

# Assessment of Utilization of Long Acting Family Planning Methods in Public Health Facilities of Kebena Woreda, Gurage Zone, South West Ethiopia, 2018

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## Abstract

**Background:** The implementation of family planning program need standardized and quality FP service provision at all levels of health system. Yet there is shortage of resources and issues in quality family planning services problems in Ethiopia. Long acting family planning methods can effectively prevent unwanted pregnancy for at least three years. Assessment on utilization of long acting family planning methods is important to increase service quality and its utilization. **Objectives:** To assess the utilization of long acting family planning methods in Kebena woreda, Gurage zone, south west Ethiopia, 2018. **Methods:** facility based crossectional study design was conducted in Kebena woreda from Mar.20 to Apr.20 /2018. The study was conducted to assess availability of resources, the compliance of service provider to standard guidelines and utilization of long acting FP services. The data were collected from 12 health facilities, 417FP clients, 45 observation sessions and from 13 key in formants. The qualitative data were analyzed manually using thematic and content based and the quantitative data was entered into Epi-data v3 and exported to SPSS v21.0 for analysis. Multiple logistic regression analysis was done to determine factors associated with long acting FP methods utilization. **Results:** The utilization of LAFP methods was 31.7% in Kebena Woreda. Having radio/television, number of children, discussing with husbands, explaining about implant, used information education communication material at discussion and counseling on follow up were significantly associated with LAFP methods utilization.

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**Conclusion and recommendations:** Overall implementation of FP program good but the utilization of LAFP methods poor. Kebena Woreda health office should work for availability of basic infrastructures like separate family planning service provision rooms and water supply and light source for health facilities and should conduct program based supportive supervision to health facilities.

**Keywords:** Family planning; Utilization of long acting family planning methods; Kebena woreda; Gurage zone.

## **1. Introduction**

### **1.1. Background**

Family planning program is one of health service provided by health system, enabling the individuals and couples to plan and get their desired number of children and the spacing and timing of their births(1). Increasing access to and use of family planning [FP] has valuable contributions to achieving the newly established Sustainable Development Goals [SDGs](2). Increased family planning services plays an important role in prevention of unplanned pregnancy and its adverse consequences like prevention of HIV/AIDS and other sexually transmitted diseases[STI](1). It is used for controlling high population growth and also contributes to reductions in maternal and child mortality (3; 4). In 2017, globally about 142 million of married or in union women want to avoid pregnancy but not using contraception methods. And also only 58% of married or in union women of reproductive age were using modern contraception. Yet, contraceptive use was much lower in Africa 36% compared to the other major regions in the world. The changes have been more gradual in Africa, where contraceptive prevalence increased from 25% in 2000 and reached 36% in 2017(5). Availability of all the necessary resources, variety of choice, supplies and equipments are known to increase the continuation and retention of family planning services(1). Long acting family planning methods can effectively prevent unwanted pregnancy for at least three years (6). Ethiopian Demographic and Health Survey [EDHS 2016] revealed that, in Ethiopia 36% married women want to wait at least 2 years and 37% of currently married women want no more children or want to be sterilized. There is a large difference by region in desire to limiting childbearing; the proportion of married women who want to limit childbearing but not use contraceptive is 21% in SNNPR(7).In SNNPR the utilization of modern contraceptive showed greatest increase between 2000 and 2011 by 32% (8). By improving the implementation status of FP program FMOH targeted to increase significantly in contraceptive prevalence rate [CPR] from the 42% to 55% in 2020. So it requires intensified support for FP service implementation (9).

### **1.2. Statement of the problem**

In 2015, worldwide about 214 million women had unmet need for contraceptive use(10). In the other hand, many users of contraceptives who lack quality of services became unsatisfied with their method, discontinue and leading to unintended pregnancy(11). World health organization [WHO] estimated that in 2015, 216/10000 women die every year in each country due to pregnancy related factors in different countries(12). Availability of quality FP service is still a challenge in Ethiopia where the unmet need for currently married women about 22%(7). Despite the effectiveness the acceptance and utilization of long acting family planning[LAFP] methods

were very low in many developing countries including Ethiopia(13). In 2016, LAFP methods utilization in Ethiopia was 10% and likewise it was 10% in SNNPR too(7).The study conducted in Mekele city indicated that the acceptability of long acting reversible contraceptive was 16.4% in 2013(14). Therefore, assessment on implementation status of FP program is important to increase service quality and utilization of services. Moreover, this study uses as new knowlegde generation and program improvement purposes. The findings of this study can be used by local planners and decision makers by improving the quality FP services and also serve as a base line data for future researchers to conduct further studies. The objective of this study was to assess the utilization of LAFP methods and to identify factors that affects utilization of LAFP methods in public health facilities of Kebena woreda, Gurage zone, south west Ethiopia, 2018.

## **2. Research Methods and Materials**

### **2.1. Study area**

Kebena Woreda is one of the Woreda in Gurage zone which is found in SNNPR, Ethiopia. It is located 154km far from Addis Ababa and 286 km far from the capital city of SNNPR [Hawassa]. The Woreda has 23rural kebeles&1 urban kebele. It is bordered by Gedebano Gutazer Wolene and MuhernaAklil Woredain the east; with Oromia region in north, Abeshge Woreda with west, and Cheha woreda with south direction (15). The Woreda has 3 HCs, 23 HPs, 32 HEWs, 90 health sector staffs and in the Woreda there is no private HF (16).

### **2.2. Study design and Period**

Facility based cross sectional study design involving both quantitative and qualitative methods was used. The study was conducted from Mar.20 to Apr.20/2018.

#### **2.3.1 Dependent variable**

- Utilization of long acting family planning methods

#### **2.3.2. Independent variables**

Socio demographic characteristics

- Age
- Marital status
- Occupation
- Educational status
- Parity
- Number of live children
- Information on LAFP methods

Service delivery related factors

- Counselling practice of health professional

Availability related factors

- Availability of all family planning contraceptive choices
- Availability of trained service provider on LAFP methods

## ***2.4 Populations and sampling***

### ***2.4.1. Source population***

- All females of reproductive age who were using FP services and all documents of FP service provision [registers, reports and documents] in Kebena woreda.

### ***2.4.2. Study population***

- All FP users who were attending at public health facilities during the time of data collection and FP program related documents in 2010 EFY.

### ***2.4.3. Sample size***

For health facilities: - all three functional HCs and 40% of 23 HPs which is 9 health post were included. Exit interview: - The sample size for individual client exit interview was determined using single population proportion formula. Using 95% confidence interval and 5% margin of error and P is taken 50% because there is no previous study related to LAFP methods utilization in study area. Based on these assumptions the actual sample size for the study was computed using the formula for single population proportion

$$n = [Z_{\alpha/2}]^2 P [1-p] / d^2$$

Where, n= sample size,  $Z_{\alpha/2}$  = Critical value = 1.96, P = 0.5, d = precision [marginal error] = 0.05,

$$\text{Then } n = \frac{[1.96]^2 [0.5] [0.5]}{[0.05]^2} = 384$$

By considering 10% non-response rate = 38 added; final sample size for client exit interview were 422 clients. Sample size for observation: For observation of client-providers interaction in FP service provision 15 service providers were targeted while they were providing the FP service; for each service provider 5 clients were observed. Total sample size for observation = 15 service provider X 5 clients observed = 75 observations. Resource inventory: An inventory of all necessary resources for FP service provision was conducted in all 12 HFs. In-depth interview: Thirteen service providers were interviewed based on their having rich information and experience on FP implementation.

## **2.5. Sampling procedure/technique**

For health facilities: simple random sampling technique was used to get 9 HPs among 23 functional HPs. For client exit interview: Consecutive clients who visited the selected HFs during the data collection period were interviewed; the first client was selected at the first day of data collection, for non-respondent of interview the next willing client was interviewed until the reach of the proportionally allocated sample size obtained from the targeted health facility. In-depth interview: key informants were selected purposely based on their experience and rich information on FP program to get sufficient information about the program. For resource inventory: supplies and required equipments, human resources and facilities amenities were inventoried. Observation: For each service provider 3 observations at morning and 2 observations at afternoon were conducted at data collection time.

## **2.6. Inclusion and exclusion criteria**

All modern FP services users who were aged greater than 18 years and willing to participate in this study were included. But FP user who came again for service or follow up at study period were excluded and also clients who take combined oral contraceptive for treatment purpose were excluded.

## **2.7. Data Collection**

### **2.7.1 Development of data collection tools**

The data collection tools developed after reviewing national FP standard guideline and different literatures.

### **2.7.2. Data collectors**

Four level IV diploma clinical nurses with  $\geq 2$  years' experience on FP service provision and having training on FP were recruited for client exit interview, 1 Bsc mid wife nurse who had trained on comprehensive FP service and with previous experience on data collection was used for observation of client provider interaction, document review and resource inventories were done by one Bsc nurses and also one general supervisor of master degree holder in public health were recruited.

### **2.7.3. Data collection field work**

Data were collected from each study HFs through clients exit interview, observation, document review, resource inventory and in-depth interview of service providers and program personnel's. Data completeness were checked daily base, continuous supervision was done by supervisor and principal evaluator, notes were taken at in-depth interview and recorded voices were kept confidential.

## **2.8. Data management and analysis**

### **2.8.1. Data entry**

Quantitative data were entered to Epi-data version 3 and checked for completeness, edited, coded and then exported to SPSS version 21.0.

### ***2.8.2. Data quality assurance***

Data quality assurance was done at different stages of the study; questioners for exit interview was pre tested 5% [21] of the sample size in similar health facilities outside study area and corrections were made accordingly, training for data collectors were done, the first 2 observations from each observed service providers were dropped from analysis to control Hawthorne effects, continuous supervision during data collection was made, data completeness & consistency was checked and early correction was made to insure data quality.

### ***2.8.3. Data Analysis***

Quantitative data were analyzed using SPSS v.21. Descriptive statistic was carried out to compute the different frequency, percentage and means of variables. Binary logistic regression was used to determine the association between outcome variable and independent variables. And those variables which showed statistical significant value [ $p < 0.05$ ] on Binary logistic regression were taken in to multiple logistic regression analysis to see their effect by avoiding possible confounders and p-value less than 0.05 were considered statistically significant. For Qualitative data; the recorded audio data were transcribed to word/written files. And the transcripts were compared to field notes. Finally the transcribed data were translated to English. The qualitative data were analyzed manually by summarizing into key thematic area and presented as a narrative summary and used as complementarily to assess different aspects of the FP service provision.

## ***2.9. Ethical Consideration***

Ethical approval letter was obtained from the ethical board of Jimma University health institute. Agreement letter was received from Kebena woreda health office distributed to the concerned HFs. Informed verbal consent were obtained from each interviewee, observed clients and observed service providers at data collection time. Also codes were used instead of names on questionnaires to maintain confidentiality.

## **3. Results**

### ***3.1. Background characteristics of the study population***

#### ***3.1.1. Study population for observation and in-depth interview***

The FP service provisions were observed for 15 FP service providers [6 midwife nurses, 9 HEWs] while they were providing FP services. For each 15 service providers 3 client provider interactions total 45 observations was presented in this study. Resource inventory was conducted in 12 public health facilities [3 HCs and 9 HPs] of Kebena Woreda and supplemented by in-depth interview. Thirteen purposely selected individuals from study facilities were interviewed.

### 3.1.2. Socio-demographic characteristics of client exit interview respondents

A total of four hundred seventeen FP service users from twelve FP service delivery points were interviewed, giving 98.8% response rate. Among respondents majority two hundred eighty nine [69.3%] were repeat clients. The mean age was 29.9 SD + 5.33years old with range between 19-47 years. The majority of participants 274[65.7%] were between 25-34 years old. Three hundred ninety six [95%] respondents had children, out of these 125[30%] had 1-2 children, others 271[65%] had 3 and above. And also 288[69.1%] respondents were currently with breast feeding at the time of data collection. The respondents educational status was 134[32.1%] were not educated, 110[26.4%] can read & write, 119[28.5%] were 1-8 grade education and others 56[12.9%] were grade 9 completed and above. Majority of contraceptive users 327[78.4%] were Muslim, 69[16.5%] Orthodox Christian and others were Protestant Christian. Regarding to occupation majority three hundred two [72.4%] housewife, 81[19.4%] merchants, 28[6.7%] Governmental employed and 6[1.4%] were unemployed. [See Table 1]

**Table 1:** socio-demographic characteristics of respondents in FP services users in Kebena woreda ,june 2018

#### Demographic variables [n=417]

| Variables                       | Category                      | Frequency[n] | Percentage [%] |
|---------------------------------|-------------------------------|--------------|----------------|
| Age                             | 19-24                         | 63           | 15.1           |
|                                 | 25-34                         | 274          | 65.7           |
|                                 | ≥35                           | 80           | 19.2           |
| Religion                        | Muslim                        | 327          | 78.4           |
|                                 | Orthodox                      | 69           | 16.5           |
|                                 | Protestant                    | 21           | 5.0            |
| Marital status                  | married and live together     | 380          | 91.1           |
|                                 | married but not live together | 37           | 8.9            |
| Parity                          | Yes                           | 396          | 95.0           |
|                                 | No                            | 21           | 5.0            |
| Currently breast feeding        | Yes                           | 288          | 69.1           |
|                                 | No                            | 129          | 30.9           |
| Educational status              | With no education             | 134          | 32.1           |
|                                 | read and write                | 110          | 26.4           |
|                                 | primary education[1-8]        | 119          | 28.5           |
|                                 | secondary education [9-12]    | 31           | 7.4            |
|                                 | above twelve                  | 23           | 5.5            |
| Occupation                      | House wife                    | 302          | 72.4           |
|                                 | Merchant                      | 81           | 19.4           |
|                                 | Gov. employed                 | 28           | 6.7            |
|                                 | Unemployed                    | 6            | 1.4            |
| Previous exposure to FP methods | New                           | 128          | 30.7           |
|                                 | Repeat                        | 289          | 69.3           |

### 3.2. Availability of resources to provide family planning services

#### 3.2.1. Availability of trained service providers

According to findings from facility inventory there were 24 service providers involving fully in providing FP services, among all 24 FP service providers 17 [70.83%] services providers had got training on comprehensive FP services, 20[83.3%] have implanol insertion and only 6 [25%] have implanol insertion with removal and IUCD insertion with removal respectively. This finding was supported by key informants: a 6 years experienced service provider said that “....the HEWs refer the clients for implanol removal and for IUCD insertion to nearest HCs/hospitals when needed”. [FSP1] All interviewed service providers indicated that there is gap in training for LAFP methods especially for IUCD insertion & removal, implanol removal and for permanent FP methods. One 8 years experienced midwife nurse said “....in the health facilities we have at least one trained HEW for implanol insertion in health posts and in HCs at least two midwife nurses trained on implanol insertion and removal and one trained health worker in IUCD method and no trained health professional for permanent FP service provision”. [FSP6]

### 3.2.3 Availability equipment and commodities

Facility audit [inventory] was conducted and different related documents and bin cards were reviewed retrospectively for the last six months during the data collection period by using structured checklist and filled after observation of documents and available equipment. In-depth interview with key service providers in Kebena Woreda selected health facilities and Kebena Woreda health office was conducted to be used as supplementary evidence for this study. [See table 2]

**Table 2:** Availability of family planning services equipments and commodities in Kebena woreda ,2018

| No | Types of equipment & supplies [n=12]                                      | Health facilities have equipment |
|----|---|----------------------------------|
| 1  | Sterilizer  | 12[100%]                         |
| 2  | Blood pressure apparatus  | 12[100%]                         |
| 3  | Weight Scale  | 11[91.6%]                        |
| 4  | Flash light   | 8[66.7%]                         |
| 5  | Uterine sound[n=3]  | 3[100%]                          |
| 6  | Speculum[n=3]   | 3[100%]                          |
| 7  | Scissors  | 12[100%]                         |
| 8  | Tenaculum   | 3[100%]                          |
| 9  | Disposable gloves   | 11[91.6%]                        |
| 10 | Thermometer   | 11[91.6%]                        |
| 11 | Syringe with Needle   | 12[100%]                         |
| 12 | Sterile gloves  | 7[58.3%]                         |
| 13 | A set of alligator forceps, sponge holding ,forceps ,scalpels and sutures | 6[50%]                           |
| 14 | Needle holder   | 7[58.3%]                         |
| 15 | Retractor[n=3]  | 3[100%]                          |
| 16 | Antiseptic solutions  | 11[91.6%]                        |
| 17 | Iodine  | 11[91.6%]                        |
| 18 | Xylocaine or lidocaine  | 12[100%]                         |
| 19 | Sharps container for used sharps  | 12[100%]                         |
| 20 | Plastic buckets or container for decontaminants                           | 12[100%]                         |
| 21 | Instrument tray   | 11[91.6%]                        |
| 22 | Examination table or coach  | 12[100%]                         |

Among 12 HFs there were only 4[33.3%] have separate FP service provision room to insure the confidentiality. Majority 8[66.7%] HFs provides FP services as integrated service in MCH room. Majority 10[83.3%] HF



provides the service at good examination room having free space and well screened to maintain privacy at examination process.

Five interviewed service providers raised the same idea to keep the availability of equipment, supplies and contraceptives; there is strong internal facility request and reporting system to monitor supplies chain management.

When we come to availability of light and water supply among 12 HFs only 1 health facility had water supply and 4[33.3%] HFs have light [solar or electric].

This was supported by key informants responded that they were facing difficulty to full fill infection prevention at service provision because of no water and light supply.

Additionally one 8 years experienced mid wife nurse said that “...we have great shortage for water and light supplies in our health facilities”. [MSP2]

And Female 4 years experienced service providers said that “....we avail water for hand washing and infection prevention by fetching water from other area by plastic “jerikan” ”. [FSP10]

#### **3.2.4. Availability of contraceptive choice**

All FP service provision rooms had oral contraceptive pills, injectables and impanol as needed and condom method was available in 50% HFs. But only one third [33.3%] of HFs had IUCD method of choice. On other hand other modern FP methods like permanent FP services, spermicidal and diaphragm methods were not available. As evidenced from store release and bin cards no stock out occurred for pills, implants and condom methods. But there was once stock out for ten days was occurred in two HFs for injectable method. Additionally in all HFs spermicidal, diaphragm and IUCD methods are stock out for long period of time.

Female 7 years experienced mid wife nurse said “in our health facilitieswe provide different types of family planning methods of choice like pills, injectables, implants, IUCD and condom as needed”.

### **3.3. compliance of family planning service provision**

#### **3.3.1. Counseling service of family planning program**

Accordingly among observed 85% new and 96.7% of repeated clients were counseled on rapport building [showed respect ,offered seat, introduced and asked the purpose of the visits ] according to national guidelines. During the counseling process 60.83% of new clients and 91.33% repeated clients were counseled on exploration of client’s interest by assessing the client’s knowledge about FP, reproductive history, risk of HIV and STI, possible medical conditions and rule out pregnancy. When we look counseling process of decision making component of counseling about 88% of the new clients and 96.7% of repeated clients were counseled for decision making to use FP methods. And also implementation component of FP services counseling were

observed for service providers counseling process including identifying barriers to FP, assuring methods implementation, exploring and linking with other services. By observation we found that 100% of new clients and 78.9% of returning clients were counseled on implementation component of family planning counseling's. [See table 3&4]

**Table 3:** Observation results of FP counseling process for new clients in Kebena woreda,2018

| No                      | Did service provider[n=15]   | Compiled        | Not compiled |
|-------------------------|--|-----------------|--------------|
| <b>Rapport building</b> |  |                 |              |
| 1                       | Greet clients with respect and offered seat  | 15[100%]        | 0[0%]        |
| 2                       | Make introduction  | 14[93.3%]       | 1[6.7%]      |
| 3                       | Assured confidentiality and privacy  | 12[80%]         | 3[20%]       |
| 4                       | Explain the need about sensitive issues  | 10[66.7%]       | 5[33.3%]     |
| <b>Average index</b>    |  | <b>85%</b>      | <b>15%</b>   |
| <b>Exploration</b>      |  |                 |              |
| 1                       | Ask the reason for the visit   | 14[93.3%]       | 1[6.7%]      |
| 2                       | Explore clients knowledge about family planning methods & fills the knowledge gaps | 12[80%]         | 3[20%]       |
| 3                       | Ask reproductive history & fertility plan  | 10[66.7%]       | 5[33.3%]     |
| 4                       | Explore clients circumstances & relationship                                       | 7[46.7%]        | 8[53.3%]     |
| 5                       | Explore issues on sexual life  | 3[20%]          | 12[80%]      |
| 6                       | Asked about STI /HIV knowledge & help to perceive risk                             | 6[40%]          | 9[60%]       |
| 7                       | Rule out pregnancy   | 14[93.3%]       | 1[6.7%]      |
| 8                       | Screen clients for possible medical conditions                                     | 7[46.7%]        | 8[53.3%]     |
| <b>Average index</b>    |  | <b>60.8%</b>    | <b>39.2%</b> |
| <b>Decision making</b>  |  |                 |              |
| 1                       | Eligibility  | 15[100%]        | 0[0%]        |
| 2                       | Side effects   | 14[93.3%]       | 1[6.7%]      |
| 3                       | HIV /STI risk protection   | 10[66.7%]       | 5[33.3%]     |
| 4                       | Potential barriers   | 12[80%]         | 3[20%]       |
| 5                       | Encourage to make decision on her self   | 15[100%]        | 0[0%]        |
| <b>Average index</b>    |  | <b>88%</b>      | <b>12%</b>   |
| <b>Implementation</b>   |  |                 |              |
| 1                       | Explain how to use method  | 15[100%]        | 0[0%]        |
| 2                       | Identify barrier to implement decision & develop strategy to overcome barriers     | 15[100%]        | 0[0%]        |
| 3                       | Make a follow up plan  | 15[100%]        | 0[0%]        |
| <b>Average index</b>    |  | <b>15[100%]</b> | <b>0[0%]</b> |

**Table 4:** Observation results of FP counseling process for returning clients in Kebena woreda,2018

| No                      | Did the service provider[n=30]  | Compiled           | Not compiled     |
|-------------------------|---|--------------------|------------------|
| <b>Rapport building</b> |   |                    |                  |
| 1                       | Greet clients with respect and offered seat   | 29[96.7%]          | 1[3.3%]          |
| <b>Average index</b>    |   | <b>29[96.7%]</b>   | <b>1[3.3%]</b>   |
| <b>Exploration</b>      |   |                    |                  |
| 1                       | Ask the reason for the visit  | 30[100%]           | 0[0%]            |
| 2                       | Ask about the current FP method   | 29[96.7%]          | 1[3.3%]          |
| 3                       | Confirm correct use of the method   | 28[93.3%]          | 2[6.7%]          |
| 4                       | Ask about any changes or problems   | 28[93.3%]          | 2[6.7%]          |
| 5                       | If any problem; Discuss on reasons of occurrence of problems and possible solutions                           | 22[73.33%]         | 8[26.67%]        |
| <b>Average index</b>    |   | <b>137[91.33%]</b> | <b>13[8.67%]</b> |
| <b>Decision making</b>  |   |                    |                  |
| 1                       | Identify the need of clients  | 29[96.7%]          | 1[3.3%]          |
| 2                       | Encourage to make her own decision  | 29[96.7%]          | 1[3.3%]          |
| 3                       | Help client identify what services she needs during this return visit   | 29[96.7%]          | 1[3.3%]          |
| <b>Average index</b>    |   | <b>87[96.7%]</b>   | <b>3[3.3%]</b>   |
| <b>Implementation</b>   |   |                    |                  |
| 1                       | Help client in implementation to continue the current method, switch another method or discontinue the method | 27[90%]            | 3[10%]           |
| 2                       | Make a follow up plan   | 30[100%]           | 0[0%]            |
| 3                       | Provide or refer to other service ,if applicable including STI/HIV  | 14[46.7%]          | 16[53.3%]        |
| <b>Average Index</b>    |   | <b>71[78.9%]</b>   | <b>19[21.1%]</b> |

### 3.3.2. Methods informed to clients during consultation

During this observation clients who received counseling and FP services were informed about other FP methods of choices. Accordingly among observed 45 clients provider interaction 24[53.3%] of clients were informed about pills, majority 42[93.3%]of clients were informed about injectables and 26[57.8%], only 10[22.2%] of clients were informed about implants and IUCD methods, respectively. During the consultation process the service providers did not informed about sterilization, spermicidal, diaphragm and condom methods.

### 3.3.3. Information given to clients during consultation

During the consultation process different information were provided to clients on key issues, STI including HIV/AIDS and follow up or revisit per the national guidelines. Accordingly 35[77.8%] of clients were informed about how to use the method provided, all clients on advantages, 42[93.33%] clients informed on disadvantages and 41[91.11%], 40[88.9%] of observed clients were got information from service provider on side effects and possibility of switching the method when needed. During the consultation FP service provision in our study area the service providers counseled 30[66.7%] of their clients for STI including HIV/AIDS. [See table 5]

**Table 5:** Observation result on information given to FP service users during consultation in Kebena woreda, 2018

| No  | Information given to clients [n=45]   | Serviceprovider given information |
|---|---|-----------------------------------|
| 1   | How to use method   | 35[77.8%]                         |
| 2   | Advantage   | 45[100%]                          |
| 3   | Disadvantage  | 42[93.33%]                        |
| 4   | Side effects  | 41[91.11%]                        |
| 5   | Possibility of switching  | 40[88.9%]                         |
| <b>Average index</b>  |   | 203[90.22%]                       |
| Did the service provider counselled the clients on STI including HIV/AIDS at service delivery point |   |                                   |
| 1   | counseling & testing for STI including HIV/AIDS at point of service provision | 30[66.7%]                         |
| <b>Average index</b>  |   | 30[66.7%]                         |
| <b>Did the provider discussed with follow up and revisit</b>  |   |                                   |
| 1   | Was the client told when to return for re supply                              | 44[97.8%]                         |
| 2   | Where to go for re supply   | 44[97.8%]                         |
| 3   | Did the provider give to the client written reminder                          | 38[84.4%]                         |
| <b>Average index</b>  |   | 126[93.3%]                        |

### 3.3.4. Medical History and Physical Examination

During the observation the observer critically observe the service provision at service delivery point by taking informed consent from both the service provider and clients. In the process of family planning service provision the service provider assured confidentiality by keeping visual and auditory privacy for 42[93.3%]. In the counselling process the service provider took the clients previous FP history from all 100% observed clients and asked about LMP date from 38[84.4%]. In case of medical examination the service provider took weight 34[75.6%], took blood pressure 36[80%], asked STI 22[48.9%] of clients and asked the client about any chronic illnesses from 23[51.1%] of clients.[See table 6]

**Table 6:** Observation result on physical examination and medical history taking for FP service users in Kebena woreda, 2018

| No  | Physical examination and medical history taken at counselling process [n=45]                       | Compiled   |
|---|--|------------|
| Did the service provider perform physical examination and taken medical history |  |            |
| 1   | Asked about contraceptive method previous history  | 45[100%]   |
| 2   | Asked about date of LMP  | 38[84.4%]  |
| 3   | Asked about unusual vaginal discharge/bleeding   | 27[60%]    |
| 4   | Asked about pelvic pain  | 22[48.9%]  |
| 5   | Take weight  | 34[75.6%]  |
| 6   | Take blood pressure  | 36[80%]    |
| 7   | Asked Sexual Transmitted disease problems /symptom   | 22[48.9%]  |
| 8   | Perform Physical examination   | 5[11.1%]   |
| 9   | Asked the client about any chronic illnesses [heart disease, Diabetics, HPN ,liver diseases etc. ] | 23[51.1%]  |
| Average index   |  | 252[62.2%] |

### 3.3.5. IEC materials used during consultation

Accordingly during observation the service provider used different types of IEC materials like flip chart 13[28.9%], brochures/pamphlets 1[2.2%], sample contraceptives 22[48.9%] and anatomical models 2[4.4%] were used by the service providers during FP service provision.[See table 7]

**Table 7:** Observation result on service providers used visual aid during consultation in Kebena woreda ,2018

| No   | IEC materials used during counselling process at service delivery point [n=45] | Yes       |
|--|--|-----------|
| Did the service provider used IEC materials during counselling process at service delivery point |  |           |
| 1  | Flip chart   | 13[28.9%] |
| 2  | Brochures/pamphlets  | 1[2.2%]   |
| 3  | Sample contraceptives  | 22[48.9%] |
| 4  | Anatomical models  | 2[4.4%]   |
| Average index  |  | 38[84.4%] |

### 3.3.6. Clinical procedure followed in family planning service provision

Among fourty five observations greater than three fourth 35[77.8%] were injectable and others were implanol insertion 10[22.2%] at service provision settings. Among injectables methods procedures for only 17[48.6%] the provider disinfect the injection sites, all 35[100%] new/sterile needle and syringe used, 34[97.1%] DIPO vial shaken before injection, 30[85.7%] allow client to self -dispersing instead of massaging and for all 35[100%]

the service provider dispose used needle and syringe to safety box. [See table 8]

**Table 8:** Clinical procedures followed for injectable at Kebena woreda ,2018

| No   | Clinical procedures for injectables [n=35]            | Yes               |
|--|---|-------------------|
| Did the service provider followed clinical procedures for injectable |   |                   |
| 1  | Injection site disinfected?                           | 17[48.6%]         |
| 2  | New/Sterile needle and syringe used                   | 35[100%]          |
| 3  | DEPO vial shaken before drawing in to Syringe         | 34[97.1%]         |
| 4  | Allow client to self -dispersing instead of massaging | 30[85.7%]         |
| 5  | Dispose used needle and syringe to safety box         | 35[100%]          |
| <b>Average index</b>   |   | <b>151[86.3%]</b> |

During observation time clinical procedures the data collector observed 10 implanol insertion procedures. Among 10 implanol insertion procedures the service provider kept client's privacy for 9[90%], for 8[80%]wash hands before procedure, for 9[90%] procedures the provider clean skin with antiseptic and also for all observed procedures the service provider given local anaesthetic, sterile procedure used, dispose the used materials in proper disposal container respectively. [See table 9]

**Table 9:** Clinical procedure followed for implant FP method in Kebena woreda ,2018

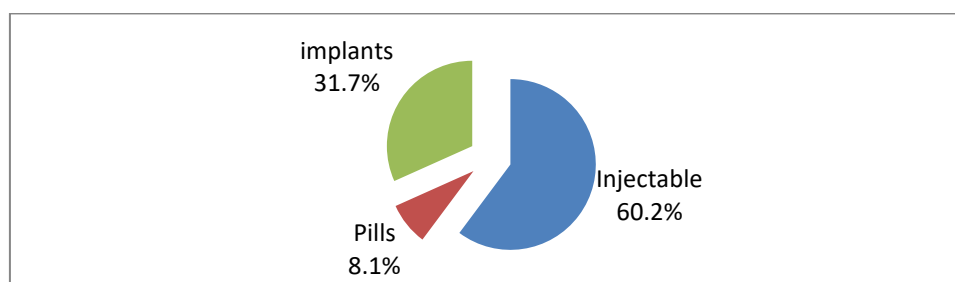
| No | Did the provider follow clinical procedure at implanol insertion[n=10]          | Yes      |
|----|---|----------|
| 1  | Client privacy kept   | 9[90%]   |
| 2  | Client informed   | 10[100%] |
| 3  | Wash hands before procedure   | 8[80%]   |
| 4  | Use sterile instruments   | 10[100%] |
| 5  | Clean skin with antiseptic  | 9[90%]   |
| 6  | Given local anaesthetic by sterile syringe and needle                           | 10[100%] |
| 7  | Sterile procedure used  | 10[100%] |
| 8  | Dispose the used syringe and needle ,gloves, gauze in proper disposal container | 10[100%] |

### **3.4. client exit interview results on utilization of long acting family planning methods**

#### **3.4.1. Utilization of family planning methods of choice used in Kebena Woreda**

Total 417 clients were interviewed from 12 HFs after FP services received. Accordingly the overall utilization of LAFP among the service users at data collection period was 132[31.7%]. Of all respondents majority FP methods used was injectable 251[60.2%], pills 34[8.1%] and others users were implant132[31.7%] during the study period no one utilized IUCD or permanent method[sterility]. In this evaluation research to assess utilization of FP methods in addition to client exit interview document review was conducted as a result the 2010 EFY HMIS report indicated that from nine months eligible 10056 the Woreda achieved 8270 in nine

months that contraceptive acceptance rate for specified year was 82.2%. [See figure 1]



**Figure 1:** Utilization of family planning methods in Kebena woreda ,2018

### 3.4.2. Information on long acting family planning methods among study participants

Out of 417 respondents most 337[80.8%] heard about LAFP previously. Of the long acting FP methods majority 335[99.4%] heard implant, 168[49.8%] IUCD and only 82[24.3%] heard about sterility previously. Of all respondents 410[98.3%] responded as they get their methods of choice. Almost three fourth of clients know other area where they can get family planning service. [See table 10]

**Table 10:** Family planning users previous information on LAFP methods in Kebena woreda ,2018

| No | Information on long acting family planning method | Yes        |
|----|---|------------|
| 1  | Do you heard about LAFP methods [n=417]           | 337[80.8%] |
| 2  | Heard implant[n=337]                              | 335[99.4%] |
| 3  | Heard IUCD[n=337]                                 | 168[49.8%] |
| 4  | Heard about Sterility [n=337]                     | 82[24.3%]  |
| 5  | Get their method of choice [n=417]                | 410[98.3%] |
| 6  | Known other area to get FP services [n=417]       | 313[75.1%] |

### 3.4.3. Consultation services for new & repeat FP service users

Majority 361[86.6%] clients feel about health care provider's respect to his clients [greeting, counseling, feedback receiving] was good and above. Of all study participants majority 375[89.9%] respondents got explanation on injectable and for pills 286[68.6%], for long acting FP methods clients got explanation on implanol 188[45.1%], for IUCD 125[30%] and only 54[12.9%] for sterility and for other methods condom, diaphragm and spermicidal methods explained by 12.2%, 6% and 4.3%, respectively.

The service providers used visual aids during counseling were 179[42.9%] of service users. Of all FP users the service provider described about possible side effect of FP methods 296[71%] , explained what to do if any problems raised before the next visit and told next appointment date for 381[91.4%]. Accordingly the 337[80.8%] respondents have planned to continue the methods they are currently using. [See table 11]

**Table 11:** Clinical responses on the service providers counselling practices in Kebena woreda, 2018

| No | Respondents [n=417]   | Yes        |
|----|---|------------|
| 1  | Does service provider demonstrate about FP methods by using IEC materials                     | 179[42.9%] |
| 2  | Does service provider describe possible side effects  | 296[71]    |
| 3  | Does service provider explain what to do if you experience any problems before the next visit | 278[66.7%] |
| 4  | Does health provider told about when to come to next or follow up visit                       | 381[91.4%] |
| 5  | Will you continue the method used today   | 337[80.8%] |

#### **3.4.4. Factor associated with Long Acting Family Planning status in Kebena Woreda**

In the study, husband know and agreement to use contraceptives, having radio/television, number of alive child, previous discussion with husbands, information about LAFP, Information about implant, information about IUCD, service provider's explaining about implant, service provider used IEC material at discussion with clients, counseling on follow up, counseling on side effects of FP methods were significantly associated with LAFP utilization in binary logistic regression.

Variables having significant association were further analyzed for multiple logistic regression analysis. In multivariable logistic analysis confirmed that having radio/television, number of alive children, previous discussion with husbands, service provider's explaining about implant, service provider used IEC material at discussion with clients, counseling on follow up if any problem happen were significantly associated with long acting family planning methods utilization in Kebena Woreda.

Women who have radio/TV in their house were identified as one of the major associated factors of utilization long acting family planning methods in the study and the result confirmed that women who had radio/TV were 5.485times more likely utilize LAFP methods than women who had no radio/TV in their house [AOR=5.485; 95% CI; 2.77, 10.836].

Women who have 3 and more children were 3.28 times more likely utilize LAFP than those who have less [AOR=3.275; 95%CI; 1.267, 8.467]. Clients having greater than 4 alive children were 8.46 times utilize LAFP methods [AOR=8.46; 95%CI; 3.418, 19.283] from the clients who have 2 and less children.

And also open discussion with their husbands/partners on family planning methods found to be one of the determinants of utilization of long acting family planning methods. Those women who had open discussion with their husbands 10.5 times more likely to utilize LAFP methods [AOR=10.5; 95% CI: 2.672, 41.273]. Service providers counseling practice was one determining factor to clients utilizing LAFP methods; in this case clients who got counseling/explanation on implant method were 21.8 times more utilize LAFP methods [AOR=21.8;95% CI: 10.415,45.427]. And clients who got counseled on to return when any problem happen were 6 times more likely utilize LAFP methods [AOR=6.01; 3.342,10.798].

The other significant factor which associated with long acting family planning was service providers practice



that using IEC material when counseling the FP service users ; the clients who got counseling with the use of IEC visual materials were 3.86 times more utilize LAFP methods from FP users who didn't get counseling with IEC materials [AOR=3.86;2.498,5.965]. [See table 12]

**Table 12:** Multivariate analysis for factors affecting utilization of LAFP methods in Kebena woreda,2018

| Variables                                    |                 | Utilized LA FP | Not utilized LAFP | p-value | COR [95%CI]         | AOR [95%CI]           |
|--|-----------------|----------------|-------------------|---------|---------------------|-----------------------|
| Have radio/TV                                | Yes             | 124            | 184               | .020    | 8.508[3.999-18.103] | 5.485[2.777-10.836]*  |
|  | No              | 8              | 101               |         | 1.0                 | 1.0                   |
| Number live children                         | 3 or 4 children | 35             | 115               | .014    | 2.179[1.293-3.671]  | 3.275[1.267-8.467]*   |
|  | > 4 child       | 59             | 62                | .000    | 3.127[1.859-5.258]  | 8.46[3.351-21.336]**  |
| Husband agree to utilize LAFP                | Yes             | 127            | 189               | .985    | 12.9[5.107-32.593]  | 8.118[3.418-19.283]   |
|  | No              | 5              | 96                |         | 1.0                 | 1.0                   |
| Heard about implant previous                 | Yes             | 72             | 96                | .088    | 1.362[0.878-2.113]  | 1.207[0.923-1.578]    |
|  | No              | 60             | 109               |         | 1.0                 | 0.886[0.746-1.052]    |
| Discussed FP with partner before             | Yes             | 130            | 229               | .013    | 15.89[3.816-66.207] | 10.5[2.672-41.273]*   |
|  | No              | 2              | 56                |         | 1.0                 | 1.0                   |
| Explained about Norplant by service provider | Yes             | 125            | 63                | .000    | 62.93[27.96-141.6]  | 21.8[10.415-45.427]** |
|  | No              | 7              | 222               |         | 1.0                 | 1.0                   |
| Explained IUCD by service provider           | Yes             | 85             | 40                | .814    | 11.08[6.796-18.054] | 4.23[3.167-5.636]     |
|  | No              | 47             | 245               |         | 1.0                 | -                     |
| IEC material used during counselling         | Yes             | 86             | 93                | .045    | 3.86[2.498-5.965]   | 2.486[1.84-3.359]*    |
|  | No              | 46             | 192               |         | 1.0                 | 1.0                   |
| counselled on follow up                      | Yes             | 117            | 161               | .030    | 6.01[3.342-10.798]  | 3.9[2.371-6.414]*     |
|  | No              | 15             | 124               |         | 1.0                 | 1.0                   |
| Service provider counselled side effects     | Yes             | 116            | 180               | .823    | 4.229[2.379-7.519]  | 2.964[1.838-4.780]    |
|  | No              | 16             | 105               |         | 1.0                 | 1.0                   |

\*\* [p-value <0.001] \*[p-value <0.05]

#### 4. Discussion

The socio demographic characteristics of respondents were more or less similar to other studies conducted in Areka town, Wonji hospital and Debretabore Town (17; 18; 19). Ethnic wise most of service users and

respondents were Kebena [58.3%] and followed by Gurage [25.2%], this was resulted from the fact that settlement is basing ethnicity in Ethiopia. Married and housewives was predominant service user in Kebena Woreda where by 91.1%, 72.4% respectively. Among service users 69.3% of them were returning clients and the rest 30.7% were new client for FP methods.

#### ***4.1. Utilization of long acting family planning methods in Kebena Woreda***

Long-acting reversible contraceptive methods in particular can considerably reduce the level of unwanted pregnancy as well as maternal mortality and morbidity more in developing countries (17).

Clients received different health information including available contraceptives of choice. Accordingly among 417 study respondents 375[89.9%] of clients got explanation on injectable, 286[68.6%] for pills, 188[45.1%] got explanation on implanol, for IUCD 125[30%] and only 54[12.9%] for sterility and for other methods condom, diaphragm and spermicidal methods explained by 12.2%, 6% and 4.3%, respectively. When we compare this result to other similar studies; the study Arbaminch hospital revealed that from study participants' implants 71.6%, Condom 74.5%, IUCD 7.95%, and Depo-Provera 60.41%, tubal ligation 38.85% get explained from service providers (20; 21). It differs from this study; the difference might be due to in urban setting the clients are more aware and utilize LAFP methods and the service providers over emphasize on injectable and implanol methods.

Explaining about all FP methods of choice for each client has great impact on clients' preference and optimal utilization and clearing misconceptions. In Kebena Woreda service providers over emphasize on long acting methods especially on implant methods and injectable methods. It is better to direct counselling and explaining about all types of long acting and permanent family planning methods.

To utilize long acting family planning clients knowledge and perception are very determinant factors (22). There for in this study clients knowledge and perceptions were assessed: as result out of 417 study respondents 167[40%] know that IUCD can prevent pregnancy for more than 10 years and 194[46.5%] know IUCD do not interfere with sexual intercourse and 170[40.8%] of the study participants didn't know IUCD not restricts normal routine activities.

This result is lower than similar study conducted in Adigrat Town showed that [83.3%] married women was aware of that IUCD can prevent pregnancies for 10 years, 68.8% of the married women were aware of that IUCD has no influence on sexual intercourse and it results in immediate pregnancies after removal (23). And another study conducted in Mizan Aman town showed about 57.8% of the married women were not agreed IUCD is good for female at risk of acquiring STI and better result in knowledge of clients from our study (24). This variation might be the respondents residence or sociodemographic characteristics and might be due to high media exposure in urban area.

And also majority of the study participants 310 [88.7%] had knowledge about implants can prevent pregnancy for 3-5 years and 251 [60.2%] of them know that after removal of implant fertility can immediately reversible. The result from the study conducted in Adigrat Town showed that for similar knowledge assessment 80% and

74.5% knew that implant can prevent unwanted pregnancy for 3-5 years and it needs small incision for insertion and removal respectively and about 72.1% of the married women knew that implants result in immediate pregnancy after removal and other community based study conducted in Mizan Aman town revealed that 74.85% of the study participants had knowledge about the notion that Implant prevents pregnancy for 3-5 years and among the study participants 68.8% had knowledge that after immediate removal of Implant (23; 24). The results of both studies slightly different from our study; this result variation could be due to difference in study setting.

Utilization of family planning methods is an important dimension of quality of family planning services provision. Accordingly the overall utilization of LAFP methods in the study area is **Poor**. Which is study found only 31.7% of respondent utilized LAFP methods in study period and all LAFP methods users were implant method users, no one utilized IUCD or permanent methods. This result is slightly higher than the study in Shashemene town utilization of long acting and permanent methods of contraception was found to be 28.4 %, Areka town the utilization of LARC was 29.7% of study participants and the study Arbaminch hospital utilization of long acting family planning methods was 22.9% (17; 25; 21). This can be due to similarity in facility based study.

And the study result quite higher than the study result from community based study done in SNNPR region found 2015 the utilization of LAFP methods was 17 % and the study conducted in Mizan Aman town in 2016 shown that the overall utilization of LAFP methods among the users was 18.2% (13; 24). This difference can be due to difference in community based study, study time and wider study area. Our study finding of LAFP method utilization is lower result than the study Adigrat town at 2015 resulted that the overall prevalence of long acting and permanent contraceptive methods was 37.3% (23). This difference in result of LAFP methods utilization might be due to time, study setting difference and also it might be due to difference in availability of necessary resources and compliance of service providers vary in different areas.

In this study all 100% long acting family planning users were implant users, no IUCD and permanent methods users found in this study. This result different from other study findings like in worldwide population fact in 2013 global female sterilization was used by 19% of women aged 15–49 years who are married. And it showed sterilization the most prevalent method in Latin America and the Caribbean 26%, with the highest prevalence found in the Dominican Republic 47% (26). Among LAFP methods IUCD and female sterilization method utilization is very low compared to this population fact report. The reason might be due to urbanization and the more developed countries know importance of IUCD and sterilization and also might be fear of hormonal methods; they might shifted to non hormonal family planning methods. And this finding compared to studies which are done in our country the result of this study different from study done Arbaminch town, Areka town, Shashemene town and Mizan Aman utilization of IUCD were 5.55%, 7.0%, 4.1% IUCD and 1.7% in addition in Shashemene town 0.3% were using tubal ligation (25; 17; 21; 24) respectively. This our study result is critical when we compare it; this big variation in IUCD and permanent FP methods utilization might be residence difference, lack of available trained human power for IUCD and permanent methods in our study area.

#### ***4.2. Factors affecting utilization of long acting family planning methods in Kebena Woreda***

In multivariable logistic analysis result having radio/television, number of live children, previous discussion with husbands, service provider's explaining about implant, service provider used IEC material at discussion with clients, counselling on follow up if any problem happen were significantly associated with long acting family planning methods utilization in Kebena Woreda. Discussion with partners was also found to be predictor of using LAFP methods. Respondents who discussed with their partners and women who had 3-4 children were predictor to use LAPMs in Hossana town. This is consistent with this study result. And deciding together with

## **5. Conclusion and Recommendations**

### **5.1. Conclusion**

This study result conclude that the FP service provision in public health facilities of Kebena Woreda need improvement in availing required equipment and resources to provide quality family planning services. The study found there was lack of some LAFP methods like IUCD contraceptive and permanent FP services provision; Shortage of basic infrastructures like separate FP service provision rooms, water supply and light source in health facilities and lack of program based supportive supervision were identified.

Most of the clinical procedures were performed as national family planning guide recommendation. Improvement needs in service providers explaining about all available contraceptive methods and exploring as issues related to sexual life and also at decision making.

Utilization of long acting family planning methods was low. Among long acting family planning methods IUCD contraceptive and permanent family planning methods utilization is critical in the study area. In multivariate analysis women having radio/television in their house, number of live children, previous discussion with husbands, service provider's explaining about implant, service provider used IEC material at discussion with clients, counseling on follow up were considered predictors for utilization long acting family planning methods in Kebena Woreda.

### **5.2. Recommendations**

The following recommendations produced by these particular findings to improve the implementation status of FP program in Kebena Woreda.

- Kebena Woreda health office should facilitate training for service provider on IUCD method and permanent family planning methods.
- Kebena Woreda health office should work for availability of basic infrastructures like separate FP service provision rooms, water supply and light source for health facilities.
- Continues program based supportive supervision should be done by zone health department and woreda health office to health facilities.
- Service providers should explain about all contraceptive methods of choice, advantages and side effects as well.

- Service providers should use visual IEC materials during the counselling time.
- Service providers should follow clinical procedures for all clients accordingly.
- Continuous health education should be given focusing on importance of LAFP methods by HEWs and by health professionals.
- We recommend further comprehensive studies focusing on other dimensions like client satisfaction and quality FP services.

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