

Research Article

Up takes of Postpartum Contraceptives

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Abstract

Background: Post-partum family planning aims to prevent an intended pregnancy within the first year postpartum. Closely spaced pregnancy within the first year of PP is associated with higher risk of preterm birth, low birth weight or small for gestational age. However, the perceived uptakes of postpartum contraceptives are very low. The intention of this study was determine uptakes and associated factors of postpartum family planning in southern Ethiopia.

Methods: The study was conducted in Hawassa city administration which is the capital of SNNPR. Community based cross sectional study was employed women who gave birth in the last 12 months before survey. Data was collected using structured questionnaire proceeding informed verbal consent. Logistic regression model was used to identify associations between variables and findings were presented.

Result: The prevalence of current post-partum contraceptive use was 85.1%. After adjusting for covariates; the odds of using postpartum contraceptive were 1.31 times, 12.13 times, 5.17 times, 10.77 time and 4.69 times higher among women with, knowledge about advantages and side effects of contraceptives, partner support for contraceptive use, previously contraceptive use and not returned period respectively with ($P < 0.05$).

Conclusion: Uptakes of postpartum contraceptives in Hawassa city administration was promising. Detailed counseling about postpartum contraceptive use, could assist equipping women with knowledge of family planning methods; empowering them to be decisive in the health and positivity of male partners are very crucial to promote postpartum use of contraceptives.

Keywords: Uptakes; Postpartum contraceptive; Postpartum period; Hawassa; Southern Ethiopia

List of Acronyms & Abbreviations

AOR: Adjusted Odds Ratio; ANC: Antenatal Care; COR: Crude Odds Ratio; FP: Family Planning; HC: Health Center; HIPFP: High Impact Practices in Family Planning; IUCD: Intrauterine Contraceptive Device; PNC: Postnatal Care; PFP: Postpartum Family Planning; PPW: Postpartum Women; SNNPR: Southern Nations Nationalities and Peoples' Region; SPSS: Statistical Package for the Social Sciences; WHO: World Health organization

Background

Family planning (FP) is an essential component of health care that assist prevents maternal and child health complications including premature mortality, and it has been identified as a critical element of reproductive health because it has been the most successful development interventions for the past 50 years [1]. Family planning services therefore, were highlighted as one of the important strategies for reducing high risk pregnancies that often occurred too early, too late, and too frequent and also as a way to improve child health. It is unique in its range of potential benefits, encompassing economic development, maternal and child health, educational advances, and women's empowerment since closely spaced pregnancies within the first-year postpartum are associated with higher risks of preterm births, as well as infants who are low birth weight or small for gestational age [2,3]. Therefore, postpartum family planning (PPFP) is defined as the prevention of unintended and closely spaced pregnancies through at least first 12 months following childbirth, which could add advantage of giving the women sufficient time to recover from the physical

stress of pregnancy and for lactation. Hence, healthy timing and spacing of pregnancies provides a positive effect on maternal health and new-born outcomes [4]. It aims to prevent unintended pregnancy and closely spaced pregnancies after childbirth and approved that PP FP saves lives [3,5,6]. PFP is often ignored and a number of biases and misconceptions had limited its availability and acceptability [7]. However, the timing of the return of fertility after childbirth is variable and unpredictable. Women can get pregnant before the return of menstruation. Therefore awareness creation is critical to determine the number of children to have, time of use after postpartum because the woman should be able to have informed choices that are free from coercion, discrimination, or violence [8,9].

Sub-Saharan Africa has one of the highest fertility rates in the world, which is further promoted by the low utilization of postpartum contraceptive methods [10]. Yet, many communities claim to use traditional family planning methods that preexists the introduction of modern contraceptives, implying that contraception is a culturally acceptable norms [2,3,8,10]. The overall trend of contraceptive prevalence is promising in Ethiopia. Despite of Rapid change with a renewed investment in family planning programs that highly promoted PFP [2,10] in Ethiopia, different studies showed that the prevalence of PFP was varying from 10.3% in northern Ethiopia to 80.3% in Addis Ababa to associated with sociocultural, demographic, residence, economic, quality of health care and dominance of partner discrepancies [10]. Additionally, researchers showed that marital status, prenatal visits, place of delivery, length of time after delivery, postnatal visits, family planning counseling during antenatal care (ANC) and postnatal

care (PNC), resumption of menses after birth, discussion of family planning with male partner and previous modern contraceptive use were the key predictors of postpartum modern contraceptive use [8]. In relation to the mentioned reasons the utilization of PFP is very low in the study area, despite of Counselling and providing FP services is an essential component of the postnatal care package in Ethiopia. Therefore, this study intended to assess the uptakes and associated factors of postpartum family planning in southern Ethiopia that could help policy makers create an approach to avert the problem and increase the CPR as high as possible through promotion of postpartum need of family planning.

Methods and Materials

Study design, study population and sampling procedure

The Community based cross-sectional study was conducted among post-partum women who gave birth within 12 months before survey in Hawassa city administration, which is the capital city of the SNNPR. In 2018, population of the city administration is estimated to be 376,539 with 65% of urban population, of which 23.3% are women of productive age group. The city administration has 8 sub cities and 32 kebeles (21 urban and 11 rural kebeles). There are 7 hospitals (3 government and 4 private Hops), 11 health centers, 17 health posts, 4 NGO and 34 private clinics under city administration. A total of 402 women who gave birth in the past 12 months before survey were identified using single population proportion formula considering prevalence of postpartum family planning use within 12 months after giving birth to be 80.3% in urban (Addis Ababa) setting and design effect of 1.5 at 95% CI and 5% level of precision, and 10% of non-response rate. Women who unable to communicate due to mental problem, and serious health as well as those who did not consent to participate, were excluded from the study.

Sampling was conducted in two stages. For the first stage six kebeles were selected by simple random sampling and total sample size was proportionally allocated based on the number postpartum women in the last 12 months. In the second stage, we selected eligible participants by systematic random sampling technique based on list of postpartum mothers registered at health post level in each selected kebeles.

Data collection and quality management

Data was gathered by using structured and pretested questionnaire. The questionnaires was first prepared in English and then translated into local national language (Amharic) and back translated into English to assure consistency by language expert and pretest was conducted among 20 postpartum women in non-sample kebeles. Supervisors and data collectors were trained for one day before data collection. The data collection was supervised daily by two supervisors. The filled questionnaires were checked daily for the completeness and consistency of data by the supervisors and principal investigator. Data collectors approached and interviewed the selected respondents after informed verbal consent was obtained. The women, who were not available in the first visit, were revisited for two more times. If they were not accessible, the women in the next household were interviewed in place of those women who were not found.

Data processing and analysis

Data was entered, cleaned and analyzed by using SPSS Version 20 (IBM Corporation, Armonk, NY, USA). Descriptive statistics was used to describe the socio-demographic and other study variables. Categorical variables are described using actual numbers and percentages while continuous variables has described by means, standard deviations, medians, and ranges. Binary logistic regression analysis with odds ratio with their 95% confidence interval was used to assess the degree of association between dependent and independent variables and used to test significance of the association p-value less than 0.25 of independent variables with the outcome variables were selected as a candidate variables for multivariable analysis to form the model. Multivariable analysis model using adjusted odd ratio (AOR) was applied to identify the important determinant factors of postpartum family planning utilization. Level of significance below 0.05 was considers to determine the association.

Ethical considerations

Ethical clearance approval has obtained from the Hawassa Health science collage Ethical Review Committee and official letter was written to each study areas. Verbal consent has also obtained from each individual respondent before data collection after thorough explanation of the purpose, benefit, risk and confidentiality of the study and as participation was on voluntary basis that they can withdraw at any time if they are not comfortable about the questionnaire. The information obtained has kept confidential.

Result

Socio demographic factors of study participants

A total of 402 post-partum women were interviewed with response rate of 100%. The age of study participants ranged from 19 to 42 years with a mean age (SD) of 30 (\pm 9.4). Nearly thirty eight percent (37.6%) were ranges from 31-35 years old. Among all participants, 167 (41.5%) were of Protestant, while Muslims 34 (8.5%), and only 8 (2.0%) corresponded to others. Almost all (92.5%) of the respondents were married. Sidama comprises predominant ethnic group with 176 (43.8%) of all study participants, more than one third (37.1%) of respondents educated Diploma and above whereas the major occupational status of respondents were employed 147 (36.6%) and only, 186 (46.3%), were earning monthly income between 501-1000 birr (\$13.2-26.3).

Reproductive histories and related factors characteristic of study participants

Almost half (50.2%) had been pregnant for three and more, while only 14.7% were primigravida. On other hand, 46.8% gave birth for four and above times; primipara were 17.9%. Most of study participants (84%) attended ANC for three and more times. however, only 1.7% of them did not follow ANC at all. Sixty one (18.5%) of study participants gave birth for the next baby within one year, and 47% of them attended their labor in health center. Surprisingly, none of them gave birth at home. However, more than one tenth (12.2%) attended private clinics for their labor and delivery. Around sixty three percent (62.9%) of the study

participants attended postnatal care. More than half (53.2%) of respondents decided to have more than three children and only 17.2% desired to have only one child in their life.

Knowledge, previous use contraceptives and Source of information for contraceptive methods

All of Study participants were informed about contraceptives, but 331 (82.3%) of study respondents had awareness about family planning. Nearly one third (29.4%) of participants responded that as they were informed from more than one sources of information. Whereas almost three quarter (73.1%) of study participants were informed from health care providers; 177(44%) heard from mass media, while only 6.5% learnt in the school among the respondents. Almost all (95.8%) and 141 (36.6%) of study respondents had informed the advantage of contraceptives and it can prevent unwanted pregnancy and respectively. The predominantly known type of contraceptive methods was injectable 239(59.5%). The majority (84.9%) respondents were notified about the side effects of contraceptives with a great complaint with irregularity of period (64.9%). However, the popular (89.8%) of study participants used contraceptives before. Injectable (39.6%) and pills (36.6%) account more three quarter of all contraceptives methods.

Current use of contraceptives

Most (85.1%) of study participants use contraceptives currently. The majority (57%) of study respondents uses injectable; one third (32.3%) use reversible long acting contraceptives; while only 0.6% use permanent family planning method. Concerning, the time of starting, 12.6% started immediately after delivery but more than half (54.7%) started it at 45 days of postnatal visit. Almost all (97.7%) of respondents use their method of choice; while 302(88.4%) were supported by their male partners.

Reasons for not using contraceptives

More than half (51%) of study participants refused use of postpartum contraceptive because of need of more offspring, followed by partner refusal (36.7%), three quarter of all study participants not used contraceptive due to lack awareness.

Factors associated with Post-partum contraceptive use of study participants

Bivariate and multivariate binary logistic regression was done to assess factors associated with PPF. Knowing about advantages and its side effects, previous use of contraceptive, partner support and delay in returning of period have statistical significance with current use of post-partum contraceptives. Women who know advantages and side effects of contraceptives were 1.31 and 12.13 times more likely to use post-partum contraceptives than their counterparts (AOR, 1.31, 95%CI 1.146-6.975; 12.13, 95%CI 4.508-15.635) respectively. Similarly, women whose partner support contraceptive use were 5.17 times more likely to use post-partum contraceptives (AOR, 5.17; 95%CI 1.95-13.70) and those who used contraceptive previously were 10.77 time more likely to use contraceptives during their post-partum period than those did not use it at all. In addition, women had not seen their period were 4.69 times more likely used contraceptive during their post-partum periods (AOR, 4.69; 95%CI 1.04-21.19 with (P < 0. 05).

Discussion

This study identified that age of study participants ranged from 19 to 42 years with a mean age(SD) of 30(\pm 9.4) that is in line with the result of conducted in northwest Ethiopia and Debre Tabor (28.3 \pm 6.4-29.96 \pm 6.7). This indicates that most of Ethiopia women use postpartum contraceptives within average year of 28-30. However, most of our study participants were multigravida and multi-para. Antenatal care assist women to have counselling and choose contraceptive options to use during postpartum [8]. In this study, the majority (98.3%) of study participants attended ANC. This is consistent with finding of studies carried out in central zone of Tigray; Durame; in urban Ghana; in rural Bangladesh; in Axum-Tigray. Findings another studies conducted in Northwest Ethiopia: Debat and Gondarare found to be very low in relation to our finding. The probable reasons for variation of the results could be the difference of socio-economic status among study population, study design and duration of studies.

Studies approved that short birth interval is high in Ethiopia. In this study, the significant number (57.9%) of participants gave birth for the second baby within two years which corresponds to similar study conducted in Bale zone (57.3%); and in Adaba (51.7%); despite it is very high compared to findings of studies conducted in Durame(30.9%); central Tigray (15.5%); Axum town (25.2%); and Gondar, only 22%. The difference of findings could be due to variation in sample size, study design and duration of study. This study found that 62.9% of the study participants attended postnatal care which is constant with studies of rural Tigray 50% and 63.5% but higher than studies in Debat (5.7%); Axum (43.7%); Gondar town (26.3%) and it is much lower than result of study in Ghana (99.7%). The probable reason for the difference of findings could socio-cultural variation of different communities, set up of studies and source of data.

In our study, surprisingly, none of them gave birth at home and only 12.2% attended private clinics for their labor and delivery. In contrast, home delivery was the most frequent culture (81.1 %) in Debat; and very few of women gave in different studies: in Durame, 3.4%; Ghana, 1.6%; Gondar, 7.5%; and central Tigray, 14.8% were gave birth at their home.

This study shows that more than half (53.2%) of respondents decided to have more than three children which is lower than study of Malawi in which 69.5% mother desired to have up to 8 children in their life. This is perhaps, inclusion criteria of studies. Even though, the actual number of decided children was not specified, 72.8%, and 61.3% of the respondent in studies of Durame and Adaba had a plan to have children in the future respectively. Whereas, 8.4% of the respondent were undecided about their future child birth. Surprisingly, 61%, and 32.2%; of the mothers wanted to have children as God allows but 38.7% of the participants do not want more child at all. However, this study identified that only 17.2% desired to have only one child in their life, one third of women expressing no intention of having additional children in their life. The possible reasons could be autonomy of women, enough number of live children, and also positive view of partners.

However, the popular (89.8%) of study participants ever used contraceptives before which agree with study of Kolfe Keraniyo

in Addis Ababa (88.6%); many studies were found to be very low. Injectable contraceptive method overweighs (39.6%) followed by pills (36.6%). The same was true in studies conducted elsewhere, even though there was variation in birth control pill and male condom. Socio-cultural values, and availability contraceptive methods at the time of service, source of information, knowledge about advantage and side effects of contraceptives determine the selection of methods. However, postpartum period is a critical time to address high unmet family planning need and to reduce the risks of closely spaced pregnancies. The contraceptive utilization rate varies in different studies. Current contraceptives use of this study is 85.1% that is in line with that of Kolfekereneo-Addis Ababa, Awe zone, Cameroon, and Kenyan studies; The overall postpartum contraceptive prevalence of different studies were found to be lower than the current study. Study designs, study populations, determined sample size could be associated probable explanations of disparity of findings.

Since informed decision is determinant for acceptance contraceptives, Women should be given the opportunity to make an informed choice about their contraceptive method and even the number children need to have [8,9]. Because, informed choices of women after clear discussion increases the continuation of chosen contraceptive method [2,6]. In many cases, objections from their partners could inhibit them to use contraception despite their desire to do so [2]. However, this study shown that almost all (97.7%) of respondents use their method of choice; in coordination with similar study conducted in elsewhere. Besides, involvement of partner was found fundamental issue. In this study, 88.4% participants were supported by their male partners which is indicative for partner's approval of contraception. This implies that male involvement has an important role on the use of modern contraceptives.

The need for postpartum contraceptive uptakes depends on different socio-demographic, contraceptive related information, desired number of fertility and clear discussion and arriving at consensus on its use. This study identified that among women who refused to use contraceptives, 51% because of need of more offspring, different studies supported this finding; followed by partner refusal (36.7%), which in congress to many studies; three quarter of all study participants not used contraceptive due to lack awareness, similar studies supported the finding; previous experience of method-related side effects; and religious beliefs.

Knowledge about advantages and its side effects, previous use of contraceptive, partner support and delay in returning of period have statistical significance with current use of post-partum contraceptives. In this study, women who know side effects of contraceptives were 12 times more likely than to use post-partum contraceptives than their counterparts. This agrees with studies conducted in different areas. Similarly, women who were supported by their partner were 5 times more likely to use post-partum contraceptives. This could be due to most married women, might face serious objections to contraceptives if their partners are not approving despite their desire to space or limit the number births. Those who previously used contraceptives were 10 time more likely to use contraceptives during postpartum period than those did not use it at all. This finding is consistent to studies from different dimensions. In addition, women who had not seen their period were 4.69 times more likely used contraceptive during their

post-partum period this could be previous experience to identified contraceptive method they used before and most of postpartum contraception carried out before 45 days of postnatal period.

Conclusion

Postpartum women in southern Ethiopia use contraceptives effectively during their puerperal period. Especially, those who are familiar with advantages and side effects of contraceptive methods utilize postpartum contraceptive more effectively than their counterparts. Partner support is very informant for promotion of postpartum contraceptive use. Thus, equipping women with knowledge of family planning methods; authorizing them to be decisive in the health and positivity of male partners are very crucial to promote postpartum use of contraceptives.

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References

1. Liu L, Johnson HL, Cousens S, Perin J, Scott S, et al. (2012) Global, regional, and national causes of child mortality: an updated systematic analysis for 2010 with time trends since 2000. *Lancet*. Geneva: WHO and UNICEF. 379:2151-61.
2. MCHIP, Jhpiego (2012) Kangaroo mother care implementation guide the maternal and child health integrated program (MCHIP) is the USAID Bureau for Global Health flagship maternal and child health (MNCH) program. By Save the children 56:1.
3. Oestergaard MZ, Inoue M, Yoshida S, Mahanani WR, Gore FM, et al. (2011) Mathers CD: Neonatal mortality levels for 193 countries in 2009 with trends since 1990: a systematic analysis of progress, projections, and priorities. *PLoS Med* 8:e1001080.
4. Iftekhar Quasem M (2003) Adaptation of Kangaroo mother care for community-based application. *J Perinatol* 6:646.
5. Lawn JE, Kinney MV, Black RE, Pitt C, Cousens S, et al. (2012) Newborn survival: a multi-country analysis of a decade of change. *Health Policy Plan* 27:6-28.
6. World Health Organization (2014) Data, WGHO, Profile of preterm and low birth weight prevention and care Geneva.
7. CSA (Ethiopia) and ICF International (2012) Ethiopia Demographic and Health Survey. Addis Ababa, Ethiopia: Central Statistical Agency and ICF International and Calverton Maryland, USA.
8. Wubshetlakew BW (2014) Department of pediatrics and child health, university of Gondar Ethiopia, Addis Ababa University Medical Faculty, Department of Pediatrics and Child Health.

9. Charpak N, Ruiz JG, Zupan J (2005) Kangaroo mother care: 25 years after. *Acta Paediatr.* 94: 514-22.
10. WHO (2003) Kangaroo mother care: a practical guide. Geneva: WHO publication.

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