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Original Article

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# Assessment of contraceptive needs and practices of women during the extended postpartum period in Kiramu Woreda, Western Ethiopia

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## Abstract

The extended postpartum period is the time which is usually given less emphasis regarding family planning by policy makers, service providers and users. However, it is a time with a rising risk of unwanted conception and an often-frustrated desire for contraceptive protection. Understanding the contraceptive behaviors, needs and preferences of women in this period is important the main objective of this study was to assess the contraceptive needs and practices of women during the extended postpartum period. A community based cross sectional study was conducted in Kiramu Woreda. Four kebeles were purposively selected in the Woreda. A total of 120 women

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who were in the first year after delivery were interviewed by trained data collectors using a structured and pre tested questionnaire. Data were entered, checked and analyzed using Microsoft excel. The mean age of the study subjects was 30.25 with minimum age of 23 and a maximum of 37 and median age of 30 years. The prevalence of modern contraceptive Family Planning. Use was found to be 34(28.3%) among women in the extended postpartum period. Two third of women in the extended post partum period were not currently practicing any modern contraceptive method at the time of interview in spite of the doing sex. The reasons for non use were: fear of side effects in 68(56.7 %) of the study subjects, 14(11.7 %) due to lack of awareness of contraceptives, 4(3.3%) of them was due to fear of their husbands. In addition to this 77(64.2%) of the Women's started sex early before six weeks. This makes early pregnant before they saw any Menstruation. However, Only 34(28.3%) of women's started to prevent pregnancy during the intended postpartum period in the district. Knowledge and practice of Modern Family planning method in the district was very low. Therefore, continual health education contraceptive method mix during the extended post partum period should be revised by family planning program managers and providers is recommended for the implementation of the program.

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**Keywords:** LAM, Extended postpartum period, Family planning, Lactation amenorrhea.

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## **1. Introduction**

The term postpartum period is conventionally defined in medical circles as the time from parturition until six weeks after childbirth. However, family planning programs have not established a consistent definition of the postpartum period. Family planning programs consider it as the time from birth up to different time periods including the first two years after childbirth (Labbok, 1992).

The extended postpartum period, i.e. the first year after giving birth, is the time which is usually given less emphasis regarding family planning (FP) by policy makers, service providers and users. It is also a period when women usually have a high unmet need for FP (Kennedy et al., 1989; Labbok et al., 1992). The postpartum period presents a rising risk of unwanted conception and an often-frustrated desire for contraceptive protection. By 7-9 months after birth, most women become exposed to pregnancy but don't want to become pregnant again so soon, yet still do not obtain contraceptive protection. Such women have experienced a return of menses, are not abstaining from intercourse, and are unprotected from conception. According to an analysis of data from 25 countries collected as part of the DHS project, 17% of women (or one in six) conceived within 9 months of the previous birth, and 35% conceived within 15 months of the previous birth (Labbok et al., 1992).

Although that the lactational amenorrhea method is responsible for preventing more pregnancies in developing countries than all other methods of contraception combined. The lactational amenorrhea method is practiced by 0.4% of Ethiopian women despite its effectiveness and safety (Peterson et al., 2000). Studies regarding the needs and practices of contraception during the extended postpartum period are limited and no study is done in Ethiopia as to the investigator's knowledge. Therefore understanding the needs, practices of contraception and reasons for nonuse among women in the postpartum period helps to design an appropriate family planning program in the postpartum period. Identifying the reasons why women are not using LAM has also a policy implication. Hence, this study is intended to identify the needs and practices of contraception among women in the extended postpartum period and is hoped that the study will contribute to the improvement of family planning services in the country. It also addresses how breastfeeding mothers are exercising the lactational amenorrhea method. Thus this study was to assess the contraceptive needs and practices of women during the extended postpartum period in KIRAMU Woreda, Western Ethiopia.

## **2. Materials and methods**

### **2.1. Study area**

The study was conducted in KIRAMU Woreda of East Wollega zone. KIRAMU Woreda is one of the 17 administrative Woreda's in the zone. This Woreda is bounded with Amuru Woreda of Horro Guduru Wollega

zones in the East, Gida Woreda in the West, Amhara Region in North, Abe Dongoro in the South. Geographically the altitude varies from 750 up to 3020 meter above sea level. The Woreda is classified into three agro ecological zones; namely, highlands (4.91%), Midlands, (53.17%) and lowlands (41.92%). The temperature reaches a daily maximum of 28 degree centigrade. The capital town of the Woreda is KIRAMU which is about 140 KMs far from Nekemte Town in The North direction. According to 2007 census, the total population of the Woreda is 66,967. 11% of the population lives in urban and 89% in rural residents. Administratively the Woreda is divided in to 17 Kebeles (Figure1).

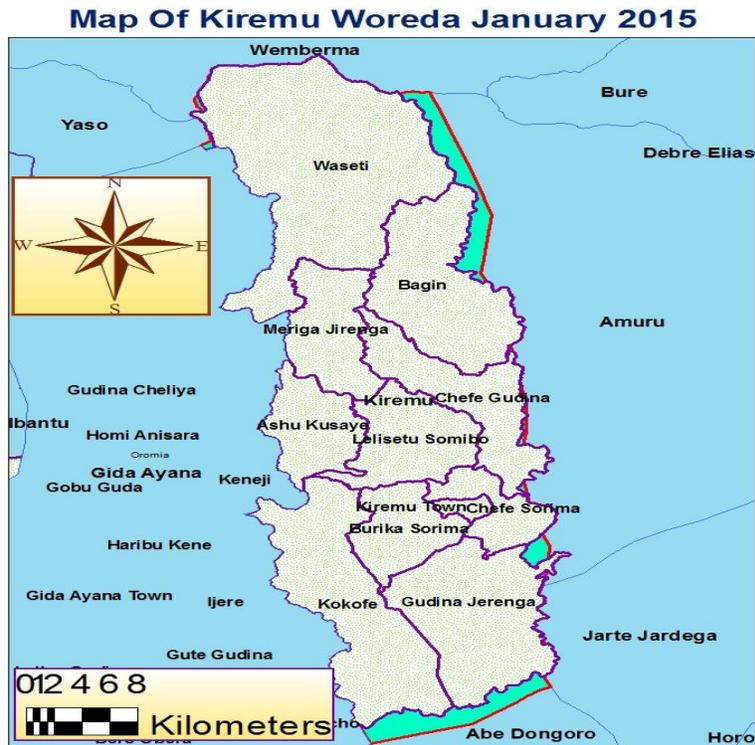


Fig. 1. Map of KIRAMU district.

### 2.2. Study population

Source population: all women in the reproductive age group who gave birth at least once in previous two years stay and who are residents of KIRAMU Woreda.

Study subjects: women who were within 12 months after birth residing in the randomly selected households.

### 2.3. Sample size

Sample size was determined using sample size determination for single population proportion.

Assumption:

Contraceptive prevalence rate during the study is unknown,

The contraceptive prevalence rate in Region is 61% (36) and therefore P is taken as 61% as contraceptive prevalence has never been above this in the area.

$$N = \frac{P(1-P) \cdot (Z \cdot d/2)^2}{d^2}, \text{ where } n = \frac{0.61(0.39) \cdot 1.96 \cdot 1.96}{0.05 \cdot 0.05}$$

$(Z \cdot d/2)^2$  =critical value at 95% CI of certainty (1.96).

D=margin of error between the sample & the Population=5%

$$N = 0.355 (1 - 0.355) \times (1.96)^2 / (0.05)^2$$

N=365, However due to scarcity of budget to collect such large amount of data in short period of time the sample size needed for this study purpose will be 120 women's.

#### **2.4. Sampling procedures**

All the seventeen Kebeles would be listed with their population size. Then the numbers of mothers who have given birth in the previous one-year were estimated assuming 1.95% of the population to be under one year of age (35). Then, a sample was taken from each Kebele, with a sample size proportional to the kebele's population. To identify the study subjects, bottle-spinning method was employed. The first household was chosen at the center of each Kebele as a starting point, and then the data collector went in the chosen direction until the required sample size for the Kebele is achieved. Households with no eligible women were excluded from the study and the data collector went to the next household until she gets an eligible household. When the data collector reaches the end of the Kebele in the chosen direction before she achieves the required sample size, she returned to the first bottle spinning place and chooses another direction.

#### **2.5. Data collection procedure**

##### **2.5.1. Data collection instruments**

Structured and pre tested questionnaire with both open ended and closed ended questions was used as a tool for data collection. The questionnaire was developed in English and then translated into Oromic and then retranslated into English to maintain consistency. The questionnaire was developed based on instruments that were applied in different studies related to family planning.

##### **2.5.2. Personnel and data quality control**

Data quality assurance was maintained by performing the following: Data collectors were all females to make the communication easy with the female respondents. All the data collectors were at least 10 grades complete. A one day's training was given to data collectors and supervisors by the principal investigator. The issue of confidentiality and privacy was stressed during the training session. Pretest was done before the actual data collection was undertaken in two kebeles outside the study area. Based on the pretest, questions were revised, edited, and those found to be unclear or confusing were removed. Supervisors and the principal investigator closely followed the day-to-day data collection process.

#### **2.6. Operational definitions**

1. Extended Postpartum period – the time from birth up to the first year after birth.
2. Lactation Amenorrhea - having no menses after giving birth, during times of breast-feeding.
3. Lactational amenorrhea method - it is a modern, temporary family planning method based on the natural infertility resulting from certain patterns of breastfeeding.

It is defined by three criteria:

- The woman's periods have not resumed
- The baby is fully or nearly fully breast fed
- The baby is less than six months old

4. Fully breast feeding- is the term applied to exclusive breast feeding (no other liquid or solid is given to the infant) & almost exclusive breast feeding (vitamins, water, juice or ritualistic feeds given infrequently in addition to breast feeds)

5. Exclusive breast feeding- giving only breast feeds for the child (no other liquid or solid is given to the infant).

6. Exposed to the risk of pregnancy

- those who resume menses or are not fully breast feeding and are not abstaining from sex after giving birth.

(For those who are in the first 6 months)

-those who are sexually active and are not using any family planning method (for those who are after 6 months)

7. Not exposed to the risk of pregnancy

-those who are amenoreic, and are fully breast feeding and/or are abstaining from sex after giving birth. (For those who are in the first 6 months)

-Those who are abstaining after birth (for those who are after 6 months postpartum)

## 2.7. Study variables

Dependant variable:

- Contraceptive use status during the extended postpartum period
- Knowledge of LAM
- Practice of LAM
- Independent variables
- Socioeconomic and demographic factors
- -Maternal age, religion, marital status, educational status, ethnicity, occupation, Menstrual status after birth( amenorrheic and cycling after birth) Breastfeeding status
- Reproductive history & preferences: Birth order (parity), fertility preference (need
- for spacing or need for limiting family size)
- Contact with health workers during the antenatal, delivery or postnatal period.

## 2.8. Data analysis procedures

After data collection was completed, data entry, cleaning and analysis was done using Microsoft Excel. Data cleaning was executed by running frequencies and cross tabulations. During analysis, frequencies of the different variables were first determined followed by cross tabulations to compare frequencies.

## 3. Results

### 3.1. Socio demographic characteristics of the study subjects

Total of 120 women who were in the first two years after delivery were interviewed. All of them were included in the analysis as there was no problem in all of the questionnaires. The mean age of the study subjects was 30.25 with minimum age of 23 and a maximum of 37 and median age of 30 years. The majority of the respondents were in the age group 24-28 with 44(36.7%) followed by 29-33(34.2%). One hundred five 105(87.5%) of the study subjects were married, Protestant Christians, 109(90%) house wives with Farmer's husband and 79(66%) educated formally either in elementary, secondary or tertiary level (Table 1).

**Table 1**

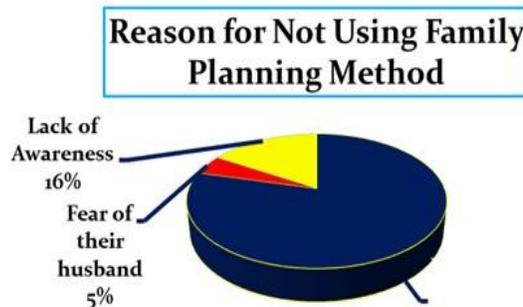
Socio demographic characteristics of study subjects, East Wollega, Kiremu Woreda, and June 2015.

Sociodemographic characteristics	Frequency	Percent (%)
<b>Age</b>		
<24	1	0.8
24-28	44	36.7
29-33	41	34.2
34-38	34	28.3
<b>Marital status</b>		
divorced	7	5.8
married	105	87.5
Widowed	8	6.7
<b>Ethnicity</b>		
Amhara	38	31.7

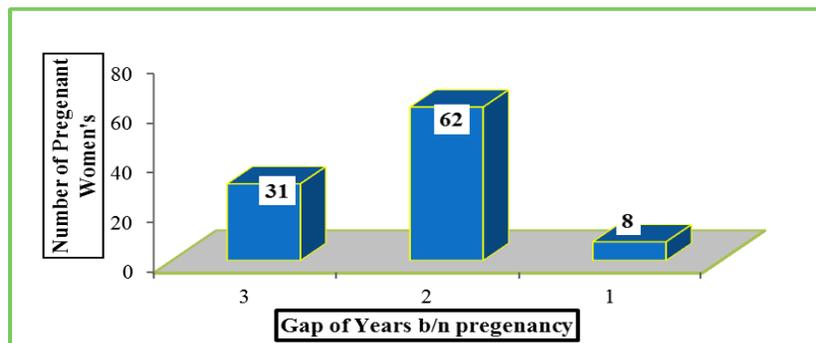
Oromo	82	68.3
<b>Educational status</b>		
above grade 8	41	34.2
Illiterate	79	65.8
<b>Religion</b>		
muslim	12	10
Orthodox	24	20
Protestant	84	70
<b>Place of residence</b>		
Rural	87	72.5
Urban	33	27.5
<b>Occupation</b>		
Farmers	109	90.8
Merchant	2	1.7
Employeer	9	7.5

**3.2. Reproductive history and preferences**

The average number of pregnancies (gravity) per woman was 4 with a minimum of one and a maximum of nine pregnancy. One hundred seven (89.2%) of those with unwanted/unplanned pregnancy. They did not use any contraceptive method during this time. The major reason for not using a family planning method was fear of side effects with 68(56.7%) and lack of awareness 14(11.7%) respectively.



**Fig. 2.** Reasons for not using family planning method in kiramu woreda of East Wollega zone June 2015.



**Fig. 3.** Gap of b/n pregnancy In Kiramu Woreda of East Wollega zone, June 2015.

As you observe in the graph the average years of Women’s being pregnant for second time in the study area was to be 2.23. Majority of The Women's in the district was being pregnant at two years of the first delivery. This accounts for 74(62%) followed by 3years of stay 37(31%). 9(8%) women's was pregnant every year. This would be one cause of maternal Morbidity.

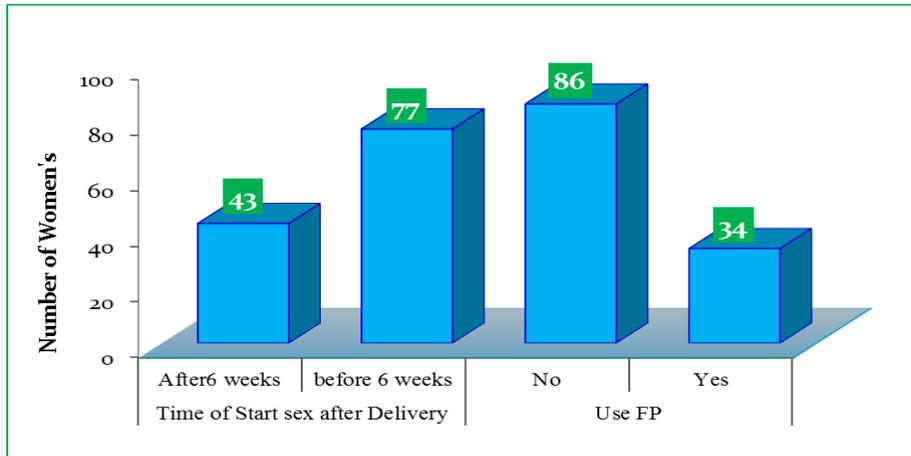


Fig. 4. Number of women's' have had sex and using FP in Kiramu district June 2015.

The time at which women's start sex and use Contraceptive was one of the key determinant factors in preventing early conception. As you see 77(64.2%) women starts doing sex before six week. In addition 86(71.7%) of Women did not use any Family planning method. Only 34(28.3%) women use different types of contraceptive method (Figure 3)

**3.3. Contraceptive method mix during the extended postpartum period**

The prevalence of modern contraceptive Family Planning use was found to be 34(28.3%) among women in the extended postpartum period. The majority of current contraceptive users were using injectables 18(52.9%) followed by Implanon and IUCD which was 8(23.5%) and 5(14.7%) respectively. This result revealed that Long term family planning methods practiced by the women's in the district were encouraging that 13(38.2%). Use IUCD and Norplant) (Figure 4).

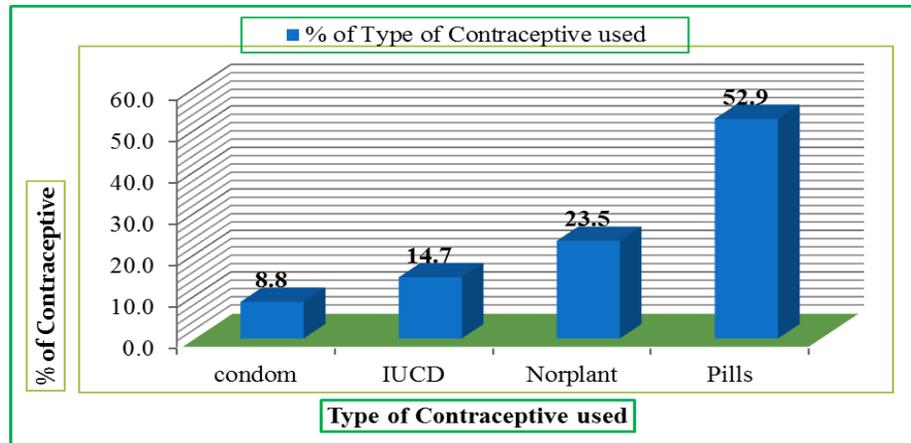


Fig. 5. Type of contraceptive use in Kiramu district of East Wollega zone June 2015.

The Number of Women's being Pregnant for 5-6 and 3-4 times with mean age of 30.23 years were 90(75%) and 22(18.3%) respectively. This indicates that The average Fertility rate of the Women's in this district was 5.075 which is slightly higher than Democratic Health survey of Ethiopia done in 2014(4.1%)(See Figure 4).

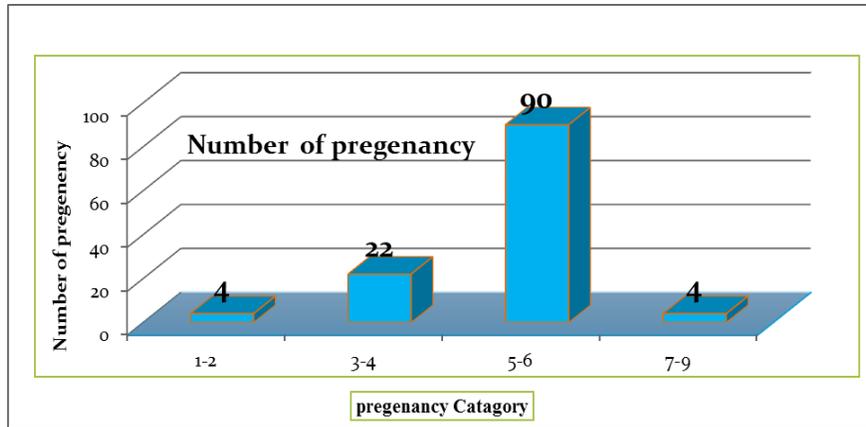


Fig. 6. Number of pregnancy in the Interviewed women's in Kiremu district of East Wollega zone June 2015.

### 3.4. Reasons for nonuse of contraceptives in the extended post partum period

Eighty six Women's (71.7%) of women in the extended post partum period were not currently practicing any modern contraceptive at the time of interview. The reasons for non use were: fear of side effects in 68(56.7%%) of the study subjects, 14(11.7 %%) due to lack of awareness of contraceptives, 4(3.3%) of them was due to fear of their husbands. Majority of Women's in the district were already started doing sex in the extended postpartum period which accounts for 109(90.8%). besides this 64.2 %( 77%) of the Women's started sex early before six weeks. This makes early pregnant before they saw any Menstruation. The Rest 43(35.8%) of Women's starts sex after six weeks of stay. However, Only 34(28.3%) of women's started to prevent pregnancy during the intended postpartum period in the district.

## 4. Discussion

The average number of pregnancies (gravidity) per woman was 5 with a minimum of one and a maximum of Nine pregnancy. One hundred seven (89.2%) of those with unwanted/unplanned pregnancy. They did not use any contraceptive method during this time. The major reason for not using a family planning method was fear of side effects with 68(56.7%) and lack of awareness 14(11.7%) respectively.

As you observe in the graph the average years of Women's being pregnant for second time in this study area was to be 2.23. Majority of The Women's in the district was being pregnant at two years of the first delivery. This accounts for 74(62%) followed by 3years of stay 37(31%). 9(8%) women's was pregnant every year. This might be one cause of maternal Morbidity.

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## 5. Conclusion

The contraceptive use during the extended postpartum period is found to be 34(28.3%) which is lower than the contraceptive use rate among the general women in reproductive age group. Knowledge and practice of Modern Family planning method in the district was very low. Therefore, continual health education contraceptive method mix during the extended post partum period should be revised by family planning program managers and providers is recommended.

- Long term non hormonal contraceptive methods should be encouraged among women in the first year after delivery in addition to short term hormonal contraceptive methods. Postpartum women should be encouraged to use long term family planning methods.
- Family planning providers should consider LAM as one of the effective family planning methods that are used during the first 6 months postpartum and they should counsel postpartum women about LAM as a family planning method for the first six month postpartum.
- Health professional should counsel women about postpartum family planning during ANC, delivery and/or during postpartum visit to health institutions as these are the potential times for counseling. Postpartum family planning should be integrated with other maternal health services like ANC, and postnatal care
- Further study should be made at large scale about the acceptability and attitude of women towards . And also another study is needed about the knowledge and attitude of family planning providers about LAM.

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