

Postpartum modern contraceptive use and associated factors in Northern Ethiopia

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Abstract

OBJECTIVES: Postpartum period is a critical period to address high unmet needs of family planning and to reduce the risks of closely spaced pregnancies. However, contraception during extended postpartum period has given less emphasis concerning contraceptive practice in Ethiopia. Therefore, this study was aimed to assess postpartum modern contraceptive use and associated factors among postpartum women in Northern Ethiopia.

METHODS: A community based cross sectional study was done from March to April, 2015. Data was entered using Epi Info version 7 and then exported STATA version 12 for analysis. Bivariable and multivariable logistic regression models were fitted to identify the determinants of postpartum modern contraceptive. Adjusted odds ratios (aOR) with 95% confidence interval (CI) and p-value <0.05 were considered as statistical significance.

RESULTS: Nearly half (48%) of women used modern contraceptive during extended postpartum period (EPP). Postpartum modern contraceptive use was significantly associated with secondary, tertiary education level [aOR=4.25; 95% CI, 1.29, 14.00; aOR=5.36; 95% CI, 1.13, 25.45] respectively; family planning counseling during prenatal and postnatal care [aOR=5.72; 95% CI, 2.68, 12.28], having postnatal care [aOR=2.36; 95% CI, 1.15, 4.87], resuming sexual activities [aOR=9.53; 95% CI, 3.74, 24.27], menses returned after birth [aOR=6.35; 95% CI, 3.14, 13.39]. In addition, experiencing problem with previous contraceptive use was negatively associated with modern contraceptive use [aOR=0.34; 95% CI, 0.16, 0.71].

CONCLUSIONS: Low postpartum modern contraceptive use was found in the study area. Therefore, strengthening family planning counseling during ANC and PNC visits, improved postnatal care services utilization and educational status to enhance modern contraceptive use for postpartum women is crucial.

Key words: Modern contraception, postpartum period, Ethiopia.

Introduction

Postpartum family planning (PPFP) is the prevention of unintended and closely spaced pregnancies during the first 12 months following childbirth [1] . The postpartum period is a critical period to address high unmet needs of family planning and to reduce the risks of closely spaced pregnancies [2] .

As research evidences indicated that, prenatal visit [3, 4], place of delivery [3, 5, 6], postnatal visit [4, 7], family planning counseling during prenatal and postnatal care(PNC) [8, 9], resumption of menses after birth [4, 10], are the key predictors for uptake of postpartum modern contraceptive.

According to World Health Organization (WHO) technical consultation committee for better maternal and child health outcomes, an interval of at least two year following live birth is recommended before becoming pregnant again[11] . Pregnancies occurring within a year of the mother's preceding birth are risky for the health of both the mother and the child than those occurring later [12], and that children born within one year of a preceding birth have a higher risk of mortality than those born after longer intervals [13]. Closely spaced births are also associated with increased chance of chronic undernourishment, stunted growth, and infant mortality [12] .

In Ethiopia evidence cited that nearly half (47%) of all pregnancies occurs within a short birth interval of less than 24 months after the preceding birth [14] . The postpartum women are an important group because may not realize as they are at risk of pregnancy even if they are breastfeeding [15]; therefore concentrating efforts to increase postpartum contraception among these women could have a proportionally bigger impact on increasing contraceptive prevalence. However, in Ethiopia, contraceptive use in the extended postpartum period is less emphasized by policy makers [16] . Identifying factors which hinder postpartum contraceptive use is essential for urban communities, because the length of postpartum insusceptibility is declining [17], as result of urbanization, economic development, and social and cultural change [18] .

Studies regarding the practices of modern contraception and associated factors during the extended postpartum period (EPP) are limited in Ethiopia particularly in the study area.

Therefore, this study aimed to address the evidence gap on postpartum modern contraceptive utilization and factors associated with it. This study could help to government, family planning programmer and other stakeholders in developing strategies to reduce closer birth intervals and maximizing postpartum contraceptive use and for the health of both the mother and children.

METHOD AND MATERIALS

Study Design and Setting

A community based cross sectional study was conducted in Aksum town, Northern Ethiopia, from March 25 to April 25, 2015. Aksum town is located at 1,067km far from the Addis Ababa, the capital city of Ethiopia to the north and 248km far from Mekelle, the capital city of Tigray Regional state. The current total population of Aksum town is 60,706 of whom, 30,960 are female. According to the information obtained from the town health office, in the town have four Kebeles with a total of 13, 910, households (HH). There are two public health centers, one public referral hospital, one family guidance association of Ethiopia (FGAE) clinic, four private clinics and nine drug shops providing maternal and other health services to the population. The source population was all reproductive age women who gave birth in the last 12 months prior to the study period who living in Aksum town.

Sample Size and Sampling Procedure

The sample size was calculated using single population proportion formula $n = (Z \alpha/2)^2 P(1-P)/(d^2)$ [19] considering 39.2% proportion of postpartum modern contraceptive use in urban Ethiopia [3], 95% confidence level(CI), 4% margin of error(d) [20] . After adding 5% for non-response, the total sample size was calculated to be 601.

Sampling Procedure

All four Kebele (the smallest administrative unit) in Aksum town was selected. The total sample size was allocated by using proportional allocation to size (PAS) to the total number of postpartum women in the Kebeles. Before the actual data collection, census was done to locate women who are on postpartum period in each kebele. The total number of postpartum women with their under one year children was 1,431. Then the study participants were selected by systematic random sampling techniques. The sampling interval was 2 obtained by dividing the total number of women on postpartum period each of Kebele to the proportional allocated sample of each Kebele. The first postpartum woman was selected by lottery method. Every second postpartum woman was included until the required sample size for each Kebele was achieved. If the selected postpartum woman were absent at the time of data collection the data collectors revisited for two consecutive times and when the interviewers failed to find the study participant after two visits, the next postpartum woman was included in the study (Figure1).

Operational definition

Extended postpartum period: The period from live birth to 12 month interval [21] .

Postpartum modern contraceptive use: This is when a postpartum woman's currently use of any modern contraception methods (pill, IUD, injectable, condom (male or female), sterilization (male or female), implants) during the 12 months following her most recent childbirth.

Knowledge of modern contraception methods: When a woman mentions at least one modern contraceptive method she was knowledgeable[17, 22] .

Data Collection Instrument and Procedures

Structured and pre-tested questionnaire was prepared originally in English and translated to local language (Tigrigna) and translates back to English in order to assess its consistency. Data was collected by eight female diploma holder midwives and one BSc Nurse for supervision. Face to face interview was conducted to collect the data. The questionnaire had three parts.

The first part was on socio-demographic variables that encompass age, marital status, occupation, maternal educational status, partner's educational level, monthly family income. The second part was on reproductive history and maternal health care like ANC utilization, postnatal care utilization, family planning counseling during prenatal and postnatal, place of delivery, number of living children, parity, fertility desire, breast feeding, husband approval, discussed with your husband on family planning methods in the last 12 months, current reproductive intention, birth interval, decision to use family planning methods. The third part was on Knowledge and current practice of postpartum modern contraceptive use. The fourth part was on the past experience of modern contraception services and sexuality issue related variables like family planning counseling by health extension workers(HEW) in the last 12 months, experiencing any problem with previous modern contraceptive use, menstrual period returned after birth, and resumed sexual activity since last birth.

Data Quality Control

Data quality was controlled through provision of training to the data collectors and supervisors about the overall data collection procedures and the techniques of interviewing. Pre-test was done using 5% of the sample questionnaire before the actual data collection in the adjacent town (Wukro Maray Health Center) which is 15 kilo-meter far from Aksum town to ensure clarity, wordings and logical sequence of the questions with a postpartum women supposed to have similar socio-demographic characteristics with people of the study area, and necessary correction was made based on the pre-test. The collected data was checked for completeness, consistency, accuracy and clarity by the supervisor and the principal investigator on a daily basis.

Data Processing and Analysis

All returned questionnaire were checked for completeness and consistency of responses manually. The collected data were coded and entered in to EPI INFO version 7 and exported to STATA version 12 statistical software programs. Data were cleaned and analyzed using STATA version 12 (STATA Corp LP, College Station, TX, USA) by the principal investigator[23]. For descriptive analysis, continuous variables were summarized using mean, median and standard deviation while categorical variables were summarized using proportions and then presented in tables and graphs. Both bi-variable and multi variable logistic regressions were used to identify

associated factors. Variables having P -value < 0.2 in the bi-variable analyses were fitted into a multiple logistic regression model to control the effects of confounding. Adjusted odds ratios (aOR) with 95% confidence interval (CI) were used to identify factors associated with postpartum modern contraceptive use. P-value less than 0.05 were considered as statistical significance of the associations with postpartum modern contraceptive uptake.

Ethical approval

Before commencement of the study, ethical clearance was obtained from Institutional Review Board of Institute of Public Health, College of Medicine and Health Sciences, University of Gondar. Formal letter was obtained from Aksum town health office administration to get permission. Written informed consent was obtained from each study participant to confirm willingness for participation after explaining the objective of the study. Respondents' name and personal identifiers were not included in the written questionnaires. Education about the importance of postpartum contraceptive use during extended postpartum period and source of getting was given at the end of the interview for those who didn't use postpartum contraceptive.

RESULTS

Socio-demographic characteristics of the study participants

Overall, 590(98.2%) postpartum women responded to the interview. The age range of the respondents was from 16 to 49 years. The women's mean age was 27.4 years (SD±5 years). Two hundred thirty one (39.2%) were aged between 25–29 years. The majority (92%) of the respondent were married. The majorities (99.3%) were Tigray by ethnicity. Five hundred forty six (92.5%) of the respondents were Orthodox Christian followers. Nearly two third (64.9%) of the respondents were house wife. Two hundred thirty six (40%) of women were attended secondary school and nearly 40 % of their partner were attended primary school. The median monthly family income was 1000 Ethiopian Birr per month (IQR=1400) (**Table1**).

Table 1: Socio-demographic characteristics of the study participants in Aksum town, Northern Ethiopia, June, 2015(n=590).

Variables/Category	Frequency	Percentage
Age		
15-19	19	3.2
20-24	149	25.2
25-29	231	39.2
30-34	126	21.4
>=35	65	11.0
Marital status		
Married	543	92.0
Others*	47	8.0
Educational level		
No formal education	80	13.6
Primary school(1-8)	202	34.2
Secondary school(9-12)	236	40.0
Tertiary school(12+)	72	12.2
Partner's education (545) **		
No formal education	24	4.4
Primary school(1-8)	210	38.5
Secondary school(9-12)	185	34.0
Tertiary school(12+)	126	23.1
Occupation		
House wife	383	64.9
Government employee	46	7.8
Private employee	103	17.5
Daily Labourer	43	7.3
Others***	15	2.5
Partner Occupation (545)**		
Government Employee	125	22.9
Private employee	257	47.2
Daily Labourer	131	24.0
Others****	32	5.9
Monthly family income		
<=600 Birr	150	25.4
601-1000 Birr	159	26.9
1001-2000 Birr	154	26.1
>2000 Birr	127	21.5

* Single, separated, divorced, widowed **among those married women *** Alcohol /Tella seller, farmer, student **** farmer, pension, guard.

Reproductive health services related characteristics of the study participants

The mean parity of the study participants was 2.52(SD± 1.46). The mean number of living children was 2.4 per women (SD±2.4). One hundred eighty two (30.8%) of the study participants have had one child. The median birth interval was 36 months. One hundred four (17.8%) of the study participants did not have an intention to have more children in the future. Three fourth (76.5%) of women were supported by their husband to use contraceptives. Nearly two third (66.4%) of women were using modern contraceptive prior to last child. In addition, one hundred twenty one (30.9%) had experienced problems while using contraceptive methods prior to their last child. More than a third of (34.75%) the women returned their menses since last birth at the time of survey. Among all women 39.45% of them had resumed sexual intercourse at 6 weeks postpartum period (**Table2**).

Maternal health services use related characteristics of the study participants

Five hundred seventy nine (98.1%) of the study participants had at least one ANC follow up. Five hundred twenty four (90.5%) of study participants had the WHO recommended four or more focused antenatal care visits for their most recent birth. Five hundred seventy seven (97.8%) women gave birth at health facilities. Two hundred fifty eight (43.7%) had PNC follow up. Three hundred twenty two (54.58%) of study participants had received family planning counseling during prenatal and postnatal care (**Table2**).

Table 2: Reproductive and maternal health service use related characteristics of study participants in Aksum town, Northern Ethiopia, June, 2015 (n = 590).

Variables/Category	Frequency	Percentage
Parity		
1-4	536	90.8
>=5	54	9.2
Living Children		
1	182	30.9
2-3	281	47.6
>=4	127	21.5
Birth Interval		
<24 Months	105	24.24
24-47 Months	131	31.49
>=48 Months	180	43.27
Reproductive intention		
Want to space	396	67.1

Want to limit	86	14.7
Undecided	99	16.8
Went to have a child	9	1.5
Who decide to use FP		
Mainly respondents	104	19.08
Mainly the husband	36	6.6
Jointly decision	405	74.3
ANC visits		
1-3	55	9.5
>=4	524	90.5
PNC		
Yes	258	43.7
No	332	56.3
Place of delivery		
Home	13	2.2
Health institution	577	97.8
Postpartum Period		
0-12 week	186	31.5
13-26 week	198	33.6
27-38 week	141	23.9
39-51 week	65	11.0
FP counseling during prenatal and postnatal care		
Yes	322	54.6
No	268	45.4
Menses returned after birth		
Yes	205	34.8
No	385	65.2
Resumed sexual activities by the time of survey		
Yes	403	68.3
No	187	31.7

Modern contraceptive use in postpartum period

The proportion of modern contraceptive use was found to be two hundred eighty three (48%) [95% CI :(43.9, 52.2)] . The most widely used type of modern contraceptive methods was injectable (59.7%) followed by implants (24.7%) and pills (12%). Two hundred forty five (86.6%) were using for spacing (**Figure 2**). Two third (65.5%) of the study participants had started contraceptives before the returned of their menses. One hundred forty five (51.24%) of women started modern contraceptive at six weeks. Two hundred fifty four (89.8%) of women received their contraceptive service from government health facilities.

Those who were not practicing modern contraceptives methods were asked about their future intention to practice a modern contraceptive method. The majority (84.3%) of the study participants had intention to practice a contraceptive in the future and two hundred fifteen (83.3%) planned to use for spacing. The postpartum women pointed out various reasons for currently not using contraceptives such as menses did not resume/less perceived risk for pregnancy 65.5% and fear of side effects 11.1% (**Figure 3**).

Factors associated with postpartum modern contraceptive use

In multi-variable logistic regression analysis, six variables were identified as independently associated with postpartum modern contraceptive use. These were: educational status, family planning counseling during prenatal and postnatal care, having postnatal care, menses returned after birth, resuming sexual activities, experiencing problem with previous modern contraceptive use. Women attended secondary school were 4.25 time more likely to use postpartum modern contraceptives compared to those with no formal education [aOR=4.25 95%, CI: (1.29, 14.00)] and those who achieved tertiary level were 5.36 time more likely to use postpartum modern contraceptives compared to those with no formal education [aOR, 5.36, 95%, CI: (1.13, 25.45)]. Women who attended postnatal care were 2.36 times higher odds to use modern contraceptives in the extended postpartum period than compared to women did not attend postnatal care [aOR =2.36,95%,CI:(1.15, 4.87)]. Women who were received family planning counseling during prenatal and postnatal care were 5.72 times higher odds to use modern contraceptive in the extended postpartum period than those who did not [aOR=5.72 ,95% ,CI: (2.67 ,12.28)]. The odds of using modern contraceptive use for women with returned menses was 6.35 times higher compared to those not returned menses [aOR = 6.35, 95%, CI: (3.14, 13.39)]. The odds of using modern contraceptives in women with resumed sexual activities were 9.53 higher than those who did not resume sexual activities since birth [aOR= 9.53, 95%, CI :(3.74, 24.27)]. The odds of using postpartum modern contraceptive use in women who had experienced problem during previous contraceptive use were 66% lower than those who did not have problems with previous contraceptives use [aOR=0.34, 95%,CI:(0.16,0.71)] (**Table 3**).

Table 3: Factors associated with postpartum modern contraceptive use in Aksum town, Northern Ethiopia, June, 2015 (n = 590).

Variable/Category	Postpartum modern contraceptive use		cOR(95% CI)	aOR(95% CI)	P-Value
	Yes	No			
Education level					
No formal education	27	53	1	1	
Primary school(1-8)	100	102	1.92(1.12,3.30)	2.87(0.98, 8.38)	0.053
Secondary school(9-12)	115	121	1.86(1.09,3.16)	4.25(1.29,14.00)*	0.017
Tertiary school(12+)	41	31	2.59(1.35,5.01)	5.36(1.14 ,25.45)*	0.034
Parity					
1-4	269	267	1	1	
>=5	14	40	0.35(0.18,0.65)	0.4(0.105,1.51)	0.178
Living Children					
1	83	99	1	1	
2-3	157	124	1.5(1.038,2.19)	1.4(0.53,3.68)	0.487
>=4	43	84	0.61(0.38,0.97)	0.81 (0.21,3.01)	0.756
Currently Breast Feed					
Yes	271	304	1	1	
No	12	3	4.48(1.25,16.06)	11.01(0.75,160)	0.079
ANC visits					
1-3	18	37	1	1	
>=4	262	262	2.0 (1.14,3.70)	2.0(0.59 ,6.75)	0.262
FP counseling during Prenatal care and PNC					
Yes	217	105	6.4(4.4,9.2)	5.72(2.67,12.28)*	0.000
No	66	202	1	1	
PNC					
Yes	173	85	4.1(2.9,5.8)	2.36(1.15,4.87)*	0.020
No	110	222	1	1	
Postpartum period					
0-12 week	43	143	1	1	
13-26 week	103	95	3.6(2.3,5.6)	1.3(0.54,3.27)	0.536
27-38 week	92	49	6.2(3.83,10.15)	2.1(0.77,5.76)	0.146
39-51 week	45	20	7.4(3.99,14.01)	3.8(0.94,15.27)	0.059
Discussed FP with husband in last 12month					
Yes	232	209	2.28(1.45,3.58)	2.77(0.67,11.32)	0.156
No	34	70	1	1	
Husband approval FP					
Yes	217	200	1.74(1.16,2.62)	0.94(0.26,3.34)	0.929

No	49	79	1	1	
Knowledge on PFP					
Yes	280	284	7.55(2.24,25.46)	0.37(0.04,3.21)	0.373
No	3	23	1	1	
Got FP counseling by HEW					
Yes	245	212	2.88(1.90,4.39)	0.92(0.36,2.35)	0.866
No	38	95	1	1	
Experiencing problem with previous contraceptive use					
Yes	49	72	0.41(0.26,0.64)	0.34(0.16,0.72)*	0.005
No	168	103	1	1	
Menses returned after birth					
Yes	156	49	6.46(4.4,9.50)	6.35(3.14,13.39)*	0.000
No	127	258	1	1	
Resume sexual intercourse by the time of survey					
Yes	264	139	16.8(10.0,28.16)	9.53(3.74,24.27)*	0.000
No	19	168	1	1	

Homers -Lemeshow test (P-value=0.52) 1=Reference Category *P- value<0.05 statistical significant.

Discussion

This study had tried to assess postpartum modern contraceptive use and associated factors among women of extended postpartum period in Aksum town. Nearly half (48%) of the women were using modern contraceptive methods during the extended postpartum period.

Postpartum modern contraceptive use was significantly associated with women's educational level, family planning counseling during prenatal and postnatal care, postnatal care services utilization, menses returned after birth, resuming sexual activities, and experiencing problem with previous contraceptive use.

This study revealed that proportion of modern contraceptive use among extended postpartum women was 48% [95%, CI: (43.9, 52.2)]. This study was in line with a study done in Gondar town, (48.4%)[4], Kenya and Zambia (46%) [24], Rwanda (50%) [25], and Mexico (47%) [26].

This finding was higher than a study done among postpartum women in urban Ethiopia (39.2%), Nepal (40.7%), and Bangladesh (37.8%)[3], Uganda (28%) [27], Sri Lankan (41.1%)[28] and India (14%)[5]. This could be attributed to the current house to house health education strategy

through health extension worker deployed in the town by the Ethiopian Federal Ministry of Health.

This study was not in agreement with a study done in Malawi (74.6%) [9] . This difference is maybe due to study setting in which the study done in Malawi was institutional based because of that those postpartum women who came to health institution for their baby well care could have good health seeking behavior and opportunity to get health education.

The most popular modern contraceptive methods using by postpartum women were injectable (59.7%), implants (24.7%) and pills (12%). This indicated that there is a skewed method mix in the study area. This explained due to that women method preferences and health care worker attitudes toward contraceptive methods [29] . This is consistent with a study done in Gondar town[4] and ECSA 2011 report [17] .

Almost all postpartum women had a universal knowledge of modern contraceptive methods (95.6%) [95%CI: 93.9-97.3]. This suggested that knowledge of contraceptive method is not yet translated in to contraceptive practice. This is consistent with the 2011(97.1%)[17] Ethiopian Central Statistics report and a study done in Malawi (94.3%) [9] .

This study revealed that educational status of postpartum women was significant associated with modern contraceptive use. This might be due to the following reasons. First; as level of education attainment increase this could probably gives postpartum women a better understanding of available of modern contraceptive methods in the health facilities and benefit of fertility regulation. Second, women who have been educated are more likely to visit a health facility and receive counseling or services on family planning (FP), and go on to use the modern contraceptive, than who have not been educated. Studies elsewhere revealed a similar pattern of relationship between educational level attainment and modern contraception use [3, 5, 9, 30] .

Family planning counseling during prenatal and postnatal care was found to be associated with modern contraceptive use during extended postpartum period. Women who had received family planning counseling during prenatal and postnatal care had about six times higher odds

to use modern contraceptives in the extended postpartum period compared to their counterparts. This might be due to the fact that women who are receiving FP counseling during prenatal care and postnatal care could be highly motivated to use modern contraceptive methods. This result collaborates with a study done in Malawi [9] and North America[8] .

Postnatal care services utilization was a significant variable which influence the modern contraceptive use in the extended postpartum period. The explanation for this finding is women who received postnatal care may have high likelihood to get family planning counseling and adoption in the post partum period. This is similar with a study done in Gondar town [4] and Mexico [7] .

Women whose menses returned after birth were 6.35 times higher odds to use modern contraceptive compared to women on amenorrhea. This finding could be justified by the fact that women may be aware of fertility return when menses resumed. Amenohorric women would perceive less vulnerable to get pregnancy by assuming that amenorrhea would protect against pregnancy irrespective of the postpartum duration. Beside this, nearly two third (65.7%) of the women cited being not resumed menses as main reason for not using modern contraceptive during extended postpartum period. Although menses returned since birth was found to be the strong stimulating factors affecting use of modern contraceptive use in the postpartum period. This study which is supported by reports from Gondar town [4], Nairobi [10] and DHS based analysis from 17 developing countries [31] .

Resuming sexual activities significantly associated with postpartum modern contraceptive practice. A similar finding was seen in studies done in Malawi [9], Egypt, Bolivia and Thailand [32] . The explanation for this could be due to the fact that when postpartum women resume sexual activities, they perceive to be exposed to risk of pregnancy then they motivate to adopt contraceptive methods. Therefore, resuming sexual activities is strongly linked to initiation of modern contraceptive in postpartum period.

Furthermore, experiencing problem with previous contraceptive use was negatively associated with modern contraceptive use during extended postpartum period. A study done in Malawi supported this finding[9] . This may be due to client dissatisfaction and less quality services

related with the previous family planning services that make, the clients tend to discontinue contraceptive use after delivery.

Women stated various reasons for not using modern contraceptives during postpartum period were: menses not resume/less perceived risk for pregnancy, fear of side effects, single/ hand no partner, spousal disapproval and spousal not present. Similar reasons were documented a study done in Gondar town [4], Malawi [9], and India [5].

CONCLUSION

In conclusion, low postpartum modern contraceptive use was found in the study area (48%). Factors associated with postpartum modern contraceptive use were: maternal educational level (secondary and tertiary education level), received FP counseling during prenatal care and postnatal care, having postnatal care visit, menses returned since birth, resumption of sexual activities at the time of survey and experiencing problem with previous contraceptive use. Therefore, strengthening family planning counseling during prenatal care and postnatal care visits, improved postnatal care services utilization and educational status to enhance modern contraceptive use for postpartum women is crucial.

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COMPETING INTERESTS

We have declared that we have no competing interests.

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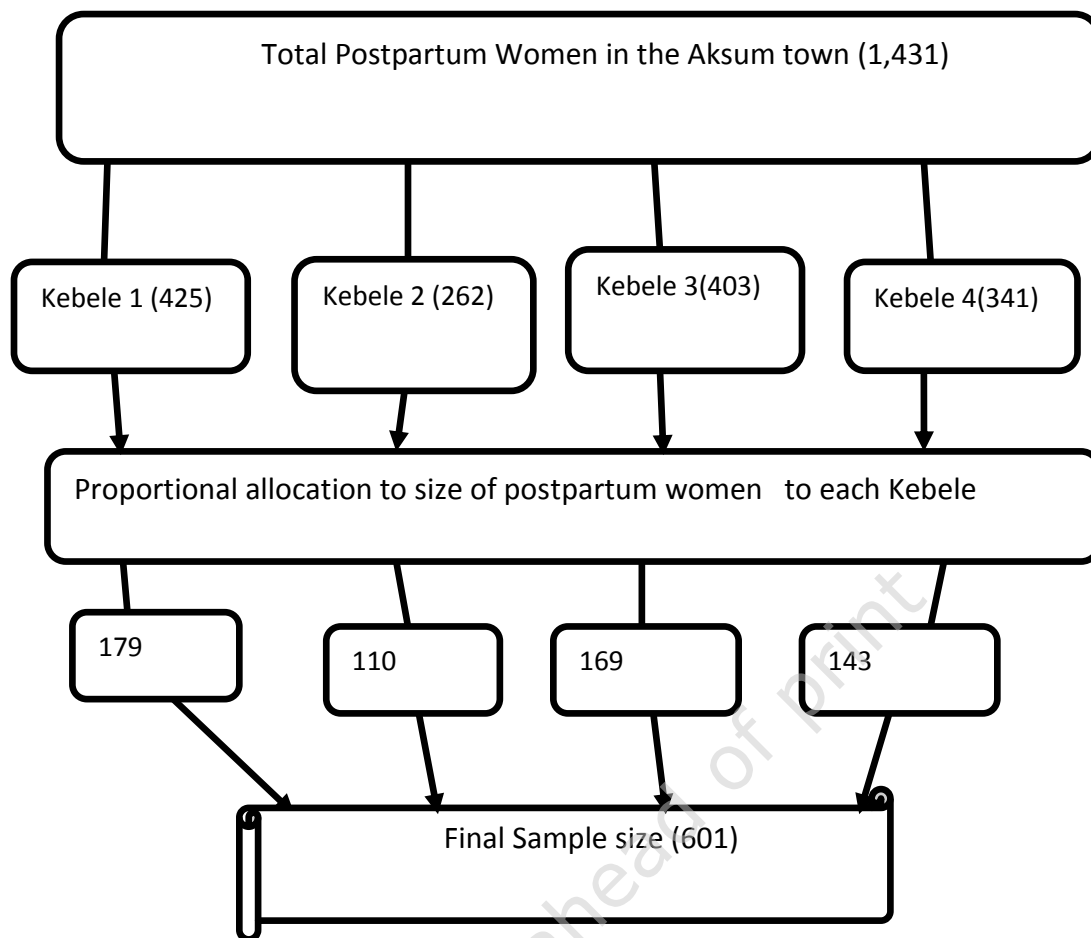
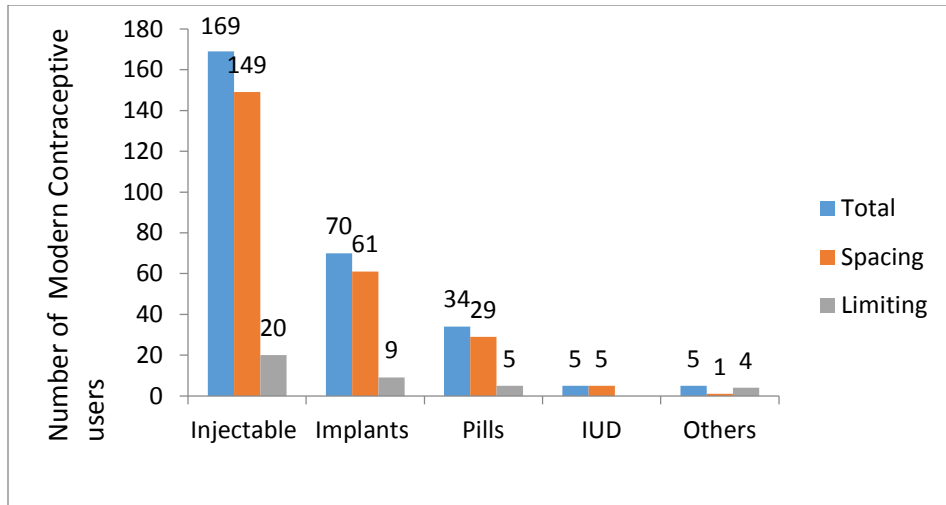


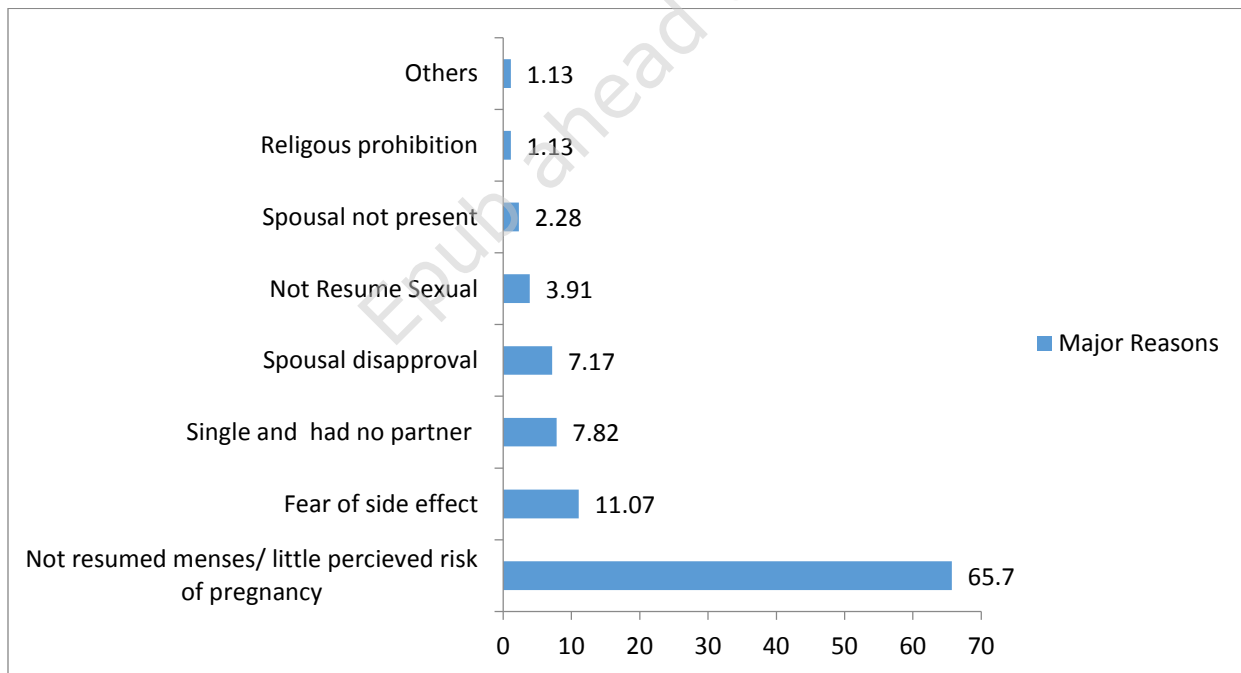
Figure 1: Schematic presentation of sampling procedure of postpartum modern contraceptive use and associated factors in Aksum town, Northern Ethiopia, June, 2015.

Key: Hawelti (Kebele 1), Kindaya (Kebele 2), Hayelom (Kebele 3), Maebel (Kebele 4)



Others : Female sterilization, Male condom

Figure 2: Number of modern contraceptive users by type and purpose among extended postpartum women in Aksum town in Northern Ethiopia, June, 2015 (n=283).



Others: Medical problem, want to have child soon

Figure 3: Major reasons for not using modern contraceptives during Extended postpartum period in Aksum town, Northern Ethiopia, June, 2015(n=307).