



## FACTORS AFFECTING UPTAKE OF CONTRACEPTIVES AMONG WOMEN AGED 15 - 25 IN THE CONTEXT OF EARLY PREGNANCY AND HIV/AIDS PREVENTION IN UGANDA

Prudence Chanda<sup>1</sup>, Emmanuel Kutiote J.O<sup>1</sup>, Lavin Awino Ochieng<sup>3</sup>,  
Patricia Tarlue J.V<sup>1</sup>, Nasir Umar A<sup>1</sup>, Aisha-Lul Ahmed N<sup>1</sup>, and Pius Mbuya Nina<sup>1,2,4</sup>

<sup>1</sup>Department of Environmental Science & Management, International University of East Africa, P.O Box35502 Kampala.

<sup>2</sup> Faculty of Bio-Science Engineering, Ghent University, Gent - Belgium

<sup>3</sup>Department of Statistics and Actuarial Sciences, Jomo Kenyatta University of Agriculture and Technology, Nairobi

<sup>4</sup>College of Natural Science, Department of Biology, Makerere University, P.O Box7062 Kampala

**ABSTRACT:** *This study investigates young women's contraceptive uptake levels as a way of delaying pregnancy and preventing sexually transmitted diseases for sustainable future development of young people. Young female adults' pregnancy is a global social health concern. It results in early school drop outs and poor performance at school due to absenteeism during pregnancy; unsafe sex also facilitates the spread of sexually transmitted infections (STIs) like HIV and AIDS, as well as high rate of termination of pregnancy (TOP), which further exposes young women to the danger of maternal mortality. A quantitative method with survey sampling design was used to collect data on socio-demographic characteristics of the respondents, knowledge and use of contraceptives, contraceptive types and factors affecting access and use of contraceptives. We analyzed data for frequency distributions, mean and standard deviation from mean as well as Chi square test of observed versus expected. From the results, two major themes were revealed in results: (1). The young women aged between 15 and 19 years prefer easy to use contraceptives and would readily visit providers of such devices they could handle without complications. Cost of a contraceptive and privacy concerns were the major factors perceived as influencing use of contraceptives by young women aged between 15 and 25. In conclusion, the results of this study showed that overwhelming majority of participants had knowledge about contraceptives and reasons for their usage; they gave different reasons for using contraceptives, with pregnancy prevention and control of STIs being the major motivating factors.*

**KEYWORDS:** Contraceptives, Women, Early Pregnancy, HIV/AIDS Prevention, Uganda

### INTRODUCTION

Worldwide there over 1.8 billion young people and nearly 90 percent of whom live in developing countries. The age-range 15 to 25 is a period when most people begin to actively explore their sexuality. Globally, most people become sexually active before their 20<sup>th</sup> birthday and in sub-Saharan Africa, 75 percent of young women report having had sex by age 20.



Research indicates that youths who begin early sexual activity are at high risk of having high-risk sex (having multiple partners, engaging in unprotected sexual activity, and experimenting sex with alcohol and other drugs), thereby increasing their risk for unintended pregnancy and sexually transmitted infections including HIV/Aids. Among youths, rates of early and unplanned pregnancies, unsafe abortions, maternal deaths and injuries, and sexually transmitted infections (STIs), including the human immunodeficiency virus (HIV) and the acquired immunodeficiency syndrome (AIDS) are very high. One in every 10 births and one in 10 abortions worldwide and one in six births in developing countries is to women aged between 15-19 years. Each day half a million of young people are infected with a sexually transmitted disease. Nearly 12 million young people are living with HIV/AIDS; and more than 7,000 young people become infected with HIV every day. While about 16 million adolescent girls aged 15-19 give birth each year, accounting for more than 10 percent of all births worldwide.

Young people's reproductive choices have an enormous impact on their health, schooling and employment prospects, as well as their overall transition to adulthood. Particularly, early childbearing has been linked to higher rates of maternal and child morbidity and mortality, truncated educational opportunities, and lower future family income, larger family sizes, which in turn may lead to greater population growth. Research shows that use of contraceptive services is beneficial for women's health and important at meeting HIV prevention goals it has been shown to be more cost effective to prevent the birth of HIV positive children through providing family planning to women in the general population than increasing the provision of Nevirapine for HIV positive mothers within antenatal care.

Contraceptive use is a human right and is identified as a priority in the National Reproductive Health Policy (MOH, 2007). All individuals have the right to access the services, including all pertinent data regarding benefits and scientific progress made in the area of contraception. A rights-based approach on the provision of contraceptives assumes a holistic view of clients, which includes taking into account client's sexual and reproductive health (RH) care needs. Appropriate eligibility criteria and practice recommendations in helping clients choose and use a contraception method need to be considered (WHO, 2006). There are several methods of contraception, which include oral contraceptives, injectables, emergency contraceptive pills and intra- uterine devices. Study findings in Kenya indicate high percentage of sexually active students and a low percentage of contraceptive use (Mutungi, 2006). Some studies indicate high morbidity and mortality cases among this group that have been attributed to unsafe abortion, complications associated with child birth and HIV/AIDS (KDHS, 2003). NASCOP indicates higher levels of STDs cases among youth than adults. Youth are more at risk with respect to STIs and HIV/ AIDS (NASCOP, 2002). Kenya still has a large unmet need for contraceptive and family planning services generally, estimated at 25.6 percent in 2011.

Uganda probably has the youngest age structure in the world; with 77 percent of its population under the age of 30 and about 20 percent aged 15-24 years. In Uganda, young people typically marry and bear children early in life once they become sexually active. By 15 years of age, 11 percent of adolescents have initiated sex and by 18 years 64 percent of young people have had their first sexual encounter. This situation makes young women in Uganda particularly vulnerable to consequences of early pregnancy, unsafe abortion and unsafe sex. The country also has a liberal family planning policy that allows access to contraceptive services to every sexually active individual and couples irrespective of age. In addition, contraceptives are free in public facilities while private facilities charge low fees as a commercial marketing strategy.



However, despite all the above favorable factors, hardly 20% percent of young people are using modern contraceptives.

Thus, uptake of contraceptives among 15 – 25-year-old women in Uganda is still low. National planning and development of new guidelines for Sexual and Reproductive Health it is important to understand factors affecting contraceptives uptake by young women. At the moment there is paucity in literature and inconclusive research reports on this topic in Uganda.

## **METHODOLOGY**

### **Research Design**

A descriptive cross-sectional study was used to carry out the study between January and August 2018 in Makindye Division, Uganda. Both quantitative and qualitative study methods i.e. survey, FGDs and in-depths interviews were used to collect detailed views of research participants in response to the research questions. Qualitative analysis enabled the researcher generate a detailed description of uptake and use of modern contraception among youths of different social background.

### **Study Area**

The study was conducted in Makindye Division. Makindye Division was purposively selected because it has the largest and oldest CBD program, of all Divisions supported by FHI360. FHI360 is an international none for profit organization. In Uganda FHI360 works all around improving access to family planning among underserved communities. Makindye Division is one of the five administrative divisions of Kampala, the capital of Uganda, and the largest division in Kampala. The city's five divisions are: (a) Kampala Central Division (b) Kawempe Division (c) Lubaga Division (d) Makindye Division and (e) Nakawa Division. Makindye Division is in the southeastern corner of the city, bordering Wakiso District to the south and west. The eastern boundary of the division is Murchison Bay, a part of Lake Victoria. Nakawa Division lies to the northeast of Makindye Division. Kampala Central Division lies to the north and Lubaga Division lies to the northwest. The coordinates of Makindye Division are: 0°17'00.0"N, 32°35'00.0"E (Latitude: 0.283334; Longitude: 32.583334). Makindye, where the divisional headquarters are located, sits approximately 6 Kilometers (3.7 mi), by road, southeast of Kampala's central business district.

### **Study Population and Sample**

The study population comprised of sexually active youths between ages 15-25 years. A mixture of both married and unmarried youths were considered in the study irrespective of their educational and occupational status. The study population also included contraceptive service providers within the study area. The sampling frame is the list of all old women between ages 15-25 years from the five randomly selected divisions in Kampala. The samples were youths (15-25) from the five divisions of Kampala who reported being sexually active and volunteered to participate in the study.



## Sample Size

The study sample size was estimated at 110 (Table 1) using a formula with 95% confidence level Booth *et al.* (2008), but we actually sampled 100 youths from the three parishes of Makindye division in Kampala. The sample size was determined basing on three factors: the estimated contraceptive prevalence rate for youths (in this case, Youths (students), community members, and local Officers. The formula below was used to calculate the sample size.

## Data Collection Procedures

Data was collected with the help of three research assistants who had completed at least advanced level of education (more than 12 years of education) and conversant with the indigenous language (Luganda) in the study district. The research assistants were oriented on the research objectives, quality control, record taking and research ethics prior to the beginning of data collection process. They traveled to different parishes within Makindye division of Kampala on pre-arranged dates to conduct the survey. Door to door interviews were conducted in English, while a local language was used if the respondent was not conversant with English, and each interview lasted 15 to 30 minutes.

The independent variables were age, religion, marital status, occupation, educational background, distance from service provider, supportive partner, number of children/household size, fertility desires, quality of services as perceived by service seekers and provider's attitudes. Key dependent (outcome) variable was contraceptive intake levels and perceptions around it.

**In-Depth Interviews with the Service Providers:** These were conducted by the researcher, in both english or local language depending on the language the respondent felt comfortable with. Interviews were carried out at the respective community, and each interview lasted for 30 minutes. The interviews were recorded to eliminate the interruptions of notes taking in the course of the interview. The audio taped information was strictly used by the researcher for reference purposes.

## Sampling Method

The researcher used purposive sampling to select the samples from the population. Simple random sampling was used to limit on the biasness of purposive sampling. Numbers were allocated, written on small pieces of paper, shuffled and randomly picked by respondents until all the required respondents were over.

## Data Collection

**Source of Data:** Both primary and secondary data were collected during the field research period. Primary data were collected by the use of questionnaires and secondary data was obtained from reports, journals, and internet.

**Instruments:** Quantitative data was collected by the use of questionnaire. A Self-administered questionnaire were designed using Likert scale, and distributed to community members of in Makindye Division who filled them within by help of research assistants.



## Data Collection Methods

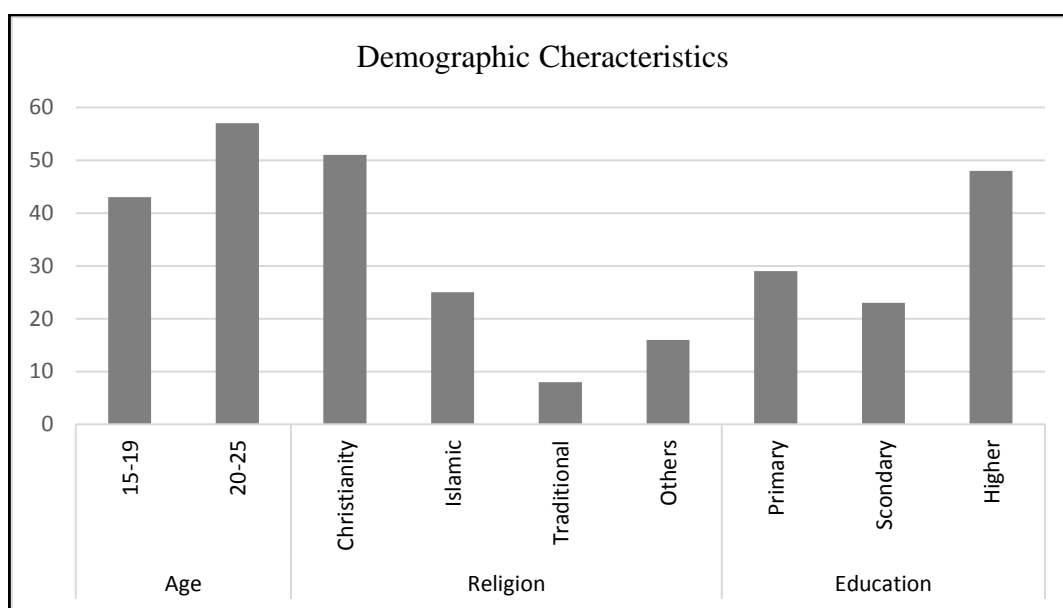
In carrying out this study, the researcher relied heavily on a structured questionnaire which was considered appropriate instrument for data collection. The questionnaire was structured in simple and clear terms with both direct and logical questions to meet the standard of all classes of people interviewed.

**Observation:** Observation was useful in the collection of data for this research study in connection with the areas and locations that were shown on the factors that affect the uptake of contraceptive among 15 – 25-year-old women in Makindye division, Kampala, Uganda. The use of observation in the course of this research also complimented other data collection instruments (personal interview & Questionnaire). It helped to identify important variables and provide useful preliminary information, as well as assisting the researcher to provide access to people that will otherwise be difficult to examine. Perhaps the most noteworthy advantage of this technique is that the study took place in the natural setting of the situation being observed and thus provided data rich in detail and subtlety (Wimmer and Dominick, 2008).

## RESULTS AND DISCUSSION

### Characteristics of the Study Participants

The results show that most of the respondents were aged between 20 and 25 years (59.1%), compared to 43% for those aged between 15 and 19 years. The mean age of participants was 19.33 – 21.87 at 95% confidence level. This suggests that, by the standard of World Health Organization, all participants had attained reproductive age, and could be classified among sexually active group of women in a general population.



**Figure 1 Description of Socio-Demographic Characteristics of the Study Participants**



Majority of the participants had attained some level of education, with a significant number having higher education in Kansanga and Nsambya parishes. In contrast, those with secondary level of education were the majority in Soya as shown in Table 1. Education level was considered an important factor since it also influences contraceptive uptake. A study in Kenya by Lasee and Becker (1997) revealed that if the husband lacked schooling but the wife had some higher education, they were 4.3 times likely to use contraceptive compared to uneducated couples. According to the researcher, one interpretation of this result was that in case the wife was better educated wife might have considerably fair amount of household decisions making compared to uneducated wife. In our study education was a factor in the sense that majority of the respondents were either in high school or attending some tertiary institution and the reason cited for using contraceptive to prevent pregnancy was not wanting to drop out of school.

**Table 1 Age distribution by education of participants at sub-division level**

Parishes		Level of education (%)				Total
			Primary	Secondary	Higher	
Nsambya	Age	15-19	5.9	5.9	26.5	38.3
		20-25	29.4	8.8	23.5	61.7
	Total		35.3	14.7	50	100
Kansanga	Age	15-19	10.8	2.7	35.2	48.7
		20-25	18.9	10.8	21.6	51.3
	Total		29.7	13.5	56.8	100
Soya	Age	15-19	0	24.2	17.2	41.4
		20-25	20.7	20.7	17.2	58.6
	Total		20.7	44.8	34.4	100

The distribution of the sample according to the classes/forms was based on proportionate sampling approach. The participants age ranged from 15.0 to 19.0 years with a mean age of 16.3 (sd 1.4) years. Most of the respondents were aged more than 15 years (90.5%) of which 67.9% were aged between 15 to 17 years and 22.6% for those aged 18 years or more. Only 9.5% of the respondents were less than 15 years old.

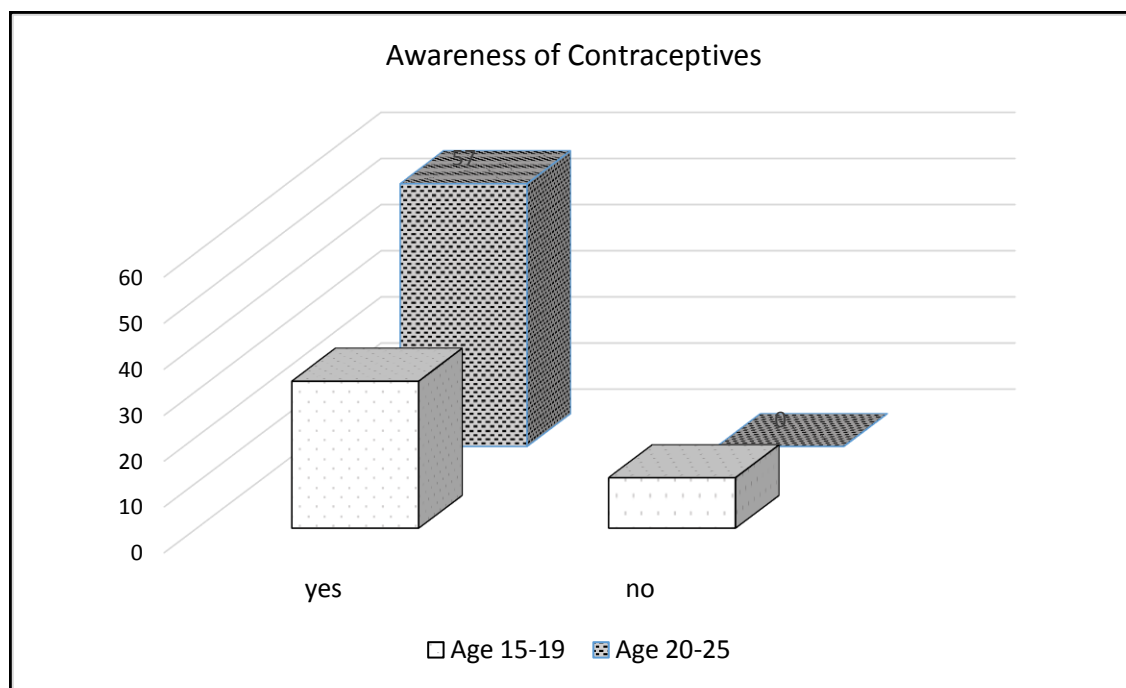
## Awareness Regarding Contraceptives

### Knowledge of Contraceptives

The respondents' knowledge and awareness regarding contraceptives was high. Asked whether they had ever heard of contraceptives, a significant majority (89%) of the respondents reported to have heard about contraceptives. Of the 89% respondents, more than 60% are using contraceptives and 32% of them were aged between 15 and 19 years. All women aged between 20 and 25 years had heard about contraceptives from various sources of information. Those who had no knowledge of contraceptives were from a group of young women aged between 15 and 19 years. Further probing to find out what they knew about the term 'contraceptives',



81% of those who had heard about contraceptives correctly stated that these were items/devices and, or drugs/medicine used to prevent sexually transmitted diseases and pregnancy, and are meant to promote family planning (Figure 2).



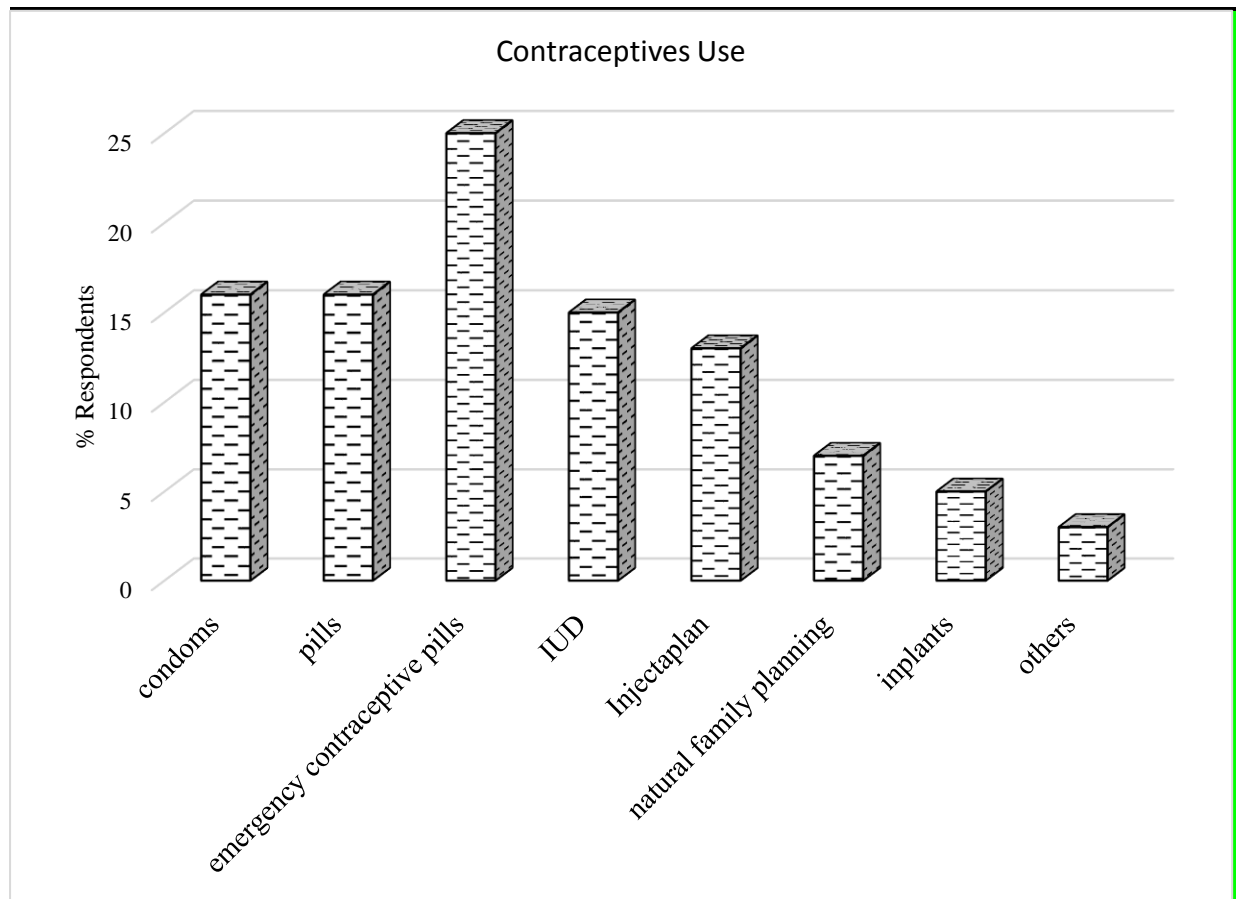
**Figure 2 Level of Awareness by Age of Respondents**

From the study findings majority use contraceptives to reduce chances of getting pregnant. Previous studies show that reducing cases of unwanted pregnancies also minimizes injury, illness and deaths associated with child birth, abortions and sexually transmitted infections (STIs) including HIV/AIDS (Walker, 2008). Like other studies conducted elsewhere in African countries, young women largely use contraceptives to prevent pregnancy and rarely focus on preventing sexually transmitted infections like HIV and AIDS as their primary objective. It has been estimated that the greatest impact of contraception on maternal mortality is for the benefit of those young women aged 20 years and below. While it is a sensitive issue in many African cultures, delaying pregnancy by increasing contraception use among both married and unmarried women 20 could save many lives (Santeli, 2007).

### **Types of Contraceptives and Factors Affecting Access and Uptake**

In this study the respondents identified the various types of contraceptives most young women aged 15 to 25 years use in Makindye division. Emergency contraceptive pills was ranked the highest on the list at 25%, while implants and other traditional methods were the least preferred by young women (Figure 3). Although emergency contraceptives are generally not intended to be used as a regular contraceptive method, but can help a woman avoid pregnancy if used up to five days after having unprotected sex (Smith *et al.*, 2009), young women in the study area apparently are not aware of this scientific fact. Previous studies point out that emergency

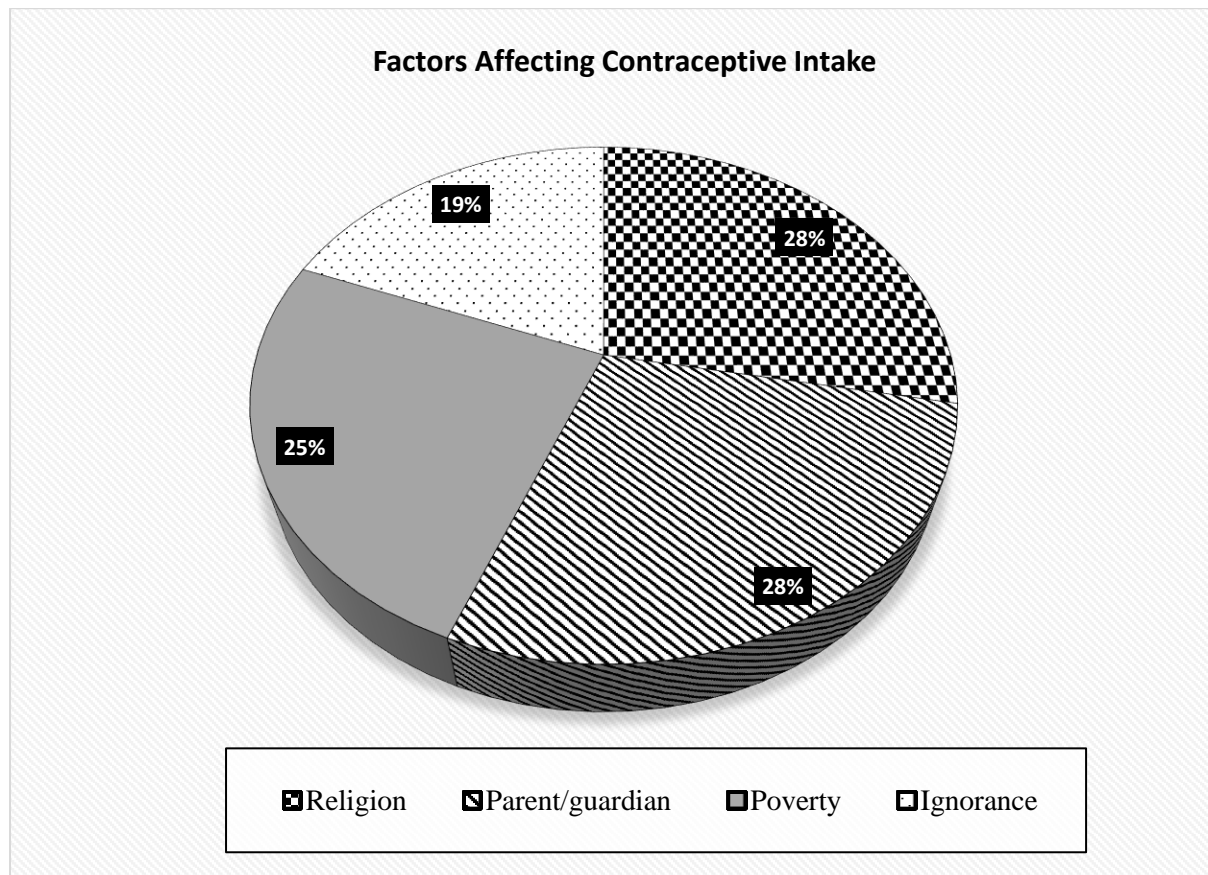
contraception pills prevent pregnancy after unprotected sex; they contain the same hormones used in oral contraceptives. Such pills can be obtained by using higher doses of regular packets of pills or by buying pills designed for regular purpose.



**Figure 3 Contraceptives Young Women use in Makindye Division**

The respondents reported a number of factors affecting contraceptive uptake among young women. Religion and staying with parents for school going girls were rated higher than other factors such as poverty and ignorance (Figure 4). The respondent reported that some of the religious beliefs were strongly opposed to family planning methods. In their view, this was hindering the use of contraceptives by young women who were afraid of being exposed when discovered, unless their privacy was guaranteed.

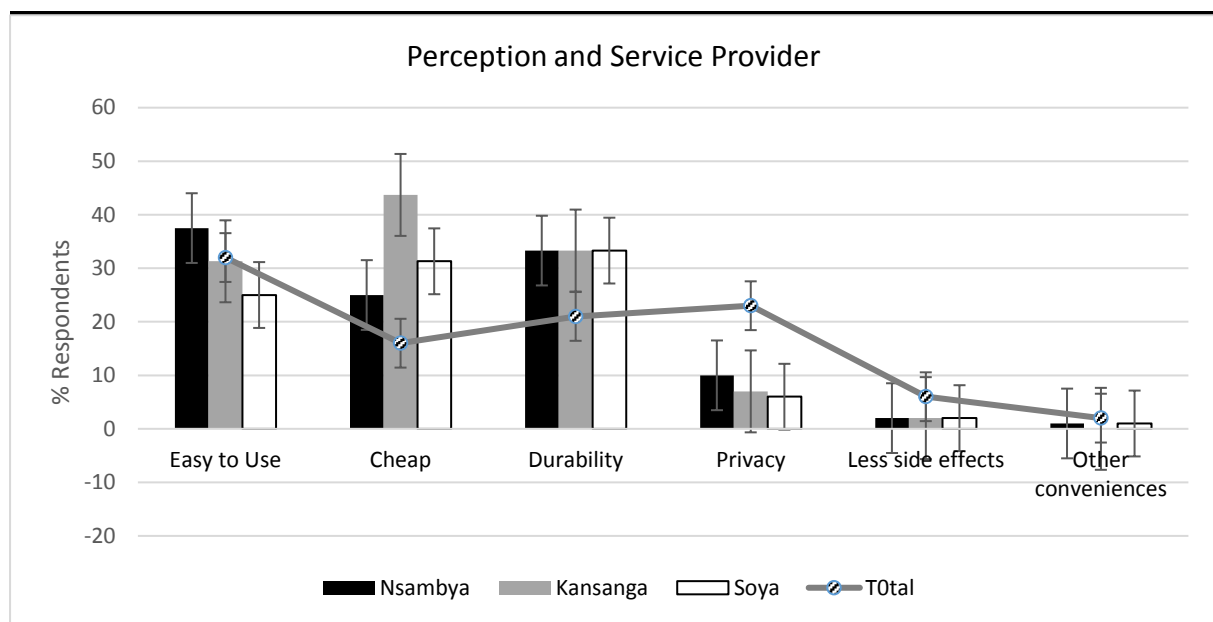




**Figure 4 Factors Influencing Contraceptive Intake Among Women Aged 15 to 25 Years**

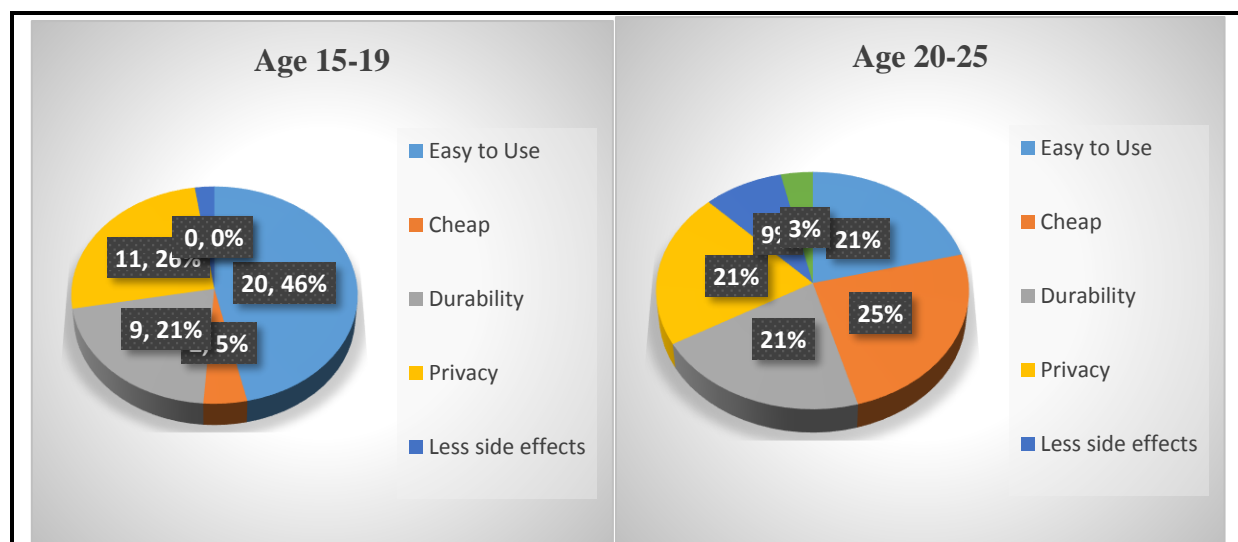
### **Perceptions Towards Receiving Contraceptives from the Different Service Providers at Local Parish Level**

From the findings on perceptions regarding contraceptive seeking behavior and use, majority mentioned that the ease of use was a major determinant. This was followed closely by those who felt that privacy at the service provider and duration of a contraceptive were important. From Figure 5 below, it is clear that Kansanga was leading with those who perceive easy usage at 43.8% (14/32) and cheap price at 43.8% (7/16) as important when considering which service provider to go for. Nsambya had the highest number of respondents at 43.5% (10/23) who value privacy more than any other factors when considering a service provider. This could be due to the fact that most respondents from Soya were married or living with partners compared to other parishes within Makindye division.



**Figure 5 Perception Regarding Contraceptive Service Seeking Behavior at Parish Level**

In Figure 6 the results show that younger females aged between 15 and 19 years prefer service providers of contraceptive devices which are easy to use. In contrast, young women aged between 20 and 25 years prefer to visit providers who guarantee their privacy. Thus, privacy and duration it takes to secure a service were important factors for this group.



**Figure 6 Perceptions Regarding Services Providers by Age of Respondents**



However, like what happens in Zambia young women in Uganda who find motivation in using contraceptives only when the cost was not a deterrent were more likely to down-grade to less effective contraceptives (Haddad et al., 2013). Most women aged between 20 and 25 years were either married or engaged in serious relationships, and therefore had other financial commitments which make them favour cheap contraceptives as opposed to expensive ones.

## CONCLUSION

The results of this study showed that overwhelming majority of participants had knowledge about contraceptives and reasons for their usage; they gave different reasons for using contraceptives, with pregnancy prevention and control of STIs being the major motivating factors. It also showed uneven availability of contraceptive supplies and limited information characterized the contraceptive services accessed by young people. In addition, the providers had negative attitudes towards dispensing contraceptives to the unmarried and in-school young people. Therefore, to improve contraceptive uptake among young people; availability of contraceptive choices should not be compromised; providers should be trained in how to serve young people; and dispensing contraceptives should be accompanied by adequate information.

## Acknowledgments

The authors are grateful to all those who willingly and generously participated in the study. We also return our appreciation to the Local Leaders in Makindye division who helped and introduced us to their respective communities at parish level.

## Conflict of Interest

The authors declare that they do not have any conflict of interest

## REFERENCES

- Ademola, A. (2001). Adolescent and youth pregnancy. A publication of Lagos State University medical students association. Msc thesis.
- Ashcraft A, Lang K: The consequences of teenage childbearing. Working Paper 2006.
- Dixon-Mueller R: Starting young: sexual initiation and HIV prevention in early adolescence. *AIDS and Behavior*, 2009, 13(1):100–109.
- Dixon-Mueller R: Starting young: sexual initiation and HIV prevention in early adolescence. *AIDS and Behavior*, 2009, 13(1):100–109.
- Fawole, A.O., Ogunkan, D.V. and Adegoke, G. S. (2011). Sexual Behaviour and Perception of HIV/AIDS in Nigerian Tertiary Institutions: University of Ilorin, a Case Study. *Global Journal of Human Social Science*. 11,(1)1
- Haddad LB, et al. Contraceptive adherence among HIV-infected women in Malawi: a randomized controlled trial of the copper intrauterine device and depot medroxyprogesterone acetate. *Contraception* 2013; 88(6): 737–743.
- Harper, C.C. and Ellerton, C.E. (1995). The emergency contraceptive pill: a survey of knowledge and attitudes among students at Princeton University. *American Journal of Obstetrics Gynaecology*, 173,1438–1445.



- Katz KR, West CG, Doumbia F, Kane F: Increasing Access to Family Planning Services in Rural Mali through Community-Based Distribution. *International Family Planning Perspectives* Vol. 24, No. 3 (Sep., 1998), pp. 104-110.
- Kayongo, S.B. (2013). Uptake of modern contraception among youths (15-24) at community level in Busia district, Uganda. Msc thesis.
- Khan S, Bradley S, Fishel J, Mishra V: Unmet Need and the Demand for Family Planning in Uganda: Further Analysis of the Uganda Demographic and Health Surveys, 1995-2006. Calverton, Maryland USA: Macro International Inc, 2008.
- Kithuka, N. B. A. (2012). Factors Associated with Condom Use among Students at Jomo Kenyatta University of Agriculture and Technology. Msc thesis.
- Lloyd C, ed. *Growing Up Global: The Changing Transitions to Adulthood Developing Countries*. Washington, DC: National Academies Press, 2005.
- Mehra, D, Agardh, A, Petterson, K.O, and Ostergren P. (2012). Non-use of contraception: determinants among Ugandan university students. *Glob Health Action*. 5, 18599
- MOH: The National Policy Guidelines for Sexual and Reproductive Health Services. Kampala, Uganda. Ministry of Health (MOH); 2006, 19-34.
- Nalwadda G, Nabukere S, Salihu HM: The abortion paradox in Uganda: fertility regulator or cause of maternal mortality. *J Obstet Gynaecol* 2005, 25(8):776-780.
- Population Reference Bureau: World Population Data sheet. Population Reference
- Reynolds H, Janowitz B, Homan R, Johnson L: Cost-effectiveness of two interventions to prevent HIV-positive births. *Proceedings of the XVI International AIDS Conference*, Bangkok, Thailand 2004.
- United Nations Children's Fund (UNICEF): *Young People and HIV/AIDS; Opportunity in Crisis*. New York, NY: UNICEF, 2002.
- World Bank: *Development and the Next Generation*. World Development Report Washington, DC: International Bank for Reconstruction and Development, 2007.