

Adolescent Students' Sexual Behaviors: Experiences from the Eastern Ghana Special Schools for the Deaf

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Abstract: This study assessed adolescent students' sexual behaviors in eastern region schools for the deaf in Eastern Ghana. The study used the descriptive survey design, which describes, analyzes and interprets conditions that exist. The population of the study was 125 adolescent students from three selected Junior High Schools (JHS) for the deaf in the Eastern region of Ghana. The study sampled 95 (52 Boys and 43 girls) students to participate through a questionnaire. Data was analyzed using frequencies and percentages. The study established that the majority of the adolescent students with deafness were sexually active as they had had sexual intercourse before the study took place. They engaged in risky sexual behaviors in various ways, such as having sex with more than one regular partner. The study's recommendations include that the school leadership should encourage teachers to sensitize the adolescent students on safer practices to avoid the risk of acquiring sexually transmitted diseases.

Keywords: Adolescent; students; sexual behaviors; school for the deaf.

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Introduction

Adolescence is a challenging phase of life, within which the individual attains physical, sexual and social maturity. Adolescent sexual behavior is a major health problem and concern. It is usually one of the lifestyle behaviors responsible for unprotected sex, unwanted pregnancies, illegal abortions, alcohol abuse and sexually transmitted infections (Gillmore et al., 2002). Most studies conducted all around the world have presented different ages at sexual debut. For example, in the United States of America, Adefuye et al. (2009) found that 87% of the participants were sexually exposed. Similarly, the Youth Risk Behavior Surveillance-United States found that 5.6% of

adolescents got introduced to sexual intercourse before age 13. It further revealed that sexual initiation before age 13 years was higher among males (8.3%) compared to female students (3.1%). Similarly, the Youth Risk Behavior Surveillance-United States, found that 5.6% of adolescents got introduced to sexual intercourse before age 13. It further revealed that sexual initiation before age 13 years was higher among males (8.3%) compared to female students (3.1%) (Kann, 2014).

In the developing world like Africa, adolescents or young people's risky sexual behavior has been recognized as an important health, social and demographic concern. Adolescents and the youth

are vulnerable to many health problems. This is because they often have multiple sexual relationships and have limited use of condoms (Amoah, 2017; Madise et al., 2019). Many young men may have their first sexual experiences with prostitutes. Young females on the other hand may have their first sexual experiences with gigolos. These acts of both female and male adolescents increase the chance of getting Sexually Transmitted Infections (STIs). The abuse of substances by a user exposes him or her to risky sexual behaviours such as having unprotected sex, which can have economic, social, physical, psychological and health problems (Madise, et al., 2019).

Adolescents participate in a variety of abnormal behaviors, such as sexual behaviors (Kato & Omona, 2021). Among the sexual behaviors that these adolescents engage in are multiple sexual relationships, transactional sex, having affairs with adults, and having their first sexual experience at a young age. According to Khangelani (2017), adolescents who engage in sex for the first time do not use a condom. This is because most adolescents have sex when they are not ready. This exposed them to the risk of unplanned pregnancy and STIs. More female adolescents have early sex compared to their male counterparts (Bwalya, 2018). The researcher further indicates that more female adolescents did not use a condom as compared to their male counterparts because boys usually initiate sex. Girls are forced into sex through money and gifts, inducements, flattery words, pestering and threats by their male partners to go after other girls (June, et al., 2019).

HIV/AIDS menace has been a major source of concern to everyone, particularly, the people of Lower Manya Krobo Municipality (LMKM) as the area has always recorded a higher rate of infections compared to other districts in Ghana (Ofori et al., 2022). The study of Ofori et al. (2022) further found that the majority of senior high school students in the LMKM of Ghana have high knowledge about HIV/AIDS through several available sources within their domain. However, the HIV/AIDS knowledge they had did not have much impact or influence on their sexual behavior. This situation needs to be changed to actively involve adolescents in the fight to prevent the spread of STIs. A search through the related literature showed some academic work on sexual behaviors among adolescents with deafness in selected special schools in Ghana (Adubea, 2020; Issaka, 2015, 2018; Seidu et al. 2024). Despite the

well-documented research on adolescents with deafness sexual behaviors, not much is known about adolescent Students' Sexual Behaviors in the Eastern part of Ghana Schools for the deaf. Adequate knowledge of adolescent sexual behaviors would help reduce the adolescent HIV/AIDS prevalence rate. The results of this study would inform stakeholders of the level of knowledge of STIs among adolescents with deafness, which will influence the adoption and implementation of adolescent health policies in the country. The study would also facilitate the development of strategies by the teachers of the deaf to assist the adolescents in having a better understanding of the basic facts of sexual behaviors.

Sexual Behaviors of Adolescent Students with Deafness

Sexual behavior is explained as the various behaviors that intensify an individual's risk of contracting a sexually transmitted infection or unplanned pregnancy (Centre for Disease Control and Prevention, 2004). In this study, sexual behavior means behaviors that could predispose an individual to acquiring STIs. Authors explain such behaviors using three characteristics: early sexual initiation, multiple sexual partners and having sexual intercourse without using a condom (Weller & Davis, 2002).

Early sexual initiation

A study conducted by Nwankwo and Nwoke (2009) in Owerri Municipal in Nigeria found that majority of the respondents who participated had sex when they were in Junior High School. A third of the respondents, however, could not remember while 13.4% had a sexual experience in their Senior High School. A few (7.5%) had the first sexual experience when they were in primary school. These findings point out what the Centre for Disease Control and Prevention (2004) had earlier reported that nearly half of students in JHS and SHS had had sexual intercourse and over 60% reported having had their first sexual intercourse by the time they graduated (Centre for Disease Control and Prevention, 2004).

A study by Mugi's (2012) concluded that sexual behaviors among students begin before entering secondary school in Kenya. Similarly, Moura (2013) study revealed that over 60% of the boys had already experienced sexual intercourse as against 40.5% of the girls at the time of the study in Vespasiano, Minas Gerais State, Brazil. The mean age of first sexual act was found to be 14.8 years (SD

= 1.5). On average, the male students started sex six months earlier than the females with a significant difference between the age at which the male students started sex and the age female students started. The average age of first sexual intercourse among the males was 17 years and that of the females was 16 years. Twenty-five percent of the respondents reported having had their sexual experience before the age of 15 years.

Sangowawa et al. (2009) conducted a cross-sectional study among hearing-impaired and non-hearing-impaired students in government-owned Junior and Secondary schools in Ibadan, Oyo state. One hundred and fifty-six (156) students were used for the study, made up of 78 deaf students conveniently sampled and another seventy-eight hearing students who were selected through stratified and simple random techniques. The results showed that 48.6 % of the hearing students had ever had sexual intercourse against 33.3% of the deaf students. Therefore, the indulgence of deaf students in sex is not a mere suspicion as some may think. Of the deaf who reported being sexually active, the researcher found that as much as 47.8% were 17 years or above when they first experienced sex and their median age at first sex was at 14 years. Based on these revelations, the researcher debunked the misconception that the deaf are sexually inactive. However, the age of sex is slightly lower for the deaf compared to the hearing students. This means that hearing students engaged in sexual activities earlier in life than their non-hearing counterparts.

A study conducted by Tenkorang and Matlicka-Tyndale (2009) among adolescents aged 9 to 17 years in 160 schools in Kenya indicated that adolescents who felt they were at no risk were most likely to postpone the initiation of first sex. The results further show that males were pressured into early sex to prove their maturity. The study of Tenkorang and Matlicka-Tyndale (2009) indicated that female adolescents perceived themselves to be at a very low risk. Males who had a higher knowledge about sexual and reproductive health issues experienced their sexual debut later. For both sexes, socioeconomic and familial factors influenced the timing of sexual debut. One's socioeconomic status also contributes to his/her risk of being infected with STIs since poverty pushes them to engage in risky sexual behaviors.

Studies show that early sexual debut follows a common trend among young people in many

African countries (Boamah-kaali et al., 2016; Khangelani, 2017; Madise et al., 2019). In a study to explore the relationship between age at first sexual intercourse and some indicators of sexual behavior among adolescents aged 14 to 19 years in Burkina Faso, Malawi and Uganda, the initiation of sexual activity before age 14 years was associated with having sexual interactions that take place outside a committed relationship (Yode & Legrand, 2012). Similarly, the findings of Oljira et al. (2012) in Ethiopia showed that the age at first sexual intercourse ranges from 13 to 19 years, with a mean age of 15.6 years. Males had a lower 15.5 years mean age as compared to females at 16.0 years.

Multiple Sexual Partners

Multiple sexual partnerships conform to risky sexual behaviors due to their propensity to increase the transmission of STIs through sexual interactions (Shelton, 2009). Shelton further argued that many people are aware of the risks involved in having several sexual partners (though not always at the same time) which increases their risk of contracting a serious STI like HIV. It is then imperative to recognize the magnitude in which the youths are indulging in multiple sexual partnerships. Sexually transmitted infections are frequently associated with sexually active youths. With multiple sexual partners; males are mostly expected to have multiple partners and practice early sexual initiation than females, and hence are at a greater risk of acquiring and transmitting STIs from one partner to another (Dekeke & Sandy, 2014).

Different kinds of psychosocial indicators (substance use, unprotected sexual intercourse and relationship status) are associated with the identification of STIs among young people with multiple sexual relationships and are thought to be important contributors to sexual risk behaviors (Edelman et al., 2015). Poverty as a driver for risky sexual behavior in sub-Saharan Africa shows that although the link between wealth status and sexual behavior is inconsistent, poor females are vulnerable to infection because of their early sexual debut without condoms (Madise et al., 2019).

A study conducted in Ghana by Darteh (2012) showed that 29% of the adolescents were involved in multiple sexual relations. More males (57.6%) than females (14.9%) reported having multiple sexual partners. It further revealed that adolescents in the two communities recorded high sexual activity. Despite their personal and social life,

condom use was lacking thereby increasing their likelihood of having STIs. Another study by Songawawa et al. (2009) investigated the number of sexual partners in the lifetime of respondents in Ibadan, Nigeria. Slightly, more than half of the students (both the deaf and hearing) reported they had more than one sexual partner since they became sexually active. A related study carried out in Yaoundé, Cameroon by Touko et al. (2010) discovered that among the sexually active participants, 53% of the males and 54.3% of the females reported engaging in several concurrent sexual relationships in the year before the study.

Boamah-kaali et al. (2016) researched the sexual behaviors and contraceptive use among Adolescents in Kintampo, Ghana. The study revealed that sexually experienced adolescents practiced unsafe sex. More than 8% of the adolescents who said they had been in a relationship further reported being in concurrent relationships. Furthermore, 6% of the female and 15% of male respondents were in sexual relationships with more than one partner at the same time. Sexual behaviors that result in pregnancies had an equally high potential of resulting in sexually transmitted infections if the male sexual partner is already infected. Similarly, Issaka (2015) found from her study among adolescents with hearing impairment in selected special schools in Ghana that 52.3% of the respondents indicated that they had had experiences of sexual intercourse with other people aside from their regular sexual partners.

Non-condom Use

The surge in premarital sexual activity and increased prevalence of STIs among the youth are crucial, as they can be associated with risky sexual behaviors like unprotected sex. Unsafe sex occurs when a vulnerable individual engages in sexual activity with at least one person or more who has a STI without the use of a condom. Studies have shown that low condom usage among the younger Ghanaian populace is consistent with the trend among young people in Sub-Saharan Africa (Issaka, 2015; Masa & Chowa, 2014; Mthemba & Ndateba, 2012; Rusinga, 2012). This pattern proposes that additional factors may impact young people's judgments about using or not using a condom during sexual intercourse (Masa & Chowa, 2014). Conforming to these factors, a study among undergraduate students at Jigjiga University in Ethiopia found that 42% of males and 58% of females amongst the respondents did not utilize condoms for the period of their last sexual act

because they "never thought about it." Fear of telling their sexual partners to use condoms accounted for 16% for males and 12.5% for females. Being in a hurry to have sex also recorded 14% for males and 12.5% for females (Mavhandu-Mudzusi & Asgedom, 2016).

Furthermore, complexity of condom use for the inexperienced during the act, embarrassment in suggesting condoms, and the cost and difficulty in purchasing condoms are some of the reasons for non-condom usage among the youth (Kirby et al., 2010; Ramjee, et al., 2015). Some young people did not use condom due to perceptions that it is a sin to waste sperm, condoms cause sores on the penis which raises issues of trust and suspicion of the infidelity from one's partner (Exavery, et al., 2011). However, regular use of condoms does not guarantee the prevention of infections. Other studies have demonstrated that condom failure despite the high awareness in most African countries is rather behavioral than mechanical (D'Anna et al., 2012; Hernández-Romieu et al., 2014; Koss et al., 2009).

Touko et al. (2010) examined the sexual behaviors of hearing-impaired adolescents in Yaoundé, the capital city of the Republic of Cameroon. The study revealed that the majority (85%) of the sexually active respondents said they use condoms, and a substantial portion (15%) of them reported never used condom in their sexual escapades. For respondents who are deaf and used condoms during their most recent sexual intercourse, 65% did so because they wanted to prevent HIV/AIDS. This revelation is heart-warming in that the majority (65%) of the deaf students not only knew that HIV/AIDS and other STIs could be prevented through condom use but also they took practical steps to prevent infections. When adolescents including the deaf can translate their knowledge of sexually transmitted infections to positive behaviors, the incidence of prevalence of HIV/AIDS and other sexually transmitted infections among them could be controlled without much difficulty.

Theoretical Framework of the Study

The theory of Reasoned Action (Ajzen & Fishbein, 1980) underpinned this study. The theory is a cognitive model of decision to engage in behaviors. It focuses on the organization of cognitive components that directly predict intention and behavior. The decision to engage in a behavior depends on the outcome that the individual expects

to accrue from the behavior. The theory states that a person's behavior is determined by their attitude towards the outcome of that behavior and by the opinions of the person's social environment.

Researchers aligned this theory to the reproductive health behavior change model, which explains how students' knowledge and interest in reproductive health influence their sexual behavior or attitudes. The theory explains how and why attitude affects behavior, and why people's beliefs determine the way they act. The ability of the theory of reasoned action to predict adolescents' decisions about having sexual intercourse demonstrates that adolescents' intentions about having sexual intercourse are consistent with their attitudes, beliefs about the consequences and norms about having sex (Ajzen & Fishbein, 1980).

The main constructs of this theory are attitudes, subjective norms and intentions (Aracely, et al., 2019). Attitudes in this case are beliefs that a person accumulates over his lifetime, formed from direct experiences, inferences and outside information. If a person has positive beliefs about the outcome of his behavior, the person is likely to have a positive attitude. The opposite is also true. A person's subjective norms are his or her beliefs about what others will think of the behavior. They are perceptions about how significant others like family members and friends will perceive the outcome of the behavior and the degree to which this influences whether the behavior takes place. Attitude

influences the intention and the subjective norm while the behavior is the transmission of the intention into action (Ajzen & Fishbein, 1980).

Adolescents' sexual behaviors can be unplanned or impulsive. The theory of reasoned action is applicable in providing an understanding of adolescents' sexual behaviors. The theory is suitable for this study because it not only adds to people's understanding of adolescents' decisions to have sex but also predicts other aspects of adolescent sexual behaviors such as early initiation of sex, multiple sex partners and the decision to use condom or not.

Methodology

Research Design

The study adopted the descriptive survey design, which describes, analyzes and interprets conditions that exist.

Population and Sampling

The population of the study was 125 adolescent students from three selected Junior High Schools (JHS) for the deaf in the Eastern region of Ghana. JHS2 and JHS3 students were chosen because they had stayed long enough in the schools and might have had adequate information. The study used the Slovin's (1960) formula for sample size determination to establish the sample size of 95 (52 Boys and 43 girls) students, proportionally distributed using stratified and simple random sampling techniques as reflected in table 1.

Table 1: Population and Sample

School	Population	Sample
School 1	26	20
School 2	42	32
School 3	57	43
Total	125	95

Data Collection Instrument

An adapted version of Carey and Schroder's (2002) HIV- Knowledge Questionnaire was used as a data-gathering tool to establish the adolescent students' sexual behaviors. The validity of the instrument was checked using expert judgment. On the other hand, the reliability was established using internal consistency and test-retest method. The instrument was pretested with seven adolescent girls and eight (8) adolescent boys with deafness in Ashanti School for the Deaf to assess the reliability of the questionnaire. The reliability Cronbach's alpha value for the items was 0.852.

Statistical Treatment of Data

Data was analyzed using the Statistical Package for Social Scientists (SPSS). The data was computed, edited and coded to minimize errors, then cleaned and crosschecked for consistency and completeness. The researchers used frequencies and percentages to analyze the information from the field.

Ethical Consideration

To ensure that research ethics are adhered to, the researchers sought permission from the Eastern Regional Education Office, the headmasters and headmistress in the schools and all the respondents

were fully briefed about the nature of the research project. The study took account of the following ethical considerations: informed consent, voluntary participation, information confidentiality and anonymity. The participants in the study were told about the nature of the study to be investigated and were given a choice of either participating or not participating.

Results and Discussion

Research Question: Which types of sexual behavior did the adolescent deaf students exhibit in the Eastern Region of Ghana?

Respondents indicated their level of agreement or disagreement, using a Likert scale with 10 items. For analysis purposes, the strongly agree and agree responses were merged into "Agree" and the

strongly disagree and disagree were merged into "Disagree." The results appear in Table 2.

The majority of respondents (76.8%) disagreed with the statement that they had sex before attaining the age of 15 whereas (22.1%) agreed with the statement. The result reveal that a greater number of the adolescents with deafness have not had sex before attaining the age of 15 years. This confirms Mugi's (2012) study, which revealed that the average age of first sexual intercourse among the males was 17 years and that of the females was 16 years. On the contrary, this study contradicts the findings of Doyle et al. (2012), which found that in West Africa, a significant proportion of adolescents initiated sex before age 15.

Table 2: Sexual Behavior of Adolescent Students with Deafness

SN	Item	Agree		Neutral		Disagree	
		f	%	f	%	f	%
1	I have ever had sexual intercourse	83	87.3	0	0	12	12.6
2	I have had sex before I turned fifteen years	21	22.1	1	1.1	73	76.8
3	I have ever had sex with someone ten years older than me	22	23.2	0	0	73	76.8
4	I have sex with more than one regular partner	62	65.2	0	0	33	34.7
5	I have had sex with different partners because I trust them	67	70.5	0	0	28	29.5
6	I have ever had sex for cash or a gift before	81	85.3	0	0	14	14.7
7	I have ever engaged in anal sex	0	0	0	0	95	100
8	I have ever engaged in oral sex	0	0	0	0	95	100
9	I had unprotected sexual intercourse in the last 12 months	68	71.5	0	0	27	28.5
10	I always use a condom when having sex	17	17.9	0	0	78	82.1

In table 2, a greater number of the respondents (65.2%) agreed with the statement that they have ever had sex with more than one regular partner. Furthermore, the majority of the respondents (70.5%) agreed with the statement that they have had sex with different sex partners because they trusted them. This finding conforms to the study conducted by Sangowawa (2009) who investigated the number of sexual partners in the life of respondents. In the study, more than half of the students (both deaf and hearing) reported having more than one sexual partner. Similarly, Tokuo et al. (2010) found among the sexually active interviewees that more than half of both males and females were in multiple concurrent sexual relationships. This revelation is worrying since behaviors such as having sex with more than one regular partner is a high-risk behavior that has the capability of spreading sexually transmitted diseases among the adolescent students.

Furthermore, in table 2, the majority of the respondents (71.5%) agreed with the statement that

they have had unprotected sexual intercourse in the last 12 months. In addition, a greater number of the respondents (82.1%) disagreed with the statement that they used condom when having sex. The findings are consistent with those by Rusinga (2012) who explored the perception of deaf students regarding their vulnerability to sexual and reproductive health problems in Mosvingo District of Zimbabwe and found that the majority (67%) of the respondents had not used condom the last time they had sex. Similarly, a study by Boamah-Kaali et al. (2016) on consistent use of contraceptives, including condom among sexually active adolescents in Ghana, revealed that adolescents practiced unsafe sex. This implies that most of the respondents engaged in sexual activities without using condoms. This revelation is disturbing as adolescents with deafness expose themselves to high-risk behaviors which exposed them to sexually transmitted infections.

More than half of all the respondents disagreed to have engaged in anal and oral sex, close to a quarter of the respondents had had sex with someone ten years older than themselves and the majority (85.3%) had had sex for cash or gift from the partners. This implies that older people might have initiated the sexual relationship with the adolescents. The implication is that, there is a relatively high prevalence of sexual exploitation and coercion among adolescents with deafness. This frowns on relevant national and international laws such as Ghana's Persons with Disability Act 715 and the UN Convention on the Rights of Persons with Disability. Article 4 (1) of the Persons with Disability Act 715 states, 'a person shall not discriminate against, exploit or subject a person with disability to abusive or degrading treatment.' Article 7 of the UN Protocol and Convention on the Rights of Persons with Disabilities called on all signatories to the above-mentioned document to promote and safeguard the interests of disabled children.

The results call for a concerted effort by policymakers, such as the Ghana Education Service, Ghana Federation of the Disabled, Ministry of Education and Ministry of Gender, Children and Social Protection to intensify sex education and put in pragmatic steps to halt this practice.

Conclusions and Recommendations

The study concludes that the majority of the adolescent students with deafness were sexually active as they had had sexual intercourse before the study took place. The students engaged in risky sexual behaviors in various ways, such as having sex with more than one regular partner. The fact that students are aware of the mode of transmission and prevention of sexually transmitted diseases but still engage in risky sexual behaviors points to a serious problem with adolescent students.

The other implication of this finding is that the adolescent students with deafness are likely to have adverse health outcomes, such as unwanted pregnancy or to contract sexually transmitted diseases (STDs). While sex education alone is not enough, close monitoring, supervision and counseling at home and in school are essential initiatives. Parents should be close to their children, providing financial and affection support and providing moral support. Sexual health education should start at home.

The study further recommends that the school leadership should encourage teachers to sensitize

the adolescent students on safer practices to avoid the risk of acquiring sexually transmitted diseases. The Ghana Education Service need to provide counseling services in the schools to help reduce risky sexual behaviors.

References

- Adefuye, et al. (2009). HIV sexual risk behaviors and perception of risk among college students: Implications for planning interventions. *BMC Public Health*, 9(1), 281.
- Adubea, A. M. (2020). Navigating sexual and reproductive health issues: Voices of deaf adolescents in a residential school in Ghana. *Children and Youth Services Review* Volume 118, 105441.
- Ajzen, I. and Fishbein, M. (1980). Theory of reasoned action-theory of planned behavior . University of South Florida. http://www.infosihat.gov.my/infosihat/artikelHP/bahanrujukan/HE_DAN_TEORI/DOC/Theory%20of%20Reasoned%20Action.doc
- Amoah, B.O. (2017). Risky sexual behavior and sexually transmitted infections among students in the Ministry of Health Training Institutions in the Tano North District. <https://ugspace.ug.edu.gh>.
- Aracely, M. V., Benavides R. A. T. and Cabriales, E. C. (2019). Sexual Communication of Parents and Children: The Theory of Reasoned Action and Planned Behavior. *Biomed J Sci & Tech Res* 19(3). BJSTR. MS.ID.003290.
- Boamah-kaali, E. A., Asante, K. P., Manu, G., Adeniji, E., Mahama, E., Ayipah, E. K., & Owusu-Agyei, S. (2016). Predictors of early sexual debut and its implications among adolescents in Kintampo, Ghana: A cross sectional survey. *SCIENCEDOMAIN international* 4(3), 1–11. <http://doi.org/10.9734/ISRR/2016/29513>.
- Bwalya, B. N. (2018). Gender differential in access to and utilisation of reproductive health services among adolescents in Lusaka. *International Journal of Contemporary Research and Review* ISSN 0976 – 4852 Cross Ref DOI: <https://doi.org/10.15520/ijcrr/2020/9/04/492> April, 9(04), SS 20416-20429 by race. *American Journal of Public Health*, 102(5), 867–876.
- Centre for Disease Control and Prevention (2015). Youth Risk Behavior Surveillance-United States. *Morbidity & Mortality Weekly Report* 2016; 65 (SS-6).

- Carey, M. P. and Schroder, K.E.E. (2002). Development and psychometric evaluation of the brief HIV knowledge questionnaires (HIV – KQ – 18). *AIDS Education and Prevention*, 14, 174 – 184.
- Center for Disease Control and Prevention (2004). Sexual behavior s – Adolescent and School Health. <http://www.cdc.gov/sexualbehavior>.
- Darteh, E. (2012). Sexual behavior and condom use among adolescents living in urban poor areas in the Brong Ahafo Region, Ghana Department of Population & Health; University of Cape Coast, Ghana. *Journal of Alternative Perspectives in the Social Sciences*, 4(3), 619-639.
- D'Anna, A. D., Margolis, L., Warner, O. A., Korosteleva, L. O., 'Donnell, C. A., Rietmeijer, J. D., Klausner, W., Nomura, C. K., Malotte, L. H. & the Safe City Study Group (2012) Safe City Study Group. Condom use problems during anal sex among men who have sex with men (MSM): findings from the Safe in the City study. *AIDS Care* 24(10). PMID:22519680external icon <https://doi.org/10.1080/09540121.2012.668285>external icon.
- Dekeke, G. and Sandy, P. (2014). Factors influencing sexual risk behaviors among senior secondary school students. *International Journal of Scientific and Research Publications*, 4(8), 1–32.
- Edeiman, N., Visser, R., Mercer, C., McCabe, I. and Cassel, J. (2015). Targeting sexual health services in primary care: A systematic review of the psychosocial correlates of adverse sexual health outcomes reported in probability surveys of women of reproductive age. *Preventive Medicine* Volume 81.
- Exavery, A., Lutambi, A. M., Mubyazi, G. M., Khadija, K., Mbaruku, G., & Masanja, H. (2011). Multiple sexual partners and condom use among 10 – 19-year-olds in four districts in Tanzania What do we learn? *BMC Public Health*, 1-9.
- Gillmore, et al. (2002). Teen Sexual Behavior: Applicability of the Theory of Reasoned Action. *Journal of Marriage and Family*, 64(4) <http://www.jstor.org/stable/359999>.
- Issaka, A.C. (2015). HIV/AIDS knowledge and sexual behavior s among adolescent with hearing impairment in some selected special schools for the deaf in Ghana.
- Issaka, C. A. (2018). Gender perspective of HIV/AIDS Knowledge and sexual behaviour of adolescents with hearing impairment in selected special schools in Ghana. *Advances in Social Sciences Research Journal*, 5(12) 79-89.
- June, N., Yode, M. and Legrand, T. (2019). Association between age at first sexual relation and some indicators of sexual behavior among adolescents.
- Kato, E. I. and Omona, K. (2021). Peer influences to risky sexual behavior s among out- of-school adolescents in Kamuli Municipality. *Health Policy & Development*, (19)1.
- Kann, L. (2014). Youth risk behavior surveillance-- United States, 2013. *PubMed.gov*, 4(4), 1–168. <http://doi.org/ss6304a1> [pii].
- Khangelani, Z. (2017). Age at sexual debut: A determinant of multiple partnership among South African youth linked references are available on JSTOR for this article.
- Kirby, J., Van der Sluis, W. and Currie, C. (2010). Attitudes towards condom. Edinburgh: Child and Adolescent Health Research Unit (CAHRU). 4 p. (HBSC Briefing Paper; 18b).
- Koss, C. A., Dunne, E. F. and Warner, L. (2009). A systematic review of epidemiologic studies assessing condom use and risk of syphilis. *Sex Transm Dis* 36(4). PMID:19455075external icon <https://doi.org/10.1097/OLQ.0b013e3181a396eb>external icon .
- Koss Hernández-Romieu, A. C., Siegler, A. J., Sullivan, P. S., Crosby, R. and Rosenberg, E. S. (2014). How often do condoms fail? A cross-sectional study exploring incomplete use of condoms, condom failures and other condom problems among black and white MSM in southern U.S.A. *Sex Transm Infect* 90(8). PMID:25080511external icon <https://doi.org/10.1136/sextrans-2014-051581>external icon.
- Madise, N., Zulu, E. and Ciera, J. (2019). Adolescents in four African countries is poverty a driver for risky sexual behavior ? Evidence from National Surveys of Adolescents in four African Countries.
- Masa R.D. and Chowa, G.A. (2014). How risk among young Ghanaians in high school: Validation of a multidimensional attitude towards condom use scale. *International Journal of Adolescent and Youth*. 2014, 19(4):444- 457. DOI: 10, 1080/02673843, 2014.963629.

- Mavhandu-Mudzusi and Asgedom (2016). The relevance of risky sexual behavior s among undergraduate students in Jigjiga University, Ethiopia. Department of Health Studies, University of South Africa, Preller Street, Muckleneule Ridge, Pretoria,003, South Africa.
- Moura, L. R. (2013). The gap between knowledge on HIV/AIDS and sexual behavior : A study of teenagers in Vespasiano, Minas Geras State, Brazil.
- Mthembu, S. and Ndateba, I. (2012). Exploration of knowledge, attitude and behavior s of street children on the prevention of HIV and AIDS in the Huye District, Rwanda. *East African. Journal of Public Health* 2012; 9: 74- 79.
- Mugi, M. W. (2012). HIV/AIDS awareness, perceived vulnerability and sexual behavior among rural secondary school student: Githungun District, Kiambu Country.
- Nwankwo, B. O. and Nwoke, E. A. (2009). Risky sexual behavior s among adolescents in Oweri Municipal: Predictors of unmet family health needs. *African Journal of Reproductive Health*, 13, 135–145.
- Ofori, M., Amoah-Nyarne, E. and Eshun, I (2022). Students’ Knowledge and Sources of Information on HIV/AIDS: Evidence from the Lower Manya Krobo Municipality of the Eastern Region of Ghana. *Universal Journal of Social Sciences and Humanities*, 2022, 2, 390. DOI: 10.31586/ujssh.2022.390.
- Oljira, L., Berhane, Y. and Worku, A. (2012). Pre-marital sexual debut and its associated factors among in-school adolescents in Eastern Ethiopia. *BMC Public Health*, 12(375),1–5. <https://doi.org/10.1186/1471-2458-12-375> ophthalmology. New Dehli, India: JP Medical Ltd.
- Ramjee, G., Abbai, N. S. and Naidoo, S. (2015). Women and sexually transmitted infections in Africa. *Scientific Research Publishing*, 385-399.
- Rusinga, O. (2012). Perception of youth about their vulnerability to sexual and reproductive health problems in Masvingo District, Zimbabwe. <https://www.semanticscholar.org>.
- Seidu, A.A., Kumi-Kyereme, A. and Darteh, E. K.M. (2024). Self-reported sexual coercion among in-school young people with disabilities in Ghana. *BMC Public Health*, 24:1223 <https://doi.org/10.1186/s12889-024-18631-6>.
- Shelton, J. D. (2009). Why multiple sexual partners? *The Lancet* Volume 374, Issue 9687.
- Slovin, E. (1960). Slovin’s formula for sampling technique. Retrieved on 24/2/2020 from <https://www.researchgate.net.post>.
- Songawawa, A., Owoale, E. and Adenkule, B. J. (2009). Sexual practices of deaf and hearing secondary school students in Ibadan, Nigeria. *Annals of Ibadan Postgraduate Medicine. States*, 2007-2010. HIV Supplemental Surveillance Report, 17(4).
- Tenkorang, E.Y. and Maticka-Tyndale, E. (2009). Factors influencing the timing of first sexual intercourse among young people in Nyanza, Kenya. *International Family Planning Perspectives*, 177–188.
- Touko, A. Mboua, C.P, Tohmuntain, P. and Perrot, A. (2010). Sexual risk factors and HIV sero-prevalence among the deaf and hearing-impaired in Yaaounde. *Sante (Montrouge, France)*, 20(2), 109-115. DOI:10.1186/1758-2652-13-5.
- Weller, S. and Davis, K. (2002). Condom effectiveness in reducing heterosexual HIV transmission. *Cochrane database syst. Rev.* 2002; (1): CDO 3255.
- Yode, M. and Legrand, T. (2012). Association between age at first sexual relations and some indicators of sexual behavior s among adolescents. *Afr J. Reprod. Health (Special Education)*, 16 (2), 173- 188.