

## **Introduction**

The early onset of sexual activity exposes adolescents to the risk of sexually transmitted infections, unwanted pregnancies and unsafe abortions.<sup>(10;19)</sup> In sub-Saharan Africa, the risk associated with early sex is disproportionately high because sexual debut typically occurs before age 20 while contraceptive use among unmarried adolescents is relatively low.<sup>(12;15)</sup> Adolescents in urban poor settings in the sub-region are particularly vulnerable to early sexual activity due to increasing poverty in urban areas and the marginalization of the urban poor.<sup>(9;20)</sup>

Extensive research in the United States of America shows that sexual communication with adolescents reduces sexual risk-taking and delays sexual debut.<sup>(7;11;16)</sup> However, research on sexual communication and adolescent sexual behavior in sub-Saharan Africa are mixed and inconclusive.<sup>(1;3;14;18)</sup> Most studies in the sub-region do not also examine the relative influence of discussion about sex with fathers, mothers, both parents and friends and adolescent sexual behaviour.<sup>(3)</sup> The main objective of this study is therefore to examine the relationship between sexual communication with fathers, mothers, both parents and the age at first sexual intercourse among unmarried adolescents in urban poor Accra.

## **Theoretical Framework**

The main theoretical framework guiding this study is the bio-ecological framework.<sup>(4)</sup> This framework outlines a complexly interlinked set of systems in adolescents' environment that shape their development and influence their behaviour.<sup>(4;13)</sup> The first and most closest system to adolescents is the microsystem which includes parents and friends. The mesosystem deals with the relationships and interactions within the microsystem. The exosystem is concerned with community based systems and activities while the macrosystem, involves cultural values, customs, laws and the political system. The microsystem exerts the most profound influence on adolescent sexual behaviour while the other systems play complementary roles.

## **Data and Methods**

In this study we analyzed pooled data of 377 unmarried adolescents aged 15-24 years who have initiated sexual intercourse from the three waves of the Urban Health and Poverty Survey. The Urban Health and Poverty Survey is a longitudinal study conducted by the Regional Institute for Population Studies in three urban poor localities in Accra.

The outcome of interest in this study is measured by asking respondents to indicate their age at first sex. A question in all the three waves asked respondents to indicate (Yes/No) who they discussed sex-related matters with. The response categories included father, mother, friends, teacher, sisters, grandparents, uncles, aunts, religious leaders and others. We computed our predictor variable from these categories. We used linear regression models to examine the relationship between sexual communication with only friends, only fathers, only mothers and both parents only and the age at first sex controlling for key background characteristics and the year of interview.

## **Results**

The results in Table 1 show that the mean age at first sexual intercourse for the respondents is 16.9 years. The age at first sexual intercourse for males (16.8 years) is similar to females (16.9 years). The data also reveals that the age at first for adolescents in Agboghloshie which is a slum community is 16.5 years compared to 16.9 years for both Ussher Town and James Town which are non-slum poor communities (results not shown). Table 1 also shows that 8.8% of the respondents discuss sex with only their fathers. More males (12.6%) discuss sex with only fathers compared to females (5.4%). A quarter of the adolescents discuss sex related matters with only their mothers with 28.7% of males discussing sex with only their mothers compared to 22.7% of females. A quarter of the respondents also communicate with both parents only about sex with more (27.6%) males communicating to both parents only than females (23.2%). Table 1 further show that 22.8% of the adolescents discuss sex with only their friends. More males (25.9%) discuss sex with only their friends compared to females (20.2%).

Table 2 presents coefficients from multivariate linear regression models for all respondents and also by gender. Model 1 (only predictor variables entered) accounted for 2.4% of the variation in the age at first sex. In this model, sexual communication with only friends had a significant positive association with the age at first sex ( $p < 0.01$ ). Communication with only fathers, only mothers and both parents only had no significant association with age at first sex. In model 2, sexual communication with friends had a significant positive association with the age at first sex after controlling for background characteristics and the year of interview ( $p < 0.05$ ). Model 2 accounted for 27.8% of the variation in the age at first sex. Model 3 shows that none of the predictor variables had a significant association with the age

at first sex among males. In model 4, sexual communication with friends had a significant positive association with the age at first sex among females, albeit marginal ( $p < 0.10$ ).

### **Discussion, conclusion and recommendation**

Although sexual communication research in sub-Saharan Africa focuses on parent-adolescent discussion about sex, there is evidence from this study that sexual communication with friends is significantly associated with an increased age at first sexual intercourse. Even though we make no claim of causality, this finding suggests that discussion about sex with friends plays an important role in increasing the age at first sex among adolescents in urban poor Accra. This finding is similar to Berenson et al. (2006) who found a positive association between discussion about condom with friends and condom use among adolescents. A possible explanation of this result is that adolescent sexual discussion with friends is usually explicit, reciprocal and detailed. This may help to instil knowledge, confidence and skills needed to delay sexual intercourse.<sup>(6)</sup> Sutton et al. (2002) identified friends as the most important source of sexual information for adolescents over 15 years of age.

This study did not find any evidence of association between sexual communication with fathers, mothers and both parents and the age at first sex. This result is consistent with the study of Biddlecom, Awusabo-Asare & Bankole (2009) which found no significant association between sexual discussion with parents and sexual intercourse among adolescents in Ghana and Burkina Faso as well as among Malawian females and Ugandan Males. This may be due to the taboos, discomfort, indirect verbal cues, threats and warnings that characterize sexual communication with parents in the sub-region. A study by Crichton, Ibisomi & Gyimah (2012) in Nairobi's informal settlement identified some barriers of adolescent-parent sexual communication which are peculiar to urban poor residents in the sub-region. These include lack of privacy due to overcrowding, lack of time, poor motivation to engage with adolescents and stress from poverty.

In conclusion, sexual communication with friends could protect adolescents from the early onset of sexual intercourse. Two recommendations emerge from this study: (1) the need to integrate adolescents' friends into interventions aimed at disseminating sexual information and (2) the need to improve sexual communication between adolescents and their parents.

**Table 1 Mean age at first sexual intercourse and frequency of sexual communication**

Age at first sexual Intercourse	All (n=377)	Males (n=174)	Females (n=203)
Mean (Standard Deviation)	16.9 years (2.85)	16.8 years (3.33)	16.9 years (2.37)
<b>Sources of sexual communication</b>			
<b>Fathers only</b>			
Yes	8.8	12.6	5.4
No	91.2	87.4	94.6
<b>Mothers only</b>			
Yes	25.5	28.7	22.7
No	74.5	71.3	77.3
<b>Both parents only</b>			
Yes	25.2	27.6	23.2
No	74.8	72.4	76.8
<b>Friends only</b>			
Yes	22.8	25.9	20.2
No	77.2	74.1	79.8

**Source:** Urban Health of Poverty Survey (2010, 2011 & 2013)

**Table 2 Linear regression models of sexual communication and age at first sex**

Sexual communication	Model 1 B [95% CI]	Model 2 B [95% CI]	Model 3 B [95% CI]	Model 4 B [95% CI]
Sex communication with only friends	1.041*** [.264-1.818]	.700** [.016 - 1.385]	.849 [-.375 - 2.072]	.718* [-.062 - 1.497]
Age of respondents	-	.617*** [.505 - .730]	.687*** [.478 - .896]	.554*** [.432 - .677]
Respondents in school	-	.698** [.013 - 1.382]	.719 [-.512 - 1.949]	.730* [-.041 - 1.501]
Locality of residence	-	-.351** [-.699 - -.002]	3.322 [-9.364 - 16.007]	8.126* [-.201 - 16.453]
Highest education of respondents' mother	-	-.190 [-.397 - .016]	-.187 [-.590 - .215]	-.209 [-.427 - .010]
<b>Intercept</b>	16.699	162.217	161.511	10.346
<b>R<sup>2</sup></b>	.023	.274	.260	.342

**Source:** Urban Health and Poverty Survey (2010, 2011 & 2013)

*Unstandardized coefficients of significant variables presented \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01*

**Variables not shown:** communication with fathers only, mothers only, both parents only, sex, highest education of fathers, living arrangement and year of interview

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