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Utilization of adolescent reproductive health services in Bondo sub-county, Siaya county, Kenya

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Abstract
Adolescent Sexual Reproductive health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, in all matters relating to the reproductive system of people between the ages of 10 and 19. However, the alarming statistics on increase in early pregnancy among the adolescents leading to risks associated with early pregnancy and Sexually Transmitted Infections, could be an indication that the Adolescent Sexual Reproductive Health Services are not being utilized despite the intervention of the Adolescent Reproductive Health Service policy which was reviewed in 2015. In Bondo Sub- County which is in Siaya County, evidence suggests that teenage pregnancy has increased from 17% in 2014 to 35% in 2016. The objective of this study was to investigate the factors contributing to utilization of the adolescent's reproductive health services. The specific objectives were; to describe the utilization of the Adolescent Sexual Reproductive Health Services by the demographic characteristics of the adolescents, to establish the relationship of utilization of the Adolescent Sexual Reproductive Health Services levels by household characteristics, and to determine the association of knowledge and utilization of the Adolescent Reproductive Health Services The study was vetted and approved by the Great Lakes University of Kisumu and Jaramogi Oginga Odinga Teaching and Referral Hospital ethical review committees, and National Council for Science, Technology and Innovation This study employed a descriptive cross sectional study design; and, a multistage cluster sampling method was used to select the respondents. Sample of 392 students were interviewed. The response rate was 98%. The study used structured questionnaires which were administered using research assistants through interview. SPSS was used to enter data, and STATA used to analyze the quantitative data. Descriptive analysis was used to determine the utilization of ASRHS by demographic and household characteristics. Cross tabulation was done followed by chi square statistics to get the independent variables that were significantly associated with utilization of Adolescent Reproductive Health Services. Results with $p< 0.05$ were considered statistically significant. Odds ratio and 95% confidence interval was used to determine the strength of association between knowledge and utilization of Adolescent Sexual Reproductive Health Services. The findings revealed that adolescents within the lower classes in secondary schools rarely utilize the ASRHS as compared to the adolescents in form four. Gender of the adolescents was not associated with use of the reproductive health services. Secondly, various household characteristics such as school clubs, Positive family discussion on ASRHS, religious status of guardian, and living in rural area influenced utilization of the Adolescent Sexual Reproductive Health Services. Thirdly, knowledge on the Adolescent Sexual Reproductive Health Service was not associated with utilization since majority of the adolescents had information of the actual services offered; however, few of the adolescents had used the services. Overall, this research revealed a gap in utilization of Adolescent Sexual Reproductive Health Services among the adolescents, which were related to age, household characteristics, and inconsistence of knowledge to utilization. This study therefore recommended that all schools should come up with a program or clubs that can empower adolescents with knowledge on Adolescent Sexual Reproductive Health Services, and school peer educators should be trained to complement the teacher counselors. Further research should be carried out to evaluate the success and gaps in the Adolescent Sexual Reproductive Health Policy, the school curriculums and the Youth Friendly Reproductive Health Services.

Keywords: adolescence, reproduction, health services

1. Introduction
Adolescent Sexual Reproductive health (ASRH) is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, in all matters relating to the reproductive system of people between the ages of 10 and 19. ASRH deals with the reproductive processes, functions, and system at all stages of life (WHO, 2015), and comprises a major component of the global burden of sexual ill health.

Adolescence is a period of rapid growth and development. It is a period between 10 and 19 years of age, categorized into early (10 – 14) and late (15 – 19) adolescent. It is a continuum of physical, cognitive, behavioral and psychosocial change that is characterized by increasing levels of individual autonomy, and a growing sense of identity (UNFPA, 2009). Globally, it is a period of unique potentials and for new sexual ideas, experiences and opportunities that affect their behavior.

Just like adults, adolescents have the right to health including sexual and reproductive health, and the right to access reproductive health services (RHS) and facilities. The adolescents require; Information including comprehensive sex education, access to a full range of sexual and reproductive health education, including condoms, other means of contraception, and other interventions for the prevention, treatment and care of sexually transmitted infections including HIV. They also require a safe and supportive environment free from exploitation and abuse.

Use of contraceptives reduces the incidence of pregnancies and exposure to any risk of life threatening pregnancy complications. Secondly, contraceptive use reduces the risks of abortions due to the reduction in the number of unwanted/unplanned pregnancies.

In 2003, the Adolescent Sexual and Reproductive Health Policy (ASRHP) was developed in Kenya, and reviewed in 2015. The adolescent reproductive health component was the key pillar of this policy. This further facilitated the operationalization of the Adolescents reproductive health policy, which led to introduction of Youth Friendly Reproductive health Services (YFRHS), and in cooperation of lessons on adolescent reproductive health into the school curriculum (MOH, 2003. Reviewed 2015)

ASRH is of significant concern because many adolescent girls between 15 and 19 years get pregnant, whereas their pelvis are still immature to handle the delivery which leads to life threatening complications, both physically and mentally. It is also dangerous for the child who may be born as a still birth, a preterm with low birth weight and asphyxia, because the adolescent mothers may not attend the prenatal clinics for care due to their low socioeconomic status.

Several factors have been associated with adolescent pregnancies. Whereas some may choose to get pregnant, some pregnancy may occur because of human right violations such as coerced sex, sexual abuse or child marriage. Furthermore, socioeconomic factors Such as poverty, limited economic opportunities and lack of contraceptive education may also contribute to adolescent pregnancy rates.

Adolescent pregnancy adversely affects the families and communities because many girls who become pregnant leave school, which is a long term implication for the individual since their educational achievement and potential is compromised. This in turn affects the whole nation that ends up with a higher population growth rate with affected and infected adolescents who cannot be of economic and social value to the nation.

Adolescent pregnancy also undermines the achievement of the Kenya vision 2030 because this young age is exposed to significant risks during pregnancy including obstetric fistula and maternal death. Since they start child bearing early, they are likely to have more children, who are not taken care of well, with less schooling, thereby increasing the poverty level of a nation.

2. Material and Methods

Kenya is faced with a rapidly growing population with an annual growth rate of 3% per annum (National Census, 2009). According to the recent Kenya Demographic and Health Survey KDHS (2014), Kenya has a broad based (pyramid shaped) population structure with 63% of the population below 25 years. Moreover, 32% of the population is aged between 10-24 years. The rapid population growth coupled with large proportion of young people in the country puts great demands on health care, education, housing, water and sanitation, and employment. With inadequate attention to the SRH needs of this age group of the Population, Kenya is unlikely to achieve the Vision 2030. This study reviewed various literatures on the demographic, socioeconomic, socio-cultural, awareness and utilization of the preventive adolescent reproductive health services globally, regionally, and nationally by the adolescents.

Moreover, a community based cross sectional study conducted to assess young people's sexual and RHS utilization and its associated factors in Ethiopia found that those living with their mothers were 2.70 more likely to utilize the SRH services, while those who lived with their fathers were 51% less likely. This could have been because, 25.3% of the participants had had a parental discussion on SRH issues, most of which were made with their mothers and sisters. Further findings were that the young people living with only their mothers, who had a higher family monthly expenditure, participated in peer to peer education and lived near the health facility, were more likely to utilize SRH services (Atitegeb, *et al*, 2016) [8]. On education, it reported that, those with primary level of education who were 74% were less likely to utilize the services.

Another cross sectional study by Ezinwanne, *et al*. (2016) [13] done in Nigeria to investigate the use of health services by adolescent girls concurred with the above finding. It reported that parental communication was associated with use of RHS by adolescents.

On the contrary, was a cross-sectional study to examine the attitudes of Kenyan in-school adolescents towards premarital sex, unwanted pregnancies/abortions and contraception, which revealed that the attitudes of the respondents to contraception were largely conservative (Adaji *et al*, 2010) [3]. The conservative attitudes of the respondents conflicts with the findings of high levels of unsafe sex and reproductive ill- health among Kenyan adolescents. Therefore, there is need to help Kenyan in-school adolescents to develop more realistic attitudes toward sexuality in order to improve their reproductive health

Method used in the study

A sample of 392 students was interviewed. The respondents. Were drawn from the six

For example, the sample sizes for the girls were calculated as given below;

$$\text{Sample Size of girls} = \frac{\text{Number of girls in the school}}{\text{Total number of students in school}} \times \text{Sample size for the school}$$

Example of the calculation is;

$$\text{Sample size of girls in Gobei} = \frac{133}{283} \times \text{School sample size}$$

Since the number of girls and boys, and the total number of students in the individual schools is known as in table two (sample frame), the researcher did a random sampling of the schools per cluster by writing the names of the schools within a cluster, and putting them in a bowl for each cluster. The bowl was shaken, and one paper picked from each of the six bowls by an assistant. The paper picked was opened

and the name of the school in the paper was taken as the school that would represent the cluster, and participate in the study.

The study used structured questionnaire in order to collect data from the respondents. The questionnaires were administered using research assistants through interview. The purpose of the study was explained to the adolescents, after which the questionnaires were completed by the research assistants as they interviewed the students one at a time per a research assistant. The principal researcher was available to monitor the activity and assisted where there was a problem. Numbers were used to represent the participants, and not names, to seal identity for ethical purposes. Completed questionnaire forms were collected, and then manually checked for errors prior to data entry.

3. Results

Out of the 391 respondents used in the study, 93.9% were between the age 15-19 categories. More than half (51.0%) of the respondents were male, while the majority were (31.1%). Respondents being between15 and 19 years, gender of the adolescents were not associated with the reproductive health services. Majority of the respondents (75.2%) get teachings on adolescent reproductive health from their religious meetings. More than a half of the respondents (55.0%) have their religion restricting utilization of reproductive health services. A few of the respondents (30.0%) had a culture that prohibits utilization of reproductive health services. As per information on Reproductive Health in School, majority of the respondents (87.9%) went to school where they were provided with the information on adolescent reproductive health. More than a half of the respondents (53.1%) attended school where there were clubs that give information on Adolescent Reproductive Health Services. Majority of the respondents' schools (62.9%) provided Adolescent Reproductive Health Services.

Family discussion is significantly associated with the use of counseling services Family members conducting the discussion on Adolescent Reproductive Health Services, for example mother had a significant association with utilization of counseling services. Parent encouragement is also significantly associated with the use of counseling services Adolescents who discuss issues related to ASRHS with their mothers were 2.44 times more likely to utilize counseling services as compared those who did not Those who discuss issues pertaining Adolescent Reproductive Health Services with their fathers were 3.80 times more likely to utilize counseling services as compared to those who did not Those who discuss issues pertaining ASRHS with their sisters were 3.55 times more likely to utilize counseling services as compared to those who did not while those who discuss issues pertaining Adolescent Reproductive Health Services with their brothers were 2.19 times more likely to utilize counseling services as compared to those who did not

Religious status of adolescent's guardian a well as religious teaching on ASRHS, culture, family discussion on ASRHS and the person involved with the adolescent in discussion pertaining to Adolescent Reproductive Health Services, had a significant association with utilization of VCT services. Muslims were 0.05 times more unlikely to utilize VCT services compared to any other religion Adolescents who get teachings on Adolescent Reproductive Health Services. From their religious meeting were 1.73 times more likely to use VCT services compared those who had none those who had a part of their culture prohibiting use of ARHS were 2.28 times more likely to utilize VCT services as compared to those did not have.

Adolescents who used family planning services had a higher chance of having been part of a club in school that gave information on adolescent on reproductive health services. The study also showed that adolescents who had used counseling services were significantly associated with having knowledge on the morning pills while those who had used counseling services were more likely to have knowledge on sexual abstinence. Knowledge on basic signs and symptoms of sexually transmitted infections such as ulcers in private parts were significantly associated with counseling services. Finally the study found out that there was no significant association between those with knowledge on HIV prevention and signs of sexually transmitted infections with utilization of family planning services

4. Discussion

The study found out that majority of the adolescents received information on ASRH in their schools. This could be explained by a presumption that the older adolescents (those in form four) spend more of their time in schools with their peers, as compared to the younger ones. Therefore, they are able to interact and pass information to one another as compared to the younger adolescents. Consequently, there is a higher likelihood of utilization of the ASRHS, especially the morning after pills, VCT, and treatment for STIs as per the study findings. This is similar to an observation made by Abajobir & Seme, (2014) [1] during a study conducted in Ethiopia based on a cross sectional study to assess the level of reproductive health knowledge and service utilization, which revealed that age and economic status were associated with reproductive health with the explanation being that increase in age increased the exposure for RH related issues.

Various household characteristics influenced utilization of the ASRHS by the adolescents. Positive family discussion on ASRHS, and religious status of guardian influenced utilization since they were associated with VCT visits and counseling services. Moreover, the adolescents who discussed issues concerning ASRH with their sisters and brothers were more likely to use the ASRHS as compared to those who discussed with their fathers and mothers. This concurs with the study of Azfredrick, (2016) [9], whereby parental support and parental communication were found as enabling factors in influence of adolescents' use of reproductive health services. This could be due to the fact that the adolescents are freer to communicate with their brothers and sisters than their parents. Traditionally, young people have learned about sex and reproduction through the extended family or via a network of neighbors or friends. Therefore, this may explain why adolescents who had been part of a club in a school, which gave information on ASRH, had a higher chance of having used counseling services, family planning and VCT services. A study in India shows that adolescents living with their grandparents are more likely to know more about RH issues related to sexual and reproductive health such as AIDs and STIs and their preventive measures through detailed knowledge (Abajobir & Seme, 2014) [1].

On the other hand, source of information could also play a role on influence of utilization. In this study, adolescents who discussed ASRH issues with their brothers and sisters were more likely to utilize the VCT services than those who discussed with their parents. It is presumed that due to cultural taboos, adolescents in many developing countries rarely discuss sexual matters explicitly with their parents. Therefore, most information for their patchy knowledge comes from peers of the same sex who may themselves lack adequate information or are incorrectly informed. Therefore, the adolescents may be hesitant to use the preventive ASRHS due to misconception and rumors.

From this study, there is need for innovative ways to expand access to adolescent reproductive health education in school, since school based approaches linked to the reproductive health institution may be effective.

5. Conclusion

Overall, this research reveals a gap in utilization of ASRHS among the adolescents, due to various influencing factors.

The ASRHS are utilized more by the form four adolescents as compared to those in the lower classes (form 1, 2 & 3). However, gender does not influence utilization of the ASRHS.

According to this study, household characteristics influenced utilization of the ASRHS by the adolescents. Adolescents living in urban areas are more likely to use the ASRHS as compared to those living in rural areas. Additionally, parental support, and peer discussions by brothers and sisters were positive enabling factors to utilization of ASRH services. Moreover, information got from the school clubs showed more influence on utilization as compared to religious teachings. This implies that information on ASRH received from peers in school clubs and siblings at home could influence utilization of the ASRHS.

Knowledge on the Adolescent Sexual Reproductive Health Services was associated with utilization, although utilization was practiced by a few of the adolescents. This could be because most of the adolescents in school are not sexually active.

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