



Review Article

Sexual and reproductive health services utilization and its predictors among students in Ethiopia: A systematic review and meta-analysis

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ABSTRACT

Background & Aim: Students are the most persecuted group for reproductive health problems due to their predisposition to risky sexual behavior. The current study sought to ascertain the pooled prevalence of sexual and reproductive health service utilization and its determinants among Ethiopian students.

Methods & Materials: Both manual and electronic searches were undertaken. Data were extracted and examined using Microsoft Excel and STATA statistical software version 14. The pooled prevalence of sexual and reproductive health service utilization was calculated with 95% confidence intervals, and the significance level between factors that are associated with sexual and reproductive health service utilization was determined using a log odds ratio.

Results: There were 1520 articles found, but only 18 of the articles with a total of 12,338 study participants fulfilled the inclusion criteria and were included in this study. The pooled estimate of students' use of sexual and reproductive health services was 42.606% (95% CI: 32.917%-52.295%; $I^2 = 88.3\%$). Discussions with family/friends (OR=3.033, 95% CI=2.217-4.150, P-value<0.001, $I^2=75\%$) and knowledge (OR=2.215, 95% CI=1.105-4.515, P-value=0.025, $I^2=85\%$) were predictors of sexual and reproductive health service utilization among students.

Conclusion: In Ethiopia, less than half percent of students used sexual and reproductive health services. Knowledge and discussions with families/friends/peers were predictors of sexual and reproductive health services use among Ethiopian students. To improve student-parent communication habits about sexual and reproductive health issues, a comprehensive and multi-sectoral collaboration is required. Further health education and communication are critical methods for improving students' knowledge of sexual and reproductive health services in Ethiopia.

Introduction

Reproductive health is defined as a state of complete physical, mental, and social well-being in all aspects of the reproductive system throughout life (1, 2). The United Nations International Conference on Population and Development (UNICPD) has classified reproductive health as part of a larger

sociocultural context that comprises gender roles, human rights dignity, and safeguards (1).

The World Health Organization (WHO) defines you as those aged 15 to 24 years old (3). More than one billion people (20%) in the world are between the ages of 15 and 24, with the majority (85%) living in



developing countries (4). Youths are regarded as the hope for one's country's future, and each individual's health and behavioral formation during this period have an impact on the country's development (5, 6). Despite this, they face distinct reproductive health risks such as unplanned pregnancies and childbearing, sexually transmitted infections (STIs) such as Human Immuno Deficiency Virus (HIV), and unsafe abortion (7-10). However, access to and use of Reproductive Health Services (RHS) is a primary concern for youths when it comes to the promotion of reproductive health and rights (11). Youth must be provided with accurate, accessible, and affordable reproductive health information and services to successfully transition to adulthood (4, 12).

Schools are the primary institutions capable of reaching the majority of youths while also having a community impact. Four out of every five children in the world aged 10 to 15 are enrolled in secondary education (66% in 2005), which is now considered a prerequisite in most countries (13, 14). Furthermore, schools are frequently the first and only place where adolescents can receive accurate reproductive health information (15). Schools can also contribute to health equity by ensuring that poor and disadvantaged adolescents, particularly girls, have access to health information and services that they would not have had otherwise (16).

Students are the greatest predisposed group to reproductive health problems because they tend to engage in risky sexual behavior (17). Furthermore, the school environment itself exposes students to more possibilities and situations for engaging in risky sexual behaviors (18). Additionally, it has remained difficult to bring students to clinical services; however, it was necessary to change how these groups sought out health care (19).

The Ethiopian government, in collaboration with several international Non-

Governmental Organizations (NGOs), has been funding activities such as scaling up and institutionalizing Youth Friendly Services through intensive capacity building at all levels of the health system (20, 21). However, as evidenced by youth challenges like unintended pregnancy and its consequences, persistent reproductive health issues, and lack of impact of all efforts across Ethiopian educational institutions: The rate of abortion among students was revealed to be 65 per 1000 women, which is three times higher than the national rate for abortion in Ethiopia (23 per 1000 women aged 15–44); the rising prevalence of STIs, including HIV/AIDS (19.5%); the unmet need for family planning; the high rates of delivery-related complications and the subsequent drop-out of school for many young people (17-23).

Students' sexual and reproductive health service utilization is poor, and this is evidenced by studies done in Nepal and Malaysia, where only 9.2% and 6.9% of students utilized sexual and reproductive health services, respectively (24, 25). Based on prior studies, utilization of sexual and reproductive health services among students in Ethiopia was in the range of 8.4% to 80.5% (26-43). Various factors affect students' utilization of sexual and reproductive health service utilization. knowledge of reproductive health and available services, students' educational level, every discussion on RH issues, age, having ever experienced reproductive problems, living with a partner, living alone, having a convenient working hour for the service, and participation in a school clubs are some of the factors affecting students' service utilization (25-43).

Various individual studies have reported this information at the district level. Given these variations, there are no data on the pooled proportion of sexual and reproductive health service utilization among students in

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Ethiopia. In addition, the identified contributing factors differ between studies. Therefore, the present study sought to determine the pooled prevalence of sexual and reproductive health service utilization and its determinant factors among students in Ethiopia. The aim was to provide fundamental data for policymakers, clinicians, and other stakeholders to help develop appropriate strategies and interventions for the sexual and reproductive health of students in Ethiopia.

Methods

Study design

Systematic review and meta-analysis of the English language following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (44).

Search strategy

Both manual search (google and google scholar) and electronic search with indexed database search (PubMed, Web of Science, and EMBASE) were used to identify relevant articles. Various other grey literature databases (searching from the reference lists of the included studies, websites of government agencies, and Adis Ababa University's online research institutional repository) were used. We applied search terms independently and/or in combination using "OR", "AND" or "NOT". In EMBASE we used Boolean operators and Emtree terms (a controlled vocabulary or standard words used to make searching easier) to identify relevant articles, whereas, in Web of science, we used synonyms, Boolean operators, keywords, and topics. In Google Scholar and another manual search, keywords/phrases were used. In PubMed medical subject headings (MeSH) terms were used as follows: (((((((((((((((prevalence) OR (magnitude)) OR (level)) AND (determinant factors)) OR (associated factors)) AND (sexual) OR

(reproductive)) AND (health service)) OR (health care)) AND (utilization)) OR (uptake)) OR (use)) AND (high school)) OR (secondary school)) OR (preparatory)) OR (college)) OR (university)) AND (students)) AND (Ethiopia).

The review took place between November 15, 2022, and December 15, 2022. The current meta-analysis and systematic review included all accessible studies published in English up to December 15, 2022.

The systematic review was registered prospectively on the International Prospective Register of Systematic Reviews (PROSPERO) under the unique identification number CRD42022385292.

Outcome measurement

Sexual and reproductive health service utilization: Use of at least one sexual and reproductive health service (HIV testing and counseling, STI screening and treatment, family planning counseling and contraceptive use, abortion service, and perinatal services) within the last year (24).

Eligibility criteria

All studies that reported the prevalence of reproductive health service utilization/sexual and reproductive health service utilization used students as a study participant, English language reporting, had full text available for search, and took place in Ethiopia were included in this systematic review and meta-analysis. Studies reported duplicated sources, unrelated research topics, used designs other than cross-sectional study, and articles with no full text available (insufficient data and outcome of interest not reported) and attempts to contact the corresponding author via email not possible were excluded from this systematic review and meta-analysis.

Study selection and data extraction

After the articles were imported from the databases into Endnote reference manager version 7, duplicates were checked and removed systematically. The title and abstract were screened and reviewed by three independent authors (GAA, EC, and NA). Any disagreements were settled through discussions facilitated by a fourth author (GAK). Furthermore, these authors reviewed the full text and extracted relevant data from the articles that met the inclusion criteria.

On an Excel spreadsheet, the authors' names, year of publication, study region, study setting, study design, the prevalence of sexual and reproductive health service utilization, sample size, number of cases of sexual and reproductive health service utilization, and publication status were meticulously extracted.

Quality assessment

The quality of the included studies (26-43) was evaluated by two independent authors (GAA and NA) using the Joanna Briggs Institute (JBI) quality appraisal checklist for cross-sectional studies (45). The third author discussed and resolved any disagreements (MM). The critical analysis checklist has eight parameters with yes, no, unclear, and not applicable options. Studies were deemed low risk if they scored 50% or higher on the quality assessment indicators listed in the supplementary file (S1).

Ethics approval and consent to participate

Ethics approval and consent to participate are not applicable since we used already previously done research.

Statistical analysis

The data was exported to STATA software version 14 for analysis after extracting all relevant findings in a Microsoft Excel spreadsheet. The pooled prevalence of sexual and reproductive health service utilization among students was presented in forest plot format with 95% CI. The Cochran Q statistic was used to assess the presence of between-study heterogeneity. This heterogeneity between studies was calculated using I^2 , with 0%, 25%, 50%, and 75% indicating no, low, medium, and high heterogeneity, respectively. The second outcome of this study was factored frequently associated with the utilization of sexual and reproductive health among students. For binary data (determinants of sexual and reproductive health service utilization), the input variables required by "metan" contained the cells of the 2×2 tables, i.e., the number of students who utilized and not utilized Sexual and Reproductive Health (SRH) service in the exposed and non-exposed groups in each study. All potential determinants associated with SRH service utilization among students were determined using the odds ratio (OR) and calculated based on the binary outcomes of the included primary studies. A random effect meta-analysis was used to estimate the pooled odds ratio with a 95% confidence interval. Finally, findings were presented as forest plots with the corresponding effect size and 95% confidence intervals. Subgroup analysis was carried out based on study region, publication status (published versus unpublished), and publication year. A sensitivity analysis was performed to determine the effect of one study on the overall effect size of the meta-analysis's estimate.

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S1. Methodological quality assessment of included studies using Joanna Briggs' Institute quality appraisal criteria scale (JBI) for cross-sectional study

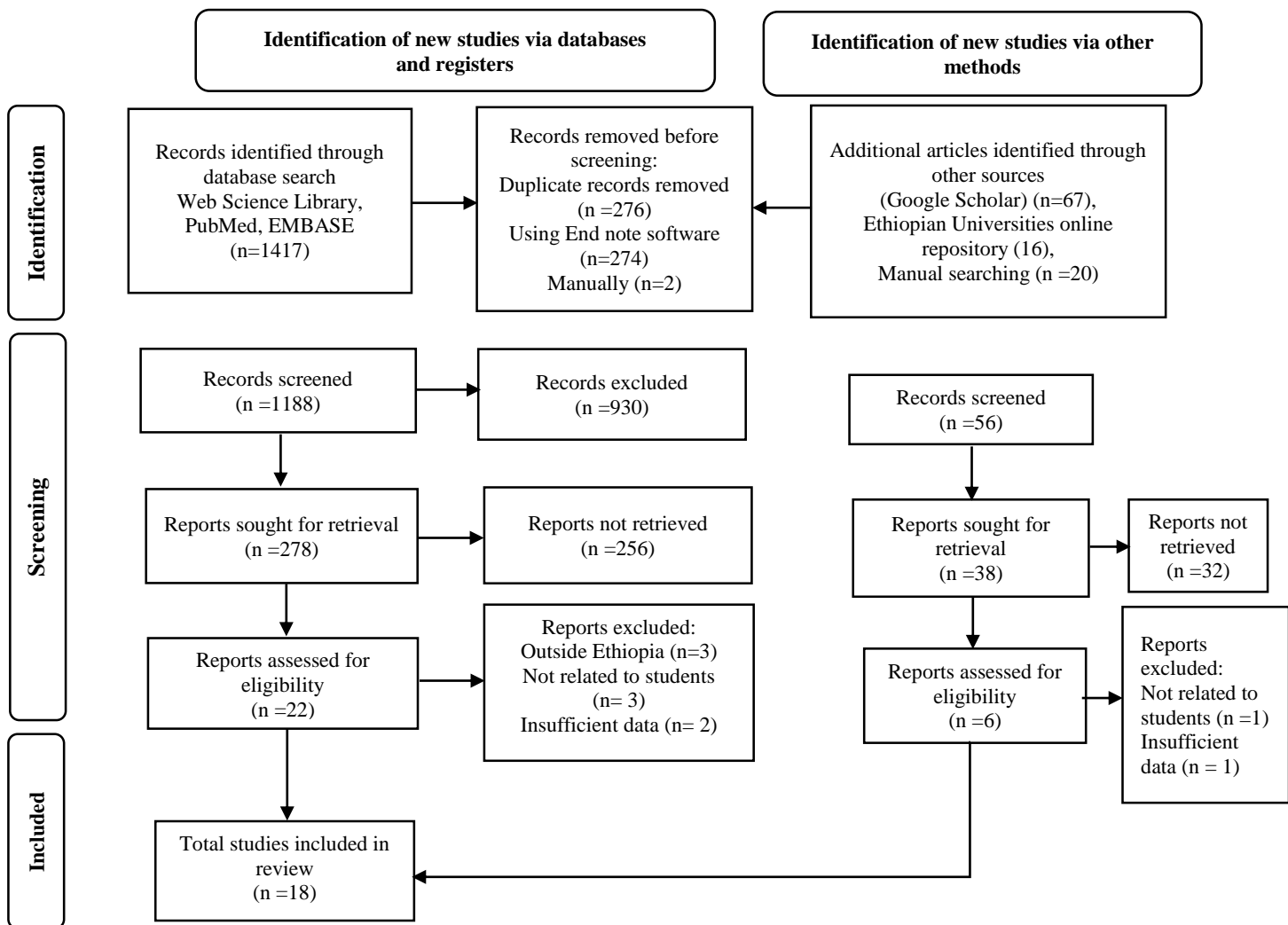
Item	Clearly defined inclusion criteria	Describing the study settings and participants	Valid and reliable exposure measurement	Objective and standard criteria for measurement	Identified confounder	Strategies to deal with confounder	Valid and reliable outcome measurement	Appropriate statistical analysis	Percentage of yes (%)
Gurara AM, Gizaw AB, Ayalew AK, kediro Adem	Yes	Yes	No	Yes	No	No	Yes	Yes	62.5%
Yonas FB, Chernet AA	Yes	Yes	No	Yes	No	Yes	Yes	Yes	75%
Gunta M. et al.	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	87.5%
Aragie TG, Abate BB	Yes	Yes	No	Yes	No	No	Yes	Yes	62.5%
Wachamo D. et al	Yes	Yes	No	No	No	Yes	Yes	Yes	62.5%
Diribsa T. et al.	Yes	Yes	yes	yes	No	yes	yes	Yes	87.5%
Liyeh TM. Et al.	Yes	Yes	yes	yes	No	yes	yes	Yes	87.5%
Abebe M, Awoke W	No	Yes	No	yes	No	yes	yes	Yes	62.5%
Binu W. et al.	Yes	Yes	yes	yes	No	yes	yes	Yes	87.5%
Abdurahman C. et al.	Yes	Yes	No	yes	No	yes	yes	Yes	75%
Dida N, Darega B, Takele A	No	Yes	No	yes	No	yes	yes	Yes	62.5%
Abate AT, Ayisa AA	Yes	Yes	No	yes	No	yes	yes	Yes	75%
Atnafu A. et al.	Yes	Yes	No	yes	No	yes	yes	Yes	75%
Dina H. et al.	Yes	Yes	No	yes	No	yes	yes	Yes	75%
Takele Alemu Yadeta	Yes	Yes	No	yes	No	yes	yes	Yes	75%
Tsegaab Temesgen	No	Yes	No	yes	No	yes	yes	Yes	62.5%
Heaven Workineh	Yes	Yes	No	yes	No	yes	yes	Yes	75%
Aklile Tebebe	No	Yes	No	yes	No	yes	yes	Yes	62.5%

Results

Search results

There were 1520 articles found in the databases, including 1322 from PubMed, 67 from Google Scholar, 42 from EMBASES, 53 from Web of Sciences, 16 from Ethiopian university research repositories, and 20 from the reference lists of included studies. While

a total of 1502 articles were excluded due to various reasons. For instance, 276 articles were removed because of duplicates, 1216 due to irrelevant titles and abstracts, 4 due to the study designs, 3 due to study areas, and 3 insufficient data where the outcome of interest was not reported. Finally, 18 (26-43) articles were included in the study (Figure 1).



Characteristics of included studies

A total of 18 research articles (26-43) with a total of 12,338 study participants were included in this analysis. The majority of the studies (six articles) were conducted in Amhara (29, 32, 33, 37, 38, 42) and the Oromia region (26, 30, 31, 34, 35, 36). The remaining six articles: three in the South Nation Nationalities and Peoples' Region (SNNP) (27, 28,41), two in Adis Ababa city (40, 43), and one in Benshangul Gumz region (39). Regarding publication year, the earliest in 2014 and the latest in 2022. The

sample sizes ranged from 345 to 2044. The prevalence of sexual and reproductive health service utilization among students in Ethiopia ranged from 8.4%- 80.5%. Six studies were conducted among university/college students, and twelve studies among secondary school students. Fourteen studies were published, and four studies were not published. All eighteen studies were assessed by using Joanna Briggs Institute (JBI) quality appraisal checklist. All of these studies reported a low risk (Table 1).

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Table 1. Descriptions of the studies used in the systematic review and meta-analysis for the utilization of reproductive health service and its predictors among students in Ethiopia

Authors	Year	Region	Study design	Study area	Study population	Sample size	Prevalence	Number of cases	Publication status	Study quality
Gurara AM, Gizaw AB, Ayalew AK, Kediro Adem	2020	Oromia	Cross-sectional	Adama town	Secondary school students	359	34%	122	Published	Low risk
Yonas FB, Chernet AA	2022	SNNP	Cross-sectional	Dawuro zone	Secondary school students	835	26%	217	Published	Low risk
Gunta M. et al.	2021	SNNP	Cross-sectional	Woliata Sodo University	University students	759	49.8%	378	Published	Low risk
Aragie TG, Abate BB	2021	Amhara	Cross-sectional	Woldia town	Secondary school students	420	64%	270	Published	Low risk
Wachamo D. et al	2020	Oromia	Cross-sectional	West Arsi zone	College students	519	59%	304	Published	Low risk
Diribsa T. et al.	2022	Oromia	Cross-sectional	Jimma zone	Secondary school students	454	8.4%	38	Published	Low risk
Liyeh TM. Et al.	2021	Amhara	Cross-sectional	Amhara region	Secondary school students	2044	54.6%	1117	Published	Low risk
Abebe M, Awoke W	2014	Amhara	Cross-sectional	Bahir Dar	Secondary school students	818	32.2%	263	Published	Low risk
Binu W. et al.	2018	Oromia	Cross-sectional	Nekemte	Secondary school students	739	21.2%	157	Published	Low risk
Abdurahman C. et al.	2022	Oromia	Cross-sectional	Haromay	Secondary school students	642	23.5%	151	Published	Low risk
Dida N, Darega B, Takele A	2015	Oromia	Cross-sectional	Madabula University	University students	568	80.5%	457	Published	Low risk
Abate AT, Ayisa AA	2019	Amhara	Cross-sectional	Woreta town	Secondary school students	345	24.6%	85	Published	Low risk
Atnafu A. et al.	2019	Amhara	Cross-sectional	University of Gondar	University students	874	62.3%	544	Published	Low risk
Dina H. et al.	2022	Benshangul Gumz	Cross-sectional	Asosa zone	Secondary school students	375	32%	120	Published	Low risk
Takele Alemu Yadeta	2021	Adis Ababa	Cross-sectional	Bole sub city	Secondary school students	526	33.5%	176	Unpublished	Low risk
Tsegaab Temesgen	2017	SNNP	Cross-sectional	Wachamo university	University students	385	59%	227	Unpublished	Low risk
Heaven Workineh	2015	Amhara	Cross-sectional	Bahir Dar University	University students	832	66.6%	554	Unpublished	Low risk
Aklile Tebebe	2017	Adis Ababa	Cross-sectional	Adis Ababa	Secondary school students	844	36.1%	305	Unpublished	Low risk

Level of sexual and reproductive health service utilization among students

The pooled prevalence of sexual and reproductive health service utilization among students in Ethiopia is presented by the forest

Plots in Figure 2. A random-effect model showed that the pooled level of sexual and reproductive health service utilization among students was 42.61% (95% CI: 32.92%–52.30%; $I^2 = 88.3%$) (Figure 2).

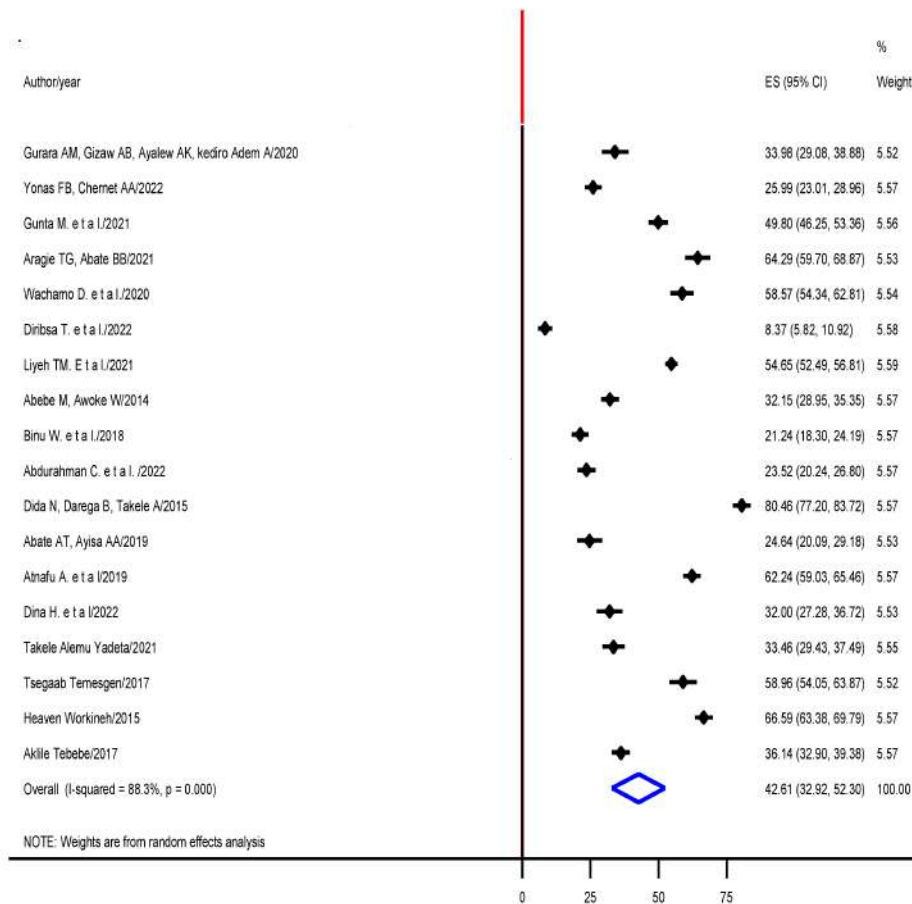


Figure 2. The Forest plot of utilization of sexual and reproductive health service with the height of the diamond is the overall effect size (42.61% while the width is the confidence interval (CI) at 95% (32.92%–52.30%). The y-axis shows the standard error of each study while the x-axis is the estimate of the effect size (ES) of each study. The vertical dotted line denotes the no effect. The box represents the effect size of each study and the line across the box is the confidence interval (CI) of each study.

Leave-one-out sensitivity analysis

A leave-one-out sensitivity analysis was carried out to detect each study's effect on the overall prevalence of sexual and reproductive health service utilization among

students by excluding one study at a time. Based on the finding from sensitivity analysis, two studies in the review impacted the pooled level of sexual and reproductive health service utilization among students (31, 36) (Table 2).

Table 2. A leave-out-one sensitivity analysis for reproductive health service utilization among students in Ethiopia

Reproductive health service utilization-related article		
Study omitted	Pooled estimate	95% CI
Gurara AM, Gizaw AB, Ayalew AK, Kediro Adem	43.11%	33.01%-53.21%
Yonas FB, Chernet AA	43.59%	33.45%-53.72%
Gunta M. et al.	42.18%	31.97%-52.39%
Aragie TG, Abate BB	41.34%	31.40%-51.28%
Wachamo D. et al	41.67%	31.63%-51.70%
Diribsa T. et al.	44.63%	35.76%-53.50%
Liyeh TM. et al.	41.90%	31.54%-52.25%
Abebe M, Awoke W	43.22%	32.98%-53.47%
Binu W. et al.	43.87%	33.90%-53.83%
Abdurahman C. et al.	43.73%	33.68%-53.78%
Dida N, Darega B, Takele A	40.37%	31.34%-49.40%
Abate AT, Ayisa AA	43.66%	33.63%-53.69%

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Atnafu A. et al.	41.45%	31.49%-51.40%
Dina H. et al.	43.22%	33.12%-53.32%
Takele Alemu Yadeta	43.14%	32.98%-53.30%
Tsegaab Temesgen	41.65%	31.63%-51.66%
Heaven Workineh	41.19%	31.40%-50.97%
Aklile Tebebe	42.98%	32.70%-53.27%

Subgroup analysis

The Cochran I^2 statistic in this study was 88.3%, $P < 0.001$, indicating evidence of heterogeneity. As a result, subgroup analysis was performed based on the region in which the studies were conducted, the status of publication (published versus unpublished), and the year of publication. Consequently, subgroup analysis based on region revealed that the Amhara region (50.78%) had the highest level of sexual and reproductive health service utilization among students, while Addis Ababa (35.08%) had the lowest. Based on the publication status of studies, the levels of sexual and reproductive health service utilization among students were 40.84% in published articles and 48.78% in unpublished studies. According to the publication year, students used sexual and reproductive health services at a rate of 49.24% before and 35.20% after 2019.

Factors associated with utilization of sexual and reproductive health services among students

Six variables were retrieved to identify a significant association with sexual and reproductive health service utilization among Ethiopian students. Two of these variables (discussion with family/friends about SRH issues and knowledge about SRH services) were found to be significantly associated with student utilization of sexual and reproductive health services (Table 3). Students with good knowledge of sexual and reproductive health services were 2.22 times more likely to use sexual and reproductive health services than students with poor knowledge (OR=2.22, 95% CI=1.11-4.52, P -value=0.025, I^2 = 85%). Students who discussed SRH issues with their families/friends were three times more likely to use sexual and reproductive health services than those who did not (OR=3.03, 95% CI=2.22-4.15, P -value<0.001, I^2 =75%).

Table 3. Determinant factors of reproductive health service utilization among students in Ethiopia, 2022

Determinants (Ref no.)	Number of studies	Sample size	OR (95% CI)	P-value	I^2 (%)	Heterogeneity test P-value
Discussion about SRH with families/friends (26, 27, 30, 32, 38, 39)	6	5006	3.03(2.22-4.15)	<0.001	75%	0.001
Knowledge about SRH service (26, 29, 32, 38, 39, 41, 43)	7	5281	2.22(1.11-4.52)	0.025	85%	<0.001
Sex (26, 30, 31, 41)	4	1717	1.08(0.39-3.02)	0.886	85.6%	<0.001
Distance (26, 35, 37, 40)	4	1872	1.72(0.52-5.71)	0.378	84.4%	<0.001
Educational level(26, 32, 37)	3	2748	0.78(0.13-4.61)	0.783	88.5%	<0.001
Ever have sexual experience(28, 31, 34, 36, 39, 42)	6	3722	1.93(0.56-6.61)	0.296	87.9%	<0.001

Discussions

The current systematic review and meta-analysis investigated students' sexual and reproductive health service utilization and associated factors in Ethiopia. In this meta-analysis, the pooled level of sexual and reproductive health service utilization among Ethiopian students is 42.61%. The finding was consistent with the use of youth-friendly sexual and reproductive services by adolescents in Ethiopia (42.73%) (46). The presence of poor socioeconomic status in the research area could explain the similarities. However, it was higher than in Malaysia (6.9%), Nepal (9.2%), and Uganda (22.6%) studies (24, 25, 47). This disparity could be explained by the participants' socio-demographic characteristics and socioeconomic differences. Furthermore, differences in the availability and accessibility of reproductive health facilities and youth centers within the school may contribute to this disparity.

Subgroup analysis by region revealed that the Amhara region had the highest level of sexual and reproductive health service utilization among students (50.78%). Based on the publication status of studies, the levels of sexual and reproductive health service utilization among students were 40.84% in published articles and 48.78% in unpublished studies. According to the publication year, students used sexual and reproductive health services at a rate of 49.24% before and 35.20% after 2019. This could be due to Ethiopia's civil war and social instability over the last four years, which could significantly impact overall health service utilization in the community.

Discussing SRH issues with families/friends/peers and knowledge about SRH services were predictor variables for SRH service utilization among Ethiopian students.

Students with good knowledge of sexual and reproductive health services were 2.215 times more likely to use SRH services than those with poor knowledge. This finding was consistent with that of youth-friendly SRH

service utilization and HIV testing in Ethiopia, Malaysia, six southern African countries, and Sub-Saharan Africa (25, 46, 48-51). The possible reason for this could be that respondents with a high level of SRH service knowledge will comprehend the advantages of using SRH services and the consequences of not using them.

Knowledge is one of the driving factors in behavioral change. To access and use RH services, students' level of knowledge is paramount. Advocating and increasing awareness and knowledge about SRH is also crucial to the success of any reproductive health effort. Thus, regular guidance on socialization for reproductive health and available services could be provided through online media to increase students' knowledge levels.

Students who discussed SRH issues with their families/friends were three times more likely to use sexual and reproductive health services than those who did not. The finding was supported by studies done in Ethiopia and Nepal (24, 46, 52). This is because open positive parent-adolescent communications on SRH issues are important strategies for preventing reproductive health problems. Adolescents who discuss with their parents on SRH issues are more likely to make healthy decisions regarding the use of sexual and reproductive health services, delay sexual activity, protect from risky behavior, and support the healthy sexual socialization of adolescents. Therefore, the government needs to work with the private sector and non-governmental providers that will improve parent-adolescent communication on SRH issues in the country. Strategies are needed to implement context-based intervention to minimize barriers and missed opportunities in parent-adolescent communication on SRH issues. The government needs to build capacity in communities that emphasize the benefits of parent-adolescent communication on SRH issues. Individuals, communities, and

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community leaders should promote and collaborate closely with local health staff in outreach activities in the communities.

The strength of the study included using a comprehensive electronic search strategy through various datasets to determine the overall level of sexual and reproductive health service utilization, the use of JBI-MAStARI appraisal, and the access to grey literature. This study also had some limitations. These were the absence of a standard definition of sexual and reproductive health service utilization to operationalize by the research team and might be research bias on a cut point. The absence of a similar previous study makes it very difficult to compare the findings of this study. Since some regions did not report data on sexual and reproductive health service utilization, the study's results did not represent all regions in Ethiopia.

Conclusion

About the data from the studies under analysis, below half percent of students in Ethiopia utilized sexual and reproductive health services. Furthermore, the pooled prevalence of sexual and reproductive health service utilization among Ethiopian students varied according to study region, publication status, and year of publication. Knowledge about SRH services and discussions about SRH issues with families/friends/peers were significant predictors of SRH service utilization among Ethiopian students. A comprehensive and multi-sectoral collaboration is required to promote student communication habits about SRH issues. Further health education and communication are critical methods for improving students' knowledge of SRH services in Ethiopia.

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Conflict of Interests

The authors declare that they have no competing interests

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