ORIGINAL ARTICLE

PARENTS' PERCEPTION, STUDENTS' AND TEACHERS' ATTITUDE TOWARDS SCHOOL SEX EDUCATION

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ABSTRACT

BACKGROUND: Sex education is described as education about human sexual anatomy, sexual reproduction, sexual intercourse, reproductive health, emotional relations, reproductive rights and responsibilities, abstinence, contraception, family planning, body image, sexual orientation, sexual pleasure, values, decision making, communication, dating, relationships, sexually transmitted infections (STIs) and how to avoid them, and birth control methods. This study was conducted to explore perception of parents about school sex education and assess the attitude of teachers and students towards school sex education.

METHODS: A cross-sectional quantitative and qualitative study was conducted on randomly selected 386 students, total census of 94 teachers and 10 parents in Merawi Town from March 13-27, 2011. Data were collected using self-administered structured questionnaire and in-depth interview guideline. Multiple linear regression analysis was performed using total score to determine the effect of the independent variables on the outcome variable and thematic analysis was used to analyze the qualitative data.

RESULTS: All study participants have favourable attitude towards the importance of school sex education. They also agreed that the content of school sex education should include abstinence-only and abstinence-plus based on mental maturity of the students. That means at early age (Primary school) the content of school sex education should be abstinence-only and at later age (secondary school) the content of school sex education should be added abstinence-plus. The students and the teachers said that the minimum and maximum introduction time for school sex education is 5 year and 25 year with mean of 10.97(SD±4.3) and 12.36(SD±3.7) respectively. Teacher teaching experiences and field of studies have supportive idea about the starting of school sex education. Watching romantic movies, reading romantic materials and listening romantic radio programs appear to have a contribution on the predictor of students' attitude towards the starting time of school sex education.

CONCLUSION: All study participants have a need to start sex education at school. All study participants said that at early age (Primary school) the content of school sex education is abstinence-only and at later age (secondary school) is added abstinence-plus. School Sex education should be under considers the need of students, teachers and parents.

KEYWORDS: Sex education, Attitude, perception

INTRODUCTION

Sex education is described as education about human sexual anatomy, sexual reproduction, sexual intercourse, reproductive health, emotional relations, reproductive rights and responsibilities, abstinence, contraception, family planning, body image, sexual orientation, sexual pleasure, values, decision making, communication, dating, relationships, sexually transmitted infections (STIs) and how to avoid them, and birth control methods(1).

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The Abstinence-Only Education program promote abstinence from sex, discussions of values, character building, and refusal skill, and do not acknowledge that many teenagers will become sexually active, do not teach about contraception and condom use, and avoid discussions about abortion, sexual transmitted disease and HIV/AIDS. On the other hand the Abstinence-Plus Education programs acknowledge that many teenagers will become sexually active, teach about contraception and condom use and discussions about abortion, sexually transmitted disease and HIV/AIDS (2).

Ethiopia is a nation of young people – over 65% of its population is under 25 years of age and a nation whose youth have profound reproductive health needs. Among the many sexual and reproductive health problems faced by Ethiopian youth are gender inequality, sexual coercion, early marriage, polygamy, female genital mutilation, unplanned pregnancies, closely spaced pregnancies, abortion, sexually transmitted infections (STIs), and HIV/AIDS. Thus, the reproductive health situation of youths in Ethiopia is a major concern. The prevalence of sexually transmitted diseases (STDs) like HIV/AIDS is relatively high among young people in Ethiopia. Unsafe abortion is the second leading cause of death for women of reproductive age, accounting for 55 percent of all pregnancy-related deaths (3, 4, and 5).

Schools provide an ideal setting for sex education, as a great deal of children can be reached there. But teachers offering sex education often use more passive forms of learning and tend to disregard skill-oriented learning activities. Others put sexuality in a larger developmental context including such issues as self-esteem, setting goals, and having respect for others (6, 7).

There are conflicting interests among teachers, parents and students regarding sex education at school. Teachers in Nepal, for example, often deliver biological information, where as parents are more interested in moral education. But the Students are looking to acquire more insights into life skill-based sex education. Thus, there is a need to consider these interests and develop teacher training which moves away from superficial biological coverage towards a more inclusive programme. And also such type gap between students, teachers and parents about sex education at school may create difficulty to reduce HIV/AIDS, unwanted pregnancy and school dropout in the student (8, 9, 10, 11 and 12).

In Ethiopia, there was no documented information about conflicting interests among teachers, parents and students regarding sex education at school. There was also no documented information whether the sex education being given is matching with what students want to learn about sexuality or not. Similar gaps exist regarding the sex education content, when it should be started to address sexuality related problems and maintain health. The objective of this study was to assess the attitude of teachers and students towards school sex education, and explore perception of parents about it.

PATIENTS AND METHODS

The study was conducted in Merawi town, Mecha woreda, West Gojjam zone, Amhara Region, Northwest Ethiopia from March 13-27, 2011. According to the 2002 Annual Woreda Report; the Woreda has an estimated total population of 307,703. In the 2010/2011 academic year, the total number of students who have been attending Secondary and Preparatory Schools were 5313.

A cross-sectional quantitative and qualitative study was conducted. Students were selected through simple random sampling technique from sample frame of students' registration books through lottery method. Due to small numbers all teachers who teach in Merawi Secondary and Preparatory Schools were included in the study. Judgmental sampling technique was employed to interview the selected parents who were supposed to give detailed information about sex education (like Parents of different religion, single parents (females or males), and married parents.

The study was conducted among 394 students and 94 teachers in Merawi town. The sample size was determined using a single population proportion sample size estimation method by assuming that 50% of the students have positive attitude toward school sex education with 95% confidence interval. All teachers who teach in Merawi secondary and preparatory school were included in the study.

A structured questionnaire was adapted from similar studies conducted on sex education and modified based on our objective to assure the content validity of the data (19, 20). For the qualitative study, in-depth interview guide was developed. The reliability of the instrument was checked by Cronbach's Alpha value (α= 0.7 cut of point). The questionnaire has different sub-sections include Socio-demographic variables, content of school sex education (20 items), importance of school sex education (7 items for students and 5 items for teachers) and timing/age to start sex education (1 open ended question).

Attitude on sex education: a positive or negative or neutral evaluation of the students and teachers to the items in the scale.

Perception about sex education: the Parents description about school sex education from sensory impressions into a coherent and unified view.

School sex education measured: the importance of school sex education, the content of school sex education (anatomy and physiology of genital organs, characteristics of puberty, importance of contraception ,education about abstinence, sexually transmitted infections ,effect of sexual abuse, education about personal safety (prevention of sexual abuse), importance of safe sex, decision making in love relationships, outcome of teenage prostitution, effect of sexual harassment, physiology of menstruation, effect teenage pregnancy and parenting(negative effect teenage pregnancy and child bearing), gender equity in a love relationship, education about attraction, intimacy and love, communication about sexual relationship, effect of peer pressure on sex activity ,education about sex as part of a love relationship ,education about sexual problems and concerns and the role of media on sexuality and starting time of school sex education.

All data collectors and supervisors have Bsc qualification in Nurse and Health Officers. Data were collected using self-administered questionnaire which were in Amharic. The data were collected at same time for different grade levels using different data collectors to prevent contamination of information. The qualitative Data were collected through face to face in-depth interview by the principal investigator.

The data collectors introduced themselves and the purpose of the study to the study participants to assure quality. The content validities of questionnaires Close supervision, training the data collectors and supervisors were assured the quality of the data.

The quantitative data were entered into statistical package for social sciences (SPSS) version 16. Descriptive analysis was done to describe socio-demographic characteristics of the study participants. Then Total score of the attitude towards importance of sex education and contents of sex education were computed. And the mean score of the attitude scales toward importance of sex education and contents of sex education were computed from the total score. The variables satisfy the assumption of linear regression (Linearity, normality and variance were checked by using x-y straight line, histogram and Q-Q plot).

Standard multiple linear regression analysis was performed to quantify the effect of independent variables on the dependent variable. Finally, independent variables which had statistically significant association with the dependent variable ($P < 0.05$) were entered to the final regression model. The qualitative data collection and analysis took place at same time. The responses were transcribed in detail for every individual response separately. And then the detail responses were thoroughly read and re-read and coded. And then the categories were identified. And finally themes were identified from category. The themes were: Importance of school sex education, content of school sex education and optimum starting time of school sex education.

Ethical clearance was obtained from ethical clearance committee of college of public health and medical science, Jimma University. After getting the ethical clearance, written permission was obtained from Merawi town education bureau, town administers and schools administers. Informed consents were obtained from each study subject.

The study was conducted in different study participants (like students, teachers and parents) to show school sex education in different perspective (person triangulation).Quantitative and qualitative methods were employed to

describe the concept of school sex education in different perspective (method triangulation).

RESULTS

Students: The age of the students ranged from 14-24 years with mean of 17.5 (SD±1.41). Out of the 386 study participants 196 (50.8%) were males and 286 (74.1%) of the students were grade 9 and 10. Three hundred twenty six (84.5%) students' parents were living in rural area. Majority of the students were Orthodox in religion and Amhara in ethnicity. Out of the 386 study participants 114(29.5%) students have watched romantic movies; 149 (38.6%) students have read romantic materials and 209(54.1%) of them have listened to romantic radio programs (Table 1).

Table 1:- Socio-demographic characteristics of students in Merawi secondary and preparatory school, Merawi town, March 2011.

Characteristics(n=386)	Category	Frequency	Percent
Age(mean=17.5(SD±1.41)	14-18	296	76.7
	19-24	90	23.3
Sex	Male	196	50.8
	Female	190	49.2
school in which students currently learn	Merawi secondary school	286	74.1
	Merawi preparatory school	101	26.2
current students grade level	grade 9	150	38.9
	grade 10	136	35.2
	grade 11	54	14.0
	grade 12	46	11.9
current students` parents residence	Urban	60	15.5
	Rural	326	84.5
religion of students	Orthodox	372	96.4
	Others*	14	3.6
ethnicity of students	Amhara	382	99.0
	Others#	4	1.0
current parents occupation	government employee	18	4.7
	house wife	59	15.3
	Merchant	22	5.7
	Farmer	284	73.6
	Others**	3	.8
Number of siblings	<=two	19	4.9
	Three	42	10.9
	Four	95	24.6
	more than four	230	59.6
Family income	<500	159	41.2
	501-800	47	12.2
	801-1162.5	84	21.8
	>1162.5	96	24.9

*=Muslim, protestant, catholic **=students & daily worker #=Tigre and Gurage

Teachers: The age of the teachers ranged from 23-43 years with mean 29.5(SD±4.6). Majority of the teachers were Orthodox in religion and Amhara in ethnicity. Out of the 94 study participants who reported their marital status, 46(48.9%) were married and 45(47.9%) were single. Fifty three (56.4%) teachers teach natural science stream and seventh nine (84%) teachers have more than four year teaching experience.

Importance of school sex education: The mean scores of the students and teachers attitude towards importance of school sex education were

28.72(±3.73) and 21.47(±2.47) respectively. Three hundred sixty four (96.8%) of the students and 93(98.9%) of the teachers appeared to have a positive attitude towards the importance of school sex education. All parents said that sex education is the backbone of preventing and controlling different diseases and problems like "HIV/AIDS, unwanted pregnancy, sexual abuse, abortion, sexual harassment, love related problem/conflict management, family planning problem". The parents concluded that the importance of school sex education is "unquestionable idea".

Content of school sex education: The mean scores of the students and teachers attitude towards content of school sex education were 72.76(±13.83) and 80.27(±12.40), respectively. Three hundred six (79.7%) of the students and 89(94.7%) teachers have positive attitude towards the content of the school sex education. Two hundred forty three (63%) of the students and 62(66%) of the teachers indicated that the school sex education should only include abstinence.'

In the qualitative study, almost all parents said that the content of the school sex education should include abstinence –only and abstinence – plus based on the mental maturity of the students. That means at early age (Primary school) the content of school sex education is abstinence-only and at later age (secondary school) the content of school sex education should be added abstinence-plus.

Starting time: The students and the teachers said that the minimum and maximum introduction time for school sex education is 5 year and 25 year with mean of 10.97(SD±4.3) and 12.36(SD±3.7) respectively. Three hundred twenty eight (84.7%) students and 79(84%) teachers said that the introduction time for school sex education should be at age of less than or equal to 15 years. In the qualitative study, the parents said that the minimum and maximum introduction time for school sex education 7 and 12 years with mean of 8.5 years.

Predictors of content of school sex education: According to the result of the multiple linear regression analysis, females appear to have unfavorable attitude towards the content of sex education as compare to males (B= -4.69, 95% CI (-7.34, -2.05). Students' parents who live in the rural area appear to have unfavorable attitude towards content of school sex education as compare to urban residents (B= -6.54, 95% CI (-10.19, -2.88). Students they have no access to listening romantic radio programs appear to have unfavorable attitudes towards contents of school sex education as compare to have access to listening romantic radio programs(B=-4.03, 95% CI (-6.67, -1.38) (Table 2). All socio-demographic variables appear to be not the predictor of teachers' attitude towards contents of school sex education at school.

Table 1. Predictor of students attitude on contents of school sex education, Merawi secondary and preparatory school, Merawi town, March 2011.

Variable in the Model	Un-standardized Coefficients		p-value	95% CI of B	
	B	Std. Error		Lower Bound	Upper Bound
(Constant)	81.020	1.969	.000	77.149	84.891
Female Sex	-4.697	1.344	.001	-7.340	-2.054
Rural parents' residence	-6.541	1.858	.000	-10.195	-2.888
Learned Preparatory School	5.424	1.527	.000	2.420	8.427
Didn't Listen love related radio program	-4.031	1.345	.003	-6.675	-1.387

Reference category = male students, urban residence, secondary school and yes for listening love related radio program

Predictors of starting time of school sex education: According to the result of the multiple linear regression analysis, students who

have occasional habit of attending church/mosque have favorable attitude towards starting/presence of school sex education as

compare to students who have always habit of attending church/mosque(B=2.55, 95% CI (.85, 4.24). Students they have no access to Watching romantic movies, reading romantic materials and listening romantic radio programs appear to have unfavorable attitude towards presence of school sex education as compare to have access to Watching romantic movies, reading romantic materials and listening romantic radio programs appear to have (B=-1.15, 95% CI (-2.13, -.17), (B=-1.28, 95% CI (-2.23,-.33) and B=-1.44, 95% CI (-2.39, -.49) respectively. According to the result of the multiple linear regression analysis, teachers who have more than four year teaching experience and teaching natural science stream have favorable attitude towards starting/presence of school sex education (B= 2.86 and B=1.57, P< .05) (Table 3 and 4).

Table 3. Predictor of students' idea on starting time of sex education at school, Merawi secondary and preparatory school, Merawi town, March 2011.

Variable in the Model	Unstandardized Coefficients		P-value	95% CI of B	
	B	Std. Error		Lower Bound	Upper Bound
(Constant)	13.046	.746	.000	11.579	14.513
Habit of attending church/mosque					
Usually	.016	.567	.978	-1.099	1.131
Sometimes	.258	.520	.621	-.766	1.281
Occasional	2.553	.861	.003	.859	4.247
Never	.618	3.005	.837	-5.291	6.528
Religion					
others**	-2.397	1.157	.039	-4.671	-.123
Do not watch love related movies	-1.158	.498	.021	-2.137	-.179
Do not read love related materials	-1.285	.483	.008	-2.235	-.334
Do not listen love related radio program	-1.443	.484	.003	-2.395	-.491

**= Muslim, protestant and catholic and Reference categories were always, Orthodox, yes for rest

Table 4. Predictor of teachers ideal on starting time of school sex education, Merawi secondary and preparatory school, Merawi town, March 2011.

Variables in the Model	Unstandardized Coefficients		P-value
	B	Std. Error	
(Constant)	10.625	2.612	.000
Teaching experience			
greater than four year	2.865	1.199	.019
Field of study			
Natural science	1.577	.782	.047

Reference categories were less than four year teaching experience and social science

DISCUSSION

Almost all students seem to have more exposure on listening to romantic radio programs. But this figure is contrast to the study conducted in United Kingdom. In United Kingdom the students more focus on reading love related materials. The possible reason for the difference might be the accessibility of reading materials related to love and reading habit of the students (21).

Ninety seven percent of the students appear to have positive attitude towards the importance of school sex education and this finding is different from the study finding conducted in Nigeria where

seventy eight percent of the students supported sex education introduction into the school curriculum (13). The possible reason might be socio-culture and parenting style difference between the two study areas. On the other hand, ninety nine percent of the teachers seem to have positive attitude towards the importance of school sex education. Furthermore, in the qualitative study all parents indicated that "the importance of school sex education is unquestionable idea. These concepts are supported by the study conducted in Nigeria (13).

Eighty percent of the students and 95% of teachers have positive attitude towards content of school sex education. This is also supported by my qualitative study; all parents said that "the content of sex education should include abstinence –only and abstinence –plus based on mental maturation of students. This figure is similar to the study conducted in Nepal, California, Canada and united state of America (6, 10, 14, 16, and 20)

The students and the teachers said that the minimum and maximum introduction time for school sex education is 5 year and 25 year with mean of 10.97(SD±4.3) and 12.36(SD±3.7) respectively. The age of introduction time of school sex education in this study was appropriate and scientific base response. This finding is similar to the study conducted in Nigeria and in United State (13, 15, 16 17, 19).

Sex, type of school, parents' residence and listening to romantic radio programs appear to be the most predictors of students' attitude towards the content of school sex education. This figure is different from the study conducted in United State. In the United States in both sexes, watching romantic movies, reading romantic materials and listening to romantic radio programs were found to be the most predictors of students' attitude towards the content of school sex education (21).   The possible reason might be parenting style, socio-cultural difference.

The habit of attending church/mosque, religion, watching romantic movies, reading romantic materials and listening to romantic radio programs were found to the most predictors of students' supportive idea on starting /presence of school sex education. This figure is similar to the study conducted in Jimma University (23).

Age of the teachers is best predictor of teachers' attitude towards importance of school sex education. But the others study conducted in Portuguese show that sex of teachers, trained teachers and experienced teachers in teaching sex education have more positive attitude towards importance of school sex education. The difference may be in this study the sex of teachers almost all are male; the educational status and the teaching experience of the teachers were the same across each other's (15).

Teachers who have more than four years of teaching experience and who teach natural science stream seem to have favorable attitude towards the starting time of school sex education and this figure is similar to the study conducted in New Brunswick Teachers (16). In the qualitative study all parents said that "the schools have responsibility on the health of their students. Because currently there are a lot of risks exist in schools environment. This finding similar to the study conducted in Chinese on exploratory study of parents' perceptions of teaching sex education at school (11).

From this study we can conclude that school sex education is one the solution for such type of emerging problems in the schools. The students, teachers and parents have similar concern about school sex education. All have in need of starting sex education at school. Sex, type of school, parents' residence and listening to romantic radio programs appear to be the most predictors of students' attitude towards the content of school sex education.

The minimum and maximum introduction time for school sex education is 5 year and 25 year. The age of introduction time of school sex education in this study was appropriate and scientific base response. Watching romantic movies, reading romantic materials and listening to romantic radio programs were found to the most predictors of students' supportive idea on starting /presence of school sex education.

Parents, teachers and Non-governmental organizations work on reproductive health should be given Sex education for students considering the students need and age of the students. The ministry of education should provide sex education resources to students, teachers and parents as needed. The ministry of education should conduct large scale community, students and teachers based research on school sex education to include sex education in school curriculum.

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