly predicting condom use: drug use, peer communication about sex, motivation for condom use, and precautions taken at first sexual intercourse.

Adolescents who did not use drugs were approximately eight times more likely to use a condom during sexual activity compared to those who used drugs (OR=7.997, p<0.036). Those who did not discuss sex with peers were significantly less likely to use a condom (OR=0.047, p<0.011). Regarding motivation, adolescents who used condoms to prevent pregnancy and infections were about seventeen times more likely to do so than those with no specific motivation (OR=16.504, p<0.002). Similarly, condom use motivated by pregnancy prevention was associated with a higher likelihood compared to motivation to prevent HIV/STDs (OR=7.834, p<0.011; OR=7.749, p<0.028, respectively). Lastly, adolescents who did not take any precautions during their first sexual intercourse were less likely to use a condom subsequently (OR=0.350, p<0.049).

Table 3. Binary logistic regression result of factors associated with condom use with partner during sexual intercourse.

Condom use with partner during sexual intercourse				
AOR (95% C.I)				
Variables	**AOR**	**Lower**	**Upper**	**P-value**
Age				
16-19 years		1		
10-15 years	0.488	0.148	1.605	0.238
Sex				
Female		1		
Male	2.538	0.994	6.826	0.065
Level of education				
SHS		1		
JHS	0.402	0.133	1.209	0.105
Mother's occupation				
Other occupations		1		
Health worker	0.277	0.053	1.446	0.128
Teacher	2.224	0.408	12.122	0.355
Drug use				
Yes		1		
No	7.997	1.142	56.008	0.036
Talking with peers about sex				
Yes		1		
No	0.047	0.004	0.499	0.011
Orientation about contraceptives				
Yes		1		
No	0.907	0.257	3.197	0.879
Orientation about pregnancy Prevention				
Yes		1		
No	1.652	0.453	6.021	0.447
Will at first sexual intercourse				
We were both equally willing		1		
I was more willing	1.774	0.567	5.549	0.324
I was forced/persuaded/begged	0.336	0.098	1.146	0.081

Table 3. Continued.

Condom use with partner during sexual intercourse				
AOR (95% C.I)				
Variables	**AOR**	**Lower**	**Upper**	**P-value**
Motivation for use of condom				
None		1		
To prevent pregnancy	7.834	1.616	37.981	0.011
To protect against HIV and other STIs	7.749	1.254	47.892	0.028
To prevent pregnancy and infections	16.504	2.774	98.184	0.002
Parenting when growing up				
Lives with neither father nor mother		1		
Lives with both father and mother	3.409	0.637	18.242	0.152
Lives with single parent	2.865	0.458	17.901	0.260
Precaution taken at first sexual Intercourse				
Male condom		1		
Pills/other contraception	0.435	0.080	2.376	0.336
None	0.350	0.124	0.994	0.049

As shown in Table 3, key factors associated with condom use during sexual intercourse among adolescents in the Wa Municipality include drug use, peer communication about sex, motivation for condom use, and precautions taken at first sexual intercourse.

3.4. Factors Associated with Having Multiple Sexual Partners

Binary logistic regression was employed to predict the likelihood of having multiple sexual partners among the155 adolescent students who ever had sex (see Table 4), based on three predictor variables: gender, peer perception about sexual intercourse, and feelings of sexual attraction to people.

The final model explained between 10.5% and 14.8% of the variance in having multiple sexual partners. It demonstrated adequate fit to the data (Hosmer and Lemeshow $\chi2 = 0.564$, $p = 0.905$) and effectively predicted this behavior (Omnibus $\chi2$ (3) = 17.231, $p < 0.001$). The model correctly classified 72.3% of cases overall. Using the enter method, three predictors were included, with two significantly predicting the likelihood of having multiple sexual partners.

Being female was associated with a decreased likelihood/ (OR = 0.465, p<0.040), whereas feeling sexually attracted to people increased the likelihood by approximately four times (OR = 4.298, p<0.007).

Table 4. Binary logistic regression result of factors associated with having multiple sexual partners.

Multiple sexual partners				
AOR (95% C.I)				
Variables	**AOR**	**Lower**	**Upper**	**P-value**
Sex				
Male		1		
Female	0.465	0.224 - 0.966		0.040
Peer perception about sexual intercourse				
Sexual intercourse is not acceptable		1		
Sexual intercourse is acceptable	1.890	0.752 - 4.751		0.176
Feeling of sexual attraction				
No, have never felt sexually attracted to anyone at all		1		
Yes, have ever felt sexually attracted to someone	4.298	1.494 - 12.364		0.007

3.5. Factors Associated with Having Sexual Intercourse at "First Night" with Previously Unknown Person

Binary logistic regression analysis was used to examine the likelihood of having sexual intercourse on the first night with a previously unknown person among the 155 adolescent students who ever had sex (see Table 5). The predictor variables included age, willingness at sexual intercourse, and age at first sexual intercourse.

The final model explained only between 6.3% and 10.4% of the variance. It did not fit the data adequately (Hosmer and Lemeshow $\chi 2 = 2.443$, $p = 0.295$) and was unable to predict having sexual intercourse on the first night with a previously unknown person (Omnibus $\chi 2$ (3) = 9.958, $p < 0.019$). Overall, the model correctly predicted 82.5% of cases. Using the enter method, three predictors were included, but none of these variables - age, willingness at sexual intercourse, or age at first sexual intercourse successfully predicted sexual intercourse on the first night with a previously unknown person.

Specifically, being an older adolescent aged ≥16 years was not a significant predictor compared to younger adolescents aged ≤15 years (OR = 1.637, p<0.673). Similarly, being forced, persuaded, or begged to have sexual intercourse did not significantly predict this behavior (OR = 0.425, p<0.072). Additionally, having first sexual intercourse at age ≤15 years was not a significant predictor compared to age ≥16 years (OR = 0.504, p<0.534).

Table 5. Binary logistic regression result of factors associated with having sexual intercourse at "first night" with a previously unknown person.

Sexual intercourse at "first night" with previously unknown person				
AOR (95% C.I)				
Variables	**AOR**	**Lower**	**Upper**	**P-value**
Age				
10-15 years		1		
16-19 years	1.637	0.166	16.155	0.673
Will at sexual intercourse				
Forced/persuaded/begged		1		
Not forced/persuaded/begged	0.425	0.167	1.081	0.072
Age at first sexual intercourse				
16-19 years		1		
10-15years	0.504	0.058	4.380	0.534

4. Discussion

The current study examined the prevalence of sexual risk-taking behaviours of adolescents as well as the factors associated with their sexual risk-taking behaviours in the Wa municipality in the Upper West Region of Ghana. The results revealed that a significant proportion of adolescents engaged in risky sexual behaviors. Specifically, 48.2% of respondents had engaged in some form of sexual activity such as kissing, touching genitals, or cuddling with someone of the opposite sex. Among those with sexual experience, the majority (59.8%) were aged 10-15 years, while 40.2% were between 16 and 19 years. Among adolescents who ever had sexual intercourse, 69.0% reported having multiple sexual partners; over half (60.0%) never used a condom during sexual intercourse, and less than 17.4% engaged in sexual activity on their first night with a new partner. These findings differ from findings of the Ghana Global School-based Student Health Survey (GSHS), which reported lower prevalence rates of multiple partners (32.5%) and condom use (26.2%) (Kugbey, Ayanore, Amu, Asante, & Adam, 2018). However, they align partly with the results of a systematic review and meta-analysis of sexual risk behaviors among adolescents in Sub-Saharan Africa, which indicated a high prevalence (59.8%) of condom nonuse (Ssewanyana et al., 2021). Among condom users, over 81.3% reported using condoms primarily to prevent pregnancy and sexually transmitted infections. The current findings of a very high prevalence of young adolescents' involvement with multiple sexual partners and their nonuse of condoms reveal a very alarming picture of the sexual behavior of adolescents in the municipality. This calls for urgent action by stakeholders, especially considering the fact that such risk-taking behaviours predispose adolescents to STIs and unwanted pregnancies, among other things.

On the question of what factors were associated with adolescents' sexual risk-taking behaviours, the results revealed a number of factors, including those associated with condom use during sexual intercourse, those associated with having multiple sexual partners, and those associated with sexual intercourse during the "first night" with a previously unknown person.

With regard to the factors associated with condom use during sexual intercourse, results revealed significant associations between condom use and variables such as age, education level, mother's occupation, drug use, parental supervision, peer discussions about sex, contraceptive knowledge, and reasons for condom use. After adjusting for confounders, logistic regression analysis identified drug use as a key predictor. Adolescents who did not use drugs were nearly eight times more likely to use condoms (OR=7.997, p<0.036). This finding is consistent with prior studies such as those of Oshri, Tubman, Morgan-Lopez, Saavedra, and Csizmadia (2013), Farid, Rus, Dahlui, Al-Sadat, and

Aziz (2014) and Rojas, Munoz-Gama, Sepúlveda, and Capurro (2016), which all indicate that substance use correlates with increased sexual risk behaviors, possibly due to impaired judgment. Peer communication about sex was also positively associated with condom use and adolescents who discussed sex with peers were more likely to use protection (OR=0.047, p<0.011). Reasons for condom use, such as preventing pregnancy and STIs, significantly increased the likelihood of consistent condom use (ORs > 7). Conversely, misconceptions about condom use, believing unprotected sex is more pleasurable or that condom use indicates distrust, contribute to inconsistent use. Stigma, shame, and access issues also hinder condom utilization. With regard to factors associated with having multiple sexual partners, results showed that male adolescents experiencing sexual attraction were more likely to have multiple partners, while females were less likely (OR= 0.465, p<0.040) to have multiple partners. This finding seems to justify the idea in most Ghanaian communities that it is more acceptable for males to have multiple sexual partners than females. This may also explain why polygamy, where males could marry multiple wives, seems to be culturally accepted in some communities in Ghana. The present finding is consistent with a number of previous studies (Adal, Abiy, Reta, Asres, & Animut, 2024; Asamoah & Agardh, 2018; Habeeb Omoponle & Veronica, 2023). Feeling sexually attracted increased the odds of multiple partners by over four times (OR=4.298, p<0.007).

Finally, concerning factors associated with sexual intercourse during the "first night" with a previously unknown person, the result indicated significant associations between first-night sexual encounters and variables such as age at sexual debut, willingness, and age at first sex. However, logistic regression revealed no significant predictors among these variables for engaging in sex on the first night with an unknown person (p>0.05). Differences from other studies such as Asamoah and Agardh (2018) may be due to different age categorizations. The results of the present study focusing on adolescents suggest that adolescents engage in first-night sex for reasons including curiosity, peer pressure, economic needs, and lack of parental support, factors that influence their decision beyond demographic variables.

4.1. Implications for Interventions

The findings suggest that adolescent sexual and reproductive health programs should adopt a multi-level approach, addressing individual behaviors, peer influences, family dynamics, community norms, and policy enforcement. Literature by World Health Organization (2021) reinforces the need for integrated strategies that combine education, socio-economic support, and legal measures to effectively prevent risky sexual behaviors, multiple partnerships, early initiation, and substance abuse among adolescents.

5. Conclusion and Recommendations

The study concludes that nearly half of all adolescents in school within the Wa Municipality ever had sexual intercourse and more than half of them had their first sexual intercourse at a younger age below fifteen years. Among adolescents who ever had sexual intercourse, almost three-quarters had multiple sexual partners and more than half never used a condom with their partner during sexual intercourse, while a little less than a quarter of them had sexual intercourse for the first time they met someone they did not previously know.

The predictors of condom use with a partner during sexual intercourse include drug use and peer communication about sex. Being a female adolescent is associated with a decreased likelihood of having multiple sexual partners and adolescents who felt sexually attracted to people are more likely to have multiple sexual partners. The age at first sexual intercourse and will at sexual intercourse are associated with sexual intercourse at first time with a previously unknown person but do not predict sexual intercourse at first time with a previously unknown person.

Adolescent sexual behaviors are exhibited in the contexts of individual and environmental factors and an interplay of the individual and environmental contexts. The strategies to prevent adolescent SRTBs, especially in the Wa Municipality, would require a multi-context and multidimensional approach including education and sensitization of adolescents on contraceptives; education and sensitization of adolescents on prevention of pregnancy and STIs; and education and sensitization of adolescents on the negative effects of substance use, drug use and alcohol consumption.

Based on the findings of the research, the researchers recommend that the Ghana Health Service and agencies that directly provide healthcare services should educate and sensitize adolescents who are sexually active to use contraceptives during sexual intercourse. Particularly, they should be educated to use condoms so as to help prevent unintended pregnancies among them and also reduce their risk of contracting HIV and other sexually transmitted infections. Also, adolescents who are sexually experienced should be educated and sensitized to be with one sexual partner as a way of reducing their likelihood of contracting sexually transmitted infections. Ghana Health Service and agencies that directly provide healthcare services should provide more education and sensitization to adolescents on contraceptives. This would help enhance their knowledge, especially about the benefits of contraceptives and also address misconceptions that adolescents may have regarding the use of contraceptives during sexual intercourse. Also, the study recommends that the Ghana Health Service and agencies that directly provide healthcare services should give more education and sensitization to adolescents on the negative effects of STIs and unintended pregnancy, as this would serve as positive motivation for them to use contraceptives during sexual intercourse. It is also recommended that intervention programmes by stakeholders should target the negative effects of substance use, drug use and alcohol consumption.

5.1. Key Points

- Almost half (48%) of adolescent students within the Wa Municipality ever had sexual intercourse and more than half of them (56.1%) had their first sexual intercourse at a younger age of between ten to fifteen years.
- Among adolescents who ever had sexual intercourse, almost three quarters (69%) had multiple sexual partners
- More than half (60%) of the participants who ever had sex never used a condom with their partner during sexual intercourse and a considerable number of respondents (17.4%) had sexual intercourse at the first time they met someone they did not previously know.
- Predictors of condom use with partner during sexual intercourse include drug use and peer communication about sex.

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