

The Reasons for not Utilization of Intrauterine Device among Short Term Modern Contraceptive User Women in Hossana Town Public Health Facilities: Qualitative Study

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Research

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Abstract

Background Intrauterine device (IUD) is a safe, long-acting, and effective method of contraception. However, is under-utilized in many countries, including Ethiopia. The several studies presented to address the problem, nearly all are quantitative. These have primarily generated a list of associated factors and reasons that did not seem to help health systems to design effective strategies to address the problem. This study looked at the problem with a different approach to explore the issue in detail and help to develop locally appropriate strategies to increase the utilization of IUD in the study area. To this end, qualitative method focused entirely on understanding why short term contraceptive user women are not using IUD from the maternal health service programs. Objective To explore the reasons for not utilization of IUD among short term modern contraceptive users in Hossana town public health facilities, southern Ethiopia. Method A Phenomenological qualitative study was conducted in Hossana town public health facilities, Southern Ethiopia from November 1-30, 2019. A total of 13 in-depth interviews were conducted: eleven short term contraceptive users, one health centre head and one health extension worker/community health worker/ were included in the study. Semi-structured interviewer guided questions and tape recorder were used to collect data. The collected data were expanded, labelled and ordered chronologically. Data were organized after subsequent detailed reading and analysis. Thematic analysis was used to analyze the collected data. Result In this study, the reasons for not utilization of IUD was poor knowledge about the benefits of IUD, insufficient counseling and not providing informed choices, and the absence of trained health personals and shortage of necessary supplies. Conclusion The main reasons for not utilization of IUD was poor counseling of mothers, unsupportive provider-client relationships, and poor counseling by service providers. Efforts to rise IUD users need to focus on improving counseling of mothers and strengthening the health systems.

Plain English Summary

Intrauterine device (IUD) has number of benefits but under utilized in several countries including Ethiopia. These have primarily generated a list of associated factors and reasons that did not seem to help health systems to design effective strategies to address the problem. This study looked at the problem with a different approach to explore the issue in detail and help to develop locally appropriate strategies to increase the utilization of IUD in the study area. This study aimed to explore the reasons for not utilization of IUD among short term modern contraceptive users in Hossana town public health facilities, southern Ethiopia. The qualitative study was conducted in Hossana town public health facilities, Southern Ethiopia from November 1–30, 2019. A total of 13 in-depth interviews were conducted: eleven short term contraceptive users, one health centre head and one health extension worker/community health worker/ were included in the study. Semi-structured interviewer guided questions and tape recorder were used to collect data. The main reasons for not utilization of IUD was poor counseling of mothers, unsupportive provider-client relationships, and poor counseling by service providers. Efforts to rise IUD users need to focus on improving counseling of mothers and strengthening the health systems.

Introduction

Worldwide total fertility rate ranges from 1.7 children per woman in the developed world to 4.6 in underdeveloped world. The total fertility rate in Ethiopia is 4.5 children per woman. This puts Ethiopia among countries with highest total fertility rates in the world. For fertilities to fall to low levels, increases the use of Intrauterine device (IUD) and another contraceptive plays a significant role especially in less developed countries including Ethiopia (1–3).

Globally, in 2012, four in ten pregnancies were unintended, of which 50% ended in abortion and 13% in miscarriage. Unintended pregnancies are an important public health concern due to their negative association with social and health outcomes for both mothers and children and nearly half of them are due to inconsistent or incorrect contraceptive use including IUD (4–6).

Moreover, Utilization of Intrauterine device reduces abortions, reduce unintended pregnancies, and lower the incidence of maternal mortality and morbidity related complications of pregnancy and childbirth. If all women with unmet need for contraceptives were able to use IUD globally, it would prevent 24 million abortions, 6 million miscarriages, 70,000 maternal deaths and 500,000 neonatal deaths would be prevented (7, 8).

Globally, the intrauterine device has been recognised as one of the modern long-term reversible contraceptive methods suitable for women of all reproductive ages. It represents cost-effective reversible method for preventing unwanted pregnancies (9, 10).

In Ethiopia, all type of contraceptives utilization by reproductive age has increased from 14% in 2005 to 41% in 2019 except IUD. The most popular contraceptive method is injectable (27%) whereas the least popular contraceptive method is Intrauterine device (2%) (11).

Several studies showed that several factors account for the poor IUD use in women. A study conducted in Ethiopia showed that women perception and knowledge about IUD is one of the main determinants for the low utilization of IUD (12–15).

Among the factors, comprehensive contraceptive counselling on the IUD is an essential component in promoting utilization and awareness creation of the IUD at the health facility and community level. Various focused messages are also important to dispel misconceptions at the community level (16).

Therefore, these factors are related to healthcare provider characteristics, health system and individual or user factors (17, 18). The aim of this study was to examine the reasons behind this persistent challenge. Although several studies presented here seem to have addressed the problem, nearly all are quantitative studies. These have primarily generated a list of associated factors and reasons that did not seem to help health systems design effective strategies to address the problem. This study looked at the problem with a different approach to explore the reasons in detail and help to develop locally appropriate strategies to increase utilization of IUD.

Method

Study area

Hossana is the capital town of Hadiya zone, which is located 235 km far from Addis Ababa, the capital city of Ethiopia, and 194 km far from the regional city, Hawassa. According to the report of 2015/16, the town has a total population of 100501 from which 50.73% were males and 49.27% were females.

Study Design and Study Period

A Phenomenological qualitative study approach was carried out from November 1–30, 2019.

Study population

The short term modern contraceptive users, health extension workers /community health workers/ and head of health centres were the study participants for this study.

Sample size

Study participants from the three health centres were included in the study. Eleven short term modern contraceptive user women, one health centre heads and one urban health extension workers /community health workers/ were included in the study. A total of 13 study participates were interviewed for the study. The number of study participants was decided based on data saturation and no new information generated after idea saturation. All study participants were selected purposively. Short term contraceptive users as well as health extension worker and health centre head was included based on their role in providing and managing the family planning services, and thus their understanding of the issues that may be contributing to identify the reasons for not utilization of IUD by the women. In the case of the mothers, they come to health centres for utilization of any type of short term family planning methods was interviewed. None of the study participants invited for the interview if they declined to participate in the study.

Data collection procedure

Data were collected using semi-structured and interviewer guided data collection tool. The data collection tool was adopted after defining the research objectives and after reviewing relevant literature. The tool was first developed in English then translated to a local language, Amharic. Oral informed consent was obtained from study participants after explaining the purpose of the study. Tape-recorder and field note was used to collect data from the study participants. Data were collected by a principal investigator and a trained data collector who is familiar with the qualitative data collection method and family planning services. Semi-structured open-ended questions and probing was used to explore the reasons for not utilizing the IUD. The interview lasted an average of 45 minutes and it held in a free room near to family planning department. A pre-test to the tool was carried out near to Hossana town health centres at Fonko health centre and Balesa health centre. These health centres have the same socio-demographic, Socioeconomic characteristics and low utilization of IUD.

Data Management

As soon as the data were collected, handwritten field notes were expanded, labelled and were archived in chronological order. All recorded audiotapes of the interviews were transcribed in Amharic and were later translated to English. The transcripts were compared against hand written note to ensure quality. These expanded notes, transcripts, and correspondence related to the data collection were used for analysis.

Data analysis procedure

Data analysis were carried out by continues iterative process and manually analysis was used by thematic analysis (19). The principal investigator reviews all handwritten notes and all transcripts and listened to the audios for familiarization of data. Then data were organized after subsequent detailed reading and analysis. All sensitive data were anonymized. After detailed reading and analysis, the emerging themes were identified and categories were developed with a thorough reading of the materials. Finally, the themes and categories were refined and used for presenting and discussing the finding. Direct quotes from the study participants are reported as spoken by participants without editing the grammar to avoid losing the meaning. Ethical approval was obtained from Wachemo University College of Medicine and Health Science Ethical Review Committee.

Results

Socio Demographic Characteristics of the Study Participants

In this study total of 13 study participants were included: eleven short term contraceptive use mothers, one health centre head and one health extension workers /community health workers/. The age of the study participants were in range of 19-32. All of the study participants were house wives and married. Regarding to religion of study participants, six short term contraceptive users were protestant, five six short term contraceptive users were Orthodox and one six short term contraceptive users were Muslim. All short term contraceptive users had at list one child. Regarding the educational status of short term contraceptive users, six short term contraceptive users were illiterate (can't write and read), three short term contraceptive users had finished secondary school and two short term contraceptive users were above secondary school. Among short term contraceptive users; five of them were injectable contraceptive users, three of them were pills users, and two of them were implant users. At the time of in-depth interview, three themes were emerged.

Theme 1: Poor Knowledge of Study Participants about Benefits of IUD

Women know about benefits of short term contraceptives such as pills, injectable, condom but they have poor knowledge about the benefits of IUD. The source of information was Mass media and urban health extension workers (community workers) at the community. This idea was supported by three short term contraceptive user women, by the head of health centre and by the health extension worker.

One of injectable contraceptive user mother stated that:

"I knew most of the contraceptive methods by name including pills, injectable, condoms, and a contraceptive which are inserted on the upper arms. And I knew well about the benefits of these contraceptives except IUD. These short term contraceptives have benefits for child spacing, for child limiting and health of the mother and her child, it saves the unnecessary expenses of the households and the country. I heard this information from different sources including TV, Radio and Brushers from Health centre and NGOs. Additionally, urban health extension workers (community workers) gave me some information about contraceptives methods"

Moreover, one pills user women and mother of three children stated:

"Using short term contraceptive method has several benefits; among those benefits, it helps me to have a small family size. If we have a small family size we would teach and rear our children properly without financial constraint. Another benefit of using these contraceptives is to have sexual intercourse without any stress that means we will not worry about whether I will be pregnant or not. Now, I don't want to have more than two children in my lifetime."

Injectable contraceptive user mother stated:

"I heard about IUD from Television as it's inserted into Womb. It is only removed by health professionals when I want to remove it. My friend was used IUD and she complained as she faced health problem and she became obese "bokach' means 'being fat' then she discontinued. And she advised me to use IUD and she advised me to use an injectable contraceptive method."

Additionally, this finding was supported by the head of Hossana health centre. Low utilization of IUD was lack of awareness and knowledge about the benefits of IUD. He stated:

"In our health centre, the short term contraceptive utilization coverage is greater than 90% except for IUD, the reasons for low utilization of IUD was lack of awareness about IUD, lack of knowledge about benefits of IUD, misconception about IUD and fear of side effects are the reasons for not utilization of IUD"

Moreover, one of urban health extension worker (community health worker) agreed on the above reasons which given by the head of health centre. She worked as /urban health extension worker/ community health workers for seven years and she stated:

"...only our effort is not enough to create sufficient awareness and knowledge about IUD. I think it good to integrate our effort with different stakeholders at the community. We are not delivering strong health education about IUD as expected from us at the community level; hence the level of awareness and knowledge of the community about IUD is very low"

Theme 2: Inadequate Counselling and Giving the Informed Choices about IUD

Adequate counselling is important for utilization of IUD as well as for the utilization of other contraceptive methods. As stated by one injectable and one IUD contraceptive users:

"I am coming to this health centre every three months to receive the injectable contraceptive/Dipoprivara/ method but I haven't received any counselling about the benefits of contraceptive you are asking /IUD/. After they gave me the injection, they give me an appointment to come back after three months on appointment date"

Misconception or misunderstanding was the result of poor counselling as stated by IUD user mother for three months and she explained the reasons of discontinue after five year utilization was. As she stated:

"I used IUD for the last three months. After I have started using this method my behaviour was completely changed 'yanagergnal', 'yabesachegnal' means it makes me 'talkative' and 'irritable'. Moreover, I feel some discomfort around my abdomen. Then I went to a clinic to get advice from Health personals, the health care provider pressured me to change another type of contraceptive methods without telling the reasons of those problems (behavioural change and discomfort around the abdomen) but I didn't agree with health personal advice then I went to a private clinic near to my home. And the health personals in privet clinic removed IUD and I started using the injectable contraceptive method. After starting the injectable method my behaviour and my health is improved rapidly"

As explained by one of new injectable contraceptive user mother

"I am a new user for short term contraceptive method/injectable/ and I got some information from my friend she was previously IUD user and I had never got counselling from the health personals about benefits of IUD. She told me to use another type of contraceptive methods, she told me as it causes infertility as well as it is not easy to remove from the womb as another contraceptive methods and it's not comfortable at the time of sexual intercourse'

To increase utilization of IUD, counselling should be focused on side effects and related factors. As pills user mother explained:

"I decided to not use this type (IUD) of contraceptive method because of I afraid of the side effects, it might be not comfortable to have sexual intercourse. Frequent checking of IUD tread is boring and I have a fear of it might change the position at the time of hard works. At the time when I want to remove, I could face several problems to remove it such as the absence of trained health personals and absence necessary equipment's to remove it."

Among the activities to increasing utilization of IUD is providing the informed choice for the available contraceptive methods including IUD. As explained one injectable contraceptive user women:

".....for your surprise, on my first visit to this Health centre, I asked the health personal about what would be better for me? But the health personals told me to use injectable contraceptive method without telling about any available contraceptives in the health centre."

Further these ideas were expressed by implant user women. She stated:

"I want to the health centre to know the types of available contraceptives to choice and I have asked one of the health officers in the health centre about currently available contraceptive methods and its benefits. He told me about all available contraceptive methods and their benefits. Then, I preferred to use Implant rather than IUD because I scared of solid device insertion in my Womb then I think it might have health problems including genital area infection and I could bleed at the time of insertion."

Theme 3: Absence of trained health personals and shortage of supplies

Supplies of IUD and absence of trained health personals for insertion and removal of IUD are among the reasons for not utilization of IUD. As explained by a pills user mother and a Implant user mother:

"I heard the benefits of IUD from TV in my home and my neighbour told me about the benefits of IUD then I decided to use IUD and I want to the health centre. But they said no IUD device and no trained health personnel for insertion of IUD. And they told me to use another type of contraceptive method"

"After I heard the benefits of IUD from radio then I went to the health centre to use IUD but Nurse in family planning unit says in our health centre, the IUD insertion equipment has been stocked out before three months and the trained nurse for insertion of IUD left to her Master's education. Hence, to not have unwanted pregnancy I decided to use short term contraceptive methods"

Discussion

The focus of this study was to explore the reasons for not utilization of IUD among short term modern contraceptive user women. This study identified three major themes discouraged IUD utilization: poor knowledge of study participants about IUD, inadequate counselling about IUD and not giving the informed choices, and absence of trained health professionals and shortage supplies. Actions on all of these themes could lead to increased utilization of IUD in the study area.

Based on our finding, giving attention to health education about the benefits of IUD to increase the knowledge level of short term modern contraceptive user women could allow the IUD appeal to a broader audience. Women who had experienced effectiveness problem and side effects with other methods seemed more open to trying a new method. Women had a strong initial interest in the method, appreciating that it is long-acting, effective, hormone-free, and would preserve normal menses. The finding of this study is similar to the study conducted in Ethiopia and Nigeria (20–22). My study findings are consistent with prior researches conducted in Addis Ababa, Ethiopia, which has shown that increased level of knowledge about IUD, as well as about long-acting contraceptives, increases the use of IUD (23, 24).

Giving informed choice and counselling about available contraceptives is among key strategies to improve utilization of Intrauterine device/IUD/. The time given to discuss with short term contraceptive user women about IUD could help to increase the utilization of IUD (25, 26). The finding of this study suggested that there are inadequate counselling services for the women about IUD from the health

personals and from health extension workers /community health workers/ to avoid misconceptions and rumours. At the time of in-depth interview, misunderstanding about IUD was not well-addressed by counselling and providing the contraceptives including IUD by the health personals and community health workers. This finding was supported by studies conducted in Pakistan (27, 28). Hence, quality counselling and follow up is important for the increased utilization of IUD (29). Health personals and health extension workers could encourage IUD utilization by giving factual information tailored to counteract rumours and misconceptions about IUD.

Supplies of IUD and absence of trained health personals for insertion and removal of IUD are among the reasons for the low utilization of IUD. Even women have the interest to use IUD if IUD device not available and if no trained health professional to insertion and removal of the device, they enforced to use short term contraceptives to avoid unwanted pregnancies. Shortage of supplies and the absence of trained health personals should be addressed by the concerned body to raise the utilization of IUD (30).

Limitation Of The Study

This study had the following limitations: as any qualitative study, the results may not be generalizable. The social desirability bias is the second limitation of the study but we have minimized by conducting an interview by trained data collectors and by using the local language.

Conclusion

The major reasons for not utilization of IUD by the short term contraceptive users are poor knowledge about IUD, inadequate counselling and inadequately informed choices of available contraceptives. Moreover, not the availability of trained health personals and shortage of supplies are reasons for not utilization of IUD. To improve utilization of IUD it needs to ensure health education to increase the awareness level of women, good counselling, and giving information about available contraceptives in the health facilities. Providing on-job training to the health care provider to avoid the shortage of trained health care provider for the insert and remove IUD.

List Of Abbreviations

ANC: Antenatal Care; AOR: Adjusted Odd Ratio; FP: Family planning; IEC: Information Education Communication; IUD: Intrauterine Device

Declarations

Ethics approval and consents to participation

This study was done after getting ethical clearance from Research and ethical committee of the school of public health, Wachemo University. Verbal consent was obtained from the participants during the data collection.

Consent for publication: Not applicable

Availability of data and material

The datasets generated and/or analyzed during the current study are not publicly available due to confidentiality. If anyone wants to have a data may contact the corresponding author for data access using the following address: Email: woldemel@gmail.com, P. O.B. 554 and Phone number +251912097351.

Competing interests

The author declare that he has no competing interests

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Authors' contributions

The author carried out conception, design, analysis, interpretation, report, and manuscript writing. The author read and approved the final manuscript.

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References

1. Population reference bureau: World population data sheet. 2011, [http://www.prb.org/pdf11/2011population-data-sheet_eng.pdf]
2. Central Statistical Agency (CSA) [Ethiopia] and ICF. 2016. Ethiopia Demographic and Health Survey 2006, Addis Ababa, Ethiopia, Calverton, Maryland, USA: Central Statistical Agency and ORC Macro,
3. Central Statistical Agency (CSA)[Ethiopia] and ICF. Ethiopia Demographic and Health Survey 2016: Key Indicators Report. Addis Ababa, Ethiopia, and Rockville, Maryland, USA. CSA and ICF.
4. Singh S, Sedgh G, Hussain R. Unintended pregnancy: worldwide levels, trends, and outcomes. Studies in family planning. 2010 Dec;41(4):241-50.
5. Gipson JD, Koenig MA, Hindin MJ. The effects of unintended pregnancy on infant, child, and parental health: a review of the literature. Studies in family planning. 2008 Mar;39(1):18-38.
6. Finer LB, Henshaw SK. Disparities in rates of unintended pregnancy in the United States, 1994 and 2001. Perspectives on sexual and reproductive health. 2006 Jun;38(2):90-6.
7. Bearak J, Popinchalk A, Alkema L, Sedgh G. 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. 2018 Apr 1;6(4):e380-9.

8. Nations U. Trends in Contraceptive Use Worldwide. Obtenido de The Department of Economic and Social Affairs. 2015.
9. World Health Organization, World Health Organization. Reproductive Health. Medical eligibility criteria for contraceptive use. World Health Organization; 2010.
10. Trussell J, Lalla AM, Doan QV, Reyes E, Pinto L, Gricar J. Cost effectiveness of contraceptives in the United States. *Contraception*. 2009 Jan 1;79(1):5-14.
11. Ethiopian Public Health Institute (EPHI)[Ethiopia] and ICF. 2019. Ethiopia Mini Demographic and Health Survey 2019: Key Indicators. Rockville, Maryland, USA: EPHI and ICF
12. Dereje N, Engida B, Holland RP. Factors associated with intrauterine contraceptive device use among women of reproductive age group in Addis Ababa, Ethiopia: A case control study. *PloS one*. 2020 Feb 18;15(2):e0229071.
13. Sanfield A. Popularity disparity: attitudes about the IUD in Europe and the United States. *Guttmacher Policy Rev*. 2007;10:19–24.
14. Black K, Lotke P, Buhling KJ, Zite NB, Intrauterine Contraception for Nulliparous Women: Translating Research into Action (INTRA) group. A review of barriers and myths preventing the more widespread use of intrauterine contraception in nulliparous women. *The European Journal of Contraception & Reproductive Health Care*. 2012 Oct 1;17(5):340-8.
15. Stanwood NL, Garrett JM, Konrad TR. Obstetrician-gynecologists and the intrauterine device: a survey of attitudes and practice. *Obstetrics & Gynecology*. 2002 Feb 1;99(2):275-80.
16. Gbagbo FY, Kayi EA. Use and discontinuation of intrauterine contraceptive device in the Greater Accra region of Ghana. *Contraception and reproductive medicine*. 2018 Dec 1;3(1):8.
17. Postlethwaite D, Trussell J, Zoolakis A, Shabear R, Petitti D. A comparison of contraceptive procurement pre-and post-benefit change. *Contraception*. 2007 Nov 1;76(5):360-5.
18. Goodman S, Hendlish SK, Benedict C, Reeves MF, Pera-Floyd M, Foster-Rosales A. Increasing intrauterine contraception use by reducing barriers to post-abortal and interval insertion. *Contraception*. 2008 Aug 1;78(2):136-42.
19. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative research in psychology*. 2006 Jan 1;3(2):77-101.
20. Sonfield A. Popularity disparity: attitudes about the IUD in Europe and the United States. *Guttmacher Policy Rev*. 2007;10(4):19-24.
21. Gebremariam A, Addissie A. Knowledge and perception on long acting and permanent contraceptive methods in Adigrat town, Tigray, northern Ethiopia: a qualitative study. *International journal of family medicine*. 2014;2014.
22. Adeyinka A, Asabi O, Adedotun O. Knowledge and practice of contraception among women of reproductive ages in South West, Nigeria. *The International Journal of Engineering and Science*. 2014;1(2):70-6.

23. Sandy PT, Mavhandu-Mudzusi AH, Tirfe BT, Mundeta B. Factors influencing the utilisation of the intra-uterine contraceptive device among women in Addis Ababa, Ethiopia. Africa Journal of Nursing and Midwifery. 2015 Jan 1;17(2):4-16.
24. Dereje N, Engida B, Holland RP. Factors associated with intrauterine contraceptive device use among women of reproductive age group in Addis Ababa, Ethiopia: A case control study. PloS one. 2020 Feb 18;15(2):e0229071.
25. AVSC International: Family Planning Counseling: A curriculum prototype; Participant's handbook. New York: AVSC International; 1995.
26. 26Family Health International: Contraceptive Technology Update (CTU) series. North Carolina: Research Triangle Park; 1999.
27. Khan A, Shaikh BT. An all time low utilization of intrauterine contraceptive device as a birth spacing method-a qualitative descriptive study in district Rawalpindi, Pakistan. Reproductive health. 2013 Dec 1;10(1):10.
28. Azmat SK, Mustafa G, Hameed W, Ali M, Ahmed A, Bilgrami M. Barriers and perceptions regarding different contraceptives and family planning practices amongst men and women of reproductive age in rural Pakistan: a qualitative study. Pak J Public Health. 2012 Mar;2(1):17-23.
29. Azmat SK, Shaikh BT, Hameed W, Bilgrami M, Mustafa G, Ali M, Ishaque M, Hussain W, Ahmed A. Rates of IUCD discontinuation and its associated factors among the clients of a social franchising network in Pakistan. BMC women's health. 2012 Dec;12(1):8.
30. Human Reproduction Update, Vol.14, No.3 pp. 197–208, 2008 doi:10.1093/humupd/dmn00
Intrauterine devices and intrauterine systems P.G. Crosignani,