ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCINCE

SCHOOL OF NURSING AND MIDWIFERY

ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE OF IMMEDIATE POSTPARTUM INTRA UTERINE CONTRACEPTIVE DEVICE AND ASSOCIATED FACTORS AMONG POSTPARTUM WOMEN AT SELECTED GOVERNMENT HOSPITALS IN ADDIS ABABA, ETHIOPIA, 2019.

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A RESEARCH THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCE, DEPARTMENT OF NURSING AND MIDWIFERY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR DEGREE OF MASTER SCIENCES OFMATERNITY AND REPRODUCTIVE HEALTH NURSING.

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APPROVAL BY THE BOARD OF EXAMINATION

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STATEMENT OF DECLARATION

By my signature below, I declare and affirm that this thesis is my own work. I have followed all ethical principles of scholarship in the preparation, data collection, data analysis and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every effort has been made to avoid plagiarism in the preparation of this thesis.

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LISTS OF ACRONYMS AND ABBREVIATIONS

ANC..... Antenatal Care

AOR..... Adjusted Odd Ratio

CI..... Confidence Interval

COR.....Crude Odd Ratio

CPR.....Contraceptive prevalence rate

EDHS... Ethiopian Demographic Health Survey

ETB..... Ethiopian Birr

HSTP....Health sector transformation plan

IUCD.... Intrauterine Contraceptive Device

LAPMs... Long Acting and Permanent Method

MNCH..... Maternal and newborn health care

MOH..... Ministry of Health

PPIUCD..... Postpartum Intrauterine Contraceptive Device

SPSS..... Statistical Package for Social Sciences

WHO..... World Health Organization

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Abstract

Background: Maternal mortality is the issue of developing countries, especially sub-Saharan Africa including Ethiopia. This is known due to poor quality of maternal health care services. So, family planning especially the practice of PPIUCD can challenge unintended pregnancy and maternal related complication. Up to 40% of these problems are estimated to be preventable by accessing postpartum family planning service. However, use of IUCD in general is 2% in Ethiopia.Due to this reason many women are exposed to unintended pregnancy and maternalrelated complications.

Objective: Assessing Knowledge, Attitude and practice of Postpartum Intra uterine contraceptive device and Associated Factors among Postpartum Women Selected at Government Hospitals in Addis Ababa, Ethiopia, 2019.

Methods: Facility based cross sectional study was carried out on 286 postpartum women in selected government hospitals of Addis Ababa from August-September 30, 2019. Ethical clearance letter was obtained from AAU, School of Nursing and Midwifery and Addis Ababa heath bureau IRB office. Study participants were selected by simple random sampling based on their proportional distribution of sample size to each hospital. An interviewer administered questionnaire was used to collect data. The data was coded and entered into Epi data version 4.2 and the analysis was carried out by using SPSS version 20.Bivariate and multivariate analysis with 95 % CI was employed. Variables found to have a P-value<0.2 in the binary logistic regression were entered into multivariate analysis and association was declared at P value<0.05

Results: out of two hundred eighty-six respondents one hundred thirty-eight (48.3%),one hundred eighty-two (63.6%) and seventy-six (26.6%) postpartum women were knowledgeable, had favorable attitudes and practice about PPIUCD respectively.Postpartum women who had college and above educational background were more likely to have favorable attitude and knowledge of PPIUCD with AOR= 2.302[1.141-4.64] and AOR=22.99[4.465-118.411] respectively. Moreover, experience of discussion with partner about Fp, level of knowledgeand PPIUCD counseling in pregnancy were some of the factors associated with PPIUCD.

Conclusion and Recommendations: Thisstudy provided that postpartum women were relatively favorable attitude but their knowledgeand practice on PPIUCD is low.This calls for a strong and continued effort from the health care providers and other stakeholders to increase postpartum women's knowledge and practice of PPIUCD service through education, increase service accessibility, and counseling for PPIUCD during ANC.

Keywords: *knowledge, attitude, practice, postpartum intrauterine contraceptive device, postpartum women*

1. INTRODUCTION

1.1. Background

An IUCD is a small, "T-shaped" intra uterine contraceptive device, which is placed in a woman's uterus. The IUCD recommended by WHO for bulk procurement is the Tcu380a. It is also known as the Copper-bearing IUD, loop or coil. It has one or two soft threads on the last part. These thin threads hang through the opening at the entrance of the uterus into the top of the vagina[1]. Postpartum IUCD is an intrauterine contraceptive device which is inserted during the postpartum period (up to 48 hours after birth, optimally within10 minutes of delivery of the placenta.Immediate postpartum intrauterine contraceptive device (IPPIUCD) is voluntary, provision of family planning method which is insertion IUCD, during the postpartum period where women in the delivery setting[2].

Approach to postpartum IUCD insertion include the post placental IUCD insertion, the immediate postpartum IUCD insertion and the trance cesarean IUCD insertion. The post placental IUCD insertion is done within 10 minutes after expulsion of the placenta, following a vaginal delivery, also done within 48 hours of deliveryand the trance cesarean IUCD insertion is when the insertion takes place following a cesarean delivery, before the uterus incision is sutured [3].Immediate Postpartum period is one of the important and crucial times when women and couples are highly encouraged and more interested to use postpartum family planning methods[4].The postpartum IUCD (PPIUCD) is an important option for women preventing to close spacing and unintended pregnancies. Until recently,the copper-bearing intrauterine device (IUD) was the only long-acting, reversible contraceptive method recommended by the WHO for immediate use among women who are breastfeeding [6].

Postpartum women who were not aware about PPIUD were less likely to use PPIUD than women who gotten information about PPIUD [3].As a result, due to lack of awareness of the method and other related factors affect the practice of PPIUCD [7].A study showed in Sidama zone Ethiopia on level of awareness around 87.4%of the postpartum women were not aware about PPIUCD during postpartum (8).

Despite of the magnitude the problem of unintended pregnancy and maternal related complication, it is one of the most easily preventable causes of maternal morbidity and mortality. Where postpartum family planning services are accessible and if community/society awareness are good on practice of PPIUCD, pregnancy and maternal related complication will be rare.lack of awareness, negative religious attitudes and poor postpartum family planning services for the unintended pregnancy and maternal related complication are the main burdens of women's health that could be prevented [9]

1.2. Statement of the Problem

Globally, 10.7 million women have died in the 25 years between 1990 and 2015 due to maternal causes. In 2015, an estimated 303,000 women died as a result of pregnancy and childbirth related complication worldwide. Developing countries accounted for about 99% of global maternal death [14]. Moreover, majority of the countries with the highest maternal mortality are in sub-Saharan Africa, including Ethiopia [11]. According to Ethiopian demography health survey 2016, maternal mortality ratio in Ethiopia was estimated at 412 deaths per 100,000 live births[15].

Studies show that birth interval at least two years apart in the developing world could reduce maternal mortality by more than 40% and under-five mortality by 31% [16]. Multicounty studies showed that accessing family planning service can reduce maternal deaths by as much as 40 percent, infant mortality by 10 percent, and childhood mortality by 21% [17].Pregnancies those occurring within two years of a previous pregnancy are associated with a heightened risk of maternal and neonatal morbidity [19].In addition, low education status, poor or negative attitude towards PPIUD and dependence on male partner for consent all affected the uptake negatively [10]. study done in India shows that education status, occupation, counseling during antenatal and postnatal period regarding possible methods and benefits of PPIUCD play a direct role in women's decision regarding her health so more awareness should be spread regarding PPIUCD[9]. Also another study shows that husband and family played important roles indecision making regarding use of PPIUCD [12].

Worldwide, estimates for the use of the IUCD stands at 13.9% among married couples. Regionally, the highest prevalence rate for the IUCD (17.5%) is observed Asia, followed by Europe (11.9%) and lowest in Latin America and the Caribbean, North America, Africa and Oceania with 6.5%, 4.7%, 4.6 and 1.8% respectively[5]. Another study reports show that practice of PPIUCD among postpartum women in different countries which are Democratic Republic of Congo (30%), Zambia(25%), India(40%), Guinea(37%), Rwanda(27%)[4].

The postpartum period is a particularly vulnerable time for women for unintended pregnancy, with studies reporting pregnancy rates of 6% to 40% within the postpartum period[8].A recent analysis of Demographic and Health Survey data found that 61% of postpartum women in 21 low- and middle-income countries have a prospective unmet need, in Ethiopia, this rises to a full 74%(47%for birth spacing and 27% for limiting)[19].The World Health Organization (WHO)

recommends that pregnancies be spaced by at least 24 months;yet in Ethiopia, nearly half (47%) of postpartum women have short (<23 months) birth-to-pregnancy intervals[4].

In Ethiopia, the use of the IUCD has remained stagnant, according to Ethiopia Demographic Health Survey (EDHS), 2016 report indicated that only 2% of married women in the general population used IUCD as their modern contraceptive method, while the most popular methods are injectable 23% and implants 8%. In some regions, the use of the IUCD is almost nonexistent as it ranges between zero percent in the Somali to 8.5% in the Addis Ababa region[15] Even though the IUCD utilization rate in Addis Ababa is slightly higher as compared to other regions,it is still very low. The low utilization rate of the IUCD is an indication of under-utilization of the method despite its demonstrated high efficacy and safety, while the majority of the FP acceptors relies on the injectable and implant[13]. The study done in Southeast-Ethiopia among postpartum womenshowed that the practice of immediate PPIUCD was 12.4%[20]. Another study conducted in Southern Ethiopia among postpartum women revealed that the Postpartum intra uterine contraceptive device use within 48 h of delivery was 21.6%[8].The study conducted by pathfinder international in Ethiopia among postpartum womenfrom 2013 to 2014, in 49 health centers involved in different country region of the initial rollout of PPIUD services reported 8,374 deliveries. Of these, postpartum women use of PPIUD was 19.7% [21]. These figures suggest a critical gap in PPFP service delivery during the postpartum period.

In 2015, the Ministry of Health in Ethiopiandeveloped the health sector transformation plan which aimed to increase the contraceptive prevalence rate (CPR) to 55% and reducing the total fertility rate to 3.0 and increasing IUCD use from 2 % to 15% by 2020[17]. And in 2013, the Ministry of Health in Ethiopialaunched a program to improve access the postpartum family planning service, to encourage the use of PPIUCD at birth[19] And furthermore emphasized in government hospitals at Addis Ababa those strengthen PPFP and to introduce PPIUCD services in a phased manner, with the first batch of health professional trainings, in 2016.

In general, it is possible to conclude from the above discussions clearly shows that the national knowledge, practice of immediate PPIUCD is very low as compared with the other methods and given the lack of understanding of the reasons why PPIUCD use in Ethiopia has stagnated or limited, so, the major concern of this study therefore, is to assess the knowledge, attitude and practice of immediate PPIUCD during postpartum period and associated factors of postpartum women in the study area.

1.3. Significance of the Study

The study done in Ethiopia shows that's a significant number of maternal and newborn deaths can be prevented by using modern contraceptives to ensure prevention of unplanned pregnancies and their complications. The use of family planning therefore, is an important and effective strategy to reduce maternal mortality. Data are lacking on what and how much is known about this method, how many postnatal clients are using the method and why others are not using this method since its introduction over the last few years at the sites where the service is provided.
The findings from thisstudy will be vital in designing strategies so as to promote the practice of PPIUCD thereby in the city and beyond.

The finding of this study will therefore provide information on the current status of immediate PPIUCD service in the city and baseline data for future planning and interventions for stakeholders and policy makers. The finding of this study may also be used by improving family planning programs and maternal health service improvement program supporters and implementers as an input towards supporting and promoting PPIUCD service among the study population.
Hence, this study will provide insight about PPIUCD service in government hospitals under the capital city and can be used as an input for similar studies that are going to be conducted in the future and it also provides the new and the current aspect of the practice among postpartum women within the study area.

2. LITERATURE REVIEW

2.1. Overview of postpartum family planning

The recent literature review, WHO PPFP guidance, and programmatic experience indicate to the value of integrating PPFP into the continuum of maternal and newborn health (MNH) care, rather than introducing it as a standalone intervention[4]. The purpose of postpartum family planning is to help a woman decide on the contraceptive they want to use, initiate it, and ensure they continue using it up to two years or longer depending on the woman's intentions. A study conducted in Ghana showed that clients discussing FP with their partners and previous contraceptive use were significant determinants of both current use and future intentions to use contraception [24]. Another study showed that most (65.0%) of the respondents had use PPFP, this intention to use PPFP was significantly associated with respondents‟ social class, their age, their level of awareness about PPFP and their prior use of any family planning method [25]. A study conducted in western Ethiopia, Nekemt town among 802 married women revealed that the intention to use LAPM was 18.2 [26]. Another study carried out in, southern Ethiopia showed that used LAPM was about 38 % [27]. Furthermore, study conducted in Adgrat town showed that the prevalence of use long acting permanent contraceptive methods(LAPMs) was 48.4 % while 14.6 % participants were unsure and this study also showed that of those who had, 58.9 % use one of the LAPMs within the next 1 year the most preferred method use was implants (71.3 %), followed by IUCD 24.0 %[28]. Another study from North West Ethiopia in Debiremarkos town showed that 45.9% of women had intention to use one of the LAPMs of contraception in the future. Of these, Implants were the most likely long acting family planning methods intended by the study participants 98 (86.7%) followed by IUCD 32 (28.3%) [25].A facility based cross-sectional study conducted in two health facilities, Southern Ethiopia showed that the Postpartum intra uterine contraceptive device use within 48 h of delivery was 21.6% while 38% of the respondents were interested in using PPIUD[8]. In a facility based study done in Southeast-Ethiopia showed that the acceptance of immediate PPIUCD usage was 12.4%[20]. Another a study, conducted in northern Ethiopia showed that the Postpartum modern contraceptive use nearly half (48.0%) of women used modern contraceptives during the extended postpartum period[30] Similar study in Debre Berhan town among total study subjects, 82 (41.6%) women started using contraceptive during postpartum period[29] A study conducted in Northwest Ethiopia showed the prevalence of modern contraceptive use among women in the extended

postpartum period the total 404 participants, 45.8% mothers used modern contraceptives during postpartum period[30]. Data for this analysis come from EDHS, 2011 to 2016 include nearly 5000 married women of reproductive age with a recent birth between rounds of the 2011 and 2016 EDHS, the postpartum contraceptive prevalence increased from 15 to 23%[31]. A cross-sectional community-based survey was conducted in Eastern Ethiopia; found that prevalence of contraceptive utilization was found to be 12.3% among women in the postpartum period[32]. A study was carried out in Northwest Ethiopia, the first year after child birth found that the prevalence of modern contraceptive was 46.7% among extended postpartum mothers [33]. A study was conducted in the women who gave birth one year before the study period in Northwest Ethiopia shows that Nearly half (48.4%) of the postpartum women were use of contraceptives [34].

2.2. Study on Knowledge, Attitude and Practice of PPIUCD

The most recent demographic and health surveys data of sub-Saharan African countries has revealed that awareness of the IUCD among women in Liberia, Gambia, Nigeria, and the Democratic Republic of Congo was only 43.5%, 39.5%, 31.8% and 24%, respectively. They a cross-sectional study conducted among 565 women in Uganda showed that women's attitude about the important role of male partners in their choice of contraceptives was associated with current use of LARC[22]. A study conducted in Nigeria showed that women who were not aware of PPFP had decreased chances of plan to use PPFP by 85%, compared to those who were aware. This was found to be statistically significant (AOR; 0.15, 95% CI; 0.08-0.28) [25]. A study conducted in Malawi found that knowledge of postnatal women is associated with use of PPIUCD (AOR = 26.436) this study also reveals that majority of the respondents (94.3%) were able to mention one or more FP methods but, few of them are not [36]. Another study conducted in the Kenya, revealed that likelihood of using family planning was 26 percent higher in a woman with knowledge of FP. Therefore, promotion of family planning that facilitates awareness about side effects and benefits is help to increased plan to use PPIUCD [37]. Study conducted in Ghana that lack of knowledge regarding the various methods of contraception is the reason why family planning is not practiced. This study found that 55% of women who did not use any modern contraception were not aware of modern contraception. It further showed that the majority (66.9%) of women with knowledge preferred a long acting method of contraception,

a category in which PPIUD falls. The study found a varied source of knowledge and included social circles (67%), the media (18%) and health care providers (14%) [38].

The study conducted in Ethiopia shows that negative attitude towards the IUCD was more evident in women who demonstrated lack or limited knowledge of the method[27]. Another study conducted in Mekelle town on attitudes of LAPMs around 53.6% of the married women had negative attitude towards practicing of LAPM[23].

The study conducted in the northern Ethiopia, among 590 postpartum women revealed that family planning counseling during prenatal and postnatal care (AOR, 5.72; 95% CI, 2.67, 12.28), having postnatal care (AOR, 2.36; 95% CI, 1.15 to 4.87) [29]. A study done in Ethiopia established that high knowledge about Long Acting Reversible Contraceptive (LARC) including PPIUD was associated with a high acceptance level Women with high knowledge on LARC were 8 times more likely to use LARC including PPIUD [39]. A study conducted in Tigray study reveals that women who had moderate knowledge were 6 times more likely to use LAPM as compared with those who had low knowledge (AOR = 5.9, 95% CI: 2.3, 14.9). Mothers who had high knowledge were 8 times more likely to use LAPM as compared with those who had low knowledge (AOR = 7.8, 95% CI: 3.1, 18.3) [23]. Reports of EDHS, women's Family Planning information offers through exposures of media or from other sources. The most often cited source of information on family planning messages reported by women and men age 15-49 in the past few months is community event or conversation (38% and 37%, respectively). Other main sources include radio (24% for women and 33% for men) and television (18% for women and 23% for men) [14]. A facility based cross-sectional study was conducted in south Ethiopia, among 310 immediate postpartum women respondents established that mothers who did not heard about PPIUCD [AOR=0.41, 95% CI: 0.41 (0.20, 0.83)] were associated with PPIUD practice[8]. Institutional based cross-sectional study was conducted in Gondar Town, Northwest Ethiopia, among 404 women who gave birth in the last 12 months prior to the study revealed that modern contraceptives use during postpartum period associated with current knowledge women on family planning [AOR= 5.01, 95% CI: (2.23, 11.24)][31]. Another study carried out Wolaita zone, southern Ethiopia among 416 women participants showed that nearly half of them had a negative attitude to use LAPMs methods. It also revealed that women who had a positive attitude were found to be 2.5 times more intention to use LAPMs compared to women who had a negative attitude [27]. The study conducted in Kebribeyah Town, Somali Region, Eastern

Ethiopia, a random sample of 556 postpartum women found that among the respondents, (49%) had unfavorable attitude toward postpartum contraceptive utilizations[33]

2.3. Factors Associated with PPIUCD among postnatal women

2.2.1. Socio-demographic factors

Various studies have demonstrated this link a number of socio-demographic affect PPIUD. A study conducted across Kenya's main cities revealed that married women used contraceptives more often than their single counterparts. Postpartum women living with their partners were likely to use a contraceptive method than those living without a partner [37]. The results compare to a similar study done in Malawi which showed that unmarried women were at risk of unplanned and unwanted pregnancies due to less utilization of FP services [36]. Studies in Sub-Saharan Africa show that young women are less likely to use contraceptives during the postpartum period, compared to older women in the reproductive age group. They believe that modern contraceptives may jeopardize their chances of having more children. On contrary study carried out in Kenya shows the prevalence of contraceptive use among postpartum women was 86.3% Contraceptive use was high among women below 25 years. The significant predictors of contraceptive use were the nature of employment, age and marital status [40]. Furthermore, a cross-sectional study carried out in Nigeria showed Women in the 40-49 age groups were 57 % less likely to use PPFP compared to those in 20-29 age group (AOR; 0.43, 95%) [25]. Another Study conducted in western Ethiopia Nekemt showed that majority of married women in this study planned to use implants (51.4%) followed by IUCD (47.9%) [26]. In many developing countries a woman's decision on postpartum contraceptive use may need spousal affirmation because of cultural, tribes and religious groups, norms and male dominance in decision making. Women with higher levels of education is capable of making informed decisions concerning their contraception. A comparative study conducted in Bangladesh among young mothers who were working and non-working mothers found that modern contraceptive use among the former was 65.5%and 58.2% for the latter. [41]. Logically, educated women can learn and use contraception more effectively than uneducated women. This shows a positive association between education and contraceptive use. 34% of women with secondary education compared with 19% with no education used at least one modern contraception method at the time of the survey. This finding implies that improving female education generally may increase contraceptive use [42]. A Community based cross-sectional study was carried out in Northwest

Ethiopia, a total of 829 women who were in the first year after child birth found that Educational status of the women (AOR=4.1, 95% CI: 1,16.9), Knowledge of modern contraceptive (AOR=16.01, 95% CI: 5.88, 43.56) were factors found to be statistically significant for educational status of the women (AOR=4.1, 95% CI: 1,16.9), were factors affecting contraceptive use in postpartum period [34]. Other studies done in Jimma, Ethiopia have shown a significant relationship between women's education, occupation and house hold income [43]. Another study conducted in Wolaita zone showed that women who attained secondary and higher level of education were found to be 2 and 2.8 times more likely to have the intention to use LAPMs compared to women who had no education, respectively [27]. A cross sectional study conducted in western Ethiopia showed that women who had secondary school education and above were 1.82 times more likely to have intention to use LAPMs compared to those who had primary school education and below (AOR=1.82, 95%CI = 1.09-3.04) [26]. The study conducted in the northern Ethiopia, among 590 postpartum women age range of 16-49 years' respondents revealed that 40.0% of women had attended secondary school so, postpartum modern contraceptive practice was significantly associated with secondary and tertiary education levels (AOR, 4.25; 95% CI, 1.29) [29]. A Community based cross-sectional study was carried out in North west Ethiopiain 829 women who were in the first year after child birth found that Educational status of the women have significantly association with PPIUCD(AOR=4.1, 95% CI: 1,16.9)[34]. A facility-based study was conducted in Southeast-Ethiopia among immediate postpartum women respondents who had completed secondary education were more likely to accept PPIUCD usage than those who had no formal education (AOR = 3, CI = 11.81, 53.91) [20]. According to EDHS 2016 Use of modern contraception increases sharply with wealth, ranging from 20% for women in the lowest wealth quintile to 47% for women in the highest wealth quintile [15]. Similarly, a cross sectional study conducted in Adgrat town revealed that women who were employed (AOR=0.4, 95% CI= 0.23, 0.81), and merchants (AOR= 0.3, 95% CI= 0.10, 0.79) have 60% and 70% lower odds of intention to use long acting permanent contraceptive methods compared to women who were housewives [28].

2.2.2. Maternal health service

A study conducted in Nigeria to determine the influence of antenatal(ANC) and post-natal(PNC) counselling on the postpartum contraceptive use found that women who had multiple antenatal contraceptive counselling were more likely use postpartum contraception(57%) versus (35%) [44]. Other Study found that in the women who received information at the hospital during their delivery unit these women were 56% more likely to use postpartum contraception than those who did not receive any information at the delivery ward. Similarly, another study found an increased likelihood of postpartum contraceptive use in otherwise identical women by 73% [46]. A cross-sectional study conducted among 565 women in Uganda showed that previous use, of contraceptives was associated with current use of LARC. [47].

The community based cross-sectional study was conducted in, northern Ethiopia showed that the Postpartum modern contraceptive use during the postpartum period was significantly associated with family planning counseling during prenatal and postnatal care (AOR, 5.72; 95% CI, 2.67, 12.28), having postnatal care (AOR, 2.36; 95% CI, 1.15 to 4.87 [29]. A facility based cross-sectional conducted in two health facilities among 310 women in, Southern Ethiopia showed that the Postpartum intra uterine contraceptive device use within 48 h of delivery, participant women who do not counselled during ANC, labor and postpartum period about PPIUD [AOR=0.17, 95% CI: 0.17 (0.06, 0.52)] were associated with PPIUD utilization [8]. The study conducted in Eastern Ethiopia, a random sample of 556 postpartum women found thatPredictors of postpartum family planning utilization were counseling for FP during delivery (AOR=6.8; 95% CI: (1.875-24.492)), counseling during ANC (AOR=3.9; 95% CI: (1.234-12.065)), duration of postpartum period (AOR=3.11; 95% CI: (1.01-9.67)), information about FP from health facility (AOR=4.0; 95% CI (1.170-14.302) [33].A facility based cross-sectional study done in Bale zone; Southeast-Ethiopia showed that the acceptance of immediate PPIUCD usage was 12.4% and husband refusal is (17.7%)[20].

2.3.2 Obstetric history

A study conducted in Mekelle town showed that mothers with two or more pregnancies were 3 times more likely to use LAPM as compared with those who had been pregnant only once. As the delivery age of the mother increase by one year the use of long acting and permanent contraceptive also increased twice[23]. A facility based cross-sectional conducted in two health facilities among 310 women in Southern Ethiopia showed that the Postpartum intra uterine contraceptive device use within 48 h of delivery, Mother who do not have a plan to have another child [AOR=2.36, 95% CI, (1.25, 4.47)], undecided plan to have another child [AOR=0.17, 95% CI, (0.05, 0.58)] were associated with PPIUD utilization [8].The study finding shows that 83.73% of acceptors were women who had cesarean section and 16.26% acceptors were postpartum women underwent vaginal delivery [48]. Another study found that 60.87% acceptors were who underwent cesarean section [49]. Women undergoing caesarean section were accepting PPIUCD, less frequently than those who underwent normal vaginal (90%) delivery, Since the percent of normal vaginal delivery are always more than the cesarean delivery, women can be taught about the advantages of the post placental insertion and also the efficacy of this method in lactating period [9]. Study conducted in western Ethiopia showed that women who decide on fertility issue jointly with partner were 2.8 times more likely intend to use LAPMs of contraception [26]. A Community based cross-sectional study was carried out in Northwest Ethiopia, a total of 829 women who were in the first year after child birth found that women who decide to use postpartum family planning was through discussion with partner (AOR=3.04, 95% CI: 1.12, 8.23) [34]. A facility based cross-sectional study was conducted in Bale zone, Southeast-Ethiopia among 429 immediate postpartum women respondents who had husband refusal (17.7%) [20]. The decision on the number of children to have decided jointly by the husband and wife in 552(93.4%) of the participants, while 23(3.9%) said wife and 8(1.4%) husband. 522 (88.3%) of the participants discuss about FP with their husband [28).

2.5. Conceptual framework

Ideas that are directly and indirectly related to the major variables of the study are Adapted from literature review. Among these: socio demographic characteristics of postpartum women (e.g. age, occupation, marital status and religion), obstetric factors and health service factors are anticipated to affect the dependent variable of the study (8, 33, and 20).

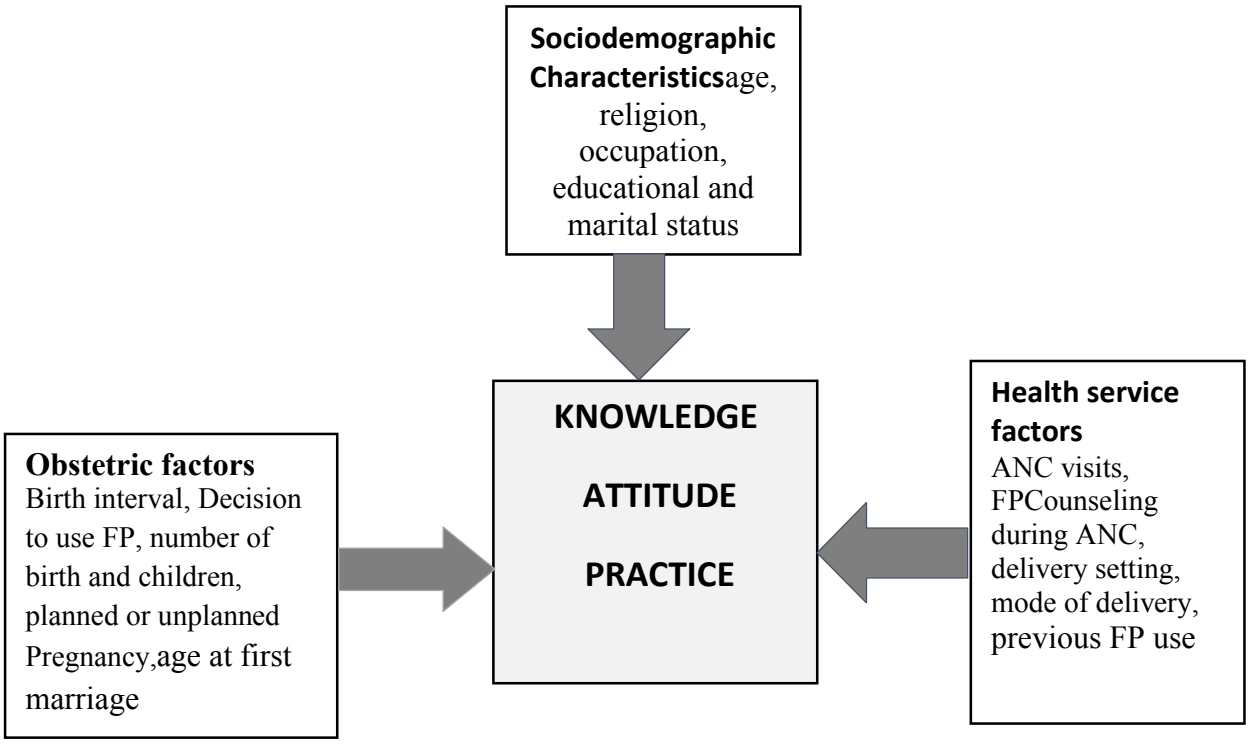

Figure 1: The conceptual frame work on assessment of knowledge, attitude and practice of PPIUCD adapted from Adaptedfrom Lidetubezabih Tefera1, 2016, Alemayehu Gonie,2017 and Nigussieat, 2015).

3. OBJECTIVE

3.1. General objective

- ✓ To assess the Knowledge, Attitude and Practice of Immediate Post-Partum Intra Uterine Contraceptive Device and Associated Factors among Postpartum women at Selected Government Hospitals in Addis Ababa, Ethiopia 2019.

3.2. Specific objectives

- ✓ To determine the level of knowledge of Immediate PPIUCD among Postpartum womenin selected Government Hospitals of Addis Ababa.
- ✓ To determine the attitude towardsImmediatePPIUCD among Postpartum women in selected Government Hospitals of Addis Ababa.
- ✓ To describe the Practice regarding Immediate PPIUCD as a method of contraceptive in selected Government Hospitals and
- ✓ To determine the factors associated the level of knowledge, attitude and practice of the Immediate PPIUCD as a method of contraceptive in selected Government Hospitals of Addis Ababa.

4. METHOD AND MATERIALS

4.1. Study area

This study was conducted in selected governmental hospitals of Addis Ababa. Addis Ababa is the capital city of Ethiopia. The city is divided in to 10 sub-cities and located at the heart of the country, at an altitude ranging from 2,100 meters at Akaki in the south to 3,000 meters at Entoto Hill in the North, which covers 522 square km andAccording to the 2007 population and housing census, the city has a total of annual population growth rate of 2.1% between 1994 -2007, it has a population size of 3,048,631, out of these, female population accounted for 1,434,164 (52%). Women of reproductive age group among the total population are 947,855[50].

With regard to health institutions the city totally holds 13 government hospitals (5 federals, 6 under Addis Ababa health bureau, 1 owned by police force and 1 armed force hospital) distributed throughout 10 sub cities. The government hospitals in the city are Black Lion Specialized Hospital (BLSH), St Paul Hospital Millennium Medical College (SPHMMC), Amanuel Hospital, Alert Hospital, St Peter Hospital, Police Hospital, Armed Force Hospital, Zewditu Memorial Hospital, Menilik II Memorial Hospital, Ras-Desta Memorial Hospital, Yekatite-12 Hospital, Tirunesh Beijing Hospital and Gandhi Memorial Hospital [51].

In this studyBlack Lion Specialized Hospital (BLSH), St Paul Hospital Millennium Medical College (SPHMMC), Zewditu Memorial Hospital, Menilik II Memorial Hospital, and Gandhi Memorial Hospital which have MCH center were selected.

4.2. Study design

Institutional based cross-sectional study design

4.3. Study period

The study was conducted from August 25- September 30, 2019 G.C

4.4. Populations

4.4.1. Source population

All postpartum women who gave birth in the selected government hospitals of Addis Ababa.

4.4.2Study population

All random selecting postpartum womenand those are meeting the inclusion criteria.

4.4.3 Inclusion and Exclusion criteria

- **Inclusion criteria:**Postpartum women who will fulfill WHO eligibility criteria for insertion of immediate postpartum IUCD in selected government hospitals in Addis Ababa.
- **Exclusion criteria:** Seriously sick and unable to respond due to after pain in postpartum women.
  - **WHO inclusion criteriafor insertion of immediate PPIUCD:** Postpartum women who gave birth after 28 weeks of gestation were included in the study
  - **WHO exclusion criteria for insertion of immediate PPIUCD:** high Fever during labor and delivery, having active STD or other lower genital tract infection or high risk for STD, ruptured membrane for more 24 hours prior to delivery, known uterine abnormalities, unresolved post-partum hemorrhage or postpartum uterine atony requiring use of additional oxytocicdrugs[6].

4.5. Sample size determination

The sample size was determined by using formula for estimating a single population proportion formula. The sample size for this cross-sectional study calculated by assuming prevalence of immediate PPIUCD practicewas 21.6% in a study done in Sidama Zone,southern Ethiopia [8]. Based on the assumption 5% marginal error, 95% confidence interval (CI) and a none response rate of 10%, the actual sample size for the study was as follows

$$n=\frac{\left(Z\frac{\alpha}{2}\right)^2 p(1-p)}{d^2}=\frac{Z^2 p(1-p)}{d^2}=\frac{(1.96)^2 X 0.216(1-0.216)}{(0.05)^2}= \mathbf{260}$$

Where n=Sample size

Z=value corresponding to a 95% level of significance=1.96

p= prevalence in previous study for practice (0.216)

q= (1-p) = (1- 0.216) = 0.784

d= Margin of error, assumed to be 5%

By considering 10% non-response rate, the total sample size was 260+26= **286**

4.7. Proportional to size allocation

To allocate the sample size for the selected Government Hospital, their previous 6 months achievement was used which is (Black Lion Specialized Hospital=2100, St.Paul Hospital(SPHMMC)=3600, Zewditu Memorial Hospital=1800, Menilik II Memorial Hospital=1800 and Gandhi Memorial Hospital=3600). Then the allocation for each hospital was done as follows:

Nx = n/N=NX where

NX= the sample size allocated for "X'' hospital

Nx =Population size that "X'' hospital achieve in the previous 6 months

n = Total sample size =286

N= Total population size = X1+X2+X3+X4+X5 =12,900 and

For Black Lion Specialized Hospital: **N**BLSH = (286/12,900)2100 =**48**

For St.Paul Hospital(SPHMMC): **N**SPHMMC =(286/12,900)3600 = **79**

For Zewditu Memorial Hospital: **N**zmh = (286/12,900)1800 =**40**

For Menilik II Memorial Hospital: Nmmh = (286/12,900)1800 =**40**

FORGandhi Memorial Hospital**: N**GMH=(286/12,900)3600=**79**

NB: X1, X2, X3, X4and X5 represents Black Lion Specialized H, St. Paul Hospital, Zewditu Memorial Hospital,Menilik II Memorial Hospital and Gandhi Memorial Hospital Selected Government Hospital and the "pooled k" value was calculated by taking the average achievements of the selected Government Hospital and the average achievement was divided in to 6 months to get the estimated population during the data collection period. Finally, when it is divided by the sample size, "pooled k"value was obtained. That is:

K = (2100+3600+1800+1800+3600)/5=2580 this further divided in to data collection period which is2580/6 = 430 then finally divided by the sample size: 430/286 ≈**2**so the subjects were selected every kth which is **2**.

4.6. Sampling procedure

From the 13 governmental hospitals found in Addis Ababa. In this study, there are five selected government hospitals in Addis Ababa which provide PPIUCD servicei.e.Black Lion Specialized Hospital, St.Paul Hospital(SPHMMC),Zewditu Memorial Hospital, Menilik II Memorial Hospital,and Gandhi Memorial Hospital.To select the study participants, the total sample size was allocated proportionally based on the average number of monthly delivery service from each selected hospital. Proportional allocation was done for postpartum women to keep homogeneity. Again proportional allocation was done for each MCH center in each selected hospital. Finally, from each MCH center, postpartum women were selected using a lottery method to attain the final individuals by using list of postpartum women in each MCH center and also exit interview was employed (participants were selected using systematic random sampling technique or every kth exit (kth value=2) as a sampling frame.

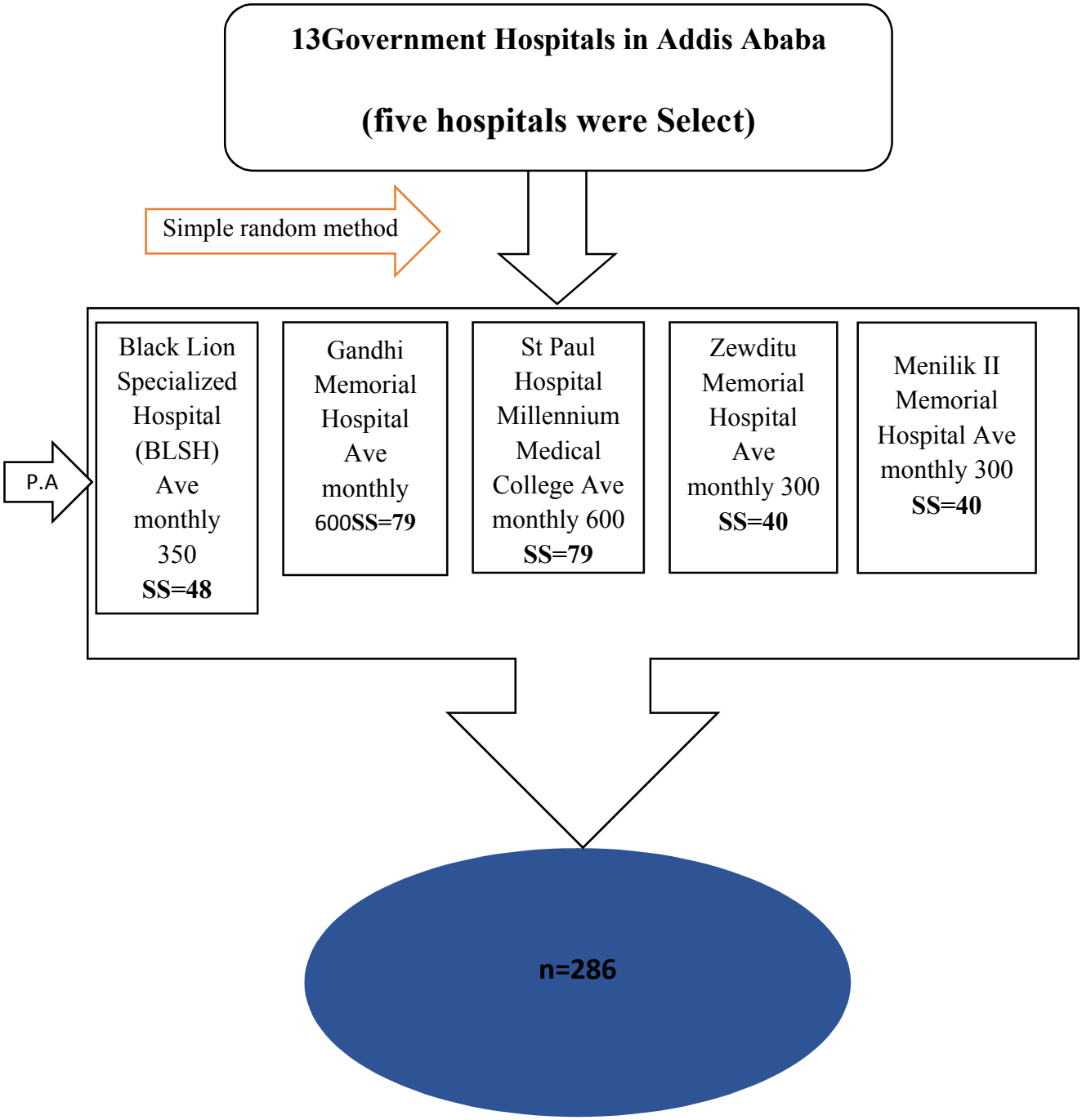

Figure 2: Sampling procedure for selection of the study participant in the study. Where (SS=sample size, PA=proportional allocation)

4.8. Variables

4.8.1. Dependent variables

Knowledge, attitude and practiceregarding postpartum intrauterine contraceptive device.

4.8.2. Independent variables

Socio-demographic characteristic: age, marital status, occupation, educational status, religionObstetric characteristics (birth interval/spacing, who decide to use family planning, number of birth and children, planned/unplanned Pregnancy.

Health service related (numbers of Antenatal care visits, Family Planning Counseling during Antenatal care and delivery setting, previous Family Planning use, mode of delivery).

4.9. Operational definitions

- **Immediate PPIUCD:**An IUCD that can be inserted post placental, intra cesarean and spontaneous vaginal delivery within 48 hrs of delivery.
- **Practice of PPIUCD:**postpartum women who used to postpartum intrauterine contraceptive device within 48 hrs follow delivery.
- **Knowledge:**what a postpartum woman knows about postpartum intrauterine contraceptive device

  Good Knowledge:A score of greater than or equal to mean (≥7) of the knowledge survey regarding PPIUCD questions on the questionnaire[33].

  Poor knowledge: If the participant score‘s less than the mean score (7) on the knowledge survey regarding PPIUCD questions on the questionnaire [33].
- **Attitude:** the predisposition to respond in a favorable or unfavorable manner towards PPIUCD

  Favorableattitude: participants who scored the mean and above (≥ 7.5) value from the provided attitude related questions about the PPIUCD.

  Unfavorable attitude: participants who scored below the mean value of the provided attitude questions about the PPIUCD[23].

4.10. Methods of data collection

4.10.1. Data collection tool

For data collection a pretested, structured interview questionnaire consisting of items with pre-coded response categories was used. The questionnaire was adapted from EDHS 2016 and reviewing literatures (8, 20, 33).

The tool has four sections:The first section consists of socio demographic characteristics; the second section consists of maternal health service practice and obstetric characteristics, the third section knowledge and the fourth section consist of attitude of the postpartum women on PPIUCD.The questionnaire was designed in English and translated in to local Amharic language by and then translated back to English by translators to check for consistency.

4.10.2. Data collection procedures

Data was collected by face to face interview using structured questionnaires. FiveBSc midwifes were selected to collect as data collectors (one for each hospital) and one MSc Nurse were selected for supervision.Before data collection, one day data collection training was given to data collectors and supervisors on the objectives, benefits of the study, individual‘s right, informed consent and techniques of the interview.

4.10.3 Data quality control

Before starting the actual data collection to assure the data quality, high emphasis was given to designing data collection instrument, first the questionnaire was pre-tested on 10% of sample size or 26 postpartum women on in T/Himanot General Hospital. After pre-testing the questionnaire, further adjustments to the data collection tool was made to improve clarity, understand-ability, and simplicity of the messages. All of the questionnaires were checked for completeness and accuracy before, during and after the period of data collection. Throughout the course of the data collection, interviewers were supervised; regular meetings were held between the data collectors and the principal investigator together in which problematic issues arising from interviews during the data collection were discussed. The collected data was again reviewed and checked for completeness before data entry. Data entry format template was prepared and programmed by principal investigator.

4.11. Data analysisProcedure

First the collected data was checked manually for completion and any incomplete or misfiled questions. Then the data was cleaned and stored for consistency and entered in to Epi Data version 4.2, and then it was exported to statistical package for social sciences (SPSS) version 20.0 software for analysis.Descriptive statistics like frequency, proportion, mean, and standard deviation were computed to describe study variables in relation to the population. Logistic regression (bivariate and multivariate) was used to determine the effect of independent variables on the outcome variables. The strength of association was declared at P value<0.05. Variables found to have a P-value<0.2 in the binary logistic regression was entered/exported into multivariate analysis to identify their independent effects and the final results were presented as odds ratio (AOR). Finally, results were compiled and presented using texts, tables, graphs.

4.12. Ethical consideration

Ethical clearance was obtained from institutional review board of Addis Ababa University, college of health sciences, School of Nursing and Midwifery research committee. Support letter from School of Nursing and Midwifery was written to BLSH, St. Paul Hospital, Addis Ababa city administration Health Bureau and T/Haymanot Hospital. Formal letter of ethical approval was obtained from AAU, St. Paul hospital and Addis Ababa city administration Health Bureau IRB. Informed written consent was obtained from all study participants. Participants were informed about the objective of the study. After information is provided about purpose of the study, non-invasiveness of the data collection procedure, confidentiality of the information and All the participants were reassured of the anonymous (unnamed), and as personal identifiers were not used. Then, after obtaining informed consent from every participant, the data collectors were continued the job by giving due respect to the norms, values, beliefs, culture, and ensured the confidentiality of the data.

4.13. Dissemination of the result

The results of this finding will be disseminated to Addis Ababa University, College of Health Science, School of Nursing and Midwifery. In addition,copies of the result will be given to Black Lion Specialized Hospital, St. Paul Hospital and Addis Ababa city administration Health Bureauto utilize the information for further development of strategic plan. Presentations at professional, local, national and publication in peer reviewed national or international journals will be considered.

5. RESULTS

5.1. Socio-demographic characteristics of the study participants

All sampled postpartum women were participated in the study making the response rate 100 %. Majority of the postpartum women one hundred forty-one (49.3%) belongs to 25-29 years' age group with mean age of 28.0 (± 4.692 SD years.Majority of the study participantstwo hundred seventy-one (88.1%), were married. There were twenty (7.0 %) divorced women. Of the study clients, From the total participants; one hundred four (36.4%) had attended up to secondary education(grade 9-12) followed by Primary (1-8) nighty (31.5%).Majority of the study participants were Orthodox one hundred twenty-four (43.4 %) and Muslim one hundred eight(37.8 %) by their religion respectively.One hundred six one hundred six (37.1%) of the respondents were housewives and fifty-six(19.6 %) were found in the private employee andfifty-one (17.8 %) were self-employed.(Table 1)

Table 1:Socio-demographic characteristics of post-partum women at selected government hospitals inAddis Ababa, August 25- September 30, 2019.(n=286)

Variable	Frequency	Percentage (%)
Age (years)		
≤19	4	1.4
20-24	58	20.3
25-29	141	49.3
30-34	47	16.4
Above 35	36	12.6
Marital Status		
Married	252	88.1
Divorced	20	7.0
Unmarried	6	2.1
Widowed	8	2.8
Level of education		
No formal education	21	7.3
Primary (1-8)	90	31.5
Secondary (9-12)	104	36.4
College and above	71	24.8
Religion		
Orthodox	124	43.4
Muslim	108	37.8
Protestant	46	16.1
Catholic	8	2.8
Occupation		
Housewife	106	37.1
Government employee	28	9.8
Private employee	51	17.8
Daily laborer	20	7.0
Self employed	56	19.6
Merchant	25	8.7

5.2. Knowledge of participants about postpartum intrauterine contraceptive device

This study showed that the majority of study participants one hundred nighty-seven (68.9%) of them responded that they have ever heard IUCD can be inserted immediately after delivery.One hundred seventy-six (61.5%) answered the duration of pregnancy protection. Majority of the study participants, one hundred five (53.3%), had heard about PPIUD from health professionals whereas only forty-nine (24.9%) of the women heard about PPIUD from Friends. There were twenty-seven (13.7%) women who heard about PPIUD from a Mass media. (Figure 3)

Table 2:Participants Source of Information about PPIUD at selected government hospitals in Addis Ababa, August 25 September, 2019.

Variables	Frequency	Percent (%)
Ever heard IUCD inserted immediately after delivery (n=286)		
Yes	197	68.9
No	89	31.1
Source of information about PPIUCD(n=197)		
Mass media (Tv, Radio)	27	13.7
Health workers	105	53.3
Family members	16	8.1
Friends	49	24.9

The study participants answered: PPIUD can be removed at any time you wish (92.3%), followed by PPIUD is inserted free of charge in Ethiopia (75.5%), PPIUD does not cause cancer (73.4%). The mean score of correctly answered knowledge questions was (7.0±1.4 SD). (table3, figure 3)

Table 3: postpartum women responded to knowledge assessment questions about PPIUD at selected government hospitals in Addis Ababa, August 25- September 30, 2019. (n=286)

Knowledge assessment questions on PPIUD	Responses				Correct responses	Percent correct
	TRUE		FALSE			
	N	%	N	%		
PPIUD can prevent pregnancies for more than 10 years.	176	61.5	110	38.5	TRUE	61.5
PPIUD is not appropriate for females at high risk of getting STIs.	147	51.4	139	48.6	FALSE	48.6
PPIUD has no interference with sexual intercourse or desire.	148	51.7	138	48.3	TRUE	51.7
PPIUD is immediately reversible (become pregnant quickly when removed).	182	63.6	104	36.4	TRUE	63.6
PPIUD does not cause cancer.	210	73.4	76	26.6	TRUE	73.4
PPIUD can be used by breast feeding mothers.	202	70.6	84	29.4	TRUE	70.6
PPIUD may cause changes in bleeding pattern.	196	68.5	90	31.5	TRUE	68.5
PPIUD can be used by HIV positive patients doing well on treatment.	117	40.9	169	59.1	TRUE	40.9
PPIUD is inserted free of charge in Ethiopia.	216	75.5	70	24.5	TRUE	75.5
PPIUD can be removed at any time you wish.	264	92.3	22	7.7	TRUE	92.3

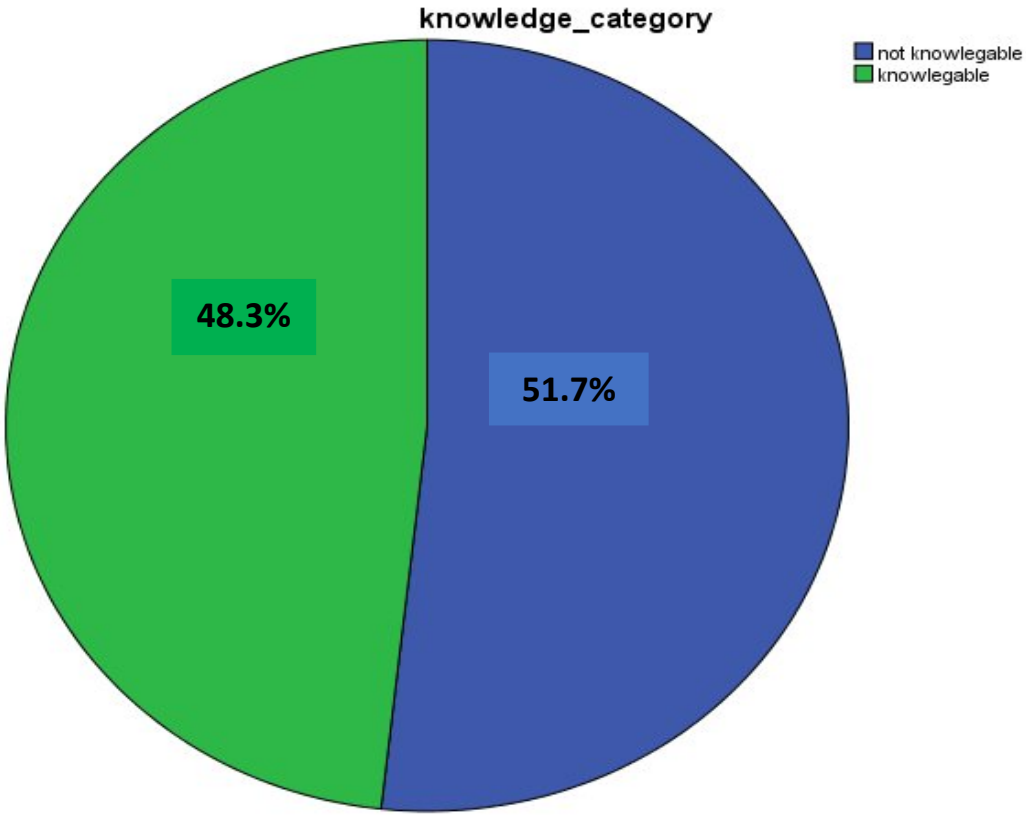

Figure 3:Level of knowledge regarding postpartum intrauterine contraceptive device among postpartum women in selected government hospitals of Addis Ababa, 2019.

5.3. Participants attitude towards postpartum intrauterine contraceptive device

Regarding to determine the respondents‟ level of attitude on postpartum women to use postpartum IUCD, the respondents were asked to reflect their opinion on a serious of questions concerning to attitude post-partum IUCD. The Likert scale with scores ranging from 1= disagree to 3= agree was used. The mean score of correctly answered attitudinal questions were(≥7.5), the study showed one hundred eighty-two (63.6%) of participants scored mean and above the mean and they were considered as having a favorable attitude while one hundred four (36.4%) of postpartum women scored below the mean score and were considered as having unfavorable attitude towards PPIUCD. Attitudes towards PPIUD were summarized through five issues related to use of PPIUCD, (Table 4)

Table 4: postpartum women responded to attitude assessment questions about PPIUD usage at selected government hospitals in Addis Ababa, August 25-September 30 30, 2019. (n=286)

Statements of Attitude question towards PPIUD	Frequency	Percent (%)
Insertion and removal of PPIUD ishighlypainful		
Agree	234	81.8
Not sure	38	13.3
Disagree	14	4.9
PPIUCD doesn't move through the body after insertion		
Agree	202	70.6
Not sure	60	21.0
Disagree	24	8.4
PPIUCD does not interfere with sexual intercourse		
Agree	236	82.5
Not sure	34	11.9
Disagree	16	5.6
PPIUD is very effective at pregnancy prevention		
Agree	184	64.3
Not sure	84	29.4
Disagree	18	6.3
PPIUCDcan harm a woman's womb		
Agree	184	64.4
Not sure	80	28.0
Disagree	22	7.7

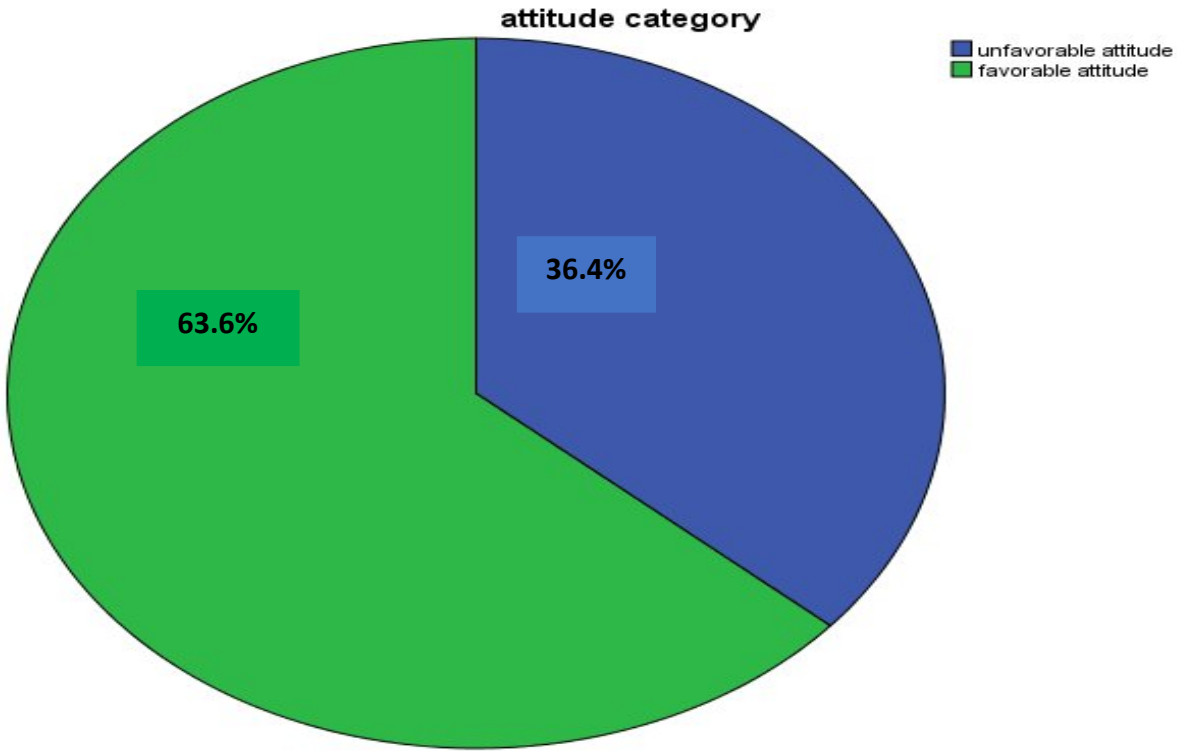

Figure 4: Attitude regarding postpartum intrauterine contraceptive device among postpartum women in selected government hospitals of Addis Ababa, 2019.

5.4.Obstetrics and Health services related Practice of study participants

5.4.1. Obstetric characteristics of the participants

The mean age at first marriage was 20.(±3.92SD)years. The majority study participants, two hundred ten (73.4%), had at least one or two birth. Eighty-one (37.2%) of the participants had a birth spacing of above 36 months followed by between 24 to 35 months, and less than 24 months sixty-two (28.4 %).One hundred seventy-three (60.5%) of the respondent had a plan to have another child in the future and thirty-one (17.9%) of the respondent were planned to have a child within 24 months in the future, fifty-two (30.1%) between 24 to 36 months and nighty (52.0%) after 36 months. The mean number of alive and more wanted children in life was 2.22 (±.508 SD) and 4.0 (±1.62 SD) respectively. Seventy-four (25.9%) of the participant's current birth were not planned and modern family planning use was decided by both women and husband were one hundred seventy-eight (62.2%). One hundred thirty-three (45.5 %)postpartum women discussed about FP with their husbandsduring pregnancy and the women who kept husband approve of family planning use was one hundred thirteen (39.5%).(Table 5)

Table 5: Obstetric Characteristics of the participants who gave birth at selected government hospitals in Addis Ababa, August 25- September 30, 2019.

Variable	Frequency	Percent (%)
Age at first marriage(n=286)		
≤ 18	76	26.6
19-20	86	30.1
21+	124	43.4
Number of Birth(n=286)		
1-2	210	73.4
3-4 children	68	23.8
5 and above	8	2.8
Age of last child(months)(n=218)		
<24	62	28.4
24-36	75	34.4
>36	81	37.2
Plan to have another child(n=286)		
Yes	173	60.5
No	72	25.2
Undecided	41	14.3
When to have another child in the future (months)(n=173)		
Less than 24	31	17.9
24-36	52	30.1
Above 36	90	52.0
Number of alive children(n=286)		
None	4	1.4
1-4	210	73.4
5 and above	72	25.2
Number of children want to have in your life(n=286)		
≤3	106	37.1
≥4	180	62.9
present birth planned (n=286)		
Yes	212	74.1
No	74	25.9
Decision on the use of modern FP(n=286)		
Mainly respondents	64	22.4
Mainly Husband	44	15.4
Jointly decision	178	62.2
Have you discussed on family planning methods with partner during pregnancy(n=286)		
Yes	133	46.5
No	153	53.5
Your partner approves of family planning use(n=286)		
Yes	113	39.5
No	173	60.5

5.4.2. Health service use of study participantsabout postpartum intrauterine contraceptive device. The study participants ever used family planning methods wastwo hundred twenty (76.9%), majority of study participant use offamily planning method before current pregnancy wasone hundred eighty (81.8%). The most widely used type of family planning method was injectable contraceptives seventy-six (34.5%), followed by implantssixty-two (28.2%) and IUCD forty-two (19.1%). Current useof PPIUCD among study participants wereseventy-six (26.6%). TheMajor reason for using this PPIUCD was for spacingthirty-eight (50.0%), followed by delaynineteen (25.0%) and reason for not using PPIUCD were fear of side effectsseventy-eight (37.1%) and They need to have another child in the futurethirty-one (14.8%). Allof the study participantswere attended ANC visits during current pregnancy and among the womeneighty-seven (30.4%) had received family planning counseling. (Table 6)

Table 6: Health service use of the participants who gave birth at selected government hospitals in Addis Ababa, August 25- September 30, 2019.

Variable	Frequency	Percent(%)
Ever used family planning methods previously(n=286)		
Yes	220	76.9
No	66	23.1
Family planning use before recent pregnancy (n=220)		
Yes	180	81.8
No	40	18.2
Which method of you use(n=220)		
Natural Family Planning	7	3.2
IUCD	42	19.1
Implanol	62	28.2
Injectable	76	34.5
Pills	33	15.0
Are you currently using PPIUCD(n=286)		
Yes	76	26.6
No	210	73.4
Why use PPIUCD(n=76)		
want to space	38	50.0
want to Delay	19	25.0
Want to limit	17	22.4
Other	2	2.6
Why not use PPIUCD(n=210)		
wanted to have another child	31	14.8
Not think I could be pregnant	30	14.3
Religion Prohibition	14	6.7
Husband disapproves	13	6.2
Afraidof side effects	78	37.1
Afraid of becoming infertile	24	11.4
Use later when menstruation begins	12	5.7
Other	8	3.8
Mode of delivery(n=286)		
SVD	197	68.9
Vacuum/ Forceps delivery	33	11.5
C/S	56	19.6
Attend antenatal care follow visit(n=286)		
Yes	286	100
Number of antenatal care visits(n=286)		
1 visit	2	0.7
2-3 visits	42	14.7
4 visits and above	242	84.6
PPIUCD counselling in the health facilities		
Yes	87	30.4
No	199	69.6
The time of PPIUCD counselling (n=87)		
during ANC follow up	69	79.3
during labor	4	4.6
after delivery	14	16.1

5.5. Determinants of knowledge, attitude and practice among postpartum womentowardspostpartum intra uterine contraceptive device

5.5.1.Knowledge ofpostpartum intra uterine contraceptive device and associated factors

In multivariate logistic regression, Participants' levels of education was significantly associated with PPIUCD knowledge at P-value of <0.05. Study participants whose learnt college and above education were 23 times more likely to be knowledgeable on PPIUCD than respondents with no formal education(AOR=22.99, 95% CI[4.465,118.411]. Similarly, Study participants who learnt up to secondary education (9-12) were 10.5 times more knowledgeable on the PPIUCD than with participantswho is no formal education (AOR=10.513, 95% CI [4.679-23.623].(Table 7).

Table 7: Knowledge of PPIUCD and associated factors among postpartum women in selected government hospitals of in Addis Ababa, 2019 (n=286)

Variable	KnowledgePPUICD		COR(95%CI)	AOR(95%CI)
	Yes	No		
Level of education				
No formal education	2(1.5%)	19(12.8%)	1	1
Primary (1-8)	15(10.9%)	75(50.7%)	2.158(0.248-18.744)	1.936(0.894-4.194)
Secondary (9-12)	69(50%)	35(23.7%)	16.960(2.166-132.770)*	**10.513(4.679-23.623)****
College and above	52(37.6%)	19(12.8%)	32.170(3.895-265.723)*	**22.992(4.465-118.411)****
Occupation				
House builder	62(45%)	44(29.7%)	1	1
Government employee	17(12%)	11(7.5%)	10.712(1.999-57.401)*	0.087(.001-9.771)
Private employee	24(17%)	27(18.2%)	19.615(1.237-128.616)*	0.160(.011-2.248)
Daily laborer	3(2%)	17(11.5%)	3.131(0.577-16.991)	0.042(0.014-1.823)
Self employed	21(15%)	35(23.6%)	0.00788(0.000-0.160)*	0.496(0.030-8.263)
Merchant	11(8%)	14(9.5%)	1.846(0.315-10.822)	0.017(0.041-3.902)
Planned				
Yes	116(84.1%)	96(64.9%)	1	1
No	22((15.9%)	52(35.1%)	7.530(2.235-25.364)*	0.916(0.032-1.488)
Ever heard about PPIUCD				
Yes	92(47.7%)	46(49.5%)	1	1
No	101(52.3%)	47(50.5%)	5.270(0.095-0.768)	2.051(0.804-5.231)

p-value < 0.05, 1=Reference

5.5.2. Attitudeofpostpartum intra uterine contraceptive device and associated factors

Themultivariate logistic regression analysis showed that study participants who had college and aboveeducation were 2.3 timesmore likely tohave favorable attitude towards PPIUCD compared with those who had no formal education (AOR=2.302, 95% CI[1.141-4.642].(Table 8)

Table 8: Attitude survey regarding postpartum intra uterine contraceptive device and associated factors among postpartum women in selected government hospitals of Addis Ababa, 2019(n= 286)

Variable	Attitude of PPUICD		COR(95%CI)	AOR(95%CI)
	Yes	No		
Level of education				
No formal education	2(2%)	11(10.6%)	1	1
Primary (1-8)	58(32%)	32(31%)	2.279(0.728-7.131)	0.532(0.776-17.23)
Secondary (9-12)	61(33%)	43(41%)	1.807(0.536-6.093)	0.692(0.189-6.09)
College and above	61(33%)	18(17.4%)	5.952(1.601-22.134)*	**2.302(1.141-4.64)****
Number of Birth.				
1-2	140(77%)	70(67.3%)	1	1
3-4 children	36(19.7%)	32(30.7%)	21.353(4.587-776.78)*	0.359(0.013-9.697)
5 and above	6(3.3%)	2(2%)	2.787(1.103-75.321)*	0.267(0.143-3.680)
Decision on the use of modern FP				
Mainly respondents	46(25.3%)	18(17.3%)	1	1
Mainly Husband	20(11%)	24(23.1%)	0.273(0.108-0.687)*	0.905(0.468-1.752)
Jointly decision	116(63.7%)	62(59.6%)	0.768(0.362-1.629)	0.498(0.238-5.040)

p-value < 0.05, 1=Reference

5.5.3. Practice of postpartum intra uterine contraceptive device and associated factors

In multivariate analysis when we compare PPIUCD practice among respondents who had PPIUCD counseling during pregnancy were 4times more likely to practice PPIUCD than those respondents who had not PPIUCD counseling during pregnancy(AOR=4.591, 95% CI(2.314,9.108). Similarly,respondents who had discussion with partner about family planning were2 times more likely to practice PPIUCD than those who do not have discussion with partner (AOR=2.014, 95% CI (1.701-71.25) andPPIUCD practice among respondents who had Knowledge were 0.06 times less likely to practice PPIUCD than those respondents who are not Knowledgeable(AOR= .062, 95% CI(0.028-0.135). (Table 9)

Table 9: Practice regarding PPIUCD and associated factors among postpartum women in selected government hospitals of A.A, 2019. (n=286)

Variable	Practice of PPUICD		COR(95%CI)	AOR(95%CI)
	Yes	No		
Occupation				
House wife	22(29%)	84(40%)	1	1
Government employee	11(14.5%)	17(8.1%)	0.314(0.090-1.098)	0.228(0.069-1.757)
Private employee	17(23.4%)	34(16.2%)	0.32(0.118-0.881)*	0.574(0.136-2.419)
Daily laborer	2(2.6%)	18(8.6%)	0.839(0.128-5.523)	0.790(0.226-2.758)
Self employed	15(19.7%)	41(19.5%)	0.469(0.167-1.316)	0.295(0.038-2.314)
Merchant	9(11.8%)	16(7.6%)	0.25(0.072-0.872)*	0.538(0.148-1.952)
Discussion with partner about family planning				
Yes	39(51.3%)	94(44.8%)	4.11(1.914-6.588)*	**2.01(1.7-71.245)****
No	37(48.7%)	116(55.2)	1	1
PPIUCD counselling in pregnancy				
Yes	37(48.7%)	50(24%)	5.260(2.146,12.97)*	**4.59(2.31-9.108)****
No	39(51.3%)	160(76%)	1	1
Knowledge Level				
Knowledgeable	10(13.2%)	72(34%)	.057(.022-.14)*	**.062(.028-.135)****
Not Knowledgeable	66(86.8%)	138(66%)	**1**	**1**
Attitude about PPIUCD				
Favorable attitude	25(33%)	131(62%)	0.514(0.241-1.096)	0.598(0.299-1.197)
Unfavorable attitude	51(67%)	79(38%)	**1**	**1**

p-value < 0.05,1=Reference

5. DISCUSSION

The study has investigated the knowledge, attitude and practice of immediate PPIUCD and associated factors among postpartum women in selected government hospitals of Addis Ababa, Ethiopia.The study revealed that only 48.3% of postpartum women were aware of PPIUCDs which was similar study done inBale Zone(54.5%)[20],Gondar(49.3%)[31] and South India(44.8%)[54]. This study has revealed higher knowledge ofPPIUCD among postpartum women than Jaipur district, India(21.9 %)[53] and New Delhi, India(9%)[52] and awareness of the IUCD among women in Gambia, Nigeria, and the Democratic Republic of Congo was only 39.5%, 31.8% and 24%, respectively [41] had poor knowledge.This finding suggests that concept of PPIUCD is still new incommunity and there is need to increase in level of knowledge and awareness in the community by means ofhealth education and counseling. But it is lower than study done in east Gojam(60.1%)[34], Somali Region(68.2%)[33], Sidama Zone(71.3%)[8]. This could be due to the difference in the study set up which is only on Hospitals in this study.

The study also found that level of education was significantly associated with knowledge that Compared to clients with college and above education had 23 times increased odds to had good knowledge than no formal education (AOR=22.992, 95%CI [4.465-118.411], postpartum women with secondary education had 10.5 times increased odds to had good knowledge than no formal education (AOR=10.513, 95% CI[4.679-23.623]. This may have been due to the following reasons. First, when postpartum women are more success in education to have a better understanding of the available health facilities and the benefits 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, and go on to know modern contraceptives, than who have not been educated. So This observation suggests that education has a positive influence on women interest to know about PPIUCD including their family planning practice.

Regarding to the attitude this study revealed that 63.6% of women had favorable attitudes. This is higher with the study done in Bale Zone(28.9%), Mekelle town(46.4%) and South India(37%) of study participants had unfavorable attitude respectively[20,23,54], This discrepancy may be due to socio economic variations and different awareness creating techniques between communities and health extension workers among different towns. And it was in line with study done inKebribeyah town(51%),Ambo(51.7%) and Mizan-Aman Town(65.02%) had favorable attitude respectively [33,39].

Postpartum women who were educated college and abovewere2.3 times more likely had favorable attitude on postpartum (AOR=2.302; 95% CI: (1.141-4.642) as compared to no formal education.This observation suggests that education has a positive influence on women's perceived to had favorable attitude of PPIUCD and probably they might be counseled and clarified misconceptions about PPIUCD by healthcare workers.

Current practice of PPIUCD insertion within 48 hours of follow deliveryin selected government hospitals of Addis Ababa was 26.6%. which was higher than in Kebribeyah town (12.3%)[33]and Bale Zone(12.4%)[20]. This variation of practice might be due to the difference in the level of awareness, educational level of respondents, religious beliefs and various misconceptions about PPIUCD insertion in the study settings. similar with study done in Sidama Zone(21.9%), Democratic Republic of Congo (30%),Zambia (25%), India(40%), Guinea(37%), Rwanda(27%)[4,8].Overall practice of PPIUCD was generally good, despite a very low usage of the interval IUCD in Ethiopia(2%).A possible explanation of the relatively high practice of PPIUCD was the newness of the immediate PPIUCD in the community, may be the presence of health care providers training and material support from a government and non-governmental organization in the study area. Postpartum women who have discussed about family planning with their partner were 2 times more likely had favorable attitude of PPIUCD (AOR= 2.014, 95% CI[1.70,71.245]. This finding could be explained by the fact that decisions made jointly with agreement of both couples will have better outcome when compared with decision made by only one side since issue of family planning is not only the concern of one partner. This finding is also in line with study conducted in Ethiopia [34].In this study found that women who had received family planning counseling during ANC, early labor and immediate postpartum period had approximately fourtimes higher odds of using PPIUCD in the postpartum period than to their counterpart. According to WHO, postpartum family planning counselling should optimally begin

during ANC [2] and it is the ideal time to counsel women, but counselling during early labor and immediately postpartum is also acceptable[2]. This may be because women who are received family planning counseling during ANC and PNC might be highly motivated to use the methods and this indicates the importance of integrating post-partum family planning counselling.PPIUCD practice among respondents who had Knowledge were 0.06 times more likely practice to PPIUCD than those respondents who had not Knowledgeable (AOR= .062, 95% CI(0.028-0.135). This may have been due to the following reasons. First, when postpartum women have knowledgeable that had a better understanding about the available family planning methods and the benefits. So This suggests that knowledge has a positive influence on women's interest to practice of PPIUCD.

7. Strength and Limitation of the study

7.1. Strength of the study

- All postpartum women who gave birth during data collection period were included in the survey.

7.2. Limitations of the Study

- This study was conducted in selected government hospitals; hence the findings might not adequately reflect the entire population.
- Postpartum women who gave birth in a particular period, time and it cannot establish cause and effect relationships.

8. Conclusion and recommendation

8.1. Conclusion

Generally, from this study majority (67.5%) of the study participants heard about PPIUCD and the major sources of information were health provider and friends. Above half of the respondents (51.7%) were found to have poor knowledge score on PPIUCD. PPIUCD is perceived by the study participants who had favorable attitude (63.4%) towards PPIUCD and 26.6% of them had practiced PPIUCD from the total participants. Respondents' level of education, participants level of knowledge, discussion with partner about family planning and PPIUCD counseling were identified as major factors of PPIUCD knowledge, attitude and practice in this particular study.

8.2. Recommendation

For Policy makers and Government

- In order to increase knowledge about family planning services especially on postpartum intrauterine contraceptive device, the media should be engaged as they play a key role in promotion of knowledge in communities.
- Government should increase opportunity to take on job training to healthcare providers in order to make the service more accessible through provision of correct information on the PPIUD as part of the family planning method.

For Health Workers

- The health workers should create awareness on use of PPIUCD and its benefits through mass media, health education at ANC, early labor, PNC as well as the community outreaches.

For Addis Ababa Health Bureau

- Stakeholders should work to create awareness on the importance and benefits of use of PPIUCD. This could be achieved through the development and implementation of strategies that specifically target use of PPIUCD scale up program in the town.

For Researchers

- Similar studies should be undertaken in different parts of the country to see the trends, magnitude and associated factors of PPIUCD.

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Annex I: English Version Information Sheet

Questionnaire Identification Number _____

My name is _____. I am working as data collector in the research conducted by Seid Mohammed, who is conducting this research for Master degree in Maternity and Reproductive Health Nursing Specialty track in Addis Ababa University. He is trying to assess the knowledge, attitude and practice of postpartum intrauterine contraceptive device and associated factors among postpartum women. As the study is directly related to women who are immediate postpartum period you are one of the women who are selected to participate in this study. Therefore you are kindly requested to participate in this interview.

Name of advisor; Mesfine Abebe (BSc, MSc, ASST. PROFESSOR) and Addishiwot Fantahun (BSc, MSN) Name of the organization: Addis Ababa University, College of Health Sciences, School of Nursing and Midwifery.

Name of the Sponsor: Addis Ababa University

Introduction: Information sheet and consent form is prepared for women who gave birth in selected government hospitals and who will be volunteer to participate in research.

A. Purpose:I am hopeful that this research will benefit all reproductive age mothers for family planning improvement and quality of service. The information that you provide are very essential, not only for the successful accomplishment of the study but also for producing relevant information which will help in improving the provision of the service. I will provide research results to concerned body for better service.

B. Duration: The duration of this study is from August, 2019 to September, 2019

C. Procedures: To assess the knowledge, attitude and practice of postpartum intrauterine contraceptive device and associated factors among postpartum women in selected government hospital of Addis Ababa city, you are invited to take part in this research. If you are willing to participate in this research, you need to understand and say ―yes‟ on the agreement form. Then after, you will be interviewed by the data collector. All your responses and the results obtained will be kept confidential by using coding system, whereby no one will have access to your response.

D. Risk and discomfort: By participating in this research project, you may feel that it has some discomfort especially on spending your time. We hope you will participate in the study for the sake of the Benefit of the research result. I am Sure there is no risk in participating in this research.

E. Expected benefits: there may not be direct benefit to you but your Participationwill help us to identify the gap and take the appropriate intervention by the authorized stakeholder. You will not be provided any incentive or payment to take part in this research.

G. Confidentiality: The information collected from this research project will be kept confidential and information about you that will be collected by this study will be stored in a file, without your name, but a code number assigned to it. In addition, it will not be revealed to anyone except the principal investigator and will be kept locked with key. Right to refuse or withdraw: I am going to ask some very personal questions, your participation in this interview is completely on voluntary bases and you have the right to refuse the participation. You have the right to withdraw from the interview at any time or refuse to answer any questions you feel uncomfortable about.

If you have any question, you can ask at any time. If you have additional questions about the study please contact:

Seid Mohammed
Tel: +251-928-99-41-90,
e-mail address: seidm348@gmail.com

Annex II: English Version Consent Form

I understand all conditions stated above. I have understood that Participation in this study is entirely voluntarily. I will tell that the answers to the questions will not be given to anyone else. If respondent does not agree to be interviewed, let them thanks and go to the next respondent. If respondent say ―YES‖ continue

Checked by:

Supervisor Name _____ signature_____

Date_____/_____/____E.C. Time Interview Started: Hour: _____ Minute: _____

Questionnaire No_____

Time Interview Ended: Hour: _____ Minute: _____

Name of interviewer _____

Date _____/_____/____ ____E.C. signature_____

Annex III: English Version Questionnaires

PART I: SOCIO-DEMOGRAPHIC CHARACTERISTICSQUESTIONNAIRE

S.No	Items(Questions)	Participants response	Remark
201	How old are You?(age in years)	----------	
202	Marital Status	1. married 2. divorced 3. unmarried 4. widowed 5. others ----------	
203	What is your highest level of your education?	1. No formal education 2. Primary (1-8) 3. Secondary (9-12) 4. College and above	
204	What is your religion?	1. Orthodox Christian 2. Muslim 3. Protestant 4. Catholic 5. Others(specify)_____	
205	What is your occupation?	1. House builder 2. Government employee 3. Private employee 4. Daily laborer 5. Self employed 6.Merchant 7. Other (specify)_____	

PART II: OBSTETRIC CHARACTERISTICS OF THE PARTICIPANTS

S. No	Items(Questions)	Participants response	Remark
301	What was your age at first marriage?	_____ Years	
302	How many children do you have?	1.One 2.Two 3.four 4.five 5.Other (Specify)……	
303	What is the age of your last child? (in months)	Enter No_____	
304	After weaning this child do you like to have another child?	1. Yes 2. No 3. Undecided	If "yes" skip Q.305
305	How many of them are alive now?	Enter No_____	
306	How many children do you want to have in your life?	Enter No_____	
307	If yes, when to have another child in the future?	1. within 24 months 2. 24-36 months	

		3. Above 36 months	
308	Was your present birth planned?	1.Yes 2.No	
309	Who decided to use modern Family Planning?	1. Wife 2. Husband 3. Both of us 4. Other (Specify)……	
310	Did you and your partner talked about family planning since pregnancy?	1.Yes 2.No	
311	Does your partner approve of family planning use?	1.Yes 2.No	

PART II: HEALTH SERVICE RELATED ABOUT PPIUCD

S.No	**Items(Questions)**	**Participants response**	**Remark**
401	Have you ever used family planning methods previously?	1. yes 2. No	
402	Have you Use FP before the recent pregnancy?	1.Yes 2. No	Skip to 405
403	If your answer is yes, which method did you use?	1. Natural Family Planning 2. IUCD 3.Implanol 4. Injectable 5. Pills 6. Condom 7. Other(Specify)_____	
404	Are you currently used PPIUCD?	1. Yes 2. No	
405	Why did you use this PPIUCD?	1. want to space 2. want to Delay 3.Want to limit 4. Other (Specify)……..	
406	If no, why are you not using PPIUCD?	1. I wanted to have another child 2. I did not think I could be pregnant 3. My religion Prohibition 4. My husband disapproves 5. I am afraid of side effects 6. I am afraid of becoming infertile 8. I intend use later when menstruation begins 9. Other (Specify)……	
407	Mode of delivery	1.Vaginal delivery 2.Vaccum/ Forceps delivery 3. Elective C/S	

		4. Emergency C/S	
408	Did you attend antenatal clinic during current pregnancy?	1. Yes 2. No	
409	How many times did you attend antenatal clinic?	1. One time 2. Two times 3. Three times 4. Four times and above	
410	Did you counsel about PPIUCD in the health facilities?	1.Yes 2. No	
411	Where did you counsel about PPIUCD?	1. ANC Follow up 2. Latent Phase 3. After delivery	Possible to choose more than one

PART III: SKILL OF CLIENTS'KNOWLEDGE ABOUT PPIUCD

501	Ever learn IUCD can be inserted immediately after delivery?	1.Yes 2. No	
502	Where did you learn about PPIUD from? you on PPIUCD for the first time?	1.Mass media(Tv, Radio) 2.Health workers 3. Family members 4. Friends 5.Others (specify) _____	
503	**About PPIUD: (True or False)**		
1. PPIUD can prevent pregnancies for more than 10 years.		1. True 2. False	
2. PPIUD is not appropriate for females at high risk of getting STIs.		1. True 2. False	
3. PPIUD has no interference with sexual intercourse or desire.		1. True 2. False	
4. PPIUD is immediately reversible (become pregnant quickly when removed).		1. True 2. False	
5. PPIUD does not cause cancer.		1. True 2. False	
6. PPIUD can be used by breast feeding mothers.		1. True 2. False	
7. PPIUD may cause changes in bleeding pattern.		1. True 2. False	
8. PPIUD can be used by HIV positive patients doing well on treatment.		1. True 2. False	
9. PPIUD is inserted free of charge in Ethiopia.		1. True 2. False	
10. PPIUD can be removed at any time you wish.		1. True 2. False	

PART IV: SKILL OF CLIENTS' ATTITUDES TOWARDS PPIUD

Q-No	**Statements of Attitude on PPIUCD**	**Response**	**Remark**
601	The insertion and removal of PPIUD is highly painful	1. Agree 2. Not sure 3. Disagree	
602	PPIUCD doesn't move through the body after insertion.	1. Agree 2. Not sure 3. Disagree	
603	PPIUCD can harm a women's womb	1. Agree 2. Not sure 3. Disagree	
604	PPIUCD does not interfere with sexual intercourse	1. Agree 2. Not sure 3. Disagree	
605	PPIUD is very effective at pregnancy prevention	1. Agree 2. Not sure 3. Disagree	

Annex IV: Amharic Version Informed consent form

ለወለደችእናትየሚነበብ

ጤናይስጥልኝ፡ ፡ ስሜ<u>ይባላል፡ ፡ ይህጥ</u>ናትበአዲስአበባዩኒቨርሲቲ የማስተርስዲግሪበእናቶችእናስነተዋልዶየትምህርትዘርፍተማሪበሆነ ወላይደማዘሚድ የሚደረግነው፡ ፡ ይህጥናትየሚካሄደውካወለደችበኋላበማዕፀንየሚቀመጡ ሉፕየቤተሰብእቅድስለእናቶችየሚሰጡአገልግሎቶችላይያለዎትንእውቀት, አመለካከት እናየአገልግሎቱተጠቃሚነትላይነው፡ ፡ የጥናቱተሳታፊዎችየሚመረጡትበዕጣነው፡ ፡ ስለዚህእርስዎ ምየተመረጡትበዕጣነው፡ ፡ እርስዎየሚሰጡንመረጃዎችለአገልግሎትአቅርቦትናጥራትመሻሻልከፍተ ኛአስተዋጽኦያበረክታሉ፡ ፡ በጥናቱወቅትእርስዎየሚሰጡንማናቸውምአይነትመረጃዎችለዚህጥናት ብቻይውላልለሌላአካልተላልፈውአይሰጡም፡ ፡ የእርስዎስምወይምማንነትአይመዘገብም፡ ፡ ማንኛው ምበዚህጥናትየሚሳተፍወይምበዚህጤናድርጅትውስጥየሚሰራሰውለእርስዎምንምአይነትመረጃአይ ነገረውም፡ ፡ በጥናቱላይያለመሳተፍ፣ በፈለጉትሰዓትማቋረጥየሚችሉአንዲሁምጥያቄዎችንየመመለስመብትዎአለዎት፡ ፡ በጥያቄውመሳተፍዎምህንያለመሳተፍዎበሚያገኙትየጤናአገልግሎትላይየሚያመጣውአዎንታዊምህንአሉታዊተፅዕኖየለም፡ ፡ ቃለመጠይቁንበሙሉለማጠናቀቅበአማካይ 20-30 ደቂቃያህልይፈጃል፡ ፡ ከእርስዎየሚገኘውመረጃመገስትናሌሎችድርጅቶችግልጋሎቱለማሻሻል ግንዛቤለመፍጠርለሚያደርጉትእንቅስቃሴከፍተኛአስተዋጽኦናድጋፍይኖረዋል፡ ፡

ተጨማሪመረጃከፈለጉከታችባለውአድራሻማየትይችላሉ፡ ፡

ሰይደማዙሞዷ፡ +251928994190 ፧ seidm348@gmail.com

ለመሳተፍፍቃደኛነ ዎት? አዎንአይ☐ዎ ☐

የ ማጠይቅቁጥርቀን ____________ ____________

የ ሚጃሰብሰበሰ ምጄርማ ____________ ____________

የ ሆስፒታልስም ____________

Annex V: Amharic Version Questionnaires

እባክዎትን የ ተሚጠወ ሜልስ ቁጥር ወይምሜልሱን ያክብቡት፡ ፡

ክፍል1፡ ማሕበራዊናኢኮኖሚያዊሚጃዎችየ ሚመለከቱጥያቄዎች

ቁጥር	ጥያቄዎች	አማራጭመልሶች	ተጨማሪ
201	እድሜሽስንትነ ው?		
202	የትዳርሁኔታ?	1. ያገባ 2. ያላገባ 3. የተፋታች 4. የሞተባት 5. ሌላይገለፅ……	
203	የትምህርትደረጃሽምንድንነ ው?	1. No formal education 2. 1ኛ-8ኛክፍል 3. 9ኛ-12ኛክፍል 4.College እና ከዛበላይ	
204	ሀይማኖትሽምንድንነ ው?	1. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ካቶሊክ 5. ከላይ ከተዘረዘሩት ዉጪ	
205	ስራሽምንድንነ ው?	1. የቤትእመቤት 2. ተማሪ 3. ነ ጋዴ 4. የመንግስት ተቀጣሪ 5. የግልተቀጣሪ	

ክፍልሁለት: የሥነ ተዋልዶመጠይቆች

ቁጥር	ጥያቄዎች	ማራጭመልሶች	ተጨማሪ
301	ለመጀመሪያጊዜሲያገ በእድሜዎስንትነ በር?	__________ years	
302	የአሁኑእርግዝናጨምሮምንያህልጊዜአርግዘዋል??	1. አንድጊዜ 2. ሁለትጊዜ 3. ከሦስትእስከአራትጊዜ 4. አምስትናከዚያበላይ	
303	የሜጨሻልጆስንትውሩነ ው?	በቁጥር____________	

304	ከዚህ ወሊደ በኋላ ሌላ ልጅ እንዲኖሮዎ አቅደዋል	1. አዎ 2. አይደለም 3. አልወሰንኩም	መልሱ አዎ ከሆነ ወደ 307
305	በሕይወትስ ንት ልጅች ወሊደዋል?	በቁጥር__________	
306	በሕይወት ዘመንዎ ስንት ልጅችን እንዲኖርዎ ያቅዳሉ?	በቁጥር__________	
307	ከዚህ ወሊድ በኋላ መቸ ሌላ ልጅ እንዲኖሮዎ ያቅዳሉ?	1. በሁለት አመት ውስጥ 2. ከሁለት እስከ ሦስት አመት ጊዜ ውስጥ 3. ከሦስት አመት በኋላ	
308	የ አሁኑ እርግዝና የ ታቀደ ነ ወነ?	1. አዎ 2. አይደለም	
309	ዘመናዊ የ ቤተሰብ እቅድ ስለመጠቀም ማ ወሰነ ው ማ ነ ው?	1. ሚስት 2. ባለቤት ጓደኛ 3. ባልና ሚስት በጋራ 4. ሌላ ከለይገ ለፅ ……… …	
310	በእርግዝና ወይም በወሊድ ጊዜ እርሶና የ ትዳር አጋርዎ ስለ ቤተሰብ እቅድ መክረ ው የ ውቃሉ?	1. አዎ 2. አይደለም	
311	ስለ ቤተሰብ እቅድ መጠቀም ጉ ዳይ ከባለቤትዎ ወይም ጓደኛዎ ነ ው?	1. አዎ 2. አይደለም	

ክፍል ሁለት: የ ቤተሰብ ምጣኔ /ልክ ከወሊደ በኋላ በሚህፀ ን የ ሚቀመጥ ሉፕ/ በተመለከተ

ቁ ጥ ር	ጥያቄዎች	አማራጭ መልሶች	ተፊጠሮ
40 1	. የ ቤተሰብ ምጣኔ አገ ልግሎት ተጠቅመሽ ታውቂያለሽ?	1. አዎ 2. አይደለም	
40 2	ከአሁኑ እርግዝና በፊት የ ቤተሰብ እቅድ ተጠቅመዋል?	1. አዎ 2. አይደለም	መልሱ አዎ ከሆ ነ ወደ 403

403	ሜልሰአዎከሆነ የትኛዉየ ቤተሰብምጣኔ ተጠቅመዋል?	1. በተፈጥሮማገ ድ/የ ወርአበባበመጠበቅ 2. በማዘጋንየሚቀመጣሉ ኘ 3. በክንደቆዳሥሮየሚቀ መጥእምኘላንት 4. መርፌ 5. እንክብል	
		6. ኮንዶም 7. ለለከለይጠቀስ______	
404	. በዚሕወሊደወቅትልከከወሊደበኋላበማዝፅንየሚቀመጠዉኖኘተጠቅመዋል?	1. አዎ 2. አይደለም	ሜልሰአይደለምከ ሆነ ወደ 406
405	ሜልሰንአዎከሆነ ለምንከወሊደበኋለሉኘተጠቀመሙ	1. አረርቆለመዉለድ 2. መቆየትሰለሚፈልጉ 3. መዉለድመቆምሰለሚፈ ልጉ 4. ለለከለይጠቀሰ……….	
406	ሜልሰአይደለምከሆነ ለምንከወሊደበኋለሉኘአልተጠቀመም?	1. ለለልጅመዉለደሰለምፈልግ 2. በእርግዝናከትትልወ ቅትግንዛቤስለለኝ 3. ሐይማኖትሰለማይፈቅ ድ 4. ባለቤት/ጓደኛሰለማ ይፈቅድ 5. የሚያስከትለዉየጎን	

		የሽጉዳትመፍራት 6. ማዘንነ ትስጋት 7. የ ወርአበባሲጀምር 8. ሌላካለይጠቀስ……….	
407	በምንወለዱ/ የ ወሊደትማገ ድ	1. በማህፀን/በምጥ 2. በማዋለጃመሣሪያ 3. በቀዶሕክምናፈልጌ/ በቀጠሮ 4. ደንገ ተኛቀዶሕክምና	
408	በአሁኑእርግዝናክትትልአድርገ ዋል?	1. አዎ 2. አይደለም	መልሱአይደለ ምከሆነ ወደ 409
409	መልሱአዎከሆነ ምንያህልተመላልሰው እርግዝናክትትልአድርገ ዋል?	1. አንድጊዜ 2. ሁለትጊዜ 3. ሦስትጊዜ 4. አራትናከዚያበላይ	
410	በጤና ተቋምውስጥከወሊደብኋላበማህፀንየ ሚቀመጡዋ ሉፕናየ ቤተሰብእ ቅድምክርአገ ልግሎትአግኝተዋል?	1. አዎ 2. አይደለም	መልሱአይደለ ም
411	መልሱአዎከሆነ በየ ትኛው ክትትልጊዜስለልክከወሊደብኋላበማህፀን የ ሚቀመጡዋየ ቤተሰብእቅድምክርአገ ልግሎትአግኝተዋል?	1. በእርግዝናክትትልወ ቅት 2.ምጥሢይጀምር 3. ልክከወሊደብኋላ	
412	በእርግዝናክትትልወቅትከወሊደብኋላየ ሚጥስለሉፕየ ምክርአገ ልግ ሎትአግኝተዋል?	1. አዎ 2. አይደለም	መልሱአዎከሆ ነ ወደ 413

ክፍል3: ከወሊደብኋላእወቀትና ክፃቄስለሉፕ

501	የ ቤተሰብእቅደየ ሚቅመጠበማህፀንየ ሚቀመጡሉፕከወሊደብኋላመጠቀ ምእንደሚቻልያውቃሉ?	1.አዎ 2. አይደለም	መልሱአዎከ ሆነ ወደ502

502	ከወሊደበኋላሉኘማጠቀሚእንደሚቻልለመጀመሪያጊዜከየትሰሙ?	1. ከማ ናኛብዙሐንሬ ደዮ;ቴሌቭዥን 2. ከጤናባለሞያዎች 3. ከቤተሰብአበል 4. ከጓደኛ 5. ሌለካለይጠቀሰ__ ________	
503	ከወሊደበኋላበማዙዕንየማቀማጠወሉኘበተማከከተእወነ ት/ሀሰተይበሉ		
1. ከወሊደበኋላበማዙዕንየማቀማጥሉኘእርግዝናንበመከላከልከአስርአመትበላ ይያገ ለግላል።		1. እወነ ት 2. ሀሠት	
2. ከወሊደበኋላበማዙዕነ የማቀማጥለኘለአናቶችለአባላዘርበሽታያጋልጣል።		1. እወነ ት 2. ሀሠት	
3. ከወሊደበኋላየማቀማጥሉኘበግንኙነ ትወቅትምቾትአይሠጥም።		1. እወነ ት 2. ሀሠት	
4.ከወሊደበኋላበማዙዕንየማቀማጥሉኘየምትጠቀመዉትሴቶች/እናቶችሚፒገዝ በፈልጉወዲያወእንደወጣለቸውጊይቆዩሚፒገዝይችላሉ።		1. እወነ ት 2. ሀሠት	
5. ከወሊደበኋላበማዙዕንየማቀማጥሉኘየምትጠቀመዉትሴቶች/እናቶችለካንሰርበ ሽታአያጋልጥም		1. እወነ ት 2. ሀሠት	
6. የምታጠበእናትከወሊደበኋላየሚዙጠወሉኘማጠቀምትችላለች።		1. እወነ ት 2. ሀሠት	
7. ከወሊደበኋላየሚዙጠወሉኘየወርአበባንያዛባል።		1. እወነ ት 2. ሀሠት	
8.Hiv በደሟዉስጥያለባትእናትከወሊደበኋላየሚዙጠወሉኘማጠቀምትችላለች።		1. እወነ ት 2. ሀሠት	
9.በኢትዮጵያወስጥከወሊደበኋላየሚዙጠወነሉኘበነፃ አገልግሎትይሠጣል።		1. እወነ ት 2. ሀሠት	
10. ከወሊደበኋላበማዙዕንየማቀማጠወሉኘበተፈለገ ጊዜመዉጣትይችላል።		1. እወነ ት 2. ሀሠት	

ክፍል4: ከወሊደበኋላበማዙዕንየማቀማየ ቤተሰብእቅደሉኘአስመልክቶያለዎትንአመለካከትየሚለፅበት

ቁጥር	ጥያቄዎች	አማራጭመልሶት	ተጨማሪ
601	ከወሊደበኋላበማህፅንየማቀማጥሉኘበማቀማበትናበሚወጣበትወቅትከፍተኛየሕመም ማቱይኖራል።	1. እስማማለሁ 2. እርግጠቸኛአይደ	

		ለሁም 3. አልስማማም	
602	ከወሊደበኋላበማህፀንየሚቀመጠውሉፕሚስጥራዊነትንሊያጋልጥአይችልም።	1. እስማማለሁ 2. እርግጠኛአይደለሁም 3. አልስማማም	
603	ከወሊደበኋላበማህፀንየሚቀመጠውሉፕበባለሙያከተቀመጠበኋላወደተለያዩየሠውነት ክፍልአይንቀሣቀስም።	1. እስማማለሁ 2. እርግጠኛአይደለሁም 3. አልስማማም	
604	ከወሊደበኋላበማህፀንየሚቀመጠውሉፕማህፀኑንሊጎዳይችላል።	1. እስማማለሁ 2. እርግጠኛአይደለሁም 3. አልስማማም	
605	ከወሊደበኋላበማህፀንየሚቀመጠውሉፕበግንኙነት ትወቅትምንምችግርአይፈጥርም።	1. እስማማለሁ 2. እርግጠኛአይደለሁም 3. አልስማማም	
606	ከወሊደበኋላበማህፀንየሚቀመጠውሉፕእርግዝናንለመከላከልበጣምውጤታማነው	1. እስማማለሁ 2. እርግጠኛአይደለሁም 3. አልስማማም	