Open Journal of Obstetrics and Gynecology, 2014, 4, 1087-1097

Published Online December 2014 in SciRes. http://dx.doi.org/10.4236/ojog.2014.416150



Post Abortion Women's Perceptions of Utilizing Long Acting Reversible Contraceptive Methods in Uganda. A Qualitative Study

Othman Kakaire^{1*}, Janet Nakiggude², John C. Lule¹, Josaphat K. Byamugisha¹

¹Department of Obstetrics and Gynaecology, School of Medicine, Makerere University College of Health Science, Kampala, Uganda

²Department of Psychiatry, School of Medicine, Makerere University College of Health Science Kampala, Uganda

Email: *kakaireothman@gmail.com

Received 26 July 2014; revised 30 August 2014; accepted 11 September 2014

Academic Editor: Seung-Yup Ku, Seoul National University, South Korea

Copyright © 2014 by authors and Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution International License (CC BY). http://creativecommons.org/licenses/by/4.0/



Open Access

Abstract

Background: About one-third of all pregnancies that occur in low income countries are unintended. An estimated 1.2 million unwanted pregnancies occur in Uganda annually. The majority of the unwanted pregnancies end in unsafe abortion which is one of the five direct causes of maternal mortality. Abortion related complications are responsible for 26% of all maternal deaths in Uganda. Abortion complications can be avoided if women appropriately use contraception to avoid unwanted pregnancy. However, in Uganda the contraceptive prevalence is low at 30% and less than 4% of women rely on long acting reversible contraceptives. Aim: We aimed to explore post-abortion women's perceptions of using of long acting reversible contraception (LARC). Methods: A qualitative research design was used for data collection and analysis. Thirty in-depth interviews with post abortion women in Mulago hospital were carried out using an interview guide. Interviews were transcribed and coded using nodes and subsequently through query, we derived themes. Results: Emergent themes regarding women perceptions of using LARC methods were myths and misinformation, fear of side effects, women's lived experiences, relatives' influence, health providers' perceptions, lack of knowledge and women desire for spacing children for a long time. Conclusion and recommendations: The majority of women were skeptical about using LARC. There is a need to educate women to dispel myths, misinformation and quality counseling to address the benefits and side effects of LARC. There is also a need to revamp the knowledge and

How to cite this paper: Kakaire, O., Nakiggude, J., Lule, J.C. and Byamugisha, J.K. (2014) Post Abortion Women's Perceptions of Utilizing Long Acting Reversible Contraceptive Methods in Uganda. A Qualitative Study. *Open Journal of Obstetrics and Gynecology*, **4**, 1087-1097. http://dx.doi.org/10.4236/ojog.2014.416150

^{*}Corresponding author.

skills of the healthcare providers regarding LARC methods.

Keywords

Perceptions, Contraception, Family Planning, LARC, Post-Abortion

1. Introduction

Unintended pregnancy remains a global public health problem despite the availability of effective contraceptives [1]. The burden of unwanted pregnancy is highest in low and middle income countries (LMIC) where one-third of all pregnancies are unintended [2]. In Sub Saharan Africa the unmet need for contraception is very high leading to high prevalence of unwanted pregnancies [3]. This unmet need for family planning is a result of poor knowledge, inadequate logistics, lack of contraceptive access to women and limited availability of skilled health care providers who can provide some family planning methods [1]. A substantial proportion of unplanned pregnancies also occur due to contraceptive method failure [4]. More than 40% of these unintended pregnancies will end in induced abortion [5] [6]. Furthermore, just over 50% of the women seeking pregnancy termination report having used contraception in the month prior to the unintended pregnancy [7].

Uganda has a high fertility rate and a low contraceptive prevalence rate of 6.2% and 30% respectively [8]. Only three quarters of contraceptive users rely on modern family planning methods [8]. The prevalence of unwanted pregnancy is high and about 56% of all pregnancies are unintended [9]. Thus an estimated 1.2 million unwanted pregnancies occur in Uganda annually [9]. The majority of the unwanted pregnancies end in unsafe abortion which is one of the major direct causes of maternal mortality. Abortion related complications are responsible for 26% of all the maternal deaths in Uganda [8] [9]. Evidence suggests that a substantial proportion of women in Uganda do not utilize or intend to use contraception in the future due to fears of side effects and opposition from the husband or partners [10].

Provision of immediate post-abortion contraception is an important strategy to prevent repeated unwanted pregnancies. After termination of pregnancy, fertility returns within 2 weeks in most women [11] [12]. Initiation of long acting reversible contraceptive (LARC) methods such as the intrauterine device and sub dermal implants, immediately following an abortion has been shown to be safe and effective at preventing un wanted pregnancies [13]-[15]. Provision of effective contraception, to prevent unwanted pregnancies among women seeking post abortion care services is a key strategy for preventing maternal deaths [16]. Although short term, user dependant contraceptives such as oral contraceptive pills, depo-medroxyprogesterone (DMPA) and condoms are highly effective at preventing pregnancy, they have high discontinuation rates [17]. Fifty-eight percent of women seeking abortion care services report use of a contraceptive method during the month of conception [18]. These pregnancies result from improper use of short term reversible methods that require continuous motivation from the user. It has been shown that 20% of unintended pregnancies are due to discontinuation of oral contraceptive pill [19].

LARC methods are highly effective with failure rates of less than 1% [20]. LARC methods are non user dependent and do not rely on continuing user motivation for their effectiveness [3] [18]. However, LARC is underutilized in sub-Saharan Africa countries including Uganda [3] [21] [22].

Uganda's pattern of low LARC use is manifested by the low IUD and implants use of 0.5% and 2.7% respectively [8]. The aim of this study is to explore participants' perceptions towards the use of LARC among women seeking post abortion care services at Mulago hospital.

2. Methods

2.1. Study Setting

This study involved research on women who sought post abortion services. The study was carried out in the emergency gynecological ward of Mulago National Referral and University Teaching Hospital from 3rd February 2014 to 14th March 2014. Twenty women seek post abortion services at Mulago Hospital on a daily basis. The services rendered at the hospital include; uterine evacuation, blood transfusion, treatment of sepsis and surgery



for severe complications following unsafe abortion.

2.2. Theoretical Underpinning on Family Planning Use

The theoretical framework used to explore the perceptions of post abortion towards contraception was adapted from the Bulatao's theory on the determinants of fertility in developing countries [23]. Initially, family Planning programs were introduced in low income countries in the early 1950s for purposes of curbing the rapid population growth in as much as it was negatively impacting on economic growth. The goals of Family Planning in low income countries later were broadened to encompass the need to improve women's health [24]. Whereas it is hoped that the public health goals should be congruent to those of the affected young women, there are variables that impact on the woman's contraception and may impact on to the public health goals. The Fertility Decision Making theory [23], considers factors that determine whether a young woman will use contraception or not. First a woman must be able to access knowledge upon which the woman should then form perceptions regarding accessibility and availability of a family planning method if she is to make a decision on her fertility regulation.

Secondly the decision making process is influenced by motivation. The drive to regulate one's fertility is influenced by the socio-economic status of the individual, their culture and family life cycle. Thirdly a woman will adopt contraception after weighing the pros and cons of using Family Planning.

2.3. Study Design

We used an exploratory research design for qualitative data collection and analysis. Due to the private nature of the abortion in our set up, we carried out in-depth interviews with 30 post abortion women. The information obtained from these interviews was used to develop an educational tool for an interventional study to promote the uptake of LARC methods among women seeking post abortion services at Mulago Hospital. The goal of this mixed methods study was to explore perceptions and determine the influence of an educational intervention on the uptake of LARC methods among women seeking post abortion services at Mulago Hospital.

2.4. Data Collection

Purposive sampling was used to select thirty participants and exit interviews conducted with women who sought post abortion services. The participants were recruited from the emergency gynecological ward of Mulago hospital at the time of discharge. Unstructured interviews were employed in order to enable the participants to express their views freely and the meanings they attached to their experiences. To clarify the questions, an interview guide was used. There was flexibility in the order of questions and prompts were employed to enhance understanding of the unique experiences of the participants. With the permission of the participants, the interviews were audio taped in the local dialect (Luganda) and later translated into English. A journal was kept for recording detailed field notes about the cultural and contextual incidents that were heard, seen, experienced, and thought about during the process of data collection, in order to better comprehend and interpret the content of the interviews.

2.5. Data Analysis

This involved reading and rereading the transcribed interviews to gain insight and deeper meaning in order to identify codes and themes. The analysis was done concurrently with data collection, which helped the interviewers to know what to ask in the next interview and to cross check information from each interview with subsequent participants. This process made it possible to recognize the saturation point at which no new information emerged from the data. Data was analyzed with the help of INvivo software package for qualitative data analysis [25]. Emergent data was grouped into primary and secondary nodes and then themes were derived.

2.6. Ethical Considerations

Ethical approval to conduct the study was from the Makerere University College of Health Sciences Research and ethics committee and Uganda National Council for Science and Technology. Administrative clearance was also obtained from the Mulago Hospital ethical review board where the study was carried out. Written voluntary



informed consent was obtained from the participants.

3. Results

We set out to explore perceptions regarding the use of long acting reversible contraceptive methods from women who were receiving post abortion care at Mulago National Referral Hospital in Uganda. The following themes were derived from the qualitative data: myths and misinformation regarding use of LARC methods, side effects related to the use of LARC methods, lack of knowledge, women's lived experiences using family planning, partners' and in-laws' views on use of long acting reversible contraception, health providers' impact on women's perceptions towards the use of LARC methods. Women who desired a long pregnancy interval between births had favorable perceptions towards LARC methods. The socio-demographics characteristics of the participants are as shown in Table 1.

3.1. Myths and Misinformation Regarding Use of LARC Methods

A good number of post abortion women were aware of the long acting reversible contraception but they were not keen on using these methods. Some of the misinformation regarding the use of long acting methods for fertility regulation were as follows:

I am not so sure I would like to use a long acting family planning method because I might use it and then become infertile. If you want to still have children, you don't want to use a coil because you may have problems and not be able to have children ever. (26-year-old post abortion woman)

I don't want to have a long acting method because I want to decide at any point I want to conceive, I should be able to conceive and have a child. When I want to conceive, I want to conceive immediately. My first born is 8 years old. The one following my first born is 1 year. But we are getting old. I want to have all my children and then do other things. I would like for this baby to grow to 2 years and then I conceive again. (28-year-old post abortion woman)

Table 1. Socio-demographics of post abortion women.

Variable	N = 30 Frequency %
Age	
<20	6 20
21 - 25	10 33
26 - 30	8 27
>30	6 20
Marital status	
Single	8 27
Married	22 73
Religion	
Catholic	12 40
Protestant	9 30
Moslem	6 20
SDA	3 10
Education	
Primary	16 43
Secondary	12 40
Tertiary	5 17
Parity	
Abortion with no living children	6 20
1 - 3	16 53
>3	8 27
Unintended Pregnancy	
Yes	19 63.3
No	11 26.7

Previous research among prenatal women has reported that women hold a misperception of becoming infertile if they used long acting reversible contraceptive methods [26]-[28]. Our research shows that the misconceptions have persisted.

Along with the misconception of infertility there was the issue of timing of conception. Women perceived contraceptive methods as robbing them of the opportunity be in control of their fertility. This was illustrated in what some women said regarding contraception:

I want something I will use and then be able to conceive when I want to. (22-year-old post abortion woman)

Some women were apprehensive about use of long acting contraceptive methods because they perceived them to be a cause of cancer as the quotation here shows.

We are told that when it gets to a time when you have sex with a man, this coil can disappear into the womb. Then when this happens, they need to remove it. Otherwise a woman may develop cancer. (33-year-old post abortion woman)

Lack of accurate information regarding LARC seemed to negatively impact on women's uptake of this long acting contraceptive method.

I would like to use one of the long acting methods of contraception but I need to understand how it works. (35-year-old post abortion woman with)

Uptake of family planning methods has been shown to be influenced by the knowledge of potential users. Improving Women education about family planning methods through the provision of educational leaflets and counseling has been shown to increase contraceptive use [29].

3.2. Fear of Side Effects Related to the Use of LARC Methods

Women reported having heard from peers who had used LARC methods and the reported side effects were mostly related to pain, excessive weight changes, irregular vaginal bleeding and dryness. Women complained of the pain they experienced or their peers had experienced as a result of using the IUD. This is illustrated by the following quotation.

I fear having the coil because it might be painful. The implant is painful and you may not be able to carry on with your chores? (28-year-old post abortion woman)

Whereas some women were worried about pain others reported side effects of bleeding and sexual challenges as the following quotation illustrates:

They put an implant into my sister but she told me that whenever she has sex, she bleeds. (30-year-old post abortion woman)

On the other hand, implants make the body (vaginal) dry and sex becomes difficult and not enjoyable so one might lose interest in sex. (35-year-old post abortion woman)

I have a friend I have been talking to and she told me that this can be a dangerous method and it can lead to heavy bleeding. (27-year-old post abortion woman)

Globally a good number of women are concerned about the side effects of using LARC and this has been a reason for the discontinuation of the contraceptive method [30] [31].

Women had concerns about body image like gaining weight as is illustrated in the following quotations:

I have a neighbor who uses the IUD. It has been 4 months but she has gained so much weight and everyone is concerned. Even my neighbor herself thinks that she is gaining weight because of the IUD. But because she does not want to get pregnant, she is committed to keeping it there. (25 year old post abortion woman)

I have fears using this because I am tiny and skinny. However I have a friend who used the implant and she gained a lot of weight. (21 year old post abortion woman)

Weight gain is common reason given for the discontinuation of hormonal contraceptives especially the progestin only contraceptives [32]. However, even users of intrauterine contraceptives report weight gain which could be a result of change in lifestyle as women grow older [33].

3.3. Women's Lived Experiences Using Family Planning

Whereas some women were responding from a perspective of what they had heard about use of long acting reversible contraceptive methods, others were reporting out of their experiences because they had used long acting reversible contraception and this appeared to influence their women's perceptions on using any family planning methods:

I got side effects... I felt dizzy, nauseated like I was pregnant. However, once it got used to my body, the nau-

sea was no more. The other side effect that I am aware of is having a back ache but when I took out the implant, the back pain eased. The other problem that I had was that I used to get chest pain. (27-year-old post abortion woman who had used the implant)

Women with previous experience of using family planning methods are more likely to use long acting contraceptive methods [34] [35].

3.4. Partners' and In-Laws' Views on Use of Long Acting Reversible Contraception by the Women

Partners' views on long acting reversible contraception methods were mixed. Some partners wanted their women to use long acting reversible contraception because their women had previously had abortions or they wanted to space their children:

He is the one who told me to come for family planning because we have enough children. We have 5 children. (33-year-old post abortion woman)

He said that if this pregnancy comes out, then we should have a break and not have other pregnancies because of what I go through. He has no problem with me starting on long acting. (30-year-old post abortion woman)

Other partners were apprehensive about their women using long acting reversible contraception and this is what the women reported of their husbands:

My husband says that it may cause me cancer. (26-year-old post abortion woman)

Our husbands also complain when you use the coil and the implants. The coil can pierce him while (having sex) and that cannot make him happy. (33-year-old post abortion woman)

There were partners who were perceived to be accommodating and these would agree to whichever method their women decided to use:

My husband would not get upset if I told him that I am using a method that is long acting. I just know that he would not get upset. He would go with whatever I decide I want. (25-year-old post abortion woman)

The male partner influences the uptake and continuation of contraceptive use. Women's decision to utilize contraception in Africa, depends on the support they get from their partners [28] [34] [36] [37].

In-laws in developing countries where women completely rely on their husbands for financial and socio support can also have a say on the methods of contraception one uses as one woman reported:

My in-law has been saying that because the implant made me put on weight, I might never give birth again. She also said that if I become pregnant again then I may give birth to a disabled child! (27-year-old postpartum woman)

It became clear from the in depth interviews that most often those opposed to family planning use are the higher ranking members of the family such mothers-in-law. Peers and even members of the community where women lived influenced the women's perceptions of LARC methods [38] [39].

3.5. Health Providers' Impact (Influence) on Women's Decision to Use LARC

Healthcare providers like nurses impacted on the women's perception of utilizing LARC contraceptive methods as described below:

However, healthcare givers tell us that when we take long acting contraception, we get complications. The nurses themselves told me that I got complications with the delivery of my second born because I had been using family planning. (26-year-old post abortion woman)

I do not have a lot of information about those two methods since I have never used them. I have never been educated about family planning methods from the health professionals. Whatever I have learnt is from my friends and advertisements on radio and television. (19-year-old post abortion woman)

Health providers are very influential in contraceptive decision making. Evidence shows that positive provider attitude is a key element in enhancing contraceptive use. Our study indicates that the behavior of providers might influence women's perceptions and attitudes towards LARC methods [30] [40].

3.6. Women Who Wanted to Space Children Had Favorable Perceptions towards Using LARC Methods

Women who wanted to have big birth interval between their children held favorable perceptions towards LARC

methods.

I like this method because I want my child to make 5 years before I think about another pregnancy. In her infancy, I had problems with house help and so I decided that I wanted to space my children. My mother had very good spacing. We are three and each of us has a difference of 7 years. I want my children to be healthy. I wanted to space my children. (27-year-old post abortion woman)

These findings indicated that respondents who were aware of the benefits of LARC family planning had positive perceptions [36].

4. Discussion

We aimed to explore the perceptions of post abortion women on using long acting reversible contraceptive (LARC) methods at a National referral hospital in Uganda. Although LARC methods are free and available in the public health sector, they are underutilized. Our results show that women's perceptions about LARC methods are shaped by myths and misinformation. Among the myths and misinformation elicited from the women were the unfounded fears of infertility, delayed return to fertility, and development of cancer following use of LARC. Women were also concerned about the side effects that could result from the use of LARC methods; including weight gain, excessive bleeding, pain during sex and loss of libido. Women's lived experiences in using family planning methods influenced their perceptions of LARC methods. The perceptions of the family like partners and in-laws also influenced the women's perceptions of LARC methods use. Healthcare providers lacked correct information and negatively impacted on the women's perceptions. Finally women who wanted to space their children were more likely to have favorable perceptions of LARC methods.

Our results show that a good number of women were misinformed, lacked correct information and had misperceptions of LARC methods. It has been shown that misinformation and lack of correct knowledge results in a low uptake of LARC methods [22]. Many women were worried about becoming infertile and expressed concerns that return to fertility would be delayed after discontinuation of LARC methods. However, there is no empirical evidence to support this fear and available evidence shows that women's return to fertility after discontinuation of LARC methods is immediate [26]-[28] [41]-[43].

Fear of cancer was another myth that negatively influenced post abortion women's perceptions of using LARC methods. There is evidence that long term use of combined contraceptives may be a cofactor in the causation of cervical cancer [44] [45]. However, this information may have been generalized to other family planning methods and hence the reason of why post abortion women hesitate to use LARC methods. Yet, use of LARC methods is associated with a reduction in both endometrial and cervical cancers [46] [47].

The side effects of using LARC methods were pointed out as barriers to women's uptake of LARC methods. Participants reported that they had friends and relatives who had suffered side effects related to use of LARC methods. Women reported excessive weight gain as a result of using LARC methods. Studies show that use of Implants and intrauterine devices are associated with weight gain [32] [33] though the weight gain may be attributed to a change in life style as the women grow older

Irregular vaginal bleeding was also pointed out as a barrier to uptake of LARC methods in this population. There is empirical evidence that both methods of LARC, implants and IUDs are associated with irregular vaginal bleeding [30] [31]. Vaginal dryness was a turn off for women's desire to use LARC methods. Women reported that their partners complained of a lack of lubrication during intercourse and this impacted on their sexual life. Although this is true for the implant which reduces genital secretions, it is not true for the IUD and there was indication that these women failed to differentiate between the side effects of the implant and the IUD.

Women's lived experiences impacted on their perceptions regarding use of LARC methods. Women who had used the methods and suffered from side effects had negative perceptions of use of LARC methods. Evidence suggests that prior experience with a contraceptive method influences women's demand for LARC methods [34] [35].

Our findings also show that women's family influenced perception of using LARC methods. Generally in Low and middle income (LMIC) countries, married women are expected to give birth to many children [36]. As such, family members including spouses and in-laws may not be supportive of a woman's desire to use LARC methods. This is coupled with the fact that people in LMIC still live in an extended family system in which many relatives like grandparents, parents, in-laws and even members of the community are stakeholders regarding women's reproduce decisions [38] [39].



Furthermore, our findings showed that healthcare providers either lacked correct information or did not provide adequate information regarding LARC methods to post abortion women. The participants reported having been discouraged by healthcare providers on using LARC methods while others complained of receiving information from none professionals like friends, peers and the media. It is known that many healthcare providers lack knowledge and skills to provide LARC methods in Africa and improving provider knowledge and skill improves uptake of LARC methods [40]. Women believe that health care providers are knowledgeable and can be trusted to maintain confidentiality, advise on method use and side effects [28]. The lack of knowledge and skills to provide LARC methods could be the reason for healthcare providers' reluctance to talk about LARC methods and in the process discouraging potential users.

Finally, women who wanted to space and viewed a small family to be beneficial had positive perceptions of LARC methods. It is well documented that LARC methods are cheap, convenient, safe and effective at preventing unwanted pregnancies [48] [49]. Thus Women who wanted to space viewed LARC methods as convenient and easy to use since they would not have to come to hospital to replenish their supplies for family planning methods frequently.

The limitation of the study is that this being a qualitative study with a small convenience sample of women seeking post abortion care services at an urban hospital its findings cannot be generalized to the entire population of women seeking post abortion care services in Uganda. Secondly, despite these being exit interviews conducted with the help of a socio-scientist, it is possible that the participants viewed the interviewer as a health care provider and this could have biased their responses. However, our aim of conducting the present qualitative study was to help us better understand the factors that influence the complex process of contraceptive decision making among post abortion women and obtain the main information domains to be included in an educational tool that is being sed to encourage uptake of LARC methods among post abortion women at Mulago Hospital.

5. Conclusion

The perceptions of post abortion women were negatively influenced by myths and misinformation, fear of side effects, lived experiences and healthcare providers' lack of information and skills. However, women who wanted to space for a long time, held positive perceptions of LARC methods. There is a need to provide accurate and correct information concerning the use of LARC methods to both potential users and healthcare providers to dispel myths and misinformation.

Acknowledgements

The Family Health Research and Development Centre (FHRDC), Makerere University School of Public Health and the Bill and Melinda Gates Institute for Population and Reproductive Health at Johns Hopkins Bloomberg School of Public Health, USA provided financial support for this work.

Competing Interests

The authors declare no competing interests.

References

- [1] Blumenthal, P.D., Voedisch, A. and Gemzell-Danielsson, K. (2011) Strategies to Prevent Unintended Pregnancy: Increasing Use of Long-Acting Reversible Contraception. *Human Reproduction Update*, 17, 121-137. http://dx.doi.org/10.1093/humupd/dmq026
- [2] World Health Organization (2012) Facts on Induced Abortion Worldwide. World Health Organization, Geneva. http://www.who.int/reproductivehealth/publications/unsafe_abortion/induced_abortion_2012.pdf
- [3] Hubacher, D., Mavranezouli, I. and McGinn, E. (2008) Unintended Pregnancy in Sub-Saharan Africa: Magnitude of the Problem and Potential Role of Contraceptive Implants to Alleviate It. *Contraception*, 78, 73-78. http://dx.doi.org/10.1016/j.contraception.2008.03.002
- [4] Jones, E.F. and Forrest, J.D. (1992) Contraceptive Failure Rates Based on the 1988 NSFG. Family Planning Perspectives, 24, 12-19. http://dx.doi.org/10.2307/2135719
- [5] Finer, L.B. and Henshaw, S.K. (2006) Disparities in Rates of Unintended Pregnancy in the United States, 1994 and 2001. Perspectives on Sexual and Reproductive Health, 38, 90-96. http://dx.doi.org/10.1363/3809006

- [6] Jones, R.K., Zolna, M.R., Henshaw, S.K. and Finer, L.B. (2008) Abortion in the United States: Incidence and Access to Services, 2005. Perspectives on Sexual and Reproductive Health, 40, 6-16. http://dx.doi.org/10.1363/4000608
- [7] Jones, R.K., Darroch, J.E. and Henshaw, S.K. (2002) Contraceptive Use among US Women Having Abortions in 2000-2001. Perspectives on Sexual and Reproductive Health, 34, 294-303. http://dx.doi.org/10.2307/3097748
- [8] Uganda Bureau of Statistics (UBOS) and ICF International Inc. (2012) Uganda Demographic and Health Survey 2011. UBOS and Calverton, Kampala. ICF International Inc., Maryland. http://www.ubos.org/onlinefiles/uploads/ubos/UDHS/UDHS2011.pdf
- [9] Hussain, R. (2013) Unintended Pregnancy and Abortion in Uganda, in Brief. Guttmacher Institute, New York. http://www.guttmacher.org/pubs/IB-Unintended-Pregnancy-Uganda.html
- [10] Khan, S., Bradley, E.K.S., Joy, F. and Mishra, V. (2008) Unmet Need and the Demand for Family Planning in Uganda. Further Analysis of the Uganda Demographic and Health Surveys, 1995-2006 Calverton, Maryland, Macro International, MEASURE DHS, 42 p (USAID Contract No. GPO-C-00-03-00002-00; DHS Further Analysis No. 60). http://www.poplineorg/node/203998#sthash7KiKxy5Zdpuf
- [11] Cameron, I.T. and Baird, D.T. (1988) The Return to Ovulation Following Early Abortion: A Comparison between Vacuum Aspiration and Prostaglandin. *Acta Endocrinologica (Copenhagen)*, **118**, 161-167.
- [12] Lahteenmaki, P. and Luukkainen, T. (1978) Return of Ovarian Function after Abortion. Clinical Endocrinology, 8, 123-132.
- [13] Grimes, D.A., Gallo, M.F., Grigorieva, V., Nanda, K. and Schulz, K.F. (2004) Fertility Awareness-Based Methods for Contraception. *The Cochrane Database of Systematic Reviews*.
- [14] Goodman, S., Hendlish, S.K., Reeves, M.F. and Foster-Rosales, A. (2008) Impact of Immediate Postabortal Insertion of Intrauterine Contraception on Repeat Abortion. *Contraception*, 78, 143-148. http://dx.doi.org/10.1016/j.contraception.2008.03.003
- [15] Goodman, S., Hendlish, S.K., Benedict, C., Reeves, M.F., Pera-Floyd, M. and Foster-Rosales, A. (2008) Increasing Intrauterine Contraception Use by Reducing Barriers to Post-Abortal and Interval Insertion. *Contraception*, 78, 136-142. http://dx.doi.org/10.1016/j.contraception.2008.03.008
- [16] Shaw, D. (2010) The FIGO Initiative for the Prevention of Unsafe Abortion. *International Journal of Gynaecology and Obstetrics*, **110**, S17-S19. http://dx.doi.org/10.1016/j.ijgo.2010.04.004
- [17] Trussell, J. and Vaughan, B. (1999) Contraceptive Failure, Method-Related Discontinuation and Resumption of Use: Results from the 1995 National Survey of Family Growth. Family Planning Perspectives, 31, 64-72. http://dx.doi.org/10.2307/2991641
- [18] Secura, G.M., Allsworth, J.E., Madden, T., Mullersman, J.L. and Peipert, J.F. (2010) The Contraceptive CHOICE Project: Reducing Barriers to Long-Acting Reversible Contraception. *American Journal of Obstetrics and Gynecology*, 203, 115.e1-115.e7.
- [19] Rosenberg, M.J., Waugh, M.S. and Long, S. (1995) Unintended Pregnancies and Use, Misuse and Discontinuation of Oral Contraceptives. *The Journal of Reproductive Medicine*, **40**, 355-360.
- [20] Trussell, J., Lalla, A.M., Doan, Q.V., Reyes, E., Pinto, L. and Gricar, J. (2009) Cost Effectiveness of Contraceptives in the United States. *Contraception*, **79**, 5-14. http://dx.doi.org/10.1016/j.contraception.2008.08.003
- [21] d'Arcangues, C. (2007) Worldwide Use of Intrauterine Devices for Contraception. Contraception, 75, S2-S7. http://dx.doi.org/10.1016/j.contraception.2006.12.024
- [22] Speidel, J.J., Harper, C.C. and Shields, W.C. (2008) The Potential of Long-Acting Reversible Contraception to Decrease Unintended Pregnancy. *Contraception*, **78**, 197-200. http://dx.doi.org/10.1016/j.contraception.2008.06.001
- [23] Bulatao, R.A. and Lee, R.D., Eds. (1983) Determinants of Fertility in Developing Countries. Academic Press, New York.
- [24] Castro Martin, T. and Juarez, F. (1994) Women's Education and Fertility in Latin America: Exploring the Significance of Education for Women's Lives. Demographic and Health Surveys Working Papers No. 10, Macro International, Calverton.
- [25] NVivo Qualitative Data Analysis Software. Version 10, QSR International Pty Ltd., 2012.
- [26] Morse, J.E., Rowen, T.S., Steinauer, J., Byamugisha, J. and Kakaire, O. (2014) A Qualitative Assessment of Ugandan Women's Perceptions and Knowledge of Contraception. *International Journal of Gynaecology and Obstetrics*, **124**, 30-33. http://dx.doi.org/10.1016/j.ijgo.2013.07.014
- [27] Williamson, L.M., Parkes, A., Wight, D., Petticrew, M. and Hart, G.J. (2009) Limits to Modern Contraceptive Use among Young Women in Developing Countries: A Systematic Review of Qualitative Research. *Reproductive Health*, 6, 3. http://dx.doi.org/10.1186/1742-4755-6-3
- [28] Gebremariam, A. and Addissie, A. (2014) Intention to Use Long Acting and Permanent Contraceptive Methods and

- Factors Affecting It among Married Women in Adigrat Town, Tigray, Northern Ethiopia. *Reproductive Health*, **11**, 24. http://dx.doi.org/10.1186/1742-4755-11-24
- [29] Saeed, G.A., Fakhar, S., Rahim, F. and Tabassum, S. (2008) Change in Trend of Contraceptive Uptake—Effect of Educational Leaflets and Counseling. *Contraception*, 77, 377-381. http://dx.doi.org/10.1016/j.contraception.2008.01.011
- [30] Weston, M.R., Martins, S.L., Neustadt, A.B. and Gilliam, M.L. (2012) Factors Influencing Uptake of Intrauterine Devices among Postpartum Adolescents: A Qualitative Study. American Journal of Obstetrics and Gynecology, 206, 40.e1-40.e7.
- [31] Mohamed, A.M., Rachael, S.K., Cleland, J.N., Thoai, D. and Shah, I.H. (2011) Long-Term Contraceptive Protection, Discontinuation and Switching Behavior: Intrauterine Device (IUD) Use Dynamics in 14 Developing Countries. World Health Organization and Marie Stopes International, London.
- [32] Bahamondes, L., Del Castillo, S., Tabares, G., Arce, X.E., Perrotti, M. and Petta, C. (2001) Comparison of Weight Increase in Users of Depot Medroxyprogesterone Acetate and Copper IUD up to 5 Years. *Contraception*, **64**, 223-225. http://dx.doi.org/10.1016/S0010-7824(01)00255-4
- [33] Hassan, D.F., Petta, C.A., Aldrighi, J.M., Bahamondes, L. and Perrotti, M. (2003) Weight Variation in a Cohort of Women Using Copper IUD for Contraception. *Contraception*, 68, 27-30. http://dx.doi.org/10.1016/S0010-7824(03)00079-9
- [34] Bulto, G.A., Zewdie, T.A. and Beyen, T.K. (2014) Demand for Long Acting and Permanent Contraceptive Methods and Associated Factors among Married Women of Reproductive Age Group in Debre Markos Town, North West Ethiopia. *BMC Women's Health*, **14**, 46. http://dx.doi.org/10.1186/1472-6874-14-46
- [35] Takele, A., Degu, G. and Yitayal, M. (2012) Demand for Long Acting and Permanent Methods of Contraceptives and Factors for Non-Use among Married Women of Goba Town, Bale Zone, South East Ethiopia. *Reproductive Health*, 9, 26. http://dx.doi.org/10.1186/1742-4755-9-26
- [36] Chipeta, E.K., Chimwaza, W. and Kalilani-Phiri, L. (2010) Contraceptive Knowledge, Beliefs and Attitudes in Rural Malawi: Misinformation, Misbeliefs and Misperceptions. *Malawi Medical Journal: The Journal of Medical Association of Malawi*, 22, 38-41.
- [37] Kabagenyi, A., Jennings, L., Reid, A., Nalwadda, G., Ntozi, J. and Atuyambe, L. (2014) Barriers to Male Involvement in Contraceptive Uptake and Reproductive Health Services: A Qualitative Study of Men and Women's Perceptions in Two Rural Districts in Uganda. *Reproductive Health*, 11, 21. http://dx.doi.org/10.1186/1742-4755-11-21
- [38] Chacko, E. (2001) Women's Use of Contraception in Rural India: A Village-Level Study. Health & Place, 7, 197-208. http://dx.doi.org/10.1016/S1353-8292(01)00009-0
- [39] Stephenson, R., Baschieri, A., Clements, S., Hennink, M. and Madise, N. (2007) Contextual Influences on Modern Contraceptive Use in Sub-Saharan Africa. *American Journal of Public Health*, 97, 1233-1240. http://dx.doi.org/10.2105/AJPH.2005.071522
- [40] Neukom, J., Chilambwe, J., Mkandawire, J., Mbewe, R.K. and Hubacher, D. (2011) Dedicated Providers of Long-Acting Reversible Contraception: New Approach in Zambia. *Contraception*, 83, 447-452. http://dx.doi.org/10.1016/j.contraception.2010.08.021
- [41] Glasier, A. (2002) Implantable Contraceptives for Women: Effectiveness, Discontinuation Rates, Return of Fertility, and Outcome of Pregnancies. Contraception, 65, 29-37. http://dx.doi.org/10.1016/S0010-7824(01)00284-0
- [42] Andersson, K., Batar, I. and Rybo, G. (1992) Return to Fertility after Removal of a Levonorgestrel-Releasing Intrauterine Device and Nova-T. Contraception, 46, 575-584. http://dx.doi.org/10.1016/0010-7824(92)90122-A
- [43] Morse, J., Freedman, L. and Speidel, J.J., Thompson, K.M., Stratton, L. and Harper, C.C. (2012) Postabortion Contraception: Qualitative Interviews on Counseling and Provision of Long-Acting Reversible Contraceptive Methods. *Perspectives on Sexual and Reproductive Health*, 44, 100-106. http://dx.doi.org/10.1363/4410012
- [44] Moreno, V., Bosch, F.X., Munoz, N., Meijer, C.J., Shah, K.V., Walboomers, J.M., Herrero, R. and Franceschi, S. (2002) Effect of Oral Contraceptives on Risk of Cervical Cancer in Women with Human Papillomavirus Infection: The IARC Multicentric Case-Control Study. *The Lancet*, 359, 1085-1092. http://dx.doi.org/10.1016/S0140-6736(02)08150-3
- [45] Appleby, P., Beral, V., de González, A.B., Colin, D., Franceschi, S., Goodhill, A., Green, J., Peto, J., Plummer, M. and Sweetland, S. (2007) Cervical Cancer and Hormonal Contraceptives: Collaborative Reanalysis of Individual Data for 16,573 Women with Cervical Cancer and 35,509 Women without Cervical Cancer from 24 Epidemiological Studies. *The Lancet*, 370, 1609-1621. http://dx.doi.org/10.1016/S0140-6736(07)61684-5
- [46] Benshushan, A., Paltiel, O., Rojanskya, N., Brzezinskia, A. and Laufer, N. (2002) IUD Use and the Risk of Endometrial Cancer. European Journal of Obstetrics & Gynecology and Reproductive Biology, 105, 166-169. http://dx.doi.org/10.1016/S0301-2115(02)00153-7

- [47] Castellsague, X., Diaz, M., Vaccarella, S., de Sanjose, S., Munoz, N., Herrero, R., Franceschi, S., Meijer, C.J. and Bosch, F.X. (2011) Intrauterine Device Use, Cervical Infection with Human Papillomavirus, and Risk of Cervical Cancer: A Pooled Analysis of 26 Epidemiological Studies. *The Lancet Oncology*, 12, 1023-1031. http://dx.doi.org/10.1016/S1470-2045(11)70223-6
- [48] Chiou, C.F., Trussell, J., Reyes, E., Knight, K., Wallace, J., Udani, J., Oda, K. and Borenstein, J. (2003) Economic Analysis of Contraceptives for Women. *Contraception*, **68**, 3-10. http://dx.doi.org/10.1016/S0010-7824(03)00078-7
- [49] Wickstrom, J. and Jacobstein, R. (2011) Contraceptive Security: Incomplete without Long-Acting and Permanent Methods of Family Planning. Studies in Family Planning, 42, 291-298. http://dx.doi.org/10.1111/j.1728-4465.2011.00292.x



Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science with its publication.

Other selected journals from SCIRP are listed as below. Submit your manuscript to us via either submit@scirp.org or Online Submission Portal.































