

# Quality Health Services for Adolescents: Assessing Awareness and Use of Adolescent Sexual Reproductive Health Services in Keta, Ghana

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## **ABSTRACT**

**Introduction:** Although adolescents have access to sexual and reproductive health services, they encounter a variety of obstacles, including limited access to safe abortion and contraceptives, early pregnancy and parenthood, and a high occurrence of sexually transmitted infections. This research assessed the awareness and use of adolescent sexual reproductive health services in the Keta Sub-district of Ghana. **Methods:** A cross-sectional study using a quantitative method of analysis and the administration of a structured questionnaire to 350 adolescents between the ages of 14 and 19 in the Keta Sub-district was conducted. **Results:** Of the 10 services covering adolescent sexual and reproductive health, 75% of participants were aware only of comprehensive sex education. Only 27% were aware of sexually transmitted infection prevention and care services. Awareness was 13% or lower for the remaining eight services. Only 24% had used an adolescent sexual reproductive health service. **Conclusion:** Awareness of adolescent sexual reproductive health services and their use is low in the Keta Sub-district. To improve access to sexual and reproductive health information, sub-district health services should create school-based satellite clinics for adolescents. Adolescents' ambassadors should be created to educate peers on adolescent issues, especially sexual and reproductive health.

**Keywords:** utilization, adolescent, sexual reproductive health services, Keta Sub-district

# **INTRODUCTION**

The Sustainable Development Goals (SDGs) calls for ensuring healthy lives and promoting well-being for all people of all ages (Goal no. 3).<sup>[1]</sup> Target 3.7 of Goal 3 is to ensure universal access to sexual reproductive health (SRH) services, such as family planning, information and education, and the integration of reproductive health into national strategies and programs.<sup>[2,3]</sup>

According to statistics, nearly 69% of adolescent pregnancies in Sweden end in abortion.<sup>[4]</sup> Complications from pregnancy and delivery are the leading cause of death among females aged 15–19 in Africa and other developing countries.<sup>[5]</sup> The reproductive health

of adolescents over the years has been largely ignored, despite the vulnerabilities they are exposed to as a result of neglect. [6] Several studies have found that the most significant barriers to using adolescent SRH services (ASRHS) include a lack of reproductive health information, knowledge, and education. [7] Sexually active adolescents, typically younger than 20, face many barriers to obtaining ASRHS, including a lack of knowledge about pregnancy prevention and sexually transmitted infections (STIs). [8] Adolescents' low use of SRH services has been attributed to a lack of privacy and confidentiality, the cost of health services, stigma on the part of health service providers, a lack of knowledge of SRH services, and socio-cultural norms. [9]

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Although adolescents and young adults constitute most of the population in most Sub-Saharan African countries, they are the least served in terms of SRH services. [10] This leads to unexpected pregnancies, and seeking treatment from quack doctors, resulting in unsafe abortions and a higher risk of developing serious health complications. [10] Unsafe abortions among female adolescents aged 15–19 who engaged in sexual activities accounted for 70.5% of all abortions, with a significantly low history of reporting between 2012 and 2017. [11] As a result, adolescents encounter a host of impediments to accessing and using sexual reproductive health services. [11] Adolescents who seek SRH services are likely to face some difficulties. [8]

In Ghana, adolescents between the ages of 10 and 19 make up 21.9% of the population, with 2% of them getting married by the time they are 15, and 11.8% having their first sex by the time they are 15 years old. [12] Furthermore, 14% of adolescent girls aged 15–19 are already mothers or are expecting their first child, with rural areas having a higher rate of teen childbearing (18%) than urban areas (11%). [13] The total population of people aged 1019 affected by the human immunodeficiency virus (HIV) is 23,412. [14] Of these figures, a total of 10.49% of new HIV infections were recorded for the age group 10–19. [14]

District Health Management Systems II data show 109,888 pregnancies among adolescents in Ghana in 2020. [15] Between March and September of 2020, the Volta region recorded a total of 676 pregnancies among school-aged adolescents, with the Keta Municipality having the most (n=92). [16] The Keta Municipal Health Directorate's annual report revealed an institutional percentage of 13.48% of adolescent pregnancy in 2020, accounting for an increase of 1.03% over the previous year (Keta Municipal Health Directorate, 2020, unpublished data).

Most research in Ghana has relied on qualitative methods to investigate various aspects of adolescent reproductive health services. A qualitative study was conducted to better understand adolescents' reproductive health needs in several Ghanaian slums.<sup>[17]\*</sup> A similar qualitative study was conducted in Ghana's northern region's West Gonja District to investigate adolescents' understanding of reproductive health, their alternatives, and the factors influencing their decisions. [18] Another study examined adolescents' contraceptive knowledge and use in three senior high schools in Sekondi, Takoradi. [19] There is a paucity of quantitative research on the utilization of ASRHS in Ghana, particularly in the Keta Sub-district. As a result, the goal of this study was to use a quantitative method to analyze ASRHS awareness and utilization in Ghana's Keta Sub-district.

#### **MATERIALS AND METHODS**

# Study Design

This cross-sectional study was approved by the Ghana Institute of Management and Public Administration ethics review committee, and informed consent was obtained from parents or guardians.

Quantitative approaches are most frequently used in explanatory research for examining connections, correlations, and causal relationships. <sup>[20]</sup> This study's design allowed us to analyze the awareness of ASRHS and the utilization of adolescent SRH services among the adolescents in the Keta Sub-district of Ghana. A cross-sectional design is an approach that collects data from a sample at a single point in time. <sup>[20]</sup>

# **Study Population**

Convenience sampling was used to select 350 students from second-cycle institutions in the Keta Municipality, ranging in age from 14–19 years. The Keta Municipality has two Sub-districts: the Anyako Sub-district with three second-cycle schools and the Keta Sub-district with two second-cycle schools.

## **Sampling Strategy**

The sample size of 350 was calculated using Cochrane's formula  $n=(z^2p(1-p))/e^2$  at 95% confidence interval, [21] where z is the 95% confidence interval (1.96), p is the population estimate (0.293), and e is the margin of error (0.05), resulting in a sample size of 318. A 10% non-response rate (n=32) was added to account for unexpected nonresponse, incomplete replies, and withdrawal from the study. [22] Thus, the minimum sample size for this research was  $N \approx 350$ .

## **Data Collection**

A structured questionnaire was used to collect the data. The questionnaires were administered in person. This gave the researcher the chance to address any questions or requests for clarification from the respondents. Each question in the questionnaire was coded, and values were assigned to each response for data entry. The assigned value for each response was consistently maintained throughout the coding process.

## **Data Analysis**

The data were analyzed using Microsoft Excel 2013 and the Statistical Package for Social Sciences (SPSS) version 25. Descriptive statistics in the form of frequencies and percentages were used to present the results obtained in tables and charts.

#### **RESULTS**

Table 1 displays the sociodemographic characteristics of the respondents. The adolescent population was divided into two distinct age groups: 14–16 and 17–19. The study included a total of 350 respondents, with 164 respondents falling within the age range of 14–16, and 186 respondents falling within the age range of 17–19. These figures correspond to proportions of 46.9% and 53.1%, respectively. Among the 350 respondents included

**Table 1.** Demographic characteristics of survey respondents (N = 350)

Attribute	n	%
Age, years		
14–16	164	46.9
7–19	186	53.1
Sex		
Male	121	34.6
Female	229	65.4
Religion		
Christianity	300	85.7
Islam	43	12.3
Traditional	7	2.0
Health Insurance Status		
Insured	292	83.4
Non-insured	58	16.6

in the study, it was found that 121 (34.6%) respondents identified as male, and the remaining 229 (65.4%) respondents identified as female. According to the religious distribution, the survey encompassed a total of 350 participants. Among these respondents, most (85.7%) described themselves as Christians. Muslims were the second-largest religious group (12.3%). In addition, 2% of the respondents themselves are followers of African traditional religions. The National Health Insurance Program is reported to cover 292 (83.4%) respondents. The remaining 58 (16.6%) respondents did not have coverage under the scheme.

Figure 1 illustrates the distribution of respondents' awareness of ASRHS. Of the total sample size of 350 adolescents, a significant majority of 323 (92%) indicated their awareness of ASRHS; however, 266 (76%) indicated that they had never used ASRHS.

Among the 10 services provided under ASRHS, 263 (75%) respondents demonstrated awareness of comprehensive sex education as one of the services offered to adolescents. The subsequent service that the respondents were aware of was prevention and care of STIs, accounting for 96 (27%) replies. Just 44 (13%) of adolescents were aware

**Table 2.** Awareness of adolescent sexual reproductive health services (ASRHS) among survey respondents (N = 350)

Service Domain	n	%
Comprehensive sex education	263	75
Contraceptive counseling	44	13
Contraception counseling	25	7
Antenatal, intra and postpartum	4	1
Safe abortion care	15	4
Sexually transmitted infection Prevention and care	96	27
HIV prevention care	38	11
Violence against women and girls prevention	15	4
Harmful traditional practices prevention	12	3
Alcohol and drug abuse care	7	2

of contraceptive counseling, and only 38 (11%) respondents were aware of HIV prevention. The level of awareness for the remaining seven services was less than 10%. The results, as depicted in Table 2, demonstrate a lack of awareness regarding SRH services among adolescents.

#### **DISCUSSION**

Although most respondents (n=323,92%) had heard of ASRHS, awareness of the various components of ASRHS was low. These results are consistent with Violita and Hadi,<sup>[23]</sup> and Oktafiyanti et al.,<sup>[24]</sup> who found that most respondents (59% and 87.5%, respectively) were aware of ASRHS. However, other studies have reported lower levels of awareness (10–38%).<sup>[18,25,26]</sup>

In terms of using ASRHS, only a small proportion of the respondents (n = 84, 24%) had ever accessed ASRHS. The results indicate poor utilization of ASRHS in the sub-district, particularly by adolescents in second-cycle schools.

Thus, attaining the SDGs on health, particularly target 3.7 of Goal 3, will be challenging. The poor use

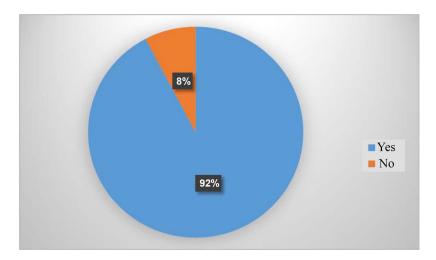


Figure 1. Awareness of adolescent sexual reproductive health services among survey respondents (N = 350).

of ASRHS could be attributed to the fact that 75% of respondents were aware of only comprehensive sex education and regarded it as the primary service provided under adolescent SRH. As a result, when the adolescent faces a situation that necessitates the use of the other nine services (Table 2), they may not use ASRHS. These results are consistent with Kyilleh et al,<sup>[18]</sup> Violita and Hadi<sup>[23]</sup>, and Kapoor et al<sup>[26]</sup>, who reported a fairly low patronage ranging from 6.9–24.3%.

We recommend augmenting the educational effort to encompass comprehensive coverage of ASRHS, including those shown in the media. We also recommend introducing and implementing school-based adolescent reproductive health education to increase utilization of the SRH services, with cooperation of key stakeholders such as the Ministry of Health and the Ghana Education Service, and to establish visible satellite clinics for adolescents within the school premises to increase accessibility to information pertaining to sexual and reproductive health. Finally, it is also recommended to select adolescents to act as ambassadors within the second-cycle schools to serve as peer educators on matters pertaining to adolescent SRH.

Limitations of the current study included the exclusion of pregnant, married, and junior high school adolescents in favor of literate and nonpregnant senior high school adolescents. Also, because closed-ended questions contained predetermined responses, there was no room for respondents to express their thoughts about the topic. The use of convenience sampling approach combined with the study being conducted in only one school limits generalizability.

## **CONCLUSION**

Most respondents (75%) were aware of comprehensive sex education only as a service among the 10 services provided under ASRHS. They were unaware of the remaining nine services. Only 24% of the respondents had used ASRHS. Awareness and use of the full range of SRH services is low among adolescents in the Keta, Ghana.

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## References

- 1. United Nations. The Partnership Platform; Department of Economic and Social Affairs. Published 2022. Accessed Aug 11, 2022. https://sdgs.un.org/partnerships
- 2. Nabyonga-Orem J. Monitoring Sustainable Development Goal 3: how ready are the health information systems in

- low-income and middle-income countries? *BMJ Glob Health*. 2017;2:e000433.
- 3. World health statistics monitoring health for the SDGs. World Health Organization. Published 2016. Accessed Nov 8, 2022. https://apps.who.int/iris/handle/10665/206498
- 4. Sedgh G, Finer LB, Bankole A, et al. Adolescent pregnancy, birth, and abortion rates across countries: levels and recent trends. *J Adolesc Health*. 2015;56:223–230.
- 5. Ganchimeg T, Ota E, Morisaki N, et al. Pregnancy and childbirth outcomes among adolescent mothers: a World Health Organization multicountry study. *BJOG*. 2014;121 Suppl:40–48.
- Morris JL, Rushwan H. Adolescent sexual and reproductive health: the global challenges. *Int J Gynecol Obstet*. 2015;131:S40–S42.
- 7. Gautam P, Soomro MH, Sapkota S, et al. Barriers to utilization of sexual health services among young people in district Dang Nepal: a qualitative study. *J Med*. 2018;19:79–83.
- 8. Health for the world's adolescents: a second chance in the second decade. World Health Organization. Published 2014. Accessed Oct 15, 2021. www.who.int/adolescent/second-decade
- 9. Kennedy EC, Bulu S, Harris J, et al. "Be kind to young people so they feel at home": a qualitative study of adolescents' and service providers' perceptions of youth-friendly sexual and reproductive health services in Vanuatu. *BMC Health Serv Res.* 2013;13:1–12.
- 10. Menashe-Oren A, Stecklov G. *Population age structure and sex composition in sub-Saharan Africa:A rural-urban perspective;* IFAD Research Series 17, IFAD; 2017.
- 11. Achinkok D, Boah M. Factors associated with reporting a history of induced abortion among adolescent girls in Ghana during 2012–2017. *Int J ResRep Gyn.* 2021;4:1–14.
- 12. Ghana Demographic Health Survey. Ghana Statistical Service, Ghana Health Service, ICF International, 2015.
- 2017 Ghana maternal health survey key findings. Ghana Statistical Service; Ghana Health Service; ICF International, 2017.
- 14. National and sub-national HIV and AIDS estimates and projections 2020 report. Ghana AIDS Commission, 2020.
- 15. 13 teenage pregnancies recorded every one hour, 110k recorded in Ghana in 2020. GHS statistics, *News Ghana*. Published 2021. Accessed Mar 18, 2022. newsghana.com. gh/13-teenage-pregnancies-recorded-every-one-hour-110k-recorded-in-ghana-in-2020-ghs-statistics/
- 16. Volta Region records 676 pregnancies among pupils, students during COVID-19 era Graphic Online. *Ghana News Agency*. Published Nov 2020. Accessed Mar 18, 2022. www.graphic.com.gh/news/education/volta-region-records-676-pregnancy-among-pupils-students-during-covid-19-era.html
- 17. Esantsi SF, Onyango F, Quansah Asare G, et al. Understanding the reproductive health needs of adolescents in selected slums in Ghana: A public health assessment. STEP UP Research Report, Nairobi Population Council; 2015.
- 18. Kyilleh JM, Tabong PTN, Konlaan BB. Adolescents' reproductive health knowledge, choices and factors affecting reproductive health choices: a qualitative study in the West Gonja District in Northern region, Ghana. *BMC Int Health Hum Rights*. 2018;18:6.

- Adibi MGD. Adolescents' knowledge and use of contraceptives: a case study in three selected senior high schools in Sekondi Takoradi metropolis. University of Cape Coast Institutional Repository, 2011. hdl.handle. net/123456789/1268
- 20. Leavy P. Research Design: Quantitative, Qualitative, Mixed Methods, Arts-Based, and Community-Based Participatory Research Approaches. Guilford Publications; 2017.
- 21. Cochran WG. Sampling Techniques. 3rd ed. John Wiley &: Sons, Inc.; 1977.
- 22. Suresh K, Chandrashekara S. Sample size estimation and power analysis for clinical research studies. *J Hum Reprod Sci.* 2012;5:7.
- 23. Violita F, Hadi EN. Determinants of adolescent reproductive health service utilization by senior high school

- students in Makassar, Indonesia. *BMC Public Health*. 2019;19:1–7.
- Oktafiyanti A, Pristya TYR, Herbawani CK, Hardy FR. Factors that associated with reproductive health knowledge among adolescents during Covid-19 pandemic in DKI Jakarta. J Public Health Res CommHealth Develop. 2022;5:90–98.
- 25. Alam R, Tapan KR. High risk behavior, knowledge and attitudes of adolescent health: a study from Rajshahi city corporation area of Bangladesh. *J Gynecol Reprod Med*. 2021;5:122–128.
- 26. Kapoor NR, Langer A, Othman A, Gausman J. Healthcare practitioners experiences in delivering sexual and reproductive health services to unmarried adolescent clients in Jordan: results from a cross-sectional survey. *BMC Health Serv Res.* 2022;22:1–9.