Original Research Article

Assessment of Factors Influencing Utilization of Reproductive Health Services for Adolescents and Youth in Samburu County, Kenya

Abstract

Background: Globally, around 16 million teenagers give birth each year, with 95% of them coming from upcoming nations In developing nations like Kenya, youths deal with a variety of sexual and reproductive health issues. Youth in Kenya frequently experience serious health issues like unintended pregnancy, unsafe abortions, and sexually transmitted infections.

Objective: The study aimed to assess factors influencing the use of youth-friendly reproductive health services among youths and adolescents in Samburu County, Kenya.

Method: The study employed an analytical cross-sectional study design. The Chi-square test for independence and binary logistic regression were employed to establish a relationship between independent and dependent variables.

Results: From this study, The presence of a reproductive health facility(OR=2.4,95%CI=0.220-0.801) and community mobilization campaigns(OR=4.7,95%CI=0.093-0.485) increased the odds of utilizing youth-friendly reproductive health services. The presence of peer pressure(OR=2,95%CI=0.266-0.971), healthcare providers' poor attitude(OR=2.1,95%CI=0.276-0.881), and lack of privacy (OR=2,95%CI=0.290-0.974)reduced the odds of utilizing youth-friendly reproductive health services.

Conclusion: In this study, the utilization of youth-friendly reproductive health services was 40.6%. The presence of a reproductive health facility, having visited a reproductive health facility, the presence of religious influence, and community mobilization campaigns increased the odds of utilizing youth-friendly reproductive health services. The presence of peer pressure, being male and single in the marital status category, healthcare providers' poor attitude, and lack of privacy reduced the odds of utilizing youth-friendly reproductive health services.

Keywords: *Adolescents, Reproductive Health Services, Utilization, Youths*

1. INTRODUCTION

The World Health Organization (WHO) defines youths as those who are 10 to 24 years old, but the terms young people and youth (15 to 24 years old) are frequently used interchangeably to refer to young people [1]. Youth, who make up 25% of the global populace, are classified as a period of maximum health with several biological, mental, and societal changes that could expose them to hazardous sexual actions, such as early sexual activity participation, sex that is unsafe, and having sex several partners [2], [3]. Despite a clear need for these services and they are urgently needed, the sexual and reproductive health (SRH) needs of adolescents and youth are often neglected and underappreciated in many African nations[4]. With 1.2 billion people on the continent, youth aged 15 to 24 make up the majority, with 226 million of them living in sub-Saharan Africa, which accounts for 19% of the global youth population [5].

In the world, around 16 million teenagers give birth each year, with 95% of them coming from upcoming nations. Nearly a quarter of girls between the ages of 15 and 19 are married (LMICs)[6]. Trends in an increased rate of un-marriages do not point to a reduction in the age at which youths first engage in sexual activity; instead, there is a need to improve access to SRH knowledge, services, and skills so that people can learn more about sexuality, avoid unintended pregnancies, and stop sexually transmitted diseases[7]. Elevated youth fertility rates in Sub-saharan Africa are influenced by several factors including lack of information about sex and reproductive health, limited admittance to and use of birth control devices, condoms, and sex reproductive health services, gender disparity, and cultural customs like teenager matrimonial and initiation rites[8].

Adolescents in sub-Saharan Africa encounter numerous severe challenges in seeking sexual reproductive health services, Which include restricted access to youth-friendly amenities (YFS), which include info on development, hazardous abortion, gender based violence, and family planning (FP). This has driven youths and adolescents to engage in hazardous sexual behavior, which has increased the prevalence of sexually transmitted infections and HIV in young people as well as their susceptibility to early pregnancy and delivery difficulties that have high mortality and disability rates [9]. The majority of young men and females surveyed in LMICs said they used condoms for their most recent sexual activity, according to several polls. Only 33% of young males and 20% of young females in these countries have a thorough awareness of HIV[10]. Only 10% of young males and 15% of young females were attentive to their status concerning HIV, which presents a significant obstacle to ensuring optimal reproductive health and wellness for all, according to UNAIDS' 2016 gaps report [5]. Females below the age of 19 who become expectant have a 50% greater chance of miscarriages and newborn deaths accompanied by an increased risk of preterm birth, less birth mass, and asphyxia, all of which have a detrimental effect on the unborn child's health and contribute to the cycle of poverty [2].

Studies on STIs among youth in Kenya are scarce, however, the most recent data suggests, 36% of Kenya's population is aged between the ages of 10 and 24. This means that almost 40% of Kenya's population is under the age of 18[11]. Godia et al. observed that the use of youth-friendly reproductive health amenities in Kenya faces a variety of challenges, ranging from the adolescent who has little knowledge of or needs information on such services, to the youthful and prosperity office perspective where there is no obligation regarding organizations, limited organization support, and helpful resources [12]. Studies have indicated that teenage mothers are more likely to drop out of school, have fewer opportunities for job advancement, and have less economic empowerment, which keeps them in poverty[13].

2. METHODOLOGY

2.1 Research Design

The study employed an analytical cross-sectional study design to assess the factors that affect the utilization of reproductive health services among youths and adolescents

2.2 Study Area

One of the designated 47 Counties in Kenya is Samburu County. It is situated in Kenya's semi-arid and arid regions in the northern portion of the Great Rift Valley, about 300 kilometers north of Nairobi. The county shares borders with Laikipia County to the south, Turkana County to the northwest, Baringo County to the southwest, Marsabit County to the northeast, and Isiolo County to the east. Kenya's geographical area (roughly 541,416 square kilometers), 21,126 square kilometers constitutes Samburu County.

2.3 Study Population

The all-out target population for this research was youths and adolescents attending Samburu County referral hospital seeking reproductive health services and this service includes Counseling services, family planning, VCT, management of STIs, and antenatal and prenatal care services.

2.4 Sample Size Determination

The study employed the fischer formula to compute the sample size of this research. As a result, 235 study participants and clients made up the final sample size for this study

2.5 Sampling Technique

Samburu County Referral Hospital was purposefully selected for the study as it serves a diverse set of population including the pastoral community. Participant selection was done by systematic sampling. To

determine the initial point, the first participant was randomly selected. Participants who were assigned an even number will participate in the study.

2.6 Data Collection Method and Instruments

Both techniques of quantitative and qualitative methods of data collection were employed whereby semi-structured study-administered questionnaires were used to collect quantitative data. Both Key informant interviews and Focused group discussions were employed to obtain qualitative data.

2.7 Validity and Reliability

A counselor reviewed the research questionnaires before data collection. This was necessary to ensure consistency and also to create room for additional info needed to ensure the success of this research. Refers to the extent to which a study tool yields reliable outcomes after repeated trials. Twenty-five study respondents from the neighboring county were employed for pretesting the data collection tool. The study participants who were employed in this exercise were not employed in the data collection phase. Both internal consistency and equivalence were done to ensure the questionnaire is reliable. A coefficient alpha of above 70% was acceptable in this study. The reliability test results showed that a score of 0.81 was obtained, indicating that the tools were reliable for gathering data.

2.8 Data Processing and Analysis

The quantitative data in this study were analyzed by descriptive statistics using the statistical package for social sciences SPSS (V25). The Chi-square test for independence and binary logistic regression were employed to establish a relationship between independent and dependent variables. Thematic analysis was used to analyze the focused group discussion and key informant interview audio. Emerging themes were guided by the research objectives. The researcher then integrated the qualitative and quantitative data to answer the study objectives.

3.0 Results

3.1 Utilization of Youth Reproductive Health Services

The utilization of youth-friendly reproductive health services was 40.6% which is way less as compared to the national target.

3.2 Reproductive Health Services Utilized

As indicated in Table 1, regarding the type of youth-friendly reproductive health services utilized, the majority(96.8%) of the study respondents reported utilizing voluntary and counseling services, this was closely(76.6%) followed by family planning and maternal and child health services standing at (72.3%). The least(14.9%) utilized youth-friendly reproductive health service in this study was general counseling.

Table 1: 1Multiple Responses on Reproductive Health Services Utilized

Reproductive health services	Categories	Frequency of responses	Percentage of cases%
	Voluntary counseling and testing services	91	96.8

	Sexually and transmitted infection treatment	18	19.1
	Maternal and child health services	68	72.3
	Counseling	14	14.9
	Family planning	72	76.6
Total		**263**	**279.8**

3.3 Social Demographic Characteristics of the Study Respondents

As indicated in Table 2, this section provides the social demographic characteristics of the study respondents. From this study, the majority (74.5%)of the study respondents were youths aged 20-24. Regarding gender, the majority(78.3%) of the study respondents were female. Regarding marital status more than half (63%)of the study respondents were single. In this study majority(91.1%) of the study respondents were Christians. Regarding schooling status, more than half(69.4%)of the study respondents not being in school. Concerning the level of education, the majority of the study respondents had attained a secondary school education level. Lastly, regarding parents' occupations, more than half (55.3%)of the study respondents reported that their parents had not been employed.

Table 2: Social Demographic Characteristics

Variable	Categories	Frequency	Valid Percentage%
Age	10-14	19	8.1
	15-19	41	17.4
	20-24	175	74.5
Gender	Male	51	21.7
	Female	184	78.3

Marital status	Single	148	63
	Separated	2	0.9
	Married	85	36.2
Religion	Muslim	21	8.9
	Christian	214	91.1
Schooling status	Yes	72	30.6
	No	163	69.4
Education level	No formal education	8	3.4
	Primary	37	15.7
	Secondary	142	60.4
	Vocational	42	17.9
	University	6	2.6
Parents occupation	Formal employment	42	17.9
	farmer	33	14
	Casual labor	19	8.1
	Self-employment	11	4.7
	Not employed	130	55.3

3.4 Bivariate and Multivariate analysis of social demographic factors

In the social demographic factor, the following variables were found to be significantly associated with the utilization of youth-friendly reproductive health services; age(X^2=21.635,df=2,p=0.000), gender(X^2=16.533,df=1,p=0.000), marital status(X^2=32.661,df=2, P*=0.000), and the schooling status(X^2=21.569,df=1,p=0.000), of the study respondents hence these variables were imported to binary logistic regression for further analysis. Education level(X^2=7.372,df=4,p*=0.109), religion(X^2=2.676,df=1,p=0.102), and parents' occupation(X^2=7.298,df=4,p*=0.116) were found not to be statistically associated with the utilization of youth-friendly reproductive health services.

As indicated in Table 3, Males were more than 4 times less likely to utilize youth-friendly reproductive health services as compared to females. Furthermore, single study respondents were 2 times less likely to utilize youth-friendly reproductive health services as compared to those who were married. This was in agreement with the qualitative findings where the majority of the discussants in the focused group discussion noted that

"I would say being married makes you more sexually active and as a result, you have to seek the necessary reproductive health services. for instance, you have to seek family planning to prevent an unwanted child .furtjher kore you have to know your HIV status to protect your loved ones. So I have to keep constant use of these services where possible"

Table 3:Multivariate Analysis of Social Demographic Factors

Step 1a	Variables	B	S.E	Wald	Df	Sig	Exp(B)	95% C.I for EXP(B)	
								Lower	Upper
	age			2.335	2	.311			
	Age (1)	.860	.793	1.175	1	.278	2.36	.499	11.183
	Age (2)	.894	.625	2.045	1	.153	2.446	.718	8.332
	gender	1.388	.437	10.109	1	.001	4.008	1.703	9.433
							ref		
	schooling	0.578	.511	1.276	1	.259	1.782	.654	4.852
	Marital status					.012			
	Marital status(1)	.977	.33	8.782	1	.003	2.655	1.382	5.066
	Marital status(2)	22.02	28.420	0.000	1	.999	3648	.000	
							ref		
	Constant	**-.815**	**.240**	**11.486**	**1**	**0.001**	**.443**		

3.5 Bivariate and multivariate analysis of social-cultural factors

In the social-cultural factors, the following variable was found to be significantly associated with the utilization of youth-friendly reproductive health services; myths and misconceptions(X^2=7.599,df=1, p=0.006), the presence of community mobilization campaigns(X^2=33.997,df=1, p=0.000), the presence of religious influence(X^2=29.262,df=1, p=0.000), and peer pressure(X^2=11.89,df=1, p=0.001)**.**Fear(X^2=0.11,df=1,p=0.741) was found not to be statistically associated with the utilization of youth-friendly reproductive health services.

As indicated in Table 4, youths and adolescents who reported experiencing peer pressure were 2 times less likely to utilize the youth-friendly reproductive health services as compared to their fellow counterparts. Furthermore, the presence of a community mobilization campaign increased the odds of utilizing reproductive health services by 4.7.

This finding was consistent with the qualitative data where one of the key informants noted that

"*The presence of these community mobilization campaigns has a key role in the utilization of the reproductive health services, you find that, the youth gets a lot of knowledge and awareness on the existence of these services and why they need to utilize them. The presence of these services encourages the eradication of fear of bad traditions within the community. There is a need to ensure more effort on this campaign to enhance increased uptake of these services"*

The presence of religious influence increased the odds of utilizing reproductive health services by 3.6. These findings were not in agreement with the qualitative findings as the majority of the respondent noted that

"I would say, today religion has not prioritized health matters as compared to the earlier days and this could be linked to a lack of health education and promotion forums in churches. Don't forget the church is a youth catchment area where it's easy to convey information related to reproductive health matters. I feel church leaders should do something to capture this area which will have a lot of benefits to the youths and the adolescents"

Table 4: Multivariate Analysis of the Social-Cultural Factors

Step	**Variables**	**B**	**S.E**	**Wald**	**Df**	**Sig**	**Exp(B)**	**95% C.I for EXP(B)**	
1a								**Lower**	**Upper**
	Presence of a Mobilization campaign	-1.55	.422	13.52	1	0.00	4.7	.093	0.485
							ref		
	Presence of Peer	0.732	.303	5.84	1	0.02	2	.266	.971

pressure								
						ref		
Presence of Religion influence	-1.29	.357	13.05	1	0.00	3.6	.137	.555
						ref		
Myths & misconception	-.384	.353	1.19	1	0.28	0.68	.341	1.359
						ref		
Constant	**1.651**	**0.34**	**23.93**	**1**	**0.00**	**5.21**		

3.6 Bivariate and multivariate analysis of health system factors

In the health system factor, the following variables were found to be significantly associated with the utilization of youth-friendly reproductive health services; healthcare workers' attitude(X^2=8.492,df=1,p=0.004), level of privacy at the health facility(X^2=7.704,df=1,p=0.006), presence of long distances(X^2=9.679,df=1,p=0.002), whether the study respondent had visited a reproductive health facility(X^2=12.777,df=1,p=0.000) and the presence of a reproductive health facility(X^2=8.982,df=1,p=0.003). Use of Unfriendly language(X^2=1.810,df=1,p=0.178) was found not to be statistically associated with the utilization of youth-friendly reproductive health services. As indicated in Table 5, The absence of privacy at the health facility reduced the odds of utilizing youth-friendly reproductive health services by 2. The presence of reproductive health facilities increased the odds of the utilization of youth-friendly reproductive health services by 2.4. Furthermore, the presence of bad healthcare providers' attitudes reduced the odds of utilizing youth-friendly reproductive healthcare services by 2. These findings were in agreement with the qualitative data where the majority of the discussants in the focused group discussion noted that:

"Health care worker's attitude has a key role whether we seek for this reproductive health services or not. Trying to imagine you have gone for HIV testing and met a health care worker with a bad attitude. If things go south you might end up being hurt to the extent of thinking of committing suicide .so I feel a doctor's attitude is of importance as far as the provision of this services is concerned"

Visiting a Reproductive Health Facility increased the odds of utilizing youth-friendly reproductive healthcare services by 3.1. This was not in agreement with the qualitative findings where one of the key informants noted that:

" I would say youths paying a visit to a health care facility does not necessarily mean they will use this youth-friendly reproductive health services, you find people seek services when they need them, yes, they might visit the hospital but for other medical reasons.so I would say it's a personal decision on whether to use this reproductive health services or not"

Table 5:Multivariate analysis of health system factors

Variables	B	S.E	Wald	Df	Sig	Exp(B)	95% C.I for EXP(B)	
							Lower	Upper
Presence of RH facility	-.87	0.33	6.94	1	0.008	2.4	.220	.801
						ref		
Having visited RH facility	-1.13	.34	10.88	1	.001	3.1	.285	1.079
						ref		
Healthcare worker attitude	0.707	.296	5.692	1	0.017	2.1	.276	0.881
						ref		
Absence of privacy	0.632	0.31	4.18	1	0.041	2	0.290	0.974
						ref		
Presence of long distance	0.589	.339	3.015	1	0.08	.555	.285	1.079
Constant	**2.634**	**0.46**	**33.43**	**1**	**0.00**	**13.92**		

4. Discussion

From this study, the utilization of youth-friendly reproductive health services was 40.6% which is way less as compared to the national target. These findings were similar to a study done in Ethiopia which reported a 44.4% utilization of youth-friendly reproductive health services[14]. Males were more than 4 times less likely to utilize youth-friendly reproductive health services as compared to females, this could be linked to males being less concerned about their reproductive health status. These findings were in agreement with a study done in Kenya[10]. Single study respondents were (two) times less likely to utilize youth-friendly reproductive health services as compared to those who were married. The probable reason for this, married people are more sexually active as compared to singles hence the urge to seek reproductive health services. This was contrary to a study done in Nigeria[15].

Furthermore, the presence of a community mobilization campaign increased the odds of utilizing reproductive health services by 4.7. The presence of community mobilization campaigns increased awareness and benefits of youth-friendly reproductive health services. These findings were in harmony with a study done in Ethiopia[16]. The presence of religious influence increased the odds of utilizing reproductive health services by 3.6. These research findings were in agreement with a study done in Nigeria[17]. Furthermore, youths and adolescents who reported experiencing peer pressure were (two)times less likely to utilize the youth-friendly reproductive health services as compared to their counterparts. This was contrary to a study done in Ghana [8].

The presence of reproductive health facilities increased the odds of utilization of youth-friendly reproductive health services by 2.4. The presence of these facilities ensures the necessary health services needed by youths are available when needed. These findings were in agreement with a study done in Ghana[18]. From this study absence of privacy reduced the odds of utilizing youth-friendly reproductive health services by 2. These findings were in agreement with other two studies done in Kenya and Tanzania where lack of privacy reduced the odds of using reproductive health services, Youths are very sensitive to their private health information and it has to be safeguarded with a lot of privacy[11], [19]. The presence of bad healthcare providers' attitudes reduced the odds of utilizing youth-friendly reproductive healthcare services by 2. Poor attitude tends to repel youths and adolescents from seeking these essential health services as they tend to have a fear of rejection. This was contrary to a study done in Ethiopia [14]. Visiting a reproductive health facility was found to increase the odds of utilizing youth-friendly reproductive healthcare services by 3.1. This could be linked to the motivation of utilizing health care services that are of benefit to the youths and of which the majority are provided for free. However, These findings were not in harmony with a study done in Brazil[20].

5. Conclusion

In this study, the utilization of youth-friendly reproductive health services was 40.6%. VCT was the most utilized youth-friendly reproductive health service. In the social demographic factors, Being male and single in the marital status category reduced the odds of utilizing youth-friendly reproductive health services. Under the social-cultural factors, the presence of peer pressure reduced the odds of utilizing youth-friendly reproductive health services while the presence of religious influence and community mobilization campaigns increased the odds of utilizing youth-friendly reproductive health services, in the health system factors, the presence of an RH facility and having visited an RH facility increased the odds of utilizing youth-friendly reproductive health services while healthcare providers bad attitude and lack of privacy reduced the odds of utilizing youth-friendly reproductive health services.

9. Ethical Considerations and Consent

To make sure that the study was carried out in a manner that does not contravene the ethics, the researcher obtained a letter from Mount Kenya University's ethical review office. Also, a letter of approval from the National Council of Science and Technology (NACOSTI) was also obtained and a letter from relevant country government offices, permitting the study to be carried out was also obtained. Moreover,

due to the confidentiality of some data that was collected, the investigator assured the participants of the privacy of the info they provided. Since some of the participants were not willing to give out some info openly, the research assured that the info was to be treated with utmost privacy. The study acknowledged that under Kenya's Constitution, adolescents under the age of 18 are not considered adults. Before interviewing and audio recording the participants, written informed consent was obtained from their parents or legal guardians and from adult participants in accordance with accepted ethical research standards.

Abbreviations

ANC; Anti Natal Care, NACOSTI; National Commission for Science Technology and Innovation, **RHS;** Reproductive Health Services, SPSS; Statistical Package for Social Sciences, WHO; World Health Organization.

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