

Parental Communication On Sexual And Reproductive Health Issues To Their Adolescents And Affecting Factors At Asella Town, Ethiopia; A Community Based Cross Sectional Study

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Abstract

Background: Parents' communication on sexual and reproductive health issues with their adolescent plays a great role in preventing morbidity and mortality associated with sexual behavior. However lack of parent to adolescent communication was a serious problem in Ethiopia resulted in teenage pregnancy, unsafe abortions, sexually transmitted infections, school problems, and other sexual risk behaviors. Parents have high responsibility on cultivating their son and daughter regarding to sexual and reproductive health issues. Therefore, the aim of this study was to investigate the level of parent's communication with their adolescents and affecting factors in Ethiopia.

Methods: A community based cross- sectional survey was conducted on 347 randomly selected parents of 10–19 year old teenagers. A random sampling was used to sample the study participants. A pre-tested and structured questionnaire as used to collect data. A binary and multivariable logistic regression analysis was conducted for adjusted odds ratio (AOR) at 95% confidence interval (CI), variables at a *P-value* <0.05 were considered as significant association.

Results: The study showed that, 23.1% of parents had communication on SRH issues with their adolescents. Factors computed for adjusted odds ratio [AOR], such as parents completed some form of education (being grades 9–12 [AOR= 2.42, 95% CI: 1.06-5.53]; diploma and above [AOR=4.78, 95% CI: 2.03-11.21]; having good knowledge [AOR =3.08, 95% CI: 1.89-5.39]; and being having positive attitudes [AOR 3.03, 95% CI: 1.37-6.70] were significantly affect the communication.

Conclusion: This study revealed that a low proportion of parents' communication on sexual and reproductive health issues with their adolescents and multidimensional factors appear to determine their discussion. Thus, promotion of parent to adolescent communication, parents training and addressing the importance of parent to young people communication to all parents along with health care providers was important.

Plain English Summary

Parent communication on sexual and reproductive health (SRH) with their adolescent is one of the potential sources of information for adolescents on the issues. Agreed that adolescents in Ethiopia are faced with increasing SRH-related risks, it is important to understand how parents communicate about SRH to their adolescents from the parents' perspectives. A community based cross-sectional study targeting parents was conducted at eight (8) kebeles of Asella town, Arsi zone, Ethiopia based on interview survey. Three hundred forty seven (347) parents having children of 10-19 years in selected household were included. The majority of the parents 82.4%, agreed on the need of discussions with their adolescents and 72% had the good knowledge of SRH issues. However in this study, the level of parent-adolescent discussion on SRH issues was very low, 23.1%. The find showed that the main reason for not talking with their adolescents; perceived it may initiate adolescent for sexual practice, culturally unacceptable, shame/taboo, lack of awareness and being too busy. Also, the probability of discussion

was found to be significantly higher among parents who had completed some form of education, parents who had good knowledge and positive attitude towards SRH issues as compared with those who didn't have good knowledge and positive attitude on the topic. This study suggests for conducting qualitative research investigating the socio-cultural context within which the SRH communications happen.

Introduction

The World Health Organization (WHO) defines an adolescent as an individual in the age group 10 to 19 years old [1]. Adolescence is the stage of transition from childhood to adulthood, which characterized by physiological, psychological and social changes. In addition, adolescence is an occasion to consider health promotion efforts on reducing the risk of negative sexual and reproductive health (SRH) outcomes, such as teen births and sexually transmitted infections (STIs)[1,2]. Evidences have shown that when adolescents mostly girls communicate to their parents about sexual behaviors, pregnancy prevention (contraception) and STIs they are more likely to engage in safe sexual behaviors, including abstinence and protective behaviors that prevent pregnancy and STIs [2, 3]. In Ethiopia, more than 35% of the total population comprises from adolescents. This big number is still suffer from life threatening of sexual and reproductive health (SRH) risks related to early marriage, unwanted pregnancies, unsafe abortions, STIs including HIV/AIDS[4]. Parent-teenager communication may be particularly important, especially when it comes to reducing engagement in sexual risk behaviors [2, 4]. It is believed that, family often has the power to guide teenagers' development in sexual health issues, encouraging them to practice reasonable sexual behavior and develop good personal decision-making skills [4].

An adolescent in stable family and discuss sexuality and reproductive health issue is more likely to remain sexually abstinent, postpone intercourse, have one partner, and use contraception [5]. Findings showed that, in Ethiopia many of adolescents often lack strong and stable relationships with their parents to openly talk about SRH issues. Consequently, many teenagers do not have access to reliable information regarding their SRH needs [6]. Even though parents are the main sources of information for SRH issues, there remains a silence between many parents and their adolescent children to discuss on these issues. Studies have shown that only 27%, 19%, and 35.0% of parents in the Tanzania, Rwanda and Ethiopia, respectively, had communicated about SRH with their adolescents [7-9].

Regarding SRH many adolescents discuss with their peers who may not have a proper knowledge on these matters and as a result gain defective knowledge. This misinformation can make adolescents vulnerable to unprotected sex, unwanted pregnancy, sexually transmitted diseases, and unsafe abortions [10]. Study showed that most of people become sexually active during adolescence [11]. However, the use of contraceptives and condoms among these people are low and unprotected sex is the second largest contributor to health risk in terms of the burden of disease in young people [11]. Globally, each year there are at least hundred million cases of STIs and more than 2.5 million unsafe abortions were reported among adolescent people [12]. In Ethiopia, 13% adolescents face challenge of early marriage, among this early childbearing is more common at rural than in urban areas 15% and 5%, respectively [13]. Study

revealed that teenage mothers are more likely to experience adverse pregnancy outcomes than adults [14].

Parent-adolescent discussions regarding of sexuality or SRH issues are more likely to reduce adolescent risk-taking sexual behaviors when combined with effective parent communication with their adolescent of SRH matters [[15]

Even though parent-adolescent sexual communication is a primary means of transmitting sexual values, beliefs, expectations, and knowledge between parents and children, proportion of parents who discussed with their adolescent was low[16]. Instead, study showed that the most important sources of information on SRH for adolescents were none family members like friends [17].

Adolescence is a critical developmental period when they begin to develop their romantic and sexual identities and is an important time to learn about how to engage in healthy idealistic and sexual behavior [3]. Parent-adolescent communication regarding SRH issues is an important and effective means of encouraging adolescents to adopt responsible sexual and reproductive behaviors [3, 17]. Parents have high responsibility on cultivating their son and daughter regarding to sexual and reproductive health issues. In Ethiopia adolescents were comprised of the majority of the population, who has significant contribution to maternal and neonatal mortality. As far as my knowledge is concerned, this is untapped research area in Ethiopia. Therefore, this cross-sectional study will have good contribution to the specific field of reproductive health. Hence, this study was conducted to investigate parent's communication with adolescent on SRH issues and affecting factors. The study was used to provide base line information for policy makers, program planners and implementers to design appropriate interventions to address the SRH issues of adolescents.

Methods And Materials

Study setting and period

The study was conducted in Asella town, Arsi zone, Ethiopia from May 1-30, 2019. Asella is capital town of West Arsi Zone located 175 kilometers from Addis Ababa. According to the information obtained from the town statistics office report, the total population of the town was 67,269, of whom 33,826 were men and 33,443 were women and having 19527 households. For the administrative purpose, the town was divided into 8 administrative units (kebele). In the town there are 1 teaching public hospital with 2 health centers and 1 private hospital with one youth clinic family guidance association of Ethiopia (FGAE).

Study design

A community based cross-sectional study design was conducted quantitatively.

Study participants

All parents/guardians living in Asella town having children of 10-19 years in selected households (HHs) were study populations whereas parents in selected house hold having at least one adolescent during data collection period was considered as study unit.

Inclusion and exclusion criteria

Parents/guardians having at least one adolescent in the study area were included whereas parents who were severely ill and unable to hear and speak were excluded from the interview. For parents who have male adolescents the fathers/ male guardians were interviewed whereas, for female adolescents mother/female guardians were interviewed.

Sample Size determination

Sample size was calculated using single population proportion formula with the following assumptions: proportion of parent to adolescent communication 28.76% in previous study in Ethiopia [18], confidence interval 95%, margin of error 5%, and with 10% non-response rate. The formula for calculating the sample size is

$$n = \frac{(Z_{\alpha/2})^2 \times p(1-p)}{d^2} = \frac{(1.96)^2 \times 0.28(1-0.287)}{(0.05)^2} = 315, \text{ Then } n = 315 + 31.5 = 347.$$

Sampling techniques and Procedure

Asella town has eight (8) Kebeles (smallest administrative unit in Ethiopia). The study was conducted at 8 kebeles with a total of 19527 households (HHs). Among these 347 HHs were contacted for the study. The first house hold was selected by standing at each kebele office a random number (lottery) to identify one of these households as the starting household (HHs) for the selected kebeles direction and data collection continued on the right-hand side of this starting house using systematic sampling technique for each kebele (Every $k^{th} = \text{Total HHS at each kebele} / \text{sample size}$) until the required proportionally allocated number reached for the sample. The number of households to be included in each kebele was determined in proportion to the total number of households in each kebele (see Fig.1). An available HHs parents during data collection at home was interviewed. During data collection the closed household were revisited by interviewer two times at different time intervals and then those failed to get that HH open or parent from the selected household was not available during the data collection the next nearest HH was interviewed.

Data collection procedure and measurement

Trained midwives collected the data by face to face interview using a structured standard questionnaire that was adapted by reviewing relevant literatures [18, 21]. To maintain the reliability of the tool the questionnaire was prepared in English and then translated to regional language, Afaan Oromo and back

to English by expertise in both languages. The data collectors were trained for two days about the objective of the study, the handling of study participants, and other ethical issues.

The questionnaires were pre-tested on 5% of participants out of the study participants 1 week ahead of actual data collection and further refined based on the results. The data was monitored daily during collection. Collected data was checked for completeness and consistency during interview and at the end of each day. The questionnaire consisted of socio-demographic characteristics, knowledge about SRH, attitude towards SRH, and discussion of SRH related question. The interview was conducted in a private place and under supervision of the principal investigators.

Data management and analysis

The data was collected through the structured questionnaire was compiled, reviewed, coded and entered into Epi- Info version 7.1.2 and exported to SPSS version 23 for analysis. Data was checked and cleaned for its completeness and errors in coding and entering before analysis. To explain the study population in relation to relevant variables, frequencies tables, graphs and text was used. Dependent variables were computed from responses to SRH communications and were dichotomized as “Yes” (coded as “1”) and “No” (coded as “0”). Then, All variables having P value < 0.25 had significant association from binary logistic regression was entered to multiple logistic regression analysis to determine independent associated factor of parent-adolescent communication on SRH issues by controlling the effect of possible confounder, significant statistical association was determined by using AOR at 95% confidence interval(CI) and P value < 0.05 .

Operational definition

- **Adolescent:**
Individual's teenagers between the age group of 10 to 19 years old [1].
- **Parents:**
Biological parents/guardian parent but it does not include elder siblings [11].
- **Communications on SRH issues:**
Parents/guardian who discussed at least two SRH issues (condom, STIs /HIV/AIDS, sexual intercourse, menstruation, unwanted pregnancy, contraception, physical and psychological changes during puberty) with their adolescents in the last 12 months [11,18].
- **Knowledgeable on SRH:**
Parents who scored above summed mean score value of the knowledge questions whereas those who scored below or equal calculated mean value was considered as not knowledgeable[11,18].
- **Positive attitude:**
Respondents who scored above the mean of the attitudinal questions while those who scored below

or equal the mean value was considered as negative attitude [11, 18].

Results

Socio-demographic characteristics of respondents

In this study a total of 347, parents were interviewed giving 100% response rate. The mean age of study participants was 45.9 (± 11 sd) years. As shown in (Table, 1) below, among the study participants, 173 (49.9%) were Oromo by ethnic group and 151(43.5%), of them were orthodox in religion. Majority of the respondents were females 205 (59.1%), regarding marital status majority, 282 (81.3%) was live together and housewives 139 (40.1%), and 128 (36.9%) educated primary school and 162(46.7%) had (3-5) family size.

Table1: Socio-demographic characteristics of respondents, Asella town, Ethiopia, June, 2019

Variable /Categories	Frequency	Percentage
Age		
<35years	64	18.4
35-45years	128	36.9
>45years	155	44.7
Sex		
Male	142	40.9
Female	205	59.1
Educational level		
Illiterate	85	24.5
Primary[1-8]	128	36.9
Secondary[9-12]	46	13.3
Diploma and above	88	25.4
Marital status		
Married/ was live together	282	81.3
Divorced	39	11.2
Widowed	26	7.5
Family size		
[1-2]	122	35.2
[3-5]	162	46.7
>5	63	18.2
Religion		
Orthodox	151	43.5
Muslim	114	32.9
Protestant	80	23.1
*Others	2	.6
Ethnicity		

Oromo	173	49.9
Amhara	117	33.7
Gurage	56	16.1
**others	1	.3
Occupation		
Housewife	139	40.1
Government employer	73	21
Farmer	60	17.3
Merchant	62	17.9
Daily laborer	13	3.7
Monthly income		
<500 Ethiopian Birr(ETB)	70	20.2
500-1000ETB	87	25.1
1000 and above ETB	190	54.8

Key= *Others (Wakefata , Adventist & Catholic) **Others could be (Tigire, & walyita

Knowledge on sexual reproductive health issues

Parents' knowledge of reproductive health issues was assessed by asking a set of close ended questions adapted from previous study [18, 23] to identify their knowledge of SRH issues. Out of these 250 (72%) were knowledgeable of SRH issues. Specific components of SRH mentioned by the parents were; family planning 93.7%, STDs 73%, and early marriage 52.4%. When asked about the behavioral and physical changes during adolescence, majority 92.8% breast enlargement and 90.5% beginning of menses on females and change in voice for males 84.7%. Among parents asked about knowledge contraceptives methods, majority had awareness of pills 91.6%, injection 92.5%, implant 82.4%, Natural /calendar 8.1%, IUCD 79.5%, condom 79.5%, emergency contraceptives 33.4%.(Fig,1). Regarding of the consequences of unprotected sex, the majority reported that leads for STD /HIV 75%, unwanted pregnancy 66%, unsafe abortion 28.2%, and school drop 90.2%.

Parent's attitude and suggestions on SRH discussion

Attitude of parents towards SRH issues discussion was measured by a set of questions using the liker scale. The majority of the parents 82.4%, agreed on the need of discussions with their adolescents, 89.6% strongly agree to encourage adolescents to ask about SRH information, and 76.4% agreed abstinence of sex rather than other contraceptives. Around 4.3% of parents think that discussion about sexuality will make adolescents promiscuous and 22.8% of parents approved the use of condom by their adolescents. In general a combined score for the five questions indicated that 77.5% of parents had positive attitude towards reproductive health and its discussion (Fig: 2). Among parents asked their suggestions of SRH communication with their adolescents, majority of parents recommended that adolescents should get adequate information of SRH issues at school 95.4%, through mass media 87%, at home 13.8% and 15% at religious area. Out of parents asked about their adolescents future sexual behaviors 79.5% were worried about it and 93.4% of them did not accept premarital sex.

Parent-adolescent communication and hindering reasons on SRH matters

In this case participants were asked by Yes or NO question whether they have ever discussed with their adolescents about SRH. Even though majority, 78% of parents have positive attitude towards parent-adolescents SRH discussion, this study showed that only, 23.1% of the respondents had discussed at least two components of SRH issues in the last 12 months. Out of the discussions had been made 60%, and 40.3% were done with their daughter and son respectively. The find showed that the majority of female parents prefer to communicate with their daughters 50.7% while male parents had been discussed with sons and daughters, 53.1%. The major topics of the discussions were about STIs/HIV/AIDS 90.2%, abstain 74.2%, early marriage 63.89%, condom 40.02%, and unwanted pregnancy, 40.5%. As seen in (Figure: 3), the most common reason for not talking with their adolescents; majority 77.5%, perceived it may initiate adolescent for sexual practice, culturally unacceptable 47.3%, difficult to explain 58.2%, shame/taboo 53%, lack of awareness 53.9% and lack of time/too busy 25.6%

Factors associated with SRH communication

As indicated in Table: 2, below. A binary logistic regression analysis showed that parents’ educational status, marital status, religion, occupations, family size, attitude and knowledge of parents were significantly associated with parent-adolescent discussion. In multivariate logistic regression all significant variables mentioned above and those with P-value less than 0.25 in the crude analysis were again entered in to multivariate logistic model to control confounding effect. Hence, the probability of discussion was found to be significantly higher among parents who had completed some form of education: grades 9– 12 (AOR= 2.423, 95% CI: 1.062-5.529), diploma and above (AOR =4.775, 95% CI: 2.034-11.213). However parents’ marital status divorced was 69% had lower tendency to discuss on SRH issues (AOR= .314, 95% CI: .117-.842). Parents who have good knowledge and positive attitude towards SRH issues are almost similarly three times (AOR= 3.086, 95% CI: 1.886 5.395; AOR= 3.034, 95% CI: 1.373-6.704) higher in discussing about SRH than their counterparts, respectively.

Table 2: Predictors of parent –adolescent discussions on reproductive health issues, Asella town, Arsi zone, Ethiopia, June, 2019 (n = 347).

Variables		Discussion on SRH issues		COR AOR(95%CI)	
		Not	Yes		
Educational status	Illiterate	48	37	1	1
	Primary(1-8)	100	28	1.31(1.44, 3.95)	22 (.39, 3.77)
	Secondary(9-12)	40	6	2.45(1.097, 5.53)	22 (1.06, 5.53)
	Diploma & above	79	9	6.76(3.00, 15.27)	22 (2.03, 11.2)
Marital status	Widowed	198	34	1	1
	Single/guardian	35	15	2.40(1.23, 5.20)	51 (1.13, 5.15)
	Divorced	23	16	4.05(1.94, 8.47)	41 (1.47, 7.01)
	Live together	11	15	7.94(3.36, 18.36)	41 (1.26, 8.89)
Family size	1-2	87	35	1	1
	3-5	135	27	.49(.28,.87)	64 (.34, 1.22)
	>5	45	18	.99(.50, 1.94)	108 (.50, 2.31)
Knowledge	Not knowledgeable	38	59	1	
	knowledgeable	42	208	3.10(1.88, 5.33)	101 (1.66, 5.44)
Attitude	Negative	72	197	1	1
	Positive	70	8	3.10(1.46, 6.39)	73 (1.37, 6.70)

Key =*COR=Crud Odd Ratio, AOR= Adjusted Odd Ratio

Discussion

A parent-adolescent discussion about SRH issues is a primary means for transmitting sexual values, beliefs, information and knowledge between parents and adolescents through communication. This kind of discussion is most likely to promote healthy sexual development and reduce sexual risks when parents

are openly discussed, skilled, and comfortable in their discussion of sex related topics [18]. In this study, even though the majority of the parents (82.4%) accepted the importance of communication with their adolescents, the study has showed that only, 23.1% of parents had discussed on at least two topics of SRH issues in the last 12 months. This level of communication is also similar in other studies conducted in Ethiopia [18-20] which revealed that the discussion rarely occurs despite accepting its importance). But it is lower than other findings from Southern Ethiopia and abroad USA [10, 21] and higher than the study conducted in Dera Town [5] all these discrepancy may be due to social-economic, cultural difference and difference in accessing of SRH information. The greatest percentage of parent communication was about STIs/HIV/AIDS which accounts 90.2%, this finding is similar to other studies conducted in Ethiopia [18, 20]. Different authors argued that most parents are focusing on the negative aspects of SRH rather than working on the preventive aspects. The study shows that, parents who attended higher level and secondary level education were more likely to discuss reproductive health issues with their adolescent children when compared to parents who received none formal education [AOR = 2.423[1.063,5.529] and AOR=4.775[1.062, 5.529] respectively. Findings are in concurrence with other studies, mostly in the country in Gojjem and Hawassa has revealed that adolescents whose mother or father was able to read and write were more likely to communicate SRH issues with their parents than those teenagers' parents unable to read and write [23]. This may be due to adolescents prefer to discuss with their peers/friends rather than their parents because they think that their parents are not knowledgeable about the subject matter or both parent and adolescents may face challenges because of fearing or embarrassing to communicate about the sexuality.

In this study, among parents asked why they do not communicated about reproductive health issues with their children majority 77.5%, of them perceived that discussing about sexual issues might encourage the children to engage in premarital sex. The finding is proportionately higher than the findings of the studies conducted in the selected region of Ethiopia [5, 18]. Additionally (53.9%) of respondents claimed lack of awareness regarding SRH issues as a reason followed by difficulty to initiate discussion due to fear and shyness (53%). Also, 47.3% of parents worried about their culture/cultural taboos, which is lower as compared to study conducted in other Sub-Saharan region [24]. However, it is similar to study conducted in Ethiopia [18]. The reason might be claimed that most parents are focusing on the negative aspects of SRH rather than working on the preventive aspects. The finding shows that parents who has good knowledge of SRH issues were three times more likely participated in discussion with their adolescents than their counter parts [AOR=3.008, (1.662, 5.446)]. This is similar to the study conducted a previous that showed the reason for not discussing on SRH issues are parents lack of lack of knowledge followed by parents lack of communication skills [25].

Regarding communication of contraceptive methods in this study the most the frequently discussed between parent and adolescent was about the abstinence while the least discussed was about the use of condom. This is similar with study conducted in Ethiopia [10, 9] the reason behind might be thinking of that talking about the utilizations of condoms may initiates the adolescent for sexual practices. In this study, most of parents have positive attitude towards the importance of parent-teen discussion on SRH issues. The find showed that those parents who are more educated have more positive attitude towards

SRH issues discussion with their adolescents than the counterpart. Additionally, majority 95.4% and 87% have suggested that adolescents should get adequate information and knowledge regarding their sexuality and reproductive health issues at school and through mass media respectively. The study recommends that adolescent-parent communication on sexual and reproductive health issues and associated factors helps for policy makers, health care providers and any concerned bodies to design appropriate intervention strategies to tackle young generation reproductive health problems. Information obtained here can be used for planning of intervention programs in different part of the country.

Strength and limitation of the study

As the strength the objectives of the study were clearly stated and the inclusion and exclusion criteria were stated very well. However limitations: i) Lack of qualitative data to complement statistics from quantitative data in form of close ended questions. ii) Absence of adolescents in the communication agenda. iii) Being a cross-sectional study hence it was difficult to imply cause effect relationship to explore parents view more.

Conclusion And Recommendation

Parent communication with their adolescent on SRH issues was low and affected by traditional norms, among others. In future it is recommended to conduct research to establish traditional norms and practices used by community as communication of SRH from adults to young people. Rather than improve underlying beliefs and norms the researchers may need to borrow from these to improve parent-adolescent SRH communication.

Abbreviation

AOR, adjusted odds ratio; CI, confidence interval; COR, crude odds ratio;

EDHS, Ethiopian Demographic and Health survey; HHs, Households;

HIV/AIDS, Human Immune Virus/Acquired immunodeficiency Syndrome

SPSS, Statistical package for social science; SRH, Sexual and Reproductive health

STIs, Sexually Transmitted Infection; USA, United State of America; WHO, World Health Organization

Declarations

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Author contributions

Daniel Bekele Wakjira, conceived the study, obtained ethical clearance and permission for study, participated in the design of the study, performed the statistical analysis and Draft the manuscript. Abdi Deksisia guided the research, involved in the design of the study, and performed the statistical analysis. Wendu Abera and Getu Megersa involved in the design of the study and statistical analysis, and drafted the article and rechecked it critically for important intellectual content. All authors read and approved the final manuscript. All authors contributed toward data analysis, drafting and revising the paper and agree to be accountable for all aspects of the work.

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Availability of data and materials

All of the main data has been included in the results. Incase additional materials with details may be obtained from the corresponding author.

Ethics approval and consent to participate

This study was conducted in accordance with the Declaration of Helsinki. Ethical clearance and permission was obtained from Arsi university health science college institutional review board (IRB) with ethical clearance letter Ref No/A/U/H/C/S/237/06 /2019 and permission was secured from Asella town administrative office. Written informed consent was provided to the parents of participants prior to data collection for this study. Participants were told the objective of the study and their right to refuse completion of the questionnaires and this would not affect any support that they will get. Questionnaires were coded instead of using names as identification and confidentiality was assured throughout the study.

Consent for publication

Not applicable.

Competing Interests: All we authors declare no personal or financial conflicts of interest in this work.

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Figures

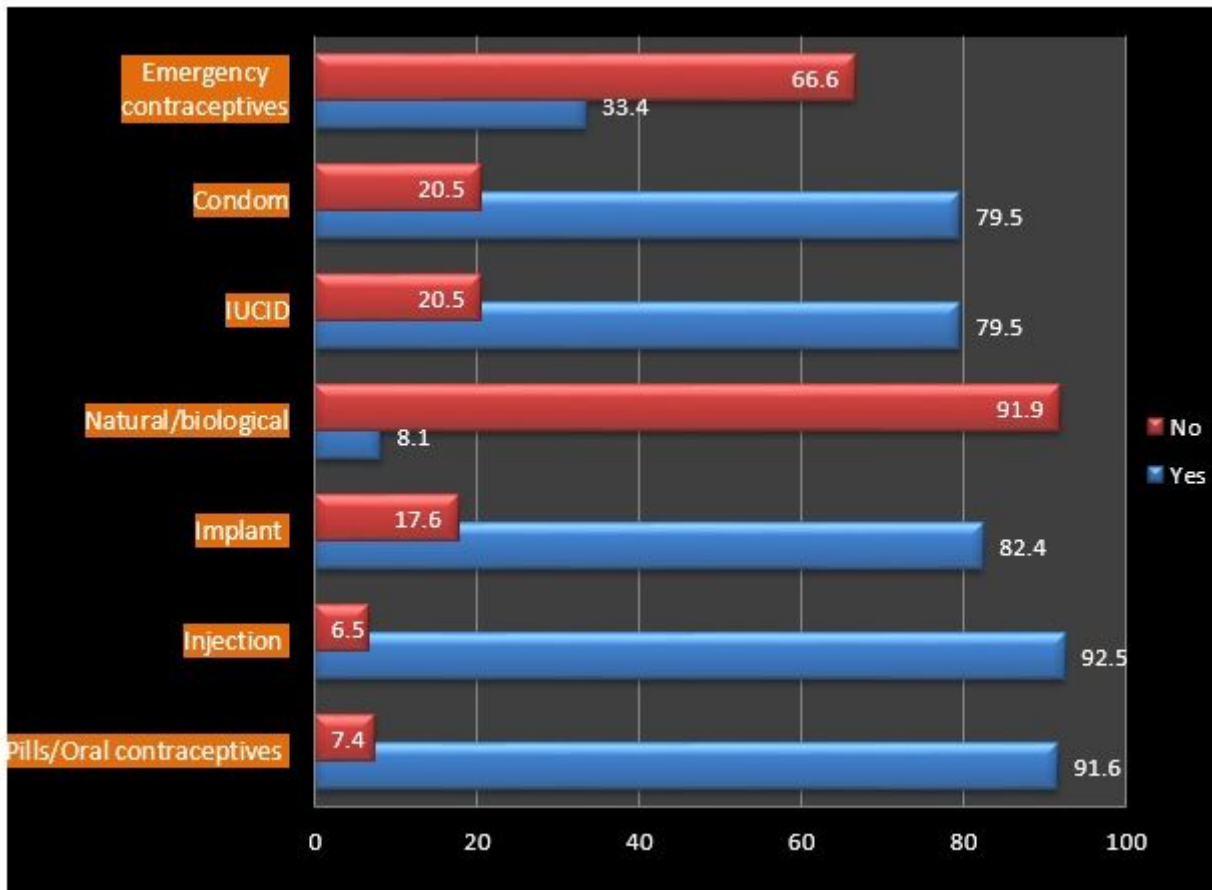


Figure 1

Parents' knowledge of family planning methods available in Asella town, Arsi zone, Ethiopia, June,2019

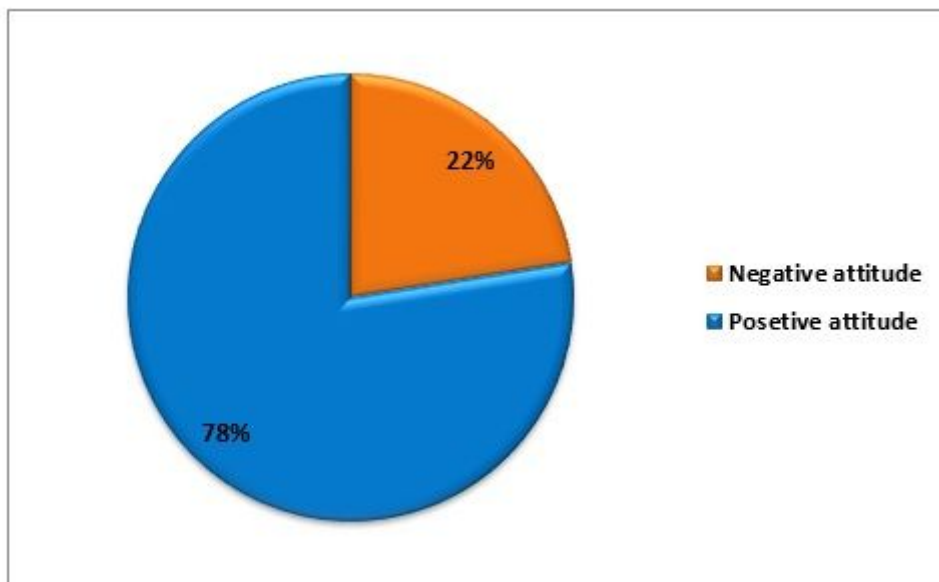


Figure 2

Over all parents attitude of SRH discussion with their adolescents, in Asella town Arsi zone, Ethiopia, June 2019

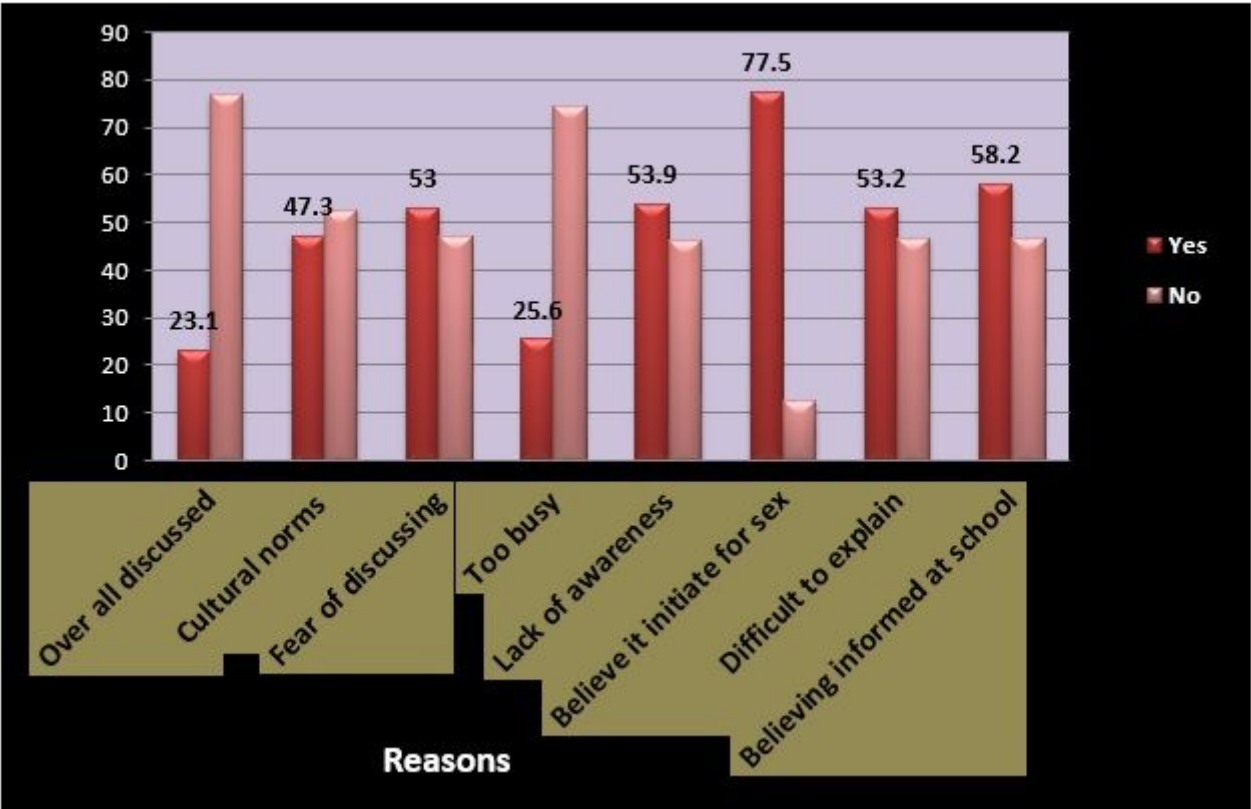


Figure 3

Respondents of overall discussion and reasons for not discussed, in Asella town, Ethiopia June, 2019.