

## Implants Contraceptive Utilization and Factors Associated among Married Women in the Reproductive Age Group (18-49 Year) in Southern Ethiopia

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### Abstract

**Background:** Implants contraceptive are one of the most effective reversible modern contraceptive methods. Implants can be used by women from menarche to menopause. Many women can safely use implants including lactating mothers, HIV positive women, cigarette smokers of any age, post abortion women, diabetic women, women at risk for cardiovascular disease (including those with high blood pressure), and adolescents.

**Methods:** A community based cross-sectional study was conducted among married women aged 18-49 years in East Badewacho Woreda, Southern Ethiopia. Multistage sampling technique was used to select a total of 647 study participants. A pre-tested structured questionnaire was used for data gathering. For data entry Epi-info version 3.5.1 was used and bivariate and multivariate logistic regression analyses were performed using SPSS version 16.0 statistical package.

**Results:** The implant contraceptive prevalence rate among married women is 96(15.1%). Implanon contraceptives were the most frequently used methods 51(53.1%), sino-implanol 29(30.2%) and jadelle 16(16.7%). Multiple logistic regression model revealed that the husband approval (AOR 3.07, 95% CI 1.64-5.74), joint decision (AOR 5.65, 95% CI 2.78-11.51), married women who have income (AOR 2.74, 95% CI 1.26-5.95), joint discussion (AOR 6.53, 95% CI 3.10-13.77). Similarly, age, discussed with health workers and health development army leaders were significantly associated with the use of implant contraceptives.

**Conclusion:** Implant contraceptive utilization is high in the woreda as compared to other methods. Joint decision, joint discussion, discussed with health workers and health development army leaders, husband approval of contraceptive use were significantly associated with the use of implant contraceptives. Therefore, woreda health office and concerned bodies be supposed to focus on couple's communication, male involvement and community conversation with health worker and health development army leaders that could enhance implant contraceptive utilization.

**Keywords:** Implants contraceptive utilization; Reproductive age group; Factors associated; East badewacho

### Introduction

Hormone releasing sub-dermal implants are a highly safe, acceptable, effective, and reversible form of contraception. Implants prevent pregnancy for an extended period of time after a single administration; no regular action by the user and no routine clinical follow up are required [1,2]. Implants contraceptive have high continuation and client satisfaction rate and have become more affordable to countries in recent years [3,4]. Contraceptive implants are small, thin, flexible plastic rods, each about the size of a matchstick, that are inserted under the skin of a woman's upper arm and release a progestin hormone into the body. The most common types of implant contraceptives are: Implanon (one rod containing 68 mg of progestin etonogestrel); Jadelle (two rods, each containing 75 mg of levonorgestrel); and Sino-implant (II) (two rods, each containing 75 mg of levonorgestrel) [5].

Implants contraceptive are one of the most effective reversible methods ever developed, comparable to intrauterine devices (IUDs), as well as female and male sterilization. Overall, in three years of Implanon use, less than 1 pregnancy per 100 users can be expected. In five years of Jadelle use, 1.1 pregnancies per 100 users can be expected. In four years of use of Sino-implant (II), the cumulative pregnancy rate is 0.9-1.06% [6,7]. They can be used by women from menarche to menopause. Many women can safely use implants including lactating mothers, HIV-positive women, cigarette smokers of any age, post abortion women, diabetic women, women at risk for cardiovascular disease (including those with high blood pressure), and adolescents.

There are an estimated 215 million women in the developing world who currently have an unmet need for family planning [8]. Several factors contribute to this unmet need; poor use of available services being a major factor. Barriers that limit access to services appear both on the demand and supply side. Barriers on the supply side include a weak system of logistics management, including erratic storage systems, an erratic system of placing orders, problems associated with transporting supplies to places where they are needed, limited service outlets, poor quality of service, and lack of adequate information on FP services. The demand constraints for family planning services in Ethiopia include religious pressure to have more children and the deep-rooted cultural perception that more children means greater economic benefits for the family[9].

Studies have shown that the use of the implant has no impact on breast-feeding or on the healthy development of breast-fed babies

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[10,11]. Implants can be initiated immediately after childbirth if a woman is not breast-feeding, and six weeks postpartum if a woman is partially or fully breast-feeding [12]. Widespread use of implants contraceptive could significantly reduce the numbers of unintended pregnancies, abortions, and maternal deaths. However, worldwide use of implants is low; among married women between the ages of 15 and 49 around the globe, 53% use a modern method of contraception, but only 0.3% use implants [4].

Despite widespread adoption of family planning in the developing world, contraceptive use is still very low in sub-Saharan Africa including Ethiopia and in other regions [13]. The aim of this research is to study on the utilization of implants contraceptive and associated factors that influencing implants contraceptive use and to address the bottleneck regarding specific challenge of such physical factors, psycho-social factors, socio-demographic factors and environmental factors in East Badewacho woreda, Hadiya zone, SNNPR region. More over, this study helps the government and other concerning bodies to maximize the use of implant utilization practice in the urban and rural community in line with MDGs of the family planning.

## Methods

### Study area and period

This study was conducted in East Badewacho Woreda of Hadiya Zone. Hadiya zone is one of the fourteen zones and four special Woreda in SNNPR state and its capital is Hosanna. EastBadewacho Woreda is one of ten administrative Woreda's found in Hadiya Zone of the Southern Nations Nationalities and Peoples region (SNNPR). It is located approximately at 70 north latitude and 37 to 380 East longitudes. The capital of the Woreda, Shone, is located at a distance of 345 km in the south-west from Addis Ababa and 123 km from Hawassa, the capital of the region[14]. Study period was from January to April 2014.

### Study design and source population:

A community-based cross-sectional study was conducted with internal comparison. All selected married women whose age was 18-49 year and permanent resident in randomly selected villages.

### Sample size and sampling procedures

The sample size was calculated by using a single population proportion sample size calculation formula considering the following assumptions.  $n$ =number of study subject,  $d$ =margin of error of 0.04 with 95% confidence level,

$Z_{\alpha/2}=1.96$  (level of significance)  $p=14.3\%$ [13],  $n=z^2*p(1-p) / d^2=(1.96)^2*0.143(1-0.143)/(0.04)^2=294$  Multiplied by 2 for the design effect gives=588. With 10% non-response rate 59 final total of 647 study population. Multistage sampling method was used in the study participants. There fore, the study subjects allocated in 39 kebeles. 10 kebeles were selected using simple random sampling method and among them, 14 villiage were selected by using simple random sampling method. And hence, eligible married women of the selected villiages were included in the study. By using simple random sampling technique, a total of 647 eligible married women were obtained and the study was conducted.

## Measurement and Variables

### I. Dependent variable

Implantable contraceptive utilization

### II. Independent variable

- **Predisposing factors:** The socio-cultural characteristics of individuals that exist prior to their utilizing contraceptive service (implants contraceptive) (Maternal Age, Educational status, occupation, marital status, ethnicity, Religion, parity, attitudes and knowledge towards implants contraceptive service).
- **Enabling factors:** The logistical aspects of obtaining service (distance from health institution, means and cost of transportation and financial source for implants contraceptive service and other expenses, income, availability of health personnel and facilities, and waiting time, acceptability and approval of contraception by the husband and significant others).
- **Need factors:** The most immediate cause of implant contraception service use, from functional and health problems that generate the need for implants contraceptive services.

### III. Operational definition

- **Implants contraceptive:** Are a method which include Implanon, Sino-implant and Jadelle.
- **Implant contraceptive utilization:** Is using any type of implants Contraceptive.
- **Long acting contraceptive methods** are modern contraceptive methods which includes implant contraceptive, Intra uterine contraceptive device.
- **Ever implant contraceptive user:**-A married women who have ever used any of implant contraceptive.
- **Current implant contraceptive user:**-A married women using any one of implant contraceptive.
- **Non-implant contraceptive user:**-A married women who is not using any type of implant contraceptive.

## Data Collection and Quality Control

Pre-tested structured questionnaires were used to collect the data. It was prepared in English and translated to local language. The enumerators were chosen based on their prior experience on data collection issues, their closeness to selected kebeles in which they are working and speaking local language. The investigator has also taken part in supervision as well as enumeration. The questionnaires were administered by 16 (Nurses). All data collectors and 2 supervisors (Health officer) were trained for 2 days on how to interview and fill the questionnaires. During the training, the importance of obtaining the respondents verbal consent and respecting their right to respond or not to respond to any part of the questions were emphasized to ensuring privacy and confidentiality issues.

Questionnaires that explore the objectives of the study were designed according to the local culture and norms. And prepared in English, and then translated to local language subsequently back translated into English. Questionnaires were comprised with socio demographic characteristics, implants contraceptive practices and factors affecting implants contraceptive utilization practices. In addition to the training given to the data collectors, the questionnaires were pre-tested on 5% [15] of sample size married women from three kebeles of the study Woreda, which were not selected for the study. As a result of the pre-test, necessary correction was made on the

questionnaires. Data collectors were selected based on ability to speak the local language and previous experience of data collection and supervision were considered and the data was collected at the house-to-house level. During the actual data collection process, strict supervision was taken. The supervisors monitored activities of each data collection process concurrently with data collectors to ensure validity of the data.

## Data Management and Analysis Procedures

The data gathered through the structured questionnaires were entered in to Epi-Info version 3.5.1 and analyzed using SPSS version 16 after having been checked for completeness and errors encountered. Descriptive analyses were carried out for each of the variables. Bivariate analyses were done for the independent variables with the outcome variable to select candidate variables for the multivariable analyses. Finally, predictors that show significant association with the dependent variable on the bivariate analysis were entered to multivariate logistic regression model to identify their independent effects.

## Ethical Consideration

Ethical clearance was obtained from Addis continental institute of public health and Woliata Sodo University from Sciences Ethical Review Committee. Official letter of cooperation was written to East Badewacho Administration and Woreda health Office by the University. Informed consent was obtained to ask participants for their consent to participate in the interview. Finally, only participants who have been consented were participated in the interview. There was no record of names in data collection process to better ensure open and honest dialogue between participants and the interviewer. Informed written consent was obtained from individual respondents and they were assured to withdraw if they want to discontinue the participation at any point of time.

## Result

### Socio-demographic characteristics of the respondents

A total of 635 currently married women responded to the questionnaires and analyzed making response rate 98.2%. According to the study, the mean age of the respondents was 32.5 year ( $32.5 \pm 7.22$  SD) and the median age was 32 year. Regarding to educational status, 224 (35.3%) of the respondents were unable to read and write, 241(38%) of the women had attended primary education, 149(23.4%) were educated to the level of secondary education and the rest 21 (3.3%) were attended to college or university level (Table 1).

Majority of the respondents were in the age group 25-29 years, 30-34 year, 35-39 year and 40-49 year were 158(24.9%), 146(23%), 131(20.6%) and 121(19.1%) respectively. The ethnicities of the respondents were Hadiya 459(72.3%), Wolayita 87(13.7%) and followed by Kembata 47 (7.4%). The religion of most respondents were protestant 482 (75.9%), Muslim 65(10%) followed by Orthodox 60(9.4%) (Table 1). The occupations of respondents were 551 (86.8%) house wife, 54(8.5%) merchant and 19 (3%) government employee (Table 2). Those who earn monthly income from the total respondents were only 74(11.7%) and the majority of the respondents were 26(35.1%), 21(28.4%) and 18(24.8%) were got 301-600ETB, 601-900 Ethi.birr and above 901ETB (Table 2). Major information source were health extension workers 426 (67.1%), health workers 345(54.3%) and health development army leaders 272 (42.8%) (Table 3).

Regarding the advantages contraceptive methods, have advantage of spacing children 459 (72.3%), avoiding unwanted pregnancy 375

(58.1), limiting the number of children 288 (45.4%) and delaying unplanned pregnancy 238 (37.5) (Table 4).

In this study, among married women who had ever used implants contraceptive 115 (18%) and 96 (15.1%) of married women had currently

Variables		Frequency	Percent (%)
Age(year) (N=635)	≤ 24	79	12.4
	25-29	158	24.9
	30-34	146	23
	35-39	131	20.6
	≥40	121	19.1
Ethnicity (N=635)	Hadiya	459	72.3
	Wolayita	87	13.7
	Kembata	47	7.4
	Others	42	6.6
Religion (N=635)	Protestant	482	75.9
	Orthodox	60	9.4
	Islam	65	10
	Catholic	28	4.4
Education of women (N=635)	Illiterate	224	35.3
	Primary (1-8)	241	38
	Secondary (9-12)	149	23.4
	12 <sup>th</sup> and above	21	3.3

Table 1: Socio-demographic and economic characteristic of married women in East Badewacho woreda march 2014.

Variable		Frequency	Percent (%)
Occupation of women (N=635)	House wife	551	86.8
	Merchant	54	8.5
	Government employee	19	3
	Others	11	1.7
Income of women(N=635)	Yes	11.7	74
	No	561	88.3
Income status of women Eth Birr (n=74)	≤ 300	12.2	9
	301-600	26	35.1
	601-900	21	28.4
	≥ 901	18	24.8

Table 2: Socio-demographic and economic characteristic of married women in East Badewacho woreda march 2014.

Variable		Frequency	Percent (%)
Ever heard about implant contraceptive	Yes	535	84.3
	No	100	15.7
Source of information	Health extension worker	426	67.1
	Health worker	345	54.3
	Health development army leader	272	42.4
	Friend	237	37.9
	Radio	68	10.7
	Newspaper	14	2.2
	TV	49	7.7
Health Knowledge of implant contraceptive	Yes	482	75.9
	No	253	24.1
Ever Know at least implant contraceptive	Implanon	463	72.9
	Sino-Implanon	259	40.8
	Jadelle	368	58

Table 3: Percentage of ever heard, knowledge, source of information, discussion with husband, main decider, husband support and utilization of implant contraceptive in married women in East Badewacho woreda April 2014.

using implant contraceptive methods (Table 5). From all respondents 535 (84.3%) of the respondents heard about implant contraceptive and were able to mention at least one of implant contraceptive method. The most commonly reported implant contraceptive method was implanon 497 (92.9%). Concerning the types of implant contraceptive methods, majority of the respondents were using implanon which is about 51 (53.1%) (Table 5). The main reasons for implants contraceptive discontinued were menstrual abnormalities 13(76.5%), weight loss 9(60%) and desire to more children 6(33.3%) (Table 5). And the major reasons for never using implants contraceptives were fear of implant removal 347 (54.6%), fear of side effects 314(49.4), desire to have more children 305 (48%), husband disapproval 231(36.4%), fear of child death 196(30.9%) and lack of knowledge 153(24.1%) (Table 6).

Married women whose age gearter than 30 years were 3.01 times more likely to use implants contraceptive than those whose age less than or equal to 30 years (AOR 3.01, 95% C.I=1.45-6.26) and those women who report their husband to approve their use of implants contraceptive were 3.07 times more likely to use implants contraceptive than those who do not commit their husbands for use of implants contraceptives (AOR 3.07, 95% C.I 1.64-5.74). Husband-wife joint decision increase the use of implant contraceptive 5.65 times more likely when compared with those women who do not joint decision with their husbands (AOR 5.65, 95% C.I 2.78-11.51) and those who discuss with their husbands were 6.53 times more likely to use implants contraceptive than those women do not discuss with their husbands (AOR 6.53, 95% C.I 3.10-13.77). Married women who had income were 2.74 times more likely to use implants contraceptive than those who have not income (AOR 2.74, 95% C.I 1.26-5.95) and the women who have more than five children were 5.54 times more likely to use implants contraceptive than those women who have less than five children (AOR 5.54, 95%CI

Variable	Frequency	Percent (%)
Ever used Implant contraceptive utilization(N=635)	Yes	115
	No	520
Current use of implant contraceptive (N=635)	Yes	96
	No	539
Current been used of implant contraceptive (N=96)	Implanon	51
	Sino-Implanon	29
	Jadelle	16
	Prevention of unwanted pregnancy	6
Purpose of using implant contraceptive (n=96)	Spacing	75
	Limiting	15
Reason for discontinue implant use(n=19)	Menstrual abnormalities	13
	Weight loss	9
	Desire more child	6

**Table 5:** Percentage of ever heard, knowledge, source of information, discussion with husband, main decider, husband support and utilization of implant contraceptive in married women in East Badewacho woreda march 2014.

Variable	Frequency	Percent (%)
Reason for not using any type of implant contraceptive		
Fear of implant removal	347	54.6
Fear of side effect	314	49.4
Desire for more children	305	48
Husband disapproval	231	36.4
Fear of child death	196	30.9
Lack of knowledge	153	24.1
To replace died children	86	13.5
Relatives happy with many children	65	10.2

**Table 6:** Percentage of never used, of implant contraceptive in married women in East Badewacho woreda march 2014.

Variable	Frequency	Percent (%)
Mentioned source of Implant contraceptive	Hospital	32
	Health center	434
	Health post	336
	Private clinic	3
	Adevantage of implant contraceptive	
	To space family size	459
	To avoid unwanted pregenancy	375
	To limitfamily size	288
	To delay mistimed pregenancy	238
Married women disscussed with husband	Yes	286
	No	45
Married women disscussed with health worker	Yes	326
	No	309
Married women disscussed with health extension	Yes	419
	No	216
Married women disscussed with health Development army leader	Yes	252
	No	383

**Table 4:** Percentage of ever heard, knowledge, source of information, discussion with husband, main decider, husband support and utilization of implant contraceptive in married women in East Badewacho woreda April 2014.

2.47-12.39) which has a significant association with the use of implants contraceptive (Table 7).

Those who had discussed with health development army leaders were 3.29 times more likely to use implant contraceptives than those married women who do not discuss with health development army leaders (AOR 3.29, 95% C.I 1.77-6.11). Those women who discuss with health workers were 2.53 times more likely to use implants contraceptive than those women do not discuss with health workers (AOR 2.53, 95% C.I 1.35-4.76) (Table 8).

## Discussion

The result of this study shows that 84.3% of the married women heard about implant contraceptives, which is higher as compared with findings of three studies conducted in Ethiopia before: A study conducted in Mekelle town, Jinka and Butajira [16-18]. From the total participant only 96(15.1%) of participants were currently using implant contraceptive methods. This finding was almost all similar with the study obtained from married women of reproductive age group that was conducted in Hawassa city i.e. 61(14.3%) are used implants contraceptive [13]. However, which is higher than the prevalence of implants contraceptive reported from five studies, EDHS2011 (3%), Mekelle town (7.5%) Jinka (7%), Butajira (5%) and also facility based study in Guatemala shows that the utilization rate of the implant contraceptive methods was 8% [16-20]. In this study, the main reasons complained by the married women for not using implant contraceptive methods were, fear of implant contraceptive removal 54.5%, fear of side effect (49.4%), desire to more children (48%), husband disapproval



Variable	Implant contraceptive use		COR(95%CI)	AOR(95%CI)	
	Yes(%)	No(%)			
Age in year	≤ 30	18(5.9)	287(94.1)	1	
	≥ 31	78(23.6)	252(76.4)	4.94(2.88,8.47)***	3.01(1.45,6.26)**
No. of living children	1-4	13(8.1)	274(91.9)	1	
	≥ 5	83(14.3)	254(85.7)	6.63(3.75-12.66)***	5.54(2.47,12.39)***
Married women those who have income	No	73(13)	488(87)	1	
	Yes	23(31.1)	51(68.9)	3.02(1.74,5.23)***	2.74(1.26,5.95)*
Joint decision for implant contraceptive	Self/husband	15(5.3)	267(94.7)	1	
	Both together	81(22.9)	272(77.1)	5.3(3, 9.43)***	5.65(+2.78,11.51)***
Husband approval on implant contraceptive	No	29(16.4)	300(83.6)	1	
	Yes	67(21.9)	239(78.1)	2.9(1.82,4.63)***	3.07(1.64,5.74)***
Discussion with husband on implant contraceptive	No	14(4.9)	272(95.1)	1	
	Yes	82(23.5)	267(76.5)	5.97(3.30,10.78)***	6.53(3.10,13.77)***
Marital Duration in year	≤ 10	20(6.9)	268(93.1)	1	
	≥ 11	76(21.9)	271(78.1)	3.76(2.23, 6.33)***	2.12(0.77,5.85)

**Table 7:** Factors associated with the use of implant contraceptives among currently married women of reproductive age (18-49) group in East badewacho woreda, March 2014.

Exposure variable	Implant Contraceptive use		COR(95%CI)	AOR(95%CI)	
	Yes (%)	No (%)			
Listening radio	No	75(16.1)	392(83.9)	1	
	Yes	21(30.9)	47(69.1)	2.34(1.32,4.13)*	1.5(.66,3.42)
Discussed with health workers	No	23(11)	186(89)	1	
	Yes	73(22.4)	253(77.6)	2.33(1.41,3.87)**	2.53(1.35,4.76)**
Discussed with health Extension workers	No	10(8.6)	106(91.4)	1	
	Yes	86(20.5)	333(79.5)	2.74(1.37,5.46)*	1.94(0.87,4.32)
Discussed with health Development army leader	No	26(9.2)	257(90.8)	1	
	Yes	70(29.2)	182(70.8)	3.80(2.33,6.2)***	3.29(1.77,6.11)***

**Table 8:** Association of exposure variable with the use of implant contraceptives among currently married women of reproductive age (18-49) group in East badewacho woreda, March 2014.

(36.4%), fear of child death (30.9%) and lack of knowledge (24.1%). Another study conducted in Goba town reveals 27% of the married women believe that implants insertion and removal is very painful. Another study conducted in Keniya shows that afraid of insertion/removal were 10.3%, afraid of side effect 24.5%, and lack of information about implant contraceptive methods 13.1% [16,21]. Large proportions of married women use implant contraception for child spacing (78.1%) than permanent limitation for number of children (15%). This is almost similar with the study conducted in mekelle town using LAPM contraception for child spacing (74%) than permanent limitation for number of children (17%). On the other hand, study in Nigeria indicates that 30% of women contraception for child spacing versus 70% uses it for permanent limitation for number of children [16,21]. This influence is correlated to the fact that large number (48%) of the married women having an interest/desire of child for the future.

Child spacing was the main reason for women to use implants contraceptive. On the other hand the need for more children was the main reason for not using implant contraceptive methods. This finding is similar with the study conducted in northwest Ethiopia and Sudan, Bangladesh and Pakistan [22-25]. Women's internal motivation to achieve their child spacing goal could be the possible reason for higher level of contraceptive use.

According to the result of this study, decision of using of implant contraceptive was mainly made by both partners together is about 353 (55.6%), about 349 (55%) have discussed with their husbands, 326 (52.3%) of the respondents have discussed with health worker about implant contraceptives, and also 296 (46.6%) of the respondents

responded that their husbands approve using implants contraceptive use. This is slightly different from the study that was conducted in Goba town, it shows that 445 (60.8%) of the respondents have discussed with health professionals about long acting contraceptives, 179 (71.3%) have discussed with their husbands, 496 (67.6%) of the participants responded that their husbands/partners approve using long acting contraceptives. The decision of using contraceptive was mainly made by both partners together is 474 (64.6%) [26]. This might be due to the difference in resident of the study participants, availability of urban health extension workers, continuous advertisement of the implant contraceptives through mass media in urban area and also increasing the choice of varieties of implants contraceptive may increase the opportunity to use implants contraceptive use. Married women who had more than 5 children were almost 5.54 times more likely to use implants contraceptive as compared with women who had less than four children. This finding is similar with previous reports from Bangladesh, Pakistan, and which say that as the number of living children increases the use of implant contraceptive will increase [22,23]. Married women who reported to their husbands approve their use of implants contraceptive were 3.07 times more likely to use implant contraceptive than those who reported disapprove of the use of implants contraceptive (AOR 3.07, 95% C.I 1.64-5.74).

In conclusion, implant contraceptive utilization was high in the woreda as compared to other methods. Joint decision, joint discussion, discussed with health workers and health development army leaders, husband approval of contraceptives use were significantly associated with the use of implants contraceptive. Therefore, woreda health office and concerned bodies should focus on couple's communication, male

involvement and community conversation with health workers and health development army leaders such that they are considered as the vital roles to maximize the implants contraceptive utilization.

Therefore, based on the finding of this research work, the following recommendations have been made.

- MOH, RHB, zonal health department and woreda health office should focus on economic activities which engage married women in income generating activities to earn income.
- To enhance implant contraceptives utilization at each level, husband involvement should be considered. Hence, governmental and non-governmental organizations, health facilities and other stakeholders should ensure married couple's discussion and sustained advocacy for use of implant contraceptive methods.
- Woreda health office and other stakeholder should encourage discussion with health worker, health development army leaders and married women with their husbands.
- Married women should be initiated for early use of implant contraceptive by health extension workers, health professionals, health development army leaders and by other concerned bodies.
- To increase implants contraceptive utilization, family planning programmers, MOH, RHB, zonal health department, woreda health office, and other stakeholders should train an adequate number of service providers and health extension workers in safe removal of the implants contraceptive as timely as possible.
- The service providers should advocate the minimal risk or side effects that associating with implants contraceptive methods so as to mitigate the health problems and maternal health suffers which is related with unwanted pregnancies.
- Further research is needed to identify the extent of implants contraceptive use at different population groups including unmarried women and the urban populations.

## Conflict of Interest

The authors declare that we have no conflict of interests.

## Author's Contribution

Biruk Elias, wrote the proposal, participated in data collection, analyzed the data and drafted the paper. Tesfahun Hailemariam participated in the preparation of the manuscript and approved the final manuscript with some revisions.

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