

Enhancing Contraceptive Utilization among Females of Reproductive Age: Factors, Challenges, and Strategies at Jinja Regional Referral Hospital

Agaba Arthur

Faculty of Clinical Medicine and Dentistry Kampala International University Western Campus Uganda

ABSTRACT

The research aimed to assess the factors influencing the utilization of contraceptives among females of reproductive age seeking health services at Jinja Regional Referral Hospital. Specifically, it sought to establish socio-demographic characteristics, examine health service factors affecting contraceptive utilization, and determine its prevalence. A cross-sectional and descriptive research design employing both quantitative and qualitative methodologies was utilized to ensure the gathered information was representative of the population and captured at a single point in time. The study discovered a prevalence of contraceptive use among females of 55.7%, with short-term hormonal methods being the most common at 57.1%. Key findings revealed that females aged 18 to 30 years (57.1%) were significantly more likely to use contraception (p-value = 0.036), and multiparous individuals (98.2%) were more inclined to utilize contraception compared to para-one individuals (50.6%) (p-value = 0.024). Moreover, prior counseling (73.2%) significantly promoted contraceptive usage (p-value = 0.015). In conclusion, despite the observed prevalence, contraceptive utilization remained relatively low. Recommendations include increasing the availability of contraceptive services at lower-level health care centers to enhance accessibility, educating mothers visiting health facilities about contraceptive services, and addressing contraception-related phobias through counseling to encourage uptake among females.

Keywords: Contraceptives, Females, Reproductive age, Health services, Health facility.

INTRODUCTION

Contraceptive use particularly modern contraceptive use remains prominent in demographic and health literature because of its numerous health benefits to women and families such as preventing unintended pregnancies, promoting healthy birth spacing, reducing lifetime risk of maternal deaths, and enhancing attainment of development goals. In addition, contraceptive use remains a dominant population and health issue because of its important role in the demographic transitions in different countries with varying degrees of demographic situations. Producing children is seen as entirely women's duty in much of the world, although it is a dual commitment. Men are mostly forgotten by health clients, particularly in case of family planning services [1]. Globally according to [2], annually, over 14 million women give birth as results of unmet needs of their reproductive plans and this is a worrisome concern for the policy makers, demographers, health specialists, social scientists as well as the public. In Africa an estimated 11 million women who would prefer to delay or avoid pregnancy but continue to

lack access to safe and effective contraception, [3]. Thus, along with providing skilled maternal care, offering family planning is crucial to averting maternal deaths. Satisfying the unmet need for family planning alone could cut the number of maternal deaths by almost a third, [2]. Although many United Nations member countries, particularly those in the developed world, have strong family planning programs, this is not the case in East Africa, where despite a rise in contraceptive prevalence, many women continue to have unmet need for contraception, [4]. The resultant high fertility is associated with high levels of maternal mortality, especially among the poorest communities. In Uganda, the role of females in family planning has been receiving greater attention recently as population planners have begun to recognize the importance of women's influence over reproductive decisions whereby getting women involved in the family planning program will lead to increasing the use of contraceptives methods, since population growth is becoming a universal problem, [5].

Uganda is one of the exceptionally populated on the planet and this is for the most part because of the high fertility rates which is 5.4 births per woman according to Uganda Bureau of Statistics, which have handled her in a condition of great neediness, putting the government in high consumptions than funds [6]. High population growth rates accompany a great deal of unfriendly impacts that put the nation at danger of unemployment and underdevelopment combined with other related variables [6]. Large numbers of studies across the world have examined individual, institutional and community determinants of contraceptive use among different groups of women. However, there is a paucity of studies focusing on the dynamics of contraceptive use in women of reproductive age attending to Jinja regional referral hospital.

Statement of Problem

Worldwide in 2017, among married or in-union women of reproductive age, the proportion of the demand for family planning that was satisfied by modern contraceptive methods (the proportion of women currently using a modern method among all women who have a need for family planning) was 78 percent [7]. 62% of married women ages 15-49 use a method of contraception and 56% use a modern method worldwide. These rates are twice as high among women living in high income countries (67% and 60% respectively) compared to women living in low-income countries (34% and 29% respectively) a result of differences in access to, availability of, and demand for modern methods of contraception [7].

METHODOLOGY

Study Design

The research design was a cross-sectional and descriptive using quantitative and qualitative approaches [11]. This design entailed that the information or data gathered was representative of the population and was obtained at only one point in time.

Area of Study

This study was carried out at Jinja regional referral hospital which is located on Rotary Road in Jinja town, Jinja district, Busoga sub region Eastern Uganda. Jinja town is 80km East of the capital city, Kampala. The coordinates of Jinja hospital are 002552N, 331218E (Latitude :0.4310, longitude:33.205). It's the regional referral for the districts of Jinja, Bugiri, Iganga, Kalir, Kamuli, Mayuge, Kayunga and some parts of Mukono and is the largest hospital in Eastern Uganda with abed capacity of 600 beds although many more people are admitted. It is a public hospital with specialized clinics including the ANC/MCH among others. It also comprises of inpatient departments like the surgical, medical, pediatrics and psychiatry wards.

The CPR (Contraceptive Prevalence Rate) in Uganda is 39 percent of married women and 51 Percent among the sexually active unmarried women. The proportion of married women using modern contraceptive methods has increased from 8 percent in 1995 to 35 percent in 2016 [8]. The Ugandan government has committed to their citizens' right to reproductive health and autonomy in 2015 [9] but still contraceptive prevalence rates are still below the global rates. In Uganda, rural women face a problem of lack of enough support, information, resources and training on how to make healthy reproductive choices, coupled with the negative stereotyping of women as mothers, which leads to questioning of their parenting abilities in terms of family planning and child spacing, [10]. The high fertility rate results in high birthrates, bringing about large family sizes with negative impact on the family, the community and nation at large as a result of Economic overload in covering the additional demand of the persistent population growth [6]. Limited research has been put in place to address the socio demographic factors or barriers to contraceptive use among rural women in Uganda where Jinja is found. These factors may vary from one society to another due to the gender norms that exist in the different societies as far as use of contraception is concerned. Therefore, the main aim of the study was to establish prevalence and associated factors affecting contraceptive utilization among women of reproductive age seeking services at Jinja Regional Referral Hospital.

Study Population

The target population were females of reproductive age seeking health services at Jinja regional referral hospital.

Inclusion Criteria

Females of reproductive age seeking health services at Jinja Regional Referral Hospital who would consent.

Exclusion Criteria

- Females of reproductive age seeking health services at Jinja regional referral hospital who didn't consent.
- Males who were seeking health services at Jinja Regional Referral Hospital
- Women of reproductive age who were critically ill or in emergency state were excluded from the study.
- Women of reproductive age who were not in the study area.

Sample Size Determination

The sample size was calculated using the formula Kish Leslie (1965) below:

$$n = z^2 p (1-p) / e^2$$

Where n = Estimated minimum sample size required

P= Proportion of a characteristic in a sample (84.5% [12])

Z=1.96 (for 95% Confidence Interval)

e = Margin of error set at 5%

$$n = 1.96^2 \times 0.845 (1 - 0.845)$$

0.052

n = 201 females of reproductive age.

Sampling Technique

Sampling is the process of selecting a proportion of the population to represent the entire Population so that inferences about the population can be made. Stratified random sampling technique was used and this entails selecting different wards outpatient department and special clinics. Participants from each of the wards, special clinic or outpatient department was the selected accordingly with each of the individuals having equal chances of being selected.

Data Collection Methods

Data was collected by the use of questionnaire and writing materials like pens and papers. The data collection process was performed in a period of four Months. The data for the study was collected by use of self-administered questionnaires and based on an in-depth literature review; the self-administered questionnaire was designed.

Data Analysis

Data was collected, tallied and grouped in form of tables and pie charts as found applicable and appropriate. Scientific software Statistical Products

and Service Solution (SPSS) was used to analyze the data.

Quality Control

Questionnaires were given to few chosen KIU-WC students to assess the acceptability of data collection tool before administering the questionnaire to the participants. Necessary adjustments were done to ensure adequate data collection.

Ethical Consideration

Study was conducted upon approval by the supervisor. This was followed by obtaining of a letter of introduction from the office of the Dean faculty of Clinical Medicine and Dentistry of Kampala International University Western Campus which was then be presented to the Hospital management upon arrival at the facility. We then sought permission from the hospital management to be allowed to proceed with the research before embarking on data collection. The participants were explained to, the importance of their participation in the study and possible benefits of the findings to their communities. We also took measures in obtaining informed consent from the participants by giving them consent forms to fill before taking part in the study and ensuring that the freedom, dignity, confidentiality and autonomy of the participants as independent human beings were respected allowing for willing full joining and exit from the study. We didn't not use any coercive methods or intimidation or any rewards in the process of obtaining data from the participants [13].

RESULTS

Social demographics of participants.

Table 1: showing social demographic characteristics of participants.

Variable	Frequency	Percentage
Age		
18-30	74	36.8
31-40	99	49.3
More than 40	28	13.9
Education		
No formal education	24	11.9
Primary education	96	47.8
Secondary education	46	22.9
Tertiary education	35	17.4
Employment		
Self employed	62	30.8
Unemployed	94	46.8
Formerly employed	45	22.4
Religion		
Christian	160	79.6
Muslim	41	20.4
Parity		
Para one	47	23.4
Multiparty	154	76.6

The table one above shows the social demographic characteristics of respondents, regarding the age of participants, majority 99(49.3%) of the participants were aged between 31 to 40 years, at least 74(36.8%) were aged between 18 to 30 years while the least 28(13.9%) were above 40 years. When the respondents were assessed for their education level, the majority 96(47.8%) of the respondents said had a primary level of education, 24(11.9%) said they had not had formal schooling, 46(22.9) said they had attained a secondary level of education, while 35(17.4%) said they had studied up to tertiary level of

education. From the study, the respondents were asked for their employment status, in which the majority 94(46.8%) said they were unemployed, at least 62(30.8%) said they were self-employed while 42(22.4%) said they were formerly employed in various fields. The study also showed that majority 160(79.6%) of the respondents were of Christian faith while at least 41(20.4%) of the respondents were of Islamic faith. More so, most 154(76.6%) of the respondents had had more than one deliveries while only 47(23.4%) had produced for the first time.

Prevalence of contraceptive use
Table 2: showing prevalence of contraceptive use. N=201

Variable	Frequency	Percentage
Mother using a contraceptive method		
Contraceptive use	112	55.7
Not using a contraception	89	44.3
Contraceptive method used (N=112)		
Long term hormonal	30	26.9
Short term hormonal	64	59.1
Short term Non hormonal	18	16.0

From the table above, when the respondents were assessed for proportion of those using a contraceptive method, majority 112(55.7%) were using a contraceptive method while 89(44.3%) were not using any form of contraception. From those using a contraceptive method, majority 64(59.1%) of the

respondents were using a short-term contraceptive method, 30(26.9%) of the respondents were using a long-term contraceptive method, while 18(16.0%) of the respondents were using a short term contraceptive method.

Association between social demographic factors and contraceptive use
Table 3: showing association between social demographic factors and contraceptive use

Variable	Contraceptive use		Not using contraception		p-value
	Frequency n=112	Percentage	Frequency n=89	Percentage	
Age					
18-30	64	57.1	10	11.2	0.036
More than 30 years	48	42.9	79	88.8	
Education					
Non formal education	20	17.9	04	4.5	0.889
Formal education	92	82.1	85	95.5	
Employment					
Employed	62	55.4	45	50.6	0.567
Unemployed	50	44.6	44	49.4	
Religion					
Christian	91	81.3	69	77.5	0.721
Muslim	21	18.7	20	22.5	
Parity					
Para one	02	1.8	45	50.6	0.024
Multipara	110	98.2	44	49.4	

The study assessed for an association between social demographic factors and contraceptive usage, the study found out that being aged between 18 to 30

years was a significant factor (p-value 0.036), towards use of a contraceptive method, this was collated with majority 64(57.1%) of those using a contraceptive

method being between 18 to 30 years as well as the majority 79(88.8%) of those not using a contraceptive method being above 30 years. The study also found out that education was not a significant factor (p-value at 0.889) in influencing one to use a contraceptive method, this was also reflected at majority of those using a contraceptive method and those not using being the majority at 62(55.4%) and 45(50.6%) respectively. The study also found out that employment status didn't affect contraceptive use or not at p-value of 0.567, majority of the respondents were employed in various fields both for those 62(55.4%) who used a contraceptive method and those 45(50.6%) who didn't. Similarly, the majority of the

respondents who were using a contraceptive method were Christians, even those not using a contraceptive method, the majority were Christians, the study further indicated that one's religion was not a significant factor in determining whether one uses a contraceptive method or not. The study assessed for the association between the parity of females and a contraceptive use, it found out that being a multipara is a significant factor (p-value at 0.024) to using a contraceptive method, while being a para one is a negative factor to using a contraceptive method. This was also reflected with majority 110(98.2%) of those using a contraceptive method being a multiparous.

Association between health services and contraceptive use
Table 4: showing association between health services and contraceptive use

Variable	Contraceptive use		Not using contraception		p-value
	Frequency n=112	Percentage	Frequency n=89	Percentage	
Counseling done about contraceptive					
Counseled	82	73.2	41	46.1	0.015
Not counseled	40	35.1	48	53.9	
Distance from health facility					
Less than 5 km	88	78.6	70	78.7	0.971
5km or more	24	21.4	19	21.3	
Availability					
Services available	74	66.1	38	42.7	0.044
Services not available	48	42.9	51	57.3	

From the table above the respondents were assessed to compare the association between health service factors and contraceptive use. It was found that being counseled about contraception use was a significant factor to using contraception (p-value =0.015), this was reflected with majority 82(73.2%) of the those using a contraceptive method having been counseled previously while for those who had not been using contraception, the majority 48(53.9%) were those who had not received a form of counseling. The study also assessed for the association between distance from the nearest health facility and contraceptive use, in which it was indicated that the both majority of

those who were using a contraceptive method 88(78.6%), and those not using a method 70(78.7%) were coming within a 5km distance. The study revealed that the nature of distance from nearest facility was not significant on whether the mother uses a contraceptive method or not, with a p-value of 0.971. The study also assessed for the association between availability of contraceptive method and its usage, the study revealed that, availability of contraceptive method was a significant factor p-value, 0.044, the majority 74(66.1%) of the females who used a contraceptive method said it could be easily assessed from the nearest health facility.

DISCUSSION

Social demographics of participants.

The study shows the social demographic characteristics of respondents, regarding the age of participants' majority 99(49.3%) of the participants were aged between 31 to 40 years, at least 74(36.8%) were aged between 18 to 30 years while the least 28(13.9%) were above 40 years, this could be because this is a reproductive age bracket for these participants and therefore seek health more often due to reproductive health issues, when compared with other studies, this study differs from a study by [14]

who noted that women who were aged above 35 years were more likely to use contraceptives comparatively [15] had also indicated that women aged 40-44 years were twice as likely not to use a contraceptive methods when compared with a younger group. When the respondents were assessed for their education level, the majority 96(47.8%) of the respondents said had had a primary level of education, 24(11.9%) said they had not had formal schooling, 46(22.9) said they had attained a secondary level of education, while 35(17.4%) said they had studied up

to tertiary level of education, more so, the respondents were asked for their for their employment status, in which the majority 94(46.8%) said they were unemployed, at least 62(30.8%) said they were self-employed while 42(22.4%) said they were formerly employed in various fields, more to note was that 160(79.6%) of the respondents were of Christian faith while at least 41(20.4%) of the respondents were of Islamic faith. More so, most 154(76.6%) of the respondents had had more than one delivery while only 47(23.4%) had produced for the first time.

Prevalence of contraceptive use

The study when the respondents were assessed for proportion of those using a contraceptive method, majority 112(55.7%) were using a contraceptive method while 89(44.3%) were not using any form of contraception. From those using a contraceptive method, majority 64(59.1%) of the respondents were using a short term hormonal contraceptive method, 30(26.9%) of the respondents were using a long term contraceptive method, while 18(16.0%) of the respondents were using a short term contraceptive method, this study shows that 44.3% of the respondents were not using a contraceptive method, which poses a reproductive health challenge, however this study shows that the prevalence rate was higher than a national prevalence cited by [8], which indicated that Contraceptive Prevalence Rate in Uganda was 39 percent of married women and 51 Percent among the sexually active unmarried women. The proportion of married women using modern contraceptive methods had increased from 8 percent in 1995 to 35 percent in 2016.

Association between social demographic factors and contraceptive use

The study assessed for an association between social demographic factors and contraceptive usage, the study found out that being aged between 18 to 30 years was a significant factor (p-value 0.036), towards use of a contraceptive method, this was collated with majority 64(57.1%) of those using a contraceptive method being between 18 to 30 years as well as the majority 79(88.8%) of those not using a contraceptive method being above 30 years, this could be because by this age many ladies are encountered with working for their families alongside producing children so they use contraception method as a measure to limit frequent pregnancies that can be a hindrance to their daily activities, when compared with other studies, this study shows a difference from a study by [16] in which they indicated that age of a woman has been found to be significantly associated with the use of contraceptives, with older women generally less likely to use contraceptives than younger women. The study also found out that education was not a

significant factor (p-value at 0.889) in influencing one to use a contraceptive method, this was also reflected at majority of those using a contraceptive method and those not using being the majority at 62(55.4%) and 45(50.6%) respectively, education provides people with relevant information concerning contraception use, however this study shows a discrepancy and also when compared with other studies, this study shows a difference with a study by [17] in which they indicated that Contraceptive prevalence increases with education. Women with higher education tend to be better informed about family planning services and are more likely to use the service than their peers with lower education. Moreover, better educated women are more likely to desire for fewer children who they can adequately provide for as compared to lesser educated women hence more desire to control the number of children. The study also found out that employment status didn't affect contraceptive use or not at p-value of 0.567, majority of the respondents were employed in various fields both for those 62(55.4%) who used a contraceptive method and those 45(50.6%) this could be because a desire to use a contraceptive method, becomes a necessary reproductive health requirement, and most of these services are provided for at cheap services or sometimes free, this enables both the employed and unemployed to access the services, when compared with other studies, this study shows a deviation from a study by [18] who indicated that women who work outside the home were more likely to use contraceptives than those who were housewives, comparatively also, [19] had found out that in Accra, self-employed women were less likely to use contraceptives than those in formal employment. Similarly the majority of the respondents who were using a contraceptive method were Christians, even those not using a contraceptive method, the majority were Christians, the study further indicated that one's religion was not a significant factor in determining whether one uses a contraceptive method or not, majority being Christians could be because the society is dominated by Christian faith since the study showed that religion had no significance in using the contraception, when compared with other studies, [20] in their studies in Pakistan had indicated that, a Muslim country and among Muslim minorities in India and Bangladesh was able to pinpoint religion as a substantial influence on the knowledge and use of contraceptives. The study assessed for the association between the parity of females and a contraceptive use, it found out that being a multipara is a significant factor (p-value at 0.024) to using a contraceptive method, while being a para one is a negative factor to using a contraceptive method. This was also reflected with majority

110(98.2%) of those using a contraceptive method being a multiparous, this could be because females with more children tend to reduce reproduction behavior and their use more contraception than their para-one counter parts, when compared with a study by [21], indicated that the women who had more than three times higher (69%) than it was among women who had no children at 19.7%.

Association between health services and contraceptive use

The study found that being counseled about contraception use was a significant factor to using contraception (p-value =0.015), this was reflected with majority 82(73.2%) of the those using a contraceptive method having been counseled previously while for those who had not been using contraception, the majority 48(53.9%) were those who had not received a form of counseling, this could be because counseled enables one to have more information regarding various contraceptive methods and therefore enables them to use the method, when this study is compared with other studies, it shows a deviation from a study by [22] who indicated that obtaining contraception process hurdles such as the increase in a women's psychic and time loss due to waiting for contraceptive services or requiring women to wait till their next menstrual period before getting the contraceptive they desire has led to increased unmet need in Tanzania. The study also assessed for the association between distance from the nearest health facility and contraceptive use, in which it was indicated that the both majority of those who were using a contraceptive method 88(78.6%), and those not using a method 70(78.7%) were coming

The study concluded that the prevalence of contraception use among females was 112(55.7%) and the commonest methods were short term hormonal contraceptive methods at 64(57.1%). The study also concluded that being aged 18 to 30 years 64(57.1%) was a promoting factor to using contraception, at p-value of 0.036. The study concluded that being multiparous 110(98.2%) was significant to use of contraception, at p-value of 0.024 than being para-one, 45(50.6%) The study also concluded that prior counselling 82(73.2%) and p-value 0.015, to use of contraception promoted its usage.

within a 5km distance. The study revealed that the nature of distance from nearest facility was not significant on whether the mother uses a contraceptive method or not, with a p-value of 0.971, this could be because attaining contraceptive services was not a daily requirement and therefore, whether a person was from near or far, she would be able to obtain, the services, when compared with other studies, a study by [23] had noted that in the rural areas where distances to health facilities can be long, meaning that women were less inclined to go such distances for contraceptives. However, distances could also aid contraceptive use by women who were using without social and spousal approval, as the distance would give them the desired confidentiality they desire. The study also assessed for the association between availability of contraceptive method and its usage, the study revealed that, availability of contraceptive method was a significant factor p-value, 0.044, the majority 74(66.1%) of the females who used a contraceptive method said it could be easily assessed from the nearest health facility, this could be because presence of services acts as an encouragement to females to use a contraception method, when this study is compared with other studies, it shows a correlation with a study by [24] who indicated that the contraceptive options available to women have increased, use of contraceptives globally between 1982-2009 and that the availability of 1 method to at least half the population correlates with an increase of 4–8 percentage points in total contraceptive use.

CONCLUSION

Recommendation

The government should increase availability of contraceptive services to lower-level health care centers so that more females can access the services. The health workers should also health educate the mothers who come to health facilities for other services about availability of contraception services. Mothers should be counseled against contraception related phobia, so that other females can be encouraged to use the facility.

REFERENCES

1. Gustafsson, M., Nestor, C.E., Zhang, H. *et al.* (2014). Modules, networks and systems medicine for understanding disease and aiding diagnosis. *Genome Med.*, **6**, 82. <https://doi.org/10.1186/s13073-014-0082-6>
2. WHO (2012). World Health Statistics 2012. www.who.int/gho/publications/world_health_statistics/2012/en/
3. Mayanja, R., Kiggundu, C., Kaddu-Mulindwa, D., *et al.* (2005). Prevalence of Asymptomatic Bacteriuria and Associated Factors among Women Attending Antenatal Clinics in Lower Mulago Hospital. M.Ed. Dissertation of Mayanja, Makerere University, Kampala.
4. UNICEF (2012). The state of the World's children.

- <http://www.unicef.org.uk/Latest/Publications/state-of-the-worlds-children-2012/>
5. Uganda Demographic and Health Survey 2016 Uganda Bureau of Statistics Kampala, Uganda the DHS Program ICF Rockville, Maryland, USA
 6. Nakirijja, D. S., Xuili, X., & Kayiso, M. I. (2018). Socio-economic Determinants of Access to and Utilization of Contraception among Rural Women in Uganda: The Case of Wakiso District. *Health Sci. J.*, Vol.12. No. 6: 608.
 7. United Nations, Department of Economic and Social Affairs, Population Division (2019). World Contraceptive Use 2019(POP/DB/CP/Rev2019)
 8. Uganda Bureau of Statistics (UBOS) and ICF. 2017. Uganda Demographic and Health Survey 2016: Key Indicators Report. Kampala, Uganda: UBOS, and Rockville, Maryland, USA: UBOS and ICF.
 9. Murthy, J., & Ntabadde Makumbi, C. (2015). Uganda, 16 June 2015: Government launches national strategy to end child marriage and teenage pregnancy. Retrieved from http://www.unicef.org/esaro/5440_uga2015_end-child-marriage.html.
 10. Saima, H., Stephenson, R., & Rubenson, B. (2011). Marriage decision making, spousal communication, and reproductive health among married youth in Pakistan. *Global Health Action*, 4, 5079.
 11. Ugwu, C. N., & Eze, V. H. U. (2023). Qualitative Research. *IDOSR Journal of Computer and Applied Sciences* 8(1): 20-35. <https://www.idosr.org/wp-content/uploads/2023/01/IDOSR-JCAS-8120-35-2023.docx.pdf>
 12. Babirye, D. (2011). Omuto yiga: Obugero obuyigiriza abaana okusoma bwino. Kampala: Triple Care Enterprises.
 13. Ugwu, C. N., Eze, V. H. U., Ugwu, J. N., Ogenyi, F. C., & Ugwu, O. C. (2023). Ethical Publication Issues in the Collection and Analysis of Research Data. *Newport International Journal of Scientific and Experimental Sciences (NIJSES)* 3(2): 132-140. <https://nijournals.org/wp-content/uploads/2023/07/NIJSES-32-132-140-2023.pdf>
 14. Frost, J. J., Finer, L. B., & Tapales, A. (2008). The impact of publicly funded family planning clinic services on unintended pregnancies and government cost savings. *Journal of Health Care for the Poor and Underserved* 19(3):778-796.
 15. Upson, K., et al. (2009). Factors associated with contraceptive nonuse among US women ages 35-44 years at risk of unwanted pregnancy. *Contraception*, 81, 427- 434
 16. Blanc, A. K., Tsui, A. O., Croft, T. N., & Trevitt, J. L. (2009). Patterns and Trends in Adolescents' contraceptive Use and Discontinuation in Developing Countries and Comparisons with Adult Women. *International Perspectives on Sexual and Reproductive Health*, 35(2), 63-71.
 17. Anguko, A. A. (2014). Determinants of Contraceptive Use Among Women of Reproductive Age in North Eastern Kenya. Thesis, University of Nairobi, Institute of Tropical and Infectious Diseases (UNITID), Nairobi
 18. Palamuleni, M. E. (2013). Socio-economic and demographic factors affecting contraceptive use in Malawi. *Afr J Reprod Health.*, 17(3):91-104. PMID: 24069771.
 19. Adanu, R. M., Seffah, J. D., Duda, R., Darko, R., Hill, A., & Anarfi, J. (2010). Clinic visits and cervical cancer screening in Accra. *Ghana Med J.*, 44(2):59-63
 20. Farid-ul-Hasnain, S., Johansson, E., Gulzar, S., & Krantz, G. (2013). Need for multilevel strategies and enhanced acceptance of contraceptive use in order to combat the spread of HIV/AIDS in a Muslim society: a qualitative study of young adults in urban Karachi, Pakistan. *Glob J Health Sci.*, 5(5):57-66. doi: 10.5539/gjhs.v5n5p57.
 21. Mahidul I., Kane T.T., Khuda-e-Barkat, Reza, M. M., & Hossain, M. B. (1998) "Determinants of contraceptive use among married teenage women and newlywed couples " Operational Research project; Health and Population Extension Division. Working g paper no. 151
 22. Speizer, I., et al. (2000). Do Service Providers in Tanzania Unnecessarily Restrict Clients' Access to Contraceptive Methods? *International Family Planning Perspectives*, 26, 13-20 + 42. <https://doi.org/10.2307/2648285>
 23. Deri, M. (2016). Contraceptive use among women of reproductive age in Jirapa district University of Ghana <http://ugspace.ug.edu.gh>.
 24. Ross, J., Stover, J. (2013). Use of modern contraception increases when more methods become available: analysis of evidence from 1982-2009. *Glob Health Sci Pract.*, 1(2):203-12. doi: 10.9745/GHSP-D-13-00010. PMID: 25276533; PMCID: PMC4168565.

CITE AS: Agaba Arthur (2024). Enhancing Contraceptive Utilization among Females of Reproductive Age: Factors, Challenges, and Strategies at Jinja Regional Referral Hospital. IDOSR JOURNAL OF EXPERIMENTAL SCIENCES 10(3) 63-71.
<https://doi.org/10.59298/IDOSR/JES/103.63.71>