


Adolescent Girl–Mother Communication on Sexual and Reproductive Health Issues Among Students in Fiche Town, Oromia, Central Ethiopia

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Mulugeta Feyissa¹, Tadesse Nigussie² , Yitagesu Mamo², and Temesgen Aferu²

Abstract

Background: Adolescents who have communication about sexual and reproductive health (SRH) with their parents are less likely to participate in risky sexual behaviors and to utilize modern contraceptives. However, communication on SRH issues between adolescents and their parents continues to be below the desired goals in low- and middle-income countries. **Objective:** To assess SRH communication between adolescent girls and their mothers among students in secondary and preparatory schools in Fiche town, Oromia, Central Ethiopia. **Method:** An institution-based cross-sectional study was conducted from March 27 to March 30, 2017, using a structured self-administered questionnaire. A total of 181 adolescent female students selected from 2 schools in the town participated in the study. Data were collected on sociodemographic characteristics, student-mother communication, and knowledge about and attitudes toward SRH issues. Multivariable logistic regression analysis was performed, and variables with a *P* value less than .05 were considered statistically significant. **Results:** A total of 103 (56.9%) of the students had discussed SRH issues with their mothers. The mothers' educational status (ie, primary school and above, adjusted odds ratio [AOR] = 10.01, 95% CI = 3.55-28.19; the student living with friends, AOR = 5.29, 95% CI = 1.09-25.47; the students' knowledge about SRH issues, AOR = 8.57, 95% CI = 3.61-20.35; and students' attitude toward SRH issues, AOR = 2.79, 95% CI = 1.26-6.15) were identified as independent positive predictors of student-mother communication on selected SRH issues. **Conclusion:** More than half of the study participants had communication on SRH issues with their mothers. SRH communication was positively associated with maternal educational status, the students' living with friends, and the student's knowledge of and attitude toward SRH issues.

Keywords

sexual and reproductive health, communication, adolescent girls, student, mother, Fiche

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Introduction

As they transition from childhood to adolescence into adulthood, all individuals show developing changes and behaviors. Adolescence, the developmental stage between the ages of 10 and 19 years, in this regard involves a band of physical, cognitive, behavioral, and psychosocial transformation. Individuals in this age group manifest different and evolving needs depending on their personal development stages and life circumstances. They are learning to think abstractly, which allows them to design their futures. The opportunities and challenges that adolescents, especially the females come through as they grow up, need parental

assistance (parent-daughter communication), for example, the issue of sexual and reproductive health (SRH). Adolescent sexual and reproductive health (ASRH) programs should also have to develop approaches that specifically focus on young adolescents, tailoring interventions

¹Selale University, Fiche, Ethiopia

²Mizan Tepi University, Mizan Aman, Ethiopia

Corresponding Author:

Mulugeta Feyissa Garedeu, Department of Midwifery, College of Health Sciences, Selale University, Fiche, 1000, Ethiopia.
Email: mulkb21@gmail.com



that are appropriate to their level of maturity, experience, and development.^{1,2}

Adolescents who have communication on SRH issues with their parents are less likely to participate in risky sexual behaviors.³ Awareness about modern contraceptives among adolescent girls who communicate with their parents about SRH is also higher compared with those who never communicate.⁴ Despite its importance and positive long-term outcomes, communication on SRH issues between adolescents and their parents has been shown to be low in low- and middle-income countries, mainly because of cultural taboo, shame, and lack of communication skills.⁵ Consequently, sub-Saharan Africa adolescent girls have been shown to be twice as affected by HIV infection as adult women. Adolescents, especially girls, are often vulnerable to HIV infection because of their lack of social status and their economic vulnerability.⁶

Factors related to adolescent-parent communication have been documented to be (for the adolescent): experience of sexual pleasure, following social media, using a condom, talking to friends about sex-related issues, and feeling ashamed of talking about sexual issue.⁷

Measuring both mothers' and daughters' perception of communication on sexual behaviors can provide insights into family characteristics that may be important targets for sexual health promotion programs for adolescent girls.⁸ Almost all studies conducted in Ethiopia focused on adolescent-parent communication in general,^{5,9-16} while this study addressed daughter-mother communication, which is critical in addressing gender-specific concerns problems like unwanted pregnancy and abortion. The study also assessed factors that influence daughter-mother communication.

Materials and Methods

Study Setting and Period

The study was conducted from March 27 to March 30, 2017, in secondary and preparatory schools located in Fiche town. The town is located in the central part of Ethiopia, 110 kilometers away from Addis Ababa (the capital city of Ethiopia). One secondary and 1 preparatory school, both of which are public, are located in the town. A total of 2342 students, of which 1173 (50.1%) were females were attending school by academic year 2016/2017. There were a total of 40 sections in both schools; each section contained 60 students on average.¹⁷

Study Design

A school-based cross-sectional study design was employed.

Source and Study Population. All regular adolescent female students attending secondary and preparatory schools in

Fiche town were the source population, while randomly selected female adolescents who fulfilled the inclusion criteria were the study population.

Inclusion and Exclusion Criteria. All regular secondary and preparatory school female students aged 10 to 24 years who were willing to participate in the study were included. Students who had a sight problem and were sick at the time of data collection were excluded.

Sample Size

A total of 181 female students were interviewed. Selections of the study participants were done from both *Abdissa Aga* (taught grades 9 and 10) and *Fiche preparatory school* (consisting of grades 11 and 12). The sample was first allocated proportionally to both schools. The share of each school was then allocated proportionally to each grade in the school. The sampling frame was also prepared from the already existing students' registration book (roster) in the respective schools' records office. The sections were selected randomly from each grade, and the share of each grade was then proportionally allocated to the randomly selected sections. The study participants from each of the selected sections were randomly recruited.

Data Collection Tools

Data were collected using a self-administered questionnaire adapted from studies conducted on this issue previously.^{4,5,8} The questionnaire contained the sociodemographic characteristics of the students and parents, knowledge and attitude of students about SRH issues, and factors affecting parent-student communication of SRH issues. The questionnaire was prepared in English and then translated into the local language (both Afan Oromo and Amharic). The Afan Oromo and Amharic versions were then back-translated to English to check message consistency. The Afan Oromo version questionnaire was pretested on 5% of the study sample in a similar area outside the study site (at Degem secondary and preparatory school). Necessary modifications were made to the tools in light of the pretest made before the actual data collection.

Data Collection Procedure

The revised questionnaires were distributed by data collectors to randomly selected students who met the inclusion criteria. The distribution was made at the same time in both schools to prevent the contamination of information. Supervisors followed the questionnaire filling activity and helped participants on difficulties faced in the completion process at both schools.

Data Processing and Analysis

To ensure the quality of data, the entire filled questionnaires were checked for completeness and consistency. Data were entered using Epi Data Manager version 4.0.2.101 with double-entry verification and exported to SPSS version 21 for statistical analysis. Descriptive statistical analysis was used to compute frequency, percentage and mean for dependent and independent variables. Binary logistic regression analysis was used to ascertain the association between the outcome variable and explanatory variables. Variables with an association in the bivariate analysis ($P \leq .25$) underwent a multivariable analysis to determine the independent predictors of adolescent-parent communication on sexual and reproductive health issues. P values $< .05$ were considered statistically significant.

Study Variables

The dependent variable was parent-adolescent communication/discussion on SRH issues. The independent variables considered included sociodemographic characteristics like age of students, educational status of the parents, the living arrangement of students, family size, and family income. Individual factors like knowledge of students about SRH issues, attitude of students about SRH issues, cultural factors and beliefs/taboo were also the independent variables considered.

Operational Definitions

- *Mother*: This study refers to the bearer and/or guardian of the student.
- *Student-mother communication*: In this particular study context is a simple discussion on issues like sexually transmitted infections (STIs), HIV/AIDS, sexual intercourse, menstruation, and unintended pregnancy in the past 6 months before the commencement of the study.
- *SRH knowledgeable*: students who scored points more than the mean score out of prepared knowledge questions on selected SRH topics.
- *Positive attitude toward SRH communication*: Those respondents who had a positive stance toward SRH communication and who scored points more than the mean score out of the prepared attitude questions.
- *Negative attitude toward SRH communication*: Those respondents who had a negative outlook toward SRH communication and who scored points less than the mean score out of the prepared attitude questions.

Data Quality Control

Data collectors were adolescents who completed grade 12. Half-day training was given to data collectors on the objectives of the study, sampling procedure, and how to check the

Table 1. Sociodemographic Characteristics of Female Students Attending Secondary and Preparatory Schools in the Fiche Town (N = 181) and Their Mothers, June 2017.

Variable	Category	Frequency	Percent
Age (in years)	<18	104	57.5
	≥ 18	77	42.5
Grade	9	88	48.6
	10	63	34.8
	11	17	9.4
	12	13	7.2
Religion	Orthodox Christian	161	89.0
	Protestant	19	10.5
	Others ^a	1	0.5
Ethnicity	Oromo	172	95.0
	Amhara	9	5.0
Mother's educational status	Do not read and write	63	34.8
	Primary	62	34.3
	Secondary	11	6.1
	Above secondary	45	24.9
Mother's occupational status	Housewife	103	56.9
	Government employee	45	24.9
	Others ^b	33	18.2

^aWakefata.

^bMerchant and farmer.

completeness of the questionnaire. The questionnaire was also pretested before the start of the actual data collection.

Results

Sociodemographic Characteristics of the Study Participants

A total of 181 self-administered questionnaires were distributed to adolescent female students in Fiche secondary and preparatory schools. All students returned the questionnaires with complete answers. The mean age of the respondents was 17.01 (± 1.42) years. Most of the students were grade 9 (88, 48.6%). Almost all the students were Oromo in ethnicity (172, 95.0%) and Orthodox Christians in religion (161, 89.0%). The majority of the respondents' mothers (63, 34.8%) were unable to read and write, and were housewives in occupation (103, 56.9%) (Table 1).

Knowledge of Adolescent Female Students on Selected SRH Issues

Of the 181 respondents, 150 (82.9%) had ever heard about SRH issues. A total of 140 (77.3%) respondents had heard about SRH issues from school, while 27(18%) heard from mass media. Of the total participants, 101 (55.8%) had good knowledge regarding SRH issues. Almost all respondents (177, 97.8%) had awareness of STIs and

Table 2. Sexual and Reproductive Health Issues Awareness Among Female Students Attending Secondary and Preparatory Schools in Fiche Town, Central Ethiopia, June 2017.

Variables		Categories	Number	Percent
Awareness of sexually transmitted infections	HIV	Yes	175	96.7
		No	6	3.3
	Syphilis	Yes	108	59.7
		No	73	40.3
	Gonorrhea	Yes	108	59.7
		No	73	40.3
	Chancroid	Yes	32	17.7
		No	149	82.3
Awareness of modern contraceptives	Oral contraceptive pills	Yes	105	58.0
		No	75	41.4
	Male condom	Yes	118	65.6
		No	62	34.4
	Depo provera	Yes	57	31.7
		No	123	68.3
	Implant	Yes	64	35.6
		No	116	64.4
	Intra uterine contraceptive device	Yes	48	26.8
		No	131	73.2
Awareness of appropriate age of first menses	Yes	98	54.1	
	No	83	45.9	

about 154 (85.1%) knew the contraceptive methods available (Table 2).

Attitude of the Study Participants on Selected SRH Issues

The majority of the respondents (167, 92.3%) believed that premarital sex was not acceptable. Concerning first sexual intercourse, 84 (46.4%) believed that parent-adolescent SRH communication could delay first sexual intercourse. Eighty-four (46.4%) of respondents agreed that unmarried couples should use a condom if they want to have sex. Concerning the protection of condoms against STIs and HIV, 86 (47.5%) of respondents believed that condoms could protect against STIs and HIV.

Adolescent Female–Mother SRH Communication

A total of 151 (83.4%) participants in the current study reported that it is important to discuss SRH issues with parents. In all, 103 (56.9%) students had ever discussed at least 1 topic of SRH issues with their mothers. Accordingly, 38 (21.0%) communicated about contraception, 50 (27.6%) discussed the issue of HIV and other STIs, while 31 (17.1%) discussed unwanted pregnancy and abortion. Only

5 (2.8%) of the respondents held a discussion with their mothers about sexual intercourse.

Factors Associated With Adolescent Female–Mother SRH Communication

Binary logistic regression analysis was conducted to see the relationship between the dependent variable (students' discussion with their mothers) and the independent variables. Age group, current living arrangement, educational status of mothers, occupational status of mothers, students' knowledge about SRH issues, and students' attitude toward SRH issues were found to have a P value $<.25$ in the bivariate analysis. The multivariable analysis conducted on the above variables indicated that mothers' educational status (adjusted odds ratio [AOR] = 10.01, 95% CI = 3.55-28.19), current living arrangement (AOR = 5.29, 95% CI = 1.09-25.47), students' knowledge about SRH issues (AOR = 8.57, 95% CI = 3.61-20.35), and students' attitude toward SRH issues (AOR = 2.79, 95% CI = 1.26-6.15) were independent predictors of girl-mother communication on at least 1 sexual and reproductive health issue (Table 3).

Discussion

This study aimed to assess the status of communication between adolescent female students and their mothers on SRH issues. The study revealed that 56.9% of the adolescent girls in the selected schools had communication with their mothers on SRH issues. This figure is higher than that of a study conducted on SRH communication and awareness of contraceptive methods among secondary school female students in Northern Ethiopia, which showed 43.5% had communication with their parents.⁴ It is also higher than a study conducted among Debre Markos preparatory school students, Northern Ethiopia, which showed that only 28.9% of students communicated with their parents on SRH issues.¹⁸ The difference might be because the study conducted in Debre Markos included both sexes in which males communicated less about SRH issues. Communication results from the current study was lower than a study conducted in Bangladesh, where 71% of the respondents reported there was communication between daughters and mothers.¹⁹

Students who live with their friends during the school year demonstrated that they talk more about SRH issues. Thus, they may seek clarification from their mothers about the SRH issues or may be more comfortable discussing these issues.

The study revealed that students who had good knowledge about SRH issues were more likely to discuss the issues with their mothers compared with those who had poor knowledge about the issues. This result is supported by a study conducted in Bangladesh.²⁰ A study conducted among Debre Markos preparatory school students in

Table 3. Factors Associated With Adolescent Female Student–Mother Sexual and Reproductive Health Communication in Secondary and Preparatory Schools, Fiche Town, Central Ethiopia, June 2017.

Variables	Categories	Discussion		COR (95% CI)	AOR (95% CI)
		Yes	No		
Age group (in years)	<18	44	60	1	1
	≥18	22	55	0.55 (0.29-1.02)	0.46 (0.20-1.04)
Mothers' educational status	Do not read and write	8	55	1	1
	Primary and above	58	60	6.65 (2.91-15.16)	10.01 (3.55-28.19)*
Mothers' occupational status	Housewife	16	35	1	1
	Employed	50	80	1.37 (0.69-2.72)	0.82 (0.33-2.02)
Current living arrangement	With parents	38	74	1.08 (0.45-2.63)	0.72 (0.23-2.30)
	With friends ^a	13	7	3.92 (1.17-13.19)	5.29 (1.09-25.47)*
	Alone	6	15	0.84 (0.25-2.90)	1.31 (0.27-6.31)
	With relatives	9	16	1	1
Students' knowledge about SRH issues	Low	12	47	1	1
	High	54	68	6.51 (3.15-13.48)	8.57 (3.61-20.35)*
Students' attitude toward SRH issues	Negative	25	65	1	1
	Positive	41	50	2.13 (1.15-3.96)	2.79 (1.26-6.15)*

Abbreviations: COR, crude odds ratio; AOR, adjusted odds ratio; SRH, sexual and reproductive health.

^aHigh schools are far from parents' home and hence students live near to the school renting house and join their family on weekends, during semester break, or summer break (only for rural students).

* $P < .05$.

Northern Ethiopia also showed that students with good knowledge were more likely to communicate with their parents compared with those who had poor knowledge. This might be because students who know about SRH may ask their mothers to know more about the issue. Similarly, students who had positive attitudes toward SRH issues were more likely to communicate with their mothers when compared to students with a negative attitude toward SRH issues.

Limitation of the Study

Social desirability bias might occur among respondents because the study deals with sensitive issues. Also, the study design is cross-sectional and hence cannot indicate causality.

Conclusion

In this study, more than half of the adolescent girls had recent communication with their mothers on SRH issues. The mothers' educational status, the students current living arrangements, their knowledge about SRH issues and attitudes toward SRH issues were independent positive predictors of student-mother communication. Future efforts to increasing mother-daughter communication could be studied.

Declaration of Conflicting Interests

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Ethical Approval

Ethical approval and clearance were received from the Research and Ethics Committee (REC) of the School of Allied Health Sciences, Addis Ababa University. The letter of permission was written to the Regional Education Bureau, again to the zonal school office, and finally to each school to conduct the study. The purpose of the study was explained to the respondents, and written consent was obtained before starting data collection.

ORCID iD

Tadesse Nigussie  <https://orcid.org/0000-0003-3123-5809>

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