

Level of Awareness and Utilization of Sexual and Reproductive Health Services among Adolescents in Secondary Schools in Turkana South Sub-County, Turkana County, Kenya

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Abstract

Adolescence is a time when teenagers exhibit rapid growth and development that is mainly characterized by emotional, sexual, cognitive, and physical changes. Therefore, when attention is accorded to enlighten them on these changes, they are able to cope amicably. However, there has been persistent reproductive health problems among adolescent secondary school students. The purpose of the study was to examine the level of awareness and utilization of sexual and reproductive health services among adolescents in secondary schools in Turkana South Sub-County, Turkana County, Kenya. The study used descriptive cross-sectional design. The target population was 2,748 male and female adolescents aged 15-19 years attending 14 secondary schools in Turkana South Sub County. Simple random sampling method was used to select 337 respondents, who answered to the questionnaire. The sample was between 10-30% of the population as recommended by Mugenda and Mugenda (2003) for a population below 10,000. Pilot test was conducted on 34 adolescents in Loturerei Mixed Day Secondary School in Turkana central. Cronbach alpha coefficient was used to measure reliability, while construct and content validity were ensured. Descriptive statistics such as frequencies and percentages and inferential statistics such as Chi-square were to analyze the data. Results were presented using tables and explanations. Results indicated that most respondents had little or no knowledge of adolescent sexual reproductive health programs, with only 15.58 percent of the 337 respondents acknowledging to be aware of services offered under the program. The study concluded that referrals from trusted sources, including professionals and peers, were highly effective in encouraging healthcare utilization. However, written materials and school noticeboards had limited impact, suggesting the need for more interactive and targeted awareness strategies. The study, therefore recommended a series of comprehensive awareness campaigns to sensitize adolescents on reproductive health programs and services.

Keywords: *Awareness, Utilization, Sexual and Reproductive Health Services, Adolescents, Secondary Schools, Turkana South Sub-County*

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1.0 Introduction

World Health Organization (WHO) categorizes adolescents as persons between the ages of 10-19 years (WHO, 2024). Adolescence is therefore the time where adolescents exhibit rapid growth and development that is majorly characterized by sexual, cognitive, physical emotional, social and sexual changes that impact their sexual and reproductive health (Kanthi & Johnson, 2021). Recent studies on adolescents across the globe put the global adolescent population at approximately 1, 25 billion (Fetene & Mekonnen, 2018). A study by Melesse (2018) found that among the 1.25 billion teenagers, 513 million of them are between 15-19 years, and 85% live in developing countries (Ansha et al., 2017). Reproductive and sexual wellbeing is crucial to mental, physical and social strength of a person. Teenagers globally are known to possess distinct reproductive needs as well as different vulnerabilities.

The availability and quality of SRH services, as well as the social designs, medical care frameworks, and individual qualities and convictions of the clients of the administrations impact adolescents' uptake of SRH (WHO, 2017). A study by Arslan (2018) in Turkey found that, very few secondary school teenagers use school administrations due to various social, cultural and health system factors, as well as lack of access to relevant information on sexual and reproductive health. Adolescents are always shy and have little or no knowledge of changes at puberty stage that incorporates both the emotional and the physical changes (Upadhyay, 2018). Notably, juvenile young ladies have unsanitary feminine cleanliness practices, and unfortunate food propensity (Choudhury et al., 2021). Half of pregnant Nepalese young adult young ladies age (15-19) do not look for antenatal consideration (Temmerman, 2017).

In developing countries, there is general agreement that sexual and reproductive health (SRH) is a critical component of secondary school going adolescents because of the positive association between investments in SRH services and sustained improvement in educational attainment, workforce development, and economic growth (Kagwanja et al., 2020). As a result, African countries have joined other nations across the globe to work together with United Nations which guide international development efforts and national health policies in resource-poor settings (WHO, 2017). Currently, many low-income countries find it hard to meet the need for SRH services because of shortages in human resources, infrastructure, equipment, and drug supply. As such, each year, more than 1.5 million adolescents undergo unsafe abortions and other stringent problems attached to SRH (Kaski, 2018). Studies done in sub-Saharan Africa countries reveal that more than 60% of hospitalized cases affiliated to reproductive health care are attached to adolescents (Ndongmo et al., 2017). National policies are needed to guide service integration, but there is limited peer-reviewed evidence regarding best-practices for minimizing disruption of health reproductive services

Many young girls living in Kenya engage in sexual activities at a relatively early age and are more likely not to use contraceptives. This is worse among those living in marginalized areas such as Turkana. In Turkana County, youths constitute 23.62% of the absolute population (KNBS, 2019). Incidentally, there is little medical services arrangement customized to this segment of the population. Be it as it may, conditions show that this population requires expanded sexual and conceptive medical services considerations. Additionally, the shift from traditional and cultural norms to modern life style deprive adolescents of the imperative

aspects such as informal education systems where adults are able to educate them on matters sexuality (Honwana, 2019).

Statement of the Problem

Turkana County in Kenya faces significant challenges with early marriages, teenage pregnancies, and HIV prevalence among adolescents, highlighting pressing social and health needs. Marginalization due to factors like limited access to water, poor infrastructure, poverty, and low literacy rates exacerbates these challenges. Cultural norms endorsing early marriages further compound the situation.

The Kenyan government's National Reproductive Health Strategy (KIPRA, 2022) aimed to address these issues by prioritizing services like family planning and HIV management. Despite these efforts and regardless of devolved governance allowing county-level initiatives, data from the KIPRA indicates persistent reproductive health problems among secondary school students. Turkana County government has initiated projects to encourage adolescent use of SRHS, yet uptake remains low.

Statistics reveal a contraceptive prevalence rate of 4.7%, low skilled birth attendance at 9.7%, and HIV prevalence of 4.0%, slightly below the national average. Alarmingly, only 18% of young people in Turkana County have adequate HIV knowledge (NACC, 2019). Further research is vital to understand how various factors, including health systems, economics, socio-culture, and SRH information availability affect Turkana County's adolescents. Such insights are essential for developing targeted interventions to improve reproductive health outcomes in the region.

“The paper reported that written materials and school noticeboards had limited impact in enhancing the utilization of sexual and reproductive health services among adolescents in secondary schools”

Purpose of the Study

To examine the level of awareness and utilization of sexual and reproductive health services among adolescents in secondary schools in Turkana South Sub-County, Turkana County, Kenya.

Research Question

How does the level of reproductive health awareness influence utilization of sexual reproductive health services among secondary school adolescents in Turkana South Sub-County, Turkana County, Kenya?

Theoretical Review

This study is guided by Health Belief Model (HBM) developed by Rosenstock in 1950. The theory posits that people's wellbeing and the related ways of behaving are impacted by their view of vulnerability to chances of wellbeing, the seriousness of potential wellbeing results, the advantages of embracing preventive ways of behaving, and the obstructions to making a move. Applied to adolescent reproductive health, the HBM suggests that adolescents are more likely to utilize reproductive health services if they perceive themselves to be at risk of unintended pregnancy, STIs, or other reproductive health problems; and if they

believe that the benefits of seeking care outweigh the barriers.

Empirical Review

Youthfulness is a basic transformative phase characterized by critical physical, and social changes. During this period, adolescents begin to explore their sexuality and reproductive health, which can have profound implications on their future well-being.

Research indicates that adolescents aged 15-19 years often have limited knowledge about reproductive health, including contraceptives, sexually transmitted infections (STIs), and pregnancy prevention (Kirby et al., 2007). Misconceptions and myths about reproductive health may prevail among adolescents, leading to risky behaviors and adverse health outcomes (Wamoyi et al., 2018).

Perceptions of reproductive health among adolescents are influenced by a variety of factors, including cultural norms, family beliefs, peer influence, and access to information. In many cultures, discussions about sexuality and reproductive health are taboo, leading to misinformation and stigma (Svanemyr et al., 2015). Adolescents may also face barriers in accessing accurate and comprehensive information about reproductive health due to inadequate sexuality education in schools and limited access to youth-friendly healthcare services (UNFPA, 2016).

Studies have shown that adolescents' perceptions of reproductive health services play a crucial role in the utilization of reproductive health services. Negative perceptions, such as fear of judgment from healthcare providers or concerns about confidentiality, may deter adolescents from seeking reproductive health services (Denno et al., 2015). Conversely, positive perceptions, such as feeling respected and

supported by healthcare providers, can enhance adolescents' willingness to engage in reproductive health services and adopt healthy behaviors (Denno et al., 2015).

Further, reproductive health knowledge and perceptions among teenagers who matured at 15-19 years are shaped by a complex interplay of socio-cultural, educational, and healthcare factors. Addressing gaps in knowledge and misconceptions about reproductive health are essential steps towards promoting healthy behaviors and empowering youths to come to informed conclusions about their SRH

2.0 Materials and Methods

Adoption of descriptive cross-sectional research design facilitated the gathering of comprehensive information regarding utilization of various aspects of SRH service among adolescents. The target population was 2,748 male and female adolescents aged 15-19 years attending 14 secondary schools in Turkana South Sub County. The study sampled the population using simple random sampling method, where 337 adolescents were selected through Mugenda and Mugenda (2003) sampling formula. Questionnaires were used as primary data collection tool. Pilot test was conducted on 34 adolescents in Loturerei Mixed Day Secondary School in Turkana Central. Cronbach alpha coefficient was used to measure reliability, while construct and content validity were ensured. The study used descriptive frequencies and percentages, while inferential statistics such as Chi-square were used to analyze the data. Results were presented using tables and explanations.

3.0 Results and Discussions

Response rate

The study issued 337 questionnaires to various adolescents. 337(100%) were filled in returned. This was due to the fact that the researcher used drop and pick strategy.

Reliability Test Results

The study conducted a pilot test on 34 adolescents in Loturerei Mixed Day

Secondary School. The results are presented in Table 1.

Table 1

Reliability Results

Instrument	Cronbach Alpha
Questionnaires	0.891

Table 1 indicates that the questionnaires had a Cronbach alpha coefficient of 0.891. A Cronbach alpha coefficient of more than 0.7 is deemed to be reliable to be used in the main study, and trusted to address the problem of the study.

The study sought to evaluate adolescents' understanding of reproductive health by inquiring whether they were aware of facilities providing adolescent reproductive health services, and the types of services available. Those acknowledging awareness of such services were subsequently asked to specify the sources from which they obtained this information. Table 2 presents responses regarding sources of information on reproductive health services.

Results of Awareness of Adolescents and Utilization of SRH Services

Table 2

ASRHS Source of Information

Awareness Source	Frequency	Percentage %
Peer/friends	139	93%
school noticeboard	7	4.7%
Teachers	3	2.3
Parents	0	0

Table 2 notes that most respondents had little knowledge of adolescent sexual reproductive health programs, with only 44.2 percent of the 337 respondents acknowledging to be aware of services offered under the program. Among the 149 respondents that were aware of Adolescent SRH programs, a majority 139(93%) said they had obtained the information from peers and friends. Those

who said to have obtained the knowledge from school noticeboards were 7(4.7%), while 3(2.3%) said they had been informed by teachers. None of the respondents acknowledged to have acquired knowledge on adolescent sexual health services from their parents. The findings therefore suggested that peers were a more influential factor in the utilization of ASRH services.

Table 3

Descriptive Results on Awareness of Adolescents and Utilization of SRH Services

ASRH Service	Awareness	
	Frequency	Percentage %
Family Planning	15	4.5
VCT	51	15
General Treatment	12	3.6
STI Treatment	9	2.7
ANC for the Young	8	2.4
Counselling	54	16.0
Social Activities	0	0

The data in table 3 highlights variations in awareness levels among different ASRH services, with counseling being the most recognized, and social activities the least recognized.

Among the ASRH services given, counseling and VCT was most cited, with 16 and 15

percent of the respondents claiming to be aware of the service being offered in the ASRH program and by family planning respectively. The study further conducted a Chi-Square analysis to examine the awareness of adolescents and utilization of SRH services. Table 4 shows the results.

Table 4

Chi-square Results on Awareness of Adolescents and Utilization of SRH Services

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.091	1	.008
Continuity Correction	6.173	1	.013
Likelihood Ratio	6.393	1	.011
Linear-by-Linear Association	7.073	1	.008
N of Valid Cases	337		

Table 4 reveals that the awareness level of students on adolescent sexual health services is influenced by age, whereby students aged between 18 and 19 years were twice likely to have interacted with ASRHS information or services compared to their counterparts below 18 years. In addition, sex was also an influencing factor, with more girls than boys being aware or having interacted with ASRHS (59% against 41%). This is despite the study having more boys than girls in its

sample. Upon performing chi-square test on awareness of ASRHS and its utilization, the study found the two variables to have a relationship. The independence of null hypothesis is rejected ($\chi^2=7.09 > 3.84$ at d.f.=1 and $\alpha=0.05$), indicating that the two variables, awareness and utilization of ASRHS, are dependent on each other, whereby awareness was seen to influence utilization.

Table 5

ASRHS Awareness Level by Age and Sex

Factor	Utilized	%	Not utilized	%
Age				
15-17	48	14.20%	289	85.80%
18-19	101	30.00%	236	70.00%
Gender				
Male	62	18.40%	275	81.60%
Female	87	25.80%	250	74.20%

Table 5 indicates that the awareness level of students on adolescent sexual health services is influenced by age, where students aged between 18 and 19 years were twice likely to have interacted with ASRHS information or services compared to their counterparts below 18 years. In addition, sex was also an influencing factor, with more girls than boys being aware or having interacted with ASRHS (25.8% against 18.4%). This is despite the study having sampled more girls than boys, as shown in the Table 5 above.

The findings of this study regarding the limited knowledge and utilization of ASRHS resonate with research conducted in various regions across the globe. In Kenya, studies have highlighted gaps in adolescents' acquaintance and contact to SRH services, with peer influence playing a significant role. Similarly, findings from other African countries have indicated low awareness and utilization of ASRHS among adolescents, with peer networks often serving as primary sources of information (Kassa et al., 2019). Research conducted on other continents has also documented challenges in adolescents' awareness and use of SRH services, with peer

influence and age playing significant roles (Chae et al., 2020). Despite variations in socio-cultural contexts, the influence of peers on adolescents' access to sexual health information and services appears to be a common theme globally.

The findings regarding the relationship between awareness and utilization of ASRHS are consistent with broader literature emphasizing the importance of knowledge and awareness in shaping health-seeking behaviors among adolescents (Patton et al., 2016; Naanyu et al., 2019). Understanding these dynamics is crucial for designing effective interventions to improve adolescents' access to and utilization of ASRHS globally.

Results of Utilization of Adolescent Reproductive Health Services

The main reproductive health services utilized by the adolescents were family planning, VCT, and STI treatment. The table below summarizes the number of adolescents and how they utilized each of the reproductive health services.

Table 6

Utilization of Adolescent Reproductive Health Services

RHS	Utilized		Not utilized	
	<i>Frequency</i>	<i>percentage</i>	<i>Frequency</i>	<i>Percentage</i>
Family planning	10	2.9%	327	97.1%
Counseling services	42	12.5%	295	87.5%
VCT	48	14.3%	289	85.7%
STI treatment	6	1.6%	331	98.4%

Overall, table 6 shows low utilization of sexual reproductive health services, with less than 100 respondents, cumulatively, having utilized any of the four services enquired. The most utilized service was VCT, accounting for 48(14.3%) of the sample population, whereas counselling services and family planning recorded 42(12.5%) and 10(2.9%) percent respectively. The least utilized service was STI treatment, with only 6 out of the 337 respondents acknowledging seeking STI-related services.

The findings regarding low use of SRH services by adolescents in Turkana are consistent with research conducted in similar contexts globally. Low utilization rates, similar to those observed in this study, have been reported in Zambia, Nigeria, and Ethiopia.

4.0 Conclusion

The study corroborates the significance of awareness in healthcare service attendance,

References

Ansha, M. G., Boshu, C. J., & Jaleta, F. T. (2017). Reproductive health services Utilization and associated factors among adolescents in Anchar District, East Ethiopia. *Journal of Family & Reproductive Health, 11*(2), 110-118.

particularly among adolescents. Referrals from trusted sources, including professionals and peers, were found to be highly effective in encouraging healthcare utilization. However, written materials and school noticeboards had limited impact, suggesting the need for more interactive and targeted awareness strategies.

5.0 Recommendations

The study recommends that there be series of comprehensive awareness campaigns. Notably, the awareness campaigns should be implemented on the targeted adolescents with the aim of educating them about sexual reproductive, health programs and services. Further, there should be usage of trusted sources, such as healthcare professionals, peer educators, and community leaders to disseminate information effectively to the adolescents.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5742664/>

Arslan, S. (2018). A probe into the indicators of intercultural communicative competence in an EFL self-study textbook. *International Online Journal of Education and Teaching (IOJET)*,

- 5(1), 150-167.
<http://iojet.org/index.php/IOJET/article/view/306/228>
- Chae, H., Kim, S., Lee, J., & Park, K. (2020). Impact of product characteristics of limited-edition shoes on perceived value, brand trust, and purchase intention; focused on the scarcity message frequency. *Journal of Business Research*, 120(3), 398-406. <https://doi.org/10.1016/j.jbusres.2019.11.040>
- Choudhury, P., Foroughi, C., & Larson, B. (2020). Work-from-anywhere: The productivity effects of geographic flexibility. *Strategic Management Journal*, 42(4), 655-683. <https://doi.org/10.1002/smj.3251>
- Denno, D. M., Hoopes, M. D., & Chandra-Mouli, V. (2015). Effective strategies to provide adolescent sexual and reproductive health services and to increase demand and community support. *Journal of Adolescent Health*, 56(1), 22-41. <http://dx.doi.org/10.1016/j.jadohealth.2014.09.012>
- Fetene, N., & Mekonnen, W. (2018). The prevalence of risky sexual behaviors among youth center reproductive health clinics users and non-users in Addis Ababa, Ethiopia: A comparative cross-sectional study. *PLoS One*, 13(6), 1-15. <http://dx.doi.org/10.1371/journal.pone.0198657>
- Honwana, A. M. (2019). Youth struggles: From the Arab spring to Black Lives Matter & beyond. *African Studies Review*, 62(1), 8-21. <http://dx.doi.org/10.1017/asr.2018.144>
- Kagwanja, N., Waithaka, D., Nzinga, J., Tsofa, B., Boga, M., Leli, H., Mataza, C., Gilson, L., Molyneux, S., & Barasa, E. (2020). Shocks, stress and everyday health system resilience: Experiences from the Kenyan coast. *Health Policy and Planning*, 35(5), 522-535. <https://doi.org/10.1093/heapol/czaa002>
- Kanthi, E. K., & Johnson, M. A. (2021). Adolescence: An overview of health problems. *Indian Journal of Continuing Nursing Education*, 22(2), 148-63. http://dx.doi.org/10.4103/ijcn.ijcn_110_21
- Kassa, G. M., Arowojolu, A. O., Odukogbe, A. A., & Yalew, A. W. (2019). Adverse neonatal outcomes of adolescent pregnancy in Northwest Ethiopia. *PLoS One*, 14(6), 1-10. <http://dx.doi.org/10.1371/journal.pone.0218259>
- Kaski, J. C., Crea, F., Gersh, B. J., & Camici, P. G. (2018). Reappraisal of ischemic heart disease. *Circulation*, 138(14), 1463-1480. <https://doi.org/10.1161/CIRCULATIONAHA>
- Kenya National Bureau of Statistics (2019). *Kenya population and housing census reports*. <https://www.knbs.or.ke/2019-kenya-population-and-housing-census-reports/>
- Kirby, D. B., Laris, B. A., & Rolleri, L. A. (2007). Sex and HIV education programs: Their impact on sexual behaviors of young people throughout the world. *Journal of Adolescent Health*, 40(3), 206-17. <https://doi.org/10.1016/j.jadohealth.2006.11.143>
- Kenya Institute for Public Policy Research and Analysis (2022). *The National Reproductive Health Policy 2022-2032*. <https://repository.kippra.or.ke/bitstream>

- m/handle/123456789/4104/National-Nursing-and-Midwifery-Policy-2022-2032.pdf?sequence=1&isAllowed=y
- Melesse, B. (2018). A review on factors affecting adoption of agricultural new technologies in Ethiopia. *Journal of Agricultural Science and Food Research*, 9(1000226), 1-10. <https://www.scirp.org/reference/referencespapers?referenceid=3300493>
- Mugenda, O., & Mugenda, A. (2003). *Research methods quantitative and qualitative approaches*. Act Press.
- Naanyu, V., Ruff, J., & Goodrich, S. T. (2020). Qualitative exploration of perceived benefits of care and barriers influencing HIV care in Trans Nzoia, Kenya. *BMC Health Serv Res* 20(355), 1-9. <https://doi.org/10.1186/s12913-020-05236-z>
- National AIDS Control Council (2019). *The national aids control council strategic plan for 2015-2019*. https://nsdcc.go.ke/wp-content/uploads/2016/03/NACC-Strategic-Plan_print8.pdf
- Ndongmo, T. N., Ndongmo, C. B., & Michelo, C. (2017). Sexual and reproductive health knowledge and behavior among adolescents living with HIV in Zambia: A case study. *Pan African Medical Journal*, 26(71), 1-11. <https://doi.org/10.11604/pamj.2017.26.71.11312>
- Svanemyr, J., Amin, A., Robles, O.J., & Greene, M.E. (2015). Creating an enabling environment for adolescent sexual and reproductive health: a framework and promising approaches. *Journal of Adolescence Health*, 56(1), 7-14. <https://doi.org/10.1016/j.jadohealth.2014.09.011>.
- United Nations Population Fund (2016). *Millions of lives transformed*. https://www.unfpa.org/modules/custom/unfpa_global_annual_reports/docs/Annual-Report-2016.pdf
- Wamoyi, J., Buller, A. M., Nyato, D., Kyegombe, N., Meiksin, R., & Heise, L. (2018). Eat and you will be eaten: A qualitative study exploring costs and benefits of age-disparate sexual relationships in Tanzania and Uganda: Implications for girls' sexual and reproductive health interventions. *Reproductive Health*, 15(207), 1-11. <https://doi.org/10.1186/s12978-018-0650-0>
- World Health Organization (2024). *Adolescent health*. https://www.who.int/health-topics/adolescent-health#tab=tab_1
- World Health Organization. (2017). *World health statistics 2017: monitoring health for the SDGs, sustainable development goals*. <https://iris.who.int/bitstream/handle/10665/255336/9789241565486-eng.pdf?sequence=1>