

Determinants Impacting the Adoption of Long-Acting Contraception among Women in Fort Portal Regional Referral Hospital's MCH Clinic

Haruna Yakasai Abubakar

Department of Medicine and Surgery, Kampala International University, Uganda

ABSTRACT

Unintended pregnancies pose significant global public health concerns, impacting individuals, families, and society at large. Despite their efficacy, the utilization of long-acting contraceptive methods (LACMs) has lagged behind short-acting methods like oral contraceptives and injections, and the reasons for this disparity remain unclear. This study aimed to assess the level of LACM utilization among women attending the MCH clinic at Fort Portal Regional Referral Hospital (FRRH) and to identify potential influencing factors. Using a descriptive cross-sectional design, data was collected from 52 respondents through a pretested questionnaire. Analysis conducted using IBM SPSS 25.0 revealed a mean respondent age of 27.6±4.8 (SD) years, with a LACM prevalence of 26.9%. Factors associated with LACM use included maternal age ≥30 years and having four or more children ($X^2=11.47$; $p=0.001$) and ($X^2=37.66$; $P<0.001$) respectively. The prevalence of LACM use among women at FRRH's MCH clinic was notably lower (26.9%) compared to short-acting contraceptive methods (73.1%). Notably, this study highlighted maternal age ≥30 years and parity ≥4 as significant factors linked with LACM utilization. Recommendations stemming from this study advocate for strategies devised by healthcare providers and stakeholders aimed at increasing LACM utilization, particularly among women under thirty years old and those with a parity of three or less. Additionally, further research is suggested to delve deeper into the reasons behind this low prevalence, fostering a more comprehensive understanding of the underlying factors influencing contraceptive choices among this demographic.

Keywords: risk factors, contraceptive, women

INTRODUCTION

Family planning allows people to attain their desired number of children and determine the spacing of pregnancies. It is achieved through use of modern contraceptive methods and the treatment of infertility (World Health Organization) [1]. Modern contraceptive methods are divided into three: - Long-acting reversible contraceptive methods (IUCD & Implants); permanent contraceptive methods (tubal ligation & vasectomy) and short-term contraceptives methods (Oral pill, inject-able, male & female condoms, foam tablet & cervical cap [2, 3]. Because of their long-lasting protection and reversibility, the reversible long-term contraceptive is an effective contraceptive method appropriate for

women wishing to limit child bearing, as well as to space births, thus potentially playing an enormous role in reducing maternal mortality [4].

Globally, 214 million women of reproductive age in developing countries who want to avoid pregnancy are not using a modern contraceptive method [5]. This unmet need for contraception is too high and variation in different regions is observed [1]. This inequity is fueled by both a growing population, and a shortage of family planning services. In Africa, 24.2% of women of reproductive age have an unmet need for modern contraception. In Asia, and Latin America and the Caribbean - regions with relatively high contraceptive prevalence - the levels of

unmet need for family planning are 10.2 % and 10.7%, respectively [6]. Unintended pregnancy remains an alarming global public health problem with its subsequent socioeconomic impact on individuals, families, and the society [7]. Though there is a considerable variation in the prevalence of unintended pregnancy across regions, the global burden is very high (44% in 2014) [8] and responsible for 27% of maternal deaths [9]. Different cross-sectional studies around the globe noted that there has been a high prevalence of unintended pregnancy for example, 69% in Malawi [10], 27% in Canada [11] and 44% in Botswana [9] highlighting the need for effective contraceptive utilization [9]. The 2016 Uganda Demographic and Health Survey (UDHS) report showed that there was 28% and 32% of unmet need for family planning among married and

METHODOLOGY

Study design

A cross-sectional study design was used [16].

Study area

The study was conducted in MCH clinic in Fort Portal Regional Referral Hospital.

Study population

The study involved women attending MCH clinic.

Inclusion criteria

- women who are 18-49 years old
- Willing to participate

Exclusion criteria

- Not willing to participate in the survey
- Below 18 years and above 49 years

Sample size determination

The sample size was determined by using Kish's formula [17].

Sampling technique

The study used consecutive sampling where each woman that comes and agrees to participate was enrolled.

The mean age of the respondents was 27.6±4.8 (SD) years. More than half (65.4%) were aged ≤29 years, 57.7% were

unmarried sexually active women respectively [12]. Evidence suggests that women who have more than 4 children are at increased risk of maternal mortality [13]. By reducing rates of unintended pregnancies, family planning also reduces the need for unsafe abortion [14].

The Uganda ministry of health and private partners' campaigns for the use of long-acting contraceptive method, however, the contraceptive method mix is dominated by short term methods like pills and Injectables [15]. There are no studies that have examined the factors contributing to long-acting contraception methods utilization on the study area. The present study was intended to contribute to bridging information gap about and subsequently the coverage of long-acting contraceptive method utilization in the local setting.

Data collection methods

This study used a questionnaire to collect data from the respondents.

Data Processing and analysis

Collected data was entered and analyzed using IBM SPSS version 25.0 Categorical variables were presented in a table of frequencies for descriptive statistics. A Chi-square test was computed to test the factors influencing utilization of LACMs. The point for statistical implication was p-values of ≤0.05.

Ethical considerations

Ethical approval was sought from Kampala international university western campus Faculty of clinical medicine and dentistry in form of introduction letter after approval of the proposal. A written and verbal consent was sought from the respondents before they participated in the study [18].

RESULTS

house wives and only 19.2% had tertiary education. Table 1.

Table 1: Demographic characteristics of respondents

	Variables	Frequency	Percent
Age group	≤29	34	65.4
	≥30	18	34.6
	Total	52	100.0
Occupation	House wife	30	57.7
	Business	11	21.2
	Employed	11	21.2
	Total	52	100.0
Religion	Catholic	20	38.5
	Protestant	10	19.2
	Muslim	7	13.5
	Pentecostal	15	28.8
	Total	52	100.0
Education level	Non	10	19.2
	Primary	20	38.5
	Secondary	12	23.1
	Tertiary	10	19.2
	Total	52	100.0
Parity	≤3	39	75.0
	≥4	13	25.0
	Total	52	100.0

Almost half of the respondents (38.5%) were using injectable FP methods followed by 25% who were using pills.

7.7% were not using any method and only 1.9% had done tubal ligation. Figure 2.

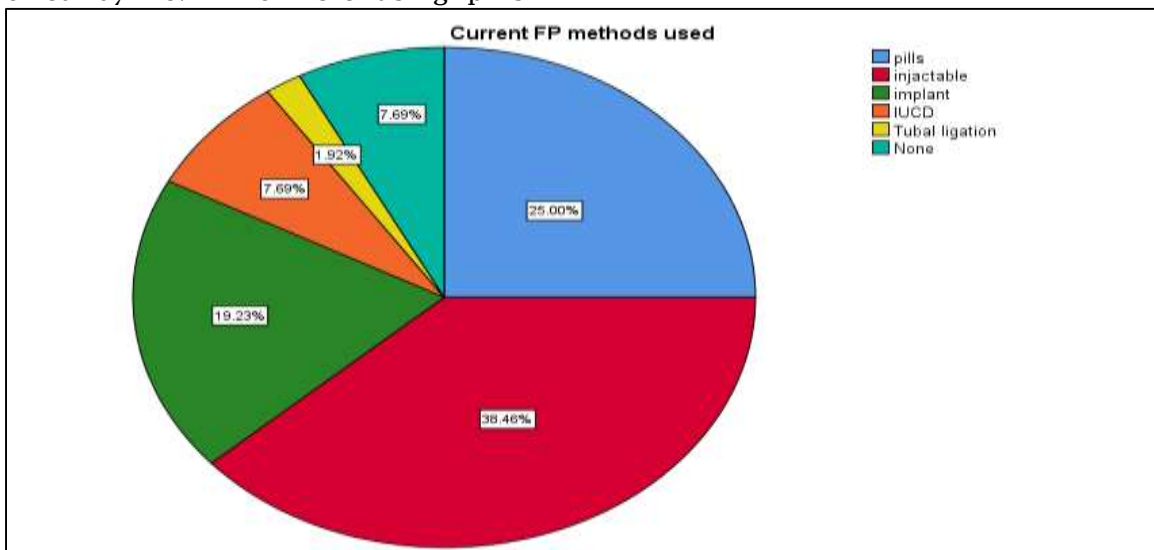


Figure 1: Current contraceptive methods used

Results show that less than half of the respondents (26.9%) were using LACM

compared to majority (73.1%) who were using short acting methods. Figure 2.

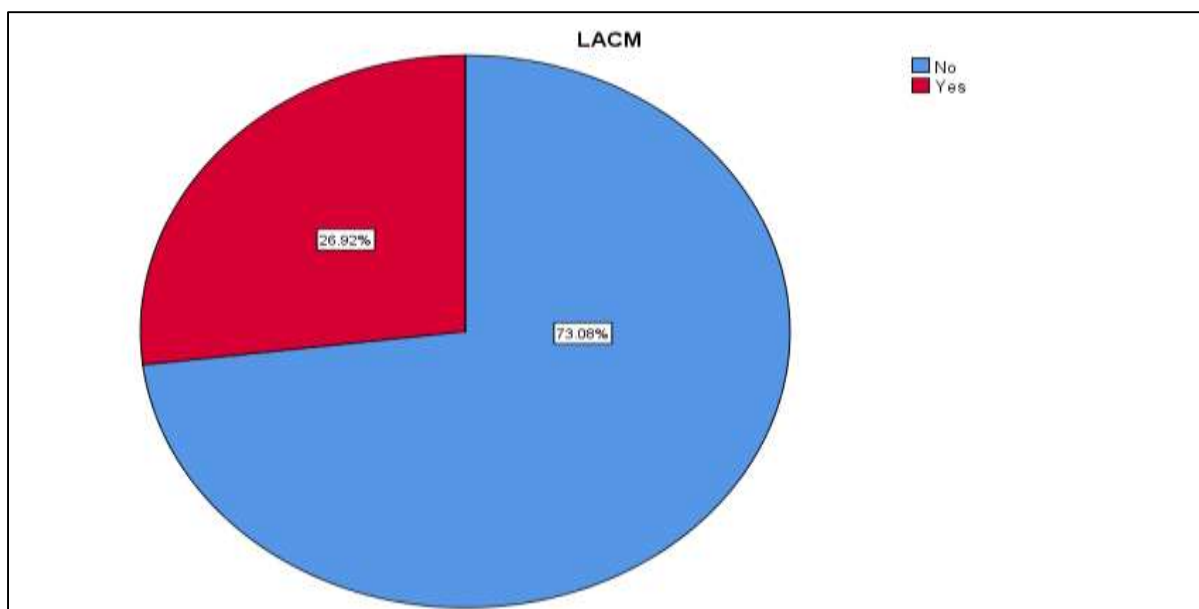


Figure 2: Prevalence of long acting contraceptive methods (LACM)

Only age was found significant ($X^2=11.47$; $p=0.001$) among the demographic variables. Table 2.

Table 2: Relationship between demographic characteristics and use of LACM

Variables	LACM		Total	Chi square (X^2)	P value	
	No	Yes				
Age group	<29	30	4	34	11.47	0.001
		88.2%	11.8%	100.0%		
	>30	8	10	18	0.69	0.706
		44.4%	55.6%	100.0%		
Occupation	House wife	23	7	30	0.35	0.950
		76.7%	23.3%	100.0%		
	Business	8	3	11	0.35	0.950
		72.7%	27.3%	100.0%		
	Employed	7	4	11	0.35	0.950
		63.6%	36.4%	100.0%		
Religion	Catholic	14	6	20	0.35	0.950
		70.0%	30.0%	100.0%		
	Protestant	8	2	10	0.35	0.950
		80.0%	20.0%	100.0%		
	Muslim	5	2	7	0.35	0.950
		71.4%	28.6%	100.0%		
	Pentecostal	11	4	15	0.35	0.950
		73.3%	26.7%	100.0%		
Education level	Non	7	3	10	0.35	0.950
		70.0%	30.0%	100.0%		

Primary	15	5	20		
	75.0%	25.0%	100.0%		
Secondary	9	3	12	0.16	0.984
	75.0%	25.0%	100.0%		
Tertiary	7	3	10		
	70.0%	30.0%	100.0%		

The results show that current number of children the woman have is statistically significant ($X^2=37.66$; $P<0.001$).

Table 3: Relationship of LACM use and current number of children

Variables	LACM		Total	Chi square (X^2)	P value
	No	Yes			
Current number of children ≤ 3	37	2	39		
	94.9%	5.1%	100.0%		
≥ 4	1	12	13	37.66	<0.001
	7.7%	92.3%	100.0%		
Total	38	14	52		
	73.1%	26.9%	100.0%		

Discussion with partner about FP was not found to be statistically significant ($X^2=0.01$; $p=0.977$).

Table 4: Relationship of LACM use and discussion of FP with partner

Variable	LACM		Total	Chi square (X^2)	P value
	No	Yes			
Discussion with partner about FP No	8	3	11		
	72.7%	27.3%	100.0%		
Yes	30	11	41	0.01	0.977
	73.2%	26.8%	100.0%		
Total	38	14	52		
	73.1%	26.9%	100.0%		

DISCUSSION

In this study, the prevalence of long-acting contraceptive use was 26.9%. The prevalence of contraceptive use among women in this study is comparable to that of the general women population in Uganda (26.9% versus 30%) [19]. The contraceptive prevalence in this study is also consistent with earlier studies reporting contraceptive use of 22.3% in Uganda [20] and a prevalence of 29% in a Kenyan hospital [21]. The similarity could

be attributed to similar social economic characteristics of the participants.

The variables which were found significant were; mother's age ($X^2=11.47$; $p=0.001$) and current number of children ($X^2=37.66$; $P<0.001$).

Age and number of children has been reported by other studies to influence use of contraception in Ethiopia, Cameroon, Uganda and Rwanda [22, 23, 15, 24] respectively.

In this study, it is noted that age specific LACM prevalence rate increase with age of women. Majority of women who were using LACM were ≥ 30 years (71.4%) compared to those ≤ 29 years old. This may be attributed to many reasons; firstly, age is associated with experience in child birth which may come with access to health education about contraception. Secondly, old age may be associated with increasing needs from large family which puts economic pressure thus need to limit or control child birth.

Like with this study, there is consensus from other studies [25, 13, 5] that LACM use is more likely among women with higher number of children. This study found that a large percentage (92.3%) of women who had ≥ 4 children were using LACM compared to only 5.1% of those that had ≤ 3 children. Also, many women reject contraception because bearing and raising

children is the path to respect and dignity [23]. As aforementioned, a high number of children comes with a cost, not only for feeding but also healthcare and education. The driving force towards use of LACM in older women and those with large number of children could be due to the desire for limiting the number of children in the face of an advancing age. The reproductive health implication of these findings suggests a targeted intervention such as health education and patient-specific counselling to create awareness on the benefits of LACM.

Unlike other studies which showed that the factors that determine LACM use among women included higher education [13], employment status [4], and discussion of family planning with a partner [26], this study found these factors not significant.

CONCLUSION

The prevalence of LACM use among women attending MCH clinic at FRRH was low (26.9%) as compared to short acting contraceptive methods (73.1%), and is

significantly associated with age above thirty (30) and parity equal to or greater than 4.

REFERENCES

1. World Health Organization (WHO) (2017) World Health Statistics 2017: Monitoring Health for the SDGs, Sustainable Development Goals. WHO, Geneva.
2. Who. (2016). WHO | Family planning/Contraception. *Who*.
3. Ouma, S., Turyasima, M., Acca, H., Nabbale, F., Obita, K. O., Rama, M., & Awor, S. (2015). Obstacles to family planning use among rural women in Atiak health center IV, Amuru District, northern Uganda. *East African medical journal*, 92(8), 394-400.
4. Hubacher, D., Spector, H., Monteith, C., Chen, P. L., & Hart, C. (2017). Long-acting reversible contraceptive acceptability and unintended pregnancy among women presenting for short-acting methods: a randomized patient preference trial. *American Journal of Obstetrics and Gynecology*. <https://doi.org/10.1016/j.ajog.2016.08.033>
5. Guttmacher Institute. (2017). Adding it up: Investing in Contraception and Maternal and Newborn Health. *Guttmacher Institute*.
6. United Nation, Department of Economic and Social Affairs, P. D. (2015). *Trends in contraceptive use Worldwide 2015*. *Contraception*. <https://doi.org/10.1016/j.contraception.2012.08.029>
7. Mazza, D., Bateson, D., Frearson, M., Goldstone, P., Kovacs, G., & Baber, R. (2017). Current barriers and potential strategies to increase the use of long-acting reversible contraception (LARC) to reduce the rate of unintended pregnancies in Australia: An expert roundtable discussion. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. <https://doi.org/10.1111/ajo.12587>
8. Bearak, J., Popinchalk, A., Alkema, L., & Sedgh, G. (2018). Global, regional, and subregional trends in unintended pregnancy and its outcomes from 1990 to 2014: estimates from a Bayesian hierarchical model. *The Lancet Global Health*.

- [https://doi.org/10.1016/S2214-109X\(18\)30029-9](https://doi.org/10.1016/S2214-109X(18)30029-9)
9. Mayondi, G. K., Wirth, K., Morroni, C., Moyo, S., Ajibola, G., Diseko, M., & Lockman, S. (2016). Unintended pregnancy, contraceptive use, and childbearing desires among HIV-infected and HIV-uninfected women in Botswana: Across-sectional study. *BMC Public Health*. <https://doi.org/10.1186/s12889-015-2498-3>
 10. Haddad, L. B., Feldacker, C., Jamieson, D. J., Tweya, H., Cwiak, C., Chaweza, T., & Phiri, S. (2015). Pregnancy prevention and condom use practices among HIV-infected women on antiretroviral therapy seeking family planning in Lilongwe, Malawi. *PLoS ONE*. <https://doi.org/10.1371/journal.pone.0121039>
 11. Oulman, E., Kim, T. H. M., Yunis, K., & Tamim, H. (2015). Prevalence and predictors of unintended pregnancy among women: an analysis of the Canadian Maternity Experiences Survey. *BMC Pregnancy and Childbirth*. <https://doi.org/10.1186/s12884-015-0663-4>
 12. UBOS. (2016). *Demographic and Health Survey*. Retrieved from www.ubos.org
 13. Hounton, S., Barros, A. J. D., Amouzou, A., Shiferaw, S., Maïga, A., Akinyemi, A., & Koroma, D. (2015). Patterns and trends of contraceptive use among sexually active adolescents in Burkina Faso, Ethiopia, and Nigeria: Evidence from cross-sectional studies. *Global Health Action*. <https://doi.org/10.3402/gha.v8.29737>
 14. Mermelstein, S., & Plax, K. (2016). Contraception for Adolescents. *Current Treatment Options in Pediatrics*. <https://doi.org/10.1007/s40746-016-0053-9>
 15. Asiimwe, J. B., Ndugga, P., & Mushomi, J. (2014). With Older Women in Uganda. *Determinants of Contraceptive Use in Uganda*.
 16. Ugwu, Chinyere. N., & Eze Val, 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>
 17. Rutterford, C., Copas, A., & Eldridge, S. (2015). Methods for sample size determination in cluster randomized trials. *International Journal of Epidemiology*. <https://doi.org/10.1093/ije/dyv113>
 18. Ugwu Chinyere Nneoma, Eze Val Hyginus Udoka, Ugwu Jovita Nnenna, Ogenyi Fabian Chukwudi & Ugwu Okechukwu Paul-Chima (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>
 19. UDHS. (2017). *Uganda Demographic and Health Survey Key Indicators Report 2016*. RoU. <https://doi.org/10.2307/2138118>
 20. Sileo, K. M., Wanyenze, R. K., Lule, H., & Kiene, S. M. (2015). Determinants of family planning service uptake and use of contraceptives among postpartum women in rural Uganda. *International Journal of Public Health*, 60(8),987-997. <https://doi.org/10.1007/s00038-015-0683-x>
 21. Jalang'O, R., Thuita, F., Barasa, S. O., & Njoroge, P. (2017). Determinants of contraceptive use among postpartum women in a county hospital in rural Kenya. *BMC Public Health*. <https://doi.org/10.1186/s12889-017-4510-6>
 22. Alemayehu, M., Kalayu, A., Desta, A., Gebremichael, H., Hagos, T., & Yebyo, H. (2015). Rural women are more likely to use long acting contraceptive in Tigray region, Northern Ethiopia: A comparative community-based cross sectional study. *BMC Women's Health*. <https://doi.org/10.1186/s12905-015-0229-7>

23. Ajong, A. B., Njotang, P. N., Yakum, M. N., Essi, M. J., Essiben, F., Eko, F. E., & Mbu, E. R. (2016). Determinants of unmet need for family planning among women in Urban Cameroon: A cross sectional survey in the Biyem-Assi Health District, Yaoundé. *BMC Women's Health*, 16(1). <https://doi.org/10.1186/s12905-016-0283-9>
24. Bakibinga, P., Matanda, D. J., Ayiko, R., Rujumba, J., Muiruri, C., Amendah, D., & Atela, M. (2016). Pregnancy history and current use of contraception among women of reproductive age in Burundi, Kenya, Rwanda, Tanzania and Uganda: Analysis of demographic and health survey data. *BMJ Open*. <https://doi.org/10.1136/bmjopen-2015-009991>
25. Blackstone, S. R., & Iwelunmor, J. (2017). Determinants of contraceptive use among Nigerian couples: evidence from the 2013 Demographic and Health Survey. *Contraception and Reproductive Medicine*. <https://doi.org/10.1186/s40834-017-0037-6>
26. Keogh, S. C., Urassa, M., Kumogola, Y., Kalongoji, S., Kimaro, D., & Zaba, B. (2015). Postpartum Contraception in Northern Tanzania: Patterns of Use, Relationship to Antenatal Intentions, and Impact of Antenatal Counseling. *Studies in Family Planning*. <https://doi.org/10.1111/j.1728-4465.2015.00040.x>

CITE AS: Haruna Yakasai Abubakar (2023). Determinants Impacting the Adoption of Long-Acting Contraception among Women in Fort Portal Regional Referral Hospital's MCH Clinic. IAA Journal of Applied Sciences 10(1):122-129. <https://doi.org/10.59298/IAAJAS/2023/10.1.1000>.