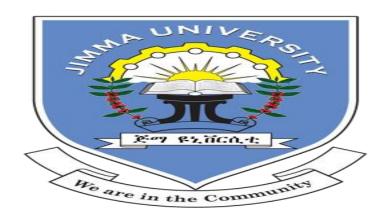
Willingness to Pay and Associated Factors for Injectable Contraceptive among Women of Reproductive Age in Harar Town, Eastern Ethiopia,



By: Nebiyu Sherefa (MLT)

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Jimma, Ethiopia

Willingness	to	Pay	and	Associated	Factors	for	Injectable	Contraceptive
among Won	ien	of R	epro	ductive Age	(15-49 Y	ears) in Harar '	Town, Eastern
Ethiopia,								

By:

Nebiyu Sherefa

Advisors:

- 1. Kora Tushune
- 2. Dejene Melese

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Jimma, Ethiopia

Abstract

Background: Ensuring modern family planning method is among the effective measures to prevent unwanted pregnancy which has an impact on maternal and child health. While the use of modern contraception specific to injectable in Ethiopia has grown and given incredible lifesaving benefits, family planning programme expenditure depends up on the support of those developmental partners.

Objective: The purpose of this study was to determine the willingness to pay and associated factors for injectable contraceptive among women of reproductive age in Harar town, Eastern Ethiopia.

Method: A community based cross-sectional study was conducted from January 1 to 15, 2018 G.C. About 843 women in reproductive age group selected using systematic random sampling technique. Data was collected via a face-to-face interviewer using a structured questionnaire. Single-bound dichotomous choice method was used to illicit the willingness to pay followed by open-ended questions. Data was entered in Epidata version 3.5.1, cleared and analyzed using SPSS version 20 statistical software. Bivariate and multivariable logistic analysis was done to see an association and factor influencing the dependent variable. (P-value < 0.05 with 95% CI level) was considered as a cut-off point for statistical significance.

Results: Most women (77.1%) were willing to pay 16 birr for injectable contraceptive per each dose. Multivariate analysis revealed that variables such as Women whose age was 15-19 year [AOR = 0.350, 95% CI: (0.133,0.916)] and those of 20-24 year old [AOR = 0.469, 95% CI: (0.229, 0.960)],women who attend Primary education [AOR = 2.156, 95% CI: (1.107, 4.199)] and Secondary & above [AOR = 1.983, 95% CI: (1.040, 3.782)], women whose household monthly income greater than 1500birr [AOR = 2.391, 95% CI: (1.206, 4.741)], women who were married [AOR = 2.690, 95% CI: (1.205, 6.008)], who had using injectable contraceptive for above two years [AOR = 2.372, 95% CI: (1.048, 5.366)] were significantly associated with WTP.

Conclusion & recommendation: Higher proportions of women in reproductive age group were willing to pay for injectable contraceptive. Policy-makers or planners should consider income, when making injectable contraceptive marketable goods. Health equity must be considered to include those unable/not willing to pay for the service.

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Acronyms and Abbreviations

CIP Costed Implementation Plan

DHS Demographic and Health Survey

FP Family Planning

FMoH Federal Ministry of Health

IUD Intrauterine Devices

SSA Sub Saharan African

RH Reproductive Health

UNFPA United Nations Population Fund

UK United Kingdom

USA United States of America

USD United States Dollar

WTP Willingness to Pay

WHO World Health Organization

CHAPTER ONE: INTRODUCTION

1.1 Background

Overpopulation has impact on social, economic and political aspects of societies as well as on state. In 2015 only 9% of world population lacks access to safe drinking water. Due to population growth, in 2030 it will rise to 50% of global population. The effect of overpopulation goes to global warming, more emergences of epidemic and pandemic diseases may encounter (1,2).

Every year 287,000 maternal deaths and many unintended pregnancy is reported, which can be prevented by family planning (FP). Family planning also contributes to women and girls healthy life. It has been identified by the World Health Organization (WHO) as one of the six essential health interventions needed to achieve safe motherhood by reducing maternal and child mortality and supporting to the achievement of other Millennium Development Goals and the current Sustainable Development Goals (3, 4, 5).

With some regional variation, the use of FP is increasing from time to time all over the world .In 1990 contraceptive prevalence was 54.8% and became 63.3% in 2010 G.C. Between 1990 and 2000 the annual growth rate was 11.2%. But after 2000 it was 3.4% and in 2015 the prevalence was 64%.

On the other hand unmet for FP lowered from 15.4% in 1990 to 12.3% in 2010 G.C. The 2015 United Nations Population Fund (UNFPA) data showed globally, an unmet need of contraceptive for married or in a union reproductive age group lowered to 11.9 percent which was 12.7 percent in 2000 G.C (6, 7).

In 1994, International Conference on Population and Development was conducted in Cairo. After the conference the use of contraceptive increased in many countries. Ethiopia, Lao People's Democratic Republic, Malawi, Rwanda and Zambia are among countries which showed at least 1.5 percentage increase every year from 1994 to 2015 (8).

The 2016 Ethiopian Demographic and Health Survey report shows among currently married women 36% of them are using any method of FP, which was 8% in 2000 and those among sexually active but unmarried women 58% of are using any method of FP. The most widely used

methods are injectables (23%), Implants (8%), IUD (2%) and Pills (2%). With the increasing the prevalence rate, the unmet need become lower, which was from 37% for the year 2000 it became 22% in 2016. The report also indicates in Harari region Injectable contraceptive was the most widely used method for contraception. From among currently married women 12.6 percent and from sexually active but unmarried women 25.2 percent were use injectable contraceptive (9).

In 2020 the number of reproductive age group women who use FP expected to be around 380 million all over the world. To sustain the current contraceptive user until 2020, a total of \$10 billion dollar is needed. In the overall to reach the goal of FP2020, in which from 69 developing countries 120 million women to make contraceptive user additional to the current user, US\$4 billion is needed (10).

In 2015 the federal ministry of health FMOH presented health sector transformation plan (HSTP) 2015/16-2019/20, which aims to increase contraceptive prevalence rate to 55% and reducing the total fertility rate to 3.0. To attain this goal the cost was estimated to 6.2 billion ETB or US\$285 million with annual cost of US\$47.5 million (11, 12).

To solve the estimated financial need; it is very important and timely to look for the possibility of cost sharing by users. Therefore, this study was designed to generate demand side information for injectable contraceptive, which is the most widely, used method.

1.2 Statement of the problem

Most of developing countries FP and other programmes are supported by developed countries. According to the Reproductive Health Supplies Coalition (RHSC) report 88 less developed countries depend up on external resources. United States of America (USA) is the biggest donor country all over the world. Since 1965 G.C, USA supported \$14 billion for forty countries on FP/RH programme. United Kingdom, Netherlands, Sweden, and France also support low- and middle-income countries (10, 13).

Many countries especially those Sub Saharan African are facing shortage and gap of resources for FP programme. Among West African countries, only Burkina Faso and Togo have sufficient funds to implement their Costed Implementation Plan (CIP). A CIP is a multi-year countries roadmap that identifies evidence-based strategies and approaches to improve family planning programs and estimates the costs of implementing those strategies. It brings together government

and FP partners to strategically plan and prioritizes specific FP activities. Mauritania faces 23 % of the overall CIP budget deficit. Côte d'Ivoire's and Cameroon's CIP show 16 % of financial gap and for Niger it shows 23 % (14).

As developing countries, Ethiopia's most of health programme like FP/RH programmes depend upon external sources. U.S. Agency for International Development, United Nations Population Fund, and UK Department for International Development are the major contributors for the programme. According to the fourth and fifth Ethiopian national health account report, 44 and 49 percent of reproductive health expenditure was covered by external donors, respectively (15, 16, 17).

Having reliance on external resources bring challenges on programmes sustainability and durability. According to FMoH, in 2013/14 & 2014/15, such type of problem observed on channel 2 supporting modality. By 2013/14 developmental partners expressed their commitment to support USD 612.87 but at the end they disbursed USD 558.33 million. In 2014/15 their commitment decreases to USD 445.96 million but finally they disbursed USD 269.07 million which was 60.3% from total commitment. According to HSTP, for the first three years most of Partners are express their commitments to continue the support but for the final fourth and fifth year some developmental partner donot give assurance (11, 18, 19, 20).

The other problem of external fund is, donations are depending on donor countries political ideology, and continuity of funds is not secure. Due to 'Global gag rule' in which it bans US FP supporting programme donations going to an organizations that work on abortion & abortion related area, many NGOs working in Ethiopia on FP faced shortage of budget. As a result they forced to close the programme (21).

To solve these problems developing countries are observing different sustainable financial resources. Financial sustainability can be defined as "having enough reliable funding to maintain current FP and health services for a growing population and to cover the costs of raising quality and expanding availability to acceptable levels". Kenyan government is implementing different mechanisms to sustain the resource for FP programme. One option is establishing dedicated line item in the country's total budget (22, 23).

Ethiopia is implementing different financial sources. Among these the federal house of representative started to allocate budget specific to FP in 2007 for the first time. Regional governments like Oromiya, Amhara, South Nation Nationalities and Tigray started to follow foot step (17).

Therefore, for satisfying the required FP service and also programme sustainability, establishing cost sharing scheme can be one of policy issue. To achieve this objective, studying whether citizens are able and willing to pay for injectable contraceptive, which is most widely used method, without decreasing the demand is an important factor. Studies conducted in other countries have pointed out there is possibility of cost sharing mechanism for FP (24, 25, 26, 27).

In author's knowledge in Ethiopia, except Prata N et al, there is no research conducted on financial related to family planning. Most researchers had been focusing on the prevalence like Fekadu et al, quality of care on family planning like Eskindir et al and other related issue of family planning like Yemaneh Y et al (28, 29, 30).

And also those studies conducted related to willingness to pay so far in this area may not be sufficient to represent the full picture of the willing to pay in Harar town and/or Ethiopian urban cities.

Furthermore, there are no empirical studies conducted that were associated with WTP for injectable contraceptive in Harar town. This study, therefore, estimates the amount that women of reproductive age group WTP for Injectable Contraceptive and identify the potential factors affecting their WTP.

1.3 significance of the study

Charging consumer for Injectable contraceptive needs careful analysis of the ability and willingness of the users to pay. This study aimed at identifying the magnitude and factors associated with WTP for injectable contraceptive among women of reproductive age group in Harar town, eastern Ethiopia. Therefore, the first significance of this study is to inform policy makers, like regional and federal government, regarding the ability and willingness of consumers to pay for for injectable contraceptive. The second significance is providing information concerning the potential factors affecting WTP for injectable contraceptive. Finally, the findings of this study are used as an important source of information for further studies in this area.

CHAPTER TWO: LITERATURE REVIEW

2.1 Theoretical literature review

There are different definitions of WTP. The most common one is 'WTP is the maximum amount that an individual states they are willing to pay for a good or service'. In which a member of a household asked a series of structured questions to determine the maximum amount of money the household is willing to pay for a good or service (31).

There are three methods to estimate WTP. The first method is simply by observe the prices that people pay for goods in various markets. The second is observe individual expenditures of money, time, etc. to obtain goods—or to avoid their loss. Additional to observation, the second method might involve an assessment of coping strategies and involve focus group discussions and sometimes household surveys. Both of these approaches are named as revealed preference techniques. The other approach called stated preference includes the contingent valuation methodology, in which asking people directly what they are WTP for goods in the future (32).

Contingent Valuation Methodology (CVM)

Contingent Valuation is a method of estimating the value that a person places on a good. The approach asks people to directly report their WTP to attain a specified good, or willingness to accept (WTA) to give up a good, unlike inferring them from observed behaviours in regular market places. Many applications of the method deal with public goods such as improvements in water or air quality but it can also be applicable to materials which revolve in regular market including FP commodities (33).

Elicitation techniques

There are different elicitation techniques to be used in a CVM application. Open–ended, closed-ended, iterative–bidding (bidding game), and payment card are mostly used. Each of them has their own advantage and disadvantage.

1) Open-Ended- respondents asked to estimate their maximum WTP for the good/service. The method has the advantage of avoiding starting point biases. Non-responses and protest zeros are some of its drawback.

- 2) Closed–Ended in this technique the respondent asked his/her willing to pay a specified amount of money for the proposed good/service. This method also called dichotomies choice question. It is being familiar with respondent like in real world markets which is easy to conduct. But it is exposed to starting price bias and requires many participants.
- 3) Bidding game in which depending up on the starting value, individuals are iteratively asked whether they would be willing to pay a certain amount, by raising or lowering the initial amount. Even though boring for the respondent and exposed to starting bias, it is has potential to gain respondents maximum WTP.
- 4) Payment card –a method in which individuals asked to chose WTP from listed value. To participate in this evaluation respondent must be literate. It is simple method and can get many respondents.

2.2 Empirical literature review

Studies on FP methods which are related to willingness to pay that are conducted in Ethiopia also in Africa are scanty. Here some of them are reviewed.

2.2.1 Family planning use and Willingness to Pay

In 2009 the Vietnam Self Paying Survey (VSPS 2009) was run by Vietnam medical military institute with the sample size of 4,470 women of reproductive age group. Among them 1217 women using non-clinical methods or not using FP. From total of 3253 current users 1869, 755, 310, 193 and 126 of women were using IUD, Injectable, Implant, Pill and Condom respectively. Among IUD users around 60% were willing to pay some amount, from Implant user 42% were willing to pay. From pills around 50 %, from Condom 40 % and from Injectable around 35 % user reported WTP for government services. Among total of current user, more than 30 % of women were willing to pay the social marketing price for IUDs and injectables but for implant less than 20 % of women were willing to pay the social marketing price (34).

The 1998 national demography & health survey of Philippines also considered households WTP for pills, injectables, IUD, Condom, and Sterilization. In the overall above 90% of participants were willing to pay for the methods. For pills among current users, women in poorest 20% of households were more WTP than wealthiest 20% of households. Among women who were not

currently users of pills but in the future intend to use poorest households were slightly more willing to pay than wealthiest households. For IUD, women in wealthier households were more willing to pay than women in poorest households. Women belonging in the wealthiest 40 percent of households were more WTP for IUD than currently paid. In the case of injectable, women living in wealthiest 40-60 percent households were willing to pay 200 peso which is greater than currently paid (35).

The survey conducted in Burkina Faso included 1,772 of clients. Overall, 46% were implant users and 35% were IUD users the rest were use other methods. The result showed that 5% of them were not willing to pay any price, among five percent of refusals population 44% responded they will shift to another method, 29% will stop using any method, and (19%) will ask someone for financial support or loan another individual or will save to pay requested price, if there is any increment of price (36).

A survey conducted in Ghana included three types of family planning methods namely condoms, hormonal family planning products, and family planning methods controlled by women (female condoms and Vaginal Foaming Tablets) by comparing clinics and hospitals with that of pharma cies and chemical shops. In general, clients were more willingness to pay in the setting of clinics and hospitals than at pharmacies and chemical shops. On both setting, when the purchasers asked about their intention if price is increase too much, around seven percents replied they would stop using any contraceptives method. More than 50% said they will find cheaper option with the same brand and 25 % will shift to another method (45).

Obinna Onwujekwe et al used the CVM to estimate WTP for oral contraceptive pills (OCP), injectables, male and female condoms, IUDs, and implants in six selected Nigerian states. The study use a sample size of 4517 randomly selected households. The result showed less than half of the respondents were WTP the starting bids for all the contraceptives (26).

Another cross sectional study conducted in South East of Nigeria used iterative bidding process in eliciting WTP and further employed multiple linear regression models (OLS method) to determine the influences of WTP. The study found that most of them were WTP for FP method. 78.3% were willing to pay with a mean of #38.5 for oral pill, which is more than enough to cover the initial cost. 80.7 % and 81.9 % of respondents were WTP a mean of #125.23 for IUD and

#139.65 for Injectable, respectively. The result of WTP for injectables also more than enough the initial cost but not for IUD (27).

In Tigray north of Ethiopia, Prata et al used the CVM in eliciting WTP values. The study used interviewer administered questionnaire and the elicitation format used was an open ended elicitation formats. The researchers used logistic regression analysis to determine factors affecting WTP decision. In the study 1490 participated, among this 1013(68%) had ever used injectable contraceptives or plan to use injectable contraceptive and those are asked on WTP question. From those WTP asked, 68% of women were WTP 11 birr (\$0.65 USD) per injection (25).

2.2.2 Factors affecting WTP

Socio-demographic factor

Studies conducted in few countries have indicated that demographic factors were found in influencing WTP for injectable contraceptive. These demographic factors include marital status, education, age, occupation and total monthly income of the household.

Studies conducted in Nigeria and Tigray region north of Ethiopia found that educational status of women was the most important factor of WTP for injectable contraceptive. In these studies proportion of women who were WTP found significantly higher in women with primary, secondary and above educational level compared to with no education (25, 26, 27).

Another factor which has related to WTP was found marital status of women. The study conducted in South East of Nigeria showed being married was positively associated with WTP where as that of study conducted North of Ethiopia showed women who married were more willing to pay for injectable contraceptive than single one (25, 27).

Studies conducted showed that women occupation had influence on WTP. It was found that women who had employed or permanent job significantly higher willing to pay than those unemployed. The study conducted in Nigeria revealed that women who worked in government organization were found associated with WTP (25, 26, 27).

Income or wealth of household has been identified in different studies as stronger factor WTP for injectable contraceptive. Results found from studies conducted in Philippines and Nigeria

revealed that, proportion of women who were WTP found significantly higher among women in the highest economic status than women in the lower economic status (26, 35).

According to studies conduct on willingness to pay for injectable contraceptive, age was not associated with WTP. But in much of other family planning related researches showed association. Based on expert opinion and other WTP studies, it included as independent variable (28, 29, 30, 44)

Reproductive Health Related Factor

Results of studies conducted in few countries showed that, reproductive health related factors like history of sex, age at first birth, number of living children and agree with husband on ideal number of children were found to influence WTP (25,26,27).

It is fact that women's who had more live children were more willing to pay than those of who had less children. In the study, it was found that women with parity significantly associated with WTP in Nigeria. However, finding from another study conducted revealed proportion of women with 1-2 children were found statistically significantly decreased odds of WTP when compared women with no children in Tigray region north of Ethiopia (25, 27).

In one Study noticed that women's with no history of sex was found as an important factor to influence their WTP for injectable contraceptive. A study conducted in Ethiopia showed that the odds of not having history of sex were significantly higher compared to those who had history of sex (25).

Women's age at first birth was another factor which related to WTP for injectable contraceptive. A study done in Tigray region showed regardless women's age at first birth, all were willing to pay over those who had not given birth (25).

Whether women agree or disagree with husband on ideal number of children did not show any association with WTP. But as expert opinion the variable included in the independent variable (25, 44).

Health Facility visit and Family planning related factor

It is fact that women's visiting of health facility for family planning or other reason influences WTP. The Study conducted in Tigray region north of Ethiopia that women who had visited health facilities for family planning or other purpose were found strongly associated with WTP over those who were not Visited health facilities (25).

The other variable that associated with WTP for injectable contraceptive was length of utilization Injectable contraceptive. The study showed that women who were utilize Injectable contraceptive for any length of time was more willing to pay than those never used (25).

Generally, from researches conducted WTP for injectable contraceptive was related with sociodemographic, reproductive history and health facilty visit. Studies conducted so far in this area may not be sufficient to depict the full picture of the problem in Harar town. Therefore, this study has tried to adders by adding some fundamental components of the problem and assessed consistency of previous findings.

Conceptual frame work

Socio-demographic (age, educational, occupation, marital status, household monthly income), reproductive history of women (history of sex, age at first birth, number of living children, agree with husband on ideal number of children) and Health facility and Family planning related factors (reason for health facility visit, length of usage of injectable contraceptive) while the dependent variable is willingness to pay for injectable contraceptive.

According to the diagram shown below socio-demographic and reproductive health related factors affect WTP for injectable contraceptive directly or indirectly through health facility visit and family planning related factor. Health facility visit and family planning related factor directly affect WTP. This conceptual frame work is adapted from previous study conducted by Prata N, et al. diagrammatically it is shown as follows (25).

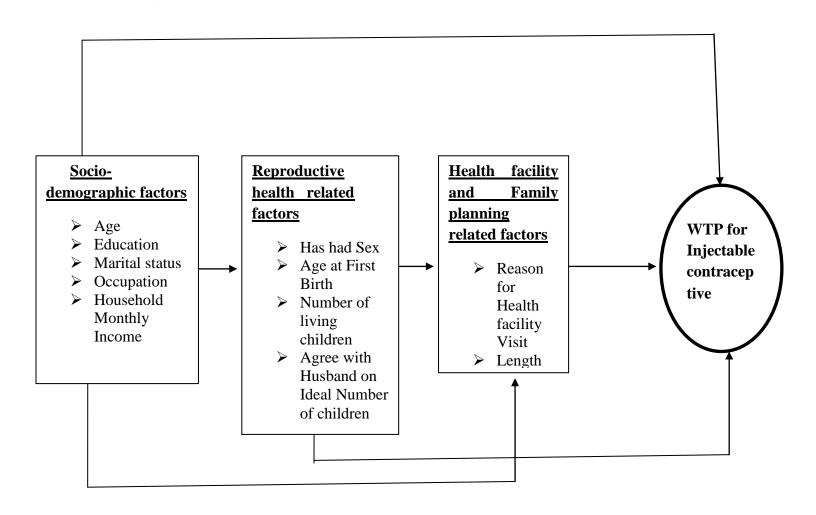


Figure 1: A conceptual frame work to study reproductive age women willingness to pay for injectable contraception, adopted from Prata N, et al (25)

CHAPTER – THREE: OBJECTIVES OF THE STUDY

3.1 General objective

To assess Willingness to pay for injectable contraceptive and describe associated factors among women of reproductive age group (15-49 years) in Harar town, eastern Ethiopia, Jan 2018 GC.

3.2 Specific objectives

- 1. To determine willingness to pay for injectable contraceptive among women of reproductive age group (15-49 years) of Harar town, eastern Ethiopia, Jan 2018 GC.
- 2. To identify factors influencing WTP for injectable contraceptive among women of reproductive age group (15-49 years) of Harar town, eastern Ethiopia, Jan 2018 GC.

CHAPTER FOUR: METHODS AND MATERIAL

4.1 Study area and period

The study was conducted in Harar town from January 1 to 15, 2018. Harar is the capital city of Harari regional state. It is located in the eastern part of the country, 515km away from Addis Ababa, and the capital city of Ethiopia. Based on the 2007 census conducted by the Central Statistical Agency, the total population of the town is estimated to be 146,483. Of these, 74,707 (51%) and 71,776 (49%) were males and females, respectively. From total population women of reproductive age account 57,733(23%) (37). According to the currently adopted administrative structure, the town is divided in to six urban administrative districts (Woreda). These administrative districts are further divided in to 19 kebeles. In the town, there are 6 hospitals (2 private, 1 Armed Force, 1 Federal Police and 2 public), four health centers. All public health facilities in the Harar town offer family planning free of charge. The regional contraceptive prevalence rate is 29.5%. The potential health service coverage of the town reported as above 100% (9, 44).

4.2 Study design

A community based cross sectional study design was employed.

4.3 Population

Source population

All women of reproductive age group (15-49 years) in Harar Town

Study population

All women of reproductive age group (15-49 years) who live in the selected kebeles.

Study unit

Women of reproductive age group (15-49 years) in the selected household

Inclusion criteria

• All reproductive age group women (15-49 years) in selected kebeles during data collection period

Exclusion criteria

• Those severely sick and cannot able to communicate

4.4. Sample size and sampling technique/sampling procedure

The dependent variable was respondents asked on their willingness to pay 16 ETB. So the samp le size was determined by using single population proportion formula with the assumptions of 95% level of confidence interval (CI), 5% margin of error, 50% (assuming among injectable use rs proportion of women who are willing to pay), design effect of 2 and 10% non-response rate:

$$ni = \frac{z^2 p(1-p)}{d^2}$$
 =(38)

$$ni = \frac{(1.96)(1.96)(0.5)(0.5)}{(0.05)(0.05)} = 384$$

Where: P= estimated proportion of married women who have WTP for FP=50% d =margin of error (5%),

 $Z\alpha/2$ = critical value at 95% confidence level (1.96), the calculated initial sample size=384

 $n = [384 \times 2 \text{ (design effect)} + 10\% \text{ (non response rate)}] = 848$

Sampling method

The study was based on a multistage probability sampling method using an administrative division of Woreda of Harar town. In the first stage, 3 woredas from the total of 6 woredas selected by simple random sampling (SRS) technique. In the second stage, 6 kebeles (2 from each woredas) was selected using the same technique. Finally, the calculated sample size 848 proportionally allocated for each kebele based on the number of households:

$$n_{j=}$$
 n N_{j}

N

Where nj = is sample size for the j^{th} kebele.

Nj= total households of the jth kebele.

 $N = N_1 + N_{2+}N_3 + N_4 + N_{5+}N_6$ is the total households in the 6 selected kebeles.

n= is the total sample size needed for the survey which is previously calculated

Since n=848 (calculated sample size), Nj for each kebeles [kebele 06 $N_{j=}466$, kebele 05 $N_{j=}1,308$, kebele 14 $N_{j=}1594$, kebele 15 $N_{j=}1,854$, kebele 17 $N_{j=}2617$, kebele 18=2255]

The required households easily calculated as
$$K06nj = \underline{848x466} = 39$$

$$10,094$$
 Therefore, $K05nj = 110$, $K14nj = 134$, $K15nj = 156$, $K17nj = 220$ and $K18nj = 189$

From the selected kebeles, households were selected by systematic sampling technique at every 11th interval by going in a clockwise direction. In cases of selected household with more than one eligible respondent, only one respondent was chosen by lottery method.

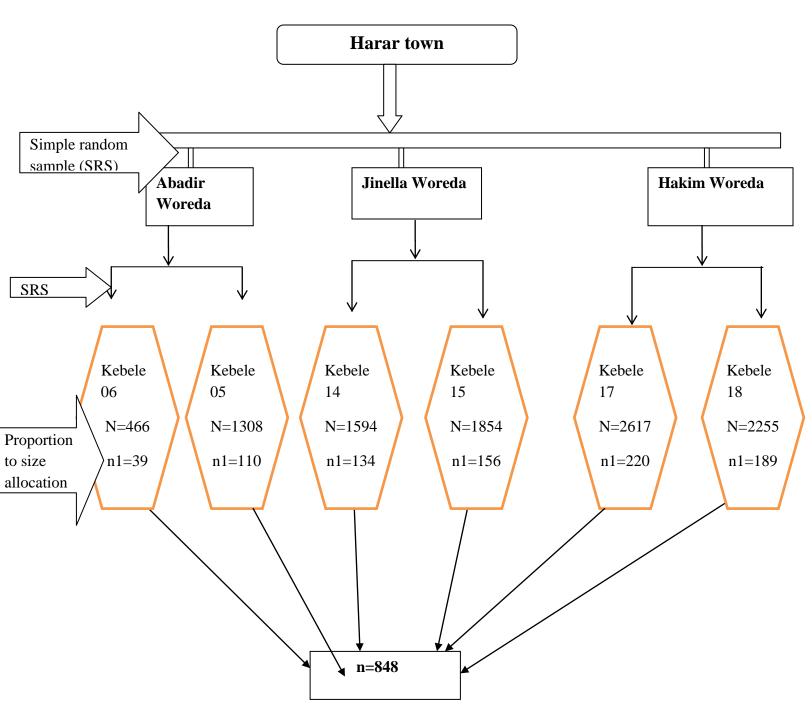


Figure 2 Schematic presentation of sampling procedure for the selection of study units in Harar town, eastern Ethiopia Jan 2018~GC

4.5. Data collection procedures (instrument, personnel, technique,)

Structured interviewer administered questionnaire was used to collect data which was developed after reviewing mainly from manual developed to study WTP and different relevant literatures of similar studies conducted(25,39,40,41). The data collection instrument consists of sociodemographic, Reproductive history, and WTP.

Before the WTP amounts were elicited, attempts would provide information for the respondent about the hypothetical market. The scenario proposed the provision of FP method in public health facilities based on the current problems on decreasing the external resource situations.

The starting bid, which was 16 ETB (\$0.59), taken from invoice of Harari regional health bureau pharmacy store manager. This is the cost of injectable contraceptive per each dose if it becomes marketable in public health facilities like other pharmaceutical drugs. According to National Bank of Ethiopia 1 USD was exchanged 27.23 ETB on January 2018 G.C. Using the bidding game format, single-bound dichotomous choice format followed by open-ended questions was employed.

The questionnaire was prepared in English and then translated into Amharic and Afan Orom languages and then back to English by two language experts. Before the actual data collection, the questionnaire was be pre-tested on 5% of the total sample size in Kebeles other than the selected kebeles in order to prevent information contamination and to ensure that respondents were able to understand the questions and to check the wording, logic and skip order of the questions in a sensible way to the respondents. Amendments made accordingly after pre-testing.

4.6. Study Variables

Dependent variable

❖ Willingness to pay: women asked to state they were willing to pay 16 ETB for injectable contraceptive. The result was either Yes or No.

Independent Variables

Socio-demographic factors

Age: refers to the age of the respondent.

➤ Marital status: categorized into married when the respondent in union, divorced if she separated with husband, widowed when her husband died or single if she was alone at the time of data collection.

> Education:respondents level of education

➤ Occupation: describe respondents' job or profession and categorized in to governmental worker, Non-governmental worker, student and housewife.

> Total monthly household income: collected as continous variable but for analysis transfer to catagorical variable and measured in ETB.

Reproductive health related factors

♣ Agree with husband on ideal number of children: the number of children that women consider as ideal for themselves.

♣ Has had sex: women who have a history of sex irrespective of time.

♣ Number of living children

♣ Age at first birth: the age of the respondent when she gave the first birth.

Health facility and family planning related factors

Visiting health facility: asked the reason for last visit of health facility within one year.

length of injectable contraceptive utilization

4.7. Operational definition

Family planning: implies the ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through use of injectables.

Willingness to pay: is a women state they are willining to pay 16 ETB for injectable contraceptive.

Currently married women: Women in union at the time of data collection

Current utilization of contraceptive: Women users of contraceptive at the time of data collection

4.8. Data analysis procedure

After data collection, each questionnaire was checked for completeness and code was given. Data was entered in to Epi data version 3.5.1, and then transferred into SPSS version 20 for cleaning and exploring missed values and for any inconsistencies.

Bivariate logistic regression was done for each independent variable against outcome variables (WTP) to estimate the crude odds ratio. The candidate variables for the multivariable analysis were selected at p value of ≤ 0.20 (42).

Multivariable logistic regression method was used to assess the independent effect of different variables after simultaneously controlling for the effect of other factors. Finally, variables which show significant association in the multivariable analysis AOR with p value less than and equal to 0.05 were statistically significant association with 95% confidence interval. Finally data were presented by frequency tables, graphs and descriptive summaries were used.

4.9. Data quality management

To achieve a good data quality, training was provided to selected female data collectors, who have nursing diploma, for one day about the objective and process of data collection. Vague points and other problems encountered about the questionnaire were given explanations and clarifications. Closer supervision was undertaken during data collection. Every questionnaire was crosschecked daily by the supervisors and the principal investigator. Pre-testing was done in Kebeles other than the selected kebeles outside the study area in order to prevent information contamination.

4.10 Ethical consideration

Approval ethical clearance was secured from institutional reviewee board of Jimma University. Permission letter was obtained from Harari regional health bureau and from each woreda administrations. Data collectors trained how to handle sensitive issues and on the importans of keeping confidentiality. Similarly after clear discussion about the actual study or explaining of purpose of the study, verbal informed consent was obtained from each study participants while the study subjects right to refuse was respected. In order to protect the confidentiality of the information, name of participants was not included in questionnaire.

4.11 Dissemination plan

After finalization of analysis and interpretation of results, a comprehensive report with relevant documents will be submitted to Jimma University, college of public health and medical science, Department of Health Economics, Management & Policy and Harari regional health bureau. The findings will be also disseminated to scientific community as an input to the research question. Attempts will be made to present the results on scientific conferences and to publish the results of the study on local and international journals.

CHAPTER FIVE: RESULTS

5.1 Socio demographic characteristics of the study population

A total of 843 women in reproductive age group participated in the study making response rate of 99.2 percent. Among this 577(68.4%) were previous, current and intend to use injectable con traceptive, which were asked on WTP. This is consistence with Prata N et al study (68%) (25). Majority of the respondents, were in the age group of 25-29(38%) years, while 272(47.1%) attended secondary & above education and 449(77%) were married. (Table1)

Table .1 Socio demographic characteristics of reproductive age women in Harar town, eastern Ethiopia, January 2018 G.C

Characteristics	Number	%	
Age			
15-19 years	40	7	
20-24 years	111	19.2	
25-29 years	219	38	
30-34 years	112	19.4	
35-49 years	95	16.4	
Religion			
Muslim	324	56.2	
Orthodox	194	33.6	
Protestant	59	10.2	
Education			
Secondary & above	272	47.1	
Primary	171	29.6	
Read & write	59	10.2	
Illiterate	75	13	
Marital status			
Married	449	77.8	
Divorce / Widowed	23	3.6	
Single	105	18.2	
Occupation			
Private worker	133	23	
GO/NGO worker	104	18.1	
student	91	15.8	
Housewife	249	43.1	
Respondent Monthly income			
>1500 ETB	130	22.5	

≤ 1500 ETB	447	77.5
Husband occupation		
GO/NGO worker	118	20.4
Private worker/ merchant	215	37.3
Daily labor & other		
•	116	19.3
Husband income-		
>1500 ETB	392	87.3
≤ 1500 ETB	57	12.7
Total household monthly		
income		
> 1500 ETB	528	91.5
≤1500 ETB	49	8.5

5.2 Reproductive health related characteristic of reproductive age group women

Four hundered thirty-seven (75.7%) of women had a history of pregnancy at least once. And the majority's 340(60%) were above 19 years of age at their first pregenancy. Regarding Current number of living children 333(57.7%) of women had one up to two children and 214(37%) disscuss and agree with husband towards the ideal number of children (Table 2)

Table .2 Reproductive Health Related characteristics of reproductive age group in Harar town, eastern Ethiopia January 2018 G.C

Characteristics	Number	%
Has had sex		
Yes	505	87.5
No	72	12.5
History of pregnancy		
Yes	437	75.7
No	140	24.3
Age at first birth		
>19 years	340	60
17-19 years	76	13.2
<17 years	21	3.6
Has No birth	140	24.3

Number of living children		
3-4 children	94	16.3
1-2 children	333	57.7
No children	150	26
Discuss with husband on		
ideal number of children		07.4
Agree	214	37.1
Disagree	123	21.3
not discuss or do not	240	41.6
have husband		

5.3 Family planning and health facility visit Related Characterstic of reproductive age group

Among the study subjects the 64.8 perent were currently using modern contraceptive method. An injectable contraceptive was the most commonly used 194(51.9%). Regarding the health facility visiting history within last 12 months, 132 (34.1%) got family planning service from different Health facilities. 203(57%) have plan to use injectable contraceptive. (Table 3)

Table 3 Family planning and health facilty visit related characteristics of WTP in Harar town, eastern Ethiopa January 2018 G.C

=	<u>%</u>	
572	QQ 1	
3	0.9	
27.4	64.0	
198	34.3	
194	51.9	
25	6.7	
121	32.4	
34	8.6	
v ice		
330	88.2	
44	11.8	
P		
272	47.1	
82	14.2	
20	3.5	
	25 121 34 vice 330 44 272 82	5 0.9 374 64.8 198 34.3 194 51.9 25 6.7 121 32.4 34 8.6 vice 330 88.2 44 11.8 272 47.1 82 14.2

Not currently using	203	35.2
Length of time using		
injectable		
>2 years	130	22.5
≤2 years	66	11.4
Not currently using	381	66.1
Preferred method of FP		
Yes	369	98.7
No	5	1.3
Previous usage of injectable		
Yes	180	61.4
No	113	38.6
visiting health facility in the		
last 12 month	122	22.0
Family planning	132	22.9
Medical service and Other	255	44.2
Not visited	190	32.9
Not visited	190	32.9
Plan to use injectable		
(not current user n=356)		
Yes	203	57
No	153	43
Reason not to use injectable		
I prefer long term	26	17
	23	15
I am widowed/divorced		
I don't have husband/I will	19	12
decide after marriage		
I will decide in future	13	7
Not allowed in religion	9	5
Other	63	41

5.4 Willingness to pay for Injectible FP method

Among those 577 Respondents majority 445(77.1%) were willing to pay the initial bid (16 birr). In the open ended questions, all participats were asked to state their maximum willingness. The mean willingness to pay amount is 25.5 Birr with a minimum of 0 and a maximum of 100 Birr.

The result showed from a total of respendant, 57 were not willing to pay any amount. Their reasons not to pay any amount were 36 (63.16%) of them responded it is the responsibility of government, 11(19.30%) responded they don't have ability topay and 10 (17.54%) raised different reasons.

The last question presented to respondents was what if the facility forced to pay more than what they would be interested to pay or more than their willingness. 53.2% of the respondents confirmed they would shift to the cheaper method, 45.9% replies they will pay any price while the rest 0.9% stated that they will stop using contraceptive method.

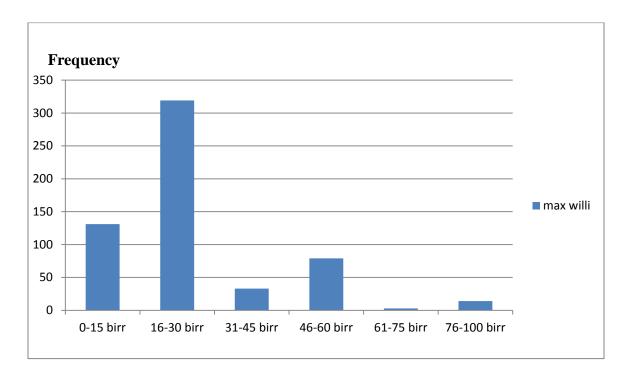


Figure 3: Maximum amount willing to pay for injectable contraceptive by reproductive age group Harar town, eastern Ethiopia, January 2018 G.C.

Factors associated with WTP

The important factor in which associated with WTP identified in this analysis were age, education, marital status, household monthly income and length of using injectable contraceptive, whereas, number of living children, age at first birth, history of sex, discussion on ideal number of children with husband, occupation, and reason for health facility visit were not associated with WTP.

Among respondents whose age 15-19 year old 65% less likely [AOR = 0.35, 95% CI: (0.13,0.92)] and those whose age category 20-24 year old were 54% less likely [AOR = 0.46, 95% CI: (0.23, 0.96)] WTP for injectable Contraceptive compared among the age category of 35-49 years of old after adjusting other variables. Education level of respondents was another factors affecting WTP for injectable contraceptive. Being education level of Secondary & above were two time more likely [AOR = 1.98, 95% CI: (1.04, 3.78)] and being Primary level Education of respondents were two times more likely [AOR = 2.16, 95% CI: (1.11, 4.19)] WTP for injectable contraceptive than comparing with illiterate level of education. Married women were three times more likely WTP for injectable contraceptive [AOR = 2.69, 95% CI: (1.21, 6.01)] when compared to single women after adjusting other variables. Length of utilization of injectable contraceptive was the final variable found statistically significant variable in this study. Among women who Use injectable contraceptive >2year were two times more likely [AOR = 2.37, 95% CI: (1.05, 5.37)] WTP for injectable contraceptive when compared with women who does not use injectable contraceptive. (Table 4)

Table 4: Bivariate and multivariate logistic regression result of willingness to pay by background and other selected variables, Harar town, Harari region, eastern Ethiopia, January 2018.

Characteristics	Willingness	s to pay	COR (95% CI)	A OR (95%CI)	P-
	Yes, N (%)	No, N (%)			value
Age					
15-19 years	22(55)	18(45)	0.42(0.14,1.24)	0.35(0.13,0.92)**	0.032
20-24 years	73(65.8)	38(34.2)	0.76 (0.28,2.04)	0.47(0.23,0.96)**	
25-29 years	189(86.3)	30(13.7)	0.30(1.11, 5.06)*	1.28(O.65,2.53)	
30-34 years	84(75)	28(25)	0.82(0.36,1.85)	0.54(0.27,1.09)	
35-49 years	77(81.1)	18(19.9)	1	1	
Education					
Secondary & above	212(77.9)	60(22.1)	2.09(1.06,4.13)*	1.98(1.040,3.78)**	0.038
primary	136(79.5)	35(20.5)	1.49(0.69,3.19)	2.16(1.11,4.19)**	
Read & write	44(74.6)	15(25.4)	0.95(0.55,1.62)	1.33(0.59,2.99)	
Illiterate	53(70.7)	22(29.3)	1	1	
Interace		, , ,			
Marital status					
Married	365(81.3)	84(18.7)	2.03(0.59,7.03)	2.69(1.21,6.01)**	0.016
Divorce/ Widowed	14(60.9)	9(39.1)	2.57(0.83,8.01)*	0.99(0.34,2.87)	
Single	66(62.9)	39(37.1)	1	1	
Occupation					
Private worker	105(78.9)	28(21.1)	080(0.45, 1.45)		
Go/ngoworker	84(80.8)	20(19.2)	0.87(0.441.73)		
Student	57(62.6)	34(37.4)	1.05(0.40, 2.74)		
Housewife	199(79.9)	50(20.1)	1		
Household Total					0.021
Monthly Income	417(79)	111(21)	2.41(1.19,4.87)*	2.2(1.20, 4.74) **	0.031
>1501	28(57.1)	21(42.9)	1	1	
≤1500					
Has had Sex					
Yes	401(79.4)	104(20.6)	1.046(0.42,2.64)		
No	44(61.1)	28(38.9)			
Age at First birth					
> 19 years	282(82.9)	58(17.1)	4.21(0.423, 41.35)		
17-19 years	58(76.3)	18(23.7)	1.48(0.49,4.49)		

<17 years	15(71.4)	6(28.6)	0.99(0.48,2.05)		
Has No birth	90(64.3)	50(35.7)	1		
Number of Living					
Children 3-4 children 1-2 children No children	77(81.9) 269(80.8) 99(66)	17(18.1) 64 (19.2) 51(34)	1.88(0.15, 23.59) 2.58(0.24, 27.38) 5.40(0.55, 53.35)		
Reason for Health					
Facility Visit					
Family planning Medical & for other Not visited	107(81.1) 198(77.6) 140(73.7)	25(18.9) 57(22.4) 50(26.3)	1.09(0.12, 9.88) 0.37(0.21, 0.66) 1		
How Long to Use Injectable Contraceptive >2 year ≤2 year Not currently using	107(82.3) 58(87.9) 280(73.5)	23(17.7) 8(12.1) 101(26.5)	1.05(0.63, 1.74) * 0.51(0.28, 0.92)	2.32(1.03,5.23)** 1.28(0.73,2.24) 1	0.042
Discuss with husband					
on ideal number of					
children Agree Disagree Not discuss and do not have husband	170(79.4) 100(81.3) 175(72.9)	44(20.6) 23(18.7) 65(27.1)	0.62(0.32,1.18) 0.88(0.48,1.59) 1		

COR*P-Value<0.20 AOR <0.05 ** Stasically significant

CHAPTER SIX: DISCUSSIONS

In this study, the magnitude and factors associated with the willingness to pay for injectable contraceptive among women of reproductive age group in Harar town were identified. 77 percent of study subjects were willing to pay 16 ETB (\$ 0.59 USD). This finding is in consistence with the study conducted in Nigeria 81 percent were willing to pay \$1.72 USD and Tigray region north of Ethiopia in which 68 percent were willing to pay \$ 0.65 USD (25, 27). This may be due to the fact womens' good attitude toward injectable contraceptive. However higher than another study conducted in Vietnam 30 percent was willing to pay \$0.93 USD and Nigeria 30 percent was willing to pay \$7.5 USD. This high proportion of difference may be different sociodemographical difference of the population and may be the cost was less than those of Nigeria (26, 35).

In this study Women Age 15-19 year and 20-24 year 35% and 50% less likely willing to pay with AOR 0.35(95% CI 0.133, 0.916 and AOR 0.46(95% CI 0.229, 0.960) respectively. In contrary with the study conducted in Tigray region north of Ethiopia show age were not show significant association with WTP (25). This significant association in the present study may be due to majority of this age group were unemployed and dependent with their family. On the other hand, it could be reflected by the reality that women at the older age could feel either they have enough children hence, more willing to pay or because of different reasons they may satisfy their desired child number.

Regarding the educational status the present study shows that, women who were completed primary and secondary& above 2.156 and 1.98 times more likely willing to pay when compared to illiterate with AOR 2.15 95% CI 1.10, 4.19 and AOR 1.98 95% CI 1.04, 3.78). Possible explanation or reason for the willingness of to pay by women with formal education in this study may have been a result of the women's economic independence; less likely to be influenced with social value judgments, such as being independent on their husbands for decision-making and also may refelect when women educated they will more understand the benefit of using FP. This implies, educating women helps in solving financial barriers related to injectable contraceptive.this finding were comparable with the study conducted Tigray north of Ethiopia and those of Ngeria (25, 26, 27).

Previous studies conducted in some area indicated that, being married was found strongly associated with WTP for injectable contraceptive (25, 26, 27). In these studies, it was found that women who were married were more likely willing to pay than those of singles. This study also indicates being married 2.7 times more WTP when compared to Single with AOR 2.69 95% CI 1.20, 6.01). This perhaps indicates that these women are particularly motivated to achieve their desired family size and they feel comfortable using money to do so since their husband similarly wants to achieve that family size.

The present study also identifies total household monthly income >1501 two times more willing to pay for injectable contraceptive when compared to household income \leq 1500 with [AOR = 2.19, 95% CI: (1.09, 4.41)]. This can be related to WTP in a way that is expected from economic theory. For instance, the WTP increased with increasing Socio Economic Status (income) and also having good income could widen the social interaction of women with different institutions and parties. This will result increasing WTP for injectable contraceptive (43).

The other final variable that is statistically significant in multiple logistic regression analysis was women who use injectable contraceptive for >2year were two times more willing to pay for injectable contraceptive when compared with women who does not use injectable contraceptive with [AOR = 2.37, 95% CI: (1.05, 5.37)]. The finding was supported by study conducted in Tigray region north of Ethiopia, Shows Women who have used injectable contraceptives for one to two years have 2.99 times the odds of being willing to pay (95% CI 1.92, 4.66) (25). This may be due to women who prefer injectable contraceptives have a greater demand for this method, it is logical that they would be more motivated to use and thus more willing to pay for the method.

The importance of occupational status on WTP for injectable contraceptive has been mentioned in the studies conducted in Nigeria and North of Ethiopia (25, 26, 27). However in this study did not show statistical significance. This may be due to most of them were housewife and also their househod monthly income also lesser.

Those had not sexual experience, number of living children and ever visiting health institution fo r any reason were not associated with willingness to pay for injectable contraceptive in this study in contrast to other studies (25, 27). This might be due to this study conducted in urban area so w

omen's' had much exposure to sex can prevent pregnancy by different method and easy accessibility of health institutions.

The study also indicates that if the facilities forced to pay more than their willingness, 53.2% of the respondents confirmed they would shift to the cheaper method, 45.9% replies they will pay any price while the rest 0.9% stated that they will stop using contraceptive method. This is inconsistence the survey conducted in Burkina Faso showed that 44% of reply they will Shift to another method, 19% of them were responded they will ask someone for financial support/loan/save to pay requested price, 29% of were stop using any method and 8% were forwarded different reason. This may be they have better understand the advantage of FP and also injectable contraceptive was their preferred method. Whereas the survey conducted in Ghana revealed more than 50% said they will find cheaper option with the same brand, and 25 % will shift to another method and around seven percents replied they would stop using any contraceptives method.

Estimating Total Willingness to Pay and Total Revenue

The main purpose of this study is to estimate women's willingness to pay 16 ETB for injectable contra ceptive at public health facilities. The total revenue to be generated by injectable contrac eptive of the Harari region can be estimated by multiplying the willingness to pay of the respond ents by total number of users. Among the total number of 57,733 reproductive age group 10,911 (18.9%) are currently using injectable contraceptive (9, 37). Based on research result, from those users, 77.1 percent were willing to pay 16 ETB. Finally the regional government can collect 134, 604 ETB (\$4,936 USD) per each quarter.

When we calculate with same logic at federal level, bas ed on 2007 G.C census Ethiopian repro ductive age group in 2010 E.C estimated 19,691,596 (37). The 2016 DHS report showed around 30 percent of married and unmarried women were using in jectable contraceptive. Based on rese arch result, from those users, 77.1 were willing to pay 16 E TB. Finally the federal ministry of he alth can collect 72,280,138.8 ETB (\$ 2,672,557USD) per ea ch quarter. In one fiscal year, the ministry can collect \$ 10,690,227.6 USD. This could cover 23 percent of Ethiopian CIP.

Limitation of the study

This study, was exploring willingness of women to pay for injectable contraceptive and examining factors that related their willingness to pay, was conducted in Harar town of eastern Ethiopia. Besides, it used a cross sectional data from the town. Furthermore, this research would consider only one method of family planning. Service related factors like quality of injectable contraceptive service and participants attitude towards injectable contraceptive providers that may contribute to difference in WTP were not included in this study.

CHAPTER – SEVEN CONCLUSSION AND RECOMMENDATION 7.1 CONCLUSSION

The study has shown that most respondents were willing to pay 16 ETB for injectable contraceptive. It shows that investing both government and donor funds in providing free injectable contraceptive services is worthwhile and provides value for money. However, if such funding is constrained, it will be possible to introduce a form of cost-sharing so that injectable contraceptive services are not disrupted. The results also show that age, education, marital status, total household monthly income, and length of utilization of injectable contraceptive were significantly associated with WTP.

Recommendations

Based on the results, discussion and conclusion the following recommendations were forwarded:-

FMoH

- ➤ The ministry may consider cost sharing mechanism for injectable contraceptive.
- The result revealed that there is strong positive relationship between households' monthly income to WTP for injectable contraceptive. Hence, much attention should be given to households' income when we consider charging for injectable contraceptive.

Harari regional health bureau

➤ It may be necessary to arrange financing mechanism to promote equity, for example by offering subsidies to the poor/ non- willing, for the level of access to injectable contraceptive.

For researcher

➤ Further study should be conducted in this type of contraceptive and other types of contraceptive by including other factors that is not assessed by the study to explore more factors related to WTP.

References

- Effects of Human Overpopulation
 http://www.everythingconnects.org/overpopulationeffects.html (accessed February 20, 2017)
- WHO, Water sanitation hygiene, Key facts from JMP 2015 report http://www.who.int/water_sanitation_health/monitoring/jmp-2015-key-facts/en/ (accessed June 30, 2017)
- World Health Organization, Family planning/Contraception, Fact sheet, Updated December 2016 http://who.int/mediacentre/factsheets/fs351/en/ (accessed February 20,2017)
- 4. Irina Yacobson et al. Family Health International 360, Facts for Planning Family, 2012
- 5. Maher H.Profamila. toward safe motherhood: a call for action, pub med. 1987
- 6. Leontine Alkema et al. National, regional, and global rates and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015: a systematic and comprehensive analysis
- UNFPA, Universal Access to Reproductive Health Progress and Challenges, January 2016
- 8. United Nations, Department of Economic and Social Affairs, Population Division (2015). Trends in Contraceptive Use Worldwide 2015 (ST/ESA/SER.A/349).
- Central Statistical Agency (CSA), [Ethiopia] and ICF, 2016. Ethiopia Demographic and Health Survey 2016: Key Indicators Report. Addis Ababa, Ethiopia, and Rockville, Maryland, USA. CSA and ICF
- 10. Kaiser Family Foundation ,Filling the need for trusted information on national health issues ,U.S. Funding for International Family Planning & Reproductive Health, April 2016 | Issue Brief
- 11. Ethiopian Federal Ministry of Health, Health Sector Transformation Plan 2015/16 2019/20 (2008-2012 EFY) August 2015, Addis Ababa, Ethiopia
- 12. Ethiopian Federal Ministry of Health, Costed Implementation Plan for Family Planning In Ethiopia, 2015/16–2020, January 2016
- 13. USAID | DELIVER PROJECT, Task Order 1. 2011. Contraceptive Financial Sustainability: A Primer. Arlington, Va.: USAID | DELIVER PROJECT, Task Order 1.

- 14. Lang, E. and S. Fohl. 2015. Family Planning Funding Gaps in West Africa: Burkina Faso, Cameroon, Côte d'Ivoire, Mauritania, Niger, and Togo. Washington, DC: Futures Group, Health Policy Project
- 15. Ethiopian Federal Ministry of Health, Ethiopia's Fourth National Health Accounts, 2007/2008, Addis Ababa, April 2010.
- 16. Ethiopian Federal Ministry of Health, April 201 4, Ethiopia's Fifth National Health Accounts Highlight of Major Findings Briefing Notes, Addis Ababa, Ethiopia.
- 17. Health policy project, Family Planning in Ethiopia, November 2012 https://www.healthpolicyproject.com/pubs/93_EthiopiaFPAugust.pdf (accessed February 6, 2017)
- 18. Jones, KM. Contraceptive supply and fertility outcomes: evidence from Ghana. Economic Development Cultural Change.2015; 64: 31-69
- 19. Ann M Starrs, the Trump global gag rule: an attack on US family planning and global health aid: Guttmacher Institute, New York, NY 10038, USA http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736 (17)30270-2.pdf (accessed on October 10, 2017)
- 20. Federal Ministry of Health, Health Sector Development Programme IV Version 1, Annual Performance Report, EFY 2007 (2014/15)
- 21. Champion of Global Reproductive Rights, Trumps Global Gag rule and Ethiopia, issue brief https://pai.org/wp-content/uploads/2017/05/Ethiopia-Country-Brief-Digital.pdf (accessed on October 10, 2017)
- 22. USAID | DELIVER PROJECT, Task Order 1. 2011. Contraceptive Financial Sustainability: A Primer. Arlington, Va.: USAID | DELIVER PROJECT, Task Order 1.
- 23. Ian Askew, Ndugga Maggwa & Francis Onyango, Fertility transitions in Kenya and Ghana: Trends, Determinants and Implications for Policy and Programs, National Research Council Committee on Population Workshop on Recent Trends in Fertility in Sub-Saharan Africa June 15-16, 2015
- 24. Katherine Tumlinson O. et al the promise of affordable implants: is cost recovery possible in Kenya? (2010), Elsevier Inc. Contraception 83(2011)88-93. (21)

- 25. Prata N, Weidert K, Fraser A, Gessessew A, A Potential for Cost Recovery: Women's Willingness to Pay for Injectable Contraceptives in Tigray, Ethiopia. (2013) PLoS ONE 8(5): e64032. doi:10.1371/journal.pone.0064032
- 26. Onwujekwe O. et al Willingness to pay and benefit cost analysis of modern contraceptives in Nigeria International Journal of Gynecology and Obstetrics 122 (2013) 94–98
- 27. Onwujekwe et al, Altruistic Willingness to Pay for Family Planning Methods: A study in Rural Communities of South-East Nigeria, Nigerian Journal of Community Medicine and Primary Healthcare, December, 2003
- 28. Fekadu H, Kumera A, Yesuf EA, Hussien G, Tafa M (2017) Prevalence and Determinant Factors of Long Acting Contraceptive Utilization among Married Women of Reproductive Age in Adaba Town, West Arsi Zone, Oromia, Ethiopia. J Women's Health Care 6: 360.
- 29. Eskindir Loha, Makonnen Asefa, Chali Jira, Fasil Tessema (2003) Assessment of quality of care in family planning services in Jimma Zone, Southwest Ethiopia. Ethiop.J.Health Dev. 2003; 18(1):8-18.
- 30. Yemaneh Y, Birie B. Assessment of Knowledge, Attitude and Utilization of Long Acting Family Planning Method among Women of Reproductive Age Group in Mizan-Aman Town, Bench-Majizone, South West Ethiopia, 2016. Integr J Glob Health.2017, 1:2.
- 31. Cited from (Tamirat Minota (November 2014), "determinants of households' willingness to pay for improved water supply services in Dilla town, southern Ethiopia: an application of contingent valuation method" (M.Sc. thesis, department of economics, AAU.)
- 32. Wedgwood, A. and Sansom, K. Willingness-to-pay surveys A streamlined approach: Guidance notes for small town water services WEDC, Loughborough University, UK. (2003)
- 33. FAO, Application of the contingent valuation method in developing countries. Economic and social development department, 2001
- 34. Winfrey, W. Ability and Willingness to Pay for Family Planning in Vietnam, Seattle: PATH; 2011

- 35. Lamberte, Exaltacion E., Nanette R. Le e, and Desiree C oncepcion U. Garganian, 200 0, Family Planning Service Utilization and Market Segmentation in the Philippines, Calverton, Maryland: ORC M acro.
- 36. Tapsoba P., Bahan D., Forsyth Queen E., Kaboré G., Hughes S. Quality of care and client willingness to pay for family planning services at Marie Stopes International in Burkina Faso. Ouagadougou: Population Council, 2013.
- 37. Central statistic agency, The 2007 Population and Housing Census of Ethiopia: Statistical Report for Ethiopia".
- 38. Biostatistics, Eighth Edition, a Foundation for Analysis in the Health Sciences Wayne W. Daniel
- 39. Karen G. Fleischman Foreit James R. Foreit, Willingness to Pay Surveys for Setting Prices for Reproductive Health Products and Services, A User's Manual, The Futures Group International's Policy Project., Revised 2004
- 40. WHO Department of Reproductive Health and Research (WHO/RHR) and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP), Knowledge for Health Project. Family Planning: A Global Handbook for Providers (2011 update). Baltimore and Geneva: CCP and WHO, 2011.
- 41. Girmay Tsegay et al,. Willingness to pay for footwear, and associated fac tors related to podoconiosis in northern Ethiopia 2016. Int Health 2016; 8: 345–353
- 42. Hosmer DW, Lemeshow S.2000; Applied logistic Regression, 2nd edition, New York.
- 43. Matheny G (2004) Family planning programs: Getting the most for the money. International Family Planning Perspectives 30: 134–138.
- 44. The national regional state of Harari bureau of health, Harari regional health bureau annual performance report, 2008 EC, Obora printing press, Harar, Ethiopia
- 45. William Winfrey, Willingness to Pay Increased Prices for Reproductive Health Products and Services in Ghana, Country Research Series | Number 12 | APRIL 2003

Annexes

Annex 1. Questionnaire: English version
Dear Sir/madam; good morning/afternoon. My name isI am working as a data
collector for the study being conducted by Mr. Nebiyu Sherefa who is studying for his master's
degree at Jimma University, college of health and medical science. I kindly request your
attention to explain about the study and being selected as the study participant.
Study title: Willingness to pay for Injectable Contraceptive among Reproductive Age
Women
Procedure and duration: you are selected among the community being by chance. I will be
interviewing you using questionnaire. The interview will take about 30 minutes
Confidentiality: The information you will provide me will be confidential. There will be no
information that will identify you in particular. The questionnaire will be coded to exclude
showing names. No reference will be made in oral or written reports that could link participant to
the risk.
Risk and benefits: The risk of participating in this study is very minimal, but only taking few
minutes from your time. There would not be any direct payment for participating in this study.
But the finding from this research may reveal important information for student graduation &
government health planner.
Rights: Participant for this study is fully voluntary. You have the right to declare to participate
or not in this study. If you decide to participate, you have the right to withdraw from the study at
any time and this will not label you for any loss of benefit which you otherwise are entitled .you
do not have answer any question that you do not want to answer. If there are any question or
enquires any time about the study or the procedure, please contact: Address of the Principal
Investigator: Nebiyu Sherefa 0911554807
Questionnaire identification number
2. Interviewer name
3. Date of interview

4. Name of the kebele _____

5. Checked by supervisor; Name	, Signature

Part One - Socio Demographic characteristics of respondents				
No	Questions	Response category code	Skip to	
100	How old are you? (in full year)	——years		
101	What is your Religion?	1.Muslim1		
		2.Orthodox2		
		3. Protestant		
102	Educational level	Illiterate1		
		Read and write2		
		Primary school3		
		Secondary school4		
		Higher education5		
103	Current Marital status?	Married/In-union1		
		Single2		
		Separated, Divorced3		
		Widowed,4		
104	Have you ever had pregnant?	Yes1		
		No2		
105	What was your age at first birth?			
106	How many living children do you have?	None1		
		Number		
107	What is your main occupation?	House wife1		
		Student2		
		Employed(GO/NGO)3		
		Self employee/merchant4		
		Daily worker5		
		Others		
		(specify)		
108	How much do you make per month (ETB)?			

109	What is your husband's occupation?	Employee(GO/NGO)1	
		Self employee/merchant2	
		Daily worker3	
		Others	
		(specify)	
110	How much your husband's monthly income	Amount	
	(ETB)?		
111	How much your family's TOTAL income		
	per month (ETB)?		
112	How much do you spend for the following	1. Food 2. water 3.	
	items per month (ETB)?	Telephone 4. Schooling 5.	
		Electricity 6. Transport 7.	
		Medical 8. house	
		9.community services (Edir,	
		etc)	
Part '	Two reproductive history		
113	Have you visited health facility in the last	Yes1	If no go to
	12 month?	No2	115
114	For what purpose?	Family planning1	
		Medical Service2	
		Others(specify)	
115			I
115	Have you ever had sexual intercourse?	Ves 1	
	Have you ever had sexual intercourse?	Yes1 No2	
116	Have you ever had sexual intercourse? Have you agreed with your husband/ partner		
116	-	No2	
116	Have you agreed with your husband/ partner	No2 Yes	
116	Have you agreed with your husband/ partner	No. .2 Yes .1 No. .2	If no go to
	Have you agreed with your husband/ partner about ideal number of children?	No. .2 Yes .1 No. .2 Others(specify)	If no go to part 2.1

118	Are you Currently using FP?	Yes1	If no go to	
		No2	124	
129	Which type of FP?	Injection1		
		Pills2		
		Implanon3		
		IUD4		
		Others(specify)		
120	Are you using the method you	Yes1		
	choose/preferred?	No2		
121	Where did you get the FP service	Public1		
		Private2		
		Other (specify)3		
122	How long time if you stanted to you family			
122	How long time if you started to use family			
	planning?			
123	Have you ever used injectable FP?	Yes1	If yes go to	
		No2	part three, if	
			no End	
			asking	
	Part2.1 Explain the type of family planning.			
	Family planning refers to a deliberate effort b	y a couple to limit or space the number of	children	
	they have through the use of contraceptive methods. Contraceptive methods are classified as modern			
	or traditional methods. Modern methods the intrauterine contraceptive device (IUD), implants,			
	injectables, the pill, and others. Injectables are administered through Deep intramuscular injection			
	into the hip, upper arm, or buttock stayed for	three month.		
124	Do you plan to use injectable?	Yes1	If yes go to	
	-	No2	part three	
125	Why don't use?		End asking	

Part three Willingness to Pay Questions					
Нуро	Hypothetical Market Scenario				
	Family planning programme was supported by external resources and the Ethiopian				
	government was providing freely. But current	ly external donations are decreasing. So			
	this create burden on government expenditure	. To ensure that we always have			
	adequate stocks for family planning methods,	the government is considering giving			
	injection by cost recovery mechanism. This re-	esearch will try to assess how much you			
	are willing and able to pay for injectables. In a	answering these questions, please bear			
	in mind the following: The current cost of the	Injectable contraceptive is 16 Eth.birr.			
126	Are you willing to pay the price mentioned	Yes1			
	above?	No2			
127	What would be the highest price you would	Amount	If they	are	
	be willing to pay for the injectables?		willing	to	
			pay	any	
			amount go	o to	
			129		
128	Why you don't pay any thing?	I have no income1			
		It is the responsibility of the			
		government2			
		Other (specify)3			
129	If the facility increased the price of the	Not use a contraceptive method1			
	injectables contraceptive beyond what you	Switch to a cheaper method2			
	were willing or able to pay, what would you	Other: specify			
	do?				

Thank You

Annex 2. Questionnaire: Amharic version

ሕንደምን አደሩ / ዋሉ ስሜ......ይባላል፡፡ የምስራው በጅማ ዩንቨርስቲ ለሁስተኛ ድግሪ የመመረቅያ ጽሁፍ ጥናት ለሚስሩት ለአቶ ነቢዩ ሽረፋ መረጃ ለመስብሰብ ነው፡፡ በዚህ መሠረት ሕርሶ ከተመረጡት ነዋሪዎች መካከል ስለሆኑ ከዚህ በታች ያለውን መረጃ በመረዳት በጥናቱ ላይ ለመሣተፍ መወሰንዎ ሕና አለመወሰንዎን ሕንዲገልጹልን በትህትና ሕንጠይቃለን፡፡

የጥናቱ ርእስ፡ በሀረር ከተማ የሚገኙ በመውሰድ እድሜ ክልል ውስጥ ያሉ ሴቶች (ከ15-49 አመት) በመርፌ ለሚስጥ የወሲድ መከሳከያ ከፍለው ለመጠቀም ያሳቸውን ፍቃደኝነት ለማወቅ የሚደረግ ዳስሳዊ ጥናት ነው፡፡

የተሳትፎ አካሄድና መመርያ፡ የእርሶ በጥናቱ ላይ የመመረጥ በአ*ጋ*ጣሚ ከነዋሪዎች መካከል ነው፡፡ ጥናቱ የሚካሄደው ለዚህ ጥናት ታስቦ በተዘ*ጋ*ጀው መጠይቅ ነው፡፡ ጥያቄው ለመሙሳት 30 ደቂቃ ያህል ሊወስድ ይችላል፡፡

ሚስጥር የመጠበቅ ሁኔታ፡ ጥናቱን አስመልክቶ ሕርሶ የሚሰጡትን ማንኛውም መረጃ በሚስጥር የሚጠበቅ በመሆኑ በማንኛውም መንገድ ስሶስተኛ አካል ተላልፎ አይሰጥም ወይም አይገለጥም ፡፡ ማንነቶ እንዳይታወቅ ስም*ዎ* በጥያቄው ወረቀት ላይ አይመዘንብም፡፡

የጥናቱ ስጋት ጥቅምና ጉዳት፡-በጥናቱ ላይ በመጣተፎ ምክንያት በአካል ሆነ በአይምሮ ላይ ሚከሠት ምንም ጉዳት አይኖረውም፡፡ ምናልባት ጥያቄዎችን ለመመለስ የሚጠፋ የጥናት ግዜ ካለሆነ በስተቀር፡፡ በጥናቱ ላይ በመጣተፍዎ የሚከፈልዎ ክፍያ ወይም የተለየ ጥቅም አይኖርም፡፡ ነገር ግን በጥናቱ ላይ በመጣተፍዎ ለሚጠየቁት ጥያቄ በዕውቀት ላይ የተመሠረተና ተገቢ መረጃ መሰጠቶ ለአጥኚው ለመመረቂያ ጽሁፍ እና ለመንግስት ፖሊሲ ለመቅረጽ ሊያገለግል ይችላል :: **የተጣታፊው መብት**፡-በጥናቱ ላይ ለመጣተፍ ሙሉ በሙሉ በራስዎ ፍላጎትና ፍቃደኝነት ላይ የተመሰረተ ነው:: ከመጀመርያው በጥናቱ ላይ ላለመጣተፍ እንዲሁም መሳተፍ ጀምረው በመሓል ለማቋረጥ መብትዎ ሙሉ በሙሉ የተጠበቀ ነው፡ ጥናቱን በተመለከተ ጣንኛውም አይነት ጥያቄ ቢኖሮዎት የሚቀጥለው አድራሻ በመጠቀም መጠየቅ ይችላሉ፡፡ አጥኚው አካል አቶ ነቢዩ ሽረፋ አድራሻ፡ ስልክ. ቁ 0911554807

1.	የመጠይቁ ካድ
2.	የጠያቂው ስም
3.	የቀበሴው ስም
1	መመደል የተከሃደበት ልን

ክፍል	ክፍል 1፡ ሀብረተሰብ -ነክ ጥያቄዎች				
ተ.ቁ	<i>መ</i> ጠይቆች	መልስ ሊሆኑ የሚችሉ	ወደ ሚቀጥለው ይለፉ		
100	<i>እድሜዎ</i> ስንት ነው ?	ዓመት			
101	ሕምነቶ ምንድነው?	ሙስሊም1 ኦርቶዶክስ2			
		ፕሮቴስታንት3 ሴሳ (ይግለፁ)			
102	የትምህርት ደረጃ	ማንበብና መጻፍ የማትችል1 ማንበብና መጻፍ የምትችል2			
		h1- 8 ክፍል			
103	የ <i>ጋ</i> ብቻ ሁኔታ?	ያገባች1 ያላገባች2 አግብታ የተፋታች3 ባለቤቷ የሞተባት4			
104	ነፍሰጡር ሆነው /ወልደው/ <i>ያውቃ</i> ሉ?	አዎ1 አሳውቅም2			
105	መጀመሪያ ነፍሰጡር ሲሆኑ /ሲወልዱ/ እድሜዎ ስንት ነበር?				
106	አሁን ስንት ልጆች አ ሎ ት?				
107	ስራዎት ምንድ ነው?	የቤት ሕመቤት1 ተማሪ2 መንግስታዊ/መንግስታዊ ያልሆነ			

		ተቋም ሰራተኛ3	
		የግል ስራ/ነ <i>ጋ</i> ኤ4	
		የቀን ሰራተኛ5	
		ሴሳ (ይጠቀስ)	
108	የወር <i>ገ</i> ቢዎት በአ ማ ካኝ ምን ያህል		
	ይሆናል(ብር)?	ብር	
109	የባለቤትዎ ስራ ምንድ ነው?	መንግስታዊ/ መንግስታዊ ያልሆነ	
	(ሳንቡ ብቻ)	ተቋም ሰራተኛ1	
		የግል ስራ/ነ <i>ጋ</i> ኤ2	
		የቀን ሰራተኛ3	
		ሴ ሳ (ይጠቀስ)	
110	የባለቤትዎ የወር <i>ገ</i> ቢ በአማካኝ ምን ያህል		
	ይሆናል?(ብር)	ብ C	
111	የቤተሰባችሁ አጠቃሳይ አማካይ የወር		
	<i>ገ</i> ቢያችሁ ምን ያህል ይሆናል?(ብር)	าใ	
112	ለሚከተሉት ነገሮች በወር ምን ያህል	1)ስምግብ 2)ስው ሀ	
	ያወጣ ሉ ? (በብር)	3)ስስልክ 4)ስትምህርትቤት	
		5)ለኤሴትሪክ/ማገዶ	
		6)ስትራንስፖርት	
		7)ስሀክምና 8)ሰቤት	
		9)ሰማሀበረሰብ አንልግሎት (እድር	
		የመሳሰሉት)	
ክፍል	2፡የስን ተዋልዶ ታሪክን በተመለከተ		
113	ባለፈው አንድ አ <i>ሙት ጊ</i> ዜ ውስጥ ወደ ጤ	ና አዎ1	አሳውቅም ካሱ
	ተቋም ሄደው ያውቃሉ?	አሳውቅም2	ወደ 115 ይስፉ
114	ለ መጨረሻ ጊዜ ወደ ጤና ተቋሙ የሄዱ	ት ለቤተሰብ ምጣኔ1	
	በምን ምክንያት ነበር?	ለሀክምና አገልግሎት2	
		ሴ ሳ (ይጠቀስ)	

115	ከዚህ በፊት ፆታዊ ግንኙነት ፈፅመዉ ያዉቃሉን?	አዎ1 አሳዉቅም2	
116	ስለሚኖርዎት ልጆች ብዛት	አዎ1	
	ከባለቤት ም/ጓደኛም ጋር ውሳኔ/ስምምነት ላይ	አልደረስንም2	
	ደርስዋል?	ሴ ሳ (ይጠቀስ)	
117	ስለቤተሰብ ምጣኔ ሰምተዉ ያዉቃሱን?	አዎ1	አሳውቅም ካሉ
		ስሳዉቅም2	ወደ ክፍል 2.1
			ይስፉ
118	አሁን የቤተሰብ ምጣኔ ሕየተጠቀሙ ነውን?	አዎ1	አልጠቀምም ካሉ
		አልጠቀምም2	ወደ 124 ይ ስ ፉ
119	የትኛውን አይነት ነው አሁን በመጠቀም ላይ	በመርፌ የሚሰጥ1	
	ያሉት?	የሚዋጥ2	
		በክንድ ላይ የሚቀበር3	
		ማህፀን ውስጥ የሚቀመጥ4	
		ሌ ሳ(ይጠቀስ)	
120	የመረጡትን/የፌስጉትን የወሲድ መከሳከያ ዘዴ	አዎ1	
	ነው በመጠቀም ሳይ ያሉት?	አይደለም2	
121	አሁን	ከመንግስት ተቋም1	
	ምጣኔውን ከየት አንኙት ?	ከፃል ተቋም2	
		ሴሳ(ይጠቀስ)	
122	የቤተሰብ ምጣኔ መጠቀም ከጀመሩ ምን		
	ያህል ጊዜ ይሆኖታል? (በወር ወይም		
	በአመት ተለይቶ ይገለፅ)		
123	በመርፌ የሚሰጠውን የወሲድ መከሳከያ	አዎ1	አዎ ካሱ ወደ
	ተጠቅመው ያውቃሉን?	አሳውቅም2	ክፍል 3 ይለፉ
			አሳው ቅም ካ <u></u>
			ጥያቄው ያብቃ

ክፍል 2.1 ስለቤተሰብ ምጣኔ ገለፃ ይሰጣቸው፤፤

የቤተሰብ ምጣኔ ማስት ጥንዶች የሚወልዱትን ልጆች ለማራራቅ ወይም ለማቆም በተለያዩ ዘዶ የሚጠቀሙበት መንገድ ነው።መንገዶቹ ባህላዊ እና ዘመናዊ በመባል በሁለት ይክፈላሉ ። ዘመናዊ የሚባሉትበመርፌ የሚሰጥ ፣የሚዋጥ ፣ በክንድ ስር የሚቀመጥ ፣ ማህፀን ውስጥ የሚቀመጥ እና የመሳሰሉት ናቸው።በመርፌ የሚሰጥ የወሊድ መከላከያ ዘዶ በቀላሉ በጡንቻ የሚሰጥ ሆኖ ለሶስት ወር ያገለግላል።በአብዛኛው ለጤንነት በጣም አስጊ በሚባል ደረጃም የጎንዮሽ ጉዳት የለውም።

124	በመርፌ የሚሰጠውን	የቤተሰብ	ምጣኔ	አዎ1	አዎ	ካሉ	ወደ
	ለመጠቀም እቅድ አለዎት?			የለኝም2	ክፍል :	3 ይስፉ	
125	ለ ምን አይጠቀ <i>ሙ</i> ም?				ጥያቄወ	› ይቁ <u>ም</u>	D

ክፍል 3፡ የመክፈል ፍቃደኝነትን በተመለከተ ጥያቄዎች?

በመርፌ ስሚሰጡ የቤተሰብ ምጣኔ ግምታዊ የሆነ የገበያ

የቤተሰብ ምጣኔ ፕሮግራም እርዳታ በሚሰጡ የውጭ ሀገራት አማካኝነት የኢትዮጵያ መንግስት በነፃ ሲሰጥ ነበር።ነገርግን አሁን የውጭ እርዳታው እየቀነሰ ስለሆነ ወጪው በመንግስት እየተሸፈነ ይገኛል።ይህም በመሆኑ መንግስት ላይ ጫና ፈጥሯል።በመሆኑም መንግስት ተገልጋዮቹ ወጪውን እንዲጋሩ ለማድረግ እያጤነው ይገኛል። የዚህ ጥናት አሳማም ተገልጋዮች ምን ያህል ወጪውን ለመጋራት ፍቃደኝነት እንዳሳቸው ለማወቅ ነው።በመርፌ ለሚሰጡ የቤተሰብ ምጣኔ አንድ ጊዜ ተወግተው ለሶስት ወር

126	ከላይ የተጠቀሰውን ዋጋ ለመክፈል ፍቃደኛ	አዎ1	
	ኖት?	አይደለሁም2	
127	በመርፌ ለሚሰጥ የቤተሰብ ምጣኔ ሕርስዎ		የትኛውንም ዋጋ
	መክፈል የሚችሉት/ፍቃደኛ የሚሆኑት	1C	ለ መክፈል ፍቃደኛ
	ከፍተኛው ክፍያ ስንት ነው?		
			ከሆጉ ወደ 129
			ይለፉ

128	ምንም ለመክፈል ፈቃደኛ ያልሆኑት ለምንድ	የመክፈል አቅም ስለሌለኝ1
	ነው?	የመንግስት ሀሳፊነት ስለሆነ2
		ሌሳ(ይጠቀስ)
129	ጤና ተቋሙ ከዚህ/መክፈል ከሚፈል <u>ጉ</u> ት	የቤተሰብ ምጣኔ መጠቀም
	በሳይ ቢጨምር/ማስከ <mark>ፊል ቢጀምር/ ምን</mark> ያደር <i>ጋ</i> ሱ?	አቆ ማ ስሁ1
		ዋጋ ወደሚቀንሰው የቤተሰብ
		ምጣኔ አይነት እቀይራስሁ2
		ሴሳ (ይጠቀስ)

<u>አመሰግናለሁ!!!</u>

Annex 3. Questionnaire: Afan Oromo version

Obboo/Addee: Maqaan kankoo ______jedhama. Qorannoo obboo Nabiyyuu Sharafaa, kan Maastarii(digrii 2^{ffaa}), kolleejjii fayyaa fi saayinsii Meedikaalaa yuunivarsiitii Jimmaatti baratan, gaggeessaniif odeeffannoo funaanuu irratti argama. Qorannoo gaggeeffamu kanaaf waan filatamtaniif xiyyeeffannaan gaafilee akka ibsitan kabajaan isin gaafadha.

<u>Mata-Duree Qorannoo:</u> Dubartoonni umrii dahumsaa (daa'ima godhachuu) keessatti argaman keessaa fedhiin kaffaltii isaan qoricha karoora maatii bifa lilmootiin kennamuuf qaban sakatta'uu.

<u>Kaayyoo Qorannichaa:</u> Kaayyoon ijoon qorannoo kanaa kaffaltii karoora maatii kafaluuf dubartoonni fedhii qabachuu fi dhabuu ilaaluu yoo ta'u, kan biraa ammoo barnoota maastarii Ikonomiksii Fayyaatiin xumuruufi. Argannoon qorannoo kanaas karoora sirna diinagdee keessaa kan karoora maatii bayyanachiisuuf. Dabalataanis odeeffannoon ati kennitu nama qorannoo kana gaggeessaa jiruuf baay'ee fayyada.

<u>Adeemsaa fi Dheerinna Yeroo</u> Gaafileen hamma 30 ta'an deebii ati kennitu irratti hundaa'uun guutamu. Gaafii fi deebiin keennas daqiiqaa 15 fudhachuu waan maluuf yeroo kankee akka naaf laattu kabajaan si gaafadha.

<u>Balaa fi Bu'aa</u> Qorannoo kana keessatti hirmaachuun miidhaa tokkollee hin qabu, yeroo muraasa qofa sirraa fudhata. Qorannoo kana irratti hirmaachuun kaffaltii kamiyyuu kan hin qabne ta'us, bu'aan qorannoo kanaan argamu garuu ogeeyyii karoora faayyaa naannootii fi federaalaa baasaniif baay'ee fayyada.

<u>Iccitii</u> Odeeffannoon ati kennitu kallatiin kan si ilaallatu waan hin ta'iniif iccitiin isaa eeggamaadha. Bu'aan qorannoo kanaa dimshaasha hawaasaa waan ta'eef namni dhuunfaadhaan inni ibsu hin jiraatu. Maqaan namaa akka hin beekamneef gaafileen koodiidhaan kaayamu. Gaafilee afaaniin yookiin barreeffamaan dhiyaatan keessatti miidhaa hirmaattota irra gayuu malu dhabamsiisuuf hirmaattotni waa'ee mataa isaanii hin gaafatamani.

<u>Mirga</u> Qornnoo kana kessatii hirmaachuun fedhiidhaan waan ta'eef, hirmaachuu fi dhiisuuf mirga guutuu qabda. Erga eegaltee boodas bu'aan kallattiin qorannoo kana irraa argattus waan hin jirreef, yeroo feetetti keessaa bayuuf mirga qabda. Akkasumas gaafilee deebisuu hin

barbaanne deebisuu dhabuuf mirga qabda. _Waa'ee qorannoo ilaalchisee gaafiii kamuu yoo qabaattan teessoo kanaan qunnama

Nabiyyuu sharafaa 0911554807

6.	Koodii gaafannoo
7.	Maqaa gaafataa
8.	Maqaa araddaa isaa
9.	Guyyaa gaaffiin adeemsifame
10.	Magaa too'ataamallatoo

Lak	KUTAA-1 CIAAFFILEE HAEAASAAN WALQABATAN			
	Gaafilee	Kanneen Deebii ta'uu		Gara fuula itti
				aanuu
100	Umriin kankee meeqa?	Waaggaa		
101	Amantiin kee maali?	1. Muslima	1	
		2. Ortodoksii	2	
		3. Pirotestaantii	3	
		4. Kan biro(himi)		
102	Sadarkaan barnoota keetii maali?	Hin barannee	1	
		Dubbisuu fi barreessuu Kan		
		dandeessu	2	
		Sad.1 ^{ffaa Kutaa} Kutaa 1-8	3	
		Sad.2 ^{ffaa} Kutaa 9-12	4	
		Barnoota olaanaa	5	
103	Heerumtee jirtaa?	Kan heerumte	1	
		kan hin heerumne	2	
		kan herumtee hiikte	3	

		Kan Abbaan mana irraa du'e4		
104	Ulfa godhattee/deessee/ beektaa?	Eeyyee	Hin	beeku
		Hin beeku	yoo	jettan
			gara	108
			darbaa	a
105	Yeroo jalqabaatiif yommuu ulfa			
	godhattan /deessan / umriin			
	keessan meeqa ture?			
106	Amma ijoollee meeqa qabda?			
107	Hojiin kee maali?	Haadha manaa		
		Barattuu		
		Hojjattuu (Moot/Mit Moot) 3		
		Hojii dhuunfaa/daldaltuu 4		
		Hojjattuu guyyaa 5		
		Kan biroo (himi)		
108	Ji'atti galii meeqa argatta?	Qarshii		
109	Hojii abbaa manaa keetii maali?	Hojjataa (Moot/Mit Moot)1		
	(dubartoota heerumaniif)	Hojii dhuunfaa/daldalaa2		
		Hojjattaa guyyaa3		
		Kan biroo (himi)		
110	Galiin ji'aatti abbaan manaa keeti	i Qarshii		
	argatu meeqa?			
111	Galii ji'aa walii gala maatii keeti	i Qarshii		
	meeqa?			
112	tokko tokkoo wantoota armaan	1. Nyaataaf2.Bishaaniif		
	gaditti tarraa'eef ji'atti meeqa	3. Bilbilaaf 4.Barnootaaf		
	baafta?	5. Ibsaaf 6. Geejjibaaf		
		7. Yaalaaf 8.Manaaf		
		9.Tajaajila hawaasumma		

		garagaatiif (afooshaaf, kkf)		
	KUTAA-2 Too'an	noo da'umsaan wal qabatan i	ilaalchis	see
113	Waggaa darbe keessa mana yaalaa		1	Hin beeku yoo
	deemtee beektaa?	Hin beeku	2	jedhan gara 115
114	Yeroo dhumaatiif gara dhaabbilee	Karoora maatiitiif	1	
	fayyaa kan deemte Sababa maaliitiin	Tajaajila yaalaatiif	2	
	ture?	Kan biroo (himi)		
115	Kanaan dura Saalqunnamtii	Eeyyeen	1	
	raawwatte beektaa	Miti	2	
116	Baay'ina ijoollee horachuuf	Eeyyeen	1	
	karoorfattan abbaa manaa kee	Miti	2	
	waliin murteessitanii jirtuu	Kan biroo (himi)		
117	Waa'ee karoora maatii dhageessee	Eeyyeen	1	Hin beeku yoo
	jirtaa	Miti	2	jedhan gara
				gaaffii kutta
				2.1darbaa
118	Yeroo ammaa kanatti karoora	Eeyyeen	1	Hin fayyadamu
	maatittii fayyadamaa jirtaa?	Hin fayyadamuu	2	yoo jedhan gara
				124 darbaa
119	Tooftaa gosa kamitti fayyadamaa jirtu?	Kan lilmoon kennamu1		
		Kan liqimsamu2		
		Irree harka irratti kan awwaalamu3		
		Gadaameessa keessa kan kaa'amu4		
		Kan biro(himi)		
120	Tooftaa ittisa da'umsaa filattanii itti	Eeyyee1		
	fayyadamaa jirtuu?	Miti2		
121	Karoora maatii amma itti	Dhaabbilee mootummaa irraa	1	
	fayyadamaa jirtan eessarraa	DhaabbileeDhuunfaa irraa	2	
	argattan?	Kan biroo(himi)		

122	Ittisa da'umsaa fayyadamuu kan		
	eegaltan hagam ni ta'a?/ji'aan ykn		
	waggaan addaan baasaa ibsaa/		
123	Ittisa da'umsaa kan lilmoon	Eeyyee1	Eeyyee yoo
	kennamu fayyadamtanii beektu?lakk	Hinbeeku2	jedhan gara 129
	121 irratti lilmoo maleetti kan		darbaa
	tuqamu qofa/		Hin beeku yoo
			jedhan immoo ni
			gaha
	KUTAA-2,1 Gosa dawaa karoora maa	••	
	Karoora maatii jechuun carraaqqii dh	uirsaa fi niitiin mariidhaan tooftaa ittisa	
	ulfaatiin baay'ina ijoollee isaanii daan	gessuuf ykn murteessuuf taasisaniidha.	
	Tooftaan ittisa ulfaa kan ammayyaa fi	i kan aadaa jedhamee bakka lamatti qoodama.	
	Malli ittisa ulfaa ammayyaa: kan gada	aamessaa keessa galfamu(IUD), kan qaama	
	keessatti awwaalamu, kan lilmoon ke	nnamu, kiniinii fi kan birooti. Kan lilmoo	
	naannawa maashaalee luqqeettuu, irre	ee(ciqilee oli) fi hudduu irratti gadi	
	fageenyaan waraanuun kan kennamu	yoo ta'u baatii sadiif tura.	
	kiniiniin ni liqimsama. Kan qaama ke	essatti awwaalamu ammoo waldhaansa	
	baqaqsanii hodhuu salphaa gogaa irre	e dubartii gara olii irratti taasisuun kan	
	godhamu yoo ta'u innis waggoota sad	iif fayyada.	
124	Mala ittisa da'umsaa lilmoon	Eeyyeen	Eeyyee yoo
	kennamutti fayyadamuuf karoora	Miti 2	jedhan kutta
	qabdaa?		3darbaa
125	Maaliif hin fayyadamne		Gaaffiin ni gaha
	KUTAA-3 KAFFALTII KAFA	LUUF FEDHII QABAACHUU FI DH	TISUU
	TILMAAMA KAFFALTII TAJAA	-	
		ra biyyoota alaatiin deeggaramaa waan tureef,	mootummaan
		isaan) kennaa ture. Yeroo ammaa kanatti garuu	
	100pmyaas tajaajna kana totaan(on	isaan) keimaa ture. 1 eroo ammaa kanatti garuu	uceggariouiiii

	biyya alaa hir'achaa waan jiraniif baasiin isaa mootummaa irratti ulfaatee jira. Kana		
	dandamachiisuuf mootummaan tooftaa karoorri maatii kun baasiidhaan itti kennamuu danda'u		
	xiinxalaa jira. Qorannaan kunis kaffaltii lilmoo tanaaf kaffaluuf		
	fedhii fi dandeettii qabaachuu keessan baruufi.Gatiin dawaa kanaa ammaan tana Qarshii 16		
126	Gatii armaan olitti eerame kana	Eeyyeen1	
	kaffaltaa?	Miti2	
127	Gatiin ol aanaa ati lilmoo ulfa ittisuuf kafaluu feetu meeqa?	Hamma	Gatii kamitti kafaluuf fedhii qabdan yoo ta'e gara129 darbaa
128	Maaliif homa tokko hin kafalle?	Galii hin qabu waan ta'eef1 Dirqama mootummaa waanta'ee	
129	Manneen yaalaa gatii limoo ulfa ittisuu kana hanga ati kafaluu feetuu ykn dandeettuu oli yoo dabalan maal goota?	Kan gatii salphaa barbaada2	

Galatoomaa

Declaration

ASSURANCE OF PRINCIPAL INVESTIGATOR

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in this or any other university and that all sources of materials used for the thesis have been fully acknowledged.

Name of the student:
Signature
Name of the institution
Date of submission.
This thesis has been submitted for examination with my approval as University advisor
Name and signitature of the first advisor:
Name and signitature of the second advisor: