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Correlates of Early Sexual Debut Among Sexually Active Youth in Ghana

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Abstract

Using the 2014 Ghana Demographic and Health Survey, this study explores the correlates of early sexual debut among 2,746 (males = 670 and females = 2,076) sexually active youth aged 15 to 24 years in Ghana. The results indicate that males aged 15 to 19 years (odds ratio [*OR*] = 8.84, $p < .001$) and who had basic education ($OR = 3.17$, $p < .001$) were significantly more likely to initiate sexual debut early. Urban males who had used modern contraceptive ($OR = 0.35$, $p < .001$) were significantly less likely to initiate early sexual debut. Meanwhile, females aged 15 to 19 years ($OR = 4.26$, $p < .001$); who had used modern contraceptive ($OR = 1.99$, $p < .001$); with no formal ($OR = 2.90$, $p < .001$) or basic ($OR = 3.12$, $p < .001$) education; with partial access to media ($OR = 1.58$, $p < .01$); and from the Akans ($OR = 1.73$, $p < .001$), Ewes ($OR = 1.92$, $p < .001$), and other ethnic groups ($OR = 1.63$, $p < .001$) were significantly more likely to initiate early sexual debut. However, employed females living in rural areas ($OR = 0.70$, $p < .01$) and those with average ($OR = 0.54$, $p < .01$) or rich ($OR = 0.51$, $p < .01$) household living in urban areas were significantly less likely to initiate early sexual debut. Interventions and policies targeting those living in both rural and urban areas are therefore needed for adolescent males and females in their early teens before they start engaging in sexual intercourse.

Keywords

sexual debut, sexually active youth, HIV, condom use, Ghana

Background

The youth population of sub-Saharan Africa remain a high-risk group for sexually transmitted infections (STIs) including HIV/AIDS.[1–3] Thus, it is imperative to prioritize the sexual and reproductive health of this segment of the population as they are considered the "window of hope" in the fight against the HIV/AIDS epidemic.[2,4] In some countries including Ghana, this recognition has informed policies aimed at protecting young people from new infections through behavioral change programs.[1–3] One of these targeted behavioral change domains is early sexual debut.

Early sexual debut is one of the major predisposing factors that place the youth at elevated risk of HIV/AIDS. Sexual debut exposes young persons to myriad negative sexual and reproductive health outcomes.[5] It is reported that young people who initiate sex at younger ages are more likely than those who do not to have multiple and concurrent sexual partners, transactional sex, engage in unprotected sexual intercourse, and acquire STIs including HIV.[5,6] Early sexual intercourse is also found to increase risk of unwanted pregnancies and poor educational outcomes, particularly for those in school.[7] A constellation of these outcomes further leads to increased vulnerability to poor sexual decision; even if they know about STIs, inexperience or denial as well as sociocultural pressures can lead them to take unnecessary risks.[8] The strong urge to conform to peer standards and sociocultural constructions of masculinity and femininity through sexual risk-taking is likely to predominate concerns about sexual health-protective behaviors. It comes as not surprising that in spite of their awareness of the reality of HIV and other STIs, adolescents in Ghana

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and other African countries do not think they faced much risk for HIV infection, even when they are sexually active.[9,10]

The age at which young adults initiate sex varies across gender and from one country to the other. Recent evidence from four countries in sub-Saharan Africa suggests that a significant minority of young people aged 12 to 14 years were already sexually active.[5] A study in the Malawi also found that other young people initiate sex as early as the age of 10 years or before the age of 17 years.[11] A more recent study in Malawi indicated that more females than males within the 15 to 19 age-group were more likely to have initiated sexual activities earlier than males in Malawi.[12] In a South African study, it was revealed that more than one third of girls between the ages of 15 to 19 had lost their virginity through force, coercion, or trickery.[13] Another South African study on school-going adolescents suggested that early onset of first sexual intercourse was likely among males than females and among older students and students of lower socioeconomic status.[14]

The problem of early sexual debut seem to be widespread in Africa as the 2007 Kenya AIDS Indicator Survey reported that by age 15, 20% of young women and 22% of men would have had sex at least once in their lifetime, while 95.2% of women and 92.8% of men reported having sex at least once by age 24. Early sexual debut is also a major health concern for girls in Nigeria.[15] A multicenter study involving Burkina Faso, Ghana, Malawi, and Uganda revealed that the median ages at first sex in the four countries ranged from 14 among males in Malawi and Uganda to 16 among females in Ghana and Malawi.[16] In Ghana, Awusabo-Asare et al.[17] reported on a 2004 National Survey of Adolescents and indicated that 30% of females and 16% of males between 15 and 19 years have ever had sex. The reasons for sexual debut included adolescents having "felt like it," having expected money, and having been tricked or forced (especially among females). Females tended to be younger than their sexual partners at sexual debut.[17] Notwithstanding these country-specific differences in age at first sex among males and females on the subcontinent, the declining median age at first sex among young people in many countries calls for thorough investigation of the phenomenon toward reducing its associated risks to STIs including HIV/AIDS.

Studies have established multilayered factors at the individual, family, and community levels, which predict early sexual debuts. At the individual levels, variables such as low aspiration and low self-esteem, lack of knowledge of reproductive health and HIV/AIDS, and attitudes to premarital sex are mentioned.[18] There is also a link between family structure and first sexual intercourse, as lack of parental supervision, role of parents in adolescent sexual activity and contraception, severe family dysfunction, family socioeconomic situation, and parental education have been found to be some of the factors at the family level that predict early sexual debut.[5,19] Zimmer-Gembeck and Helfand[20] reported that delayed sexual debut was more likely among adolescents who lived in an intact family unit (a two-parent family, married parents). The study further indicated that early onset of sexual intercourse is also associated with adolescents with a past dating history. Regarding adolescent living with just one parent, it has been found that those living with their fathers have higher self-efficacy for delayed sex.[18]

Recently, the need to look beyond individual- and family-level factors to examine community-level factors that underlie and influence early sexual debut has been emphasized. For instance, in their multicenter study, Stephenson et al.[16] identified community-level factors such as adolescent marriage, wealth, religious group affiliation, sex education, parental monitoring, reproductive health knowledge, media exposure, membership in adolescent social groups, and use of alcohol as potential risks or potential factors for early sexual initiation in Burkina Faso, Ghana, Malawi, and Uganda. The influence of social connectedness, communication, and monitoring on adolescent sexual activity in Ghana has also been examined.[21]

To illuminate understanding on how these multilayered factors interact in creating pathways to young people's sexual activity, various theoretical models have been formulated. For instance, information–motivation–behavioral skills model[22] specifies that individuals will engage in self-protective behaviors, such as delaying sexual debut, when they know that such behaviors reduce the risk of infection, are motivated to engage in the behaviors, and have the requisite skills and self-efficacy to do so. Campbell et al.'s[23] community characteristic framework also focuses on several community characteristics associated with reduced vulnerability to HIV infection. These include availability of information and resources related to HIV prevention and awareness of sociocultural conditions that predispose youth to risky behavior. Other factors as identified by this framework include the community commitment to address threats posed by HIV and the presence of social networks that support behavioral changes among youth. The examination of sexual debut and its associated risk factors therefore requires in-depth investigation of correlates both at and beyond sociodemographic, individual levels and family levels to encompass a focus on community systems as emphasized by the Ghana Aids Commission's 5-year strategic plan. The aim of our study is to determine sociodemographic correlates of early sexual debut among sexually active youth in Ghana. The two main objectives of the study are (a) to describe early sexual debut among the youth in Ghana and (b) to examine the correlates of early sexual debut among sexually active youth in Ghana.

Methods

Data

We used a nationally representative household data ($N = 13{,}784$) from the 2014 Ghana Demographic and

Health Surveys (GDHS).[24] The GDHS is a nationwide survey with a representative sample of women and men aged 15 to 49 and 15 to 59, respectively. The survey consisted of 9,396 women and 4,388 men from 11,835 interviewed household. The 2014 GDHS used a two-stage sample based on the Ghana Population and Housing Census to produce separate estimates for key indicators for each of the 10 regions in Ghana. The first stage involved selecting sample points or clusters from an updated master sampling frame constructed from the 2010 Ghana Population and Housing Census. A total of 427 clusters were selected, 216 in urban areas and 211 in rural areas. The second stage of selection involved systematic sampling of 30 of the households listed in each cluster. This was done to ensure adequate numbers of completed individual interviews to provide estimates for key indicators with acceptable precision and to provide a sample large enough to identify adequate numbers of under-five deaths to provide data on causes of death. The clusters were selected using systematic sampling with probability proportional to size. Each household selected for the GDHS was eligible for interview with the household questionnaire. In the interviewed households, 9,656 eligible women were identified for individual interviews; interviews were completed with 9,396 women, yielding a response rate of 97%. In the subsample of households selected for the male survey, 4,609 eligible men were identified, and 4,388 were successfully interviewed, yielding a response rate of 95%. Ethical approval for the study protocol was given by the Ghana Health Service Ethical Review Committee in Accra, Ghana. A subsample of a third of the household was selected to conduct HIV testing. Besides the HIV testing, individuals were asked to state their age at first intercourse during the past 12 months. Moreover, sociodemographic key indicators such as age, sex, place of residence, region, religion, education level, and ethnicity were also part of the questions in the questionnaires. Although the number of explanatory variables for both males and females were not the same, the study focuses on those who initiate sexual debut early (before age of 16 years). For the current study, early sexual debut was used to describe those who initiate sexual debut early, and this was derived from the variable age at first intercourse. Sexually active youths aged 15 to 24 years were used as the basis for analysis. Thus, the sample size of 2,746 (males = 670 and females = 2,076) was used for the current study.

Dependent Variable

The study uses age at first intercourse from the survey data, and respondents who initiate sexual debut before the age of 16 years were described as "early sexual debut." This was considered as the dependent variable.

Independent Variables

A number of independent variables were used based on previous studies.[7,12,25] The independent variables used in this study included place of residence (urban and rural) and age categorized into two groups with 5-year age intervals (i.e., 15 to 19 and 20 to 24 years). The rest of the independent variables were religion (Christian, Moslem, and Others); education (no education, basic education, and at least secondary); HIV testing; ethnicity; contraception use; access to media; and household wealth, represented by wealth index (in three categories from poor, average to rich). The wealth index was constructed using data on a household's ownership of selected assets, such as televisions and bicycles, materials used for housing construction, and types of water access and sanitation facilities. The index places individual households on a continuous scale of relative wealth. It was then categorized into three categories from poor, average to rich.

Statistical Analyses

The extracted data for males and females were weighted so that the sample was representative of 15- to 24-year-old respondents in the 2014 Demographic Health Survey. Analyses were performed using the Statistical Package for Social Science version 24, which accounted for the sample strata, the primary sampling unit, and population weights. Chi-square test was used to examine the relationship between sociodemographic factors and early sexual debut. Univariate and multivariate logistic regression analyses were conducted to assess the association between sociodemographic characteristics and early sexual debut among sexual active young adults. Our logistic regression analysis was stratified according to gender and place of residence. Statistical significance was defined as a two-tailed p value $< .05$ in all analyses. The results from the logistic regression analyses are presented as odds ratios (OR) with 95% confidence intervals.

Results

Bivariate Analysis of Sexual Debut With Sociodemographic Characteristics

Table 1 presents the relationship between sexual debut and sociodemographic characteristics. The results showed that age-group, employment status, ethnicity, contraception method used, level of education, access to media, and religious affiliation were significantly related to early sexual debut for both males and females. HIV testing status, wealth status, and place of residence were associated with early sexual debut for only females.

The majority (56.5%) of males aged 15 to 19 years who reported early sexual debut were employed (67.2%), belonged to the Akan ethnic group (51.4%), had not used any contraceptive methods (68.9%), had at least secondary education (72.3%), had partial access to media (68.9%), and self-reported Christianity as their religious affiliation (76.3%). For younger females (15 to 19 years), more than half (55.0%) were more likely to have reported early sexual

Table 1. Bivariate Analysis of Selected Socioeconomic Variables by Early Sexual Debut.

	Male ($N = 670$)			Female ($N = 2,076$)		
Explanatory variable	No *N* (%)	Yes *N* (%)	*p* value	No *N* (%)	Yes *N* (%)	*p* value
Age			<.001			<.001
20–24 years	389 (79.9)	77 (43.5)		1,052 (75.7)	309 (45.0)	
15–19 years	104 (21.1)	100 (56.5)		337 (24.3)	378 (55.0)	
HIV testing status			.093			<.001
Untested	408 (82.8)	156 (88.1)		739 (53.2)	427 (62.0)	
Tested	85 (17.2)	21 (11.9		650 (46.8)	260 (38.0)	
Employment status			.029			.006
Unemployed	120 (24.3)	58 (22.8)		619 (44.6)	350 (50.9)	
Employed	373 (75.7)	119 (67.2)		770 (55.4)	337 (49.1)	
Ethnicity			.005			.017
Akan	209 (42.4)	91 (51.4)		601 (43.3)	274 (39.9)	
Ga-Adangme	30 (6.1)	17 (9.6)		71 (5.1)	37 (5.4)	
Ewe	60 (12.1)	27 (15.3)		156 (11.2)	85 (12.4)	
Mole–Dagbani	103 (20.9)	20 (11.3)		351 (25.3)	150 (21.8)	
Other	91 (18.5)	22 (12.4)		210 (15.1)	141 (20.5)	
Contraception method			.013			<.001
Modern	194 (39.3)	48 (27.1)		271 (19.5)	172 (25.0)	
Traditional	20 (4.1)	7 (4.0)		104 (7.5)	28 (4.1)	
None	279 (56.6)	122 (68.9)		1,014 (73.0)	487 (70.9)	
Educational level			<.001			<.001
No education	24 (4.9)	3 (1.7)		145 (10.4)	103 (15.0)	
Basic education	47 (9.5)	46 (26.0)		190 (13.7)	217 (31.6)	
At least secondary	422 (85.6)	128 (72.3)		1,054 (75.9)	367 (53.4)	
Access to media			.045			<.001
None	9 (1.8)	8 (4.5)		93 (6.7)	79 (11.5)	
Partial access	318 (64.5)	122 (68.9)		999 (71.9)	542 (78.9)	
Full access	166 (33.7)	47 (26.6)		297 (21.4)	66 (9.6)	
Religious affiliation			.002			.054
Other	37 (7.5)	22 (12.4)		45 (3.2)	37 (5.4)	
Christian	345 (70.0)	135 (76.3)		1,100 (79.2)	526 (76.6)	
Muslim	111 (22.5)	20 (11.3)		244 (17.6)	124 (18.0)	
Wealth status			.786			<.001
Poor	199 (40.4)	75 (42.4)		566 (40.7)	398 (58.0)	
Average	121 (24.5)	39 (22.0)		348 (25.1)	150 (21.8)	
Rich	173 (35.1)	63 (35.6)		475 (34.2)	139 (20.2)	
Place of residence			.504			<.001
Rural	250 (50.7)	94 (53.1)		705 (50.8)	441 (64.2)	
Urban	243 (49.3)	83 (46.9)		684 (49.2)	246 (35.8)	

debut, and the majority (62.2%) of these participants had not tested for HIV, with no usage of any form of contraception (70.9%), and had partial access to media (78.9%). More than half (50.9%) of the female participants were unemployed and had at least secondary education (53.4%). In addition, about 77% were Christians, who were from the rural residence (64.0%) and from the Akan ethnic group.

Correlates of Early Sexual Debut

The results of the logistic regression are presented in Table 2. For males, the likelihood of early sexual debut was significantly higher among those aged 15 to 19 years ($OR = 8.84$, $p < .001$). These odds are rather higher among those living in urban areas ($OR = 6.09$, $p < .001$) than participants in rural areas ($OR = 4.26$, $p < .001$). Participants with basic education were more likely to have initiated early sexual debut ($OR = 3.17$, $p < .001$), but these odds are significantly higher among urban dwellers ($OR = 7.50$, $p < .001$) than those in the rural areas ($OR = 2.75$, $p < .01$). Males living in urban areas and who have used modern contraceptive ($OR = 0.35$, $p < .001$) were significantly less likely to initiate early sexual debut. However, participants who live in rural areas and had rich household index had significantly higher odds of initiating early sexual debut ($OR = 3.32$, $p < .01$).

Table 2. Odds Ratios From Logistic Regression Estimation of the Correlates of Early Sexual Debut in Ghana, 2014.

	Male subsample			Female subsample		
Explanatory variables	All OR [95% CI]	Urban OR [95% CI]	Rural OR [95% CI]	All OR [95% CI]	Urban OR [95% CI]	Rural OR [95% CI]
Age category						
20–24 years+	1	1	1	1	1	1
15–19 years	4.84 [3.03, 7.73]***	6.09 [2.80, 13.20]***	4.33 [2.36, 7.94]***	4.26 [3.38, 5.37]***	4.46 [3.00, 6.64]***	4.17 [3.13, 5.56]***
HIV testing status						
Never tested+	1	1	1	1	1	1
Ever tested	1.07 [0.57, 2.00]	0.95 [0.41, 2.19]	1.18 [0.50, 2.77]	1.00 [0.77, 1.31]	0.87 [0.59, 1.29]	1.16 [0.80, 1.68]
Employment status						
Unemployed+	1	1	1	1	1	1
Employed	0.83 [0.52, 1.32]	0.72 [0.36, 1.46]	1.16 [0.55, 2.47]	0.83 [0.65, 1.07]	1.03 [0.67, 1.57]	0.70 [0.50, 0.97]**
Ethnicity						
Mole–Dagbani+	1	1	1	1	1	1
Akan	1.44 [0.60, 3.43]	1.80 [0.34, 9.47]	0.95 [0.32, 2.86]	1.73 [1.24, 2.39]***	1.87 [1.07, 3.26]**	1.98 [1.30, 3.03]***
Ga-Dangme	1.48 [0.54, 4.09]	1.53 [0.24, 9.67]	1.61 [0.47, 5.47]	1.73 [0.93, 3.22]	2.25 [0.92, 5.52]	1.57 [0.62, 3.96]
Ewe	1.42 [0.56, 3.59]	1.24 [0.21, 7.16]	1.03 [0.33, 3.28]	1.92 [1.24, 2.97]***	2.58 [1.19, 5.60]**	1.69 [1.02, 2.79]**
Other	0.99 [0.35, 2.79]	2.86 [0.42, 19.54]	0.32 [0.10, 1.05]	1.63 [1.12, 2.37]**	1.40 [0.70, 2.78]	1.82 [1.17, 2.84]***
Contraception method						
None+	1	1	1	1	1	1
Modern	0.69 [0.41, 1.18]	0.35 [0.16, 0.74]***	1.32 [0.68, 2.57]	1.99 [1.47, 2.71]***	2.24 [1.34, 3.72]***	1.92 [1.29, 2.86]***
Traditional	0.95 [0.32, 2.80]	0.52 [0.08, 3.17]	2.03 [0.52, 7.93]	0.74 [0.46, 1.20]	0.73 [0.38, 1.43]	0.92 [0.45, 1.88]
Educational level						
None	0.74 [0.20, 2.68]	3.90 [0.62, 24.57]	0.37 [0.07, 1.88]	2.90 [1.86, 4.52]***	2.57 [1.08, 6.13]**	3.03 [1.84, 4.97]***
Basic	3.17 [1.66, 6.05]***	7.50 [2.52, 22.28]***	2.75 [1.24, 6.10]**	3.12 [2.27, 4.28]***	2.74 [1.51, 4.98]***	3.18 [2.13, 4.75]***
At least secondary+	1	1	1	1	1	1
Access to media						
No access	1.21 [0.31, 4.64]	0.53 [0.09, 3.26]	5.25 [0.59, 46.32]	1.52 [0.80, 2.89]	0.96 [0.27, 3.34]	2.67 [1.15, 6.23]**
Partial access	0.89 [0.56, 1.43]	0.68 [0.35, 1.34]	1.40 [0.62, 3.17]	1.58 [1.04, 2.43]**	1.03 [0.59, 1.81]	3.18 [1.61, 6.26]***
Full access+	1	1	1	1	1	1
Religious affiliation						
Christianity	0.74 [0.35, 1.53]	1.13 [0.42, 3.04]	0.53 [0.19, 1.47]	0.72 [0.42, 1.24]	0.88 [0.31, 2.53]	0.69 [0.36, 1.34]
Islam	0.42 [0.16, 1.14]	0.46 [0.10, 2.03]	0.34 [0.09, 1.24]	0.86 [0.47, 1.55]	1.47 [0.44, 4.86]	0.67 [0.35, 1.31]
Other+	1	1	1	1	1	1
Wealth status						
Poor+	1	1	1	1	1	1
Average	0.51 [0.23, 1.21]	0.37 [0.12, 1.17]	1.02 [0.48, 2.14]	0.68 [0.30, 1.22]	0.54 [0.28, 1.01]	0.87 [0.58, 1.32]
Rich	0.38 [0.20, 1.58]	0.48 [0.17, 1.40]	3.32 [1.07, 10.33]**	0.55 [0.28, 1.12]	0.51 [0.27, 0.95]**	0.60 [0.34, 1.05]

Abbreviations: OR, odds ratio; CI, confidence interval; + denotes reference category (OR = 1.00).
**$p < .01$. ***$p < .001$.

For females, the odds of early sexual debut were significantly higher among those aged 15 to 19 years ($OR = 4.26$, $p < .001$). This likelihood is higher among those living in rural areas ($OR = 4.46$, $p < .001$) compared with those living in urban areas ($OR = 4.17$, $p < .001$). Compared with the Mole–Dagbani ethnic group, Akans ($OR = 1.73$, $p < .001$), Ewes ($OR = 1.92$, $p < .001$), and those in other ethnic groups ($OR = 1.63$, $p < .001$) had significantly higher odds of initiating early sexual debut. These odds were higher for participants living in rural areas, except for the Ewe ethnic group where the reverse was reported. Contraception use was significantly related to early sexual debut such that females who used modern contraceptives had higher odds of initiating early sexual debut ($OR = 1.99$, $p < .001$). These odds are higher among those living in urban areas ($OR = 2.24$, $p < .001$) compared with those in the rural areas ($OR = 1.92$, $p < .001$). Females with no formal education ($OR = 2.90$, $p < .001$) and those with basic education ($OR = 3.12$, $p < .001$) had significantly higher odds of initiating early sexual debut. These odds for early sexual debut were higher in rural areas those in urban areas.

As shown in Table 2, partial access to media ($OR = 1.58$, $p < .01$) increases the odds of early sexual debut. However, females in the rural areas with no access ($OR = 2.67$, $p < .01$) and partial access to media ($OR = 3.18$, $p < .001$) had a significantly higher odds of having early sexual debut. It was also observed that females employed and living in rural areas were significantly less likely to have early sexual debut ($OR = 0.70$, $p < .01$). Compared with those in poor wealth status, female participants with rich household ($OR = 0.51$, $p < .01$) living in urban areas were significantly less likely to have early sexual debut, while males in the same wealth index living in rural areas were more likely to have early sexual debut ($OR = 3.32$, $p < .01$).

Discussion

The main aim of the study was to determine sociodemographic correlates of early sexual debut among sexually active youth in Ghana. In this study, we found a slightly higher number of young males (56.5%) to have had their sexual debut compared with young females (55.0%). Gender has been shown to influence early sexual debut among young adults globally.[7,14,15,25,26] There is however, no consistency in the literature. While some studies have shown that females were more likely to have early sexual debut,[12,15,26] other studies including the current study suggest otherwise.[7,14] It is plausible within patriarchal societies like those in Ghana for masculinity to be associated with sexual prowess. A recent study has found sexual performance as a core masculinity norm in Ghana, the failure of which contributes to negative psychological outcomes including suicides.[27] The higher number of males who have had early sexual debut may be an indication that these young men may have engaged in early sex as a masculine validating mechanism toward fulfilment of peer and social/cultural norms.[9] Traditionally, pubescence marks the stage where rites are performed to initiate young boys into adulthood.[28] The initiates upon attainment of the new role enjoy some amount of freedom to exhibit responsibilities that comes with the new *adult* status. Silberschmidt[29] underscored this when he asserted that traditional norms in African cultures encourage more freedom and sexual experiences for boys than for girls.

As reported by previous researchers,[8,12,30] we found that for both males and females, contraceptive use was associated with early sexual debut. More so, those with basic education and below were significantly more likely to engage in early sexual debut than those with at least tertiary education. Education does not only provide adolescents with relevant information on sexual and reproductive health needs but also requisite information about their sexual needs and rights that may affect their future careers and opportunities. It has been reported in a previous study conducted in Ghana and Malawi that school-going female adolescents are more likely to avoid sexual debut not only to delay pregnancy but also to help give them better future prospects that longer education brings.[31] The inverse relationship between education and early sexual debut could be attributed to the fact that school-going adolescents may perceive early sexual activity as distraction from academic activities with adverse future consequences,[32] while the non or less-educated young adults may be less informed about the consequences of such behavior. Thus, these findings are suggestive of the fact that education is protective of early sexual activity.

Our results further showed that modern contraceptive use was protective of early sexual debut for young males living in the urban setting males; it was a risk factor for females living in rural areas. The nexus between gender, rural–urban residence, contraceptive use, and early sexual debut has not been explored in the literature. It is established that urban residents generally are more likely to access and use modern contraceptive,[33] which could have influenced their sexual behavior including their sexual debut. However, for females living in rural areas, the use of modern contraceptive could have negatively influenced and hastened their sexual debut. It has also been argued that young adults from poorer environment tend to feel that they have fewer opportunities in life, and they might lack the educational, career, and recreational aspirations characterizing young adults living in urban areas.[34]

Partial access to media was found to increase the risk of early sexual debut, and this odd increased particularly for those living in rural areas. There is limited literature on the role of access to media on sexual activity of young adults. It is however known that adolescent sexuality is associated with media use, but the direction of the relationship is not clear.[16,35] A study conducted among young women living in the United States showed that the number of hours used watching TV is related to the worsening of their sexual concept.[36] The information acquired through the media could expose these young adults to sexual scripts that could be learned to help them engage in sexual behaviors when the need arises. For females living in rural areas as found in this study, exposure to sexual portrayals in the media may be integrated into adolescents' beliefs that may eventually influence their sexual behavior.

It was also found that having rich household wealth was protective of early sexual debut for young females living in the urban areas but served as a risk factor for males living in rural areas. These findings contradict previous studies that have found low socioeconomic status (household wealth) to be a risk factor to early sexual debut.[5,13,14,16] Adolescents living in rural areas are known to have late sexual debut, but having high socioeconomic status could influence the lifestyle of such individuals to initiate early sex. This and other geographical differences could result in socialization that renders such adolescents more sexually ready than others in other household wealth. Perhaps the interaction effect of gender, rural–urban residence, and socioeconomic status on early sexual debut would have to be explored further.

Early sexual debut was influenced by ethnic grouping for only females. Compared with the Mole–Dagbani ethnic group, Akans, Ewes, and those in other ethnic groups had significantly higher odds of initiating early sexual debut. These odds were higher for participants living in rural areas. The influence of these ethnic groups on rural females' sexual debut can be attributed to female socialization norms within such groups. Strong proscription of early sexual behavior, reflected in such practices as female genital mutilation, may likely delay sexual debut in societies within the Mole–Dagbani enclaves. This practice involving the removal of the clitoral hood is targeted at removing sexual urges in females. Although officially illegal in Ghana, there are

reports that the practice is ongoing in regions that are predominantly Mole–Dagbani.[37] We thus may assume that the socialization process of girls in these parts of Ghana may be somehow infused with strong cultural injunctions that put fear in young females against sex or suppress sexual urge and expression at early ages. Sexual permissiveness in the absence of strong proscriptive sexual norms within most Akan and Ewe societies may provide a plausible explanation for the finding of higher odds of sexual debuts among girls from these ethnicities.

Strength and Limitations

The findings of this study must be interpreted cautiously in the light of some important limitations. This study is limited by its cross-sectional nature, and hence, causal inferences cannot be made. Furthermore, the study relied on self-report measures, which could be affected by social desirability bias or memory bias. Despite these shortcomings, the study has compelling strengths. First, the large sample size gave the study sufficient power. In addition, the representativeness of the sampling strategy as well as the nationwide nature of the data boosts the study's generalizability to other settings.

Conclusion

This study was conducted to examine correlates of early sexual debut among sexually active youth using the 2014 GDHS. Males aged 15 to 19 years who had basic education were significantly more likely to initiate sexual debut early. For females, those aged 15 to 19 years, had used modern contraceptive, with no formal or basic education, and had partial access to media were significantly more likely to initiate early sexual debut. The likelihood of these factors influencing early sexual debut among both males and females was determined by either rural or urban residence. This study contributes to the scanty literature on the determinants of early sexual debut among young adults in Ghana and sub-Saharan Africa in general. Interventions and policies targeting those living in both rural and urban areas are therefore needed for adolescent males and females in their early teens before they start engaging in sexual intercourse.

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