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Methods: An institutional-based cross-sectional the study design was conducted among 605 under graduate students of MaddaWalabu University students were selected using random sampling and data were collected using by structured self-administered questionnaire. Descriptive independent sample t-test and ANOVA were computed to analyze the data

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Knowledge and Self- Efficacy on Hiv/Aids among Undergraduate Students of Maddawalabu University, Southeast Ethiopia

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Abstract- Introduction: Human Immunodeficiency Virus /Acquired Immunodeficiency Syndrome (HIV/AIDS) has become increasingly public health problem worldwide. Particularly in developing countries' higher institutions like Ethiopia. The victims are youngsters; productive age of the population. The primary prevention and control of the spread of HIV/AIDS infection is through awareness and changing behavior remains at the highest priority. However few studies have been conducted among university students of Ethiopia on their self-efficacy of Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome prevention and control. Hence, this research was intended to investigate the Knowledge and self-efficacy of Madda Walabu University Undergraduate Students on HIV/AIDS.

Methods: An institutional-based cross-sectional the study design was conducted among 605 under graduate students of MaddaWalabu University students were selected using random sampling and data were collected using by structured self-administered questionnaire. Descriptive independent sample t-test and ANOVA were computed to analyze the data.

Result: This study result shows that among the total study participants, majority of the students (81.3%) has ever experienced sexual relationship. Nearly half (52.4%) of the students use condom during sexual intercourse consistently. About half (49.37%) of them had moderate level of knowledge regarding Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome infection, and of which only 28.4% of them had regular sexual partner. Students' level of knowledge regarding Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome significantly predictor of their level of self-efficacy and condom use ($R = 0.445$ and $R^2 = 0.198$).

Conclusion: The knowledge students have on human immunodeficiency virus/acquired immune deficiency syndrome, significantly predicts self-efficacy of protecting oneself from HIV/AIDS. Most students at the age of adolescence habit sexual intercourse early, but with insufficient knowledge of protection. Hence, Health education has to be designed focusing of psychological empowerment.

Keywords: knowledge, self-efficacy, hiv/aids, university students.

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I. Background

The world is now nearing the end of the third decade of the Acquired Immunodeficiency Syndrome (AIDS) epidemic. Unfortunately, although enormous progress in prolonging and improving the quality of life of those infected with Human Immunodeficiency Virus (HIV) have been made, the world still has neither a cure for nor a vaccine to prevent this disease. Perhaps most importantly, it has become increasingly clear that preventing the transmission and the acquisition of HIV must focus upon promoting knowledge, develop self-efficacy and bringing behavioral changes[1]. However, it was also reported that HIV/AIDS has become the leading cause of death in the Sub-Saharan African countries major mode of transmission being heterosexual contacts [2]. Ethiopia is one of the Sub-Saharan African countries most severely affected by the HIV/AIDS pandemic. HIV/AIDS national adult prevalence rate is estimated at 1.5% [3]. The adult prevalence of HIV infection in Ethiopia was estimated to be 2.4% in which most of the burden occurring among younger age groups [4, 5].

HIV/AIDS infections continue to be one of the world's greatest public health challenges as no vaccines have been found for curative treatment of the deadly disease. The HIV virus is mainly spread through sexual intercourse and the main hope to prevent infection remains modification of sexual behaviors including correct and consistent condom use [6]. Condoms offer safe, economically cheap and practically effective means of preventing both unwanted pregnancies and sexually transmitted infections including HIV/AIDS when used consistently and properly. This prevention strategy is however hindered by low use of condom especially by people living in areas with HIV/AIDS epidemic although condoms are readily available [7]. People's sexual behaviors take place in complex socio-cultural settings and motivations for condom use. Condom use is complex and intricate involving a range of levels such as individual, couple and community [6].

College students worldwide are at risk for c ontracting Sexually Transmitted Diseases (STD) and HIV/AIDS. Condom remains the integral part of HIV prevention programs. The prevalence of condom use is low despite all efforts to improve the use of it. Correct

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use of it reduces the risk of HIV transmission by almost 100%.Therefore, condom promotion has received considerable attention in the fight against the AIDS pandemic. Similarly, in sub-Saharan Africa condom use is among the most difficult issues to address in designing programs to reduce the sexual transmission of HIV in Africa [8].

Though different measures have been taken in response to the problem and some encouraging out comes have been achieved in terms of change of behavior, still there is a gap between knowledge, attitude, and practice [3, 9, 10]. Risky sexual practices such as multiple sexual partner ship, and inconsistent use of condoms are still widely practiced [10].

To understand how to assist young people in practicing safer sex (or transferring the know ledge into safer sex practices) , research hers [11] have considered prevention communication as one of the key tools for behavioral change.

In 2010, about 68% of all people living with HIV resided in sub- Saharan Africa. It is also accounted for 70% of new HIV infections, in 2010 [12]. HIV/AIDS is affecting young members of the societies especially adolescents between the age of 15 to 24 who are vulnerable and at risk of the disease. This young people represent 45% of all new HIV infections [12]. It is also estimated that most regular undergraduate university students lie within the age group of 18 to 24 years [13]. In Ethiopia, higher risky sex (i.e. sex without adequate protection) both within women and men are most prevalent among those living in urban areas in Addis Ababa. Among those with secondary or higher education level are in the highest quartile. Among men, the prevalence of higher risky sex is also notably high in Gambela, Dire-Dawa, Harare, Tigray and Afar[14]. Although there are some encouraging signs, surveillance results indicate that the epidemic is still progressing at a slower rate than previously predicated [13].

According to the second round HIV/AIDS Behavioral Surveillance Survey in Ethiopia, it was found out that around 9.9 percent of the in-school youth (14.6 % of males and 5.3 % of females) had sexual experience [13]. The mean and medium age of sexual debut among youth was 16 years. Only that 41.8 percent of in school youth who had sex with non-commercial partners reported consistent use of condoms. These are not withstanding; there is urgent need to understand factors influencing condom use to inform designing of effective preventive strategies [7].Self efficacy reflects a person's level of confidence in his or her ability to control the environment [15].

Sexual intercourse is the main mode of HIV transmission in Ethiopia, which is mainly driven by young people [16]. Condoms are a key component of prevention strategies that individuals can choose to reduce their risks of sexual exposure to HIV [16]. [10], however, condom utilization for prevention of HIV transmission requires people to exercise control over their own behavior. Even though individuals acknowledge that safer sex practices reduce risk of HIV infection and possess the required skills, they do not adopt them when they lack a sense of self efficacy [17].Thus this study aimed to investigate Knowledge and Self- Efficacy on HIV/AIDS among Undergraduate Students of MaddaWalabu University, Southeast Ethiopia.

II. Significance of the Study

Knowledge and self-efficacy of students concerning HIV/AIDS are the main variables for social development of a society and country at large. Competent and efficient professionals and personnel can be produced if our future professionals (students) get help and support during their stay at the university in relation to HIV/AIDS self-efficacy problems. So that, studying knowledge and self-efficacy of the students regarding HIV/AIDS; used for promoting HIV/AIDS prevention, intervention, and control. In turn, investigating the problem contributes for development and poverty reduction of the country in general. It is also essential for policy formulation and revision concerning HIV/AIDS services. Furthermore, the finding of this result will be as the base line data for other interested professionals to conduct further study.

III. Methods

a) *Study design and area*

Institutional-based cross-sectional study was conducted. The study used quantitative study design. Among 605 randomly selected regular undergraduate students in March, 2014 of MaddaWalabu University in Ethiopia were participated which is found 430 KMs to the Southeast of Addis Ababa (capital city of Ethiopia) in Oromia National Regional State. The university has two campuses, Robe main campus and Goba College of Medicine and Health Sciences. The study included both male and female students in both campuses. In the year 2014 the university has ten schools, one institute, one college and thirty seven departments with the total number of 11511 undergraduate and post graduate students.

b) *Sampling and Participants*

Regular undergraduate students of MaddaWalabu University were the source population and the study populations were those selected students for study through simple random sampling. The sample size was determined by using a single population proportion formula considering the assumptions: proportion of self-efficacy which was 39% [18] level of confidence of 95%, margin of error 0.05, design effect of

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1.52 and 10% non-response rate were considered. Finally the sample size was 607.

The respondents were stratified into health and non-health campus. From the total ten non-health schools (Robe campus) and one medicine and health sciences college of the university (Goba campus), eight schools/college were selected randomly. The total sample size of the study was allocated proportionally for the schools/college. Sample allocated for the schools/college were allocated proportionally for the stratified class year under the departments of selected schools/college. Finally, simple random sampling was employed to recruit the study subject.

c) Data collection and analysis

In order to collect the relevant and reliable data the researcher employed close ended questionnaire from the tools used before by scholars in the area [4,5, 19]. Data were collected through self-administered questionnaire. Before data entry into SPSS questionnaires were checked for completeness and entry was made on SPSS version 21 for analysis. Accordingly, Percentage, T-test, ANOVA and Regression were computed. The results were presented by tables. Regression analysis was used to identify associations between variables. The possible effects of confounders were controlled through multivariate logistic regression analysis of backward conditional method with an entry of 0.05 and 0.1 removal. Association between the explanatory and dependent variable were assessed at p-value of 0.05

IV. Results

a) Students' HIV/AIDS Knowledge and Self-Efficacy

The participant socio demographic characteristics were studied and the results were presented here under. Hence, the below table 1 described the general information of the individual respondents based on their demographic characteristics. The above table indicates a total 605 of participants were included in the study. As the table indicates, 452(74.7%) of the participants were male, whereas the rest 153 (25.3%) of participants were female. As clearly showed the frequency of participants in terms of age, majority of the respondents 353(58.3%) age ranged from 21-25 years. On the other hand, 194 (32.1 %) of them were in 16-20 years age category. The respondents' age range 26-30, 47 (7.8%), and the rest very few respondents age range 31-35, accounts for 11(1.8%). In relation to frequency of participants in terms of residential status of family/foster, those from urban resident were 239(39.5%) and a large number of the respondents were rural resident 361 (59.7%). With regard to, academic year level, year I participants accounted for the majority of the respondents 244(40.3%) while, year II year III and year IV respondents respectively were 203(33.5%), 138 (22.7%) and 20(3.6%).

Table 1: Socio-demographic variables of respondents

		N	%
Sex	Male	452	74.7
	Female	153	25.3
Origin of Residence	Urban	239	39.5
	Rural	361	59.7
Age	16-20	194	32.1
	21-25	353	58.3
	26-30	47	7.8
	31-35	11	1.8
Year of study	I	244	40.3
	II	203	33.5
	III	138	22.7
	IV	20	3.6

As indicated below in a table, all of the participants (100%) reported that they have heard about HIV/AIDS. However, 123(20.3%) and 482(79.7%) of the respondents said "yes" and "no" to the question that asked if they do know anyone who is infected with HIV. Besides, 437(72.2%) of the participants reported that they do not know anyone who has died of AIDS. On the other hand, 168(27.8%) of the sample respondents responded that they do know anyone who has died of AIDS. Moreover, respondents were asked if they know the modes of HIV transmission and prevention. With regard to this question, the majority of respondents reported that Unprotected Sexual intercourse, Mother to child transmission, sharing infected sharp objects, blood Transfusion and Organ transplant are the major modes of HIV transmission as responded by

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257(42.5%), 136(22.5%), 212 (35%), 180(%), 177(29.7%) of subjects respectively. Similarly, the majority of participants reported that by abstaining from sexual intercourse 123(20.3%), by using a condom correctly & consistently 230(28%), by being faithful to uninfected sex partner 302(50%) and by avoiding sharing of sharp objects 181.5(30%) one can prevent himself/herself from HIV/AIDS. Generally, result shown as that students have moderate level of HIV/AIDS knowledge (49.37%). As a result, Most of the students believed that being faithful to partner is the best prevention mechanism of HIV/AIDS.

Table 2: Respondents HIV/AIDS Knowledge

S.N	Variables		Frequency	Percent
1	Have you ever heard of HIV or the disease called AIDS?	Yes	605	100
		No	-	-
		Total	605	100
2	Do you know anyone who is infected with HIV?	Yes	123	20.3
		No	482	79.7
		Total	605	100
3	Do you know anyone who has died of AIDS?	Yes	168	27.8
		No	437	72.2
		Total	605	100
4**	Please indicate how a person can get infected with the virus that causes AIDS?	Unprotected Sexual intercourse	257	42.5
		Mother to child transmission	136	22.5
		Sharing infected sharp objects	212	35
		Blood Transfusion	180	29.7
		Organ transplant	80	13.2
		Do not know	10	1.65
5**	Please indicate how a person can prevent himself/herself from getting infected with the virus that causes AIDS?	By abstaining from sexual intercourse	123	20.3
		By using a condom correctly & consistently	230	38
		By being faithful to uninfected sex partner	302	50
		By avoiding sharing of sharp objects	181.5	30
		Do not Know	-	-
	Average knowledge level of students considering the Multiple Response			≥ 49.37%

*** Multiple Response Items*

As it indicated the on below table there is statistically significant age difference on students comprehensive knowledge except mother to child HIV transmission (Sig 0.00*& 0.699 @ *P<0.05 respectively).

Table 3: ANOVA HIV/AIDS Comprehensive Knowledge Based on Age Difference of students

		SS	Df	MS	F	P
MOT	Between Groups	152.484	3	50.828	49.923	.00
	Within Groups	611.890	601	1.018		
	Total	764.374	604			
PRHT	Between Groups	36.152	3	12.051	11.959	.00
	Within Groups	605.607	601	1.008		
	Total	641.759	604			
CUSE	Between Groups	11.702	3	3.901	23.612	.00
	Within Groups	99.283	601	.165		
	Total	110.985	604			
MTCHT	Between Groups	1.792	3	.597	.476	.699
	Within Groups	754.383	601	1.255		
	Total	756.175	604			
ARTH	Between Groups	56.615	3	18.872	14.586	.00
	Within Groups	777.577	601	1.294		
	Total	834.192	604			

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STigmaD	Between Groups	4050.904	3	1350.301	515.226	.00
	Within Groups	1575.096	601	2.621		
	Total	5626.000	604			

*P<0.05 SS = Sum Squares; MS = Mean Square; df = degree of freedom
MOT=Mode of HIV transmission; CUSE=Correct &consistent Condom Use
MTCHT= Mother to Child HIV transmission, ARTH= Anti-Retroviral therapy,
STIGMAD=Stigma and Discrimination

The statistical analysis disclosed that there is statistically significant age difference (F (3,601) = 143.473, P<0.05) among students on general knowledge of HIV total score.

Table 4: ANOVA on Knowledge on HIV Total Score of students By Age

	SS	Df	MS	F	P
Between Groups	2821.33	3	940.445	143.473	.00
Within Groups	3939.47	601	6.555		
Total	6760.8	604			

*P<0.05 SS = Sum Squares; MS = Mean Square; Df = degree of freedom

The statistical analysis revealed that there was a statistically significant difference between male and female students in their self-efficacy (t = 8.130, df = 603, p<0.05) (Table 5). However, statistical analysis between male and female students was found to be significant. In addition, the descriptive statistics were also computed to find out the differences in self-efficacy by sex. And, the results reveal that relatively male students had more self-efficacy (M= 53.6698 and SD= 8.09749) than their female counter parts (M= 48.7880 and SD= 1.27338). The result has shown as that Male students are more confident than female students on HIV/AIDS self-efficacy. Generally, students have scored below average self-efficacy (Expected mean (54) > (Observed mean (52.2).

Table 5: Students' Self-Efficacy on HIV/AIDS Independent Sample T-Test Self Efficacy

	Sex	N	EPM	μ	M	SD	Df	t	Sig
Sex	Male	421	54	52.2	53.6698	8.09749	603	8.13	.00
	Female	184			48.788	1.27338	465.454	12.034	

*p<.05 M = Mean SD = Standard Deviation DF = Degree of Freedom

As it can be infer from table-2.1 Using Students General knowledge regarding HIV/AIDS to predict Students HIV/AIDS Self-Efficacy yielded a Statically Significant Regression (R = 0.445and R2 = 0.198). That is 19.6% of the variance in Self-Efficacy was explained by the independent variables called HIV/AIDS Knowledge. Furthermore, the direct effect of Students HIV/AIDS Knowledge on their Self-Efficacy were determined by B_standardized coefficient in the table (R= 0.445, F=148.691, *P<0.05), and then Students Knowledge of HIV/AIDS were statistically significant predictor of students Self-Efficacy regarding HIV/AIDS (Table6).

Table 6: Regression: Predicting Self-efficacy Using Knowledge

	Sum of Squares	Mean Square	Df	B	R	R^2	Adjusted R^2	F	Sig.
Regression	6109.78	6109.78	1	0.45	0.445	0.198	1.96 (19.6%)	148.691	.00
Residual	24777.5	41.09	603						
Total	30887.3		604						

A. Dependent Variable: Self-efficacy1
B. Predictors: (Constant), Knowledge On HIV: B = 0.45, *P<0.05, N=605

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V. Discussion

Respondents were asked if they know the modes of HIV transmission and prevention. With regard to this question, the majority of respondents reported that Unprotected Sexual intercourse (42.5%), sharing infected sharp objects (35%), Organ transplant (29.7%), Mother to child transmission (22.5%), and blood Transfusion (13.2%), are the major modes of HIV transmission. Similarly, the participants reported that by being faithful to uninfected sex partner (50%), by avoiding sharing of sharp objects (30%), by using a condom correctly & consistently (28%), and by abstaining from sexual intercourse (20.3%) one can prevent himself/herself from HIV/AIDS. Generally, result shows as that students have moderate level of HIV/AIDS knowledge. As a result, Most of the students believed that being faithful to partner is the best prevention mechanism of HIV/AIDS. Additionally, the statistical analysis disclosed that there is statistically significant age difference ($F(3,601) = 143.473$, $P<0.05$) among students on general knowledge of HIV.

Similar with this study, [20,21] found that almost all student had heard about HIV/AIDS and approximately 95% knew the most common routs of transmission.

Furthermore, the result showed more than 60% of the students knew persons infected and died of HIV/AIDS. Moreover[22], found that 80% of the respondents know that HIV/AIDS could be transmitted via unprotected sexual intercourse, sharing infected sharp objects, blood transmission, organ plants, and about 63-86% thought abstain, condomuse, faithful to uninfected partner and avoiding sharing of sharp objects can prevent HIV transmission. The above mentioned findings of this study showed that there was an awareness and self-efficacy of the students on HIV/AIDS among Madda Walabu University.

However, this finding is higher than that found in a study conducted by [22].This is inconsistent with [23] that reports 47.4% of this study participant believes that they could tell if someone is infected with HIV just by looking at a person, indicating the lower, awareness in this study population.

This misconception about HIV/AIDS is very dangerous in countries like Ethiopia where the prevalence is high (4.4%) as HIV/AIDS Prevention and Control office [23].

Self-efficacy as the degree of confidence that the respondents show in their ability to engage in safe-sex practices by keep faithful to their partner, abstain from sex, obtaining condoms, keeping condoms, negotiating condom use and using condoms with their partner/partners to protect themselves from contracting HIV/AIDS. In regarding to this, there was a statistically significant gender difference in students self-efficacy ($t = 8.130$, $df = 603$, $p<0.05$) in which male students had more self-efficacy ($M= 53.6698$ and $SD= 8.09749$) than female ($M= 48.7880$ and $SD= 1.27338$). Likewise, students general knowledge regarding HIV/AIDS significantly predicts Students self-efficacy to protect them safe from HIV ($R = 0.445$ and $R 2= k0.198$). That is 19.6% of the variable in self-efficacy was explained by the independent variables called HIV/AIDS knowledge. Students knowledge of HIV/AIDS were statistically significant predictor of students self-efficacy regarding HIV/AIDS.

Specifically, students who had high knowledge about the HIV/AID Smode of transmission, mode of prevention and use of condom significantly forecasts their belief and confidence of capability to pass challenges of risky behaviors keep faithful to their partner, abstain from sexual intercourse and to use condom correctly and consistently. This implies, if we increase the HIV/AIDS knowledge of our students, indirectly we are working on their capacity and strong belief to protect them from infection. Other studies also recognize that, self-efficacyis an important determinant in reducing risky sexual behaviors that could lead to HIV/AIDS [24]. They examined the roles of self-efficacy, outcome expectancies, and perception of peer attitudes of adolescents at the beginning of sexual activity and examined how the constructs affect the use of condoms among young people who are sexually active. To the contrary, this study suggested admission types and level of education had a significant effect on enacting – abstinence both on confidence not to make premarital sex and ability to delay sex till marriage.

Academic year level also had significant effect on correctly and consistently use of condom .This is consistent with the findings of [23] which depicts respondents with a higher level of schooling were aware of various preventive methods. Similarly in addition to the above idea [25] in order to avoid risk behaviors by limiting the number of sexual partners, delaying individual sexual doubt and having protected sex is crucial in the prevention and control of HIV/AIDS.

VI. Conclusions

Students had moderate level of HIV/AIDS knowledge (49.37%). As a result, most of the students believed that being faithful to partner is the best prevention mechanism of HIV/AIDS. There wasstatistically significant age difference in comprehensive HIV/AIDS knowledge of students. There was statistically significant gender difference in students self-efficacy regarding HIV/AIDS. Male students had more self-efficacy than female students. The students'level of knowledge regarding HIV/AIDS significantly predictstheir level of self-efficacy of belief to protect themselves from HIV infection through abstinence, faithfulness and condom use. About 81.3% of the students had ever experience sexual relationship.

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From those, only 28.4% hadregular sexual partner. The circumstances that stimulate students to have sex are: The developmental age, social environment,peer pressure, and feeling of modernity, drug abuse, media (E.g. pornography movies) and love,whereas 18.7% of the students did experience sexual intercourse still. This is why due to lack of opportunity, fear of pregnancy, HIV/AIDS and other STDS, due to religious reasons, sexual relationship phobia, thinking that is not right to do it at this age and do not want to do it before marriage and even they rationalize that it will obstacle their educational goal

VII. Ethical Approval

The ethical issue was approved by MaddaWalabu University Ethical Review Committee. A supportive letter obtained from the University Research Directorate to all schools. For explaining the purpose of the study, verbal consent was obtained from all participants. All the information given by the respondents has been used for research purposes only, and confidentiality was maintained by omitting the names of the respondents. There is no approval number and the University work with letter of permission written from University Research Directorate to all schools, all departments and the subjects' oral consent.

VIII. Availability of Data and Materials

Data supporting the findings are in the manuscript, additional data available up on request.

IX. Abbreviation

AIDS: Acquired immune deficiency syndrome; *ANOVA:* Analysis of Variance, HIV: Human immune deficiency virus, MOH: Ministry of health, N R P:Non-regular partner, RP: Regular partner, STD: Sexually transmitted disease, SPSS: Statistical Packages for Social Sciences, WHO: World health organization, HAPCO: HIV and AIDS Prevention and Control, USA: United State of America ,UNAIDS: United Nations HIV/AIDS Program, UNFPA: United Nations population Activity, UNICEF: United Nations Children's Fund.

The study was conceived and designed by AG and BA, and both of them were involved in the conception. And also they analyzed the data. AG prepared the manuscript and critically reviewed it. Both AG and BA also assisted in the data collection and reviewed the manuscript, and have read and approved the final manuscript.

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References Références Referencias

1. UNAIDS (2012) World AIDS day report.
2. UNAIDS/WHO (2009) AIDS epidemic update UNAIDS 20 avenues Appia CH-1211 Geneva 27 Switzerland.
3. Ethiopian Demographic and Health Survey (EDHS) (20011). CSA, A.A Ethiopia, ORC Macro, Calverton, Maryland, USA
4. Shiferaw Y, Alemu A, Girma A et al. Assessment of knowledge, attitude and risk behaviors towards HIV/AIDs and other sexual transmitted infections among preparatory students of Gondar town, northwest Ethiopia. BMC Research Notes. 2011; 4 (505):2-8.
5. Regassa N, Kedir S. Attitudes and practices on HIV preventions among students of higher education institutions in Ethiopia: the case of Addis Ababa University. Educ. Res. 2011. 2 (2): 828 - 840
6. Coats E, Wasting S,(2007) Context and condom use among the Maasai. Culture, health and sexuality, 9 (4):387-401.
7. Smith KP, Watkins SC(2005): Perceptions of risk and strategies for prevention: responses to HIV/AIDS in rural Malawi. Social Science and Medicine,60 (3):649-660.
8. Peltzer K (2000) Factors affecting condom use among south African university students. Department of Psychology, University of the North, Private Bag X1106, Sovenga 0727, South Africa.) East African Medical.Journal Vol. 77(1).
9. Firehiwot A (2006) Behavior change communication (BCC) and the response of young adults: The case of Ethiopia.SaLE.
10. UNAIDS,UNFPA and WHO.(2013).Condoms and HIV prevention: position state ment .,.http: // www.unaids.org/en/resources/presscentre/featurestories/2013/march/20130319preventionposition/.
11. Hindin, M.J. &Fatusi, A.O. (2009) Adolescent sexual and reproductive health in developing countries. An overview of trends and intervene-tions. Vol. 35(2).
12. Addis Z, Yalew A, Shiferaw Y etal. Knowledge, attitude and practice towards voluntary counselling and testing among university students in Northwest Ethiopia: a cross sectional study. BMC Public Health. 2013; 13 (714): 2-8
13. Behavioral Surveillance Survey (BSS) Ethiopia (2005). Round Two, MOH/HAPCO, AAU, CSA, EPHA, Addis Ababa, Ethiopia.
14. EPHA (2006) Intention to use Condoms and remaining faithful in Student at Gondar University.

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15. Forsyth AD, Carey MP(1998) Measuring self efficacy in the context of HIV risk reduction: Research challenges and recommendations. Health Psychology, 17(6):559 568.
16. Federal HAPCO (2011) HIV/AIDS: HIV prevention package: MARPs and vulnerable groups. Addis Ababa, Ethiopia: Federal Ministry of Health.
17. Bandura A (1994) Social cognitive theory and exercise of control over HIV infection, preventing AIDS: theories and methods of behavioral interventions. New York: Plenum; 1:25–59
18. Tesfaye Setegn, AbulieTakele, Nagasa Dida & Begna Tulu.2013.Correlates of Risk Perception to HIV Infection, Abstinence and Condom use among Madawalabu University Students, Southeast Ethiopia: Using Health Belief Model (HBM).Global Journal of Medical research Diseases Volume 13 Issue 5 Version 1.0 Year 2013.
19. Al-Rabeei NA, Dallak AM, Al-Awadi FG (2012) Knowledge, attitude and beliefs towards HIV/AIDS among students of health institutes in Sana'a city. East Mediterr Health J 18: 221-226.
20. Taffa, N. Johnne, Sundby, Hansen, C.H. & Bjune, G (2003). HIV prevalence And Socio-Cultural Contexts of Sexuality Among Youth in AA, Ethiopia. (Ethiopian.Journal. Health Development, 16(2): 139-145.
21. Gao,Y., Lu, Z.Z., Shi, R., Sun, X.Y. and Cai,Y.(2001). AIDS and sex education for young people in china.Reproduction, Fertility and Development, 13,729-737.
22. Getinet T (2009) Self-reported sexual experiences, sexual conduct and safer-sex practices of Ethiopian undergraduate male and female students in the context of HIV/AIDS pandemic. Published on line Proquestllc 789 East Eisenhower Parkway. Umi Number: 3356131.
23. Ministry of Health and National HIV/AIDS Prevention and Control Office (2006). AIDS in department, ministry of health. Addis Ababa, Author.
24. Moore, J.S., Harrison, J.S., & Doll, L.S. (1994). Interventions for sexually active, heterosexual women in the United States. In R.J. Di Clemente, & J.L. Peterson (Eds.).Preventing AIDS Theories and Methods of Behavioral Interventions (pp. 243-265). New York: NY: Plenum Press.
25. World Health Organization (2004) Gender dimensions of HIV status disclosure to sexual partners: Rates, barriers and outcomes: A review paper. Geneva, Switzerland: World Health Organization.

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