

## Conceptions of and Attitude toward Multiple Sexual Partners among Youths in Bolgatanga Municipality, Northern Ghana

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### Abstract

**Objective:** This study analyses the conceptions of and attitude toward multiple sexual partners among youths in Bolgatanga municipality, northern Ghana.

**Methods:** Semi-structured and focus group interviews were held with 71 youths and 12 adults.

**Results:** Youths' multiple sexual partnerships were found to be related to various factors, including infidelity and distrust in relationships, cultural traditions such as the practice of polygyny and the importance of fertility, and modern developments such as increased school attendance and the use of new media. For boys, important motives for having multiple sexual partnerships are sexual prowess, prestige, desire, and pleasure, while for girls financial independence is important.

**Conclusion:** The various influencing factors and the youths' personal motives, combined with limited knowledge of SRH and risky sexual behavior prevents the youths from making well-advised and healthy choices concerning their sexual and reproductive wellbeing.

**Keywords:** Multiple sexual partnerships; Risky sexual behavior; Adolescents; Youths; Ghana; Premarital sex

### Introduction

Individuals who engage in multiple sexual partnerships are at higher risk of sexually transmitted infections (STIs) including HIV, compared to people who are faithful to one partner [1,2]. This applies to both concurrent and sequential sexual partnerships [3]. Additionally, young women who engage in multiple sexual partnerships before marriage are at increased risk of unintended pregnancies, which often results in dropping out of school, stigmatization, unsafe abortions, or single motherhood. In Ghana, 14% of males aged 15-59 and 2% of females aged 15-49 (married and unmarried) self-reported that they had had more than one partner in 2011, and more than three quarters of these people did not use condoms [4]. Almost three quarters of male youths and over one third of female youths are sexually active before marriage, and 6% of males and 3% of females aged 15-24, and 13% of males and 5% of females aged 20-24, self-reported having had more than one sexual partner in 2011.<sup>1</sup> More than half of the youths who had multiple sexual partners did not use condoms [4,5]. The national HIV prevalence is relatively low in Ghana compared to other sub-Saharan African countries: in 2013, it was 1.3% among adults and 0.4% among youths aged 15-24. Compared to 2011 there was a decline for adults

from 2.1% and for youths from 1.7% in 2011 [1,6]. Ghana is still considered a high-risk country, however, because men and women engage in multiple sexual partnerships, knowledge of HIV/AIDS and condom use is relatively low, and neighboring countries have high levels of HIV/AIDS [7]. HIV in Ghana is mostly transmitted through unprotected heterosexual contact, and it is estimated that 90% of new infections occur among people aged 15-39 [8].

STIs or STI symptoms (including bad-smelling/abnormal genital discharge and genital sores or ulcers) were self-reported in 2008 by 8% of males and 26% of females aged 15-24 [5]. Data on treatment seeking among this age group are not available. However, the stigmatization of people with STIs can discourage people from seeking treatment, leading to severe complications [9,10]. Further, unintended pregnancies can lead to unsafe abortions, which are an important cause of morbidity and mortality, particularly among Ghanaian women under 20 [11,12]. It was reported that 16% of girls (<20 years) who were pregnant in 2007 had an abortion, while other studies argued that the actual number of unsafe abortions and attempted abortions is higher [13,14]. In sub-Saharan Africa, studies – mainly quantitative ones – have found various factors associated with the tendency to have multiple sexual partners. Important motives for men are sexual prowess and social prestige, and for women money and gifts [15]. Transactional sex is a common practice in sub-Saharan Africa,

<sup>1</sup> It should be noted that this could be underreported due to the taboo on premarital sex.

and is of a different nature than prostitution in western societies [16]. In Ghana, the toleration of men having multiple sexual partners could be influenced by the acceptance of polygyny (men marrying more than one woman), which in 2011 was practiced by 9% of men and 18% of women [4]. Moreover, a married man in Ghana traditionally “has unlimited sexual freedom both in and out of marriage” [17]. For youths, it is reported that the status of male youths increases with more sexual activity, while that of female youths decreases [18]. For girls, having had recent multiple sexual partners was related to living in small towns and having sexually experienced friends [19]. A study in the northwest of Ghana found that although the majority of youths believed that “faithfulness is ideal,” having multiple sexual partners as a young man is seen as winning a competition and a conquest, while most young men still expect women to be faithful [8]. Several researchers have argued that we need more knowledge of the factors that lead to risky sexual behavior (e.g., multiple sexual partners) in youths in sub-Saharan Africa, in their social and cultural context. This insight could contribute to the development of more tailored and effective SRH programs to protect youths from the potential adverse consequences of risky sexual behavior [3,19-23]. In Bolgatanga municipality, the capital of the Upper East Region in northern Ghana, youths have less knowledge of SRH and are less familiar with family planning methods and HIV/AIDS compared to youths in other parts of Ghana [24]. The dominant ideology, which originates from both the traditional culture and the Christian and Islamic religions, is that people should abstain from premarital sex [25]. The majority of male and a minority of female youths, however, are sexually active before marriage [5]. It was reported for men that the period between the median age (21 years) at first sexual intercourse and the median marriage age (25 years) is relatively longer than for women (17-18 years), and a relative high percentage of girls (40%) compared to boys (6%) marry before the age of 18 in the Upper East Region [4,5]. Specific data on the number of youths engaging in multiple sexual partnerships in this region are not available. As mentioned, in Ghana more male youths than female youths self-reported to have had multiple sexual partners. Female youths have relatively more sexual partners among both age-mates and older men, which puts them and those partners at high risk. Some of these girls have transactional sex with multiple partners, mostly because of poverty [25,26]. It should be noted that polygyny is relatively common in the Upper East Region: In 2011, it was practiced by 25% of men and 39% of women [4]. Research on the youths’ conceptions of and attitudes regarding multiple sexual partners in Ghana is limited. Moreover, most research is of a quantitative nature. In the present study, we used qualitative methods to analyze the youths’ conceptions and attitude toward multiple sexual partnerships in Bolgatanga municipality.

## Methods

### Design

Semi-structured interviews with 32 youths and focus group interviews with 39 youths were held in the period 2010-2012. The individual interviews ensured privacy for the respondents, and the focus groups motivated respondents to share their ideas and react to each other. Twelve adults who were familiar with the local youths, their lives, and their problems were also interviewed. These respondents provided information about the sociocultural dynamics and context of premarital multiple sexual partnerships. The Ghana Health Service and the Navrongo Health Research Center (NHRC) were officially informed and consulted about the project. It was also discussed with

the Youth Harvest Foundation Ghana (partner organization in Bolgatanga providing SRH education to youths) and various local authorities, which gave their approval.

### Setting

Ghana has almost 25 million inhabitants, divided over 10 regions. The Northern, Upper East, and Upper West regions are mainly rural and are the poorest. The majority of the people live in villages and small communities. The main source of income is farming. School attendance and literacy rates are lower compared to the rest of Ghana [4]. Bolgatanga municipality (132,000 inhabitants) is the capital of the Upper East Region (population 1 million), where 24% of the population is aged 10-24 [4]. The dominant ethnic group is the Mole-Dagbani, which has eight subgroups. One of these is the Frafra, whose subgroup Gurune is dominant in Bolgatanga municipality [26]. Data on religious backgrounds in Bolgatanga are available only for 2000. The three main religions were traditionalism (practiced by 53% of the population), Christianity (36%), and Islam (9%). It is, however, notable that between 2000 and 2012 the percentage of Christians in the Upper East Region increased from 28% to 42%, that of traditionalists decreased from 46% to 28%, and that of Muslims increased from 23% to 27% [4,27]. A comparable change can be expected for Bolgatanga municipality.

### Population and Sample

The study population comprised youths aged 14-25, with varying levels of education, living in rural and urban areas in Bolgatanga municipality. The adults were of various ages; they lived in both rural and urban areas, and had various occupations, such as teachers, parents, religious leaders, ethnicity experts, and social and health workers. Snowball sampling was done, taking into account gender, age, religion, education, and urbanization. Potential respondents were approached with the assistance of the Youth Harvest Foundation Ghana, churches, mosques, key local figures, and the Ghanaian host family of the first author. The majority of those approached agreed to cooperate. Some refused due to obligations at school, home, or work. Respondents were included until data saturation was reached. All interviewed persons were informed of the research objectives and asked for their consent, and they had the right to end the interview at any moment.

	Respondents	Main topic interview
<b>Youths</b>	71	
Semi-structured interviews (2010)	8	Broad focus on SRH of youth
Semi-structured interviews (2011-2012)	24	Multiple sex partners
Focus groups (2011)	39	Multiple sex partners
<b>Adults</b>		
Adults (semi-structured interviews 2010-2011)	12	Multiple sex partners

**Table 1:** Data collection among youths (N=71) and adults (N=12).

## Data Collection

Data were collected in several rounds. In the first stage of the project (2010-2011), semi-structured interviews were held with 14 youths and 17 adults in Bolgatanga municipality, with a broad focus on SRH and the youths' sexual and relational behavior [25]. From this first research stage, six interviews with eight youths and 12 interviews with adults were selected for a secondary analysis for the present paper, because the interviews addressed the topic of multiple sexual partnerships (Table 1).

In 2011 and 2012, 22 semi-structured interviews with 24 youths (20 individual interviews, two in same-sex pairs) and five focus group interviews with 39 youths were additionally conducted, focusing on multiple sexual partners and on protected and unprotected sex (the latter issue is addressed in another paper). The topic list for the interviews was based on literature and previous research [25] and contained the following topics: "opinion and conceptions concerning multiple sexual partners," "motives to have different sexual partners," "the role of boys and girls in sexual relationships concerning faithfulness, dependence (money), and their expectations and norms"<sup>2</sup>.

The order in which the topics were discussed in each interview depended on the participants' answers to previous questions. The open and semi-structured interviews lasted 20-75 minutes, the focus groups 30-60 minutes. All interviews were digitally recorded and transcribed verbatim.

Most interviews with the youths and adults during the various stages of the research were conducted in English by the first author (Dutch woman, familiar with the research area since 2000). Three Dutch female undergraduates carried out 10 semi-structured interviews individually; another four were jointly conducted by two of these students. Additionally, a male Ghanaian bachelor's graduate carried out three semi-structured and two focus group interviews.

He interviewed only male youths; in four of the five interviews, he used the local language Frafra (without an interpreter) in order to include male youths who did not speak English. A local female interpreter (aged 22) assisted in one focus group interview with female youths and 10 semi-structured interviews. These interviews were partly in English and partly in Frafra. Both the interpreter and the Ghanaian interviewer were well known by the first author, who had selected them because of their suitability for this task. All interviews with adult respondents were held in English.

During the fieldwork, Ghanaian families hosted the first author and the Dutch students. This allowed the researchers to experience life in the area and to better understand the social and cultural context.

## Data Analysis

The qualitative data analysis software NVivo 10 was employed. As a first step, open coding was used with the focus on the youths' conceptions of and attitude toward multiple sexual partnerships. Six categories were then defined on the basis of these codes.

The first author carried out the coding in NVivo 10. Methodological aspects of the research, the coding processes (development and consistency of codes and categories), and contradictions that were identified during the analysis were documented and discussed by the

research group (JvdG, BvM, MdU, NdV). For privacy reasons, the names of all respondents mentioned in this paper are fictitious.

## Results

This section presents the demographics of the respondents, followed by an elaboration of six categories that provide insight into the youths' conceptions and attitude toward multiple sexual partnerships, namely:

- Cultural traditions: polygyny and fertility.
- Modernity.
- "There is no trust in this world."
- Male motives: "I want to be a big person."
- Female motives: "One man cannot solve your problems."
- "The consequences are many."

## Demographics of respondents

Semi-structured interviews were held with 19 male and 13 female youths; all were unmarried and aged 14-25. Regarding sexual experience, 11 males and three females were experienced, two males and five females were not experienced, and for six males and five females this was unknown. The majority of the sexually experienced respondents had had more than one sexual partner. Sample characteristics are summarized in Table 2.

In addition to the semi-structured interviews, 39 youths participated in five focus group interviews. Three focus group interviews were held with 22 male youths aged 16-25. Although the age range was announced when selecting the youths, three men aged 29, 30, and 32 years were also present. Because the interview had already started when they mentioned their ages, it was thought that it would disturb the group if they were sent away. They were therefore included in the study.

One of the focus groups with male youths was held in a rural area; the participants were attending junior high school, school dropouts, cowherds, or farmers. The other two focus groups with male youths were held in urban areas; most participants were attending senior high school, one was a teacher, and one a police officer. Two focus groups were held with 14 female youths aged 16-21. One of the focus groups was held in a rural area; these female youths were either school dropouts or junior high school students. The other focus group was held with female youths from a mixed senior high boarding school. The majority of the respondents in all focus groups were Christian. Sexual experience was not asked for in the focus groups because of the inappropriateness of disclosure.

The complementary interviews with adults were held with nine men and three women, who had various ages, professions, religions and backgrounds. Sample characteristics are summarized in Table 3.

## Cultural traditions: polygyny and fertility

A first finding is that cultural traditions, in particular the practice of polygyny and the cultural importance of fertility, contribute to the practice of multiple sexual partners in Bolgatanga municipality. Polygyny is a common practice in the municipality. According to the majority of the respondents, polygyny is accepted by traditionalists and Muslims, and one respondent said that some Christians "who are not

<sup>2</sup> The list also included topics concerning protected and unprotected sex, which are not reported on in this paper.

very religious” also practice it. Most respondents said that a man could marry more wives if he is able to take care of them and their future children. Both youths and adults gave examples of men in their community with multiple wives, and some of these men also had girlfriends.

	Number (%)
<b>Sex</b>	
Male – age range	19 (59) – 19–25 years
Female – age range	13 (41) – 14–23 years
<b>Ethnicity</b>	
Frafra	22 (69)
Other	4 (13)
Unknown	6 (19)
<b>Urbanization</b>	
Bolgatanga municipality	27 (84)
-Rural community	14 (44)
-Bolgatanga town	3 (9)
-Not specified	10 (31)
Navrongo <sup>a</sup>	2 (6)
Bongo district <sup>a</sup>	2 (6)
Unknown	1 (3)
<b>Education</b>	
Not educated	3 (9)
Attending JHS <sup>b</sup>	2 (6)
Completed JHS	2 (6)
Attending SHS <sup>c</sup>	11 (34)
Completed SHS	8 (25)
Completed Vocational School	1 (3)
Attending Polytechnic	2 (6)
Attending/completed university	2 (6)
Unknown	1 (3)
<b>Religion</b>	
Christian	19 (59%)
Muslim	7 (22)
Traditional	4 (13)
Unknown	2 (6)
<sup>a</sup> Schooling in Bolgatanga municipality; <sup>b</sup> JHS: Junior High School; <sup>c</sup> SHS: Senior High School	

**Table 2:** Demographics youths, semi-structured interviews (n=32).

	Number (%)
<b>Sexual experience</b>	
Males	
Yes	11 (58)
No	2 (11)
Unknown	6 (32)
Females	
Yes	3 (16)
No	5 (26)
Unknown	5 (26)

**Table 3:** Sexual experience youths (n=32).

For example, Claudia (14, Christian, no sexual experience) knew a man who had many wives: “Somebody at that house is having wives, the house over there. He's having 10 wives, and he's still having girlfriends outside, having plenty children.”

In a focus group with male youths, it was said that one reason for men to marry more wives is that, after a few years with one wife, they prefer a “fresh,” younger woman. Claudia (14, Christian, no sexual experience) said that “men like women a lot” and that “it's their character.” Regarding the youths, some of the males and females said they do not want a polygynous marriage. Rudolf (24, Traditionalist, sexually experienced) said: “But for me in particular, I won't marry more than one. All these modern girls, they don't like being married to more than one guy; they believe one partner, one partner.”

Giving birth, particularly to boys, is important in marriage, according to the local patrilineal tradition. It is the man's task to “produce children” within marriage, according to Samuel (ethnicity expert). If there is no child after a few years of marriage, men are encouraged by their family and community to marry a second woman to ensure the continuation of the patrilineal family line. James (24, Christian, sexual experience unknown):

You see, especially the married couples for instance, if it happens that they're married and then maybe the lady is not, is unable to produce. So when the man realizes that “Oh the fault is from the lady, the lady cannot produce.” So you will see that he will be compelled to go in for a different lady. Because you don't want to just be like that, without a child. So you see that is where they always go in for a second girl.

It was remarked by Felix (63, parent, Christian), however, that a highly religious Christian man will remain with his wife even if she does not bear children Table 4.

### Modernity

Modern developments such as the use of new media (television, cellphones, internet) and increased school attendance, which is accompanied by the growing influence of peers, were found to be contributing factors to having multiple sexual partners. The number of youths watching movies, music videos, and pornographic videos, either on television or on their cellphones, has increased in recent years. Some youths try to emulate the sexual and relational attitude



and behavior they see in these new media, and they experiment with what they see in music and pornographic videos, according to some youths and adults.

	Number (%)
<b>Sex</b>	
-Male	9 (75)
-Female	3 (25)
<b>Age</b>	
-26-35 years	6 (50)
-36-55 years	4 (33)
-56-64 years	2 (17)
<b>Ethnicity</b>	
-Frafra	9 (75)
-Moshi	1 (8)
-Dagao	1 (8)
-Unknown	1 (8)
<b>Religion</b>	
-Christianity	9 (75)
-Islam	3 (25)
<b>Background</b>	
-Teacher	2 (17)
-Ethnicity expert	2 (17)
-Community nurse	1 (8)
-Social worker	2 (17)
-Religious leader <sup>1</sup>	2 (17)
-Parent	1 (8)
-Elderly (who are also parents)	2 (17)
<sup>1</sup> Youth president in church, assistant Imam	

**Table 4:** Demographics adults, semi-structured interviews (n=12).

For example, television programs from abroad nowadays show sexual freedom for youths, according to John (31, teacher). Mohammed (55, Islamic leader/parent) said that youths have porn on their cellphones:

If you found one porno picture in a paper or a magazine, that was big news here. But today it's everywhere, and I can tell you one thing: make friends with 10 young girls, now all have mobile phones that have memory chips in them and go to multimedia and play the videos. And you will be shocked all the movies are pornographic sex, sex, sex.

James (24, sexual experience unknown) said that some of his friends name themselves after music video stars and like to copy their behavior and their clothes:

So if it happens that R. Kelly, because for instance he is someone who maybe you see in the movie. Through the movie you will see them sleeping with ladies. Maybe some can only say, it is camera works or something like that. Though it may not be really sex, but the camera can bring them together. So if they see something like that they also try to practice it. (...) The way they always act is with different girls, many girls. So he may even think that that fellow is a role model to him. He may think that "Oh, he wants to be like him."

School attendance has increased in recent years. Youths spend more time at school with their peers without the supervision and authority of their families and their community. It was mentioned by some youths that students have multiple sexual partners particularly at school. Clement (20, sexual experience unknown), a former student at a mixed senior high school, said that students can meet their boyfriends or girlfriends in and out of school:

Most of the youths here in Bolgatanga are involved in sexual behavior such as, especially schools like this, the secondary schools like this. That means, this is always the place for them to, um, exhibit their feelings for girls. (...) The school like this, the students, the girls they can get up at any time, go out. Because it is not a full boarding school. So they can get up at any time they want. They go out to their boyfriends.

Albert (20, sexually experienced) had attended a mixed full-boarding senior high school and mentioned that students there also had multiple sexual partners. For example, a couple of his friends had sex in a classroom with the same girl. He and his friends called it gala. According to an experienced youth worker in the research area, youths use various words, including made-up ones (like "gala"), to refer to sexual issues. Albert:

Gala, which means two, more than one boy. One boy having sex with a girl, so maybe two, three, four, five. I mean having sex with one girl. They just call it gala. So the guy came and called them, and they followed. But in this case two of them had sex with the girl in the classroom where it was dark. The third years had completed, so that one [classroom] was always closed. So they, they managed to get in there, and they did their thing.

Veronika (20, no sexual experience), a former vocational school student, said that if you do not have multiple sexual partners or are still a virgin, you are laughed at by other students: "Teasing you that you don't like enjoyment, you don't know what enjoyment is."

### "There is no trust in this world"

Infidelity between boyfriends and girlfriends, as well as distrust and fear that their partner is cheating on them, are important issues in youths' relationships, according to several male and female youths. These issues are both the causes and results of having multiple sexual partners. For example, Rudolf (24, sexually experienced) said "The first thing is that we don't trust each other," and Akopolka (girl, 17, sexual experience unknown) said "Boys are not to trust. Me, I will never trust a boy." With regard to trust in a relationship, it might also be important not to delay the first sexual intercourse too long. For example, Thomas (21, sexually experienced) said: "When you date a girl, within one week you didn't make love to the person, it's like the girl is cheating on you."

Additionally, the saying "Never put all your eggs in one basket" was mentioned by Rudolf (24, sexually experienced) and in one focus group with males, to explain that you should not focus on one partner only, because you could lose "everything" by having only one partner.

Some male and female youths said that male youths have several girlfriends in case one of them disappoints. For example, Christoph (20, no sexual experience) said: "If he is having five girls. Then one day, one says that 'Oh, I don't love you,' he knows well that he is still having four. So it won't hurt him more like the way if he was having only one girl."

Further, it is difficult to break up with a girlfriend you love, even if she is cheating on you. You could also get an extra boyfriend/girlfriend if your boyfriend/girlfriend is cheating, according to some male and female youths. Gregory (24, sexually experienced):

You see that creates about that, so assuming I'm in love with a girl or I have a relationship with a girl, and I come to hear that this person too is having a relationship with that same girl, you see that I will like to also what, have one adding.

Some girls also appear to be in favor of multiple relationships. Lydia (age and sexual experience unknown): "Why not just play around? Because you stay with one guy and at the end of the day you will get disappointed."

In a focus group with male youths, one reason provided for distrust in a relationship was that "We are Africans" and "We change our mind at any time we want." Abdul (21, sexually experienced) said that apart from not trusting girls, he also distrusts his parents:

There is no trust in this world. I don't trust my father. Nor my mother. My father can say "Oh, tomorrow I will give you this" and tomorrow he will say "I don't have money." There's no trust, fail and promise. So me I don't trust, if they are my mother or my father. You see so. I don't trust any girl.

Male youths are "soon fed up" with their girlfriend, according to several male and some female youths, and some male adults. They meet other girls who are more beautiful, attractive, or nice, and after having sex a few times their interest fades. For example, Francis (25, sexually experienced) said: "When we're with one girl, it's only for a short while before we get fed up with her and begin chasing other girls around. And the same thing happens with each girl we meet." Mirabel (18, sexual experience unknown) confirmed this and said:

Uh, the guys they have many, because they will see this girl today, the next day they will see this girl, become attracted to her and the next day they will see another person, that person that get attracted to more than this one.

However, on the other hand, there are also male and female youths who want to be faithful in their relationship. For example, Claudia (14, no sexual experience) knows boys who are "gentle" and who do not want multiple partners, Caroline (18, sexual experience unknown) said she would end her relationship if she were not the only girl. It was also said in a focus group with male youths that there are boys who stay with one partner.

### **Male motives: "I want to be a big person"**

Prestige, sexual desire, and pleasure are important reasons for young men to have multiple sexual partners, according to several male and female youths. Having multiple girlfriends is a matter of prowess for males: They are seen as big, tough, and capable, and males see it as a game and they bet on who can have more girlfriends. For example, Aziz (22, sexually experienced) said: "With the guys, they think that it's something of pride or prestige to sleep with a number of ladies." And Francis (25, sexually experienced) said:

There are some boys among us, that you hardly see them going out with one girl. Today you see him with Akolpoka, tomorrow he's with Akrupogbila, tomorrow he's with Atampoka and what he's doing, he's having sex with all of them. Trying to show that he's a sort of hard guy or something. To them, it's a matter of betting with friends that he can have sex with that girl and proceeds to ensure that he wins the bet.

There is also some peer pressure among boys to have multiple girlfriends, Saida (23, sexually experienced):

In order to prove that you are really a boss among a group, you have to do some physical things for your people to know that "Oh, you are really someone." Some use this as an excuse and they get themselves involved picking girls. "I want to be a big person, you see because I'm so strong, I'm so handsome, I'm big, that's why I'm able to get this number of girls as my girlfriend."

Girls prefer young men who are popular in the community or are musicians or footballers, and these men will probably have multiple girlfriends, according to male youths in a focus group. One participant said "Because they [girls] know that when you are a star, it will be hard for them [boys] to have you alone."

Apart from prestige, young men are also driven by desire and pleasure-seeking to have multiple sexual partners: One partner would not satisfy their sexual desire or might not be in the mood to have sex, or the young men see "better" girls. For example, Gregory (24, sexually experienced) said: "We think that one person cannot satisfy our sexual desire, that is why we go in for another partner."

### **Female motives: "One man cannot solve your problems"**

Money, basic needs, and luxury items were important influencing factors for female youths to have multiple sexual partners (age-mates and older men), according to the majority of the youths and adult respondents. Most respondents mentioned poverty as a reason for female youths to have multiple sexual partners, because money from only one boyfriend would not be sufficient to buy food and clothes and pay school-related costs. For example, Caroline (18, sexual experience unknown) said:

But if you are having only one, he will give you only five cedis that one cannot solve your problems! So you have to have more than one so that you can get your plenty money to do what you want to do.

Veronika (20, no sexual experience) said that due to poverty, girls have sex for small amounts: "There is a lady there like that. And I asked her what was the highest amount she has ever received from having sex like that all over and she said two Ghana cedis."

Some girls also have multiple sexual partners in order to acquire luxury items, such as fashionable dresses or shoes, or to pay for make-up or a hairdo, because they, or their parents, cannot or do not want to pay for them. Girls expect particular expenditures from their boyfriends, according to Aziz (22, sexually experienced). He said there are girls telling boys that "Me, I will not take someone who cannot even buy me, er, pay for my hair!" He also mentioned, however, that in general in every relationship one needs some money to buy something "to show your love." Some girls would only stay with their boyfriend if he has money; if not, they would end the relationship, or get an additional boyfriend, according to some male and female youths. Mirabel (18, sexual experience unknown) said: "Mmm, because we girls, we'll say 'Oh this man he doesn't give me anything. So why should I be with him?' Because of that they'll go for another guy." Hashim (23, sexually experienced) said: "She just dumps me and then

go in for the one who can help her. Some don't do it that way. They will still hold on to you while they are still playing around somewhere [having other boyfriends]."

Two female youths said that sex with multiple men was seen as a deal or a transaction. Lydia (age and sexual experience unknown) said it is "a fair deal," men would say "I sleep with you, I give you money." Monica (16, sexual experience unknown) said: "So assuming this man comes and he tells you 'Oh please, I will give you this amount of money if you sleep with me.' They will say 'Fine, okay, then do it and give me my money.'"

It was said to be easy to bribe young ladies with money or goods to have sex, particularly when their boyfriend is not providing this, according to Saida (23, sexually experienced) and John (31, teacher). Saida:

Yeah, because the fact is that, we ladies we are just like that, it's easy for a lady to be convinced, for sure, I know, convinced by a guy. You can be with a guy with an intention you are picking no-one. But immediately someone will just come and get small chance to you, able to convince you to get you things, that your guy, your boyfriend never did for you and all that.

Additionally, some girls have sex with various older and wealthy men, according to several respondents. Most of these men are married and want "fresh" and "young" girls, and they are not attracted to their wives anymore. James (24, sexual experience unknown) said that men picked up female youths in order to have transactional sex:

Some they just spend the money on the young ladies. Just because, oh, they want to have sex with them. So such people they just jump from a lady, even a day self, they can jump ladies up to four or more. (...) We, those who don't have anything, we are just sitting. You can see that, one day you will see that this fellow will come and pick this lady, a different day too you see a different car, a different person coming to pick that same lady. So that's, meanwhile she is having two boyfriends like that. As for that, it is just common, we are just seeing it.

According to Mary (22, no sexual experience) and John (31, teacher), some female students have transactional sex with wealthy and older men in order to pay school-related costs. Some female students have sex with their teachers, according to David (29, Christian leader) and John (31, teacher). John: "So when they see you, and think that you have something to offer them. Some few cedis to give them. They will accept it."

James (24, sexual experience unknown) explained that girls involved in transactional sex will not stop even if you warn them. He said that if you tell these girls "what you are doing is not good," they say "You should not think you know more." Claudia (14, no sexual experience) said that other students insult girls who have multiple sexual partners, but that these girls do not care about it, and told her that "My life is my life." Sophia (22, no sexual experience, SRH peer educator) said that some parents allow their daughters to have transactional sex, because they, too, benefit from it. Diana (23, sexually experienced) said that she did not engage in transactional sex during her sewing apprenticeship, because a family member had taken care of her.

Apart from money and goods, some girls also have multiple sexual partners to satisfy their sexual desire, for their pleasure, and because of prowess. Some girls cannot stay away from sex, they "take sex as food" and "want it always," according to some male and female youths and one adult. Mirabel (18, sexual experience unknown):

Many girls they go around having sex for money, but some they do it just for pleasure. You know that, and some girls if they, they can't stay for some minutes without having sex with a man. So they are always, uh, they have reaction to sex. Whenever they don't have sex, they don't always feel well.

Some male and female youths said that some female youths think that having more boyfriends or having sex with multiple partners makes them beautiful and proud. Saida (23, sexually experienced): "And others are there, they take it like it's something that makes them proud. Just to say 'Oh, I'm a lady, I have this number of boyfriends.' Some too just do that." And Aziz (22, sexually experienced) said that there are some girls with multiple boyfriends who think they are "high class" and "hot."

### **"The consequences are many"**

Several respondents said that having multiple sexual partners before marriage can have negative consequences: STIs (including HIV/AIDS), pregnancy, dropping out of school, and low social status for girls in particular. The majority of the youths mentioned the transmission of STIs, HIV/AIDS, or "infections" or "diseases." Some respondents also said that some youths do trust their partner, while he or she might be cheating and could contract an infection. Ruth (social worker): "They forget that each of them can cheat on the other. And come back with a disease." Sophia (22, no sexual experience, SRH peer educator) was concerned, because she knows cases in which a young woman with HIV had sex with various young men:

It's like they don't hear, the men they don't hear that maybe this person is having this disease. And sometimes I try telling them, but my mother will stop me and say that, "There's a day that they will know."

Apart from STIs, pregnancy as a result of having multiple sexual partners was mentioned by several youths and adult respondents. Particularly unintended pregnancies were mentioned, and the mothers-to-be often do not know who the father is. It was said that male youths will not take responsibility for the pregnancy when they realize that they are not the girl's only boyfriend or sexual partner, according to several male, female and adult respondents. Samira (21, sexually experienced):

But if it happens that you are with those three boys and then you get this unwanted pregnancy, sometimes you even end up without even marrying those three. You have to give birth in the house, because this boy will say I'm not the only person, and then this boy will also say I'm not your only boy.

In the case of an unintended pregnancy, families will try to identify the father and arrange a marriage. According to Patrick (42, social worker), girls traditionally bring disgrace to their family if they do not know the father, or if the father refuses to acknowledge the child. Children born outside marriage are seen as unrelated to their patrilineal family even more when the father is unknown. Single mothers can be denied familial support. Unintended pregnancies might therefore lead to unsafe abortions, with severe risks of morbidity and mortality for women, according to some respondents. Caroline (18, sexual experience unknown) said that when boys find out their girlfriend or sexual partner is pregnant, they leave her for another girl and do not take responsibility.

Unintended pregnancies can also lead to girls dropping out of school, according to some respondents. They have to take care of their child at home and thus cannot continue their education. Saida (23,

sexually experienced) said that this also applies to some boys: When it is known that he is the father of the child, he needs to earn some money for mother and child, and cannot attend school anymore. Additionally, youths engaged in multiple sexual partnerships might drop out of school or fail their exams. According to one male and one female youth, and one focus group with boys, these youths could be expelled from school for having sex on campus, or for not attending all classes, or they could be distracted from their studies by their various sexual relationships.

Young women who have multiple sexual partners lose their dignity. They are seen as “cheap” and it can be difficult for them to marry, according to several male and female youths. Diana (23, sexually experienced): “You know, if you have been roaming like that, roaming always, then it’s only, just like the boys will see you as you are nothing.”

Male youths use female youths, according to Aziz (22, sexually experienced): “What the girls also don’t realize is that most of the guys out there are there only to use them. They go in for them just for lust. After sex they have no interest in the girl.”

In the focus group with boys it was mentioned that girls who have had multiple sexual partners will find it difficult to get married:

So it’s very difficult for most of the girls to get married. Because they are just moving with a lot of boys. So no one always becomes serious about her. Because you don’t want to marry her and they will say “Oh, I have used this lady before you are coming to take.”

John (31, teacher) mentioned that people investigate a woman’s background before marriage, to find out if she has had multiple sexual partners.

## Discussion

This study analyzed the conceptions of and attitude toward multiple sexual partnerships among youths in Bolgatanga municipality, Ghana. Understanding the factors that lead youths in a specific context to engage in risky sexual behavior, such as multiple sexual partnerships, contributes to the development of more tailored and effective SRH education.

Abstinence from premarital sex is promoted in Bolgatanga municipality by the cultural tradition and the Christian and Islamic religions, and the majority of girls and a minority of boys do not have premarital sex. Being sexually active as a youth, and having multiple boyfriends or girlfriends before marriage, however, is seen as a relatively common practice by both youths and adults in this municipality. Infidelity and distrust in sexual relationships were found to be both the result and the cause of concurrent sexual partnerships. Youths have concurrent sexual partners because they are afraid that they will get hurt if their partners cheat on or leave them. Although researchers in northwest Ghana also found that youths held the opinion that they would not be faithful to one partner [8], distrust and emotional injury as motives for having concurrent sexual partners were not found in previous research among youths in Ghana. However, comparable findings were found in research among Puerto Ricans and African Americans (18-25 years) in Connecticut, USA: The respondents said that they did not want to rely on one partner and preferred to have someone ‘waiting in the wings’ to prevent emotional injury [23]. Research in South Africa showed a relation between the knowledge or suspicion that one’s partner has other partners and having concurrent sexual partners oneself [28].

Young men in Bolgatanga municipality have multiple girlfriends because they seek sex and pleasure, and because they gain prestige and prowess, particularly among their male peers. Male peers might have an increased influence because boys these days leave their community to attend school, to work, or to hang out with friends, away from the supervision and authority of the family. In sub-Saharan Africa, and also in the northwest of Ghana, it was reported that the influence of peers is important to prove masculinity through early sexual debut and having multiple sexual partners [8,18, 20]. In the present study, prestige and prowess were found to be motives for boys to have multiple girlfriends, in accordance with other studies in sub-Saharan Africa [15]. However, this finding should be understood within the cultural context. These boys grew up in Bolgatanga municipality, where polygyny is a common practice, and men are allowed to leave their wives, marry other women or have girlfriends if their wives have not given birth within a couple of years. Moreover, Ghanaian men in general have sexual freedom both within and outside marriage [17]. The increased influence of peers at the interpersonal level combined with the cultural practice of men having multiple wives, leaving their wives, or having girlfriends, might affect the youths’ opinion that it is prestigious to have multiple sexual partnerships.

Young women in Bolgatanga municipality have multiple sexual partners mostly to get money to pay for basic needs, school-related costs, and luxury items. The girls’ multiple sexual partners are men of their own age as well as older, married, and wealthier men. Most of the girls’ families are too poor to pay for their daughters’ needs, or they spend the money on their sons (i.e. school-related costs). Engaging in transactional sex is a relatively easy way for girls in Bolgatanga municipality to become more economically independent, in contrast to finding a well-paid job. Apart from the risk of getting HIV and STIs, girls with multiple sex partners are looked down upon by society and they will find it difficult to find a marriage partner. Some parents tacitly accept it that their daughters have multiple sexual partners for money, because it benefits them as well. This finding that some parents will turn a blind eye was also found in southern Ghana and Tanzania [16,18].

SRH educators could help these girls and their parents to understand that risky sexual behavior might affect their future plans [29]. Education in general could support these girls to empower themselves and to create their own future, and protect them from early forced marriages. For most married men, a reason to approach young women for transactional sex is that they do not feel sexually satisfied by their wives, which is in accordance with previous research in southern Ghana and sub-Saharan Africa [15,16,30]. Furthermore, a disturbing consequence might be that young men feel encouraged to have multiple sexual partners when they see that men who have money can have sex with young girls, even if he is old.

New media also influence the youths’ conceptions of and attitude toward multiple sexual partnerships. They watch pornographic movies and music videos on television and cellphones, and see others having multiple sexual partners. Research in Ghana on youths’ use of internet on their cellphones – and particularly that related to SRH issues, possibly unrealistic views of relationships and sex, and chatting and dating – is limited. Studies in the capital, Accra, reported that youths search the internet for information related to SRH and watch pornographic movies in internet cafes [31,32]. In Nigeria, it was reported that the more youths are exposed to images of naked humans on television and in videos, the more likely they are to have multiple sexual partners [33]. Nigerian boys thought it was okay to have



multiple sexual partners because they watched movies with men having sex with several girls [34]. It is worrisome that some youths in Bolgatanga municipality take the risky sexual behavior presented in the media as an example.

The majority of the youths mentioned the transmission of STIs, HIV/AIDS, and various diseases and infections as the consequences of having multiple sexual partners. However, most assumed that sex with multiple partners always occurs without the use of condoms or another contraceptive method. Women or girls who have transactional or polygynous sexual relationships are more vulnerable than men and boys to STIs and HIV [35]. They have less power in decision-making as regards having protected sex. They therefore must be empowered to insist on condom use and challenge gender inequalities [29]. Moreover, damaged or vulnerable vaginal tissues increase the risk of STI and HIV transmission for women. Vaginal tissues could be damaged by violence or rape, or by FGM, which has the second highest prevalence in the Upper East region (28%) compared to the rest of Ghana [4]. In addition, women are in general at more risk compared to men, because many STIs survive well in a woman's vagina. Other reasons for their greater vulnerability are that they are more likely to have undetected STIs that facilitate HIV transmission and disease progression, and that male to female transmission of HIV occurs more often than female to male transmission [35].

Unintended pregnancy was seen as an important consequence of multiple sexual partners, particularly when girls do not know who impregnated them, or when the father denies his fatherhood. This brings disgrace upon the girls' family, leads to a decline in family support, and might lead to unsafe abortion. In Ghana, unsafe abortion is an important cause of morbidity and mortality, particularly among women younger than 20 [11,12]. Dropping out of school for females is a consequence of unintended pregnancy and single motherhood as well. Additionally, dropping out of school also applies to youths who have multiple sexual partners or are looking for sexual partners, and therefore do not attend all classes, do not study seriously, or are expelled because of their sexual behavior. Schools were found to be places where youths engage in multiple sexual partners. Because school attendance in Bolgatanga municipality has increased in recent years, more youths now spend time with their peers at school instead of under the authority of their families. Although school regulations prohibit students from engaging in sexual relationships, it is a relatively common practice among sexually active students, according to both youths and adults. It should be noted, however, that these students might be a minority, since the majority of girls and a minority of boys do not have premarital sex, and the focus on education was found to be an important reason for both boys and girls to not have premarital sex in Bolgatanga municipality [24].

### Strengths and Limitations

A strength of this study is the use of qualitative methods, which enabled the study to collect data on the respondents' conceptions, opinions, thoughts, and feelings. Moreover, most studies on this topic in sub-Saharan Africa focus on predictors, not on youths' conceptions. Additionally, this study was carried out in a particular region in northern Ghana where research resources are limited, which means that the results provide insight into a specific, relatively new, research location. Several researchers stress the need to understand factors of risky sexual behavior in their specific cultural and socioeconomic contexts [21,23]. The use of participant observation as a method has both strong and weak points. The strengths lie in the familiarity of the

first author with the local situation since 2000. Respondents have grown to trust the researcher, which is especially useful as sexuality is a tabooed topic. However, this last aspect also touches a weak point: Respondents might give desirable answers just to please the researcher. To increase the reliability, different interviewers were used, namely the first author, two Dutch female graduates, and one local Ghanaian male (who interviewed only male youths in order to decrease possible bias caused by only females interviewing males). Colloquialisms and local understandings were clarified with key figures.

The method of snowball sampling might have influenced the results regarding sexual experience, age (more youths were relatively older than  $\geq 18$ ), and religion (relatively more Christian youths and adults were included than Muslims and traditionalists). However, this can also be seen as a strong point, because opinions about multiple sexual partners might be more reflective and explicit when uttered by relatively older youths with sexual experience. It should also be noted that respondents who volunteer to cooperate in SRH research are often more comfortable talking about this topic than those who do not volunteer [29]. With respect to the possible influence on one's sexual behavior of having or not having sexually experienced friends, it can be argued that the sample of this study is representative of the local situation: There are relatively more unmarried sexually experienced male respondents, and relatively more unmarried female respondents who abstain from premarital sex [4,5].

Further, a weak point might be that data on sexual experience, religion, and ethnicity were missing for some of the respondents. In addition, an interpreter was used in some of the interviews, which could have influenced the conversation. Finally, member checks (respondents checking the interview transcripts) could not be done for practical reasons.

### Implications

SRH programs should address the contradictory influences concerning SRH issues from the traditional culture, the Christian and Islamic religion, new media, and the peer group of the youths. Additionally, youths need to be educated about the consequences of having multiple sexual partners for their health and their future. SRH education should address peer pressure, unequal gender relations, self-esteem and self-respect, the meaning of prowess, sexual rights, and communication and expectations in sexual relationships. Especially the education of girls should have the highest importance: Send them to school, protect them from child marriage, and empower them to address gender issues and negotiate safe sex in sexual encounters. Adults, and particularly parents, need to be educated about the contradicting cultural, religious, and modern influences regarding multiple sexual partners and premarital sex, and how they can educate youths and protect them from the adverse consequences. Further, more research is needed in remote areas to get a better understanding of and grip on the boys and girls who are involved with risky sexual behavior, such as multiple sexual partners.

Finally, it is important to educate youths about the safe use of new media, particularly internet on their cellphones, and where to find reliable information about SRH, relationships and sex, and the possible risks involved. Schools and religious institutions could support education about the safe use of new media.

## Conclusion

A substantial proportion of youths in Bolgatanga municipality in Ghana have multiple sexual partners. Because their sexual contact is often unsafe – some youths even equate multiple sexual partners with unsafe sex – it must be seen as a risky and dangerous practice, resulting in infections and illnesses such as STIs and HIV, and for girls, unintended pregnancies, social stigmatization, and school dropout.

In this paper, the focus was on youths' conceptions of and attitude toward multiple sexual partners, and the reasons and motives behind their risky behavior. It was found that their attitude and motives are influenced by cultural traditions, by the growing importance of Islam and Christianity, and by such modern developments as increased school attendance and the use of modern media. Although both boys and girls mentioned a culture of distrust and a practice of infidelity that motivated them "to never put all their eggs in one basket," there were substantial and striking differences between the motives of boys and girls to engage in multiple sexual relationships.

These differences can be understood in the context of different cultural messages given to boys and girls. In the local cultural tradition, polygyny is accepted and still widely practiced. Although Christianity preaches monogamy, Islam sanctions polygyny. Both the local tradition and Islam tell boys that it is all right to have multiple sexual partners. Moreover, these messages are enforced by modern media, which give them the idea that sexual prowess, prestige, desire, and pleasure can be expressed by making sexual conquests.

For girls, the cultural messages are different. Although in the local cultural tradition their autonomous sexual drive is acknowledged, it was traditionally (and sometimes still is) controlled by FGM, and it was only with their husband that they should have sex. The majority of girls still obey these cultural prescriptions, which are enforced by churches and Islam. However, girls also are influenced by increased school attendance and by modern media, which results in the growing importance of peer groups and modern ideas of youths' autonomy and sexuality. Girls' motives to engage in multiple sexual relations are in the first place economically vested: They seek money for basic needs, school-related items, or luxury goods. Sometimes their (poor) families silently agree. These sexual practices are for girls even more risky than for boys, as they are more vulnerable to infections and illnesses, or to carry them unnoticed. Unwanted pregnancies and social scorn are the price they pay; boys can and often will deny fatherhood, whereas girls cannot deny their motherhood.

To understand the choices and motives of girls, it might be worthwhile to look at the context of sexuality, agency and poverty. Girls have to make their decisions in a context of serious poverty and large-scale unemployment. Even if they finish school, a future job and future income are uncertain. Their families are often unable to support them. In a situation like this, getting money by involving themselves in relationships with several, preferably wealthy, men might be a solution not only for themselves, but also for their family members. It might be not only the weaker, easily seducible girls who engage in concurrent relationships, but also the stronger, more entrepreneurial ones. They get involved in these relationships, often without being aware of all the dangers and risks they are exposing themselves to, such as infections, STIs, HIV, unwanted pregnancies, school dropout, and social stigma. Those running educational programs should keep in mind these differences in attitudes, conceptions, and motives of boys and girls, together with the larger social and cultural context.

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## References

1. Ghana Aids Commission (2012) Ghana country AIDS progress report.
2. Green EC, Mah TL, Ruark A, Hearst N (2009) A framework of sexual partnerships: risks and implications for HIV prevention in Africa. *Stud Fam Plann* 40: 63-70.
3. Leclerc-Madlala S (2009) Cultural scripts for multiple and concurrent partnerships in southern Africa: why HIV prevention needs anthropology. *Sex Health* 6: 103-110.
4. Ghana Statistical Service (GSS) (2012) Ghana multiple indicator cluster survey with enhanced malaria module and biomarker. Final report. (Final report with capital letter or remove Final report).
5. Ghana Statistical Service (GSS), Ghana Health Service (GHS), ICF Macro. Ghana demographic and health survey 2008. Calverton, Maryland, USA: Ghana Statistical Service; Noguchi Memorial Institute for Medical Research (NMIMR); ORC Macro; 2009.
6. UNICEF (2014) The state of the world's children report 2015.
7. Appiah-Agyekum NN, Suapim RH (2013) Knowledge and awareness of HIV/AIDS among high school girls in Ghana. *HIV AIDS (Auckl)* 5: 137-144.
8. Kuumuori Ganle J, Tagoe-Darko E, Mensah CM (2012) Youth, HIV/AIDS risks and sexuality in contemporary Ghana: Examining the gap between awareness and behaviour change. *Ijhs* 2: 21.
9. World Health Organization (2012) Global incidence and prevalence of selected curable sexually transmitted infections–2008. Switzerland: World Health Organization.
10. Ghana Statistical Service (GSS) (2004) Noguchi Memorial Institute for Medical Research (NMIMR), ORC Macro. Ghana demographic and health survey 2003.
11. Sundaram A, Juarez F, Bankole A, Singh S (2012) Factors associated with abortion-seeking and obtaining a safe abortion in Ghana. *Stud Fam Plann* 43: 273-286.
12. Abdul-Rahman L, Marrone G, Johansson A (2011) Trends in contraceptive use among female adolescents in Ghana. *Afr J Reprod Health* 15: 45-55.
13. Mote CV, Otupiri E, Hindin MJ (2010) Factors associated with induced abortion among women in Hohoe, Ghana. *Afr J Reprod Health* 14(4 Spec no).
14. Ghana Statistical Service (GSS) (2009) Ghana Health Service (GHS), and Macro International. Ghana Maternal Health Survey 2007.
15. Uchudi J, Magadi M, Mostazir M (2012) A multilevel analysis of the determinants of high-risk sexual behaviour in sub-Saharan Africa. *J Biosoc Sci* 44: 289-311.
16. Ankomah A (1999) Sex, love, money and AIDS: The dynamics of premarital sexual relationships in Ghana. *Sexualities* 2: 291-308.
17. Anarfi JK, Awusabo-Asare K (1993) Experimental research on sexual networking in some selected areas of Ghana. *Health Transition Review* 3: 1-15.
18. Fehringer JA, Babalola S, Kennedy CE, Kajula LJ, Mbwambo JK, et al. (2012) Community perspectives on parental influence on engagement in multiple concurrent sexual partnerships among youth in Tanzania: Implications for HIV prevention programming. *AIDS Care* 9: 1-8.
19. Karim AM, Magnani RJ, Morgan GT, Bond KC (2003) Reproductive health risk and protective factors among unmarried youth in Ghana. *Int Fam Plan Perspect* 29: 14-24.

20. Buvé A, Bishikwabo-Nsarhaza K, Mutangadura G (2002) The spread and effect of HIV-1 infection in sub-Saharan Africa. *Lancet* 359: 2011-2017.
21. Awusabo-Asare K, Annim SK (2008) Wealth status and risky sexual behaviour in Ghana and Kenya. *Appl Health Econ Health Policy* 6: 27-39.
22. Madise N, Zulu E, Ciera J (2007) Is poverty a driver for risky sexual behaviour? Evidence from national surveys of adolescents in four African countries. *Afr J Reprod Health* 11: 83-98.
23. Macaуда MM, Erickson PI, Singer MC, Santelices CC (2011) A cultural model of infidelity among African American and Puerto Rican young adults. *Anthropol Med* 18: 351-364.
24. Rondini S, Krugu JK (2009) Knowledge, attitude and practices study on reproductive health among secondary school students in Bolgatanga, upper east region, Ghana. *Afr J Reprod Health* 13: 51-66.
25. van der Geugten J, van Meijel B, den Uyl MH, de Vries NK (2013) Virginity, sex, money and desire: premarital sexual behaviour of youths in Bolgatanga Municipality, Ghana. *Afr J Reprod Health* 17: 93-106.
26. Fenteng JOD (2009) Gender role among the Krobo and Gurune ethnic groups and their implications for HIV and AIDS infection. Unpublished thesis. University of Cape Coast, Ghana.
27. Ghana Statistical Service (GSS) (2005) 2000 Population and housing census. Analysis of district data and implications for planning Upper East Region. Accra: Ghana Statistical Service.
28. Mah TL (2010) Prevalence and correlates of concurrent sexual partnerships among young people in South Africa. *Sex Transm Dis* 37: 105-108.
29. Cheney AM, Ostrach B, Marcus R, Frank C, Ball C, et al. (2014) A culture of future planning: perceptions of sexual risk among educated young adults. *Qual Health Res* 24: 1451-1462.
30. Mapfumo J, Shumba A, Zimba R, Chinyanganya P (2012) Sexual activity and prevalence of multiple sexual relationships among female students at a university campus in Zimbabwe. *Anthropologist* 14: 383-391.
31. Burrell J (2009) Could connectivity replace mobility? An analysis of internet cafe use patterns in Accra, Ghana. In: Mirjam de Bruijn, Francis Nyamnjoh, Inge Brinkman, editors. *Mobile phones: The new talking drums of everyday Africa*. Cameroon/The Netherlands: Langaa & African Studies Centre.
32. Borzekowski DL, Fobil JN, Asante KO (2006) Online access by adolescents in Accra: Ghanaian teens' use of the internet for health information. *Dev Psychol* 42: 450-458.
33. Wusu O (2013) Exposure to media content and sexual health behaviour among adolescents in Lagos metropolis, Nigeria. *Afr J Reprod Health* 17: 157-168.
34. Otutubikey Izugbara C (2005) The socio-cultural context of adolescents' notions of sex and sexuality in rural south-eastern Nigeria. *Sexualities* 8: 600-617.
35. Ostrach B, Singer M (2012) At special risk: Biopolitical vulnerability and HIV/STI syndemics among women. *Health Sociol Rev* 21: 258-271.