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POST GRAGUATE PROGRAM

Acceptance rate and associated factors of immediate post-partum intrauterine contraceptive device among women who delivered in selected public hospitals of Addis Ababa, Ethiopia, 2021

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As part of a master's degree in maternity and reproductive health nursing, a research thesis was submitted to Addis Ababa University College of Health Science School of Nursing and Midwifery

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This thesis by Wondossen T/silassie is accepted in its present form by the board of examiners as satisfying the thesis requirement for the degree of master's in Maternity and reproductive health in nursing.

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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.

This thesis is submitted in partial fulfillment of the requirement for a graduate degree from the Addis Ababa University at College of Health Sciences, School of Health Sciences department of Nursing and Midwifery. The thesis is deposited in the Addis Ababa University Digital Library and is made available to local, national and international scientific community. I solemnly declare that this thesis has not been submitted to any other institution anywhere for the award of any academic degree, diploma or certificate

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ACRONYMS AND ABBREVIATIONS

AD	Advisor
AOR	Adjusted odd ratio
ARH	Alert referral hospital
ANC	Antenatal care
COR	Crud odd ratio
CS	Cesarean section
CUR	Contraceptives utilization rate
EDHS	Ethiopian demographic health system
ETB	Ethiopia birr
FP	Family planning
GMH	Gandi memorial hospital
HMIS	Health management information system
IUCD	Intrauterine contraceptive device
IUD	Intrauterine device
LARC	Long-acting revisable contraceptive
MOH	Ethiopia ministry of health
PI	Principal investigator
PPFP	Postpartum family planning
PPH	Postpartum hemorrhage
PPIUCD	postpartum intrauterine contraceptive device
SPSH	St. Peter specialized hospital
SU	Supervisor
SVD	Spontaneous vaginal delivery
TASH	Tikur anbesa specialized hospital
WHO	World health organization

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ABSTRACT

Background: Despite of highly effective, inexpensive, non-hormonal and immediately reversible. The acceptance rate of postpartum intrauterine contraceptive device was very low in developing countries including Ethiopia. Therefore, the goal of the study to determined acceptance rate with its associated factors among women who delivered in selected public hospitals of Addis Ababa.

Objective Acceptance rate and associated factors of immediate postpartum intrauterine contraceptive device among women who delivered in selected public hospitals of Addis Ababa, Ethiopia.

Method: - A cross-sectional study design based on an institution was used on 336 participants. Data collectors used a pre-tested and organized questionnaire to collect information. The data was entered into EpiData 4. 6 statistical packages and then exported to SPSS version 25 for further analysis. To assess the relationship between each independent variable and the dependent variable, bivariate and multivariate logistic regression analyses were utilized.

Result: -The acceptance rate was founded to be a total of 336 participants responded (98.5 %). Immediately delivered women's educational status (AOR =0.160, 95 % CI: (0.040-0.649) Private employers, daily laborer, and student were significantly linked (AOR=4.269, 95 % CI: (1.280-14.234) (AOR=7.373, 95 % CI: (1.534-35.433) (P<0.013), and (AOR=11.004, 95 % CI: (1.602-75.572) respectively. Monthly income of 3201-5250, 5251-7900, and maternal monthly income greater than 7901 (AOR =4.731, 95 % CI: (1.497-14.949) (AOR =5.712, 95 % CI: (1.489-21.910) and (AOR =6.589, 95 %CI: (1.736-25.009) were all significantly related. Favorable attitude (AOR = 14.457, 95 % CI: (4.999-41.806). This was found to be significantly linked to the acceptance rate of immediate postpartum intrauterine contraceptive device.

Conclusion and recommendations: The rate of immediate postpartum intrauterine contraceptive device uptake was low. Maternal education, occupation, monthly income, and attitude are all linked to acceptance rates. Health-care education, a change in women's attitudes, and frequent training for healthcare workers are all important.

Key words: acceptance rate, immediate postpartum Intra Uterine contraceptive device, factors.

1. INTRODUCTION

1.1. Background

For the well-being of women, families, and communities, family planning is a vital basic human right (1). Post-partum family planning and empowerment programs improve reproductive health outcomes such as contraception acceptance and use, as well as safer sexual practices (2). One of the most pressing challenges in emerging countries is rapid and uncontrolled population increase (3). However, in the past, studies and campaigns on fertility and family planning have overlooked the role of men, focusing instead on women's actions and services in the context of maternal and child health (4, 5).

With the postpartum period, the intrauterine contraceptive system is extremely effective, instantly reversible after termination, non-hormonal, long-acting contraception that can be started within 10 minutes or up to 48 hours after the third stage of labor and safe for most postpartum women. The majority of women did not want to get pregnant right after giving birth, but there were no specific details concerning immediate contraception use in the postpartum period. According to the study, 86 percent of unexpected postpartum pregnancy is caused by women who do not utilize contraception, and roughly 88% of pregnancies are terminated by abortion (6).

Intrauterine Contraceptive Device is the world's second most used birth space procedure (IUCDs). Copper-bearing IUCDs come in a variety of shapes and sizes. The WHO recommends the TCu380A, a “T” shaped intrauterine device (IUD), for bulk procurement (7). Low complications, it is relatively cheap and convenient (3-5, 8, 9). Despite these advantages, there was limited acceptance of knowledge on the post-partum Intra Uterine contraceptive device (PPIUCD) in Ethiopia (10).

The Postpartum Intra-Uterine Contraceptive Device is used in the first year after delivery to prevent unintended and closely spaced pregnancies. The mother and couples are highly motivated during the postpartum period, exposed to unplanned, unwanted pregnancy and having an adverse outcome termination of pregnancy, early labor, PPH, underweight baby, fetal loss, and maternal morbidity during family planning methods. Intrauterine contraception is commonly available in health facilities, but IUCD is poorly

accepted because of denial, ignorance, or fear of associated complications by their spouse or family member. However, higher acceptance rates among multipara females (69%) have been observed and want their future pregnancy after more than two years of birth space interval (75%) (11-13).

WHO medical eligibility criteria that state PPIUCD doesn't disturb breastfeeding mothers. It is also safe for both women and their health care providers to allows the mothers to get highly effective contraception while the women within the medical system during the postpartum period(1, 10). Postpartum family planning advice from health care professionals including Intra-Uterine Contraceptive Device starting from the second trimester during antenatal care (ANC) by using various posters, film, health education talks, and using all available tools that can connect with women (14).

The prevalence rate of contraceptives 15%, that estimated approximately 16% of married couples in Nigeria have an unmet need for contraception, either for spacing births or to limit births, and are at risk of unintended pregnancy. Among users of contraception, intrauterine contraceptive devices (IUDs) are commonly used for family planning in Nigeria. (15).

Among 59 % of adolescents using successful methods like IUCD and implants as American collage obstetricians and gynecologists, but 82 percent of adolescents with a potential risk of unintended pregnancy are using contraception adolescents using short-acting methods such as condoms, oral contraceptives, withdrawal due to high discontinuation and pregnancy incidence compared to long-acting reversible contraception (16).

1.2 Statement of the problem

Pregnancy-related maternal deaths are unfairly and unacceptably rising. Globally, 295,000 women died annually during pregnancy and postpartum period including childbirth in 2017 due to pregnancy-related Causes.

It accounts 86 % of global maternal deaths, including countries in sub-Saharan Africa and South Asia, especially in developing countries (17). Short birth interval is one of the most serious causes of maternal death correlated with abortion and negative health complications, premature labor, postpartum hemorrhage (PPH), low birth weight infants, neonatal death, and suggest growth and development and malnutrition (18).

The growth rate of around 1.05% per year in the world population in 2020 and the current average population rise is projected at 81 million individuals per year. Pressure and the key problem for developing countries infrastructure, expansion, housing, health care, educational facilities, employment opportunities, reducing maternal and infant mortality are high population growth rates (19). Unintended pregnancy is high in developing countries compared to developed countries. The prevention of unintended pregnancy also needs sexual, family planning, and reproductive health services (20).

The ratio of maternal mortality in Ethiopia was estimated at 412 per 100,000 live births in EDHs 2016, which is volatile during labor and delivery, and postpartum time. In Ethiopia, the highest TFR (Total Fertility Rate) is 4.6%, given such unregulated population growth and its effect on society's socio-economic development, great emphasis has been put on family planning, which plays a major role in reducing fertility worldwide. However, the unmet need for FP is 22%.

Ethiopian Ministry of Health (MoH) developed the 2015, health sector transformation plan, this transformation plan mainly aimed to increase the contraceptive utilization rate (CUR) to 55%, and decreasing the total fertility rate to 3.0 and similarly increasing IUCD usage from previously 2 percent to 15 percent by 2020 (21). But population growth is growing dramatically, particularly in developing countries. Contraceptive

methods can achieve 10% infant mortality and one-third of maternal death, but only 14.3% of IUCD user women aged 15-49 years worldwide (22, 23).

Facility centered a prospective analytical study conducted in India, showed that the acceptability and feasibility of immediate postpartum IUCD were 72 (36 %) women were willing for PPIUCD insertion and 128 (64 %) women rejected PPIUCD insertion due to the factors of lack of knowledge, low education, family pressure and numerous misconceptions for IUCD insertion (1).

The study conducted in an institutional-based mixed-method done in Rwanda showed that the prevalence of immediate PPIUCD was (28.1%). Due to the factors were mothers who didn't receive counseling and husband approval (24). Another study conducted in Bale in Southeast Ethiopia also showed that the acceptance of immediate PPIUCD was low due to different factors like fear of complication, religious beliefs, and husband refusal (3).

In general, it can be concluded from the above-mentioned discussion that, relative to other methods, The acceptance of PPIUCD is very low, and given the lack of understanding of the reasons for the stagnation or decrease in the use of IUCD in Ethiopia, the primary goal of this study was to identify the gap to address the rate of acceptance and the factors that affect the acceptance of PPIUCD during the immediate delivered postpartum women for the use of PPIUCD and the facts of the analysis in the study area.

1.2. Significance of the study

The findings of this research help for maternal health increases Child health, maternal health care and decreases maternal and infant mortality. Ethiopia's poor acceptance rate of post-partum contraception leads to high population growth and low socioeconomic progress, which in turn affects the family's health status. Since women's contraceptive choice and practice is a key element of quality care in the family planning service program, understanding the participation and its deciding factors is important so that the study outcome will be vital and can be used as an input for strategy and package creation.

For both service providers and health management teams, the information generated from the study will be important for women to improve postpartum Intra-Uterine Contraceptive Device services especially the quality of the information provided to women in the community at the reproductive age. The study may benefit the policy developers to develop appropriate women-based policies/guidelines, plans, and intervention programs for the appropriate application of the acceptance rate PPIUCD.

The findings will provide health practitioners with information on the acceptance rate for PPIUCD in Addis Ababa and this study will also support literature for higher educational institutions nursing/midwifery students emphasize women to increase the acceptance of PPIUCD.

The finding may also serve as a baseline data for future researchers who want to conduct a research on related topics.

Finally, the findings will assist and guide the growth of changes in focused behavior, both married women and males, strategies for the PPIUCD.

2. LITERATURE REVIEW

2.1. The acceptance rate of immediate PPIUCD

The acceptance rate of the immediate postpartum Intra-Uterine Contraceptive Device helps to ensure that women's birth space remains the mother without unintended pregnancy from 2 years to longer years as women's intentions with low cost and low complications, free from hormonal contraceptive side effects.

The study conducted in India found that only 404 (20.78 percent) women underwent PPIUCD insertion out of the 486 (25 %) women who approved PPIUCD insertion (11).

Women who accept spousal approval were more often to use PPIUCD (AOR 2.591, 95% CI = 1.485–4.492); as compared to those who didn't receive any spousal approval and Concerning about gravidity the When compared to primigravida, mothers with more than one child were more likely to use PPIUCD (AOR =2.265, 95% CI = 1.472–3.163) (21).

A facility-based cross-sectional study conducted among 1914 pregnant mothers attending ANC in Ghana found that PPFP user-approval (AOR 3.21, 95 % CI (1.64-6.26) and spousal acceptability (AOR 3.2, 95% CI (1.94-5.48) were substantially correlated with the accepted to follow PPFP, with the A higher proportion (82%) indicated that before they adopted a method, they would need their partners' permission(25). women who believed that PPFP would be acceptable to their partners believed that they would still need their partners' permission before they could adopt a method. The majority (76.2 %) of pregnant women believed that their partners would compete with PPFP (25).

The use of postpartum IUCDs is influenced by religious views (3). In the research conducted in north India, the overall acceptance rate was 39% (95% CI: 35.1–42.9) (26). In another study conducted in ambo town, Oromia region, Ethiopia, among pregnant women the level of women intention to use PPIUCD was 34.9% (27).

2.2. Obstetrics characteristics

According to world journals and pharmaceutical and medical research, the proportion of acceptance of PPIUCD was higher in caesarian section (59.2%) than in vaginal deliveries (40.8%) and a sudden rise in acceptance of PPIUCD in vaginal delivery was observed during the study period (28).

The other study conducted in India shows that most of the PPIUCD insertions were performed in vaginal deliveries, i.e. 678 (83.6 percent) out of 811 and only 133 (16.40 percent) intra-cesarean PPIUCD insertions (6). On the other hand, in the study conducted in the same country, the majority of patients with para-1 are (48 %). Primi gravida was 44% (N=98) of the maximum number of patients interviewed, 48% of whom were PPIUCD-approved. Just 27 percent of Grand Multipara has accepted the PPIUCD. In this study, the acceptance of PPIUCD was lower among large multiparous individuals (27%) compared with primiparous individuals (48%), which is statistically significant (1).

In a mixed study conducted in Rwanda, the prevalence of PPIUCD usage was 28.1 percent; women who delivered by spontaneous vaginal delivery (SVD) were three times more likely to use PPIUCD than women who delivered by cesarean delivery (AOR =3.623; 95 % CI 2.017–6.507); participants who received PPIUCD counseling by the provider were three times more likely to use PPIUCD than those who did not during the When compared to women who did not receive any form of provider counseling during the antenatal period, they were more likely to use PPIUCD (AOR 2.072, 95 percent CI = 1.018–4.218) (24).

2.3. Knowledge and awareness of immediate delivered women for PPIUCD

According to South Africa obstetrics and gynecology journals, 46 % (n=69) had some familiarity with the injectable method of contraception, and 2.7% (n=4) had used the IUCD; 70.7% (n=106) knew that the system does not prevent HIV transmission, 40.7% (n=61) knew that HIV infected mothers would use the IUCD, 75.3% (n=113) believed that the IUCD induces heavy bleeding, 36.7% (n=55) knew that the device does not prevent. The IUCD could be inserted in the immediate after delivery during the postpartum period, and 26.7% (n=40) understood that the span of use was 10 years (29).

In a mixed study conducted in Rwanda, the majority of the mothers (324, or 84.6 percent) stated that they were aware of the PPIUCD. The associated fewer side effects (14.9%), the lack of effect on breastfeeding (10.2%), and the fact that it is a long-acting method were all reasons for using PPIUCD (9.1%). Some of the mothers did not use the method delayed to fear of the side effects (10 %), low knowledge along with the method (12%), and spousal refusal (10%) of PPIUCD (24).

Another study published in the South-East Rajasthan international journal of community medicine and public health reported that only 480 (2.58 percent) of 18550 mothers were aware of PPIUCD. The total acceptance was determined to be 2.94 percent, and the level of awareness for PPIUCD was low among mothers (30).

Furthermore, according to a study conducted in the Sidama zone of south Ethiopia, women who became pregnant unexpectedly were less likely to use PPICUD than women who planned to become pregnant (AOR=0.17, 95 % CI (0.05, 0.58). Women who had never heard of PPIUD were less likely to use it [AOR=0.41, 95 % CI: 0.41 (0.20, 0.83)]. Women who were not counseled about PPIUD were less likely than women who were counseled about PPIUD to use it [AOR=0.17, 95 % CI: 0.17 (0.06, 0.52)] (10).

Another study also conducted in Ethiopia in the bale region showed that IUCD may be mounted in the uterus (80.7%), has no chance of sexually transmitted diseases (40.8 %), and has no highly valued sexual intercourse interference (43.2 %). The mean score for correctly answered questions about information was (13.74 ± 2.8 SD) and the acceptance of immediate PPIUCD was low and the rejection of immediate PPIUCD with its distinct purpose, which is 17.7 % partner rejection, 24.8 percent fear of complication, and 19.8 percent religious belief (3).

2.4. The attitude of the mothers towards immediate PPIUCD

According to South Africa obstetrics and gynecology journals, 40% expressed concern about the discomfort during insertion, 33.3% believed that the IUCD could cause cancer, and 32.0% believed that normal sexual behavior was interfered with by the system 77.3% of the participants received the information they had about the IUCD from the clinic during teaching and therapy sessions (29).

Institutional based cross-sectional study conducted at Mekele, Ethiopia showed that the side effects of 128 (44.8 %) and fear of infertility after infertility were the key reasons listed for not embracing long-acting reversible contraceptives use 117 (40.9%). More than half of the mothers (52.9 %) had a non-supporting towards long-acting women contraceptives. The only women who had a positive approach to long-acting reversible contraception were the only independent predictors of acceptability of long-acting contraceptives (AOR=2, 95% CI (1.084, 3.75) (31).

Another study also conducted in Bale southeast Ethiopia showed that, Mothers agreed that insertion and removal of IUCD are extremely uncomfortable (33.6 %), that insertion of IUCD causes private disclosure (33.6 %), and that using IUCD restricts typical day-to-day activities (27.4%). The mean score of correctly answered attitudinal questions were (8.74 ± 2.46) (3)

2.5. Socio-demographic factors

The socio-demographic variables of the women influenced the adoption of postpartum contraceptive options. A woman's education can assist predict contraceptive use.
According to 2018 consecutive 3 years, World Journal of Pharmaceutical and Medical Research the majority of the accepted PPIUCD age group were 20 to 24 (49.5%) and the proportion of vaginal delivery to Cesarean delivery (59.5%)(32). Another study conducted in India shows that the majority of the women counseled were between the age group of 20-29 years 177 (88.5%), 62 (35%) were accepted PPIUCD insertion but above 30 years women refused around 60% IUCD insertion (33). Another study conducted in Ethiopia's Bale zone found that roughly 30% of postpartum women in the 21–25 year age group were accepted. The average age of research participants was 26.26 (with a standard deviation of 4.78) (3).

As the study conducted in India shows that the need to discuss the procedure with the partner and family [524 women (35.93%] followed by the refusal of the partner and family [234 women (10.04 %)] was the main reason for non-acceptance. Women in the age group ranging from 20 to 29 years (64.60 %), those from urban areas (56.96 percent), Hindus (51.44 %), those with secondary or higher education levels (63

percent), and those with middle socioeconomic status were the most accepted in the current study (52 %) (11).

According to a study conducted in Kenya, 86.3% of postpartum women use contraception. Contraceptive use was particularly common among women under the age of 25. From those women, the significant predictors of contraceptive usage were the condition of employment, age of the mothers, and marital status (34). A study conducted in Ethiopia shows that IUCD usage was strongly associated with husbands/couple being supportive for IUCD usage (Adjusted OR = 13.24, 95% CI; 5.30–33.02), being literate women (Adjusted OR = 5.31, 95% CI; 1.05–26.93), and the source of information about IUCD being mass-media (Adjusted OR = 3.81, 95% CI; 1.49–9.74) (35).

According to the EDHS 2016, the percentage of presently married women who do not use contraceptive methods (49%) and those who are undecided (2%), the usage of contraceptive methods grew dramatically as the degree of education grew. At least 51% of women with higher education and secondary education use family planning, compared to 31% of women with no education. The same proportion 49% of currently married women ages 15-49 who are not currently using contraception accept to use the family planning method for future time (4).

In the study conducted in Bahir Dar; educational status was the other significant factor for the utilization of IUCD. Such participants who were able to read and write were 4.64 times higher, those who were 8.08 times higher in primary school, those who were 8.89 times higher in secondary school, and those who attended college and above were 21.24 times higher for IUCD relative to women who were unable to read and write (36). Another study conducted in Ambo, Oromia, to use PPIUCD on pregnant women found that participants with a diploma or above were 3 times more likely to be involved than those with little education (AOR=3.249,95 % (CI:1.057-9.985) (27).

2.6. Conceptual framework

During immediate postpartum Intra-Uterine Contraceptive Devices, women need a continuum of counseling to ensure the best possible contraceptive choice from the option. Skilled counseling, experience, profession, and respect for women's choice were the center that the provider guiding.

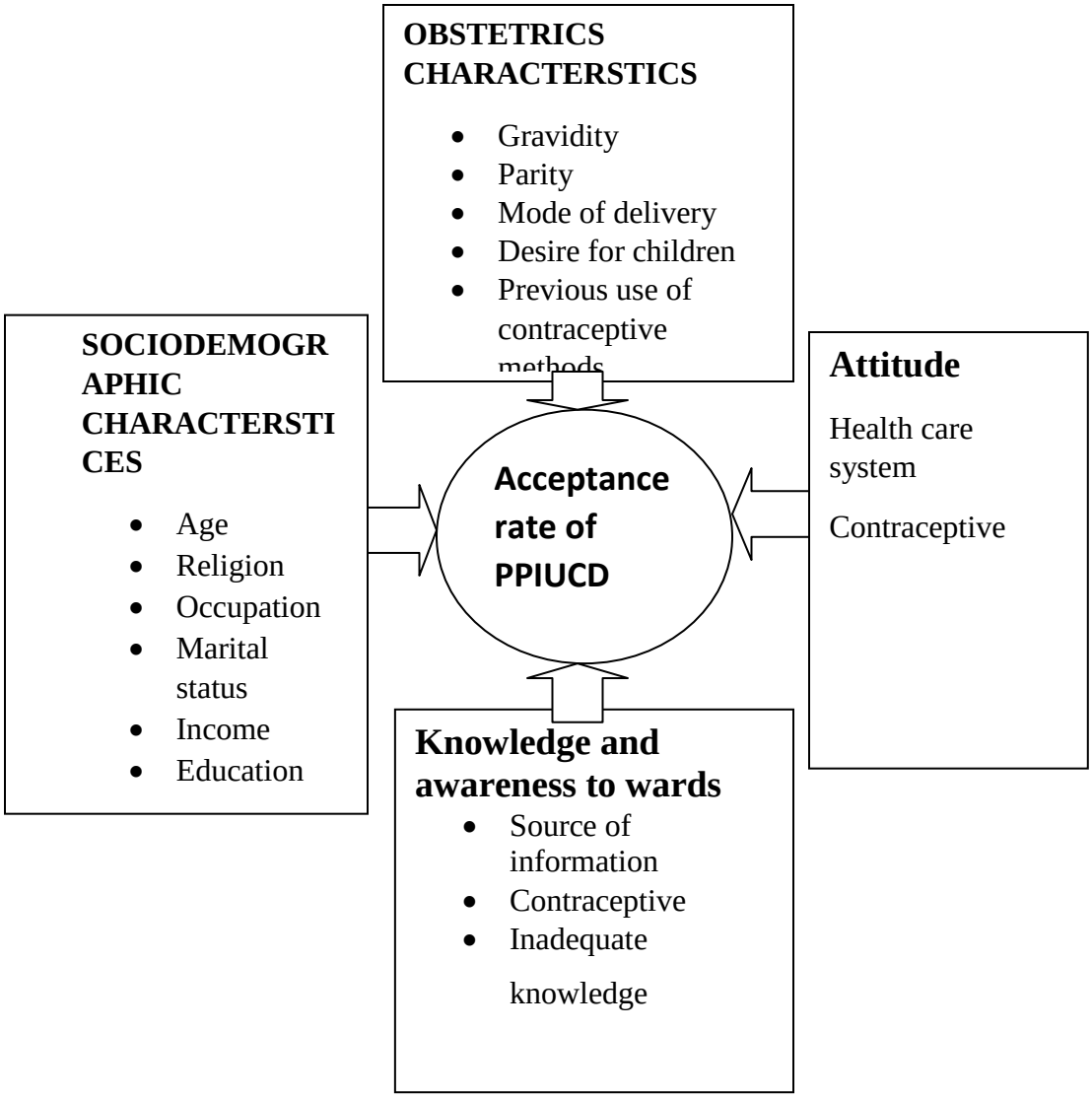

Figure1 Conceptual framework on Acceptance rate and associated factors of immediate postpartum intrauterine contraceptive device among women who delivered in selected public hospitals in Addis Ababa, Ethiopia 2021and (3, 10, 21).

3. OBJECTIVE

3.1. General objective

To determine the acceptance rate and associated factors of immediate postpartum intrauterine contraceptive device among women who delivered in selected public hospitals of Addis Ababa, Ethiopia; 2021

3.2. Specific objective

- ✓ To assess the acceptance rate of immediate postpartum IUCD among women who delivered in selected public hospitals of Addis Ababa, Ethiopia; 2021
- ✓ To identify the factors that influence the acceptance rate of immediate postpartum IUCD among women who delivered in selected public hospitals of Addis Ababa, Ethiopia; 2021
- ✓ To determine knowledge and attitude of immediate PPIUCD acceptance rate among women who delivered in selected public hospitals of Addis Ababa, Ethiopia; 202**1**

4. METHOD AND MATERIALS

4.1. Study area and period

The research was carried out in Addis Ababa, Ethiopia's capital city, from February 8 to March 8, 2021 on immediate postpartum women. The city includes 11 sub-cities and a total area of 527 square kilometers, administratively divided into 11 sub-cities and 121 districts (known locally as "woredas"), with a population of over 4.8 million people and a growth rate of 4.4 percent (global population growth rate, world population review, 2020). Addis Ababa has 13 government hospitals spread across 11 sub-cities (five federal hospitals, six under the Addis Ababa health bureau, one operated by the police force, and once owned by the armed forces). Based on the lottery process, the hospitals can pick. Therefore, the current study was picking Tikur Anbessa Specialized Hospital, Alert referral hospital, St. Peter Specialized Hospital, and Gandhi Memorial Hospitals.

Tikur Anbessa Hospital is Ethiopia's largest referral and teaching hospital and operates under the Ethiopian Ministry of Education and in the average last three months 410 mothers delivered in the hospital both spontaneous vaginal delivery (SVD) and cesarean section (HMIS, 2020). Gandhi Memorial is among the six-government referral hospital teaching hospital run under the Addis Ababa Administrative Health Office and Alert also referral hospital that administrates by the Ethiopian ministry of health which are 700 and 330 respectively mothers were delivered in the hospital both spontaneous vaginal delivery (SVD) and cesarean section (CS). Even though St. Peter specialized Hospital is not a teaching hospital, it is a referral hospital run by the federal ministry of health, and the total number of mothers delivered in the hospital, both via spontaneous vaginal delivery (SVD) and cesarean section (CS), was 290 in the previous three months.

Family planning, ANC, delivery services, all public hospitals are provided with free services. All modern contraceptive techniques, like long-acting contraception like IUCD, are available in all (HMIS, 2020).

4.2. Study Design

A cross-sectional study was done using an institution-based study design from February 08/2021 to March 08/2021.

4.3. Population

4.4. Source population

The source populations were all mothers who delivered in Addis Ababa public hospitals.

4.5. Study population

Those mothers who gave birth in Addis Ababa selected public hospitals during the study period were considered as the study population.

4.6. Eligibility criteria

4.6..1. Inclusion criteria

All mothers who delivered in Addis Ababa selected public hospitals after post placental delivery.

4.6..2. Exclusion criteria

Women who did not full fill WHO medical eligibility criteria for Intra-Uterine contraceptive device, women with 3rd and 4th-degree tear during delivery, and seriously sick and mental illness those unable to give responses were excluded from the study.

4.6..3. Sample size and Sampling Techniques

The sample size required for this study was calculated based on a single population proportions formula. According to a study conducted in Rwanda on factors associated with the uptake of the immediate contraceptive devices, the prevalence of acceptance rate was 28.1%. The total number of the three consecutive average monthly delivered women in Tikur anbesa specialized hospital, Gandi memorial hospital, Alert referral hospital, and St. Peter specialized hospital was 1730.

$$n = \frac{(z_{\alpha/2})^2 \times pq}{d^2}$$

$(1.96)^2$ X 0.281(1-0.281) /0.5^2

Where,

n= the desired sample size

q=1-p

p= the proportion take 0.281

Z= was the standard normal score set at 1.96 (95% confidence interval)

d= was the margin of error to be tolerated (5%)

The sample size was calculated using the following formula: Sample size =310

With the above inputs, the minimum sample size required for this study is 310. The total sample size was 341 after accounting for a 10% non-response rate.

Table 1 **Sample size calculation for associated factors of immediate postpartum intrauterine contraceptive device among women who delivered in selected public hospitals of Addis Ababa, Ethiopia; 2020/21**

Variable	(%) level Two-sided confidence	Power (%)	Ratio unexposed /exposed	% out come in exposed group	Odd ratio	Sample size	References
Spontaneous vaginal delivery	95	80	1:1	5	3.623	278	(24)
Illiterate	95	80	1:1	5	21.24	34	(36)
No information	95	80	1:1	5	8.85	78	(37)
Low knowledge	95	80	1:1	5	7.9	90	(38)

The sample size of the factors of Spontaneous vaginal delivery, illiterate, had no information and low Knowledge are 278, 34, 78, and 90 respectively. The sample size was calculated by using EpiInfo version 7. 2. The sample size of the factors less than that calculated by a single proportion population formula (or the sample size of the 1st

objective greater than that of the 2nd objective). This took the greater sample size (the 1st objective) which was 341.

4.7. Sampling procedure

Thirteen public hospitals provide labor and delivery service in the study area of them four namely; Tikur Anbesa specialized hospital, Gandhi memorial hospital, Alert referral hospital, and St. Peter hospitals were selected randomly using the lottery method from the total list. Then to select 341 delivered mothers from the total four selected public hospitals.

Based on these, the four Addis Ababa selected public hospitals were included. The total average three months (October, November, and December) number of delivered women was 1730, (Tikur anbesa specialized hospital 410 women, 700 for Gandi memorial hospital, 330 for Alert referral hospital, and 290 for St. Peter specialized hospitals). As a result, the final sample size of 341 was produced by allocating proportionally to these selected public hospitals based on the average three-month delivered women.

Finally, random selection was used to select individuals (delivered women). Based on a systematic random sampling methodology (i.e., Kth= N / sample size=>1730 /341 =5 which means Kth= 5), an assessment of the four Addis Ababa public hospitals' 3 months average delivered mothers were made. As a result, every fifth delivered woman at each selected public hospital was recruited as a study unit until the total sample size for this study was attained.

Based on the assessment of the Addis Ababa selected public hospitals 3 months average delivered mothers, by systematic random sampling method until the proportional allocation of sample size obtained at each selected Addis Ababa public hospital.

The total sample size (341) was allocated proportionally for the four public hospitals based on the number of delivered women in each hospital.

$$nj = \frac{nxNj}{N}$$

Where;

nj= is the sample size of the jth hospital

Nj= is the population size of the jth hospital

n= n1+ n2+n3 is the total sample size (341)

N=N1+N2+N3 are total population size of hospitals (1730)

Tikur Anbesa Specialized hospital = 341*410/1730 = 81

Alert referral Hospital = 341*330/1730= 65

Gandhi Memorial Hospital = 341*700/1730 = 138

St. Peter Specialized Hospital = 341*290/1730 = 57

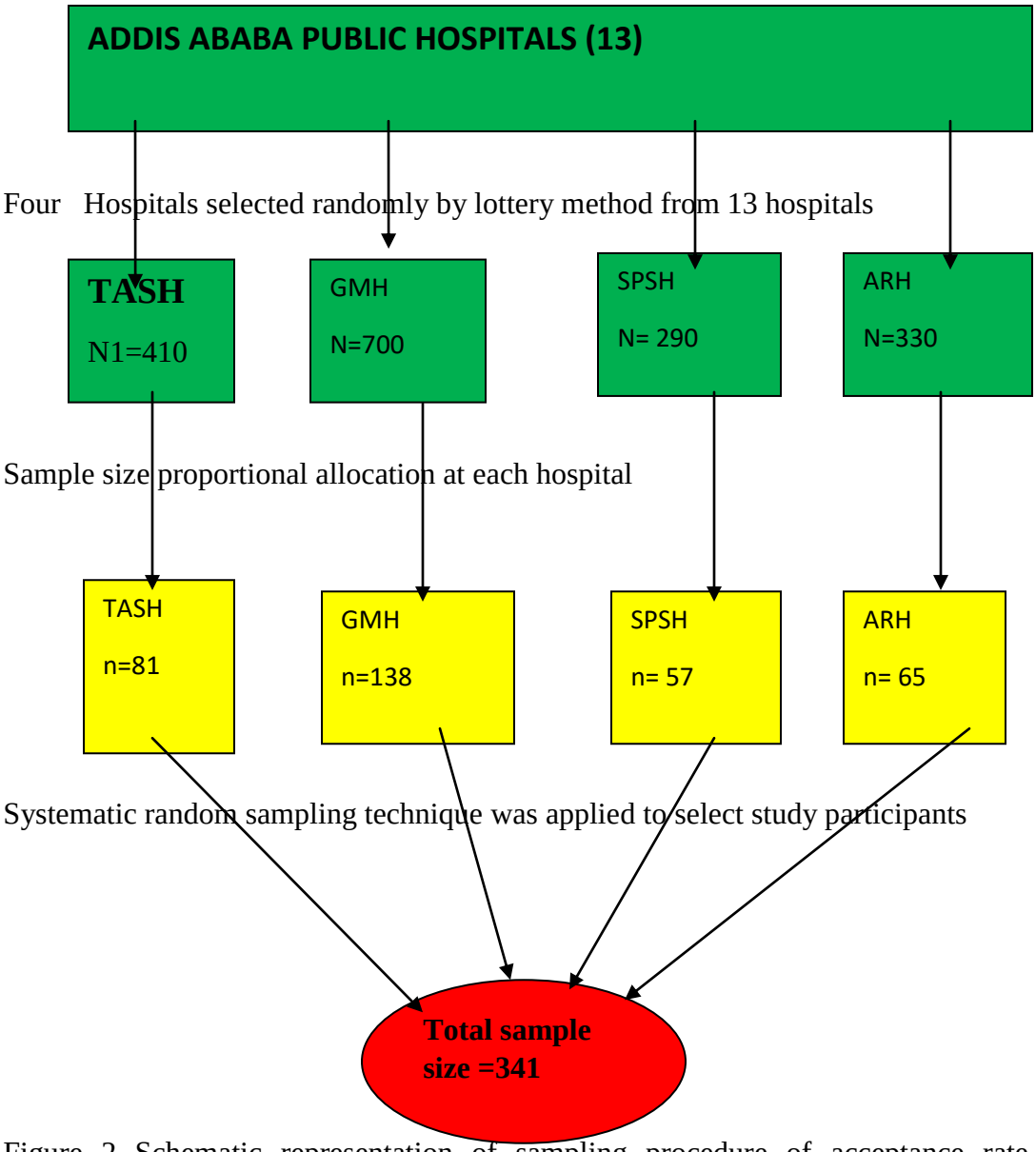

Figure 2 Schematic representation of sampling procedure of acceptance rate and associated factors of immediate postpartum intrauterine contraceptive device among women who delivered in selected public hospitals of Addis Ababa, Ethiopia; 2021

Note: -**TASH**- Tikur Anbesa Specialized Hospital, **GMH-** Gandhi memorial hospital, **ARH**- Alert referral hospital, and **SPH**-St. Peter specialized hospital.

4.8. Data collection

For data collection, a pre-tested and interview questionnaire was used. The survey questionnaires were taken and adapted from different literature produced by different writers (3, 24). For similar purposes, the questionnaire was initially written in English and then translated into Amharic for data collection before being returned to English by two language experts who were fluent in both English and Amharic. This increased consistency, accuracy and made it easier to communicate with participants. For data collection used the Amharic (local language) version.

Data was collected from 08 February to 08 March 2021; 10 data collectors (eight diploma midwives and two BSc midwives for supervisor out of the selected hospitals to minimize social desirability bias) were recruited and given training for the data collectors on the understanding of questionnaire, counseling of PPIUCD, the eligibility criteria of the mothers and ethical issues 1 day before the real data collection date. With the assistance of the 8 diploma midwives were data collectors and two BSc Midwife supervisors, the interviewer administration questionnaire was obtained.

After guaranteeing their willingness to participate, the tool was distributed among the study population and then collected by the data collectors after completion, to determine the acceptance rate for PPIUCD.

The data collectors remained in the delivery room without interfering with the treatment given to the mothers who were given.

4.9. Pretest

The interview questionnaire was pre-test by taking 5 percent of the sample size to decide whether the instrument was free from major biases, clearly worded and help to generate the desire data, run two weeks before the main data collection time at the Tikur anbesa specialist hospital, which was not included in the study, to determine whether the instrument was free of significant biases. After the pretest was performed, correction on the instrument, clarification, and ambiguity of terms was rendered accordingly. The pre-test also revealed how much time it takes to handle the entire questionnaire.

4.10. Data quality assurance

To clarify the purpose of the analysis, the flow tools, the content of tools, to ensured ethical problems during data collection, data collectors were educated on data collection tools and the principal investigator and field supervisor was recheck the completeness and clarity of the questionnaire immediately after the interview at the field level and during submission.

Good contact was established between respondents and data collectors, questionnaires filed were reviewed for completeness regularly and errors were corrected.

4.11. Data management and analysis

The completeness of the questionnaire collected was manually reviewed, coded, and entered into EpiDta version 4. 6 statistical set, and then exported for further review to SPSS version 25. Descriptive statistics were carried out and summarized. Descriptive statistics including frequencies and percentages were measured to describe the sample population with specific variables. In addition, dependent and independent variables were used to compute cross-tabulation.

Bivariate and multivariate logistic regression analysis was conducted to saw the relative influence of the independent variable on the dependent variable.

To control the impact of cofounders and not to miss associated factors on the outcome variable, the variables relevant in bi-variate analysis ($P< 0.2$) were entered into a multivariate logistic regression model. For those variables that display a statistically significant correlation in bivariate analysis, multiple logistic regression analysis can then conduct multiple logistic regression analysis and examine independent predictors by monitoring for potential confounders.

The adjustment odds ratio was used to measure the strength of association at 95% CI to assess the existence and strength of association, and if $p < 0.05$, statistical significance was declared. Finally, the outcome was provided in the form of descriptive text, tables, and graphs.

4.12. Study variable

6.12.1. **Dependent variable**: -acceptance rate of immediate PPIUCD

6.12.2. Independent variable

Socio-demographic characteristics

Sex, age, religion, marital status, educational level, occupation, monthly income

Obstetrics characteristics

Parity**,** gravidity, desire children, previous use of FP method, mode of delivery

Knowledge and awareness

Source of information, inadequate knowledge, contraceptives, illiterate

Attitude

Health care system and Contraceptive

6.13. Operational and conceptual definitional

Acceptance rate: -Women who accepted to have PPIUCD, while women delivered to use IUCD were considered to have not used the PPIUCD.

PPIUCD: -Immediate postpartum IUCD insertion into the maternal uterus/womb after post-placental delivery, administered within 10 minutes to 48 hours by either SVD or CS(3).

Knowledge of immediate delivered women about PPIUCD:-The total number of responses to 6 information objects, with a minimum score of 0 and a maximum score of 6, was calculated. It was categorized as "high" to quantify the information based on the percentage of people who knew 80 percent or more of the different qualities immediately PPIUCD, "moderate" to those who knew 60-79 percent, and "low" to those who knew less than 60 percent (27, 38).

Attitude on PPIUCD: -The attitude of immediate PPIUCD was grouped and submitted by using the “Likert scale”. To measure the attitude of immediate PPIUCD was assigned into two categories favorable attitude- women who score above the mean and

unfavorable attitude those women who score the mean or below the mean to the attitude items (27, 38).

6.14. Ethical considerations

The ethical committee of the school of Nursing and Midwifery, College of Health Science, Addis Ababa University ethical committee, as well as the Addis Ababa public health research and Emergency Management Directorate, provided ethical clearance. The Research Ethics Committee's letter would then be sent to the hospitals concerned. A letter of permission was received from the administrative bodies of the region to communicate inside the hospital with the appropriate bodies.

After a detailed explanation of the research goals, informed written consent was obtained from all participants in the study. The data collectors have then continued the work after obtaining informed consent from each participant by giving due respect to the research participant's standards, principles, beliefs, and maintaining the confidentiality of the data. During data collection, any personal identity of the study participants was not registered. Data security could be protected by storing the questionnaires and data in a safe location.

6.15. Dissemination of the result

The study result was be submitted to the Addis Ababa University College of Health Sciences and was disseminated to Addis Ababa public health research and Emergency Management Directorate. Hard and soft copy was available in the library of Addis Ababa University for graduate students as well as for other concerned readers.

The finding was presented in different seminars and meetings. It was also disseminated for researchers to use as a reference for information, for critique and further research, or to individuals who have direct or indirect input into the project. It was made to present local/international journals at various professional conferences and to publish them.

5. RESULT

5.1. Socio-demographic characteristics of acceptance rate and associated factors of immediate PPIUCD

A total of 341 participants were approached and responded to the questionnaires which account for 336 (98.5 %) responses. About 145 (43.2%) of the respondents' age group was from 25-29 years. The study participants' mean age was 27.26 (SD ±5.548 years), with a minimum and maximum age of 16 and 48 years, respectively. More than half of the study participants were orthodox 169 (50.3%) and Muslim participants were 103 (30.7%). Regarding marital status 302 (89.9%) participants were married.

Concerning participant's educational status majority of the women 108 (32.1%) elementary (1-8) and 99 (29.5%) high school respectively. Regarding maternal occupation, 134 (39.9%) were housewives. Concerning participant's monthly income 134 (39.9 %) of women those monthly income less than 3200. The mean monthly income of the study participants was 4209.6 (SD± 2449.38) with minimum and maximum monthly income of 400 and 1600 respectively (Table 2).

Table 2 Socio-demographic characteristics of acceptance rate and associated factors of immediate postpartum intrauterine contraceptive device among women who delivered in selected governmental hospitals of Addis Ababa, Ethiopia; 2021. (n=336)

Variables	Numbers	Percentage (%)
Residency		
Addis Ababa	**258**	**76.8**
Outside Addis Ababa	78	23.2
Age		
≤ 19	14	4.2
20-24	89	26.5
25 -29	**145**	**43.2**
30-34	54	16.1
≥35	34	10.1
Religion		
Orthodox	**169**	**50.3**
Muslim	103	30.7
Protestant	37	11
Catholic	27	8
Marital status		
Married	302	89.9
Single	19	5.7
Divorced	8	2.4
Widowed	7	2.1
Educational status of the mothers		
No education	64	19
Primary (1-8)	**108**	**32.1**
High school (9-12)	99	29.5
College and above	65	19.3
Educational status of the husband		
No education	27	8
Elementary (1-8)	92	27.4
High school (9-12)	**98**	**29.2**
College and above	90	26.8
Occupation		
Housewife	**134**	**39.9**
Governmental work	42	13.5
Private worker	105	31.3
Daily laborer	37	11
Student	18	5.4
Monthly income (in ETB)		
(≤ 3200	**134**	**39.9**
3201-5250	127	37.8
5251-7900	36	10.7
(≥7901	39	11.6

5.2. Obstetric characteristics of the participants

Of 336 participants 309 (92 %) had ANC visits to either health center or hospital. Concerning previous family planning methods, 190 (56.5 %) were used and however, 146 (43.5 %) not. Among previous family planning consumers, the majority of the participants were used injectable 109 (32.4%) and Implanon/ jaddle 58 (17.3 %). The mean number of pregnancies, number of children alive, and future children desire were 2.54 ($\pm$1.596), 2.08 ($\pm$ 1.239), and 3.32 ($\pm$ 1.275) respectively (Table 3).

Table 3 obstetrics characteristics of acceptance rate and associated factors of immediate postpartum intrauterine contraceptive device among women who delivered in selected public hospitals of Addis Ababa, Ethiopia; 2021. (n=336)

Variable	Category	Numbers	Percentage (%)
ANC visits	Yes	309	92
	No	27	8
Number of visits	One time	24	7.1
	Two time	44	13.1
	Three-time	39	11.6
	Four-time	120	35.7
	Five and above	82	24.4
Mode of delivery	SVD	217	64.6
	CS	119	35.4
History of previous FP method usage	**Yes**	**190**	**56.5**
	No	146	43.5
Natural FP		26	7.7
IUCD		29	8.6
Pills		58	17.3
Condom		21	6.3
Implanon/jaddle		58	17.3
Injectable		**109**	**32.4**
Decision on the Number of pregnancies to have	Wife	95	28.3
	husband	62	18.5
	Both	**179**	**53.3**
Number of pregnancies	**1-2**	**187**	**55.7**
	3-4	118	35.1
	≥5	31	9.2
Number of children alive	**1-2**	**248**	**73.8**
	3-4	73	21.7
	≥5	15	4.5
Status of pregnancy	**Planned**	**235**	**69.9**
	Unplanned	101	30.1
Number of future pregnancy desire	1-2	74	22
	3-4	**223**	**66.4**
	≥5	39	11.6

5.3. Awareness of the participants towards immediate PPIUCD

The greater number 218 (64.9 %) of the participants reported that they had Ever heard about immediate PPIUCD and source of information for the majority of the participants were health professionals 136 (40.5%) and mass media 112 (33.3 %). And women who had ever heard IUCD Could inserted IUCD immediately after delivery was 128 (38.1%) (Table 4).

Table 4 Awareness of acceptance rate and associated factors of immediate postpartum intrauterine contraceptive device among women who delivered in selected public hospitals of Addis Ababa, Ethiopia; 2021. (n=336)

Variable	Category	Nembers	Percentage (%)
Have you Ever heard about IUCD	**Yes**	**218**	**64.9**
	No	118	35.1
Source of information about PPIUCD			
Neighbors/friends/relatives		63	18.8
Health proffesional		**136**	**40.5**
Mass media		112	33.3
Husband		25	7.4
Had ever heard IUCD inserted immediately	**yes**	**128**	**38.1**
after delivery	no	96	28.6

5.4. Knowledge of the participants towards immediate PPIUCD usage

This study report showed that 130 (38.7%) of the participants had low knowledge, 30 (8.9%) had moderate knowledge and 64 (19%) of the participant women had high knowledge about PPIUCD. One hundred twenty-eight (38.1%) of women know that IUCD prevents unwanted pregnancy for at least 3 years. One hundred twenty-seven (37.8%) of women know that IUCD is immediately reversible after termination at any time and the majority of the women One 137 (40.8%) of women know that IUCD is FP method that can be put into the uterine (Table 5)

Table 5 Knowledge of acceptance rate and associated factors of immediate postpartum intrauterine contraceptive device among women who delivered in selected public hospitals of Addis Ababa, Ethiopia; 2021. (n=336)

Variable	Category	Numbers	Percentage (%)
IUCD prevents unintended pregnancies for at least three years?	**Yes**	**128**	**38.1**
	No	32	9.5
	Don't know	64	19
IUCD is a contraceptive that can be inserted into the uterine?	**Yes**	**137**	**40.8**
	No	51	15.2
	Don't know	36	10.7
IUCD has a low chance of being transferred sexually transmitted disease?	Yes	91	27.1
	No	42	12.5
	Don't know	91	27.1
IUCD has no interference with sexual intercourse?	**Yes**	**112**	**33.3**
	No	38	11.3
	Don't know	94	22
IUCD can be reversed immediately after termination?	**Yes**	**127**	**37.8**
	No	44	13.1
	Don't know	53	15.8
IUCD does not cause cervical cancer?	**Yes**	**97**	**28.9**
	No	42	12.5
	Don't know	85	25.3

5.5. The overall knowledge level of the women about immediate PPIUCD

The majority of the participant's women 130 (38.7%) had low knowledge, sixty-four (19%) had high knowledge and 30 (8.9%) women had moderate knowledge.

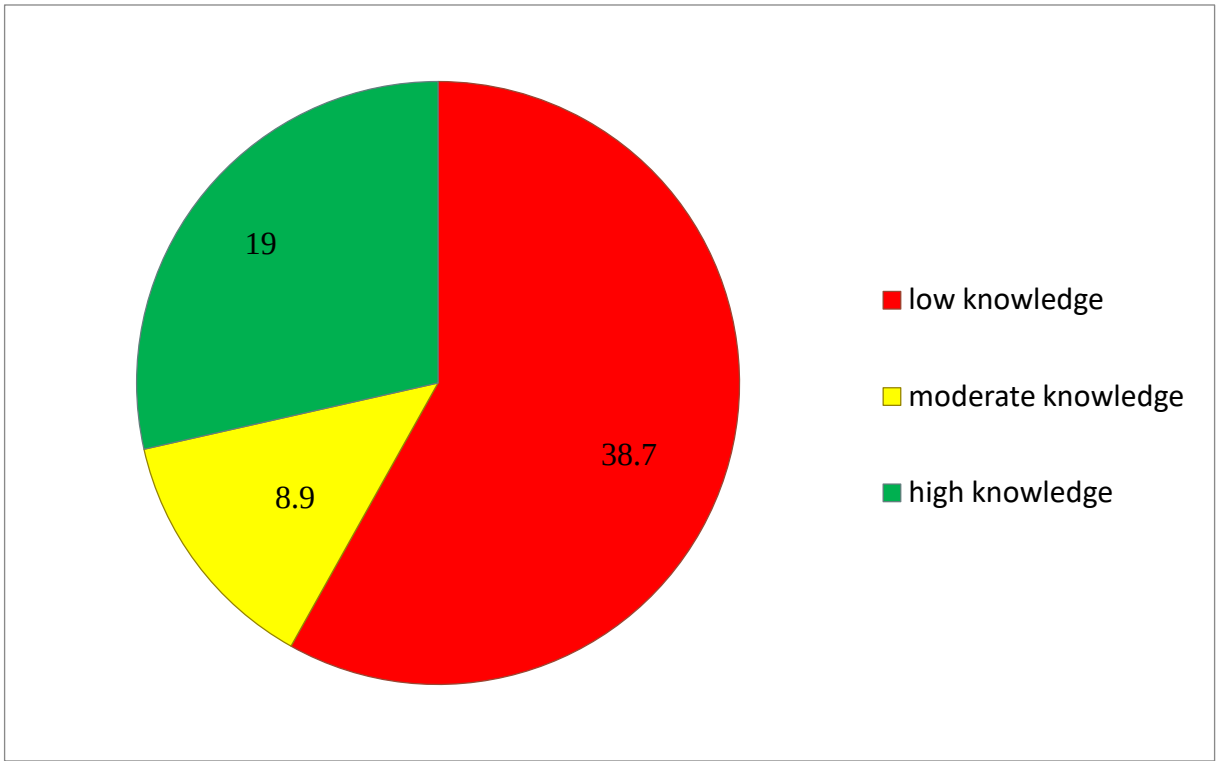

Figure 3 the level of knowledge on the acceptance rate and associated factors of immediate postpartum intrauterine contraceptive device among women who delivered in selected public hospitals of Addis Ababa, Ethiopia; 2021.

5.6. The acceptance rate of immediate PPIUCD

This study report showed from the total participants 42 (12.5%) accepted to use PPIUCD immediately after delivery, on the other hand, the majority of the participants 294 (87.5 %) rejected to accept PPIUCD (Figure 4).

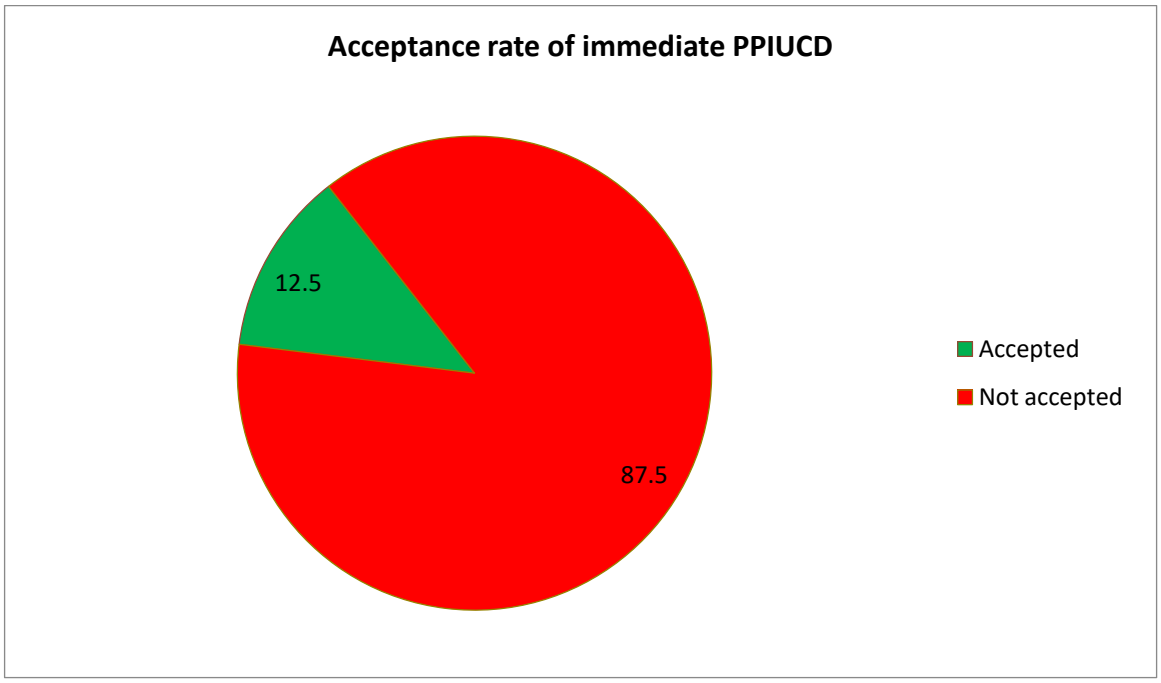

Figure 4 the acceptance rate and associated factors of immediate postpartum intrauterine contraceptive devices among women who delivered in selected public hospitals of Addis Ababa, Ethiopia; 2021.

The main reason to reject immediate postpartum intrauterine contraceptive device were due to not their preferred method 142 (42.3%), fear of side effects 132 (39.3 %), and lack of awareness about PPIUCD 118 (35.1%) (Figure5).

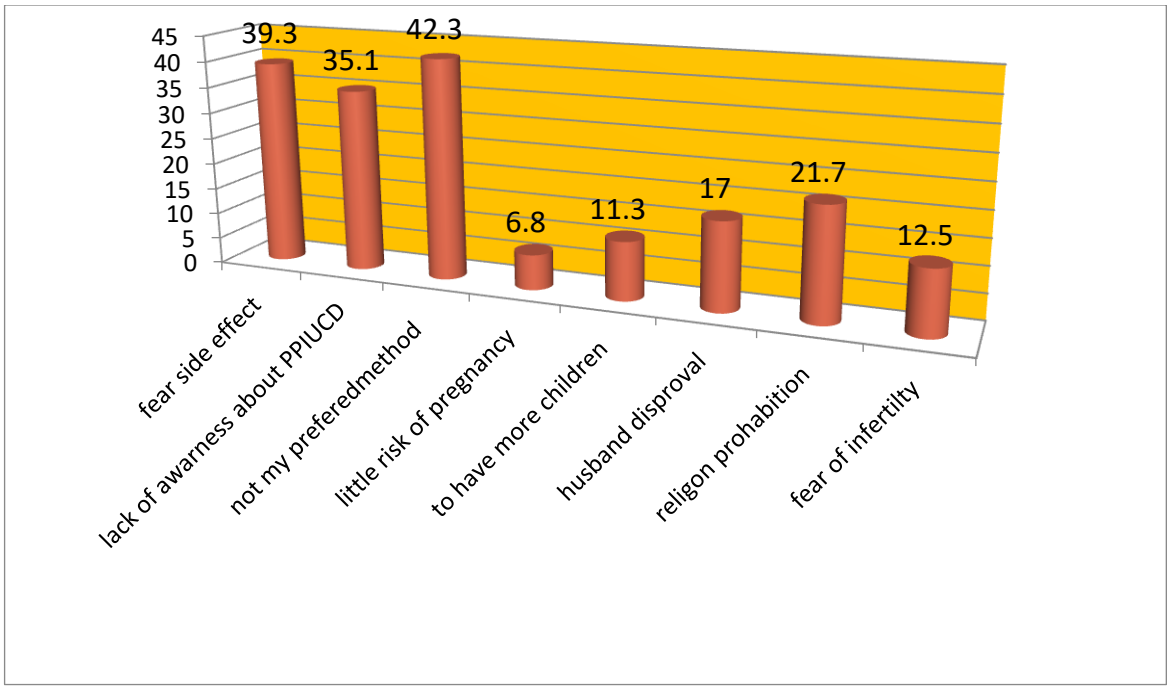

Figure 5 Reason to reject the acceptance of immediate postpartum intrauterine contraceptive device among women who delivered in selected public hospitals of Addis Ababa, Ethiopia, 2021

5.7. Women attitude towards PPIUCD

To report the women's level attitude on the acceptance rate of immediate PPIUCD, the women were asked logical and serious questions that measure the opinion to accept immediate PPIUCD. After recording the variable, the score of the Likert scale ranging from 1=strongly agrees to 5=strongly disagree due to negative question. The mean score of the attitude was 15.5 so, by using this cut-point, above the mean favorable attitude and below the mean unfavorable attitude.

This study report showed that 145 (43.2%) had favorable attitudes, while 191 (56.8%) had the unfavorable attitudes of immediately delivered women towards acceptance rate and its associated factor of immediate PPIUCD.

The women's attitudes revealed five major concerns: insertion and removal of IUCDs are extremely painful, IUCD use causes irregular bleeding, IUCD usage causes privacy loss, IUCD use restricts normal activities, and IUCDs may affect future fertility. Majority 92 (27.4%, 123 (36.6%), 109 (32.4%), 92 (27.4%), and 101 (30.1%) of the women were neutral on IUCD insertion and removal being extremely painful; similarly, the women

were neutral on IUCD use causing irregular bleeding, IUCD insertion causing privacy loss, and IUCD use restricting typical activities and think IUCDs may impair future fertility respectively (Figure 6).

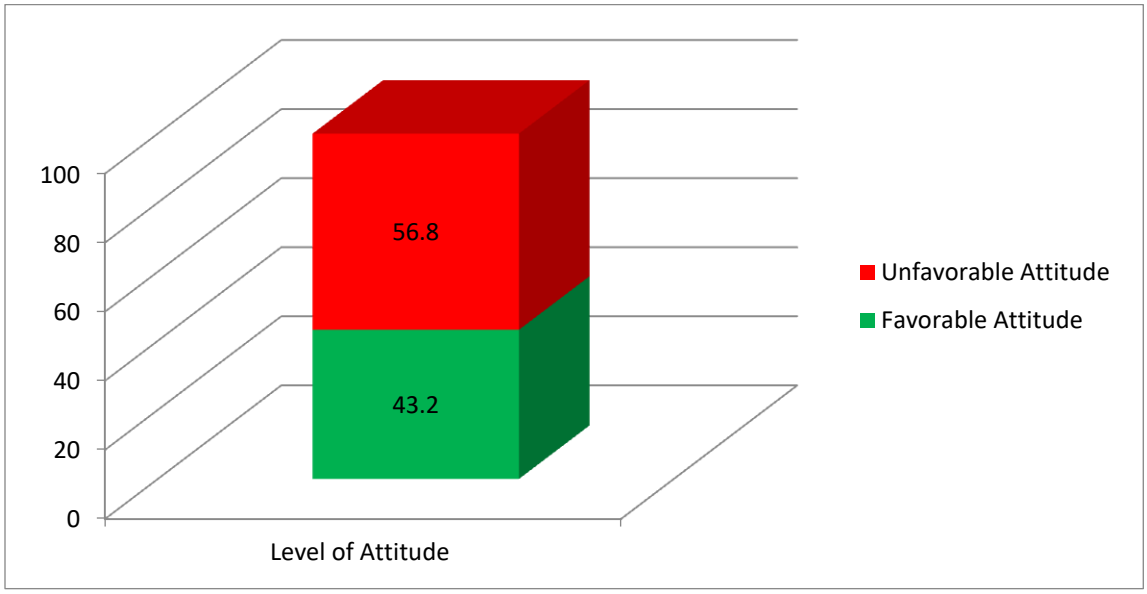

Figure 6 the above bar chart showed that the overall attitude level of the acceptance of immediate postpartum intrauterine contraceptive device among women who delivered in selected public hospitals of Addis Ababa, Ethiopia, 2021

5.8. Factors associated with immediate PPIUCD acceptance rate

The logistic regression was done to identify the relationship between the dependent and independent variables. Binary logistic regression showed that the association of each independent variable with acceptance rate and associated factors to use immediate PPIUCD. This was the P-value less than 0.2, and then entered into multivariate regression to identify the independent variable prognosticates of the acceptance rate and associated factors to use immediate PPIUCD. This was P-value less than 0.05. In bivariate logistic regression presented the following variable participant's educational status, participant's occupation, participant's monthly income, participant's decide for FP use, participant's pregnancy status, the participant's heard about IUCD use as a contraceptive method, and level of participant's attitude about immediate PPIUCD.

After multivariate regression, the following factors presented to have an association with the acceptance rate and associated factors of immediate PPIUCD. Those were the

participant's educational status, participant's occupation, participant's monthly income, and level of participant's attitude.

In multivariate analysis result of the participant's education was significantly associated with the acceptance rate and associated factors of immediate PPIUCD. Immediate post-partum women who were elementary (1-8) educated were 84 % less likely to accept to use immediate PPIUCD than women who were college and above educated (AOR = 0.160, 95 % CI: (0.040-0.649) (P<0.010).

Maternal occupation significantly associated with the acceptance of immediate PPIUCD. Immediate post-partum women who were private employees and private workers, daily laborer, and student were 4 times more often accept to use PPIUCD than those women were in housewife (AOR=4.269, 95% CI: (1.280-14.234) (P<0.018), 7 times more likely to accept to use immediate PPIUCD than women who were housewife (AOR = 7.373, 95 % CI:(1.534-35.433) (P<0.013) and 11 times more likely to accept to use immediate PPIUCD than women who were housewife (AOR =11.004, 95 % CI: (1.602-75.572) (P<0.015) respectively.

The other variable associated was the participant's monthly income. Immediately delivered women who were monthly income 3201-5250, 5251-7900, and maternal monthly income greater than 7901 were 5 times more likely to accept immediate PPIUCD for those who were monthly income less than 3200 (AOR =4.731, 95% CI: (1.497-14.949) (P<0.008), 6 times more likely to accept to use immediate PPIUCD than women monthly income less than 3200 (AOR =5.712, 95 % CI: (1.489-21.910) (P<0.011) and monthly income greater than 7901 were 7 times more likely to accept to use immediate PPIUCD than participants monthly income less than 3200 (AOR =6.589, 95% CI: (1.736-25.009) (P< 0.006) significantly associated to the acceptance rate and factors associated to PPIUCD respectively.

And Participants who had a favorable attitude about PPIUCD were 14 times more likely to accept to use PPIUCD than those with an unfavorable attitude. (AOR = 14.457, 95% CI: (4.999-41.806) (P<0.000) (Table 5).

Table 6 Factors associated with immediate PPIUCD acceptance rate +among women who delivered in selected public hospitals of Addis Ababa, Ethiopia, 2021 (n=336).

Variable	Accepted to use PPIUCD		COR95% CI	AOR95%CI	P-value
	Yes	No			
Maternal education					
Illiterate	5	59	0.155(0.054-0.440)*	0.457(0.10-2.084)	
Primary(1-8)	5	103	0.089(0.032-0.249)*	0.160(0.040-0.649)**	0.010
Secondary (9-12)	9	90	0.183(.078-0.429)*	0.318(0.095-1.068)	
≥ college	23	42	1	1	1
Occupation					
House wife	5	129	1	1	1
Governmental employee	12	30	10.320(3.380-31.514)*	3.384(0.791-14.473	
Private	15	90	4.300(1.509-12.255)*	4.269(1.280-14.234)**	0.018
Daily laborer	5	32	4.031(1.100-14.771)*	7.373(1.534-35.433)**	0.013
Student	5	13	9.923(2.535-38.837)*	11.004(1.602-75.572)**	0.015
Monthly Income (in ETB					
<=3200	6	128	1	1	
3201 -5250	16	111	3.075(1.163-8.129)*	4.731(1.497-14.949)**	0.008
5251-7900	11	25	9.387(3.178-27.727)*	5.712(1.489-21.910)**	0.011
>=7901	9	30	6.400(2.116-19.359*	6.589(1.736-41.806)**	0.006
Decide for FP use					
Wife	9	86	.564(.255-1.251)*	0.418(0.149-1.170)	
Husband	5	57	.473(.174-1.285)*	0.876(0.212-3.623)	
Both	28	151	1	1	1
Status of pregnancy					
Planned	36	199	1	1	1
Unplanned	6	95	.349(.142-.857)*	0.767(0.224-2.632)	
Ever heard IUCD use as a contraceptive method					
Yes	35	183	1	1	1
No	7	111	0.33(0.142-0.768)*		
Level of attitude					
Unfavorable	5	187	1	1	1
Favorable	37	107	12.933(4.934-33.899)*	14.457(4.999-41.806)**	0.000

Keys: * statistically significance at P-value <0.2, in bivariate, 1 =reference of the category

** Statistically significant at P-value <0.05 in multivariate

6. DISCUSSION

Controlling and stabilizing the population is essential for the country's socioeconomic and social development. As a result, in a low-resource country like Ethiopia, the available contraceptive methods, especially long-acting ones like IUCD, are very feasible and cost-effective. This study aimed to find out how many women in public hospitals were accepted to use immediate PPIUCD and what factors influenced their decision.

The acceptance rate and its related factors of immediate PPIUCD were found to be low in this research relative to other previous studies that were conducted in the different study areas. The most common reasons for rejecting immediate PPIUCD were not being a woman's preferred form 142 (42.3%), fear of side effects 132 (39.3%), and lack of knowledge about PPIUCD 118 (35.1%).

This result was backed up by a study conducted in the Ambo area, West Shoa District, Oromia Region, which found that women preferred method 32.5% of the time, were fear of side effects 29.6% of the time, and were lack of awareness about PPIUCD 24.5 % of the time (27).

The overall acceptance rate to use immediate PPIUCD and its associated factors was 12.5%. This finding was very low as compared to the study conducted in north India, primary health center, (39%) (26), also in Marathwada region, India (25 %) (30) and in Rwanda a mixed-method study (28.1 %) (24).

This variance in acceptance rate may be due to the study setting, emphasis on actual use (usage) rather than intended use (intention), health care education access, counseling at ANC regarding PPIUCD, level of understanding, availability of IUCD due to Covid-19, various PPIUCD myths, sample size, and socio-demographic characteristics variation.

In this study, the acceptance rate of immediate PPIUCD was influenced by maternal education. The acceptance rate of immediate PPIUCD was significantly associated among women who had primary (1-8) education attended 84 % less likely to accept to use immediate PPIUCD those who were women education attended college and above (AOR = 0.160, 95 % CI: (0.040-0.649) (P< 0.010).

This was in line with the findings of the 2016 EDHS, which found that (49%) of currently married women were not using contraceptive methods and 2% were uncertain. Contraceptive use increased dramatically with the level of education, with at least 51% of women with higher education using family planning, compared to 31% of women with no education (4) and inconsistent with Ruanda those mothers who had attended tertiary education 3 times more likely to had uptake to used immediate PPIUCD than mothers those who had no education and Bahir Dar in which mothers those who were college and above were 21.24 times higher for IUCD relative to women who were unable to read and write but mothers who were primary education 8.08 times higher as compared to read and write and Ambo those mothers who were diploma and above are 3 times more likely to involve than with no education (24, 27).

This could be because education influences health behavior; educated women are more empowered to decide on fertility control, need to discuss contraceptive issues openly, have a better understanding of how to use PPIUCD, and can speculate on risk and benefit issues; and the possible reason for variation could be due to the study setting, sample size differences, or socio-demographic differences.

The finding of maternal occupation to immediately delivered women who were works private employers and private workers, daily laborer and student were 4 times more likely to accept to use immediate PPIUCD than women who were housewife (AOR=4.269, 95% CI: (1.280-14.234) (P<0.018), 7 times more likely to accept to use immediate PPIUCD than women who were housewife (AOR = 7.373, 95 % CI:(1.534-35.433) (P<0.013) and 11 times more likely to accept to use immediate PPIUCD than women who were housewife (AOR =11.004, 95 % CI: (1.602-75.572) (P<0.015) respectively. This finding was supported by the finding that was done in Ambo town which was private employers (27). However, daily laborer and student were also significantly associated in this research, which may be attributed to socio-demographic differences and occupation status (in Addis Ababa many women work in daily laborer due to large city but in ambo few women can participate as a daily laborer and similarly many reproductive-age women have scholarship chance including the extension in Addis Ababa).

The participant's monthly income contributes to immediate PPIUCD insertion. In this study women who were a monthly income increase (higher monthly income) more likely to use immediate PPIUCD than women who had low monthly income. Participants monthly income who were 3201-5250, 5251-7900 and women monthly income greater than 7901 were 5 times more often accept to use immediate PPIUCD when compared with those who were monthly income less than 3200 (AOR =4.731, 95% CI: (1.497-14.949) (P<0.008), 6 times more likely to accept to use immediate PPIUCD than women monthly income less than 3200 (AOR =5.712, 95 % CI: (1.489-21.910) (P<0.011) and monthly income greater than 7901 were 7 times more likely to accept to use immediate PPIUCD than participants monthly income less than 3200 (AOR =6.589, 95% CI: (1.736-25.009) (P< 0.006) significantly associated to the acceptance rate and factors associated to PPIUCD respectively.

This finding highly increased congruently to EDHS 2016, modern contraceptive usage increase income this was 20 % for mothers in the lowest wealth to 47 % for the mothers in the highest income (4) and also congruent to that of the study done in Ambo town (27). The reason may due to better wealth women get the best exposure to contraceptive method due to access to get IUCD everywhere including private clinics and better understand about PPIUCD.

In addition to the above, the current study also revealed that to accept to use of immediate PPIUCD increased significantly among women favorable (positive) attitude. This was an attitude (43.2%) that was favorable, but 56.8 % were unfavorable attitude due to this report majority of participants had a negative attitude about PPIUCD.

Participants who had favorable (positive) attitudes about PPIUCD were 14 times more likely to accept to use PPIUCD (AOR = 14.457, 95% CI: (4.999-41.806) (P<0.000) than women with unfavorable (negative) attitude. This finding was higher than the study done in Mekele town women who had a positive approach to long-acting reversible contraception (31).

This disparity may be attributed to attitudes, perceptions of the advantages and complications of PPIUCD provide counseling, socio-demographic differences study subject, setting area and sample size.

Implication

The implications of the study address that the requirements of policymakers give attention to long-acting contraceptive methods, especially for PPIUCD, health professionals especially midwives and obstetricians focus on counseling on PPIUCD.

The research had implications for immediate postpartum women's attitudes, knowledge, and awareness. As a result, policymakers, health professionals, and non-governmental organizations that work in the field of maternal and reproductive health are all responsible for expanding the benefits of PPIUCD.

Governments also encourage women to use IUCD and long-acting contraceptives by disseminating accurate information through the media and providing updated training to health professionals.

6.1. STRENGTH AND LIMITATION OF THE STUDY

6.1.1. Strength of the study

- The study focuses on the actual usage, not only utilization or simply accept to use immediate PPIUCD
- The immediate delivered women counsel about PPIUCD and the option given for the women without interfering with their choice, rather than educate about the advantage and disadvantage of IUCD.
- The questionnaire was pre-tested and required modifications made before the real data collection.
- The data collectors are supervised daily after data collection by the principal investigator and supervisors.

6.1.2. Limitation of the study

- Study the only usage not included complication and discontinuation rate.
- The study restricts only to public hospitals, did not include private clinics. Hence, it does not represent the proportion of acceptance rate to use immediate PPIUCD in private health facilities and governmental health center
- The study conducted in health facilities; hence the result may not be including the entire population in the community.
- While the study hospital-based and the data collectors were health professionals may not be free from bias.

7. CONCLUSION AND RECOMONDATIONS

7.1. Conclusion

The acceptance rate of using immediate PPIUCD was low 12.5 %, according to the findings of this study. The main reasons for this were that IUCD was not the preferred method of the mother and that she was afraid of the side effects. The acceptance rate of immediate PPIUCD was significantly associated with the women's occupation, monthly income, and level of participant's attitude in this study.

7.2. Recommendation

Based on the finding of this research the following recommendations were forwarded by the principal investigator.

For policymakers and the Ministry of Health (MOH)

- To improve a good attitude about PPIUCD, social media engage to change the community's attitude by using leaflets, radio, and television advertisements.
- The Ministry of health to give regular training for health care providers including counseling methods and to make the service more accessible with correct information and to increase maternal satisfaction about IUCD.
- Working in the field of reproductive health to gear towards women in their extended immediate postpartum period for the provision of immediate PPIUCD. Such services to highly targeted low socioeconomic women.

For health care providers

- To increase maternal attitude about PPIUCD, health care providers should create awareness starting from ANC follow to immediate post-partum period without prevarication about the benefit and side effects of IUCD.
- The health care providers give enough time to discuss with PPIUCD until sink in and the decision subordinate to the women, not decision-makers.

For further researchers

- Further analytical studies recommend identifying the acceptance rate, as well as complication and discontinuous rates with follow-up.

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ANNEX I: Study information sheet

English version informed consent sheet

This sheet is to be ready for the participants of the study.

Good morning/afternoon, my name is_____ and I am one of the Addis Ababa University, College of Health Sciences, and Department of Nursing and Midwifery data collectors for the report. The goal of the study is the acceptance rate and associated factors of the immediate postpartum intrauterine contraceptive device among women administering selected public hospitals in Addis Ababa. If you give me consent after you have learned the purpose of the research, you are selected to be a participant in this study.

Purpose-Determine the rate of acceptance and related factors of the immediate postpartum intrauterine contraceptive system among women administered at selected public hospitals in Addis Ababa, Ethiopia.

Procedure and duration: First of all, I picked you randomly to take part in this research. Different questions to answer are available. It will use an interview questionnaire that will take 12-20 minutes.

Risks: The risks of being involved in this research are very minimal, taking only a few minutes. Benefit: You may not receive any direct benefit at this time by participating in this study, but the data you provide is very important for solving problems associated with the immediate method of intrauterine contraception postpartum.

Confidentiality: The information provided to us by you will be confidential. The questioner is coded to remove the appearance of your name on the questionnaire and the form of consent.

Rights: Participation is entirely voluntary in this report. You have the right to announce that you are not interested in this research and you have the right at any time to withdraw from participating.

Contact address: If there is any questions or unclear idea any time about the study or the procedures, do not hesitate to contact and speak to principal investigator with the following Address**:**

Name: Wondossen T/silassie Pho**ne number**: +251-910991401 E-mail address:dnw2127@gmail.com

II. consent form

The selected participant heard the information in the consent sheet and understood what is required from me and what will happen to me if I take part in the study. I understand that all the information regarding me, like my name and all answers given by me, must not be transferred to a third party. I can also understand that I can withdraw from the study at any time without giving a reason and without me or my family's‟ routine service utilization being affected for my refusal. Now please tell me if you agree to participate in the interview.

The Participant: 1. Agreed

2. Did not agree to End the interview and thank the respondent.

Interviewer Agreement I certify that I have taken written consent from the respondent that she has agreed to participate in the study and I have confirmed the agreement is correct.

The participant Sign_____

Data collectr's Name:_____

Signature_____ |_____|_____| 2021.

SupervisorName:_____

Signature_____ |_____|_____| 2021.

Code _____Data collecter name _____

ANNEX II. English version questionnaire

Part I socio-demographic characteristics of the participants

Date _____ hospital _____Serial no _____MRN_____			
s.no	Question	Choices	Remark
	Address	7.2.1. Adsis Ababa 7.2.2. Out side Addis Ababa	
101	How old are you?	Years _____	
102	What is your religion	1. Orthodox 2. Muslim 3. Protestant 4. Catholic	
103	What is your current marital status	1. Married 2. Not married 3. Divorced 4. Widowed	
104	What is your educational status	1. No education 2. Primary (1-8) 3. Secondary (9-12) 4. College and above	
105	The educational level of the husband	1. No education 2. Primary (1-8) 3. Secondary (9-12) 4. College and above	
106	What is your occupation?	1. Housewife 2. Government employee 3. Private employee 4. Daily laborer 5. Student	
107	Occupational status of the husband	1. Government employee 2. Private employee 3. Daily laborer 4. Student	

108	What is your monthly income?	_____ETB	

Part II Obstetrics characteristics

201	Do you have ANC visit?	1. Yes 2. No	If the answer is "no" skip to 203
202	If yes how many ANC visits	1. One 2. Two 3. Three 4. Four 5. More	
203	Mode of delivery	1. 1. Spontaneous vaginal delivery 2. 2. Cesarean section	
204	Have you ever used family planning methods previously?	1. Yes 2. No	If "no" skip to 205
205	If, your answer is yes which method you used? (more than two answers possible)	1. Natural FP. 2. IUCD 3. Pills 4. Condom 5. Implanon/judile 6. Injectable	
206	Who decides the family planning?	1. Wife 2. Husband 3. Both	
207	The number of pregnancies?	_____	

208	How many of them are alive now?	_____	
209	What was the status of pregnancy?	1. Planned 2. Unplanned	
210	number of future children desire	_____	

Part III Knowledgeand awareness of women towards immediate PPIUCD

301	Have you ever heard about IUCD as a contraceptive method?	1. Yes 2. No	If "No" skip to 401
302	From whom do you get information on PPIUCD for the first time? (more than two answers possible)	1. Neighbors/friends/relatives 2. Health professionals 3. Mass media 4. Husband	
303	Have you ever heard IUCD can be inserted immediately after delivery?	1. Yes 2. No	
304	Do you know IUCD prevents unwanted pregnancy for at least 3 years?	1. Yes 2. No 3. Don't know	
305	Do you know IUCD is a FP method that can be put into uterine	1. Yes 2. No 3. Don't know	
306	Do you know IUCD has no high risk of getting sexually transmitted infections|?	1. Yes 2. No 3. Don't know	

307	Do you know IUCD has no interference with sexual intercourse?	1. Yes 2. No 3. Don't know	
308	Do you know IUCD is immediately reversible?	1. Yes 2. No 3. Don't know	
309	Do you know IUCD cannot cause cervical cancer?	1. Yes 2. No 3. Don't know	

Part IV Immediate acceptance rate and attitude of PPIUCD

401	Accepted to use PPIUCD to delay or to avoid pregnancy immediately after delivery	1. Yes **2.** No	If "yes" Skip to 501
402	If you are not going to use PPIUD, would you tell me the main reasons? (more than two answers possible)	1. Fear of Side Effect 2. Lack of Awareness of the PPIUD 3. Not My Preferred Method 4. Little Risk of Pregnancy 5. To Have More Children 6. Husband Disapproval 7. Religion Prohibition 8. Fear of Infertility	

P**art V the attitude towards PPIUCD insertion**

501	Do you think insertion & removal of IUCD is highly painful?	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree	

		5. strongly Agree	
502	Using IUCD cause irregular bleeding	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. strongly Agree	
503	Do you think the insertion of IUCD cause to lose privacy?	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. strongly Agree	
504	Do you think Using IUCD restricts normal activities?	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. strongly Agree	
505	Do you think IUCDs may impair future fertility?	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. strongly Agree	

THANK YOU

Annex III Amharic version

ክፍል አንድ፡ የአማርኛው ትርጉም የመረጃ ቅፅ

ይህ ቅፅ ጥናቱ በሚካሄድበት ወቅት ለታሳታፊዎቹ ይነበባል፡፡

ጤና ይስጥልኝ ስሜ_____ይባላል፡፡ በአዲስ አበባ ዩኒቨርስቲ ጤና ሳይነስ ኮሌጅ በነርስ እና ሚድዋይፈሪ ትምህርት ክፍል ለሚካሄደው የሁለተኛ ድግሪ ትምህርት መመረቂያ ጥናት መረጃ ከሚሰበስቡት ውስጥ አንዱ ነኝ፡፡ የጥናቱ አላማ በማህፀን ውስጥ የሚቀመጥ የቤተሰብ ምጣኔ ዘዴን ወዲያው እንደወለዱ የመቀበል አቅም (acceptance rate) እና ተያያዥ ተፅእኖዎች ላይ ያተኩራል፡፡ ስለ ጥናቱ አስፈላጊውን ገለፃ ከበቂ መረጃ ጋር ከተሰጠዎ በኋላ ጥያቄውን ይጠየቃሉ፡፡ጥናቱ በተመረጡ የአዲስ አበባ የህዝብ መገልገያ ሆስፒታሎች ይከናወናል፡፡

ዓላማ፡ይህ በማህፀን ወስጥ የሚቀመጥ የቤተሰብ ምጣኔ ዘዴን ወዲያው እንደወለዱ የመቀበል አቅም እና ተያያዥ ተፅእኖዎች ላይ ያተኩራል፡፡ የጥናቱ ውጤት ለሚመለከታቸው አካላት ይሰጣል፡፡

አካሔድ፡ በተመረጡ የአዲስ አበባ የህዝብ ሆስፒታሎች ውስጥ በማህፀን ውስጥ የሚቀመጥ የቤተሰብ ምጣኔ ዘዴን ወዲያው እንደ ወለዱ የመቀበል አቅም እና ተያያዥ ተፅእኖዎች ላይ ለሚደረገው ጥናት እንዲሳተፉ ተጋብዘዋል፡፡ በጥናቱ ላይ ለመሳተፍ ከተስማሙ አዎን በማለት መስማማትዎን ያመላክቱ፡፡ከዚህም በኃላ በመረጃ ሰብሳቢው መጠይቅ ያደረግሎታል፡፡ የሚሰጡት መረጃ በጠቅላላ በሚስጥር በኮድ ተደርጎ ለማንም ሳይሰጥ ይቀመጣል፡፡ መረጃውን ለመስጠት ከ 12- 20 ደቂቃ ይወስድብዎታል፡፡

ጉዳት እና ስጋት፡ በጥናቱ ላይ በመሳተፍ ግዜዎትን እንደተሻማዎት ሊሰሞት ይችላል ሆኖም ግን የጥናቱ ውጤት ለሚያመጣው ለውጥ ብለው እንደሚሳተፍ እናምናለን፡፡ እንዲሁም በመሳተፍዎ ምንም አይነት ጉዳት አይደርስብዎትም፡፡

ምስጢራዊነት፡ በዚሁ ጥናት ላይ የሚገኘው መረጃ በሙሉ ምስጢራዊነቱ ተጠብቆ ይቀመጣል፡፡ የእርስዎም መረጃ በፋይል ከእርስዎ ስም ውጪ በኮድ ተደርጎ ይቀመጣል፡፡ በተጨማሪም ከጠናቱ ውጪ ለማንም ሰው አይሰጥም፡፡

በጥናቱ ያለመሳተፍ መብት፡ በጥናቱ ያለመሳተፍ ሙሉ መብት አለዎት፡፡በጥናቱ ውስጥ ሌላ ጥያቄዎችም መልስ ያለመስጠት መብት አሎዎት፡፡ በማንኛውም ጊዜ ከጥናቱ ያለመሳተፍ መብት አለዎት፡፡ተጨማሪ ጥያቄ ካለዎት በሚከተለው አድራሻ ያገኙናል፡፡

መረጃ ለማግኘት፡ በጥናቱ ላይ ያልገባዎትን እና መጠየቅ የሚፈልጉትን ጥያቄ ለመጠየቅ የሚከተሉትን አድራሻ መጠቀም ይችላሉ፡፡

ስም፡ ወንዶስን ተ/ስላሴ

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ክፍል ሁለት፡ የስምምነት ማረጋገጫ ቅጽ

ከላይ የተጠቀሱትን በሙሉ ተረድቻለሁ፡፡ በዚህ ጥናት ላይ የምሳተፈው በሙሉ ፍቃደኝነት ነው፡፡እንደተነገረኝ ከሆነ የምሰጠው መልስ ለሌላ ለማንም ሰው አይሰጥም እንዲሁም ስለ እኔ ማንነት ለማንም አይገለፅም፡፡ስለሆነም በጥናቱ ላይ ለመሳተፍ ፍቃደኛ ነኝ፡፡

ተሳታፊው ፍቃደኛ ካልሆኑ አመስግነው ወደ ሚቀጥለው ይለፉ፡፡

ተሳታፊዋ ፍቃደኛ ከሆኑ ይቀጥሉ፡፡

የተቆጣጣሪ ስም _____ ፊርማ _____ ቀን _____

ቃለ መጠይቁ የተጀመረበት ሰዓት _____ ደቂቃ _____

መለያ ኮድ ቁጥር _____ቃለ መጠይቁ ያለቀበት ሰዓት _____ ደቂቃ _____

ቃለ መጠይቁን ያደረገው ባለሙያ ስም_____

ክፍል አንድ፡ አጠቃላይ ማህበራዊ መረጃ

ቀን_____ሆስፒታል_____ተራ ቁጥር_____ ካርድ ቁጥር_____

ተ.ቁ	ጥያቄ	ምርጫ	አስተያት
	አድራሻ	1. አዲስ አበባ 2. ከአዲስ አበባ ውጭ	
101	እድሜሽ ስንት ነው?	እድሜ _____	
102	የምትከተይው ኃይማኖት ምንድን ነው?	1. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ካቶሊክ	
103	የጋብቻ ሁኔታ?	1. ያገባ 2. ያላገባ 3. የተፋታች 4. ባሏ የሞተባት	
104	የእናትየዋ የትምህርት ሁኔታ ?	1. ያልተማረ 2. የመጀመሪያ ደረጃ (1-8) 3. ሁለተኛ ደረጃ (9-12) 4. ኮሌጅ እና ከዚያ በላይ	

105	የባለቤትሽ የት/ት ሁኔታ ?	1. ያልተማረ **2.** የመጀመሪያ ደረጃ (1-8) **3.** ሁለተኛ ደረጃ (9-12) **4.** ኮሌጅ እና ከዚያ በላይ	
106	የስራሽ ሁኔታ ምንድነው?	1. የቤት እመቤት 2. የመንግስት ተቀጣሪ 3. የግል ተቀጣሪ 4. የቀን ሰራተኛ 5. ተማሪ	
107	ወርሃዊ ገቢሽ ስንት ነው?	_____ብር	

ክፍል ሁለት፡ የእናትየዋ የወሊድ ታሪክ

201	የቅድመ ወሊድ ክትትል አለሽ?	1. አዎ **2.** የለኝም	መልስዎ የለኝም ከሆነ ወደ ጠያቄ ቁጥር 203 ይለፉ
202	ለክትትል ወደ ጤና ጠቋም ስንት ጊዜ ሄድሽ?	1. አንድ ጊዜ 2. ሁለት ጊዜ 3. ሶስት ጊዜ 4. አራት ጊዜ **5.** ከዚያ በላይ	
203	በምን ወለድሽ	1. በማህፀን 2. በቀዶ ህክምና	
204	ከዚህ በፊት የቤተሰብ ምጣኔ አገልግሎት ተጠቅመሽ ታውቂያለሽ?	1. አዎ **2.** አላውቅም	
205	ለ 204 ጥያቄ መልስሽ «አዎ» ከሆነ የትኛውን የቤተሰብ ምጣኔ ተጠቀምሽ? (ከ ሁለት በላይ መልስ ይቻላል)	1. በተፈጥሮ የመከላከል ዘዴ 2. በማህፀን የሚቀመጥ 3. በየቀኑ የሚዋጥ ኪኒን 4. ኮንዶም 5. በክንድ የሚቀመጥ 6. በመርፌ የሚሰጥ	
206	ስለ ቤተሰብ ምጣኔ የሚወስነው ማነው?	1. ሚስት 2. ባል	

		3. ሁለቱም	
207	አሁን ስንተኛ እርግዝናሽ ነው?	_____	
208	አሁን በህይወት ስንት ልጆች አሉሽ?	_____	
209	የእርግዝናሽ ሁኔታ ምን ነበር?	1. የታቀደበት 2. ያልታቀደበት	
210	ወደ ፊት እንዲኖርሽ የምትፈልጊው የልጅ ብዛት ስንት ነው?	_____	

ክፍል ሁለት፡ ከወለዱ በኋላ ወዲያው በማህፀን ስለሚቀመጠው የቤተሰብ ምጣኔ(PPIUCD)ያለዎት እውቀት እና ግንዛቤ

301	በማህፀን ስለሚቀመጠው የቤተሰብ ምጣኔ ሰምተሽ ታውቂያለሽ?	1. አዎ **2.** አልሰማሁም	መልስዎ አልሰማሁም ከሆነ ወደ ጥያቄ 401 ይለፉ
302	በማህፀን ስለሚቀመጠው የበተሰብ ምጣኔ ከማን ሰማሽ? (ከ ሁለት በላይ መልስ ይቻላል)	1. ከጎረቤት/ ከጓደኛ/ ከዘመድ 2. ከጤና ባለሙያ 3. ከመገናኛ ብዙኃን 4. ከባለቤቴ	
303	በማህፀን የሚቀመጠው የቤተሰብ ምጣኔ እንደወለድሽ ወዲያውኑ በባለሙያሊቀመጥልሽ እንደሚችል ታውቂያለሽ?	1. አዎ 2. አላውቀም	
304	በማህፀን የሚቀመጠው የቤተሰብ ምጣኔ ያልተፈለገ እርግዝናን ቢያንስ ለ3 አመት እንደሚከላከል ታውቂያለሽ?	1. አዎ 2. አይደለም 3. አላውቅም	
305	በማህፀን የሚቀመጠው የቤተሰብ ምጣኔ በማህፀን ውስጥ እንደሚቀመጥ ታውቂያለሽ?	1. አዎ 2. አይደለም 3. አላውቅም	
306	በማህፀን የሚቀመጠው የቤተሰብ ምጣኔ ዘዴ በግበረ ስጋ ግንኙነት ወቅት ለሚተላለፍ የአባላዘር በሽታ	1. አዎ 2. አይደለም 3. አላውቅም	

	እንደማያጋልጥ ታውቂያለሽ?		
307	በማህፀን የሚቀመጠው የቤተሰብ ምጣኔ ዘዴ በግብረ ስጋ ግንኙነት ወቅት ችግር እንደሌለው ታውቂያለሽ?	1. አዎ 2. አይደለም 3. አላውቅም	
308	በማህፀን የሚቀመጠው የቤተሰብ ምጣኔ ዘዴ በፈለጉት ወቀት አቋርጠው ወዲያው ማርገዝ እንደሚቻል ታውቂያለሽ?	1. አዎ 2. አይደለም 3. አላውቅም	
309	በማህፀን የሚቀመጠው የቤተሰብ ምጣኔ ዘዴ ለነቀርሳ እንደማያጋልጥ ታውቂያለሽ?	1. አዎ 2. አይደለም 3. አላውቅም	

ክፍል አራት፡ ወዲያው ከወለዱ በኋላ በማህፀን ስለሚቀመጥ የቤተሰብ ምጣኔ የመቀበል ደረጃ(Rate)?

401	እርግዝናሽን ለማዘግየት ወይም እሰከወዲያኛው ላለማርገዝ በማህፀን የሚቀመጠውን የቤተሰብ ምጣኔ ዘዴ ለመጠቀም ወሰንሽ?	1. አዎ 2. አልተጠቀምኩም	መልስሽ ተጠቅሜለሁ ከሆነ ወደ ጥያቄ 501 ፍለፉ
402	መልስሽ አልጠቀምኩም ከሆነ ዋና ምክንያትሽ ምንድነው? (ከሁለት በላይ መልስ ይቻላል)	1. የሚያስከትለውን የጎን ዮሽ ችግር በመፍራት 2. ስለ መከላከያው ግንዛቤው ስለሌለኝ 3. ምርጫዬ ስልሆነ 4. በእርግዝና ላይ ጉዳት ስላለው 5. ብዙ ልጆች መውለድ ስለምፈልግ 6. ባለቤቴ እንድጠቀም ስለማይፈቅድልኝ 7. ሀይማኖቴ ስለማይፈቅድ 8. መካንነት ያስከትላል ብዬ ስለምፈራ	

ክፍል አምስት፡ ከወለዱ በኋላ በማህፀን የሚቀመጠውን የቤተሰብ ምጣኔ (PPIUCD) ስለ መጠቀም ያለዎት አመለካከት

501	በማህፀን የሚቀመጠው	1. በጣም አልስማማም	

	የቤተሰብ ምጣኔ ዘዴ ሲቀመጥ እና ሲወጣ በጣም ያማል ብለሽ ታስቢያለሽ?	2. አልስማማም 3. ምንም አላውቅም 4. እስማማለሁ 5. በጣም እስማማለሁ	
502	በማህፀን የሚቀመጠው የቤተሰብ ምጣኔ ዘዴ መደበኛ ላልሆነ የደም መፍሰስ ያጋልጠኛል ብለሽ ታስቢያለሽ?	1. በጣም አልስማማም 2. አልስማማም 3. ምንም አላውቅም 4. እስማማለሁ 5. ጣም እስማማለሁ	
503	በማህፀን የሚቀመጠው የቤተሰብ ምጣኔ ዘዴ በሚደረግልኝ ጊዜ ግላዊነቴ (ሚስጥሬን) አጣለሁ ብለሽ ታስቢያለሽ?	1. በጣም አልስማማም 2. አልስማማም 3. ምንም አላውቅም 4. እስማማለሁ 5. በጣም እስማማለሁ	
504	በማህፀን የሚቀመጠው የቤተሰብ ምጣኔ ዘዴ መደበኛ እንቅስቃሴን ይገድባል ብለሽ ታስቢያለሽ?	1. በጣም አልስማማም 2. አልስማማም 3. ምንም አላውቅም 4. እስማማለሁ 5. በጣም እስማማለሁ	
505	በማህፀን የሚቀመጠው የቤተሰብ ምጣኔ ዘዴ በወደፊት እርግዝናዬ ላይ ችግር ይፈጥራል ብለሽ ታስቢያለሽ?	1. በጣም አልስማማም 2. አልስማማም 3. ምንም አላውቅም 4. እስማማለሁ 5. በጣም እስማማለሁ	

አመሰግናለሁ!!