

ASSESSMENT OF FACTORS AFFECTING CONTRACEPTION UTILIZATION AMONG PREPARATORY SCHOOL STUDENTS IN GONDAR TOWN, AMHARA REGION, ETHIOPIA

GETANEH BIZUAYEHU DEMEKE*

Department of Population Studies, College of Social Sciences and Humanities, University of Gondar, Ethiopia.

Email: getanehbizuayehu16@gmail.com

Received: 04 January 2022, Revised and Accepted: 02 February 2022

ABSTRACT

Objective: The study was aimed to assess factors affecting contraception utilization among preparatory school students in Gondar town, Amhara region, Ethiopia.

Methods: An institutional-based cross-sectional study design was employed. A multistage sampling procedure was employed in the study area. The data were entered, clean and analysis using statistical package for social science (SPSS) version 16 software. Descriptive, bivariate, and multivariate analyses were employed. Multivariate analysis with 95% confidence interval (CI) was computed to identify factors associated with contraception service utilization at $p < 0.05$.

Results: The response rate of this study was 97%. The result showed that 90.4% of study participants knew about contraception services utilization. However, the practice of contraception was only 24% (95% confidence interval (CI): (20.8%-27.4%). Based on the finding of multivariate analysis among explanatory variables, age, media exposure, marital status, and ever had girl or boyfriends were significantly associated with contraception services utilization.

Conclusion: Interventions are needed to improve adolescent sexual and reproductive health such as promote parent adolescent communication, strengthening of youth centers, working with community and religious leaders, and increase the accessibility of services which are important to encourage adolescent contraception service utilization.

Keywords: Reproductive health, Adolescent, Youth, Contraception, Gondar town.

© 2022 The Authors. Published by Innovare Academic Sciences Pvt Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>) DOI: <http://dx.doi.org/10.22159/ijhs.2022v10i1.44156>. Journal homepage: <https://innovareacademics.in/journals/index.php/ijhs>

INTRODUCTION

According to the world health organization (WHO), adolescents were defined as the person age of 10–19 and a young age from 10 to 24 years old [1]. About 1.2 billion adolescents found worldwide, making 5th world population and 80% of them live in the developing countries [2]. Today, out of 7.3 billion the world population, the number of young people is little <1.8 billion [3]. The term youth-friendly reproductive health (RH) service refers to those services that are accessible, acceptable, and appropriate for the youth. The services include family planning, voluntary counseling and testing, and treatment of sexually transmitted infections [4].

Adolescents and young adults have an increased interest in the opposite sex, highly concerned with physical and sexual attractiveness, and frequently changing relationships. Besides, they are risk takers who are more likely to make decisions about the future without adequately considering the consequence [5]. Young people from sub-Saharan Africa countries are more at risk sexual and RH problems than those young people from around the world [6].

Babies born to adolescent mothers account for 11% of all births worldwide, 95% of births are from the developing countries [7]. In the developing world, large proportion of unmarried adolescents is sexually active and it needs information about sexual health and risks, access to contraceptive products and services [8].

Adolescents in Ethiopian context, based on national youth policy, are defined as age from 15 to 29 years. Young people constitute more than one-third of the total population in Ethiopia [9]. In Ethiopia, mortality and morbidity among adolescents and youth related to RH are associated with a range of health and health-related behavioral problems such as, risky sexual practices, child marriage, early child bearing, unintended

pregnancy, unsafe abortion, and its complications, sexual transmitted infections (STIs) including human immune deficiency virus (HIV) and access to and utilization of RH [10].

About 208 million unplanned pregnancies were occurring each year in worldwide. Among this, 41% exposed to incidence. Nearly half of these unplanned pregnancies end in abortion [11]. An estimated 33 million unintended pregnancies are result of contraceptive failure or incorrect use [12]. Each year, contraception prevents 188 million unplanned pregnancies which results reduce 112 million abortions, 1.1 million newborn deaths, and 150,000 maternal deaths [13].

The study in Nepal showed that teenage pregnancy is one of the major problems of sexual and RH among adolescents. Due to high teenage pregnancy, many students there were high school dropout among girls in rural communities and chances of getting married at a young age were also high [14]. In 2011 Ethiopia demographic and health survey (EDHS) report indicated that the utilization of family planning services in the existing health-care system by young people was very low. As a result, there is a high rate of unwanted pregnancies which often result in abortions and their complications [15].

The study conducted in Hadya showed that the utilization of contraceptive service among adolescents and youths was 40.2% each. This study also indicated that students were faced different sexual and reproductive health (S and RH) problems after sexual intercourse, such as 56.3% exposed to unplanned pregnancy, 22.9% of abortion, and 20.8% were sexual transmitted infections (STI) diseases [11]. The reasons for low utilization of this services, lack of accessibility, and sociocultural factors were the main hinder to use the services. A community-based study also conducted in East Gojjam indicated that among sexually active youths, only 21% of them ever used

contraceptives. Among the sexually active female adolescents, 43% of them became pregnant and 15% had a history of abortion [3].

General objectives of the study

The general objective of the study was to assess factors affecting contraception service utilization among preparatory school students in Gondar town, Amhara Region, Ethiopia.

The specific objectives of this study are listed below

- To determine the level of contraception service utilization among preparatory school students in Gondar town.
- To identify factors associated with contraception service utilization among preparatory school students in Gondar town.

METHODS

Study area, period, and study design

The study was conducted in Gondar town from March 2019 to June 2019. Based on 2018/19 population projection of the central Gondar zone, Gondar town had a total population of 302,539 among this, 142,821 and 159,718 were male and female, respectively. From a total population age, 10–14 years were 12%, 15–19 and 20–24 were 16.1% and 14.1%, respectively. According to Gondar town administration, education, office, there are seven public and three private preparatory schools in the town in which 4728 students were attending during the 2019 academic year. An institutional-based cross-sectional study design was conducted among public and private preparatory school students.

Data sources, source, and study population

The main data source for this study was primary data. The primary data source was collected through questionnaires. All preparatory school students in Gondar town were source population, while the study population were public and private school students among selected preparatory schools in the study area.

Inclusion and exclusion criteria of the study

Students who attended both public and private preparatory schools were included in the study, while students were sick or unable to speak and nighttime students excluded from the study.

Sample size determination

The sample size was determined using single population proportion formula by considering the following assumption. Level of confidence was 95% with 0.05 α value ($Z_{\alpha/2} = 1.96$ on the standard normal distribution curve), 5% margin of error ($d = 0.05$), a proportion of 29.8% contraceptive service utilization obtained from the previous study in Woreta town among adolescents age 10–19 years, 5% contingency, and design effect of 2 was considered in the sample size determination.

$$n = \frac{(Z_{\alpha/2})^2 p(1-p)}{d^2}$$

$$n = \frac{(1.96)^2 * 0.298(1-0.298)}{(0.05)^2} = 321$$

Adding 5% contingency, the sample was 337. Because multistage sampling method was used, the sample of 337 is multiplied by design effect of 2 and the final sample size was 674.

Sampling and data collection techniques

Multistage sampling technique was used to select primary sampling unit and to determine the sample proportion for each selected school. In the study area, there were seven public and three private preparatory schools that were present. The simple random sampling technique was employed to select secondary sampling unit. Out of 10 preparatory schools, six schools, four from public and two from private, were selected using lottery methods and purposively. Systematic sampling technique was done by taking a list of all students from roster in each grade. The questionnaire was first prepared in English

Table 1: Demographic and socioeconomic characteristics study participants in Gondar town, 2019

Variables	Responses	Frequency (n)	Percent
Sex	Male	251	38.4
	Female	403	61.6
Age	<18 years	414	63.3
	>18 years	240	36.7
Religion	Orthodox	506	77.4
	Muslim	88	13.4
	Others	60	9.2
Place of birth	Rural	161	24.6
	Urban	493	75.4
Marital status	Single	636	97.2
	Married	18	2.8
Personal monthly pocket money	Yes	156	23.9
	No	498	76.1
Father's educational level	Illiterate	63	9.6
	Read and write	183	28
	Primary school	122	18.7
	Secondary and above	286	43.7
Mother's educational level	Not formal education	306	46.8
	Primary school	110	16.8
Family monthly income	Secondary and above	238	36.4
	150–1400 Ethiopian birr (ETB)	184	28.1
	1401–3550 Ethiopian birr (ETB)	224	34.3
Mother's occupation	>3550 Ethiopian birr (ETB)	246	37.6
	Government employed	160	24.5
	Merchant	163	24.9
Father's occupation	Housewife	291	44.5
	Others	40	6.1
	Government employed	254	38.8
	Farmer	177	27.1
Living status	Merchant	189	28.9
	Daily laborer	34	5.2
	With both parents	488	74.6
	With mother only	86	13.1
	Others	80	12.2

Table 2: Sexual history of study participants in Gondar town, 2019

Variables	Responses	Frequency (n)	Percent
Ever had a girl/boyfriend	Yes	182	27.8
	No	472	72.2
Ever had a girlfriend	Yes	71	39
	No	180	38.1
Ever had boyfriend	Yes	111	61
	No	292	61.9
Ever had sexual intercourse	Yes	170	26
	No	484	74
Factors motivated to conduct sexual intercourse			
Drinking alcohol	Yes	18	10.6
	No	152	89.4
Peer influence	Yes	63	37
	No	107	63
Love relationship	Yes	89	52.4
	No	81	47.6
Faced RH problems	Yes	27	4.1
	No	627	95.9
Types of problems faced			
Un intended pregnancy	Yes	10	37
	No	17	63
Abortion	Yes	4	14.8
	No	23	85.2
Chlamydia	Yes	13	48.1
	No	14	51.9

and then translates into Amharic and retranslates back to English by another translator to check consistency. After these, the data were collected using self-administered questionnaire. The questionnaire includes demographic, socio-economic, individual, as well as health system characteristics.

Study variables

The dependent variable was contraception services utilization and independent variables/explanatory variables were demographic, socioeconomic, individual, and health system factors.

Data quality control and analysis

To ensure data quality, one school facilitator for each selected preparatory school was assigned who supervised each school. The intensive training was given for 1 day about the aim of the study, procedures, and data collection techniques. Before the study, 5% pretest structured questionnaire was conducted on students at Merawi preparatory school outside the study area to check the reliability of the questionnaire. The collected data were rechecked for completeness before the data entry. Version 20 SPSS software was used for statistical analysis. Bivariate and multivariate analysis was employed to assess the association between dependent and independent variables within 95% confidence level at $p < 0.25$ and < 0.05 , respectively. Cross-tabulation and Chi-square methods were used to find out the degree of association each independent variable to dependent variable. The logistic regression model was employed since this method is the most appropriate tool to analyzing the degree of strength of the relationship between dependent variable and independent variables when dependent variable dichotomous taking value between 1 and 0. Descriptive statistics were used to describe results in table as frequency and percentage.

RESULTS

Background characteristics of the study population

A total of 654 students were included within the study making a response rate of 97%. For a complete of 654 study participants 251 (38.4 %) were males and 403 (61.6%) of study participants were

females from grade, 11th -12th and also the reported mean age of study participants was 18.62 (with $SD \pm 1.714$) years with the range of 16 to 27 years. The majority of respondents 403 (61.6%) were female participants. 636 (97.2%) of study participants wasn't married and also the remaining 18 (2.8%) was married. 493 (75.4%) of respondent the place of birth in urban area and 161 (24.6%) were rural. 506 (77.4%) of respondents were Orthodox Christian followers, (13.4% Muslim and (9.2%) others. Others refer to protestant and catholic religious followers (Table 1).

Sexual history of study participants

From study participants 71 (39%) of male and 111 (61%) of females ever had girlfriend and boyfriends. With regard to sexual activity or intercourse 170 (26%) of respondents were ever had sexual intercourse. Students mentioned that, factors were motivated to practice sexual activity, 89 (52.4%) where love relationship, 63 (37%) of, peer influence as well as 18 (10.6%) of them drinking alcohol. Study participants were faced sexual and reproductive health problems, such as unintended pregnancy, 10 (37%), abortion, 4 (14.8%) and Chlamydia, 13 (48.2%) (Table 2).

Knowledge and source of information about contraception methods

Of 654 study participants, 691 (90.4%) were aware of contraceptive methods. The most commonly known contraceptive methods were pills 454 (69.4%) and injectable contraception 409 (64.1%). With respect to the source of information, the media (TV) was the main source of information on contraceptive methods 451 (69%). Only 101 (15.4%) of respondents were ever discussed with parents on the issue of contraception, while the study subject mentioned that the reasons for not discussed with parents about contraception services utilization, and cultural taboos, 380 (57.5%) not necessary, two hundred fifty three (45.8%) and fear of parents seventy five (13.6%).

Contraception service utilization

About 157 (24%) of respondents were utilize contraception services. The pattern of contraception use, among individual methods, male condom 106 (67.5%), flowed by injectable contraception seventy (44.6%) and the lowest intra uterine contraceptive device (IUCD) 9

Table 3: Contraceptive service utilization of preparatory school students in Gondar town, 2019

Variables	Frequency	Percent
Ever used contraceptive		
Yes	157	24
No	497	76
Which types of contraceptive method used his/her life time		
Male condom	106	67.5
Pill	67	42.7
Injectable	70	44.6
Implant	62	39.5
IUCD	9	5.7
Which contraceptive methods currently use		
Male condom	45	28.7
Injectable	36	23.9
Pills	30	19.1
Implant	39	24.8
IUCD	7	4.5
Where you got contraceptive*		
Government hospital	20	12.7
Pharmacy	36	22.9
Govt. health center	45	28.7
Private health center	78	49.7
FGAE	8	5.1
Reasons did not use contraception*		
Fear of health worker confidentiality	84	16.9
Inconvenience working hour	204	41
Long waiting time	154	31
Fear of community attitude	236	47.5
Fear of seen by family	198	39.8
My religion not allowed	387	77.9

Table 4: Bivariate analysis of factors associated with contraceptive service utilization among preparatory school students in Gondar town, 2019

Variables	Contraceptive use				
	Yes	No	X ²	df	p-value
Age					
<18	77	337	17.281	1	0.000
>18	80	160			
Marital					
Single	144	492	20.948	1	0.000
Married	13	5			
Religious					
Orthodox	116	390	3.448	2	0.178
Muslim	28	60			
Others	13	47			
Pocket money					
Yes	41	115	0.429	1	0.512
No	116	382			
Media exposure (TV)					
Yes	108	343	4.223	1	0.040
No	47	95			
Ever had girl/boyfriends					
Yes	109	73	175.280	1	0.000
No	48	247			
Discussed with parents on the issue of contraceptives					
Yes	35	66	6.748	1	0.009
No	122	431			

Table 5: Bivariate and multivariate analysis of factors associated with contraception service utilization among preparatory school students in Gondar town, 2019

Variables	Contraception use		Odds ratio (OR)		
	Yes	N	B	COR (95%CI)	AOR (95%CI)
Age					
<18 years	77	337		1	1
>18 Years	80	160	0.783 (0.745)	2.188 (1.519–3.153)	2.107 (1.442–3.081)**
Marital status					
Single	144	492	2.184 (2.139)	8.883 (3.115–25.334)	8.488 (2.851–25.272)**
Married	13	5		1	1
Religious					
Orthodox	116	390	0.073 (0.268)	1.075 (0.562–2.056)	0.765 (0.449–1.302)
Muslim	28	60	0.523 (0.235)	1.687 (0.789–3.610)	1.265 (0.644–2.485)
Others	13	47		1	1
Pocket money					
Yes	41	115	0.160 (0.088)	1.174 (0.777–1.774)	1.092 (0.708–1.682)
No	116	382		1	1
Media exposure					
Yes	108	343	0.452 (0.545)	0.636 (0.422–0.960)	1.724 (1.045–2.845)*
No	47	95		1	1
Ever had girl/boyfriends					
Yes	109	73	2.579 (2.479)	13.189 (8.660–20.087)	11.927 (7.726–18.414)**
No	48	247		1	1
Discussed with parents on the issue of contraceptive					
Yes	35	66	0.628 (0.354)	1.873 (1.187–2.957)	1.424 (0.821–2.472)
No	122	431		1	1

NB 1: Reference category, COR: Crude odds ratio, AOR: Adjusted odds ratio *p-value<0.05** p value<0.01

(5.7%) of respondents were used in his or her life time, while, those respondents mentioned that, currently using dominant by male condom 45 (28.7%), followed by implant 39 (24.7%). Currently used means using a contraception method at the time of survey is regarded as a current user. The majority of respondents were obtained contraception from, the private health enter 78 (49.7%), followed by public health center 45 (28.7%), while the lowest obtained from family guidance association of Ethiopia (FGAE) 8 (5.1%) (Table 3).

When requested questions the reasons of now not used contraception, fear of confidentiality of health employee 84 (16.9%), lengthy waiting time to get services 154 (31%), fear of seen by means of family 198 (39.8%), inconvenience working hour 204(41%), concern of community mind-set 236 (47.5%) and my religion now not permit earlier than marriage 387 (77.9%) respectively in ascending order.

Health-care system and service provider attitudes

A participant who had access to contraception was good 76 (48.4%) and the health facility far from home to use contraception taken above 30 min 93 (59.2%) and less than 30 min 46 (40.8%). 86 (54.8%) of respondents reported that the attitude of health professional was good during utilization of contraception services.

Factors associated with contraception services utilization

Bivariate and multivariate analyses were computed to assess factors associated with contraception services utilization. First, the degree of association between independent and outcome variables was assessed using bivariate analysis (X^2) test. Candidate variables with $p<0.25$ in bivariate analysis were entered into multivariate analysis. Finally, the corresponding of $p<0.05$ was considered statistically significant (Table 4).

On bivariate analysis factors such as marital status, age, ever had a girl or boyfriends, media exposure, religion, pocket money, and discussion with parents on the issue of contraception, found to be significantly associated with contraception utilization at $p<0.25$. These variables which were significant in bivariate analysis were entered into multivariate analysis. After that, media exposure, marital status, age, and ever had a girl or boyfriends were significantly associated with contraception utilization at $p<0.05$ (Table 5).

DISCUSSION

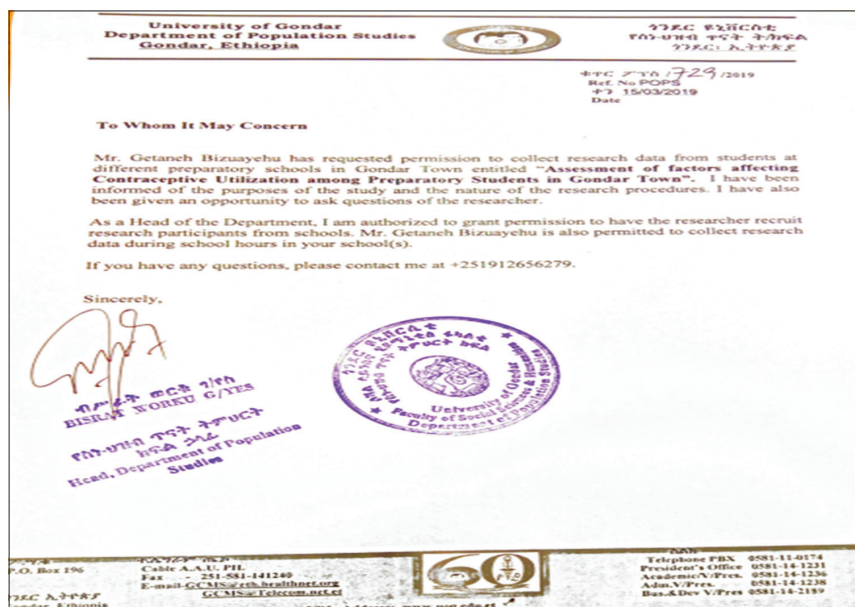
This study tried to assess factors affecting contraception service utilization with associated factors among preparatory school students in Gondar town. Contraception utilization plays a significant role in preventing different reproductive health problems and inspiring healthy productive adolescents within the country. Contraception use is one amongst the crucial factors mediating between sexual activities and pregnancy rates among adolescents as well as their older counterparts.

Based on the findings, the majority of respondents were not married and orthodox Christianity. Most of the respondents lived with both biological parent's with mother and father. Ever use of contraception was measured by asking adolescent used at least one type of contraception methods in their life time. In this study from a total respondent, only 24% were using contraception, which is in line with the study that was conducted in Awabel District, Northwest Ethiopia (25.4%) and East Gojjam 21 % [16, 17].

In this study respondents mentioned that factors were affect utilization of contraception. Such as, fear of confidentiality of health worker, inconvenience working hour, long waiting time, fear of seen by family and religion norms. The study findings, which were in the line with the two schools, based study conducted in Bahir Dar and Hadiya [18, 19]. The possible reasons might be demographic, socioeconomic, and sociocultural characteristics. In this study, 90.4% of school students knew about contraception methods which are almost similar to a community-based study done in Addis Ababa, 91% [20]. The possible reasons might be demographic features such as, age, place of residence, as well as parent education.

The finding of study showed that only 15% of respondents were discussed with parents about contraception, which is lower than the study that was conducted in Addis Ababa 20% and Goba 65.2% [20,21]. This might be due to cultural differences between the study populations. In the northern part of Ethiopia, talking about sexuality and related issues is a social taboo.

Marital status of respondents was significantly associated with contraception service utilization. In multivariate analysis, single adolescents were 8.5 times more likely to use contraception than ever



married married (AOR=8.488; 95%CI: (2.851-25.272) which was consistent with a study done in Assela town [22]. The possible reasons might be all study participants were students. Age of respondents was found to be significantly associated with utilization of contraception service. This study indicated that the age of adolescents above 18 years old was 2.1 times more likely to utilize modern contraception than those with age <18 years (AOR=2.107;95%CI: (1.442-3.081). The result is in the line with the study that was conducted in Bahir Dar, Kachabirra district and Addis Ababa [19, 20, 23]. This might be due to as age increases the exposure for contraception service utilization related issues also increases.

Adolescents who had media exposure on contraception services were 1.7 times more likely to utilize as compared to those who had no media exposure (AOR=1.724;95% CI: 1.045-2.845). The finding of this study is in line with the study that was done in Jimma town [24]. This might be adolescents from households with media as means of communication were more likely to ever or currently use contraception than adolescents without these means of communications. The finding of this study found that respondents who had a girl or boyfriends were 12 times more likely to utilize modern contraception than those who did not have a girl or boyfriends (AOR=11.927;95% CI: 7.726-18.414). This might be adolescent ever had a girl/boyfriends more utilize contraception service than the counterpart to avoiding unintended pregnancy and sexual transmitted infectious diseases (STID).

CONCLUSION

The finding of the study presented using bivariate and multivariate analysis. The majority of adolescents were not utilizing contraception service in the study area. In this study, knowledge of contraception services was high. However, utilization of contraception service among preparatory school students in Gondar town was very low. This indicated that there is big difference between knowledge and practice. From contraception methods, male condom was mostly used contraception method among adolescents. The result of this study indicated that adolescent discussed with parents on the issues of contraception has a significant effect on utilization of contraception services. With regard to the source of information about contraception service, a large number of respondents have forwarded media (TV) which was the main source of information. Multivariate analysis was done to reveal the association between contraception service utilization of different demographic, socioeconomic, health system, and individual factors. Accordingly, marital status, age, media exposure, and ever had a girl or boyfriends were significantly associated with

contraception services utilization. Develop and implement appropriate adolescents and youth contraception service, information, education and communication (IEC) program in schools to harmonize knowledge and practice of service utilization. Youth center management should be facilitating peer education with service provider and preparing an adequate room for a clinic and waiting place for users.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

At the start of the study process, ethical clearance was first obtained from the Department of Population Studies at University of Gondar, College of Social Science and Humanities in written form like the following form,

The verbal support letter was obtained from North Gondar Education Bureau and the next permission was obtained from Gondar town, public and private preparatory school director offices in the verbal form based on the above letter. All respondents were asked for verbal informed consent before participation. The study participants were informed about the purpose of the study. They were also informed as they can skip questions that they do not want to answer fully or partly. After assuring the confidential nature of the response (the anonymity of the information provided by them) and obtaining informed consent from the study subject, the questionnaire was filled with strict privacy.

ACKNOWLEDGMENTS

The authors would like to thank University of Gondar for provided ethical clearance. The authors also would like to thank the study participants for voluntary participation in the study.

REFERENCES

1. World Health Organization. Adolescent Health. Geneva: World Health Organization; 2010.
2. UNICEF. Progress for Children: A Report Card for Adolescents. New York: UNICEF; 2012.
3. United Nations Population Fund. State of World Population, Adolescents, Youth and the Transformation of the Future. United Nations Population Fund; 2014.
4. World Health Organization. Adolescent Friendly Health Services in South East Asia Region: Report of Regional Consultation, 9-14 February 2004, Bali, Indonesia. Geneva: World Health Organization; 2008.
5. Nicholson J. Risky Sexual Behavior among Adolescents and Young Adults. Carolina: University of North Carolina Chapel Hill; 2012.
6. Ringheim K, Gribble J. Improving the Reproductive Health of Sub-Saharan African Youths: A Route to Achieve the Millennium Development Goals. Washington, USA: Population Reference Bureau; Ref Type: Report; 2010.

7. United Nations Population Fund. How Universal is Access to Reproductive Health. New York: United Nations Population Fund; 2010.
8. Guttmacher Institute. Adolescent Women's Need for and Use of Sexual and Reproductive Health Services in Developing Countries. Guttmacher Institute; 2015.
9. Addis Ababa Youth and Sport Office: Standard for Service Provided in Youth Centers, Addis Ababa, Ethiopia; 2009.
10. FMOH. National Adolescent and Youth Health Strategy (2016-2020). FMOH; 2016.
11. Singh S, Sedgh G, Hussain R. Unintended pregnancy: Worldwide levels, trends, and outcomes. *Stud Fam Plan* 2010;41:241-50.
12. World Health Organization. The Sexual and Reproductive Health of Younger Population, Background Paper for Survey. Geneva, Switzerland: World Health Organization; 2011.
13. Darroch J, Singh S. Trends in contraceptive need and use in developing countries in 2003, 2008, and 2012 an analysis of national surveys. *Lancet* 2013;381:1756-62.
14. Prakash K: Adolescent's Knowledge and Perception of Sexual and Reproductive Health And Services a Study From Nepal, Published Thesis; 2016.
15. CSA. Ethiopia Demographic and Health Survey, Addis Ababa Ethiopia. CSA; 2011.
16. Ayehu A, Kassaw T, Hailu G. Level of young people sexual and reproductive health service utilization and its associated factors among young people in Awabel District, Northwest Ethiopia. *PLoS One* 2016;11:e0151613.
17. Amanuel A. Reproductive Health Knowledge and Services Utilization among Rural Adolescents in Machakel Woreda, East Gojam Zone, Northwest Ethiopia, Unpublished Thesis; 2012.
18. Helamo D, Kusheta S, Bancha B, Habtu Y, Yohannes S. Utilization and factors affecting adolescents and youth friendly reproductive health services among secondary school students in Hadiya Zone, Southern Nations, Nationalities and Peoples Region, Ethiopia. *Int J Public Health Safe* 2017;2:141.
19. Abebe M, Awoke W. Utilization of youth reproductive health services and associated factors among high school students in Bahir Dar, Amhara Regional State, Ethiopia. *Open J Epidemiol* 2014;4:69-75.
20. Lelissie Y. Assessment of Knowledge and Utilization of Youth Friendly Health Service among Adolescents (15-19) in Addis Ababa Master Thesis; 2016.
21. Birhan G, Abule T, Nigus B, Addis A, Yonas Y, Ayene W. Assessment of reproductive health service utilization and associated factors among adolescents (15-19 years old) in Goba Town, Southeast Ethiopia. *Am J Health Res* 2015;3:203-12.
22. Tigist T. Assessment of Reproductive Health Right Knowledge and Practice among Preparatory School Female Students of Asella Town, Oromia Regional State, Ethiopia; 2015.
23. Lejibo TT, Assegid S, Beshir M, & Tilahun Beyene Handiso, Reproductive Health Service Utilization and associated factors among female adolescents in Kachabirra District, South Ethiopia: A community based cross sectional study. *Am J Biomed Life Sci* 2017;5:103-12.
24. Tegegn A, Gelaw Y. Adolescent reproductive health services in Jimma city; accessibility and utilization. *Ethiop J Health Sci* 2009;19:102.