



Risky Sexual Behavior and Associated Factors Among Adolescent Students in Tana Haik High School, Bahir Dar, Northern Ethiopia

Hiwot Amare^{1,*}, Muluken Azage², Mahider Negash³, Abinet Getachew³, Adinew Desale¹, Nardos Abebe¹

¹Ethiopian Public Health Institute, Addis Ababa, Ethiopia

²Bahir Dar University, College of Medicine and Health Sciences, Bahir Dar, Ethiopia

³Merstypes International MCH Clinic, Bahir Dar, Ethiopia

Email address:

hiwotamare22@yahoo.com (H. Amare), mulukeag@yahoo.com (M. Azage), mahiderhiwot@gmail.com (M. Negash), abi7834@gmail.com (A. Getachew), adinewdesale@yahoo.com (A. Desale), nardosabebe799@gmail.com (N. Abebe)

*Corresponding author

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Abstract: Introduction: Adolescence is a period of transition from childhood to adulthood. World Health Organization defines adolescent as the person between 10 and 19 years of age. Adolescents' sexual behavior threatens the physical, psychological, social health and well-being of this group. Therefore, assessing the sexual behavior of adolescent students is essential to evaluate vulnerability and this enables one take appropriate preventive measure. Objective: The objective of this study is to assess the risky sexual behavior of school adolescents and responsible factors influencing their risky sexual behavior practices in Tana Haik Secondary and Preparatory School, Bahir Dar, Northern Ethiopia, 2016. Methods: A cross-sectional study was carried out using questionnaire. A systematic random sampling was used to get the total sample size of 308 participants. A pre-tested, structured questionnaire was used to collect quantitative data and Data analysis was done using SPSS version 16.0 software packages. Result: Out of the study participants, 79 (26%) respondents were practiced sexual intercourse. Among the sexually active students 73% were not utilized condoms, 34% of them had more than one partner and 5% reported to have sexual intercourse with commercial sex workers. Personal pressure (46%), peer pressure (27%), forced (10%), alcohol and chat influence (9%) and economic problem (9%) were the reasons reported for the initiation of the first sexual practice. Fifty-nine (19%) of the study participants were developed risky sexual behaviors. Participants' educational level, marital status, parental marital status, living status, and alcohol consumption were predictor factors for the existence of different sexual behaviors. Conclusion: A considerable number of school adolescents had started sexual activity early and have practiced risky sexual behavior that might predispose them to different sexual and reproductive health problems. Delay in sex debut and reducing risky sexual behavior among adolescents can be achieved through well designed sexual education programs at the school.

Keywords: Risky Sexual Behavior, Associate Factors, School adolescent, Bahir Dar City

1. Introduction

Adolescence begins with the onset of physiologically normal puberty and it's a period of development corresponds roughly to the period between the ages of 10 and 19 years [1]. The adolescent is a shift period from childhood to

independent adulthood that achieves the highest stage of cognitive and physical development and strives to define their self-identity [2]. A need for independence is also one of the features of this group and most of the young people join the labor force [3].

According to United Nation report, the total number of the

world population in 2015 is projected to be more than 7.3 billion, of which one-fourth are in the age group of 10-24 [2]. The life of adolescents is at risk for the reason that they do not have adequate information, health services, and support they need to go through sexual development [4]. Adolescents and young adults are frequently changing relationships with opposite sex, highly concerned with physical and sexual good looks. Adolescents are more likely to make decisions about the future without adequately considering the consequences [1].

A study reported that adolescents and young adults were engaged in risky sexual practices that expose for acquiring sexually transmitted infections and unwanted pregnancy. Most of the sexual practices during adolescence period are unsafe due to lack of awareness about sexual and reproductive health, limited access to health services, lack information about contraception and susceptibility to sexual abuse [5]. Therefore, a risk of unnecessary pregnancy, risky abortion and sexually transmitted infections including HIV/AIDS are prevalent among young people [2]. In resource limited countries, nearly half of HIV infections happen in people younger than 25 years old, this implies that nearly 60% of all new HIV infections are among 15 to 24 years [6].

Sexual beginning among adolescent is linked with divorced families, sexually active friends, illiterate, family instability, low income, tolerant attitudes, and lack of confidence to avoid sex, peer pressure, drinking alcohol, drug use, previous sexual abuse and exposure to sexual content of media [7, 8]. Stigma dampens young people from taking preventive measures against sexually transmitted diseases and informing their sexual partner [9 10]. Adolescents who had sexual practice outside of marriage may face social stigmas, family conflicts, problems with school and the potential need for unsafe abortions along with unintended pregnancy and increased exposure to STIs [11].

Before adolescent become sexually active, necessary facts and information should be provided and strength in school and further than. Preventive methods that enable adolescents to develop safer behavior requires not only just knowing who is at risk, but also understanding why they engage in risky practice, motivating them to reduce their risk, developing their knowledge and skills, and improving their access to means of prevention [12]. Therefore, to equip adolescent on disadvantages of risky sexual behavior high school are the appropriate environment alongside with the formal education.

Sexual and reproductive health services, including risky sexual behavior, have been implemented at each school along with the formal education to internalize what they have been taught on sexual health and risky behaviors among themselves since 2006 [13]. But, there is no recent information on risky sexual behaviors among adolescent high school students after implementation of such youth-friendly sexual and reproductive health services. The finding of the study will help to provide the current status on risky sexual behavior and its associated factors to identify the gaps and

strengthen the existing strategies. Therefore, the aim of this study was to assess risky sexual behavior and its associated factors among adolescents in Tana Haik high school.

2. Methods and Materials

2.1. Study Design and Area

Institutional based cross-sectional study was employed at Tana Haik Secondary and Preparatory School at Bahir Dar, Amhara Region since, February 2016. Bahir Dar is the capital city of the Amhara National Regional State which is located at 565 km from the northwest direction of Addis Ababa, a capital city of Ethiopia. There are universities, colleges and preparatory schools in the city. TanaHaik secondary and preparatory school is one of them with a total of 3,200 students in 2016.

2.2. Study population

The study population was all adolescent students that attending their education at day time in Tana Haik secondary and preparatory school during the study period. An adolescent whose age is below 14 and above 19 years and that attend his/her education at night time were excluded from the study.

2.3. Sample Size and Sampling Technique

The sample size was calculated using the single population proportion formula by considering the following assumptions: the proportion of risky sexual behavior to be 24% from a previous study [13], 95% confidence interval, the margin of error 5% and 10% non response rate. Then, the final sample size was 308 participants.

A systematic random sampling technique was employed to select a representative sample of adolescent students in each grade. The sample size was distributed proportionally to each grade based on the number of students.

2.4. Data Collection

Data were collected using self-administered structured questionnaire. The questionnaire had questions of socio-demographic variables of participants and sexual and behavioral related issues. The questionnaire was initially prepared in English and then translated into Amharic, the local language. Four nursing diploma graduate were recruited as data collection facilitator. The questionnaire was pretested to ensure the understandability of questions by study participants. Data were collected anonymously to ensure confidentiality. The filled questionnaire was checked for completeness and consistency by the principal investigator.

2.5. Data Analysis

Data were entered, cleaned and analyzed using SPSS (Statistical Package for Social Sciences) version 16 software. Descriptive statistics were calculated to describe data. Binary and multivariable logistic regression analyses were used to

determine the presence of statistically significant associations between the outcome and the independent variables. Crude and adjusted odds ratios with 95%CI were calculated and a p-value less than 0.05 was considered statistically significant.

2.6. Ethical Considerations

The study was approved by Ethical Review Committee of the Amhara Regional Health Bureau. Permission was also secured from Tana Haik secondary and preparatory school director. Informed consent was obtained from each study participants and their parents (for <16 years old students). All participants were informed of their right to refuse at any time and not to write their names to ensure confidentiality.

3. Results

All adolescent students completed the questionnaire. Of the total participants (308), 151 (51%) were females and 175 (57%) were in the age group of 17-19. Above eighty percent of the participants (82%) were Orthodox Christians and 90% were Amhara by ethnic group. Above ninety percent (94%) were single. Sixty percent of the study participants came from the family size of 5 to 7 and 64% of study participants lived with both parents. Nearly twenty percent (18%) of the participants came from the rural area and lived in rented house in the city.

Table 1. The socio-demographic characteristics of school adolescents in Tana Haik Secondary and Preparatory School, February 2016.

Variables (n=308)	Male n (%)	Female n (%)	Total n (%)
Sex	151 (49)	157 (51)	308 (100)
Age			
14-16	60 (45)	73 (55)	133 (43)
17-19	91 (52)	84 (48)	175 (57)
Religion			
Muslim	10 (42)	14 (58)	24 (8)
Orthodox	117 (46)	137 (54)	254 (82)
Protestant	24 (80)	6 (20)	30 (10)
Ethnicity			
Amhara	126 (45)	152 (55)	278 (90)
Others	25 (83)	5 (17)	30 (10)
Education			
Grade 9	32 (38)	53 (62)	85 (27.6)
Grade 10	45 (51)	43 (49)	88 (28.6)
Grade 11	33 (53)	29 (47)	62 (20)
Grade 12	41 (56)	32 (44)	73 (23.7)
Perceived family economic status relative to neighbor:			
Poor	51 (61)	33 (39)	84 (27)
Similar	56 (43)	74 (57)	130 (42)
Better	44 (47)	50 (53)	94 (31)
Marital Status			
Single	145 (50)	145 (50)	290 (94)
Married	6 (33)	12 (67)	18 (6)
Family size			
<5	52 (56)	41 (44)	93 (30)
5-7	84 (46)	100 (54)	184 (60)
>7	15 (48)	16 (52)	31 (10)
Family Marital Status			
Live together	109 (49)	112 (51)	221 (72)
Div/Wid/Sep.	42 (48)	45 (52)	87 (28)
Live with whom			
With father and mother	99 (50)	98 (50)	197 (64)
With Father/Mother	22 (51)	21 (49)	43 (14)
With relatives/friends	15 (41)	22 (59)	37 (12)
Alone	15 (48)	16 (52)	31 (10)
Residence Situation			
Live in the town	125 (49)	128 (51)	253 (82)
Came from rural area and live town	26 (47)	29 (53)	55 (18)
Father's Education:			
Illiterate	24 (48)	26 (52)	50 (16)
Primary education	43 (44)	55 (56)	98 (32)
Secondary and above	84 (53)	76 (48)	160 (52)
Mother's Education:			
Illiterate	31 (40)	46 (60)	77 (25)
Primary education	53 (52)	49 (48)	102 (33)
Secondary and above	67 (52)	62 (48)	129 (42)

3.1. Risky Sexual Behavior of the Study Participants

Seventy-nine (26%) of the participants reported they had experienced sexual practice. Among those who had sexual practice, 20 (25%) were within the age of 14 to 16 years.

Personal pressure (46%), peer pressure (27%), force (10%), alcohol and chat influence (9%) and economic problem (9%) were the reasons reported for the beginning of the first sexual practice.

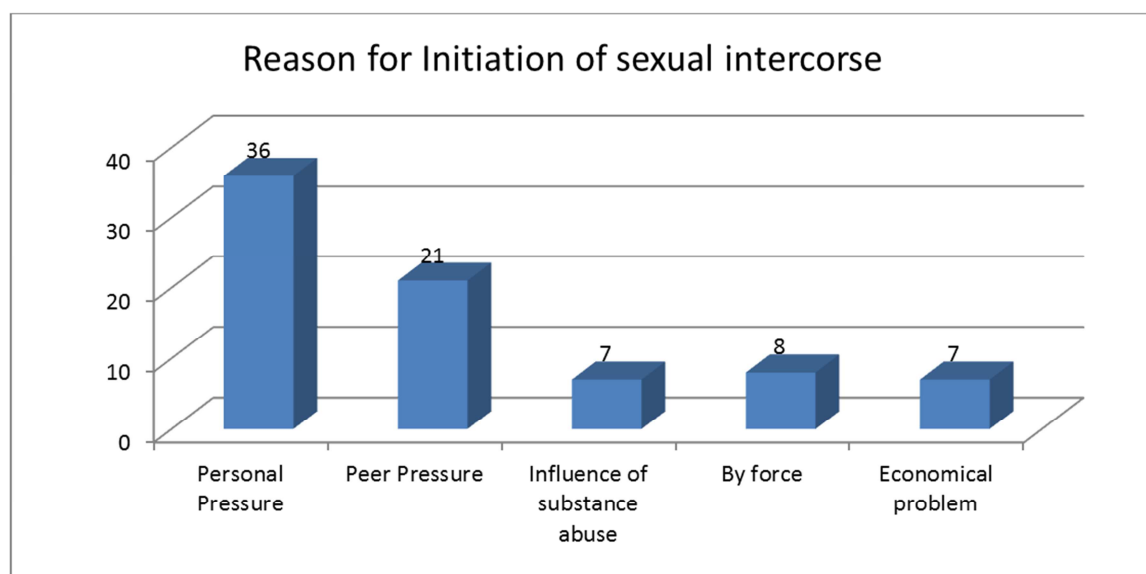


Figure 1. Reasons for initiation of first sexual practice reported by study participants.

Of those having sexual practice, 58 (73%) did not use condoms (unsafe sex) during the first sexual practice, 27 (34%) of them had more than one sexual partner and 4 (5%) had sexual intercourse with commercial sex workers. Fifty-nine (19%) of the study participants had risky sexual behaviors (unsafe sex, sexual intercourse with the commercial-sex worker, sex with more than one partners and sexual intercourse by force).

Table 2. Sexual behavior of school adolescents in TanaHaik Secondary and Preparatory School, February 2016.

Variables	Frequency	Percent
Ever practice sex (n=308)		
Yes	79	26
No	229	74
Age at first sex (n=79)		
14-16	20	25
17-19	59	75
Reason for Sexual Intercourse (n=79)		
Personal Pressure	36	46
Peer Pressure	21	27
Influence of substance abuse	7	9
By force	8	10
Economical problem	7	9
Condom used during first sexual intercourse (n=79)		
Yes	21	27
No	58	73
Number of sexual partners (n=79)		
One	52	66
more than one	27	34
Reason for more partner (n= 27)		
Sexual pleasure from all	25	93
Perceive all my partners are healthy	2	7
Sexual intercourse with CSW (n= 79)		

Variables	Frequency	Percent
Yes	4	5
No	75	95
Sexual intercourse by force (n=79)		
Yes	8	10
No	71	90
Sex with regular Partner (n=79)		
Yes	37	47
No	42	53
Risky Sexual Behavior (n=308)		
Yes	59	19
No	249	81

Among the study subjects 131 (42.5%), 27 (8.7%) and 2 (0.6%) were using alcohol, chat, and hashish ranging from 2-3 times in a month to daily respectively.

Table 3. The magnitude of Substance use among school adolescents in Tana Haik Secondary and Preparatory School, February 2016.

Variables	Frequency	Percent
Alcohol consumption: n=308		
Never Drunk	177	57.5
Drunk	131	42.5
Khat chewing: n=308		
Never chewed	281	91.3
Chewed	27	8.7
Cigarette Smoking: n=308		
Never Smoke	306	99.4
Smoked	2	0.6
Hashish Use:		
Never Used	306	99.4
Used	2	0.6

3.2. Factors Related to Risky Sexual Behavior

Logistic regression was carried out to check the effect of

possible independent variables on risky sexual behavior and those variables, which have a p-value of less than 0.05 by multivariate logistic regression, were considered statistically significant. As a result, educational level ($P = 0.002$), marital status ($P = 0.005$), family marital status ($P = 0.003$), living

with whom ($P = 0.012$) and alcohol consumption ($P = 0.042$) were significantly associated with the development of risky sexual behavior. On the other hand, the other variables were not significantly associated with the development of risky sexual behavior.

Table 4. Association of variables with risk sexual behavior from study participants at TanaHaik Secondary and Preparatory School, February 2016.

Variables	Risky Sexual Behavior		COR	AOR	P-value
	Yes	No			
Sex					
Male	24	127	1.52 (0.85-2.70)	1.76 (0.84-3.67)	0.131
Female	35	122	1.00		
Age					
14-16	22	111	1.00		
17-19	37	138	1.35 (0.75-2.42)		0.310
Education					
Grade 9	7	101	1.00		
Grade 10	25	57	2.1 (0.69-6.33)	4.2 (2.11-15.94)	0.002
Grade 11	20	43	0.33 (0.13-0.83)	0.79 (0.26-2.40)	
Grade 12	7	48	0.31 (0.12-0.81)	0.5 (0.16-1.52)	
Marital Status					
Single	45	245	19 (5.99-60.52)	8.5 (1.9-8.55)	0.005
Married	14	4	1.00	1.00	
Family size					
<5	15	78	1.00		
5-7	40	144	0.77 (0.23-2.52)		0.66
>7	4	27	0.26 (0.17-1.61)		0.26
Family Marital Status					
Live together	33	188	1.00	1.00	
Div/Wid/Sep.	26	61	2.4 (1.34-4.37)	7.8 (1.31-4.7.2)	0.003
Live with whom					
With father and mother	29	168	1.00		
With Father/Mother	5	38	12 (5.20-28.46)	1.2 (0.19-7.22)	0.012
With relatives/friends	4	33	15.9 (4.81-52.91)	11 (2.21-56.01)	
Alone	21	10	17 (4.80-62.44)	9.5 (1.89-48.07)	
Residence Situation					
Live in the town	39	214	1.00	1.00	
Came from rural area and live town	20	35	3 (1.64-5.98)	1.24 (0.41-3.76)	0.693
Father's Education:					
Illiterate	21	29	0.22 (0.10-0.45)	0.28 (0.05-1.47)	0.266
Primary education	16	82	0.82 (0.41-1.64)	0.76 (0.22-2.62)	
Secondary and above	22	138	1.00		
Mother's Education:					
Illiterate	23	54	0.38 (0.19-0.76)	2.04 (0.37-11.13)	0.237
Primary education	18	84	0.75 (0.37-1.54)	0.66 (0.20-2.15)	
Secondary and above	18	111	1.00		
Alcohol consumption: n=308					
Never Drunk	19	158	1.00	1.00	
Drunk (weekly/daily)	40	91	3.6 (1.99-6.68)	2.22 (1.03-4.37)	0.042
Khat chewing: n=308					
Never chewed	49	232	1.00	1.00	
Chewed (weekly/daily)	10	17	2.78 (1.20-6.44)	1.4 (0.46-4.37)	0.542

4. Discussion

Adolescence is the stage of life during which individuals reach sexual maturity. It is the period of transition from puberty to maturity. At the same time, adolescents are the greatest hope for turning the tide against sexually transmitted infections, AIDS, and early pregnancy because adolescence is a period of physical, social and emotional transition and development. This study attempted to assess the risky sexual

behavior and factors that related to risky sexual behavior among high school adolescent students. Accordingly, the finding indicated that 26% of the participants were sexually active and that was consistent with a report from Pawi Wereda that showed 24% of the study participants were experienced sexual intercourse in their early age [13]. The finding revealed that adolescents were initiated to practice sex at their early age life, which points out the need to strength the life skill for adolescents. This may indicate that adolescents start sex at an early age, as a result, this exposes

them to develop risky sexual behavior and its consequences. This finding was lower than the study findings from Bahir Dar University (36.4%), Bahir Dar private colleges (42.3%) and report from Russia (39%) of participants were experienced sexual intercourse [14, 15, 16]. The variation may be due to that participant in these studies were more aged, live alone and exposed to many sexual risks in the Universities and colleges.

In this study personal pressure (46%), peer pressure (27%), forced (10%), alcohol and chat influence (9%) and economic problem (9%) were the causes reported for the beginning of sexual practice. Likewise, a study finding from Oromia and Benishangul regions found that personal desire (39%, 27%) and peer pressure (23%, 16%) were the reasons reported for initiation of sexual intercourse respectively [17, 13]. This signifies that the influence to adolescents' action in their sexual relationship depends on many factors that lead them to practice risky behavior.

Having multiple sexual partners is one of the risky sexual behavioral factors that increase peoples' exposure to infectious diseases. In the current study, among sexually active respondents, 66% of them had one sexual partner; however, a significant proportion (34%) of participants replied as they have two or more sexual partners. Our finding was consistent with the study done in Pawi Wereda high school students (35%), Addis Ababa University students (37%) and Tanzanian higher education students (39%) [13, 18, 19]. This may point out that the risky behavior of school adolescents is high and needs attention to change their risk behavior.

Unprotected sexual intercourse is one of the major risk factors that expose school adolescents to risky sexual behavior. In the current study, 27% of school adolescents reported that they have never used the condom during their first sexual intercourse, which was better than a finding from Benishangul Gumuz (59%) that showed the participants have never used the condom [13]. Low utilization of condom is an indication of the fact that high-risk behaviors are still widely practiced among high school adolescents.

It is known that substance use like alcohol, khat, and the cigarette was among the factors that pushed school adolescents to sexual debut at an early age. In this study, among those who had practiced sexual intercourse 9% of them reported that alcohol and chat influence were reasons for their initiation of first sexual practice. The more substances that school adolescents and young adults ever tried; the more likely they are exposed to risky practices.

Our study revealed that 19% of the study participants were developed risky sexual behaviors. Some of the reasons why respondents are at risk: 27% had sex without the condom, 34% had multiple sexual partners, and 5% had sex with female commercial sex workers. In our study, the magnitude of risky sexual behavior was consistent with the finding from Pawi Woreda high school students (20%) and slightly lower than the study finding from a private college of Bahir Dar city (41%) [13, 15]. The discrepancy might be due to most private college students were living in a rented house away

from their supervising families and they were elder than high school students to practice sexual behaviors.

Students who were in a higher educational level were about 4 times more likely to develop sexual behaviors compared to those who were in a lower grade (grade 9). Students, who were single, were about 9 times more likely to develop risky sexual behaviors than who were married. Students, who were living alone without their supervising families, were about 10 times more likely to have risky sexual behavior compared to those who were living with their father and mother and those students, whose parents were divorced, widowed and separated, were about 8 times have risky sexual behavior compared to students whose parents were live together. Students, who were drunk, were 2 times more likely to practice risky sexual behavior than who were never drinks.

5. Limitations of the Study

The study was mattered to limitations. The behavioral outcomes were based on self-reported information, which was subject to reporting errors and bias. Since the study was on very sensitive and private issues the possibility of underestimation cannot be ruled out. Since the study was based on cross-sectional data, which implies that the direction of causal relationships cannot always be determined.

6. Conclusion and Recommendations

A considerable number of school adolescents had started sexual activity early and have practiced risky sexual behavior that might predispose them to different sexual and reproductive health problems. Risky sexual behaviors were proven by use of condom inconsistently, having multiple sexual partners and having sexual intercourse with sex workers. Delay in sex debut and reducing risky sexual behavior among adolescents can be achieved through well designed sexual education programs at the school.

List of Abbreviations

AIDS: Acquired Immunodeficiency Syndrome
HIV: Human Immunodeficiency Virus

Declarations

Ethics approval and consent to participate:

The study was approved by Ethical Review Committee of the Amhara Regional Health Bureau. Permission was also secured from Tana Haik secondary and preparatory school directors. Informed consent was obtained from each study participants and their parents (for <16 years old students). All participants were informed of their right to refuse at any time and not to write their names to ensure confidentiality.

Consent for Publication

Not applicable

Availability of Data and Material

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Competing Interests

The authors declare that they have no competing interests.

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Funding was not received for this study.

Authors' Contributions

HA being the principal investigator contributed to proposal write-up, study design, data analysis, interpretation of results and write-up, MA being the co-principal investigator contributed in data analysis, interpretation of results and write-up, AD and NA had contributed to monitoring and supervision, data analysis and write-up, MN and AG, had contributed to data collection, data analysis and write-up. All authors read and approved the manuscript.

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References

- [1] International Planned Parenthood Federation. "Understanding Adolescents, in An IPPF Report on Young People's Sexual and Reproductive Health Needs," London. 1994. Available: <http://www.plannedparenthood.org>.
- [2] United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2015 Revision.
- [3] Z. Fekadu and P. Kraft, "Predicting intended contraception in a sample of Ethiopian female adolescents," The validity of the theory of planned behavior. *Psychology and Health* 2001; 16 (2): 207-222.
- [4] Child and Adolescent Health and Development. Adolescent sexual and Reproductive Health. *Htm* 2004; 1-2.
- [5] Ministry of Health. Rapid assessment on knowledge, Attitude and practices related to reproductive health in Ethiopia. Health education center and National office of population, Addis Ababa, 2000 Dec.
- [6] F. Eshetu, D. Zakus, D. Kebede. The attitude of students, Parents and Teachers towards the promotion and provision of condoms for adolescents in Addis Ababa, Ethiop. *J. Health Dev.* 1997; 11 (1): 7-16.
- [7] WHO. Programming for adolescent health and development. Report of WHO/UNFPA/ UNICEF study group on health programming for adolescents. Technical report series No. 886. WHO, Geneva, 1999.
- [8] L. Meschke, S. Bartholomae, R. Zentall. Adolescent Sexuality and Parent-Adolescent Processes. *Promoting HTC. Family R.* 2000; 49 (2): 143-154.
- [9] Central Statistical Authority. Demographic and Health Survey. Addis Ababa, Ethiopia, 2005.
- [10] E. Lemma. Predictors of HIV/AIDS related Sexual behavior of high school adolescents based on the classical health behavior models. Jimma Town, South West Ethiopia. (Unpublished Thesis Addis Ababa University), 2000 Dec.
- [11] UNICEF, UNAIDS and WHO. Young people and, HIV/AIDS. Opportunity in crisis. Geneva. WHO, 2002.
- [12] Reproductive Health Outlook. Adolescent Reproductive health: Overview and Lessons Learned. Available at: <http://www.rho.org/html/adol-overview.htm>. Accessed 2015 Dec 11.
- [13] Mulatu A, Tefera B, Tizta T, Muluwas A. Risky Sexual Behavior and Associated Factors Among High School Youth in Pawe Woreda Benishangul Gumuz Region. *Sci. J. Cli. Med.* 2015; 4 (4): 67-75.
- [14] Wondemagegn M, Mulat Y, Bayeh A. Sexual behavior and associated factors among students at Bahir Dar University: a cross sectional study. *Reproductive Health.* 2014; 11: 84.
- [15] Zelalem A, Melkamu B, Muluken A. Risky Sexual Practices and Associated Factors for HIV/AIDS Infection among Private College Students in Bahir Dar City, Northwest Ethiopia. *ISRN Public Health.* 2013; 9: Article ID 763051.
- [16] Yuri A, Dennis VT, Jeffrey AK. Risk factors for HIV and other sexually transmitted disease among adolescents in St. Petersburg, Russia. *Family Planning Perspective* 2001; 33 (3): 106-112.
- [17] I. Nassir. Factors that influences school adolescents exposure to HIV/STD in Bale, Oromia Region, 2006.
- [18] R. Nigatu, K. Seman. Attitudes and practices on HIV preventions among students of higher education institutions in Ethiopia. *Educational Research* 2011; 2 (2): 828-840.
- [19] E. S. Maswanya, K. Moji, I. Horiguchi. Knowledge, risk perception of AIDS and reported sexual behavior among students in secondary schools and colleges in Tanzania. *Health Education Research,* 1999; 14 (2): 185-196.
- [20] A. M. Sunmola. Evaluating the sexual behavior, barriers to condom use and its actual use by university students in Nigeria. *AIDS Care* 2005; 17 (4): 457-465.
- [21] Makwe E, Ahmad HA. Attitude, Sexual Behaviour, and Risk Perception to Sexually Transmitted Infections Including HIV/AIDS among Students of University of Abuja, Nigeria. *British J. of Edu. Soc. Beh. Sci.* 2014; 4 (3): 350-361.