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Knowledge of Postpartum Women About Modern Contraceptive Methods and Attitudes Towards its Utilization in Debre Tabor Town, Northwest Ethiopia: A Community-Based Cross-Sectional Study

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Knowledge of Postpartum Women about Modern Contraceptive Methods and Attitudes towards its Utilization in Debre Tabor Town, Northwest Ethiopia: A Community-Based Cross-Sectional Study

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Abstract

Background: The postpartum period is a crucial time to prevent short inter-pregnancy interval and unwanted pregnancies. Despite, it is the most ideal period to create awareness regarding knowledge and attitudes of postpartum mothers about contraceptive methods; it is the most neglected part of the continuum of care. Therefore, this study aimed to assess postpartum mothers' knowledge and attitudes of modern contraceptive methods towards its utilization.

Methods: A community-based cross-sectional study was conducted among 552 postpartum mothers at Debre Tabor town from September 20 to October 20, 2018. A cluster sampling technique was used to select the study participants. Data were entered into Epi info version 7 and analyzed by SPSS version 20 software. Multivariable logistic regression model was fitted to identify associated factors.

Results: The overall prevalence of good knowledge and favorable attitude towards modern contraceptive methods was 57.6% (95% CI: 53.3%, 61.6%) and 40.6% (95% CI: 36.8, 44.6) respectively. Higher education [AOR: 2.15 (95% CI: 1.36, 3.4)], ever had a discussion with their husband about contraception [AOR: 2.15 (95% CI: 1.48, 3.14)] and ever used modern contraceptive methods [AOR: 1.87 (95% CI: 1.15, 3.03)] were found to be significantly associated with good knowledge of postpartum modern contraceptive methods. Besides, maternal age of 25-34-year-old (AOR= 0.42; 95% CI: 0.27, 0.65), having prior information about contraceptive methods (AOR= 1.73; 95% CI: 1.19, 2.53) and good knowledge of postpartum modern contraceptive methods were associated with the attitude of mothers towards modern contraceptive methods.

Conclusion: The study shown that significant number of postpartum mothers had poor knowledge and un-favorable attitude towards modern contraceptive methods. Integrated work is necessary to build up women's access to education and to get information all through the maternal continuum of care.

Keywords: Attitude, Ethiopia, Knowledge, Modern Contraceptives

1. Introduction

Family planning (FP) is the ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births which is achieved through the use of contraceptive methods. It is also a way of thinking and living that is adopted voluntarily upon the basis of knowledge, attitude, and responsible decisions by individuals and couples (1).

Family planning is a means of promoting the health of women and families and part of a strategy to reduce the high maternal, infant and child mortality. Besides, it is also the most effective measure to control high population growth (2). For this reason, information about FP should be made available and actively promote access to FP services for all individuals desiring them (1).

Family planning is a priority area in the to-do lists of the government of Ethiopia; because, it is one of the strategies of the government to improve maternal and child health. The newly launched health service development plan (HSDP) IV and the SDG (sustainable development goal-7) are aiming at expanding quality FP services to improve the health of mothers, neonates, children, adolescents, and youths (3).

The Ethiopian federal ministry of health (FMOH) has undertaken different initiative measures to reduce maternal mortality. From those initiatives, the most important one is delivery of family planning service at all levels of the health care system (1). But, in Ethiopia 22% of mothers have unmet need for modern family planning methods (4). Addressing the unmet need for modern contraceptive methods will have an immediate impact in decreasing unintended pregnancies whose outcome could be postpartum hemorrhage or unsafe abortion, both which are direct causes of maternal mortality (1, 4).

In Ethiopia, the prevalence of children born less than two years after their siblings is 22% (4). Short birth intervals are associated with harmful outcomes for both newborns and their mothers, such as preterm birth, low birth weight, and death (5-7). The postpartum period is the most crucial time to maintain the ultimate health of the women and her newborn. It is also the time of opportunity to provide contraceptive methods for decreasing the risk of short inter-pregnancy interval and unwanted pregnancies. Assessing postpartum mother's knowledge and attitude towards modern contraceptives is a way to improve its utilization

which prevents mothers and their families from the consequences of shortly spaced pregnancies.

Lack of adequate data on knowledge and attitudes about modern contraceptive methods in the populations impede the effort to improve the practice (8). Knowing the common misconceptions about each contraceptive method helps to address concerns and fears of mothers to the specific method (1). As a result, studying knowledge and attitudes of postpartum mothers tell us what they know and how they feel about modern contraceptives.

The majority of MNCH services are conducted before and within the first six months of the postpartum period. These MNCH services are an opportunity to build the mother's attitude and improve their knowledge of modern contraceptive methods. At the time of antenatal care (ANC), labor and delivery, postnatal care, and immunization service, women may get more information about modern contraceptive methods. So, it is an opportunity to assess and realize the knowledge and attitudes of postpartum mothers to improve the utilization of modern contraceptives.

Studies in Ethiopia showed that utilization of postpartum family planning methods was low (9). Different reasons like; don't know about family planning methods, un-favorable attitude, religious beliefs and wants to have many children were contributed to it (9, 10). Even through most postpartum mothers know the names of modern contraceptive methods (4), they don't know; when a postpartum mother could start contraceptive methods, time of pregnancy after discontinuation of contraception, whether the mother may become pregnant whilst in breast feeding and before the beginning of menstruation.

Increasing women's knowledge and improving their attitude on postpartum modern contraceptive methods is essential to improve their quality of life. Therefore, this study is aimed to assess knowledge of postpartum modern contraceptive methods and attitudes towards its utilization in Debre Tabor town, Northwest Ethiopia.

2. Methods and Materials

2.1. Study Design, Setting and Period

A community-based cross-sectional study was conducted from September 20 to October 20, 2018 in Debre Tabor town which is the capital city of South Gondar zone Amhara Regional State, Northwest Ethiopia. The town is located 666 kilometers Northwest of Addis Ababa. Based on the 2007 National Census conducted by the Central Statistical Agency of Ethiopia (CSAE), projection the town has a total population of 55,596 of whom 27, 644 (49.7%) are men and 27,952(50.3 %) are women. 96.72% of the population of the town is Orthodox Christians, and 2.54% is Muslim (11). The town has one referral hospital, three health centers, and six health posts serving the community.

2.2. Study Population

All women who gave birth in the past six to twelve months in the selected clusters during the study period were included. Mothers who were critically ill throughout the data collection period were excluded.

2.3. Sample Size Determination and Sampling Procedures

The sample size (n) which was required for this study was determined by using a single population proportions formula by considering the assumptions: postpartum mothers who had good knowledge was 68.2% (9), a margin of error (d) = 5%, and a 95% level confidence.

$$n = \frac{(Z\alpha/2)^2 p(1-p)}{d^2} = n = \frac{(1.96)^2 * 0.682(1-0.682)}{(0.05)2} = 334$$

Where n= required sample size, α= level of significant, z= standard normal distribution curve value for 95% confidence level= 1.96, p= proportion of mother's knowledge about postpartum modern contraceptive methods, d= margin of error.

The final sample size was 552 including the design effect of 1.5 and a 10% non-response rate. Design effect of 1.5 was used in case of cost minimization rather than 2. Debre Tabor town has six urban "kebeles" (which are the smallest administrative unit in Ethiopia) and three "kebeles" were selected randomly (kebele 1, kebele 2, and kebele 5). A house-to-house visit was carried out in the selected clusters to identify eligible mothers. All eligible mothers

in the selected clusters were interviewed with the assumptions of homogeneity of participants in Debre Tabor town.

2.4. Operational Definitions

Extended postpartum period: the period between six to twelve months of delivery (12).

Good knowledge: Mothers who have a score of greater or equal to the mean value of six and above from eleven variables which assessed modern contraceptive methods were considered having good knowledge.

Poor knowledge: Mothers who have a score of less than the mean value of six from eleven variables which assessed modern contraceptive methods were considered having poor knowledge.

Favorable attitude: Mothers who have a score of greater or equal to the mean value of four and above from eight variables which assessed modern contraceptive methods were considered having favorable attitude.

Unfavorable attitude: Mothers who have a score of less than the mean value of four from eight variables which assessed modern contraceptive methods were considered having unfavorable attitude.

2.5. Data Collection Tools, Procedures and Quality Control

Data was collected using face to face interviewer-administered questionnaire. Two fourth-year midwifery students and one BSc in midwifery holders were recruited for data collection and supervision respectively**.** The questionnaires were prepared in English and translated into Amharic and translated back to English to keep the consistency of the questionnaire. We did a pre-test on 28 (5%) of the sample at Woreta town**.** One day training was given about the overall data collection process for both the data collectors and the supervisor. During the data collection period, questionnaire was checked for completeness daily by the supervisors, and on spot corrective measures was taken.

2.6. Data Processing and Analysis

The data were entered into EPI Info version 7 and exported to SPSS version 20 software for analysis. Binary logistic regression was used to identify factors associated with knowledge

and attitudes of modern contraceptive methods. Variables having with a p-value of less than or equal to 0.20 was fitted in the multivariable logistic regression models for controlling the possible effect of confounders and the variables which have independent association with knowledge and attitudes of postpartum mothers about modern contraceptive methods were identified based on the odds ratio with 95% CI and *p*-value less than or equal to 0.05 were considered to determine statically significant association.

3. Result

3.1. Socio-Demographic Characteristics

A total of 552 postpartum mothers were included in the study. The mean age of the participants was 27.59 years (SD± 4.82). Most (95.1%) of the mothers were married and 96.7% of the mothers were orthodox Christians. Regarding the educational status, 344 (62.3%) of mothers were secondary education and above. Among respondents, 336 (60.9%) were a housewife by occupation **(Table1).**

3.2. Reproductive and Maternity Health Service-Related Characteristics

About 537 (97.3%) of the mothers were delivered at health institutions for their most recent delivery. More than three-fourths (76.1%) of deliveries were spontaneous delivery. About 237 (42.9%) of mothers have discussed with their husbands about FP methods. Most of the mothers 537 (97.6%) had ANC follow up and more than four-fifths (86.1%) of women had four and above visits. More than half (56.9%) of the mothers had PNC visit of whom 163 (51.9%) got information about modern contraceptives in the postpartum period (**Table 2**).

3.3. Mother's Knowledge of Postpartum Modern Contraceptive Methods

Among the respondents, 318 (57.6%) had good knowledge of postpartum modern contraceptive methods. Most of the participants 482 (87.3%) were ever heard about various methods of contraceptives used for postpartum mothers. Nearly two-thirds (74.6%) of the mothers knew that a woman can pregnant whilst breastfeeding. Above half of the respondents knew postpartum women can start contraceptives before the beginning of menstruation. One-fourths (26.8%) of the mothers knew that IUCD can be used by breastfeeding mothers. Nearly half (47.1%) of the participants knew that after permanent contraceptive a woman cannot become pregnant (**Table 3)**. Injectables (84.4%), pills

(74.3%), and implants (60.3%) were the most known contraceptive methods by the study participants (**Figure 1**).

3.4. Mother's Attitude of Postpartum Modern Contraceptive Methods

Among the respondents, 224 (40.6%) had a favorable attitude towards postpartum modern contraceptive methods utilization (**Table 4**).

3.5. Factors Associated with Knowledge of Postpartum Mothers on Modern Contraceptives

On the bivariable regression analysis, the factors found to be significantly associated with knowledge of mothers on modern contraceptive methods were: educational statuses of the mother, mothers ever discuss with their husband about contraceptive methods, attend PNC, having prior information about modern contraceptive methods after delivery of the last child, and history of modern contraceptive utilization before the delivery of the last child.

After controlling the effect of other variables, mothers educational status (high school and above) [AOR: 2.15 (95% CI: 1.36, 3.4)], ever discuss with their husband about contraceptive methods [AOR: 2.152 (95% CI: 1.48, 3.14)], and history of modern contraceptive utilization before the delivery of the last child [AOR: 1.87 (95% CI: 1.15, 3.03)] were found to be significantly associated with knowledge of modern contraceptive methods of postpartum mothers in multiple logistic regression analysis (**Table 5**).

3.6. Factors Associated with Attitude of Postpartum Mothers on Modern Contraceptive Methods

Multivariable regression analysis revealed that maternal age of 25-34 [AOR: 0.42 (95% CI: .27, .65)], having prior information about modern contraceptive methods before delivery of the last child [AOR: 1.733 (95% CI: 1.19, 2.53)] and knowledge of the mother [AOR: 3.493 (95% CI: 2.37, 5.15)] were found to be significantly associated with the attitude of postpartum mothers about modern contraceptives (**Table 6**).

4. Discussion

Improving women's knowledge and attitude towards modern contraceptive methods is indispensable to enhance the practice of postpartum contraceptives. This study assessed women's knowledge and attitudes of postpartum modern contraceptive methods in Debre Tabor town.

Accordingly, this study found that the overall knowledge of women on postpartum modern contraceptive methods was 57.6% which is in line with a study conducted in Northwest Ethiopia (10). However, the finding of this study was lower than a study conducted in Eastern Ethiopia (9). This may be due to the difference in the study subjects. The previous study was done on postpartum mothers at the end of twelve months of delivery. This may increase repetitive contacts in MNCH services; which provide the chance to get more information about family planning methods.

In this study, the level of mother's good knowledge about postpartum modern contraceptives was higher than the study conducted in Northwest Ethiopia (13). This may be due to the difference in the study population in which the information we gathered. The previous study was done in all reproductive-aged mothers but this study was conducted on postpartum mothers.

In this study, the educational status of women was found to be a predictor of mother's knowledge of postpartum contraceptive methods. Those mothers who attend primary and above education were 2.15 times more likely to have good knowledge of postpartum modern contraceptive methods compared to those women who didn't attend formal education. This study is supported by a study conducted in Northern India (14). This could be due to educated mothers may get information about contraceptive methods from different sources like by attending maternal health services and other reproductive issues. They also able to retain the information they attained.

The odds of having adequate knowledge of postpartum modern contraceptive methods among women who have ever discussed with their husbands about contraceptive methods were two times higher compared to those who had poor knowledge. This could be justified as a discussion for contraceptive methods with partners that may increase the chance to share

different information and get the freedom to do any maternal and reproductive health services. This in turn enhances their knowledge of contraceptive methods.

History of modern contraceptive utilization before the delivery of the last child was also another important factor for mothers' knowledge of modern contraceptive methods. Those mothers who have ever used modern contraceptive methods before the delivery of the last child were nearly two times more likely to have had good knowledge of postpartum contraceptive methods compared to their counterparts. This could be due to women who have ever used contraceptive methods may discuss and share ideas about different contraceptive methods with health professionals.

This study found that the attitude of mothers towards modern contraceptive methods was 40.6% with 95% CI (36.8, 44.6). The finding is lower than studies conducted in Eastern Ethiopia and Khatamendu, Nepal (13, 15). These differences might be due to the dissimilarity in socio-demographic characteristics. The other difference from a study conducted in Nepal might be the result of the tool we used to measure the outcome variable; in this study, the questions were prepared on five Likert scales (strongly disagree, disagree, neutral, agree and strongly agree) and also might be the difference in study design.

Mothers in the age groups of 25-34 were 58% less likely to have had a favorable attitude compared to mothers in the age group of 18-24 years old.

Our study declared that having prior information about contraceptive methods before the delivery of the most recent child was 1.73 times more likely to have had a positive attitude towards postpartum contraceptive method utilization. This may be due to having prior information help women to have sufficient knowledge and outweigh the advantages and disadvantages of using contraceptive methods thereby developing a favorable attitude through time.

Lastly, adequate knowledge of postpartum modern contraceptive methods is found to be a significant factor associated with the mother's attitude towards postpartum modern contraceptive methods utilization. Those women who had good knowledge were 3.49 times more likely to have had a favorable attitude towards postpartum modern contraceptive methods. This is because knowledge is an entry point for any behavior and health service-related practices. Also, knowledgeable women have better retaining and comprehension

skills about maternal and reproductive health-related activities compared to women who have poor knowledge.

5. Conclusion

The overall knowledge and attitude of mothers towards modern contraceptive methods in the area was low. Mother's educational status, ever discussed with their husband about contraceptive methods, and history of modern contraceptive methods utilization before the delivery of the last child were the factors significantly associated with knowledge of postpartum modern contraceptive methods. Furthermore, adequate knowledge of postpartum modern contraceptive methods, age group of 25-34 years old and having prior information about contraceptive methods were the factors that significantly associated with the attitude of women. Integrated work is necessary to build up women's access to education, to get information all through the maternal continuum of care, and encourage couples to have a free discussion regarding contraceptive methods.

Abbreviations

ANC: antenatal care, AOR: adjusted odds ratio, CI: confidence interval, COC: combined oral contraceptives, COR: crud odds ratio, FP: family planning, IUCD: intra-uterine contraceptive device, MCH: maternal and child health, PNC: postnatal care, PPFP: postpartum family planning, SPSS: statistical package for social scientists, WHO: world health organization

Declarations

Ethics Approval and Consent to Participate

This study was conducted under the declaration of Helsinki. Ethical clearance was obtained from the School of Midwifery (MIDW/10/489/2018) under the delegation from the Ethical Review Board of the University of Gondar. Written informed consent was obtained from each study participants after informing the objective of the study. In the consent, statements about the potential risks, benefits, and confidentiality were included and explained.

Consent for publication: Not applicable

Data Sharing Statements

The datasets collected and analyzed for this study are available from the corresponding author and can be attained on a reasonable request.

Competing Interest: The authors declare that they have no competing interests.

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The funding source of this research was the University of Gondar and the University has no role in design, data collection, analysis, decision to publish as well as preparation of the manuscript.

Authors' Contributions

All the authors had significant involvement in the conception and designing the study, acquisition of data, analysis and interpretation of data, took part in drafting the article, revising the article, gave final approval of the version to be published, have agreed on the journal to which the article has been submitted and agree to be accountable for all aspects of the work.

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Table1: Socio-Demographic Characteristics of Postpartum Mothers in Debre Tabor Town, South Gondar Zone, Northwest Ethiopia, 2018 (n=552*)*

Variables	Frequency	Percent (%)
Age		
18-24	132	23.9
25-34	353	63.9
35-45	67	12.1
Marital status		
Married	525	95.1
Single	11	2
Divorced	14	2.5
Widowed	2	0.4
Religion		
orthodox	534	96.7
Muslim	15	2.7
Protestant	3	0.5
Level of education		
Illiterate	115	20.8
Primary education	93	16.8
High school and above	344	62.3
Occupation		
Housewife	336	60.9
government and private employed	113	20.5
Laborer	6	1.1
self-employed	61	11.1
Others (farmers and student)	36	6.5
Partners educational status (n= 538)		
Illiterate	102	19

Primary education	72	13.4
High school and above	364	67.7
Partners occupation (n=53 8)		
Gov't employed & private employed	265	49.3
Daily laborer	59	11
self-employed	187	34.8
Others (farmer and student)	27	5

Table2: Reproductive and Maternity Health Service-Related Characteristics of Mother at Debre Tabor Town Northwest Ethiopia, 2018 (n=552)

Variables	Frequency	Percent (%)
Parity		
1-2	411	74.5
3-4	124	22.5
>=5	17	3.1
Place of delivery		
Home delivery	15	2.7
Institutional delivery	537	97.3
Mode of delivery		
Spontaneous vaginal delivery	420	76.1
Caesarean delivery	55	10
Instrumental delivery	77	13.9
Intension to have another child for the future		
No	121	21.9
Yes	431	78.1
Ever discussed with their husband about FP		
No	315	57.1
Yes	237	42.9
Do you have ANC visit		
No	13	2.4

Yes	539	97.6
Number of ANC visit (n= 539)		
≥4 times	464	86.1
<4 times	75	13.9
Get information on FP during ANC (n= 539)		
No	244	45.3
Yes	295	54.7
Attend PNC		
No	238	43.1
Yes	314	56.9
Get information about FP on PNC (n= 314)		
No	151	48.1
Yes	163	51.9
Get information about family planning before the delivery of last child		
No	310	56.2
Yes	242	43.8
After delivery of the last child do you get information about family planning		
No	342	62
Yes	210	38
History of modern contraceptive before the delivery of last child		
No	97	17.6
Yes	455	82.4

Table 3: Knowledge of Women in the Postpartum Period on Modern Contraceptives in Debre Tabor Town, Northwest Ethiopia, 2018 (n=552)

Variables	Frequency	Percent
Know family planning methods used for postpartum mothers		
Yes	482	87.3
No	70	12.7
Know mother become pregnant whilst breastfeeding		
Yes	412	74.6
No	140	25.4
Know a woman start contraception before the menstruation begins?		
Yes	333	60.3
No	219	39.7
Know IUCD be used to prevent pregnancy after delivery		
Yes	234	42.4
No	318	57.6
If IUCD is used to prevent pregnancy after delivery, when to start it? (n= 234)		
After delivery within 48 hours	42	17.9
From 4-6 weeks.	28	12
From 6weeks-6 months	89	38
From 7 months-1 year	12	5.1
I don't know	63	26.9
Know IUCD used during breast feeding period		
Yes	148	26.8
No	404	73.2
Know after IUCD removal a woman can become pregnant immediately		
Yes	189	34.2
No	363	65.8
Know implants be used to prevent pregnancy after delivery		

Yes	344	62.3
No	208	37.7
If implants used to prevent pregnancy after delivery when to start it? (n=344)		
from delivery - 6 weeks	163	47.4
from 7 week - 6months	84	24.4
from 7 months -1year	46	13.4
I don't know	51	14.8
Know after removal of implants a woman can become pregnant immediately		
Yes	295	53.4
No	257	46.6
Know after permanent contraceptive a woman can't become pregnant		
Yes	260	47.1
No	292	52.9
Know a woman during breast feeding period can use COC		
Yes	223	40.4
No	329	59.6
If COC is used for during breast feeding when to start it? (N=223)		
From delivery - 6 weeks	106	47.6
From 7 week - 5 months	72	32.3
from 6 months -1year	21	9.4
I don't know	24	10.8
Know Injectables (DEPO) be used to prevent pregnancy after delivery		
Yes	449	81.3
No	103	18.7
If Injectables used after delivery when to start after delivery (n= 449)		
Immediately after delivery	13	2.9
From 48 hours - 6 days	4	.9
From 7 days - 3 weeks	22	4.9
3 weeks-6months	303	67.5
Above 6 months	80	17.8

I don't know	27	6
Overall knowledge		
Poor Knowledge	234	42.4
Good Knowledge	318	57.6

Variables	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Without family planning Postpartum woman can pregnant within 6 weeks.	52 (9.4%)	147(26.6%)	75 (13.6%)	235 (42.6%)	43 (7.8%)
After delivery if the menses is not started I will not become pregnant	125 (22.6%)	157(28.4%)	35 (6.3%)	176 (31.9%)	59 (10.7%)
PPFP doesn't affect the health of my child	20 (3.6%)	107(19.4%)	116 (21%)	233 (42.2%)	76 (13.8%)
Postpartum family planning doesn't help me to start sexual intercourse immediately.	43 (7.8%)	132(23.9%)	241 (43.7%)	81 (14.7%)	55 (10%)
Postpartum family planning can't expose to urinary tract infection.	11 (2%)	67 (12.1%)	217 (39.3%)	150 (27.2%)	107 (19.4%)
IUCD doesn't affect any day to day activity.	7 (1.3%	53 (9.6%)	286 (51.8%)	136 (24.6%	70 (12.7%)
Male sterilization doesn't affect the desire of sexual activity.	27 (4.9%)	55 (10%)	312 (56.5%)	109 (19.7%)	49 (8.9%)
IUCD doesn't affect any sexual activity and desire.	33 (6%)	65 (11.8%)	282 (51.1%)	111 (20.1%)	61 (11.1%)
Attitude	Favorable			224 (40.6%)	

Un -favorable	328 (59.4%)

Table 4: Attitudes of Women in the Postpartum Period on Modern Contraceptive Methods in Debre Tabor Town, Northwest Ethiopia, 2018 (n= 552)

Table5: Bivariable and Multivariable Logistic Regression Analysis of Factors Associated with Knowledge of Postpartum Mothers about Contraceptives in Debre Tabor Town, South Gondar Zone, Northwest Ethiopia, 2018 (n= 552)

Variables	Knowledge		COR (95%CI)	AOR (95%CI)
	Good knowledge	poor knowledge		
Marital status				
Married	306	219	1.747 (.802,3.805)	.839 (.354,1.989)
Others (single, divorced, widowed)	12	15	1	1
Educational status				
No formal education	48	67	1	1
Primary education	49	44	1.554 (.896,2.696)*	1.745(.966,3.151)
High School and above	221	123	2.509 (1.629,3.86)	2.15(1.359,3.403)**
Mode of delivery				
Spontaneous delivery	233	187	1	1
Caesarean delivery	37	18	1.65(.91,2.992)	1.543(.81,2.942)
Instrumental delivery	48	29	1.328(.806,2.189)	1.241(.723,2.131)
Ever discussed with their husband about FP				
No	152	163	1	1
Yes	166	71	2.507(1.758,3.576)	2.152(1.478,3.135)**
Attend ANC				
No	5	8	1	1
Yes	313	226	2.216(.716,6.862)	.987(.304,3.207)
Attend PNC				
No	121	117	1	1

Yes	197	117	1.628(1.157,2.29)	1.186(.813,1.729)
After delivery of the last child do you get information about FP				
No	180	162	1	1
Yes	138	72	1.725(1.209,2.461)	1.42(.964,2.092)
History of modern contraceptive before delivery of last child				
No	44	53	1	1
Yes	274	181	1.823(1.172,2.836)	1.87(1.154,3.03)**

Notes: * p-value <0.05, ** p-value ≤0.001

Table 6: Bivariable and Multivariable Logistic Regression Analysis of Factors Associated with Attitude of Postpartum Mothers about Modern Contraceptives in Debre Tabor Town, South Gondar Zone, Northwest Ethiopia, 2018 (n= 552)

Variables	Attitude		COR (95%CI)	AOR (95%CI
	Favorable attitude	Un-favorable attitude		
Age				
18-24	68	64		
25-34	127	226	.529 (.353, .793)	.42(.27, 652)**
35-45	29	38	.718 (.397,1.298)	.579(.308,1.089)
Ever discussed with their husband about FP				
No	113	202	1	1
Yes	111	126	1.575(1.117,2.221)*	1.224(.841,1.783)
Attend PNC				
No	80	158	1	1
Yes	144	170	1.673(1.18,2.37)**	1.451(.986, 2.136)
Before delivery of the last child do you get information about FP				
No	106	204	1	
Yes	118	124	1.83(1.298,2.584)**	1.733(1.19, 2.525)**
After delivery of the last child do you get information about FP				

No	120	222	1	1
Yes	104	106	1.82(1.279,2.576)**	1.357 (.904, 2.037)
History of modern contraceptive utilization before delivery of the last child				
No	44	53	1	1
Yes	274	181	1.823(1.172,2.836)	.91(.556,1.491)
Knowledge				
Poor knowledge	59	175	1	1
Good knowledge	165	153	3.199(2.214-4.62)	3.493(2.371,5.147)**

Notes: *p –value <0.05, ** p-value ≤0.001

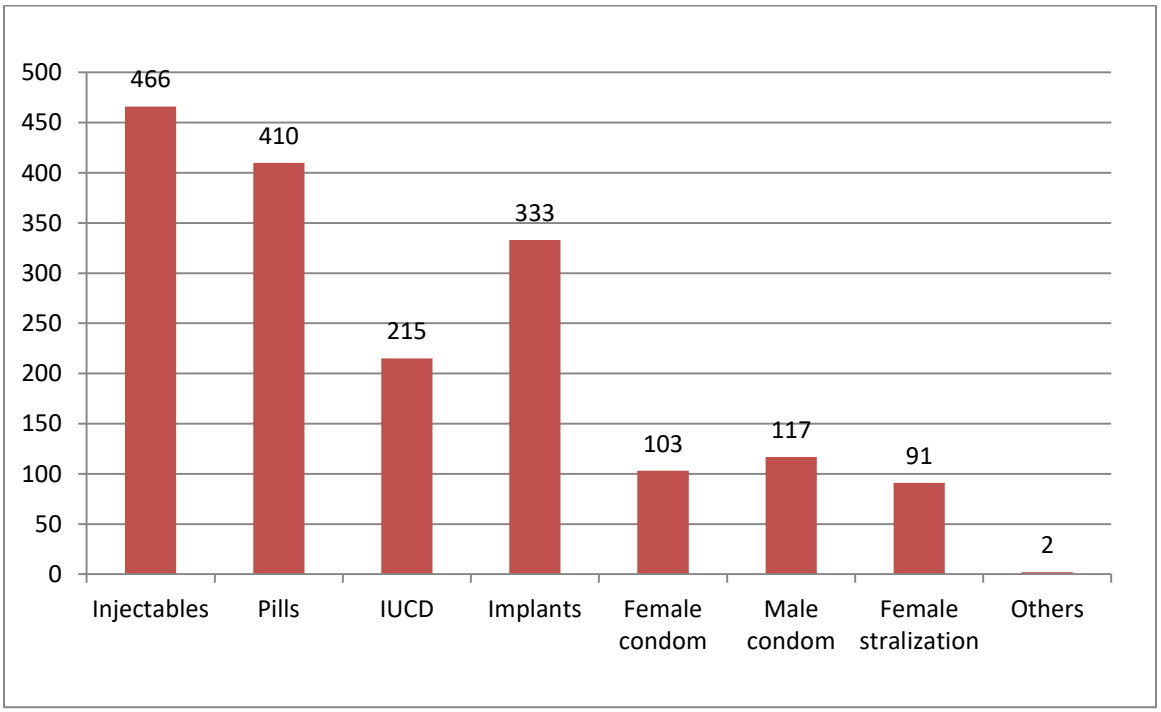

Figure 1:- Type of contraceptives known by postpartum mothers in Debra Tabor town, South Gondar zone, Northwest Ethiopia 2018.

Figures

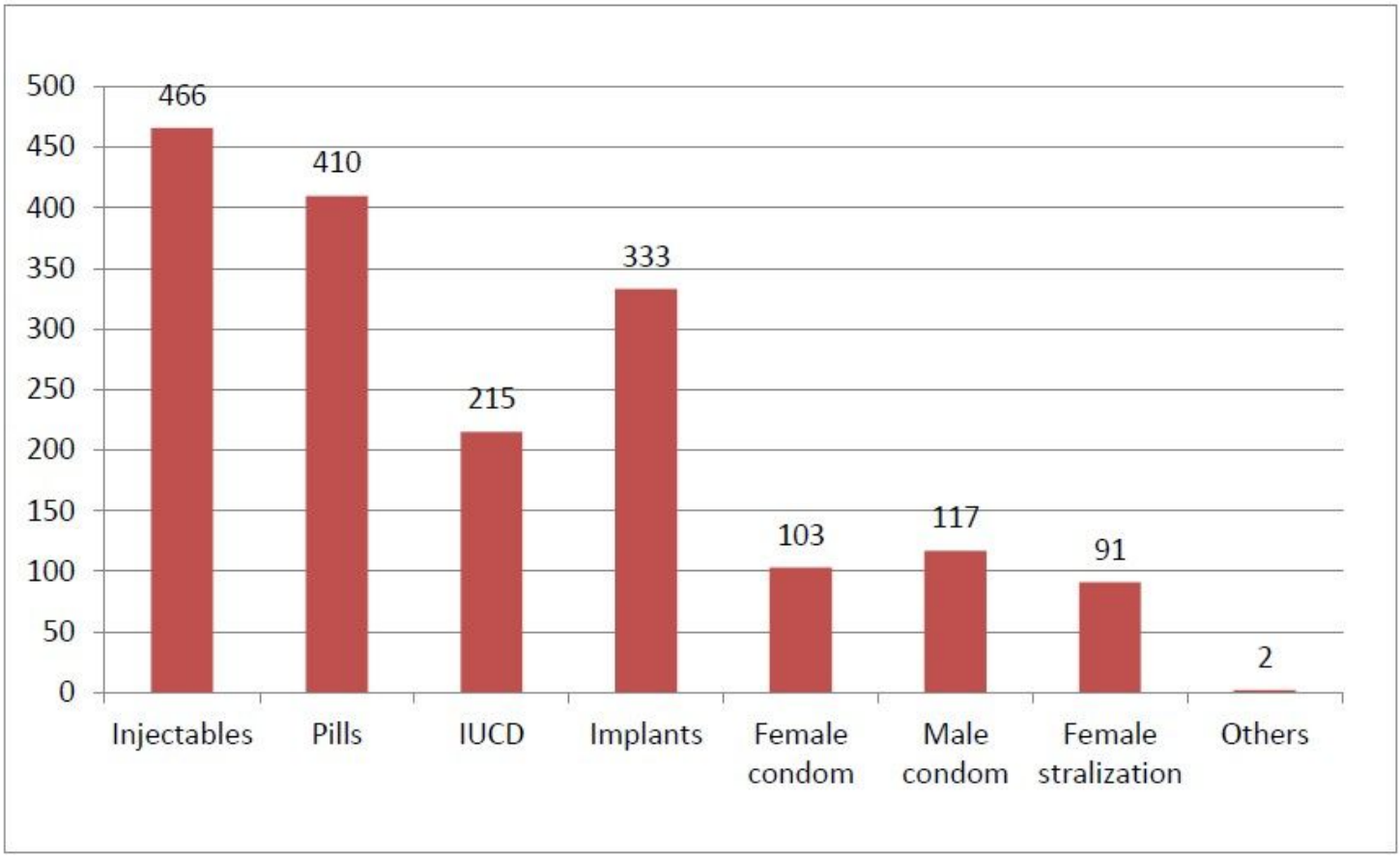

Figure 1

Type of contraceptives known by postpartum mothers in Debra Tabor town, South Gondar zone, Northwest Ethiopia 2018.