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FACULTY OF MEDICINE

SCHOOL OF PUBLIC HEALTH

Comparison of Factors Influencing Utilization of Modern Contraceptive Methods among Rural and Urban Women Currently using Family Planning Service in South Wollo Zone, Amhara National Regional State

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List of Abbreviations

CAR:	Contraceptive Acceptance Rate.
CPR:	Contraceptive Prevalence Rate.
EDHS:	Ethiopian Demography and Health Survey.
FMOH:	Federal Ministry of Health.
FDREPCC:	Federal Democratic Republic of Ethiopia Population Census Commission
IUCD:	Intra- Utrine Contraceptive Device
HC:	Health Center.
HP:	Health post.
HSDP:	Health Sector Development Program
ICPD:	International Conference for Population and Development.
MCMU:	Modern C ontraceptive Method Utilization.
MDG:	Millennium Development Goals.
MMR:	Maternal Mortality Rate.
MOH:	Ministry of Health.
NGO:	Non-Governmental Organizations
UNECFA:	United Nation Economic Commission for Africa
SPSS:	Statistical Package for Social Sciences.
RH:	Reproductive Health

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Abstract

Background: Utilization of modern contraceptive methods is related to socio-demographic, reproductive and fertility factors. Previous studies concentrated on identifying these and other determinant factors in rural or urban but it is unclear whether the magnitude of these factors in rural and big urban population similar or not.

Objective: The objective of this study is to assess and compare factors influencing utilization of modern contraceptive methods among rural and urban women currently using family planning service in South Wollo Zone, Amhara Region.

Methods and materials: Health facility based comparative cross-sectional study was conducted in Dessie town, Jamma and Wereilu Weredas of South Wollo Zone from February to March-2010.The Two rural Weredas were selected from the ten remote weredas located in the western part of the Zone by using simple random sampling methods. All health centres and one potential health post per weredas were the study unit. After obtaining permission to proceed from all level of relevant bodies, data were collected by trained health workers using pre-tested interviewer administered close ended questionnaires from 534 women who visit 12 health facilities as current MCM users. Data were entered and analysed using SPSS Soft Ware.

Result. Rural women use modern contraceptive methods for the first time on average after they had 3 children and only (4.5%) of users before the first child as compared to urban users after they had 1.4 children and (24.3%) before the first child. Desire to limit family size by rural users less (25.8%) than (31.5%) urban users. Decision making to use modern contraceptive by rural users less (21.7%) than urban users (25.5%).(90.3%) of rural and (86%) of urban users had past history of pregnancy. Rural women whose perceived economic status as average were three times more likely to practice modern contraceptive as compared to urban women.

Conclusion: This study has clearly described that rural women use modern contraceptive methods after they had higher number of children and less desire to limit family size as compared to urban women. It is recommended that strong behavioural change intervention targeting the high fertility desire of rural women and modern contraceptive methods utilization is needed.

1. Introduction

Rapid population growth is among the top ranking global problems. But all region of the world do not equally share this problem. Because developed nations could stabilize their population growth at the replacement level and now enjoying the benefits of the outcome (1).

In African countries one major factor contributing to the challenge is the continued rapid growth of population. The number of people in need of health, education, economic and other services is large and increasing which in turn means that the amount of resource, personnel and infrastructure required to meet development goals are also increasing (2) .

In Ethiopia according to the third population and housing census the total number of person enumerated was 73,918,505 of these 50.5% were male and 49.5 % were female. The Population of the country in the previous Censuses of 1984 and 1994 were 39,868,572 and 53, 477, 26 respectively. The population of Ethiopia grew at an average annual rate 2.6 % between 1994 and 2007 (3)

Fertility is one of the three principal components of population dynamic that determine the size and structure of population in a country. In Ethiopia rural women on average have 2.5 children more than urban women. There is substantial differential in fertility by region ranging from low of 1.4 children per women in Addis Ababa to high of 6.2 children per women in Oromiya.Total fertility rate of the country also estimated about 5.4 per 1000 (3, 4).

The level of contraceptive use is one of the most proximate determinants for the trend and differentials seen in fertility over time or places and increasing contraceptive use can significantly reduce the cost of achieving selective Millennium Development Goals (MDGs) and directly contribute in reduction of maternal and child mortality (2).

In the past four decade family planning program has played a major role in raising prevalence of contraceptive practice and reducing fertility in developing countries from 6 to about 3 birth per woman, However in lower-income countries contraceptive practice remain low and fertility, population growth and unmet need for family planning are high (5).

In Ethiopia use of contraceptive methods tripled in the fifteen years period between 1900 and 2005 from 5% to 15%. The increase was especially marked for modern methods which were more than doubled in the five year between 2000 and 2005. One in three currently married women has unmet need for family planning (34%) the need for spacing (20%) is higher than the need for limiting (14%). If all currently married women who say they want to space or limit the number of children were to use family planning the contraceptive prevalence rate in Ethiopia would increase from 15% to 49% (6).

According to the Federal Ministry of Health (FMOH) health indicators, contraceptive acceptance rate of Ethiopia in 2007 and 2008 were 33.6% and 50.9% respectively (7).The 2008|9 Federal Ministry of Health, Health Sector Development Program (HSDP) performance report also showed that currently National contraceptive acceptance rate of Ethiopia is 56 % (8).

Modern contraceptive methods utilization is related to socio-demographic, reproductive and fertility factors. Most of the studies so far done assessed these and some other determinant factors but there is no clear study that compared factors influencing modern contraceptive methods utilization among current users between rural and big urban population, therefore the present cross-sectional study aimed to compare factors influencing utilization of modern contraceptive methods between rural and big urban women currently using family planning service.

2. Statement of the Problem

Utilization of modern contraceptive methods is related to socio-demographic, reproductive and fertility factors. Previous studies were concentrated on identifying these and other determinant factors in rural or urban (small town and big town together or separately) at different time or at the same time but it is unclear whether factors influencing modern contraceptive methods utilization in rural population and big urban area population (population size greater than 100,000) similar or not.

As the definition of urban and rural are (especially urban) different across countries and very often even in the same country it is difficult to examine differences in the population characteristics (Unless the population size taken as one parameter) between small town and villages as well as big urban areas and small town. (9). It is true in Ethiopia that the 2005 Ethiopia Demography and Health Survey showed percent distribution of all current modern contraceptive user by region, However from all big urban in the country only two big urban (Addis Ababa and Dire Dawa) percent of current modern contraceptive users are separately mentioned but distribution current modern contraceptive users based on their socio-demographic, reproductive and fertility characteristics are not seen (6) Other studies conducted so far on determinant of modern contraceptive also did not answer whether factors influencing modern contraceptive methods utilization among current users in rural population and big urban population are different or not.

To contribute by filling the above mentioned research gap the present comparative cross-sectional study was carried out in rural population and big urban population with population size 68,642 (Dessie town).Therefore the knowledge obtained by this study will help to design family planning intervention strategies for rural and big urban populations according to the magnitude of identified problem. It will also serves as baseline for further study in the study area.

3. Literature Review

Promotion of family planning in countries with high birth rates has the potential to reduce poverty, hunger and avert 32% of all maternal deaths and nearly 10% of childhood death. It would also contribute substantially to women empowerment, achievement of universal primary schooling and long-term environmental sustainability (5).Based on these facts the 1994 International Conference on Population and Development (ICPD) held in Cairo marked a paradigm shift in making reproductive health service comprehensive and integrated. One of the plan of action in the conference was to make family planning universally available by the year 2015 as a part of a broad approach to reproductive health and rights. Government and the International Community pledged their commitment for the implementation of the recommendation adopted at the conference (9).

In Ethiopia the situation is not exceptional from the other nations in the implementation of the recommendation that the 2006-2015 Ethiopia National Reproductive Health Strategy and other health related policies and strategies give priority to family planning (11.12, 13) As the result of priorities given so far, different years of federal ministry of Health, annual Health and Health indictors documents showed that contraceptive acceptance rate of the country is on increasing trend (14) Despite the efforts made so far evidences showed that utilization of modern contraceptive methods is still influencing by socio-demographic, reproductive, fertility and some other factors as mentioned below.

3.1. Socio-demographic factors

Various studies showed that modern contraceptive utilization among current users can be influenced by their Socio demographic characteristics (residence, age, marital status, educational status, religion, ethnicity, occupation, income, family size and economic status)

Age

According to the 2005 Ethiopia Demography and health survey modern contraceptive use higher in age group 25-29 (14.4%) and 35-39 (14.4%) than other age categories of reproductive age group (15-49) among current contraceptive users

Education

Studies in different parts of the world have showed a positive linear relationship between education and modern contraceptive use. Evidences showed that in Malawi and Tanzania there was an association between women educational attainment and modern contraceptive use, where the more educated was more likely to use modern contraceptive (15).

A study done in Gondor town revealed that there was positive trend of association in contraceptive use, with increase educational status the relative percentage of contraceptive use increase from 33.7% to 41% among primary and secondary schooling and 52.5% among higher educated women (16).In Ethiopia, according to the 2005 Demography and health survey, contraceptive use differs significantly across educational categories. Current use increase five fold from 10% among women with no education to 53% among those with secondary and higher levels of education (6).

Marital status

A study conducted among rural women in reproductive age group in Oromia zone, Amhara National Regional State revealed that married women were two times more likely to practice modern contraceptive compared to unmarried, divorced and windowed women (16).

Wealth

Wealth has a positive effect on women use of contraceptive, with use increasing markedly as wealth increasing from 4% among women in the lowest wealth to 37% among those in the highest wealth (6).

Religion and Ethnicity

A study done in Bangladesh revealed that the percentage of current users of modern contraceptive methods among Muslims was lower (30.2%) than non-Muslim (36.3%) (17) In Ethiopia the situation is the same as the above mentioned fact. According to the 2000 Demography and health survey high proportion of women reported that religious leaders oppose the use of contraceptive. In this study Religion and Ethnicity were the determinant factors to the use of contraceptive.

Occupation

Evidence showed that Government employed women were three times more likely to use modern contraceptive method than housewives (18).

Residence

A study conducted in in Dembia, North Gondor showed that urban women were 3.6 times more likely to use modern contraceptive method than rural women (19).The 2005 Ethiopia Demography and health survey also revealed that contraceptive prevalence rate more than four times higher in urban than in rural area (6).

3.2. Reproductive and Fertility Factors

The 2005 Ethiopia Demography and health survey and other studies showed that contraceptive use related to reproduction and fertility characteristics of current users (gravidity, parity, number of live children, birth interval, birth order, abortion. still birth, age at first birth, and sex composition of live children).In Ethiopian child bearing start early and. at current age specific rate of childbearing, Ethiopian women will have had more than half of her life time birth by age 30, and nearly three-fourth by age 35.The interval between births is relatively long. The median number of months since the preceding birth is 33.8 and 21% of no first birth occur within two years of previous birth, 35% occur between 24 and 35 months later and 44% occur at least 3 years after previous birth

Contraceptive use among women with one or two children (17%) and lowest among women with no children (12%)6% of all women first used a method of family planning when they had 4 or more children 3% at the time with no children and 4% after the birth of their first child. Most women below age 30 started using contraception after they had one child (6, 18)

3.3. Knowledge and other description on modern contraceptive use

Knowledge of modern contraceptive methods

In Ethiopia knowledge of modern contraceptive methods has increased from 2000-2005. Knowledge about family planning and its benefit was high among current users Modern methods more widely known than traditional contraceptive methods 87% of women know about modern methods and 17% know traditional contraceptive methods. The pill (84%)

was the most known method followed by inject able (83%) but the most widely used method was inject able followed by pill (6).

Study done in Somalia Region revealed that 95.6% of urban women and 43.6 % of rural women had information about t family planning and most women used inject able and pills (20).Other study revealed that current user of modern contraceptive methods who are well informed about the side effects and problems associated with methods and know of a range of methods options are in better position to make an informed choice about the method they would like to use (17).

Other description on modern contraceptive use

Studies showed that besides knowledge, socio-demographic, reproductive and fertility characteristics of users to use modern contraceptive, some other factors such as, types contraceptive method using, perceived benefit of MCM, perceived barriers, choice based utilization, reasons not using MCM based on the choice and decision making to use MCM.are also determinant factors in the usage of modern contraceptive.

A study conducted in Jima Zone showed that 21.1% of clients were reported to be given the method different from their choices. About 41 % use pills without being their choice and about 31.1 % were not given the chance to choose the family planning methods (21).

Different studies showed that modern contraceptive use is more practiced when the decision about family planning is made by both couples and when they freely discussed on the matters of family planning (17, 22, 23).

In general the gap that identified in the above literature review on socio –demographic, reproductive and other more related factors that influence utilization of modern contraceptive methods is no clear studies conducted so far that compared these factors between rural women and big urban women of current modern contraceptive users.

4. Objective

4.1. General objective

To assess and compare factors influencing utilization of modern contraceptive methods among rural and urban women currently using family planning service in South Wollo Zone.

4.2. Specific objectives

1. To assess socio-demographic factors that influence utilization of modern contraceptive methods among rural and urban women.
2. To assess reproductive and fertility factors that influence utilization of modern contraceptive methods among urban and rural women.
3. To compare socio-demographic, reproductive and fertility factors that influence utilization of modern contraceptive methods between urban and rural women currently using family Planning service.

5. Methods and Materials

5.1. Study area

The study was conducted in Dessie town, Jamma and Wereilu weredas of South wollo zone, Amhara National Regional State from February to March, 2010.

South Wollo is one of the 11 Zones in the Amhara national regional state. The Zone has a total population of 2,834,212 with an area of 17,736.8 square km. It is divided in to 20 rural and 2 urban administrative weredas. In the Zone, *64* health centers , 407 health post ,2 rural and 1 referral Hospital are currently functional Besides Government health facilities there are 3 privat Hospital *91clinics and* 2 Non-Governmental clinics that provide family planning service. The health service coverage of the Zone reached about 93.5%.

Dessie town administrative wereda is one of the two urban woredas and the capital city of the Zone with a total population of 168,642. It is 400km far from Addis Ababa and 480km from Bahir Dar.The 3 privat Hospital,3 health centres and 9 health post *and 2* Non-Governmental clinics are found in dessie town.

Jamma and Wereilu weredas are among the 18 rural weredas found in the zone and located at western part of the zone with 80 -130 km far away from Dessie town with total population of 133,924 and 115,235 respectively. There are 3 health centres per wereda and under each health centers there are 5 health posts.

According to the 2008 South Wollo Zone Health Department Zonal annual report, contraceptive acceptance rate of the 10 selected rural weredas was 72.1%, the urban wereda (Dessie town wereda) was 82.9% and the Zonal contraceptive acceptance rate (20 rural and 2 urban weredas) was 80.3%.

5.2. Study design

Health facility based comparative-cross-sectional study was conducted on rural and urban women who registered in the health centres and health posts as current contraceptive user and visit the facilities regularly (all repeat acceptors) for family planning service in the study area.

5.3. Sampling

5.3.1. Source and Sample population

- **Source population**: All women currently using modern contraceptive methods in South Wollo Zone.
- **Sample population**: Current contraceptive users who visit health institutions or the health centers and health posts which was selected in the study area,

5.3.2. Sampling procedure

From a total of 20 rural weredas in the Zone 10 weredas which are found at the western part of the Zone and 80-180km far from the urban study area (Dessie town) was selected by using inclusion and exclusion criteria's and from the10rural weredas Jamma and Wereilu were selected by using simple random sampling method.

All health center (Three health centers per each urban and rural wereda) and one potential health post per woreda (a total of 12 health facilities) were the study unit. All women in reproductive age group (15-49) who visit the health facilities as current contraceptive users (new and repeat acceptors) of modern contraceptive methods at the time of study were the study subject.

5.3.4. Inclusion and Exclusion criteria's

5.3.4.1. Inclusion Criteria's

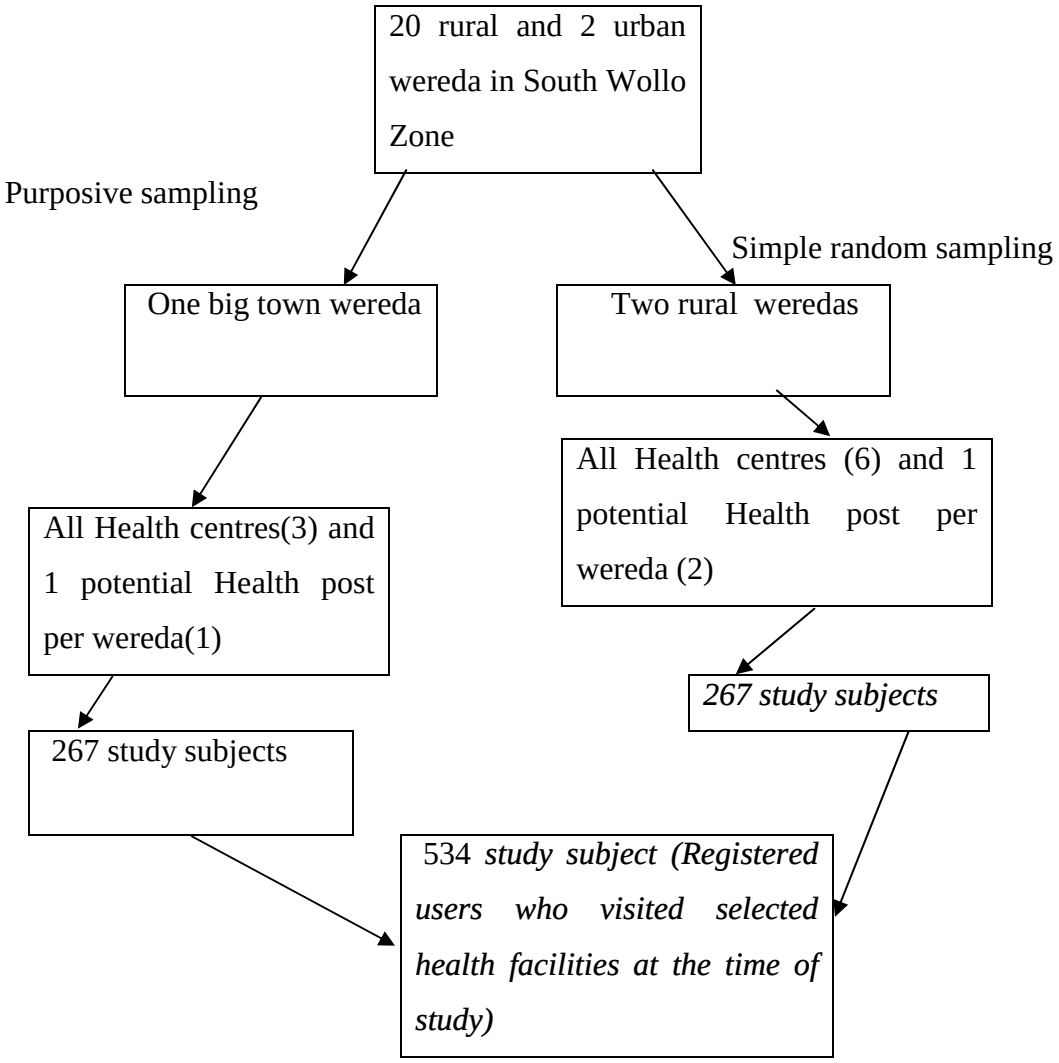
From a total of 20 rural weredas in the Zone 10 weredas which are found at the western part of the Zone and 80-180km far from the urban study area (Dessie town) were selected. From the 10 rural weredas ,Jamma and Wereilu were selected by using simple random sampling method.

- All health centers in both urban and rural study area and one health post that has highest number of clients per day were the study unites.
- Women in reproductive age group (15-49 years of age) who visit the health facilities as current users (new and repeat acceptors) at the time of study are considered eligible.

5.3.4.2. Exclusion Criteria's

- Weredas near (<80 km) to urban study area (Dessie town) were not selected because of their relative similar characteristics to the urban weredas.
- To complete data collection on time, except one health post per wereda that has highest number of clients flow per day other health posts were not selected
- Due to scarcity of resources private and Non- Governmental health facilities and Government Hospitals
- MCM users in the main town of rural study area were excluded
- Rural women who were using family planning services in urban study area were exclude

Figure: 1. Sampling Frame work showing sampling procedure and the study subjects



5.4.3.3. Sample Size

The required sample size is determined using the formula for two population proportion in comparative cross-sectional study by considering the following assumption.

$$n1 = \frac{\left[Z\alpha/2\sqrt{\left(1+\frac{1}{r}\right)P(1-P)} + Z\beta\sqrt{P1(1-P1)+\frac{P2(1-P2)}{r}}\right]^2}{(P1-P2)^2}, \quad n2 = n1r$$

Where

n1= sample size in urban, n2=sample size in rural

p1= contraceptive acceptance rate in urban p2= contraceptive acceptance rate in rural

p1 - p2= effect size, P= average proportion

α=level of significance=0.05

$1-\beta$=desired power=80%

r=ratio of urban to rural= n1/n2= 1:1

$Z\beta$= coefficient at level of power=0.84

$Z\alpha/2$ =coefficient at level of significance=1.96

P1 = 82.9.0 % and P2 =72.1 %

Therefore n1= 243 and n2= 243 adding non-response (10%) total sample size was 534.

The sample size is calculated based on the National contraceptive acceptance rate and the study area contraceptive acceptance rate. The 2008|9 Federal Ministry of Health (FMOH) Health Sector Development Program (HSDP) performance report showed that currently National contraceptive acceptance rate of Ethiopia is 56 % and the 2008 the study area annual Zonal performance report also showed that contraceptive acceptance rate of South Wollo Zone (the 19 rural and 2 urban wetedas) was 80.1% and the urban (Dessie town) and the 10 selected rural study weredas were 82.9% and 72.1% respectively.

5.4. Variables

Dependent variable

The dependent variable in this study is:-

- modern contraceptive methods use

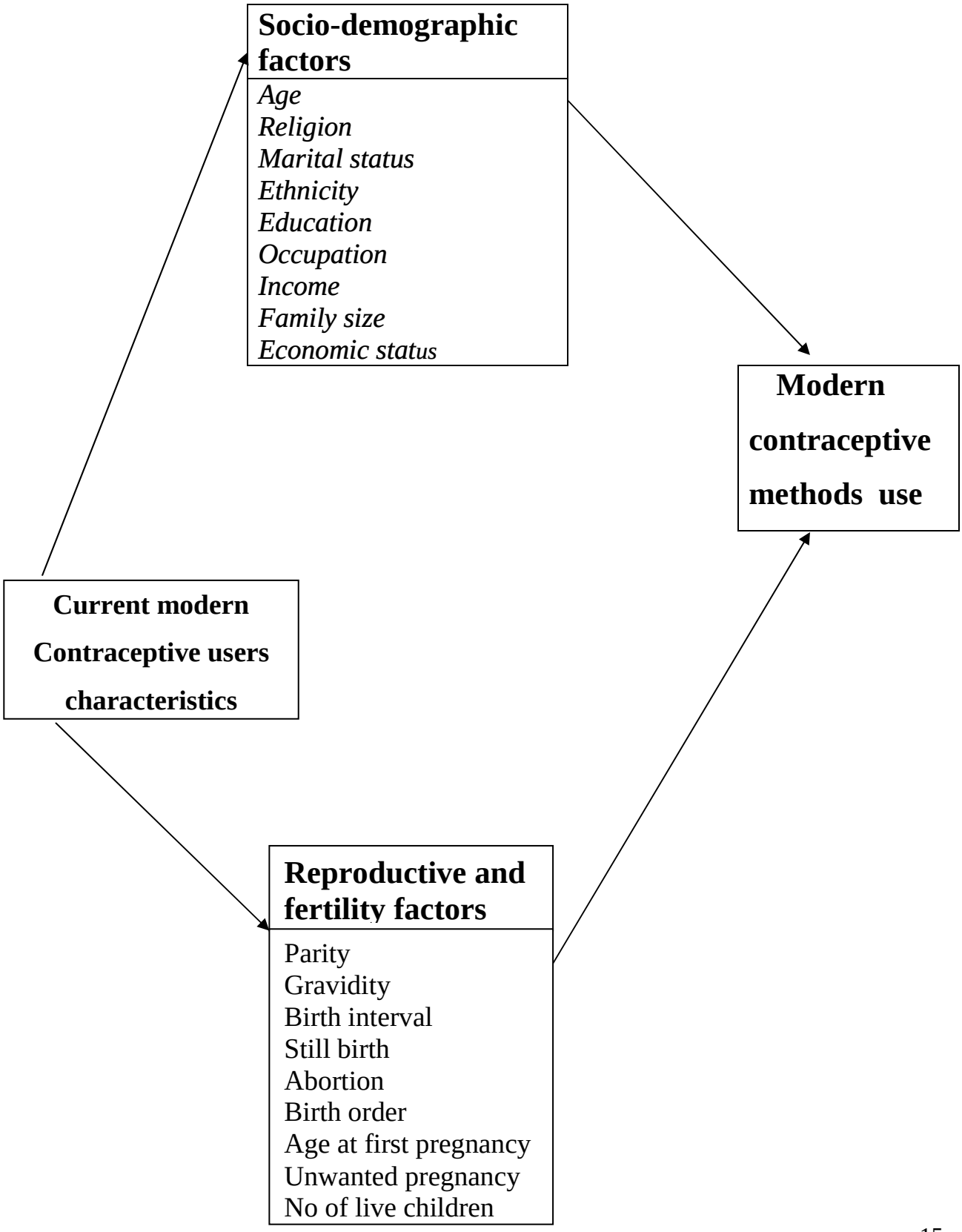
Independent variables

The independent variables in this study are:-

- **Socio demographic factors**:-age, marital status, education status, religion, ethnicity, occupation, income, family size economic status ***residence.***
- **Reproductive and fertility factors**:-History of pregnancy, gravida, parity, number of live children, sex composition of live children, still birth ,abortion , birth interval and birth order.
- **Knowledge and other description on modern contraceptive use**:-Source of information about MCM, Method mix, types contraceptive method known, benefit of MCM, utilization based on choice, reasons not using MCM based on the choice and decision making to use MCM.

Association of the above dependant and independent variables shown in figure

Figure: 2. Conceptual frameworks showing association of dependant and independent variables



Operational Definition

- **Family planning**:- The use of various methods of fertility control that will help individual men and women or couples to have the number of children they wan when they want them in order to assure the well being of the children and the parents.
- **Modern contraceptive method** are methods such as short term (oral pills, injectables, male condom and female condom) long term(Norplant, IUCD, male sterilization and female sterilization).
- **Current contraceptive users**: - Women in reproductive age group who visit the Facilities as repeat and new accepter of modern contraceptive methods at the time of study.
- **Contraceptive method mix**: -Percentage distribution of contraceptive users by method
- **Contraceptive acceptance rate: -** The proportion of women of reproductive age who are accepting a modern contraceptive method (New and repeat acceptors)
- **Fertility**: - The actual production of live offspring (children)
- **Gravidity:-**The number of pregnancy (completed or incomplete) experienced by a women
- **Parity**: - The number of full term children previously born by a women
- **Birth interval**: time between two successive live births.
- **Big urban (Big town)**:- A town with population size 168,642.This definition is based on the United Nation Economic Commission for Africa (UNECA) recommendation in the classification of urban..It define based on population size, as rural locality (> 20,000) ,urban locality(20,000-99,999) city (big urban) (100, 0000-499,999) and big city with population size >500,000 (9)**.**

5.5 Data Collection

5.5.1 Data collection procedure

Interviewer administered close questionnaires were prepared to collect data. The questionnaires addressed Socio demographic factors **(**residence, age, marital status, education status, religion , ethnicity, occupation ,income, family size and economic status), Reproductive and fertility factors (history of pregnancy, gravid, parity, number of live children , sex composition of live children, still birth ,abortion , birth interval and birth order) and Knowledge and other description on modern contraceptive use (source of information about MCM, method mix, Choice based utilization, reasons not use MCM based on the choices).

The questionnaires were first prepared in English then translate into Amharic as the study subjects speak Amharic. The questionnaires were translated back to English to check for consistency.

5.5.2 Training of data collectors

Eight health workers for rural and 4 health workers for urban with minimum educational level diploma and above (12 data collectors) and 3 supervisors that had BSc (2 health personnel for rural and 1 health personnel for urban) were recruited.

Data collectors and supervisor were trained for 2 days on questions included in the questioners, on interviewing technique, purposes of the study, the importance of privacy, discipline, and approach to the interviewees and confidentiality of the respondents.

5.5.3. Pre-testing of the questionnaires

To ensure validity and reliability of the study questioners, before conducting the study pre-test was done on 10 rural and 10 urban clients from two facilities which are not included in the main study. Based on the finding the questioners were modified as necessary.

5.5.4. Data Quality Control

Supervisors performed on sit supervision during the whole period of data collection. At the end of each day the questioners were reviewed and checked for their completeness, accuracy and consistency and corrective action has taken timely.

5.5.5. Data Processing and Analysis

After all the necessary data collected, and cleaned, the data entered and analyzed using SSPS Software version 15.Bar charts were constructed using Excel.

Frequency distribution of socio-demographic, reproductive and fertility characteristics and knowledge and other more related factors on modern contraceptive methods utilization described and compared by using tables, bar charts and figures.

The association and significant between explanatory and response variable (current modern contraceptive users exposures to urban and rural) expressed by using unadjusted odd ratio and 95% Confidence Interval (C.I).The relative contribution of selected variables were measured using logistic regression.

5.6. Ethical consideration

Ethical clearance obtained from Addis Ababa University Faculty of Medicine School of Public health. Written consents were obtained from Zonal Health department and Wereda health offices. Verbal informed consent received from each study subject and anyone who was not willing to take part in the study had full right not to participate in the study. All interviews were done individually and respondent's name was not indicated on the questionner to ensure privacy and confidentiality of study subjects respectively and risk and benefit of the study were explained to study participants

After interview the importance of contraceptive have been discussed with respondents and appropriate information on the source and types of modern contraceptive methods were provided to those women who have an intention to use different alternatives but not know the source and types of MCM.

5.7. Dissemination of Research Finding

After presented as partial fulfilment of the degree of Master of Public Health to School of Public Health Faculty of Medicine Addis Ababa University, the result will be submitted to Zonal Health Department and presented in professional meeting that will be conducted at the Zonal level in the study area .It will also be disseminated through publication.

6. Results

Five hundred thirty four women attending family planning service as current modern contraceptive user in Government health centres and health post were interviewed., of which 50%(267) were from Dessie town Administrative wereda and 50%(267) from two rural Weredas of South Wollo Zone, namely Jamma and Wereilu.The response rat was 100%.

6.1. Socio Demographic Factors

As shown in table 1,in rural participants modern contraceptive use higher in the age group 25-29 and 30-34, 67(25%) and 55(20.5%) than other categories of reproductive age group where as in urban modern contraceptive use higher in the age group 20-24 and 25-29, 71(26.6%) and 76 (28.4%). Most women 218(81.6%) of rural and 220(82.9%) of urban were Married. Only 33(12.3%) of rural and 19(7.1%) of urban were illiterate, others were primary and secondary schooling. 75(28%) and 71(26.6%) for rural and l75(28%) and 94(35.2%) for urban respectively.

Two hundred twenty five (84.3%) of rural and 105(39.2%) of urban users were house wife.201 (75%) of rural 195(73%) of urban users reported that their perceived economic status as average. 66(24.7%) of rural and 55(20.5%) of urban users reported that their total monthly income were <150 Birr and 78(29.2%) of rural and 128(47.9%) of urban users their monthly income were >500 Birr.

One hundred forty six (54.6%) of rural and 136(50.9%) of urban users were Muslim and 112 (41.9%) of rural and 115 (45%) of urban users were Orthodox Christian by religion. and 246(92%) of rural 234(87.6%) of urban users were Amhara by Ethnicity. In both urban and rural the number of children 0-12 years of age (before puberty) in the family were higher in the age group 0 -1(48.3%) and 2-3 (44.2%) in urban, 0 -1 (30.7%) and 2-3 (48,3 %) for rural.

Table: 1. Socio-demographic characteristics of current modern contraceptive users in rural and urban, South Wollo Zone, February 2010.

Variables	Rural N=267 N0 (%)	Urban N=267 N0 (%)
Age(years)		
15-19	35(13)	39(14.6)
20-24	50 (18.7)	71(26.6)
25-29	67(25)	76 (28.4)
30-34	55(20.5)	43(16)
35-39	41(15.3)	29(10.9)
40-44	14(5.2)	5(1.9)
45-49	5(1.9)	2(0.7)
Marital status		
Unmarried	26(9.7)	24(9)
Married	218(81.6)	220(82.9)
Divorced and Windowed	23(8.6)	23(8.6)
Educational status		
Unable to read and write	33(12.3)	19(7.1)
Able to read and write	79(29.5)	40(14.9)
Grade 1-6	75(28)	75(28)
Grade 7 12	71(26,6)	94(35.2)
12 complete and above	9(3.3)	39(11.2)
Family total monthly income		
<150 Birr	66(24.7)	55(20.5)
150-299 Birr	75(28)	35(15)
300-499 Birr	48(17.9)	49(18.3)
>500 Birr	78(29.2)	128(47.9)
No of children 0-12 years of age in the family		
0 -1	82 (30.7)	129(48.3)
2-3	129 (48,3)	118(44.2)
4-5	52 (19.5)	16(6)
6 and above	4(1.5)	4(1.5)

6.1. Reproductive and fertility factors

Reproductive and fertility characteristics *of current modern* contraceptive users in rural and urban are presented in table 2.Two hundred forty one (90.3%) of rural and 230(86%) of urban women had past history of pregnancy of which 8(3%) and 15(6.5%) of rural user and 12(5%) 21(9%) of urban reported that they had past history of still birth and induced abortion respectively.41(17%) rural users and 74(32%) of urban had past history of unwanted pregnancy. Modal age group at first pregnancy was 15-19 for both urban and rural, However it was 202(83.8%) in rural and 133(57.8%) for urban.

On average rural women have 3.2 live children compared to urban 2.1 live children. As shown in figure 3, 41(17%) of rural user and 81(35.2%) of urban had only one past history of pregnancy 41(17%) of rural user and 10(4.3%) of urban users had 6 and above past history of pregnancy.

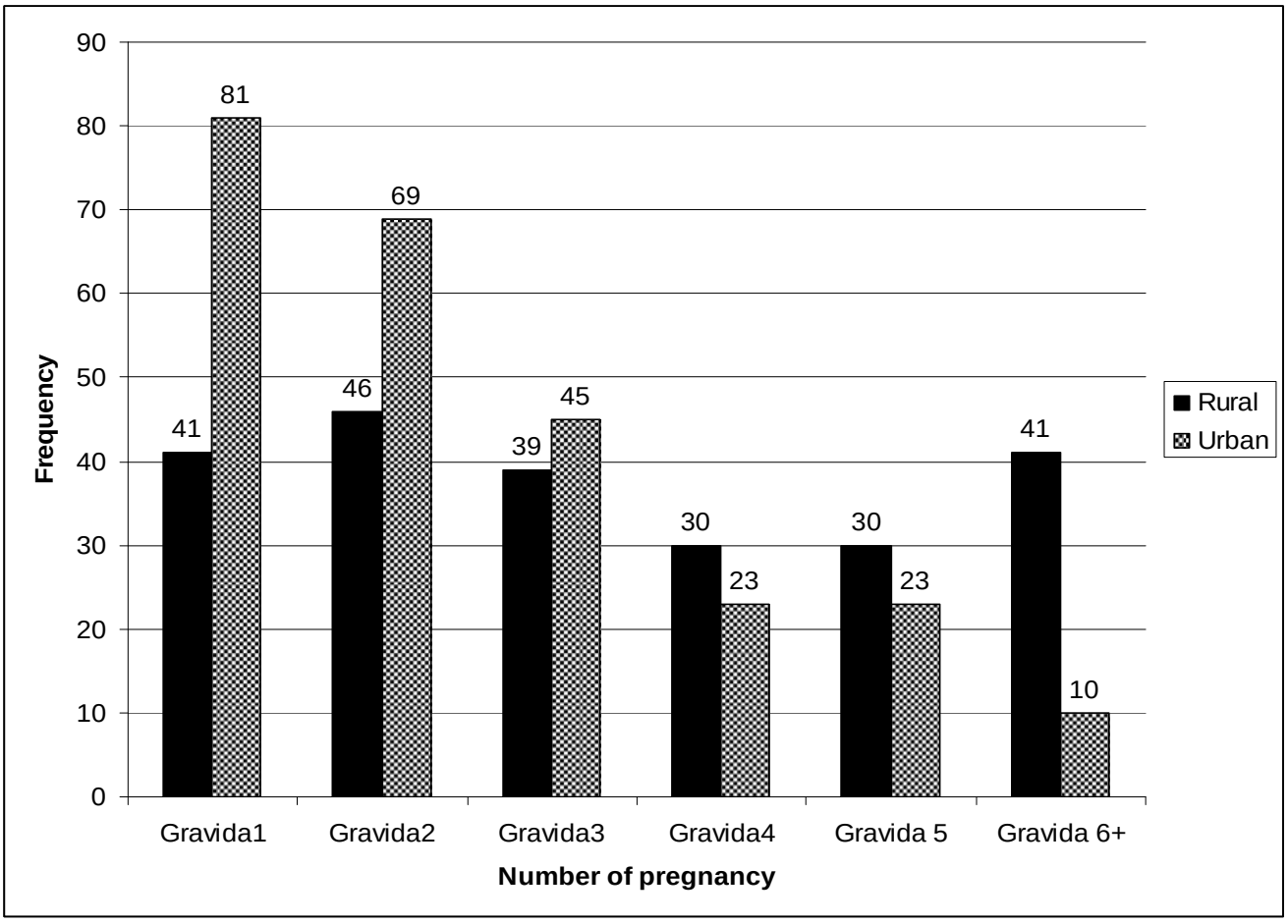


Figure: 3. Number of past history of pregnancy in urban and rural current modern contraceptive users, South Wollo Zone, February 2010

Rural women use modern contraceptive methods for the first time after they had on average 3 children compared with 1.4 in urban. As shown in figure 4, eleven (4.5%) urban users and 56(24.3%) of rural user use modern contraceptive method for the first time before the first child and 47(19.5%) of rural and 119(51.7%) of rural user use modern contraceptive method for the first time after the first child. Majority of rural women 61(25.3%) use modern contraceptive method for the first time after the birth of fifth child and above..

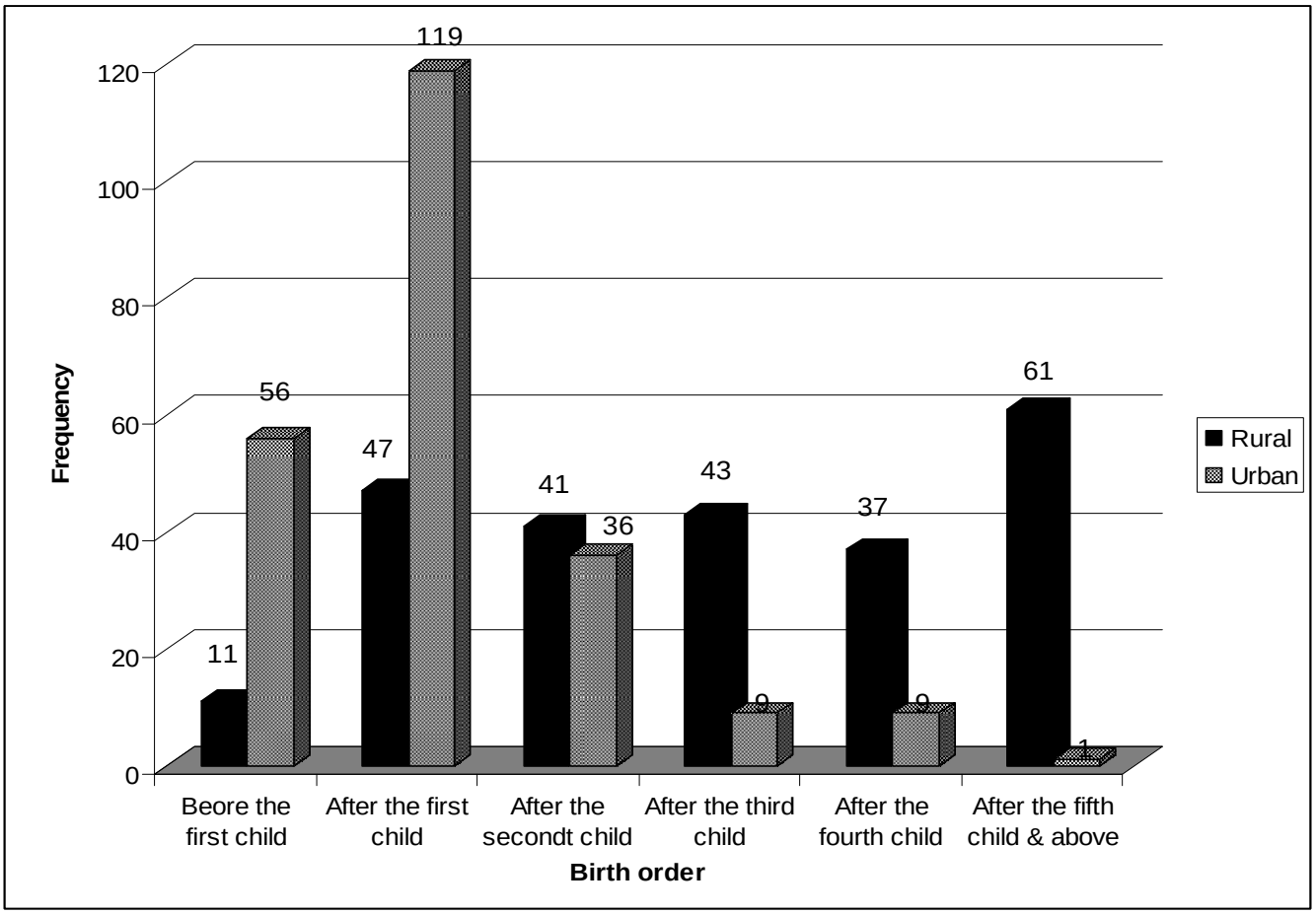


Figure: 4. Number of children a woman had when to use modern contraceptive method for the first time in urban and rural current modern contraceptive users, South Wollo Zone, February 2010

Table: 2. ***Reproductive and fertility characteristics of current modern contraceptive users in rural and urban women, South Wollo Zone, February 2010***

Variables	Rural N=267 N0 (%)	Urban N=267 N0 (%)
History of pregnancy		
Yes	241(90.3)	230(86)
No	26(9.7)	37(14)
History of unwanted pregnancy		
Yes	42(17.4)	74(32)
No	199(82.5)	156(68)
Number o f children ever born (Parity)		
Para 1	44(18.2)	97(42.2)
Para 2	42(17.4)	55(23.9)
Para 3	41(17)	51(17.8)
Para 4	38(15.7)	17(16.5)
Para 5	351(14.5)	9(3.9)
Para 6 and above	41(17)	1(.4)
Number of live children		
0 -2	86(35,6)	124 (53.9)
3-4	94(39)	88 (38.3)
5 and above	61(25.3)	16 (6.9)
History of still birth		
Yes	8(3)	15(6.5)
No	234(97)	215(93.5)
History of induced abortion		
Yes	12(5)	21(9)
No	239(95)	209(91)
Age at first pregnancy		
15-19	202(83.8)	133(57.8)
20-24	29(12)	82(35.6)
25-29	7(3)	11(4.8)
30-34	3(1.2)	4(1.7)

6.2. *Knowledge* and other Description on Modern Contraceptive Use

Besides socio-demographic, reproductive and fertility characteristics of current MCM users, other more related factors on modern contraceptive use were also assessed. Study participant were asked from where, whom they heard information about modern contraceptive methods for the first time (46%) of rural and (48%) of urban users reported that their source of information on modern contraceptive methods for the first time were health workers 31(11.6) rural and 57(21) for urban.

Two hundred sixty three (98.5%) of rural and 264 (98.8%) urban know pills, 261(97.8%) of rural and 26 (99%) knows inject able.45(16.5%) rural users and 52(19.5%) urban users use pills, 99(74.5%) rural and 196(73.4%) urban uses inject able were as only 23(8.6%) rural and 19(7%) urban uses Implant and IUCD.

One hundred ninety eight (74%) rural 183(68.5%) urban reported that they were using modern contraceptive method for spacing, 69(25.8%) rural l84 (31.5%) urban for limiting of family size. One hundred fifty nine(59.5%) of rural users and183 (68.5%) of urban users were reported that decision to use modern contraceptive method were made by both couples.258(96.6%) rural users and 255(95.5%) urban users reported that they were using a method of contraceptive based on their choice.

Table: 3. ***Knowledge and other description on modern contraceptive use in rural and urban women currently using modern contraceptive methods, South Wollo Zone, Feburary2010***

Variables	Rural N=267 N0 (%)	Urban N =267 N0 (%)
Source of information on MCM for the first time		
Health workers	123(46)	129(48)
Mass media	31(11.6)	57(21)
Friends and others	113(42)	81(30
Knowledge on MCM		
Pills	263(98.5)	264(98.8)
Inject able	261(97.8)	26(99)
Implant and IUCD	165(61.8)	170(63)
Knowledge on benefit using of MCM		
Child spacing	264(98.8)	265(99)
To limit family size	261(97.8)	264(98.8)
Prevention of unwanted pregnancy	263(98.5)	264(98.5)
Prevention of STI and HIV	28(10.5)	765(28.5)
Method mix(Types of MCM currently using)		
Pills	45(16.5)	52(19.5)
Inject able	199(74.5)	196(73.4)
Implant and IUCD	23(8.6)	19(7)
Aim to use MCM currently		
For spacing	198(74)	183(68.5)
For limiting	69(25.8)	84(31.5)
Perceived barriers to use MCM		
Husband dominance	81(30)	63(23.3)
Sex preference	76(28.5)	78(29)
Side effect of methods	63(23.6)	66(24.7)
For religious reason and other perception	47(17.6)	60(22.5)
Decision to use modern contraceptive methods		
Jointly	159(59.5)	183(68.5)
Husband	4 9(18)	11(4.1)
Wife	58(21.7)	68(25.5)

6.4. Comparison of Factors Associated with Modern Contraceptive Utilization between Rural and Urban Women

In Bi-variate analysis, perceived economic status, past history of still birth, past history of induced abortion and age at first pregnancy found to be associated for urban users in the usage of modern contraceptive methods compared to rural women of current users. Perceived economic status as average in rural and past history of unwanted pregnancy in urban were significantly associated with the usage of modern contraceptive methods where as other associations were not significant. Marital status, educational status birth interval and family total monthly income were a negative trend of association for rural women in the usage of modern contraceptive methods compared to urban women of current users.

Urban women who had past history of still birth were two times more likely to practice Modern contraceptive compared to urban women who had past history of still birth (OR =2.03, 95% CI=0.84-4.88) Urban women who had past history of unwanted pregnancy were two times more likely to practice modern contraceptive compared to urban rural who had past history of unwanted pregnancy (OR =2.24(95% CI = 1-1.14).

Rural women whose age at first pregnancy 15-19 were two times chance to practice modern contraceptive compared to urban women whose age at first pregnancy 15-19 years (OR =2.8, 95% CI= 0.13-3.33) Rural women whose perceived economic status as were as average nearly three times more practice modern contraceptive compared to urban women whose perceived economic status as rich (OR= 2.8, 95% CI= 1.13-7.7)

Table: 4. Comparison of factors associated with modern contraceptive utilization between rural and urban women, South Wollo Zone, February 2010

Variables	Rural N=267 N0 (%)	Urban N=267 N0 (%)	Unadjusted Odd Ratio (95%CI)
Marital status			
Unmarried	26(9.7)	24(9)	1
Married	218(81.6)	220(82.9)	0.9 (0.41-2.1)
Divorced and Windowed	23(8.6)	23(8.6)	1(0.55-1.85)
Educational status			
Unable to read and write	33(12.3)	19(7.1)	1
Able to read and write	79(29.5)	40(14.9)	0.33 (0.053-o.33)
Grade 1-6	75(28)	75(28)	0.11(0.52-0.27)
Grade 7-12	71(26,6)	94(35.2)	0.23(0.10-0.51)
Perceived economic status			
Poor	50(18.7)	65(24.3))	1
Average	201(75)	195(73)	2.2(1.13-7.7) *
Rich	16(5.9)	7(2.6)	2.8 (0.9-5.5)
Family total monthly income			
<150 Birr	66(24.7)	55(20.5)	1
150-299 Birr	75(28)	35(15)	0.6(0.320.8)
300-499 Birr	48(17.9)	49(18.3)	. 3(0.17-0.46)
>500 Birr	78(29.2)	128(47.9)	0.6(0.8-1)
History of unwanted pregnancy			
Yes	42(17.4	74(32)	2.24(1-1.14) *
No	99(82.5)	156(68)	1
History of still birth			
Yes	8(3)	15(6.5)	2.03(0.84-4.88)
No	234(97)	215(93.5))	1
History of induced abortion			
Yes	12(5)	21(9)	1.9(0.92-3.99)
No	239(95)	209 (91)	1
Age at first pregnancy			
15-19	202(83.8)	133(57.8)	2.8(0.13-3.33)
20-24	29(12)	82(35.6)	1.5(0.54-14)
25-2	7(3)	11(4.8)	0.6(0.24-10)
30-3	3(1.2)	4(1.7)	1

6.5. Comparison of factors Associated with Modern Contraceptive Utilization between Rural and Urban Women by Selected Characteristics

After an adjustment for (age at first pregnancy, history of induced abortion, perceived economic status, marital status, history of still birth and history of unwanted pregnancy), perceived economic status as average in rural and past history of unwanted pregnancy in urban were still remain significant. But other variables were insignificant.

The logistic model showed that rural women whose perceived economic status as average were three times more practice modern contraceptive compared to urban women whose perceived economic status as average (OR = 3.2, 95% CI= 1.4-9) Urban women who had past history of unwanted pregnancy were two times more likely to practice modern contraceptive compared to urban rural who had past history of unwanted pregnancy (OR=3, 95% CI=1-1.14).

Table: 5 comparisons of factors associated with modern contraceptive utilization between rural and urban women by selected variables, South Wollo Zone, February 2010

Variables	Rural N=267 N0 (%)	Urban N=267 N0 (%)	Unadjusted Odd Ratio (95%CI)	Adjusted Odd Ratio (95%CI)
Marital status				
Unmarried	26(9.7)	24(9)	1	1
Married	218(81.6)	220(82.9)	0.9 (0.41-2.1)	0.8 (0.38-2.3)
Divorced and Windowed	23(8.6)	23(8.6)	1(0.55-1.85)	1.2(0.65-2.85)
Perceived economic status				
Poor	50(18.7)	65(24.3))	1	1
Average	201(75)	195(73)	2.8(1.13-7.7) *	3.2(1.34-6.6) *
Rich	16(5.9)	7(2.6)	2.2 (0.9-5.5)	2.2 (0.7-4.5)
History of unwanted pregnancy				
Yes	42(17.4	74(32)	2.2(1-1.14) *	3(1-1.6) *
No	99(82.5)	156(68)	1	1
History of still birth				
Yes	8(3)	15(6.5)	2.03(0.84-4.88)	2.03(0.84-4.88)
No	234(97)	215(93.5))	1	1
History of induced abortion				
Yes	12(5)	21(9)	1.9(0.92-3.99)	1.9(0.92-3.99)
No	239(95)	209(91)	1	1
Age at first pregnancy				
15-19	202(83.8)	133(57.8)	2.8(0.13-3.33)	3(0.13-3.33)
20-24	29(12)	82(35.6)	1.5(0.54-14)	1(0.33-14)
25-2	7(3)	11(4.8)	0.6(0.24-10)	0.5(0.12-8)
30-3	3(1.2)	4(1.7)	1	

NB*=Significant

7. Discussion

Modern contraceptive methods utilization is related to socio-demographic, reproductive and fertility factors. Most of the studies so far done assessed these and some other determinant factors but there is no clear study that compared factors influencing modern contraceptive methods utilization among current users between rural and big urban population, therefore the present cross-sectional study aimed to compare factors influencing utilization of modern contraceptive methods between rural and big urban women currently using family planning service.

This study indicated that rural modern contraceptive users were higher in the age group 25-29 (25%) and 30-34 (20.5%) than other age categories in reproductive age groups (15-49) where as in urban modern contraceptive use higher in the age group 20-24 (26.6%) and 25-29 (28.4%).This result is comparable to the 2005 Ethiopia Demography and Health Survey that in Ethiopia modern contraceptive use higher in age group 25-29 (14.4%) and 35-39 (14.4%) (6). Higher number of married women were practicing modern contraceptive in both rural and urban study area than unmarried, divorced and widowed women (81.6%) in rural and (82.9%) in urban. This result is comparable to a study conducted on reproductive age group in Oromia Zone, Amhara National Regional State (17).

This study revealed that in urban an increasing trend between education and modern contraceptive use. Where the more educated was more practiced with increase educational status the relative percentage of contraceptive use increase from (28%) to (35.2%) among primary and secondary schooling The finding in this study is in agreement with the 2005 Demography and health survey of Ethiopia that contraceptive use differs across educational categories, current use increase five fold from (10%) among women with no education to (53%) among those with secondary and higher levels of education (6) .The result of this study in rural different from the 2005 Demography and health survey that in rural users education has a negative association in the usage of modern contraceptive .

This study demonstrated that housewives were the highest user of MCM in both urban and rural, However the proportion is higher in rural women (84.3%) use modern contraceptive method compared with housewives in urban (39.2%).

This result is different from a community based study conducted else where in the country which revealed that higher number of Government employed women use modern contraceptive method compared with housewives (17).

This study revealed that urban women who have highest income use modern contraceptive more than lower income as compared to rural, with use increasing markedly as wealth increasing from (20.5%) among women in the lowest wealth to (47.9%) among those in the highest wealth in urban where as in rural (24.7%) among women in the lowest wealth to (29.2%) among those in the highest wealth. The finding in this study in agreement with the current literature for urban (6)Perceived economic status as average in rural significantly associated with the usage of modern contraceptive methods, nearly three times more practice compared to urban women whose perceived economic status as average.

In Ethiopia contraceptive use among women with one or two children (17%) and lowest among women with no children (12%).6% of all women first used a method of family planning when they had 4 or more children 3% at the time with no children and 4% after the birth of their first child. Most women below age 30 started using contraception after they had one child (6) The present study showed that rural women use modern contraceptive methods after they had higher reproductive and fertility that rural women use modern contraceptive methods for the first time after they had higher number of children on average 3 children and only (4.5%) of users before the first child as compared to urban users that they use a method of family planning after they had on average 1.4 children and most of them (24.3%) before the first child. Most of (51.7%) of rural women use modern contraceptive method for the first time after the birth of the first child as compared to rural (19.5%).Higher proportion of rural women (25.3%) use modern contraceptive method for the first time after the birth of fifth child and above as compared to urban(4%).

This study described that in spite of higher pregnancy and child birth, most rural users still their desire to limit family size is less (25%) than urban (31.5%), their previous pregnancy also more of wanted (82.5%) as compared to urban (68%).In rural the age at first pregnancy was earlier. Modal age group at first pregnancy was15-19 for both urban and rural, However in rural it was higher (83.8%) than urban (57.8%)

This study has shown the number of pregnancy and the number births among rural current users were higher than urban users. (42.2%) of urban user had only one past history of birth but (17%) of rural users and (4%) of urban users had 6 and above past history birth. It has also shown that past history of unwanted pregnancy in urban significantly associated with the usage of modern contraceptive methods which was two times more likely to practice modern contraceptive than rural who had past history of unwanted pregnancy. Rural women whose age at first pregnancy 15-19 were two times chance to practice modern contraceptive compared to urban women whose age at first pregnancy 15-19 years .Urban women who had past history of still birth were two times more likely to practice modern contraceptive compared to urban women who had past history of still birth.

This study described that knowledge about family planning and its benefit was high in both rural and urban current users (98.8%) of both urban and rural users had information about family planning .Inject able and pills were more widely known than implant and IUCD.The result of this study is comparable with the 2005 Ethiopia Demography and Health Survey that knowledge about family planning and its benefit was high among current users. Modern methods more widely known than traditional method. (87%) of women know about modern methods. The pill (84%) was the most known method followed by inject able (83%) but the most widely used method was inject able followed by pill (6) The result is also comparable with a study done in Somalia Region that 95.6% of urban women had information about family planning (20).

This study has shown most women used injectable (74.5%) in rural and (73.4%) in urban followed by pills (16.5%) in rural and (19.5%) only (8.6%) rural and (7%) urban uses implant and IUCD, Decision to use modern contraceptive methods by both couples higher in urban (68.5%) than rural (59.5%) but decision to use modern contraceptive methods by rural women less (21.7%) than urban women (25%).

8. Strength and Limitation of the Study

8.1. Strength of the Study

- This study was conducted at Zonal level by dividing the Zone population as rural and big urban (Large study area)
- Compared big urban and rural population characteristics that influence modern contraceptive utilization among current users so that filled the research gap which was not clear so far
- There was high response rate (100%)
- Data collection was carried out by highly trained health workers who work in the selected health facilities
- Addressed all health centres in the study wereadas (large sampling unite)

8.2. Limitation of the study

- The study was done only in Government health canters and health posts in both urban and rural study area. Government Hospitals, Private and Non–Governmental health facilities were not included.
- Due to Scarcity of literature that compared modern contraceptive users based on their Scio-demographic, reproductive and fertility characteristics between rural and big urban women, it was difficult to compare weather the result of this study comparable or not with other studies.
- As the study design is cross-sectional, temporal relationship may not show

9. Conclusion

Rural women use modern contraceptive methods after they had high reproductive and fertility and desire to limit family size and history of past unwanted pregnancy in rural less than urban women. Their pregnancy was also earlier. Majority of rural women use modern contraceptive method for the first time after the birth of higher number of children as compared to urban.

Most rural users were housewives, elementary schooling, have lower total family monthly income and less power to decide to use modern contraceptive methods as compared that of urban users. Rural women whose perceived economic status as average had more chance to practice modern contraceptive methods than urban women

10. Recommendation

In general this study identified socio-demographic, reproductively and fertility variation in relation to modern contraceptive utilization between rural and big urban users so that it lay aground and call the need of strong intervention strategy targeting socio-demographic, reproductively and fertility behaviour of rural women and modern contraceptive utilization. Based on the evidences that obtained from the present study the following specific interventions are recommended.

1. Strong behavioural change communication on the bad out comes of high fertility on maternal and child health targeting the high reproductive and fertility behaviour of rural women.
2. Improving participation of rural women to make decision concerning their reproductively and fertility issue.
3. Family planning intervention should consider not only the health aspect but also demographic and reproductive rights should be equally considered and collaboration of relevant bodies to avert high fertility desire of rural population is mandatory.
4. Intervention strategies that aimed to control reproductive and fertility should be according to the magnitude of the problem in different ways for rural and big urban population.
5. Detail and large scale similar comparative study, addressing all facilities that provide family planning services such as Government Hospitals, Private and Non–Governmental facilities, is needed.

11. References

1. The criticisms and controversies surrounding the international Family planning Programme .International Family planning perspectives, 29:2004:1- 8.
2. Achieving the MDG.The contribution of Family planning. From American people, Health policy initiative, 2007
3. Federal Democratic Republic of Ethiopia population census commission. Summary and Statistical Report of the 2007 Population and Housing Census, December ,2008.
4. Federal Ministry of Health, planning and programming Department, Health and Health Indicator,2006|7.
5. Sexual and reproductive health Family planning the unfinished Agenda, 3:2008.
6. ORC Macro Calverton, Maryland, Ethiopia Health and Demographic Health Survey, 2005.
7. Federal Ministry of Health Health and Health Indicator .planning and Programming Department, 2007|8..
8. Federal Ministry of Health, Health Sector Development Program (HSDP) performance report.2008|9
9. Addis Ababa University Faculty of Medicine School of Public Health. Department of Reproductive and Family Health,Lectur on migration and urbanization,April,2009.
10. News Letter of the Reproductive community in Ethiopia, 6: (1): March, 2009.
11. Ethiopia National Reproductive Health Strategy. March, 2006.
12. Federal Ministry of Health. Health Sector Development Program (HSDP).
13. Population policy of Ethiopia. April 1993.
14. Federal Ministry of Health. Planning and programming Departmet.Health and Health Indicator, Indicators of all Years.
15. A real variation in contraceptive use in east Africa. Paper presented at UAPS conference. December, 2003.
16. Yigza K..Contraceptive prevalence and factors associated with usage of contraceptive around Gondor town,200 ,Ethiop.J.Health .Dev. 14:(3)227-234.
17. Tafese.F.Assessment of factors influencing utilization of modern contraceptive methods among women in reproductive age group in Oromia Zone Amhara National Regiona State.Thesis as partial fulfilment of the degree of Master of Public Health,2005.

18. Shauid A.and Niatit C. Factors affecting the use contraception in Bangladish.Asia- pasific population Journal,1993.

19. Ethiopia Demography and Health Survey, 2000.

20. Dubiwak R.Factors influencing contraceptive method mix among married women of reproductive age group in rural east Harerge zone. Thesis as partial fulfilment of the degree of Master of Public Health,2008

21. Eskindr L,Meknnen A , Jira C, and Fasil T.Assessment of quality of care in family planning service,in Jima Zone, 2004, Ethiopia,J.of health development , 4:(2) 31-23

22. Amin Z.Assessment of factors influencing contraceptive utilization in Somalia Region, Thesis as partial fulfilment of the degree of Master of Public Health,2008.

23. Alaminieh L.Assessment of family plan inning method mix and effect of contraceptive. Thesis as partial fulfilment of the degree of Master of Public Health,2007..

24.Mulu S. Assessment of contraceptive needs and practice of women in the extended postpartum period in Bahir Dar.2007.

25. Kebede Y.Contraceptive prevalencein Dembia district North Gondor, 2006. Ethiop, J.health .Dev,20:(1):32-38.

26. Kekkonen G. Assessment of prevalence and factors affecting use of Long acting and Permanente contraceptive in Jinca town,South Omo .Thesis as partia fulfillment of the degree.2007.

27.Amhara National Regional State Health Buru Anual Performance Report,2008.

28. Solomon.T., Ashebir G.Past reproductive performance and its correlation with Perinatl mortality in the current gestation at teaching Hospital in Addis Ababa, 2008, Ethiopian Med J, 46(4) 313-23

29. South Wollo Zone, Zonal Annual performance report,2008.

12. Annex

12.1. Study Information Sheet

Addis Ababa University Faculty of Medicine School of Public Health.

Questionneres for Assessing actors influencing utilization of modern contraceptive methods among rular and urban women currently using family planning service.

Introduction

My name is ---------I am working as data collector in a study done by Jemal Ali who is a student of master of public health in Addis Ababa University Faculty of Medicine School of Public Health.. We are interviewing women who are currently using family planning services to assess determinant factors that influence utilization of modern contraceptive methods. I am going to ask some questions to you individually which are not difficult to answer and your name is not written in this format and never be used with any of the information in connection you are going to tell me. Your identity as well as the information that you will be providing will be kept confidential You are not obliged to answer any question that you do not want to answer and you may end this interview at any time you want, However your honest answer to these questions will help us to identify factors influencing utilization of modern contraceptive methods and improve family planning service in the future. I appreciate your help in responding this question and the interview will not take more than 30 minutes.

Would you be willing to participate?

If Yes, proceed

If No, thank and stop here

12.2. Verbal Consent form for Study Subject

I have been informed about the purpose of this particular study project that the information I give will be used only for the purpose of the study. In addition I am also informed my identity as well as the information I will be providing will be kept confidential. Based on this I agree to participate in this study voluntarily.

Signature of interviewer

(Certifying that respondent has given informed consent verbally)

For any other information please contact us through

E-mail:jemal200958@yahoo.com

Tel: 0912453089

12.3. Questionnaires for assessing factors influencing utilization of modern contraceptive Methods among rural and urban women currently using family planning service

01. Identification number----------

02. Study area:-Wereda------ Health Center------ Health Post-------

Part:1. Assessment of Socio -demographic factors

No	Questions	Coding categories
101	Where is your place of residence?	1.Urban 2. Rural
102	How old are you?	_____complete years
103	What is your current marrital status?	1.Unmarried 2.Married 3.Divorced 4.Windowed 5. Other
104	What is the highest educational level you completed?	1.Unable to read and write 2.Able to read and write 3.Grade 1-6 4.Grade 7-12 5.12completecertificate 6.Diploma and above
105	What is your religion?	1. Muslim 2., Orthodox Christian 3. Catholic Christian 4. Protestant Christian 5. Others (specify) _____
106	What ethnic group do you belongs to?	1.Amhara 2. Oromo 3. Tigre 4. Others (specify

107	What is your main occupation?	1. Government employee 2. Private employee 3. House wife 4. Daily labourer 5. Housemaid/ servant 6. Merchant
108	Compared to your neighbours where do you classify the family economy status?	1. Poor 2. Average 3. Rich
109	What is your family total monthly income?	1. <150 Birr 2. 150-299 Birr 3. 300-499 Birr 4 .> 500
110	Number of children 0-12years of age in the family	1. Less than 5 years 2. 6 – 8 years 3. 9-12 years

Part 2- Assessment of Reproductive and fertility factors

No	**Questions**	**Coding categories**
201	Have you had any pregnancy before	1.Yes 2 .No
202	If yes, How many?	Enter the number---
203	Do you have any unwanted pregnancy	1. Yes 2. No
204	Number of children ever born to you	_____(in number)
205	How many live children do you have now?	_____(in number)
206	What is sex composition of your live children?	Male ------- Female-----
207	Do you have any still birth?	1. Yes 2. No
208	Have you ever experienced induced abortion?	1. Yes 2. No
209	What was your age at your first pregnancy?	_____(in number)
210	What was your birth interval?	1.12 < months 2. 12-23 months 3. 24-35 months 4. 36-47 months 5. 48-59 months 6. 60-71 months 7.72 and above
211	In relation to child bearing when do you use MCM for the first time?	1.Before the first child 2.After the first child 3.After the second child 4.After the third child 5. After the fourth child and above

Part: 3. Knowledge and other description on modern contraceptive use

No	Questions	Coding categories
301	From where | whom did you first get the information about MCM?	1. From health workers 2. From mass media 3 .From friends
302	Which methods of MCM do you know?	1. Pills 2. Inject able 3. Norplant 4. Condom 5. I UCD 6. Others(specify----)
303	What are the important reason that a women using MCM?	1.Prevention of pregnancy 2. child spacing 3. Prevention of STI and HIV 4. To limit family size 5. Medication
304	For what purpose do you use MCM?	1. For spacing 2. For limiting 3. Other (specify------
305	What is the type of modern contraceptive method using now?	1. Pills 2.injectable 3 .Norplant 4. condom 5.IUCD 6.Others(specify-----)
306	Are you using the method you choose?	1.Yes 2.No
307	If no/ what was the reason?	Enter the reason-------
308	What are the important reasons that a women not using modern contraceptive method?	1.Husband dominance 2. For religious reason 3. Sex preference 4. Side effect of methods 5. Inaccessibility 6. Cost of methods 7 .Other (specify---)
309	Whom do you think to make a decision to use modern contraceptive method?	1.Jointly 2.Hasband 3.Wife

Checked by: Supervisor: Name _____Signature _____

Date _____ Month _____ Year _____

Name of interviewer _____

Date of interview _____ Date _____ Month _____ Year

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LETTER OF DECLARATION

I, the undersigned declared that this is my original work, has never been presented in this or any other university and that all the resources and materials used for this thesis have been fully acknowledged

Name:Jemal Ali

Signature----------

Place: Addis Ababa,Ethiopia

Date of submission----------

This thesis has been submitted for examination with my approval as university advisor

Name:Ababi Zergaw (PhD)

Signature----------