



ST. PAUL'S HOSPITAL MILLENNIUM MEDICAL COLLEGE

DEPARTMENT OF PUBLIC HEALTH

KNOWLEDGE, ATTITUDE AND DECISION OF FAMILY PLANNING
METHODS AMONG MOTHERS MANAGED AT KOLFE HEALTH CENTER

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Abstract

Background: Maternal health problems remain a major global concern since pregnancy and childbirth are the leading causes of morbidity and mortality among reproductive age women. Evidences have shown that encouraging early antenatal care visits, institutional deliveries, postnatal care, and contraceptive adoption are the key elements in improving safe motherhood. Therefore this study aims to gain insight into one of the key elements to improve safe motherhood, which is postpartum contraceptive adoption.

Objectives: This study aims to determine the knowledge, attitude and decision of mothers towards postpartum family planning.

Methods: An institution-based cross-sectional study design was employed among 179 randomly identified mothers who were managed at Kolfe Health Center. Data was collected through interviewer administered questionnaire and analyzed using SPSS version 20.0 software.

Results: Knowledge of at least one contraceptive method is nearly universal in Ethiopia with 99.45% of respondents stating at least one contraceptive technique. Nearly all respondents (97.8%) of respondents have positive attitude towards postpartum contraception. Counseling for postpartum family planning was universal. 50.3% of respondents had decided to use at least one contraceptive technique at the time of interview.

Conclusion: Knowledge about postpartum contraceptive techniques is nearly universal in urban areas in Ethiopia with almost all mothers in the postpartum period having a positive attitude towards contraception. The decision to use contraception in urban areas is higher as compared to rural areas.

Recommendation: The quality of counseling by health professionals should be improved. Positive imagery towards contraception should be done along with encouragement to use contraceptives.

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Acronyms

ANC	Antenatal Care
Ass. Prof.....	Assistant Professor
EDHS	Ethiopian Demographic and Health Survey
FDRE	Federal Democratic Republic of Ethiopia
HIV	Human Immune-deficiency Virus
IUD	Intrauterine Device
KHC	Kolfe Health Center
MD	Doctor of Medicine
MMR.....	Maternal Mortality Ratio
MNCH.....	Maternal, Newborn and Child Health
MoH	Ministry of Health
NGO	Non-Governmental Organization
ObGyn.....	Obstetrics and Gynecology
PHD.....	Doctor of Philosophy
PPFP.....	Postpartum Family Planning
SPHMMC	St. Paul's Hospital Millennium Medical College
SPSS	Statistical Package for Social Sciences
STI.....	Sexually Transmitted Infections
WHO	World Health Organization

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1. Introduction

1.1 Background

Postpartum period is the time period after the delivery of baby. Family planning is an essential care that should be offered to any woman of reproductive age. Family planning has several benefits including reducing the risk of pregnancy related risks, reducing the incidence of teenage pregnancy and reducing the transmission of HIV and other STIs. ^[1]

The WHO defines postpartum family planning as the prevention of unintended pregnancy and closely spaced pregnancies through the first 12 months following childbirth and integrates it as a component of Maternal, Newborn and Child Health (MNCH). It also establishes four points of contact where the family planning services are counseled and provided namely during pregnancy, during labor and delivery, during postnatal visit of the mother and during the time of infant care ^[1].

As the first pillar of safe motherhood and an essential component of primary health care, contraceptive plays a key role in reducing maternal and newborn morbidity and mortality by preventing unintended pregnancy and close birth intervals. ^[2] In addition, World Health Organization (WHO) technical committee advises an interval of at least 24 months before couples attempt to become pregnant. ^[3]

The rationales for implementing postpartum family planning are that it has an important role to play in strategies to reduce the unmet need for FP and that it addresses the needs of those who wish to have children in the future (referred to as ‘spacers’), as well as those who have reached their desired family size and wish to avoid future pregnancies (referred to as ‘limiters’) ^[1]. According to an analysis of Demographic and Health Surveys data from 27 countries, 95% of women who are 0–12 month’s postpartum want to avoid a pregnancy in the next 24 months; but 70% of them are not using contraception ^[4]. More than 30% of maternal deaths and 10% of child mortality can be averted if inter-pregnancy interval is more than 2 years. ^[5]

Evidences have also shown that closely spaced pregnancies within the first year postpartum are the riskiest for mother and baby, resulting in increased risks for adverse outcomes, such as preterm, low birth weight and small for gestational age babies. ^[6] The risk of child mortality is highest for very short birth-to-pregnancy intervals (<12 months). If all couples waited 24 months to conceive again, under-five mortality would decrease by 13%. If couples waited 36 months, the decrease would be 25% ^[7]

According to 2013 maternal mortality estimate 292, 982 maternal deaths occurred during 2013 and almost 99% of these deaths happened in the developing countries. ^[8] Moreover, 90% of the neonatal deaths were registered in these countries ^[3]

1.2 Statement the problem

Ethiopia is a developing country with high neonatal under-five mortality rates. In addition the Maternal Mortality ratio according to Ethiopian Demographic Health Survey 2011 is 676 per 10,000. ^[9] Millennium Development Goal 5 calls for the improvement in maternal health, with a target of reducing the Maternal Mortality Ratio (MMR) by three-quarters over the period 1990-2015. ^[10] Furthermore, In Ethiopia, nearly half of all non-first pregnancies occur less than 24 months following the preceding birth. ^[11] Another study done in Northwest Ethiopia also showed the presence of short intervals between births. ^[12]

This study therefore aims to tackle the problems mentioned above as family planning, especially in the postpartum period, has been shown to be directly related with better outcomes for both the mother and the newborn. ^[5] ^[6] ^[7]

1.3Significance of the study

This research will be conducted on one of the most important and priority areas in the medical sectors and as described above, has a huge potential to reduce maternal, neonatal and under-five mortality. It is the intention of this research to bridge the gap and help in the implementation of policies that impede the provision of postpartum contraception.

2. Literature review

According to the WHO, globally there are around 214 million women of reproductive age who desire to avoid pregnancy but don't have the means to do so. In Africa, 24.2% of women of reproductive age have an unmet need for modern contraception. ^[1].

According to a study done on the “Patterns and trends of postpartum family planning in Ethiopia, Malawi, and Nigeria” the practice of postpartum contraception has increased by 160% from a baseline of 5% in Ethiopia from 2005-2011. In Malawi it has increased by 55% from a baseline of 9.5% between the years 2004-2010 whereas in Nigeria, the practice of postpartum contraception had decreased from 5.9% to 3.8% between the years 2008-2013. ^[13].

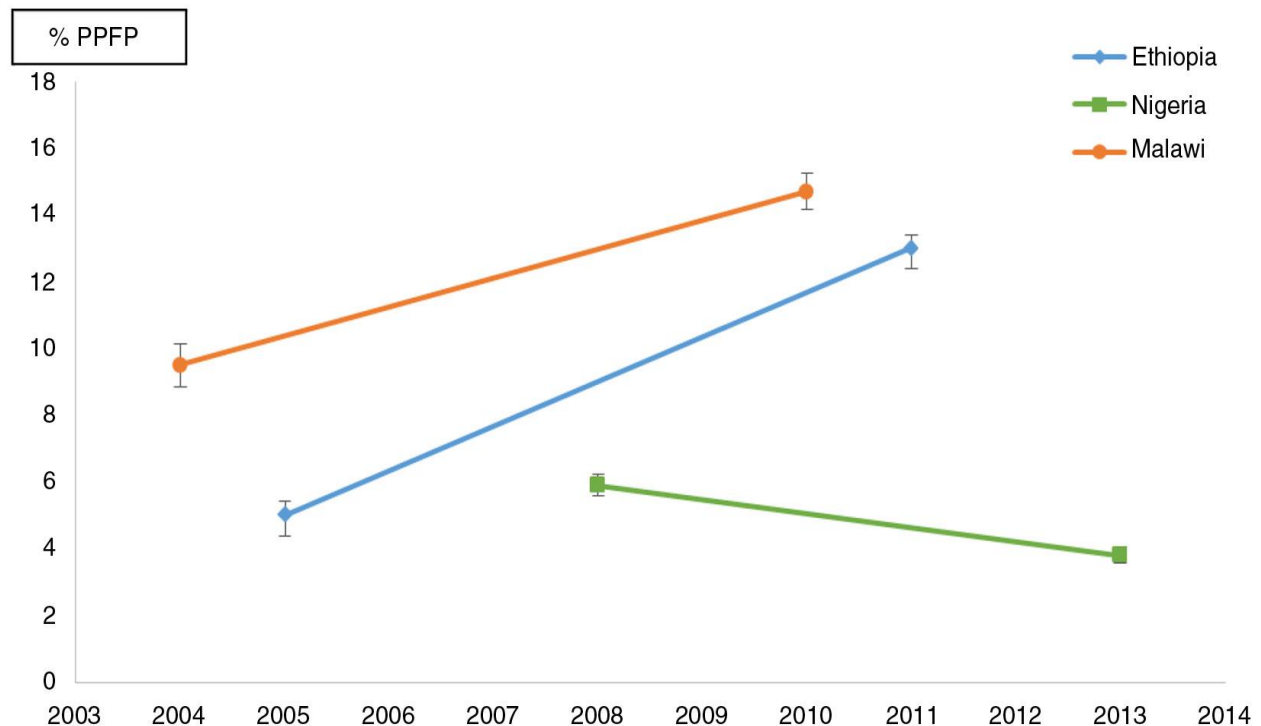


Figure 1: Trends in average percent modern postpartum family planning use (% PPFP) at 3 months, all women 15-49 years old, with 95% confidence intervals in Ethiopia, Malawi, and Nigeria. Source: DHS. ^[13].

According to mini EDHS 2014, knowledge of at least one contraceptive method is nearly universal in Ethiopia. The contraceptive prevalence rate is 29 percent for all women and 42 percent for currently married women. The vast majority of women use modern methods than traditional methods (40% vs 2% respectively). The most popular modern method, used by 31 percent of currently married women, is injectables while 5% of currently married women use implants and 3% use the pill ^[10].

The mini EDHS report also found that currently married women in urban areas are more likely than their rural counterparts to use a contraceptive method (59 and 38 percent, respectively) and to use any modern method (56 and 37 percent, respectively). The pattern in the relationship between contraceptive use and number of living children is an inverted U-shape. Contraceptive use is highest among women with 1-2 children and lowest among women with five or more children. Use of any contraceptive method varies notably by region, ranging from 64 percent in Addis Ababa to 3 percent in the Somali region. Similarly use of any modern contraceptive method is highest in Addis Ababa (57 percent) and lowest in the Somali region (2 percent). Current contraceptive use increases with women's education. Thirty-five percent of women with no education report current use of any method, compared with 70 percent of women with more than secondary education. Similarly, current use of any contraceptive method increases with wealth. Currently married women in the wealthiest household are twice as likely as women in the poorest household to use any contraceptive method (57 and 28 percent, respectively). ^[10]

In a community based cross sectional study in Gonder town, nearly half (48.4%) of the postpartum women were using different types of contraceptives. The most commonly used method was injectable (68.5%). Resumption of menses, and having antenatal care were the factors positively associated with contraceptive use in the extended postpartum period. ^[14]

3. Objectives

3.1 General Objectives

This study aims to determine the knowledge, attitude and decision of postpartum family planning among patients managed at Kolfe Health Center.

3.2 Specific objectives

To determine the knowledge about postpartum family planning in patients managed at KHC

To determine attitude towards postpartum family planning in patients managed at KHC

To determine the decision of postpartum family planning in patients managed at KHC

4. Research Methods and Materials

4.1 Study Area

This study was conducted at Kolfe Health Center. The health center is located in Kolfe Keranyo sub-city in Addis Ababa, Ethiopia.

4.2 Study Design

The research is an institution based cross sectional study.

4.3 Source Population

The source population was pregnant mothers who have had their deliveries attended at Kolfe Health Center.

4.4 Study Population

The study population is chosen amongst the source population provided that they fulfill the following eligibility criteria:

- ✓ Pregnant
- ✓ Are admitted in the delivery room
- ✓ Have delivered within the past 6 weeks at Kolfe Health Center and have postnatal follow up there

The study excludes mothers who didn't fulfill the above criteria on top of which; the following features have also been added:

- ✓ Mothers who were admitted to the labor ward at Kolfe Health Center but have been referred to hospitals prior to the completion of delivery because of complications.
- ✓ Mothers who have postnatal follow up at Kolfe Health Center but did not deliver at Kolfe Health Center
- ✓ Mothers suffering from mental illness; since judgment & mental status will be in doubt, the information they provide may not be reliable despite having fulfilled the eligibility criteria.
- ✓ Mothers who have already participated in this research during their previous visit to the health center.

4.5 Sample Size Determination

The single population proportion formula was used to calculate the sample size considering the following assumptions:

Since there is no study in Ethiopia done in an urban setup, the proportion of women using contraceptives in the postpartum period was assumed to be 50%, 95% confidence level, 5% margin of error. (Similar to the study done in rural area, Gondar) ^[4]

Taking N as the average number of deliveries at Kolfe health center during the duration of data collection, which is approximately 360.

$n_0 = Z^2 p(1-p)/d^2$ Where;

n: sample size

p: proportion = 50%

z: confidence interval or CI =95%

d: marginal of error = 0.05

$$n = \frac{\frac{Z^2 p(1-p)}{d^2}}{1 + \frac{1}{N} \left(\frac{Z^2 p(1-p)}{d^2} - 1 \right)}$$

Approximately $n = 179$

4.6 Sampling Technique

The sample was from the study population using Simple Random Sampling technique. The constant, k, was obtained by dividing the average number of deliveries over a two month period by sample size. Approximately $k=2$.

4.7 Data Collection

Data was collected through interviewer administered questionnaires from March 12, 2018 to May 5, 2018.

4.8 Study variables

Dependent variables

1. Knowledge of mothers towards family planning
2. Attitude of mothers towards family planning
3. Decision of postpartum family planning

Independent variables

1. Age
2. Religion
3. Ethnicity
4. Residence
5. Marital Status
6. Educational Status
7. Occupational status
8. Income
9. Gravidity
10. Parity
11. Abortions
12. Mode of delivery

4.9 Operational definitions

The research is conducted under clearly defined operational parameters which are as follows:

Knowledge: In accordance to the mini EDHS report ^[10] and the cross-sectional study done in Gonder town regarding contraception use ^[11], knowledge of contraceptive techniques is defined as knowledge of at least one contraceptive technique.

Attitude: Since there are no previous researches specifically done to assess attitude of postpartum contraception, 8 questions were adopted with responses coded with Likert scale. The responses were recoded into “yes” or “no” and the respondents who answered at least half as “yes” were said to have a positive attitude.

Decision: Similar to other previous researches mentioned above ^{[10],[11]} decision is defined as deciding to use at least one method of contraception at the time of interview. If the respondent states to use more than one method of contraception, then the most effective method was considered as the method of practice. ^[10] For the purpose of this research only modern methods of contraception are considered as reliable tools to assess practice since adherence and correct use of traditional methods were difficult to illustrate in the interview.

4.10 Data processing and management

The collected data was manually rechecked for comprehensiveness and clarity. Afterwards, data entry into SPSS 20 was done.

4.11 Data analysis

The data obtained was analyzed using SPSS 20 statistical packages. Descriptive statistics such as mean, mode, standard deviation and range were used to analyze the obtained data.

4.12 Ethical consideration

The ethical approval and clearance was obtained from Department of community Health, SPHMMC. At all levels, officials were contacted and permission was secured. The necessary explanation about the purpose of the study and about its procedure, assurance of confidentiality, and the right not to participate on the study without any consequence were given and a written consent was obtained from the respondents.

4.13 Dissemination of findings

The findings of this research will be disseminated to St Paul's Hospital Millennium Medical College and Kolfe Health Center.

5. Results

5.1 Socio-demographic features of mothers:

The mean age of the respondents is 26.78 ± 4.246 with the maximum and minimum being 43 & 19 years of age respectively.

Many of the respondents, 75 (41.9%) were found to be Guraghe in ethnicity followed by Amhara 53(29.6%) and Oromo 39(21.8%). About 97 (54.2%) of the respondents were Orthodox Christian, 56(31.3%) were Muslim and 26(14.5%) were Protestant in religion.

Majority of respondents, 166 (92.7%) lived in urban areas while also the vast majority of respondents (172, 96.1%) were married. Many of the respondents 132 (73.7%) were house wives followed by 21 (11.7%) being governmental employees and least value recoded were students (4, 2.2%). Of the respondents, 2(1.1%) stated to be not employed and not married.

Of the respondents, 74 (41.34%) were having or had a primary, secondary or college & higher level education with the bulk (86, 48%) only able to read or write. The majority of respondents (138, 77.1%) didn't have their own personal income.

The mean parity of mothers was found to be 2.02 ± 0.86 with the maximum and minimum being 4 and 1 respectively. Majority of respondents, 160(89.4%) had their delivery vaginally.

The details of each value for their respective socio-demographic features are listed under Table2

Variables	Values	Frequency	Percent %
Ethnicity	Guraghe	75	41.9
	Amhara	53	29.6
	Oromo	39	21.8
	Silte	5	2.8
	Tigre	4	2.2

	Gamo gofa	2	1.1
	Hararghe	1	0.55
Religion	Orthodox Christian	97	54.2
	Muslim	56	31.3
	Protestant	26	14.5
Residence	Urban	166	92.7
	Rural	13	7.2
Marital Status	Married	172	96.1
	Single	7	3.9
Educational Level	Illiterate	19	10.6
	Can read and write	86	48
	Completed Elementary	40	22.3
	Completed High school	8	4.5
	Diploma or higher level	26	14.5
Occupation	House wife	132	73.7
	Government employee	21	11.7
	Self employed	14	7.8
	Employed at an NGO	6	3.1
	Unemployed and unmarried	2	1.1
	Unemployed but student	4	2.2
Mode of delivery	Vaginal	160	89.4
	Cesarean section	19	10.6
Annual Income	Maximum = 6000	2	1.1
	Minimum = 1000	9	5
	No personal income	138	77.1
Parity	Maximum=4	9	5
	Mean=2.02±0.86		

5.2 Knowledge of Respondents

On this study the respondents were asked a total of 7 questions to assess their levels of knowledge.

On the first question all (178, 99.4%) but one respondent stated that they have heard of contraceptive techniques before this research. Of those who have heard of contraceptive techniques before, 150(83.8%) of the respondents answered health professionals as their primary sources of information followed by 23(12.8%) from Radio and TV stations. 2(1.1%) from friends while 1(0.55%) each heard it from leaflets, at school or workplace.

On the third question the respondents were asked to name the methods of contraception they know of. Of the respondents 103(57.5%) stated to know Pills, Injectables, Implants and IUDs all as methods of contraception followed by 25(14%) who stated they only know of Pills and Injectables. Overall the Injectable method was the most commonly known with 174(97.2%) stating to know it including 3(1.7%) of the respondents who know only Injectable as a means of contraceptive. Only 1(0.55%) respondent stated not to know of any contraceptive technique.

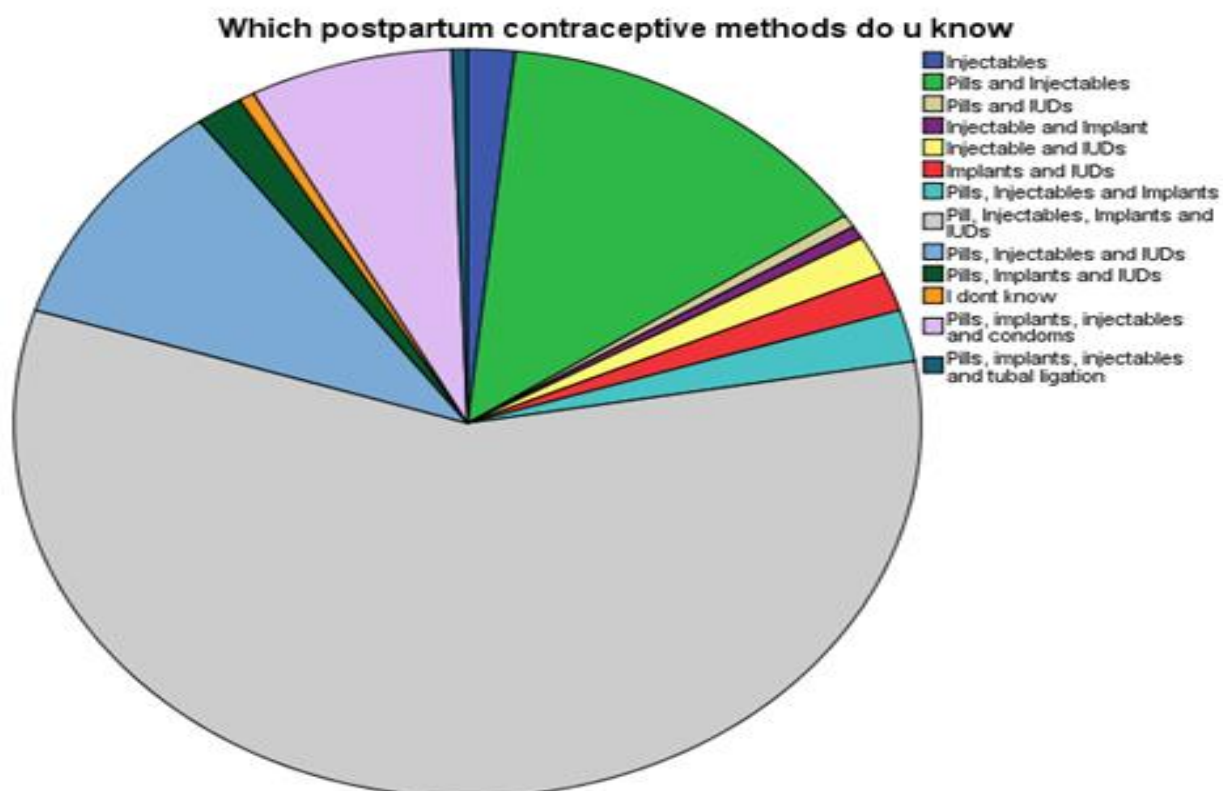
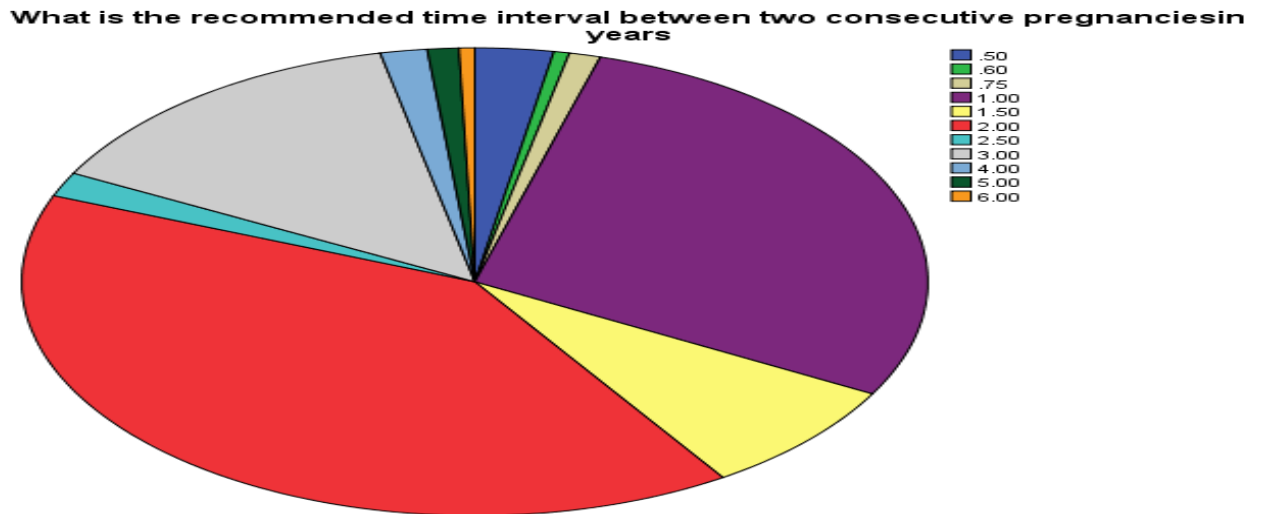


Figure 2: Which postpartum contraceptive methods do you know

When asked the recommended inter-pregnancy interval, many (97, 54.2%) answered 2 or more years.

Figure 3: What is the recommended time interval between two consecutive pregnancies



The majority (167, 93.3%) of respondents stated to know of possibility of pregnancy while on breast feeding with 11(6.1%) to state it's not possible and 1(0.55%) respondent stated not to be sure of the answer.

When asked about the advantages of using postpartum contraception, 154(86%) answered for limiting family size and increasing the gap between two consecutive pregnancies while most of the respondents (138, 77.1%) stated that they don't know of any adverse drug effects.

Table 2: What are the advantages of postpartum contraception?

What are the advantages of postpartum contraception		
	Frequency	Percent
For limiting family size and increasing the gap between two consecutive pregnancies	154	86.0
For maternal and child health	1	.6
I don't know	7	3.9
For financial benefit	5	2.8
For maternal and child health, limiting family size, and financial benefit	9	5.0
For limiting family size and financial benefit	3	1.7

5.3 Attitude of respondents towards postpartum contraception

Based on this study's operational definition, 176(98.3%) of respondents have a positive attitude towards postpartum contraception.

The majority (175, 97.8%) believe postpartum contraception to be necessary with all but one agreeing or strongly agreeing with the positive role postpartum contraception plays to limit family size and reduce financial constraints in the family, higher percentage (115, 64.2%) strongly agreeing with the statement. One respondent answered as being neutral.

The majority of respondents (172, 96.1%) agreed or strongly agreed that postpartum contraception is beneficial to both maternal and child health with the higher percentage (113, 63.1%) strongly agreeing. 4(2.2%) of the respondents were neutral while 3(1.7%) of the respondents disagreed with the notion.

The majority of respondents (93, 52%) disagreed or strongly disagreed that postpartum contraception goes against their religious beliefs out of which only one respondent strongly disagreed. 31(17.3%) of the respondents were neutral and 55(30.7%) agreed or strongly agreed that it was indeed against their religious beliefs with the higher percentage (33, 18.4%) agreeing.

The majority of respondents (144, 80.6%) disagreed or strongly disagreed that postpartum contraception goes against their sociocultural beliefs out of which only one respondent strongly disagreed. 25(14%) of the respondents were neutral and 10(5.6%) agreed or strongly agreed that it was indeed against their sociocultural beliefs.

Half of respondents (90, 50.3%) agreed or strongly agreed that postpartum contraception has a negative impact on the trust and degree of intimacy between couples with the higher percentage (77, 43%) agreeing. 19(10.6%) of the respondents were neutral while 70(39.1%) of the respondents disagreed with the notion.

Majority of respondents (177, 98.9%) agreed or strongly agreed that postpartum contraception should be counseled for every mother while 2(1.1%) were neutral while 174 (97.2%) agreed or strongly agreed that postpartum contraception should be provided for every mother while 4(2.2%) were neutral and one disagreed.

5.4 Degree of Practice of Postpartum contraception

The respondents were asked if they were counseled on postpartum contraception during their latest pregnancy and delivery and if they have opted for using contraceptive techniques after their delivery.

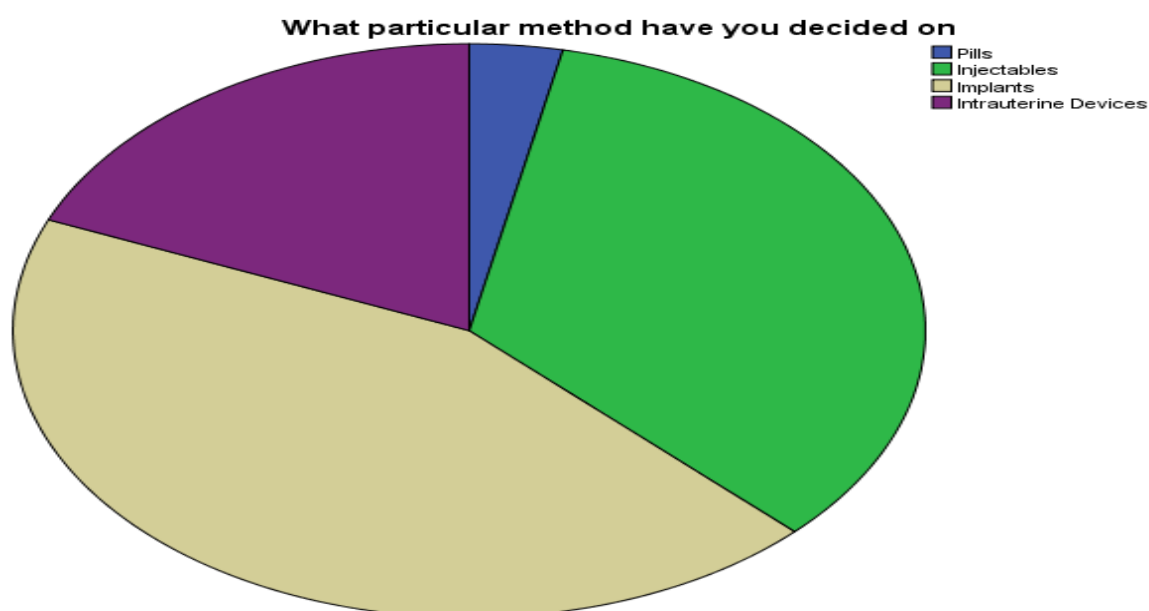
All but one of them stated they have been counseled about postpartum contraception.

Half of the respondents (91, 50.8%) stated to have decided on a particular method of contraception at the time of interview while 61(34.1%) stated they haven't made a decision yet and would need more time to think. 27(15.1%) of the respondents stated they were not willing to use postpartum contraception.

Of the 27 respondents who were not willing to use postpartum contraception techniques, 19(70.4%) stated to opt to use calendar method while the other 8 stated to be unwilling to use any method. Of the eight, half stated religious conflict as their main rationale for not using postpartum contraception.

Of the 91 respondents who opted to use postpartum contraceptives, 40(44%) chose Implants followed by Injectables (31, 34.1%), IUDs (17, 18.7%) and Pills (3, 3.3%) in descending order of frequency. All stated they were using the method of their own choice.

Figure 4: What particular method of contraception have you decided on



6. Discussion

Women in the postpartum period have a critical window of opportunity to receive family planning service especially in urban areas because of their better access to health services including ANC, delivery, postnatal care, and immunization. ^{[15][16]}

This study found that all but one respondent (99.45%) know at least one method of contraception which is slightly higher than the findings in the mini EDHS report 2014 which found that to be 96.7% of reproductive age women. This research also found that the most widely known contraceptive methods were Injectables followed by Pills and Implants (97.2%, 94% and 72% respectively). This finding is similar, in terms of the order of the methods, to that of the mini EDHS report 2014 which found 93.9% for Injectables, 87.8% for Pills and 73.5% for Implants. The slightly higher percentage values for this study as compared to the mini EDHS report can be explained by the fact that this study was done only on mothers who were being managed at a health institution which would make them likely to be taught and counseled about contraceptive techniques by health professionals. Indeed in this study 83.8% of the respondents stated to first hear of contraceptive techniques from health professionals.

This study also found that at the time of interview, 50.3% of the respondents decided to use at least one method of contraception in addition to the 10.62% who stated they were using the calendar method. As described above calendar method and similar methods of contraception weren't used to assess practice. This finding is higher than study done in Gonder town which stated the degree of practice to be 48.4% ^[14] and slightly lower than the mini EDHS report 2014 which reported it to be 53.6%. This finding is consistent with studies done in other countries like in Kenya and Zambia (46%), and Rwanda (50.4%). ^[17-18] The most commonly used contraceptive methods, at the time of interviews, were Implants which accounted for 44% of respondents which stated they were on contraception followed by Injectables(34.1%). This was in stark contrast to the findings in the study in Gonder town in which Injectables accounted for 68.5% followed by Pills (16%). This contrast can be explained by the nearly universal (99.45%) counseling of the mothers about postpartum contraception and the fact that this research was institution-based unlike the former which was community based and therefore more likely to have less intensive counseling. In addition, since one of the inclusion criterion was mothers who have delivered within the past 6 weeks only and 34.1% of the respondents hadn't made a

decision about use contraceptive at the time of interview, the results might have been exaggeratedly in favor of Implants because they are usually inserted immediately after birth while there is usually a gap of 45 days or more for Injectables.

This study has some limitations. It is institution based and therefore might not be directly representative of the community. It only includes mothers who are admitted to the labor ward and those who have delivered within the past 6 weeks prior to the interview and might miss mothers who opted for contraception after the 6th postpartum week. It also only measures the degree of pharmacologic or surgical means of contraception and doesn't include other modern methods like Calendar Method and Lactational Amenorrhea because it is difficult to assess the adherence and proper use of the methods using the questionnaire. Lack of follow up for the final decision of those who said they haven't decided for a particular method of contraception is also another limitation.

7. Conclusion and Recommendation

7.1 Conclusion

Knowledge of at least one postpartum contraception method is nearly universal in Ethiopia. Almost all mothers in the postpartum period have a positive attitude towards contraception. The degree of practice of postpartum contraception is higher in urban areas than rural areas in Ethiopia. The longer duration methods of contraception are preferred over those with shorter duration of contraception.

7.2 Recommendation

As obtained from the research, the knowledge and attitude of mothers towards postpartum contraception were satisfactory. The decision whether or not to use a method of contraception however is low therefore the following recommendations might serve to ease the decision making process:

- Counseling techniques and quality of counseling must be improved
- Policy makers should encourage PPFP by creating a positive image through media outlets
- Health professionals should be training well on how to properly counsel mothers

8. References

1. WHO. Programming Strategies for Postpartum Family Planning, Geneva: WHO 2013.
2. Conde-Agudelo A, Belizán JM. Maternal morbidity and mortality associated with interpregnancy interval. *BMJ*. 2000;321:1255.
3. WHO. Report of a WHO Technical Consultation on Birth Spacing. Geneva: WHO; 2006.
4. Ross J & Winfrey W. Contraceptive use, intention to use and unmet need during the extended postpartum period. *International Family Planning Perspectives*, 2001, 27(1):20–27.
5. Cleland J et al. Family planning: the unfinished agenda. *The Lancet*, 2006, 368(9549):1810–1827.
6. DaVanzo J et al. Effects of inter-pregnancy interval and outcome of the preceding pregnancy on pregnancy outcomes in Matlab, Bangladesh. *BJOG*, 2007, 114(9):1079–1087.
7. Rutstein SO. Further evidence of the effects of preceding birth intervals on neonatal, infant and under-five-years mortality and nutritional status in developing countries: evidence from the Demographic and Health Surveys.
8. Kassebaum JN, Bertozzi-Villa A, Coggeshall S. Global, regional, and national levels and causes of maternal mortality during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet*. 2014;6736(14):60696–6.
9. CSA [Ethiopia] and ICF International: Ethiopia Demographic and Health Survey report 2011. Addis Ababa, Ethiopia and Calverton, Maryland, USA. In.;2012.
10. Central Statistical Agency [Ethiopia]. 2014. Ethiopia Mini Demographic and Health Survey 2014. Addis Ababa, Ethiopia.
11. USAID MCHIP. Family planning needs during the first two years postpartum in the Ethiopia. Washington DC: USAID; 2013.

12. Tessema GA, Zeleke BM, Ayele TA. Birth interval and its predictors among married women in Dabat District, Northwest Ethiopia: A retrospective follow up study. *Afr J Reprod Health*. 2013;17(2):39–45.
13. Sennen Hounton, William Winfrey, Aluisio J. D. Barros & Ian Askew (2015) Patterns and trends of postpartum family planning in Ethiopia, Malawi, and Nigeria: evidence of missed opportunities for integration, *Global Health Action*, 8:1, 29738
14. Yeshewas Abera, Zelalem Birhanu Mengesha and Gizachew Assefa Tessema (2015) Postpartum contraceptive use in Gondar town, Northwest Ethiopia: a community based cross-sectional study, *BMC Women's Health*, 15:19,
15. Jhpiego. Postpartum Intrauterine contraceptive Device (PPIUD) services Family planning initiative. Maryland, USA: Jhpiego; 2010.
16. Thomas B, Richard J, Mary S. Efficacy of a New postpartum transition protocol for avoiding pregnancy. *Am Board Fam Med*. 2012;26:35–44.
17. Aurellie B, Elizabeth E, Ngabo F, Wesson J, Chen M. Getting to 70%: barriers to modern contraceptive use for women in Rwanda. *Int J Gynecol Obstet*. 2013;11–15.
18. USAID. A guide for monitoring and evaluating population- health environment program. I. Washington DC: USAID; 2007.

9. Annexes

9.1 Consent Form

Hello, I am _____, an interviewer working for Dr. Bisrat Nigussie who is a final year medical graduate from St. Paul's Hospital Millennium Medical College. The following questionnaire I am going to interview you with was prepared by Dr. Bisrat as a partial requirement to graduate from SPHMMC in the degree of Doctor of Medicine. The questionnaire is designed to assess the Knowledge, Attitude and Decision of postpartum family planning methods in mothers managed at Kolfe Health Center. Your participation in this study is voluntary and the information you give is of critical importance in this study for the interpretation of results and improvement of family planning services provided by the health center. I assure you about the confidentiality of your response and guarantee that it is only used for research purposes. For the sake of this I would like to take a formal consent before I proceed with the interview. You have the right not to participate in this study. Finally, if you need more explanations at any time during the interview or have any questions you can put them forward.

Name of interviewer_____

Date:

Signature:_____

9.2 Questionnaire

1. Socio-demographic Status

1.1). Age:

1.2). Gravidity: Parity: Abortion: Mode of delivery:

1.3). Religion:

1. Orthodox Christian

2. Protestant

3. Muslim

4. Other, Specify:

1.4). Marital Status

1. Single

2. Married

3. Divorced

4. Widowed

5. Other, Specify:

1.5) Ethnicity

1. Oromo

2. Amhara

3. Tigre

4. Other, Specify:

1.6). Educational Status

1. Unable to read and write

2. Completed Elementary school

3. Completed High School

4. Certificate

5. Diploma and above

6. Other, Specify:

1.7). Residence

1. Urban area

2. Rural area

3. Other, Specify:

1.8). Occupational Status

1. Government Employee

2. Employed at a nongovernmental institution

3. Self-employed

4. Housewife

5. Other, Specify:

1.9). Income per month:

2. Knowledge about Postpartum Contraceptive

2.1) Have you ever heard of postpartum contraceptive methods

1. Yes

2. No

2.2) If yes to 2.1, where did you first hear about it?

1. from Health Professionals

2. from Radio and Television broadcasts

3. from newspapers

4. from leaflets

5. from friends

6. Other, Specify:

2.3) Which postpartum contraceptive methods do you know?

1. Pills
2. Injectables
3. Implants
4. Condom
5. Intrauterine devices
6. Other, specify:

2.4) What is the recommended time interval between two consecutive pregnancies?

2.5) Is it possible to become pregnant while breast feeding?

1. Yes
2. No

2.6) What are the advantages of postpartum contraception?

1. To limit family size
2. To increase the gap between two consecutive pregnancies
3. Others, Specify:

2.7) What are the common side effects of postpartum contraceptive techniques?

3. Attitude of mothers towards Postpartum Contraception

3.1) Do you believe postpartum contraception is necessary?

1. Yes
2. No

3.2) Postpartum contraception is useful to limit family size and reduce financial constraints in the family.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

3.3) Postpartum contraception is beneficial for maternal and child health

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

3.4) Postpartum contraception goes against religious morals

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

3.5) Postpartum contraception goes against the sociocultural morals you were raised in

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

3.6) Postpartum contraception has a negative impact on the trust and degree of intimacy between couples

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

3.7) Postpartum contraception should be counseled for every mother during her pregnancy follow up and during her delivery process.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

3.8) Postpartum contraception should be provided for every mother after birth.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

4. Practice of Postpartum Contraception

4.1) Have you been counseled on postpartum contraception?

1. Yes
2. No

4.2) If “yes” to question 4.1, have you decided to use postpartum contraception?

1. Yes, I have decided to use a method of postpartum contraception.

2. No, I have decided against using it.

3. I haven't made a decision yet

4.3) If "yes" to question 4.2, what particular method have you decided on?

1. Pills

2. Injectables

3. Implants

4. Condom

5. Intrauterine devices

6. Other, specify:

7. I haven't decided on a method yet

4.4) If "yes" to 4.2, has the method of contraception you have chosen been provided for you?

1. Yes

2. No

4.5) If "No" to 4.4 has a different method of contraception been provided for you?

1. Yes

2. No

4.6) If "Yes" to 4.5, which method as provided?

1. Pills

2. Injectables

3. Implants

4. Condom

5. Intrauterine devices

6. Other, specify:

4.7) If "No" to 4.5 or 4.2, can you please state the reason?