

Original Article

Determinants of Contraceptives Uptake among Adolescents' Girls Aged 14-19 Years in Homa Bay County.

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Date Published: ABSTRACT

14 October 2021 Introduction. Adolescents are individuals aged between 10-19 years. This phase is characterised by rapid growth, sexual maturation, and sexual exploration. These behaviours expose sexually active adolescent girls to a greater risk of unintended pregnancies, unsafe abortion, and sexually transmitted infections. This study aimed to assess the determinants of contraceptives uptake among adolescent girls in Homa Bay County in Kenya with specific objectives assessing the level of awareness, uptake as well as evaluating the factors affecting the sexual & reproductive health service provision to adolescent girls in the region. Result: A cross-sectional survey was done targeting 385 girls and 32 health facilities. The response rate was 100%, with the level of knowledge on contraceptives at 97.6%. The main sources of knowledge on contraceptives were from teachers in schools (30%), peers (17.2%) and media. 70% of the respondents were in a heterosexual relationship of which 58.6% preferred male condom use as their contraceptive method of choice, while the use of pills was the least at 0.6%. The majority (57.9%) of the girls did not practice safer sex exposing them to a higher risk of Sexually transmitted infections and unintended pregnancies. Discussions: The level of contraceptive uptake significantly varied from one sub-county to the other ($p < 0.005$), with the sub-counties in the Islands of Lake Victoria such as Suba sub-counties having up to 80% lesser chance of their girls using any form of contraceptives (OR = 0.2; CI: 0.2–0.8). Major barriers were the fear of side effects (51.8%) and self-stigmatisation (13.4 %). Health facilities were the main source of contraceptives (77.1%); however, the study noted a lack of youth-friendly services that would favour increased access. Further, there was a complete

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lack of knowledge on adolescent sexual and reproductive health policies and procedures among the girls (39.6%). Conclusion: Misinformation, cultural perception on the use of contraceptives among adolescents, and lack of youth-friendly services in health facilities are key drivers to the underutilisation of contraceptives by adolescent girls in Homabay county. Adolescents from the island stand a higher risk of non-utilisation of contraceptives compared to their mainland counterparts. Recommendations: There is a need for strengthened youth-friendly comprehensive sexual health education and services in all health facilities with more emphasis on risk reduction interventions and sensitisation of young girls on the available policies. Mechanisms should be availed, specifically to reach the “hard to reach” adolescent populations in the islands.

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INTRODUCTION

The adolescent stage includes individuals aged between 10-19 years (WHO, 2014). During this period, they undergo physical and sexual maturation, and low sexual and reproductive health services and contraceptive use and early sexual debut among girls exposes them to greater risk of sexually transmitted infections, and unintended pregnancies, and unsafe abortion. Globally, approximately 79 million girls experience unintended pregnancies leading to approximately 40% of those girls dropping out of school (Hagan and Buxton, 2012). Further, it is estimated that 33.9% of this group will get sexually transmitted

infections, whereas 18.75 % will undergo an unsafe abortion.

These challenges are more common in Sub-Saharan Africa where it is estimated that 2.2 million girls (2.8 %) will experience unintended pregnancies, 13.7% get STI, and 19% undergo unsafe abortions every year (Marston & Cleland, 2004). The effective use of modern contraceptives among adolescent girls can delay their first pregnancy, decrease the maternal mortality rate and improve their maternal health outcomes and those of their children when they become young women. Studies in Kenya have shown that despite the availability of modern contraceptive services, the majority of adolescent girls are still reluctant to embrace

contraceptive use compared to older women (Raine et al., 2005). In Kenya, data from the Ministry of Health (MOH, 2020) and the African Institute for Development Policy (AFIDEP) show that 33% of girls aged 15-19 years in Homa Bay County have begun childbearing, a rate considerably higher than the national average. Specifically, the data suggest that 2.1% of girls in the region are pregnant with their first child while 31.2% have ever given birth, compared to the national average of 3.4% and 14.7%, respectively (KDHS, 2014). This study was aimed at assessing the determinants of contraceptive uptake among adolescent girls in Homa Bay County, Kenya.

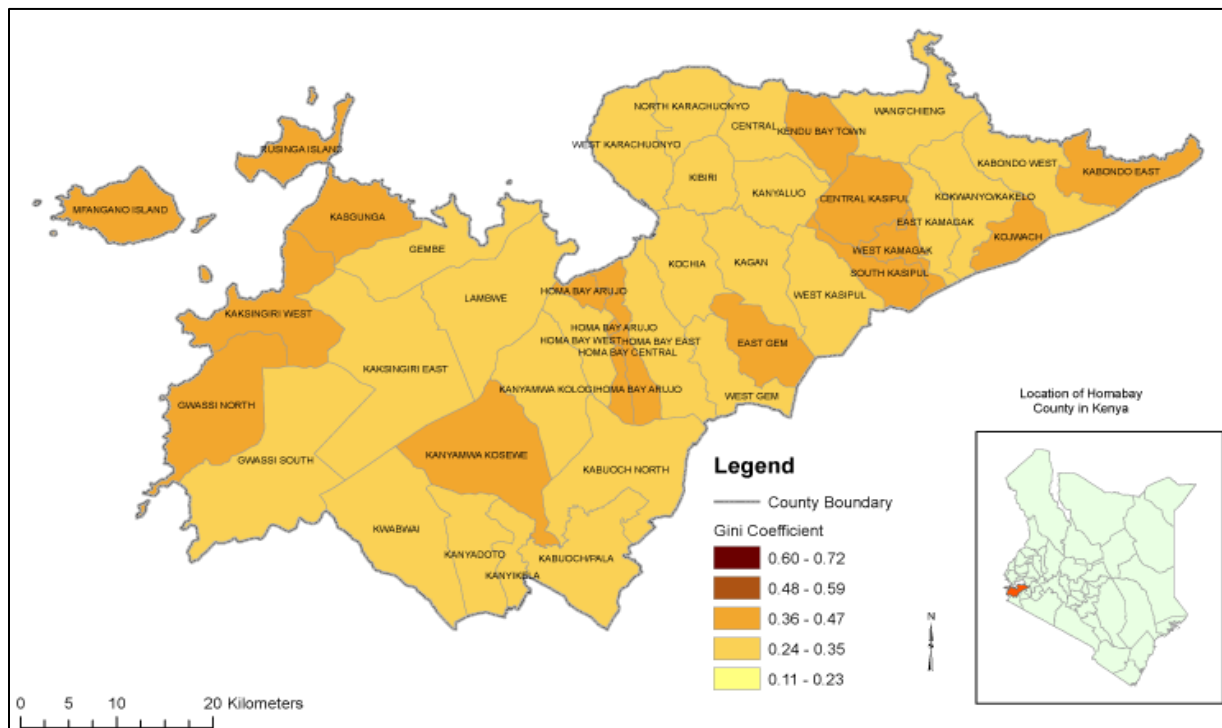
METHODOLOGY

Study Design and Location

A descriptive cross-sectional study was conducted within Homa Bay County targeting all adolescent girls aged between 14-19 years.

The study was conducted in Homa Bay County, in Kenya. The county is located in the western region of Kenya, along the shores of Lake Victoria (*Figure 1*), and spans an approximate area of 3,183.3 Km², with a population of about 963,794 people (male - 48% and female - 52%), (KNBS, 2009). The county is inhabited mainly by the Luo community and Abasuba mainly on the island. Other communities are Kisii, Teso, Bukusu, and Samia, who mainly do business and fishing activities. Christianity is the main religion with less than 0.1% Muslims. The main economic activity in this region is fishing and small-scale farming with other small-scale economic activities including sand harvesting, *Boda boda*, and quarry mining. Administratively, Homa Bay County comprises eight sub-counties including Ndhwa, Suba North, Suba south, Homabay town, Rachuonyo South, Rachuonyo North, and Rachuonyo East (*Table 1*).

Figure 1: Map of the Homa Bay County



Sampling Technique

Multi-stage sampling was used where cluster analysis was used to divide the county into the eight

sub-counties (clusters) proportionally based on the population. Thereafter a purposive sampling was used to select all adolescents' girls of age 14 years to 19 years and then Simple random

Table 1: Population of Homa Bay sub-counties (census 2019)

Constituency name	Population (2019 Census)
Rachuonyo North	113,117
Rachuonyo South	107,549
Rachuonyo East	162,045
Rangwe	99,748
Homa Bay Town	94,660
Ndhiwa	172,212
Suba North	111,409
Suba South	103,054

Sample Size

Cochran method was used with an estimated 50% prevalence and 5% precision being used (Cochran, 2007). A sample size of 385 girls was therefore

determined, which was distributed proportionately to the population (*Table 2*). Excluded in the study were the girls whose parents did not consent and the participants who were sick or ailing at the time of the study.

Table 2: Sample distribution based on proportionate based sampling

Sub-county	Total Population	Proportion	Sample size
Ndhiwa	12642	18.7	72
Rachuonyo North	10778	15.8	61
Rachuonyo south	8247	11.9	46
Rachuonyo East	7615	11.2	43
Homa Bay	7218	10.6	41
Suba south	7120	10.6	41
Rangwe	7120	10.6	41
Suba north	7177	10.4	40
Total	67917	100	385

Data Collection Tools

A Structured pre-tested questionnaire was used to collect the data. To maintain its consistency, the tool was first prepared in English and then translated into Luo the local language. Included in the questionnaire were questions on socio-demographic characteristics including age, education level, marital status. Others included contraceptive awareness, Uptake level, and factors affecting sexual and reproductive health service provision to adolescent girls in the region.

Data Management and Analysis Procedures

The inferential statistics analysis methods were used to analyse data. We assessed correlation using Pearson chi-square. This was done by a simple 2 by 2 table to show how each main variable relates with the other. We also used logistic regression to determine how the three main aims relate to demographic variables. We selected Contraceptive uptake to assess the usage of contraceptives objective. The equation characterising a logistic regression is given below.

$$y = \log \left[\frac{p(y = 1)}{1 - p(y = 1)} \right]$$

$$= \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots$$

$$+ \beta_n x_{in} \text{ for } i = 1, 2$$

Where P (y=1) is the probability of an event occurring, i.e., contraceptive uptake in this case; 1-P (y=1) is the probability of an event not occurring, i.e., non-awareness; β_0 is the intercept term meaning the level of contraceptive use observed at baseline or when no covariate is included in the model; β_1, β_2 are the slope terms or the degree of change for the covariate of demographic variables present, i.e., sub-county, age group, marital status, and education level; and y is the dependent binary variable, level of contraceptive use. We then fitted the model using STATA software, version 13 to obtain the result.

RESULTS

Socio-Demographic Characteristics of Respondents

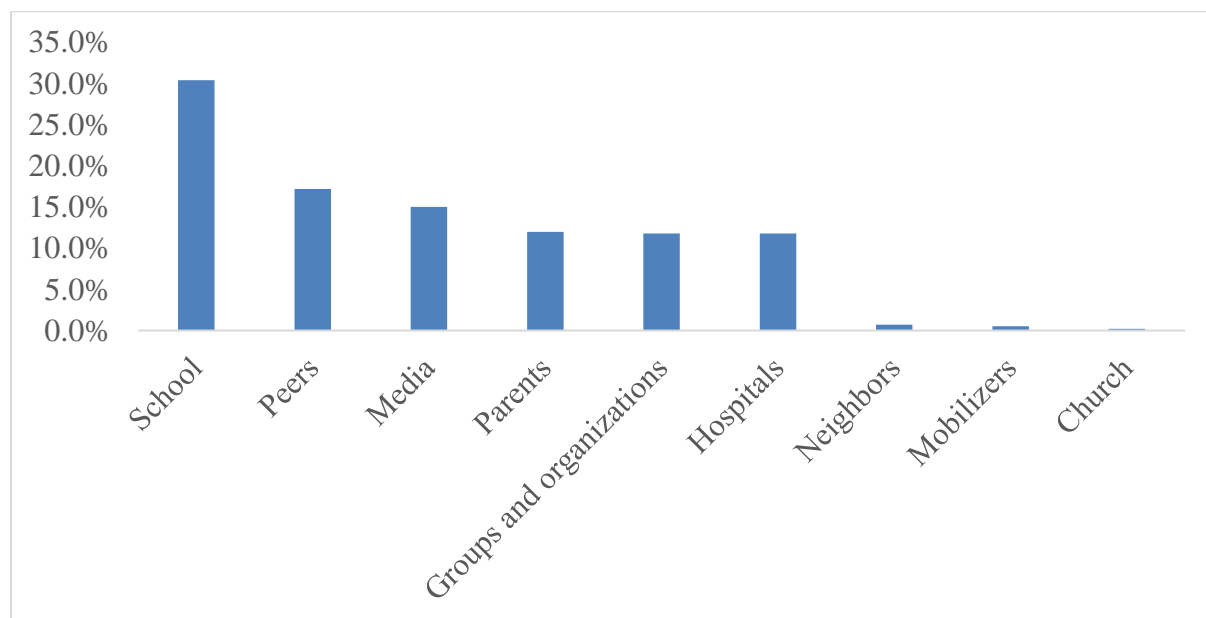
A total of 385 adolescent girls were recruited for the study making the response rate of 100%. Ndiwa sub-county had the highest number of respondents (72/385) accounting for 18.7% (Table 3). It is noted that all the sub-counties making up Rachuonyo were merged into one during the study due to their small

radius and cross-dependent on each other in terms of sharing common social amenities like hospitals, schools, and markets. The highest age bracket of the respondents was 16 – 17 years accounting for 37%, with age brackets of 14 – 15 and 18 – 19 accounting for 29% and 35%, respectively. In total, the highest percentage (65%) were those with secondary school education with primary and vocational training both accounting for 26% (23% and 3% respectively). It is however noted that one limitation was the fact that we did not determine how many had successfully completed secondary schools or had dropped out of secondary schools at any stage of education.

Awareness Level of The Contraceptives

This study reveals that 97.6% (n = 372) of adolescent girls were aware of the term “contraceptives” and clearly understood the meaning and reasons for use. On the other hand, only 2.4% (n = 9) did not have any knowledge of contraceptives. Schools were the major sources of information, accounting for 30.4% of the respondents with churches contributing the least percentage on contraceptive awareness campaigns (Figure 2). Key to the contraceptive awareness sources was the peer group and the social media, which accounted for 17.2% and 15.0%, respectively.

Figure 2: Source of knowledge on contraceptives among adolescents in Homa Bay County



Elaboration on Awareness of the Term Contraceptives

When asked to elaborate on awareness of the term contraceptive, 369 (98.9%) stated that

contraceptives “Prevented pregnancies” while 2 (0.5%) made it aware that they had “Heard about it but have no idea what they are for” while 1 (0.3%) said contraceptives “Prevent AIDS” and “a reason to help girls abstain” (Table 3).

Table 3: Level of awareness on the meaning and use of contraceptive

Elaboration on awareness of the term contraceptive	Frequency	Percentage
Prevent pregnancies	369	98.9
Heard about it but have no idea what they are for	2	0.5
Prevent AIDS	1	0.3
A reason to help girls abstain	1	0.3
Total	373	100.0

Uptake of Contraceptives

Most of the respondents 269 (70.8%) recorded having been or were active in a heterosexual relationship with a male, while 116 (29.2%) had not been in any sexual relationship. Out of those in a sexual relationship, a total sample of respondents, 228 (84.7%) said they use contraceptives. Still, among the 269 in a sexual relationship, 194 (72%) could discuss the use of contraceptives with their sexual partners. Among those who use contraceptives, 76% (173/228) confirmed the ability

to discuss the use of contraceptives with their sexual partners 24% (55/228) in this group, although using contraceptives, could not discuss the issue of contraceptives with their sexual partners. In total, 33% (89/269) comprising (55 using contraceptives and 34 not using contraceptives) could not discuss contraceptives with their sexual partners (Table 4). Of the 89 respondents, 85% cited fear as the main reason for not discussing contraceptives, while 7% (6/89) mentioned that they were not in any existing relationship with a male partner at the time and thus had no partner to discuss the issue of contraceptives.

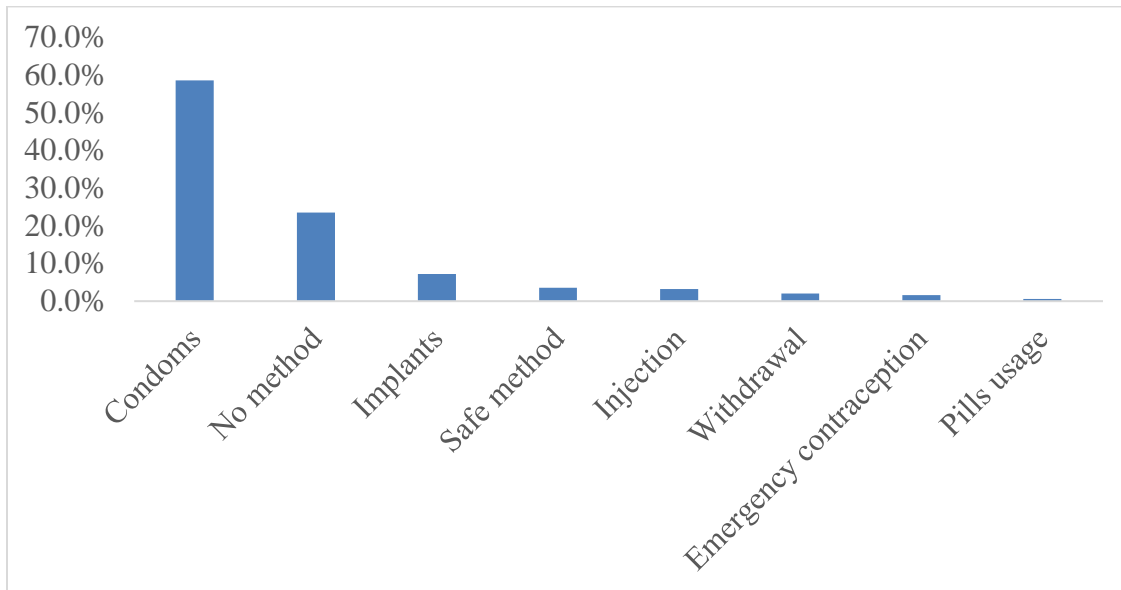
Table 4: Reasons for not being able to discuss contraceptives with sexual partner

Reasons	Frequency	Per cent
Fear of discussing such issues	76	85.4
No partner	6	6.7
Fear of side effects	2	2.2
Ignorance	3	3.4
Personal reasons	2	2.2
Total	89	100

Out of the 228 who confirmed using contraceptives, 213/251 (93.3%) responded to the question “the contraception. Method used at last sexual intercourse”. A total of 125 (58.6%) relied on condom use by their male counterparts, 50 (23.5%) had not used any contraceptives, 15 (7.2%) said they had implants, 8 (3.6%) said they depended on safe method, 7 (3.2%) said injection, 4 (2.0%) said they

relied on the withdrawal method, 3 (1.6%) said emergency contraception and 1 (0.6%) said usage of pills (Figure 3).

Figure 3: The type of contraceptive used at last sexual intercourse.

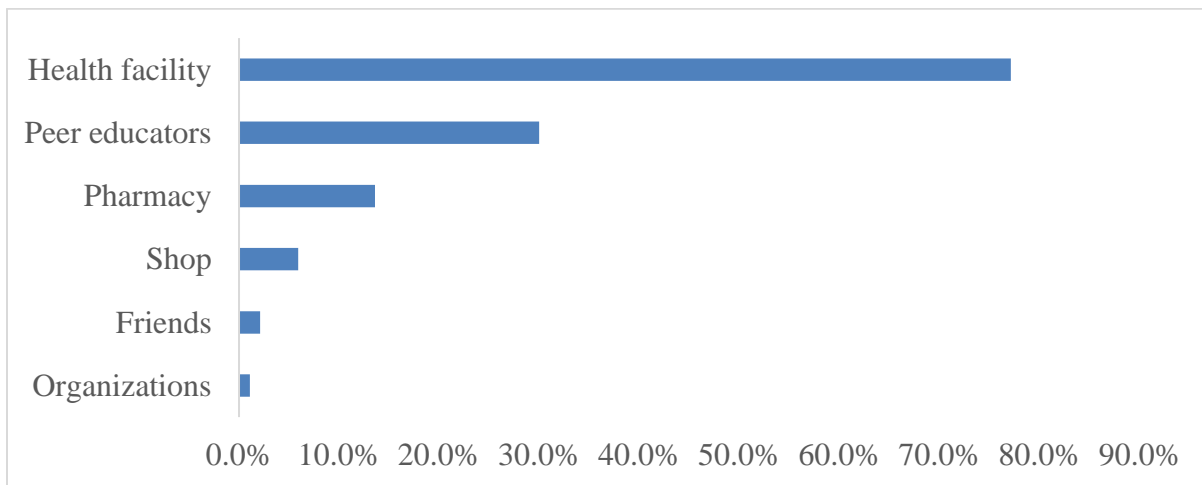


Major Source of Contraceptive among Adolescent Girls

The major sources of contraceptives among adolescent's girls included the health facilities at

176 (77.1%), pharmacies at 31 (13.6%), local retail shops at 13 (5.9%), from friends at 5 (2.1%), from other local organisations at 3 (1.1%) while 1 (0.3%) obtained the contraceptives from peer educators (*Figure 4*).

Figure 4: Major source of contraceptives among adolescent girls

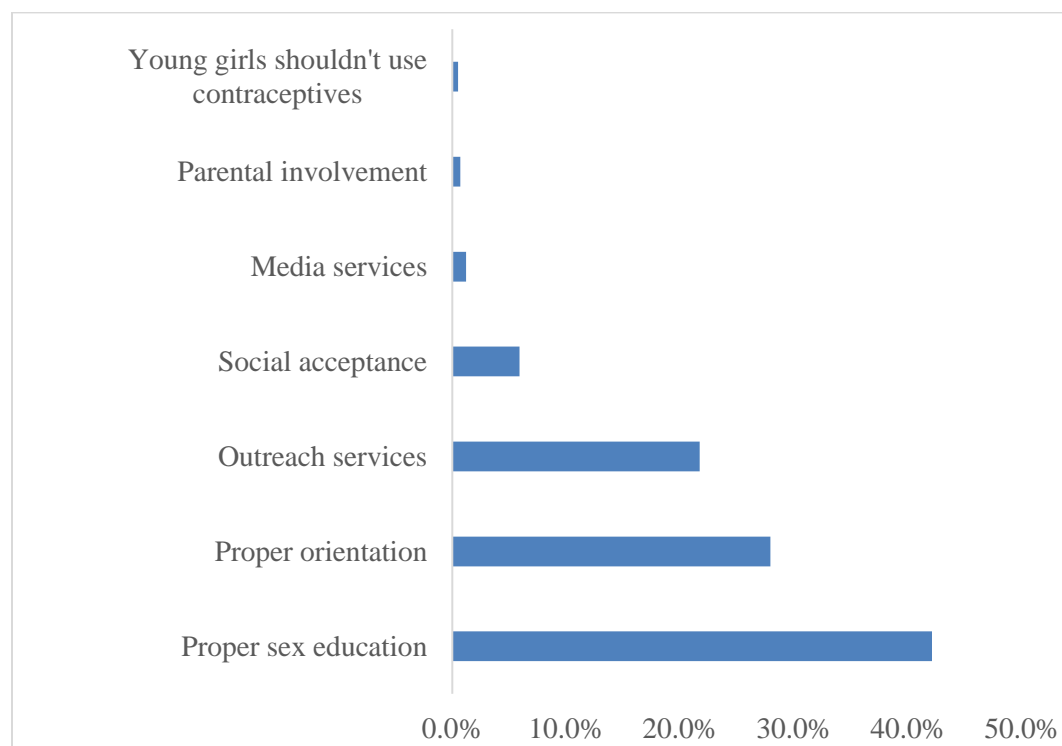


Factors that Would Increase Level of Contraceptive Use

Out of the total respondents who gave their opinion about factors that could increase the level of contraceptive use among sexually active adolescent

girls, 162(42.1%) for proper sex education, 107(27.9%) for proper orientation, 84(21.7%) for outreach services, 23 (5.9%) for social acceptance., 5 (1.2%) for media services, 3 (0.7%) for parental involvement and 2 (0.5%) stated that young girls should not use contraceptives (*Figure 5*).

Figure 5: Factors that could increase the level of contraceptive use



Barriers to Accessing Contraceptive Services

(2.7%), Infertility 3(0.8%), Religion 3 (0.8%), Partners do not allow 2 (0.4%).

Responses attributed to barriers of accessing contraceptive services ranged as follows; side effects 199 (51.8%), Cultural or religious opposition 52 (13.4%), Fear of parents 39 (10.1%), Distance 27(7.1%), myths and misconceptions 23 (6.1%), ignorance 15 (3.8%), fear of the procedure 11(2.9%), Poor quality of available services 10

Table 5: Barriers to accessing contraceptive services among adolescent girls

Barriers	Frequency	Percentage
Side effects	199	51.8
Cultural or religious opposition	52	13.4
Fear of parents	39	10.1
Distance	27	7.1
Myths and misconceptions	23	6.1
Ignorance	15	3.8
Fear of the procedure	11	2.9
Poor quality of available services	10	2.7
Infertility	3	0.8
Religion	3	0.8
Partners do not allow	2	0.4
Total	385	100.0

Actions to be Taken to Reduce Adolescents Engaging in Sex

About their opinions on actions to be taken to reduce adolescents engaging in sex, 337 (87.6%) said “Conduct health education on life skills”, 29(7.4%) said “Involve parents”, 10 (2.6%) suggested “Abstinence”, 4 (1.1%) suggested “Punishment”, 3 (0.8%) suggested “Family planning”, 1 (0.3%) suggested “Peer pressure”, while 1 (0.3%) suggested “Praying for them”.

Barriers to Accessing Contraceptive Services

Qualitative Responses on Determinants of Contraceptive Uptake in Homa Bay County

From *Table 6* above, the study established that the main determinants were perceived sides effects of contraceptives, religious and cultural position of the community and myths and misconceptions with regards to adolescent girls using contraceptives. The girl X was quoted saying”

“I will not get a baby in the future if I use contraceptive method; this drug causes infertility in young people.”

Another girl Z quote” *My parent will not allow me to use the family planning method; these things are only meant for married people.”*

Actions to be taken to reduce adolescents engaging in sex. The adolescent girls interviewed agreed that they do not have the correct information on their sexuality and hence many young girls are engaging in risky sexual behaviours, which exposes them to early pregnancies and HIV. When asked what action would be taken to reduce them from engaging in sex, the majority 87.6% pointed out that health education on life skills and parental involvement would be key in addressing their problem.

On contraceptive use, it was established that the adolescent girls in Suba sub-counties were significantly less likely (OR 0.27; p = 0.003) to use a contraceptive method as compared to the girl living within Homabay town sub-county and Ndiwa sub-counties, respectively. This can be attributed to the fact that Suba sub-county is located on the island of Lake Victoria, faced with the challenges of few health facilities, poor transport connectivity between the mainland and the island, fishing activity as well as beach lifestyle that is synonymous with fish for sex. This factor is deemed to expose the young girls in Suba sub-counties to be more vulnerable compared to the girls living in the rest of the Homabay county.

Table 6: Likelihood of contraceptive use in various sub-counties within Homa Bay County

Sub-county	Contraceptive Use	Not using contraceptives	OR	P-Value
Homabay town	Reference			
Rachuonyo	129	21	0.6641	0.3526
Ndhiwa	65	7	1.0039	0.99944
Suba	58	23	0.2726	0.0036

This study established that level of education significantly influences contraceptive use among adolescent girls. At the time of the study, 326 (84.7%) of the respondents reported having started using a contraceptive method of their choice, while only 56 (15.3%) were not using any contraceptive method (*Table 7*). It was noted that the adolescent

girls with the lowest level of education, primary school level 65 (74%) were significantly less likely to utilise the contraceptive services in Homabay county as compared to their counterparts with higher levels of education in a secondary school 219 (87.2%) and University 32 (91.4%) respectively.

Table 7: The contraceptive use with demographic information

Contraceptive use	Yes, 326 (84.7%)	No, 59 (15.3%)	
Age category (yrs)			
14 – 15 years	87 (78.4%)	24 (21.6%)	0.087
16 – 17 years	122 (86.5%)	19 (13.5%)	
18 – 19 years	117 (88.0%)	16 (12.0%)	
Level of education			
Primary school	65 (74.7%)	22 (25.3%)	0.027
Post-primary/vocational.	9 (81.8%)	2 (18.2%)	
Secondary (9-12)	219 (87.2%)	32 (12.8%)	
Higher education/university/college	32 (91.4%)	3 (8.6%)	
Marital status			
Not married	324 (85.0%)	57 (15.0%)	0.675
Divorced/Separated.	1 (100.0%)	0	

Factors Affecting the Provision of Sexual and Reproductive Health Services to Adolescents' Girls in Homa Bay County

A total of 32 health facilities were randomly selected to evaluate the factors that affect the sexual and reproductive health uptake. With regard to the availability of contraceptive commodities, only 38% of the facilities visited had a full range of all family planning commodities in stock, both short-term methods and long-term methods in place. The short-term methods assessed were male condoms, female condoms, Depo Provera, oral contraceptive pills, and Sayana press, while the long-term methods include implants and Intrauterine contraceptive devices. While the majority (62%) of the health facilities visited were either lacking one or more commodities in their stock hence there was a lack of choice in the provision of SRH services to adolescents.

With regards to affordability of the sexual and reproductive services, the study established that only 18% of the facilities were providing free contraceptives services to adolescent girls in Homabay county. Although the facilities were providing information materials on RH services, only 40% of the facilities visited had both physical and audio-visual materials and none of the facilities had the materials translated in both English, Kiswahili, and local language for ease of understanding by the adolescent clients

The counselling and examination rooms offered adequate privacy while the majority (88%) of the facilities had flexible opening and closing hours extending up to late evenings and weekends when youths were out of school; however, 50% (16/32) the facilities did not have separate rooms dedicated for youth-friendly services.

Table 8: Factors affecting Sexual and reproductive health services uptake

	Response [n, (%)]		
	Yes	No	N
Availability of all the FP commodities	38%	62%	32
Cost of FP services is affordable-Free services	18.8%	81.25	32
Staff is specially trained to work with youth.	12.5%	87.5%)	32
Availability of reading materials - Audio visual & written form	40%	60%)	32
Opening hours including weekends	88%	12%	32
Separate room dedicated to youth clients	50%)	(50%)	32

DISCUSSIONS

Background Information

This study reveals a high number of girls (70.8%) aged between 14 – 19 years old engaging in sexual activities with male counterparts. This finding was in sharp contrast to other studies (Kabiru & Orpinas, 2009) which have shown significantly lower (11%) adolescent girls reporting having engaged in sexual activity. Although the later study was only conducted among adolescents in high school, it is noted that the highest number of respondents in this study were in the age bracket 16 – 17 years which accounted for 37% of the respondents. It is therefore imperative to note that the population in the study by Kabiru and Orpinas (2009) would be similar to this study in many aspects. Indeed, other studies (Yaya & Bishwajit, 2018) have demonstrated the average age at first sexual activity, among girls, at 16 years. The finding of 70.8% of adolescent girls in a rural county is significant in the fact that urgent measures on sexual and reproductive health (SRH) be put in place for such adolescents since many studies and programs in Kenya have concentrated in the urban and city dwellings (Wilson et al., 2020; Kabiru & Orpinas, 2009; Beguy et al., 2009). Further, the rates of unintended pregnancies in rural Kenya remain high (Omoró et al., 2018) with some studies showing that more than 40% of adolescent girls below 19 years who engage in sexual activity end up with unintended pregnancy (Taffa et al., 2003).

Despite the high level (97.6%) of awareness, with up to 98.9% being able to elaborate on the use of contraceptives, only 30.1% believed that adolescent girls should take contraceptives, despite the fact that at least 56.6% of these girls knew where to get the contraceptives. The perception of contraceptive uptake seemed to be strengthened by the fact that only 36.9% disagreed with the perception that contraceptives should only be used by married women. In this analysis, the perception by these adolescent girls seems to be driven by the fear of either family or community repercussions. Such fear exposes these girls to the mercy of their sexual partners, as demonstrated in this study, where 58.6% of the girls relied on the use of male condoms by their partners in their last intercourse, 23.5% not relying on any contraceptive, while still others

depending on unreliable methods such as “safe/calendar”, “withdrawal” and emergency contraceptive methods.

Dependable subject-specific contraceptive methods including Intrauterine contraceptive device (IUCD), Injectable, Implants, Pill, Female condoms, were either used minimally or were not used at all, mainly due to the perceptions highlighted. Indeed, some studies in Kenya have found that unfavourable perceptions among parents, teachers, and adolescents themselves have contributed to low contraceptive uptake (Kinaro et al., 2015), with the general perception that contraceptives are only for the married highly exemplified (Mwaisaka et al., 2021). Perception, as opposed to barriers, have been documented as a major contributor to low contraceptive uptake (Kinaro et al., 2015), a finding that was corroborated by the findings in this study, where out of those girls who used contraceptives, 76% easily discussed the issue of contraceptives with their sexual partners. Driving the negative perception also seemed to be the aspect of fear and stigma associated with the use of contraceptives. As found in this study fear revolved around (mis)information around the side effects (51.8%), fear of parents (10.1%), and fear of procedures, whereas stigmatisation was centred around cultural and religious perception on contraceptives (13.4%) and misconceptions (which mainly contributed to self-stigmatisation) at 6.1%. Fear, misconceptions, and side effects have been established to be a major hindrance to the uptake of modern methods of contraception (Juma et al., 2013 in Kenya, not just by adolescent girls but also by the general population.

Data on stigma around the use of contraceptives in Western Kenya (Meurice et al., 2021) established that 43% of the respondents associated the use of contraceptives with sexual promiscuity, where 51% believed that users of contraceptives would encourage their peers to live the same lifestyle of sexual promiscuity. Of the same respondents, 57% believed that contraceptives should only be used by married women, while 50% believed that a girl could not herself decide on the use of contraceptives. Other stigma associated with contraceptive use, in the study by Meurice et al. (2021), included the notion that they impair future fertility registered by 57% of the respondents. Such

levels of stigmatisation have also been recorded for Homabay county. The county being unique in its social, economic, and demographic characteristics; these vary from one sub-county to another.

The main sub-counties of Homabay County are Rachuonyo, Homabay, Ndhiwa, and Suba sub-counties, hived from the eight sub-counties mainly due to their similarities, close radius, and cross dependence to one another in terms of sharing social amenities such as schools, markets, hospitals, etc. The Rachuonyo and Ndhiwa Sub counties are majorly rural and peri-urban in nature, with moderately high rainfall throughout the year suitable for agriculture. Rachuonyo is well known for growing sweet potatoes while Ndhiwa for sugar production for sale in the local and regional markets, respectively. 58% of the Homabay county total population (IEBC census, 2019) originate from the two sub-counties with a total fertility rate of 4.6 (KDHS, 2014) and a youthful population is 36% (KNBS, 2019). Homabay sub-county on the other hand is mainly urban situated along with the shore of Lake Victoria and is strategically located in the region acting as a transport hub to many destinations to other parts of the county and beyond. It connects Kisumu city and Tanzania via the Isbania border in Migori county.

The Sub-county is economically dependent on transport business, like Boda Is Bania riders, fishing and fish trade (Jaboya) in Luo language where sex is exchanged for fish resulting in many young girls ending up being married to older men, early pregnancy and hence high school dropout among girls (APRHC, 2012). The sub-county also records a high HIV prevalence rate and sexually transmitted infections. The Suba sub-counties are mainly found on the island of Lake Victoria with the major ones being Rusinga, Mfangano, Remba, and Migingo islands. These areas have poor transport connectivity and mainly the inhabitants use boats and ferry for transport, few schools, health facilities and have very independent administrative structures and lifestyle. The residences are managed by the beach management unit (BMU) and fishing is the main economic activity.

These study findings show differences in contraceptive uptake levels varying from one sub-county to another with adolescent girls in Suba sub-

counties in the islands are more vulnerable and are at a higher risk of sexually transmitted infections including HIV/AIDs and unintended pregnancy than their counterparts in other parts of the county. Suba has an (OR. 0.27 p-value 0.0036) meaning that the girls in this area are 80% unlikely to use contraceptives as compared same girls in Homa Bay county. This finding is supported by KDHS 2014 data which show that there is a high teenage pregnancy prevalence of 33% in Suba compared to 29% in Homabay. The low contraceptive uptake (7.2%) reported using implants, 23.5 % no method, while 3.6 % of adolescents were using safe days as a way of preventing pregnancy, this could be attributed to the social-economic disparities that exist between the island and mainland counties.

On the island, there is a shortage or lack of contraceptive commodity supplies in the facilities making it difficult for adolescent girls to have access to a wide range of modern contraceptive methods to choose from. This low supply could be due to poor transport network, especially the girls who live on the island that only dependent on small boats for their transport and few health facilities 3 out of 32 sampled were on the island as well as lack of trained health care providers who perceive working in the island as a hardship area. The opening hours are quite different, where facilities in the island close much earlier around 1 pm as compared to the mainland facilities which operate until 5 pm Monday to Friday five days a week. These factors could jeopardise the right to offering quality, equitable, and access to essential health services to vulnerable and hard-to-reach populations. This study also reveals the disparities in the number of adolescents who were enrolled in secondary and university at the time of the study between the mainland sub-counties and the island, where (61%) of the respondents were from the mainland while 54 (14%) were from Island Sub counties.

On the factors that determine awareness, the study shows education level greatly impacted on awareness of contraceptives among adolescent girls as well as the region where an adolescent comes from. These findings are concurrent with previous studies conducted on school (APRHC, 2012). In this study, the major barriers to contraceptive use among adolescent girls in Homa Bay County were fear and

stigma and the major source of contraceptives among adolescent girls was the health facilities. Known contraceptive methods such as, Intrauterine contraceptive device (IUCD), Injectables, Implants, Pill, Female condom, were majorly not used, while also it was noted the major factor that will help increase the level of use of contraceptives among sexually active adolescent girls was proper sex education. With regards to side effects of usage of contraceptive barriers to the accessibility of contraceptive services to adolescent girls was the major one. The study found out that the major consequence of not using contraceptives among adolescents was that it led to unwanted pregnancy. The suggestions on what should be done to reduce adolescents engaging in sex were that adolescent girls should be provided with sex education on life skills, involve parents, and counselling on family planning. The study established that for an increase in usage of contraceptives among sexually active adolescents' awareness should be created.

With regards to the capacity of the health facilities in providing sexual and reproductive health care to adolescent girls in Homa Bay County, It was noted that staff is friendly and responsive to youth clients, they are respectful and ensures privacy of the youth clients, they are understanding and knowledgeable about youth concerns and needs, they are specially trained to work with youth, Counsellors spend adequate time with youth clients, Medical providers spend adequate time with youth clients, information on the need for and timing of follow-up visits is provided and clear and Peer counsellors available respectively.

Youth drop-ins are welcomed and accommodated, Services are offered to both male and female clients, and the facility provides informational and audio-visual materials on RH services; however, the material was not translated into a language that could easily be understood by the youths and to address concerns of youth clients, Group talks/discussions are available, Service is linked to other youth services, Program network and necessary referrals are available and Cost of RH services is available.

The study showed that Adolescent and reproductive health services are provided at convenient hours for youth clients, but this varied greatly from one

facility to another with some facilities closing half-day, especially those that were located in the islands. Counselling and examination rooms ensure privacy for youth clients, facilities are conveniently located for youth easy access, Education materials are displayed and available to youth clients to take away, Peer youth education outreach programs are available, youth are involved in decision making on youth-friendly services provision and community informed on the benefits and availability of youth-friendly services respectively while decoration and surroundings are not inviting to youth clients.

CONCLUSION

Misinformation, cultural perception on the use of contraceptives among adolescents, and lack of youth-friendly services in health provider facilities are key drivers to the underutilisation of contraceptives, by adolescent girls, despite sufficient knowledge and availability, in Homabay county. Adolescents specifically from the island communities in the region stand a higher risk of non-utilisation of contraceptives compared to their mainland counterparts. The risk factors continue to expose adolescent girls in this region to a higher risk of sexually transmitted infections, including HIV, unintended pregnancies, early marriages and a high rate of school dropout Adolescent's girls whom it was noted engage in a sexual relationship with males were aware of contraceptives and its core purpose is to prevent contracting AIDS and that its availability should not be limited to a married woman and wealthy people only. They majorly use condoms as agreed with their sexual partner. Contraceptives are majorly sourced from health facilities while known methods are not being utilised and that there is a lack of proper sex education and education on life skills. Staff provided friendly services, although not youth-related and proper outpatient services. Policies and procedures were noted to be in place although not clearly understood by adolescent girls and health providers to address youth challenges. Environmental and facility characteristics need to be easily accessible and available, parental awareness needs to be done, meeting to be organised during school time and made more spacious. There is also a need for awareness on facilities available due to illiteracy in the

community and youth and elderly meetings be held with coherence or separately.

RECOMMENDATION

- There is a need for strengthened youth-friendly comprehensive sexual health education and services in all health facilities offering ASRH services with more emphasis on risk reduction interventions and sensitisation of young girls on the available policies.
- Mechanisms should be availed in the region, specifically to reach the “hard to reach” adolescent populations in the islands.

Ethical Approval and Consent to Participate

Ethical approval was obtained from the ethical review board of the Jomo Kenyatta University of agriculture and technology. After the objectives of the study were explained and both verbal and written consent were obtained from the parents and study participants. Privacy and confidentiality were guaranteed by all the data collectors. Each participant was interviewed separately one on one to keep their confidentiality.

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