LONG- ACTING REVERSIBLE CONTRACEPTIVES USE AND ASSOCIATED FACTORS AMONG EXTENDED POSTPARTUM WOMEN ATTENDING PUBLIC HOSPITALS IN EAST HARARGHE ZONE, EASTERN ETHIOPIA

MPH THESIS

DANIEL NEGASH (BSC)(Blended)

SEPTEMBER2020

HARAMAYA UNIVERSITY, HARAR

Long- Acting Reversible Contraceptives Use and Associated Factors among Extended Postpartum women attending Public Hospitals in East Hararghe Zone, Eastern Ethiopia.

A Thesis Submitted to the School of Public Health,
Post Graduate Program Directorate
HARAMAYA UNIVERSITY

In a Partial Fulfilment of the Requirements for the Degree of MPH
Reproductive Health Track

Daniel Negash (BSc) (Blended)

September, 2020
Haramaya University, Harar

APPROVAL SHEET

HARAMAYA UNIVERSITY

POST GRADUATE PROGRAM DIRECTORATE

I hereby certify that I have read and evaluate this thesis entitled "Long- Acting Reversible Contraceptives Use and Associated Factors among Extended Postpartum women attending Public Hospitals in East Hararghe Zone, Eastern Ethiopia" prepared under my guidance by Daniel Negash. I recommend that it be sumitted as fulfilling the thesis requirement.

Dr. Merga Dheresa (PhD) ---------- ----------

Major Advisor signature Date

Negga Baraki (MPH, Assist.Prof.)---------- ----------

Co-Advisor signature Date

As a member of the Board of Examiners of the MPH Thesis Open Defense Examination, I certify that I have read and evaluated the Thesis prepared by Daniel Negash and examined the candidate. I recommend that the thesis be accepted as fulfilling the Thesis requirement for the degree of MPH in Reproductive Health Track.

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Name: Daniel Negash Signature ----------

Date: ----------

School/Department: MPH.

BIOGRAPHICAL SKETCH

My name is Daniel Negash. I was born in 1990. I completed my primary and secondary education at Water Primary and Jigjiga Secondary School. I have been graduated with BSc Midwifery at Haramaya University in 2013. After clinical and teaching experience at College as Asistant Lecturer (Bisidimo Health Science College and Hospital, East Hararghe), I joined Haramaya University again for second-degree education in MPH (RH) in 2019.

ACKNOWLEDGMENTS

First of all, I would like to thank Haramaya University, for providing me a chance to continue my master's education. I would like to express my deepest gratitude to my adviser Dr Merga Dheresa and Negga Baraki (MPH, Assist.Prof.) for their constructive comments and suggestion throughout preparation of this thesis.

Finally, I sincerely acknowledge the Haramaya University, collage of health and medical sciences librarians and internet center coordinator for their support and assistant in getting pertinent materials.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS AND ABBREVIATIONS

AOR	Adjusted Odds Ratio
ANC	Antenatal Cares
CI	Confidence Interval
COR	Crude Odds Ratio
COC	Combined Oral Contraceptives
EDHS	Ethiopian Demographic Health Survey
EMDHS	Ethiopian Mini Demographic Health Survey
HEWs	Health Extension Workers
IHRERC	Institutional Health Research Ethics Review Committee
IUCD	Intra uterine Contraceptives Devices
Km	Kilometer
LARC	Long acting Reversible Contraceptives
MDGs	Millennium Development Goals
PNC	Postnatal Cares
SDGs	Sustainable Development Goals
SPSS	Statistical Package for Social Sciences
WHO	World Health Organization
WDA	Women's Development Army

ABSTRACT

Background: Long-acting reversible contraceptive is birth control that provides for at least two years.Non-use of contraception by couples during postpartum period can result in many

unwanted pregnancies, social and economic consequences. Despite multiple impacts, limited studies are conducted on the prevalence of long- acting reversible contraceptive use and its associated factor among extended postpartum women in the study area.

Objective: This study was aimed to determine the prevalence of long acting reversible contraceptive methods use and its associated factors among extended postpartum women in the public hospitals at East Hararghe zone, Eastern Ethiopia, from May 1 to 31, 2020.

Methods: Institution based cross-sectional study design was used. All Public Hospitals of East Haraghe Zone were selected. A total sample size of this study was determined to be 614.Systematic random sampling technique was used to select study participants. Data were collected from sytudy subjects using pretested semi-structured face to -face interview guided questionnaire. The data was entered and cleaned by Epi data (Version 3.1). Datawas analyzed using descriptive statistics and logistic regression, to identify factor associated with long-acting reversible contraceoptives methods utilization and the result is presented using the crude odds ratio, as well as Adjusted odds ratio with thecorresponding 95% confidence level.

Results: The prevalence of Long-acting reversible contraceptive was 33%.Educational level of women's (AOR=11.32, 95%CI: 4.672-27.393), Postpartum counseling (AOR=3.648, 95%CI: 1.88-7.08), prior experience of using LARC (AOR=7, 95%CI: 3.79-15.202) anddiscussion with husbands about LARC (AOR=2.75, 95%CI: 1.56-4.84) were positively associated with the use of Long-acting reversible contraceptive methods.

Conclusions: Utilization of Long-acting reversible contraception among extended postpartum women in East Hararghe Zone was low. This might be related to low achievements of womens educational level and councelling. Strengthening councelling and improving women educational status are crucial steps to enhanced LARC use among extended postpartum women.

Keywords: Postpartum women, Long-acting reversible contraception, Extended postpartum period

1. INTRODUCTION

1.1. Background

According to World Health Organization (WHO), “Long acting reversible contraceptives are method of birth control that provides effective contraception for an extended period without requiring user action, for at least two years. Thesemethods includes intrauterine device and sub-dermal contraceptive implantsthe most effective, safe and low failure rates of reversible methods of contraceptive and after removed fertility of women is returned” (WHO., 2017).Postpartum contraceptive is defined as prevention of unintended pregnancies and closely spaced pregnancies in the first 12 month after childbirth(WHO., 2013a).

Intrauterine devices were first introduced in 1960s (UN., 2019).Implants are also long-acting and extremely effective to preventing pregnancy, with less than 1% clinical faller rate (Ritu *et al.*, 2015). Globally the use of long-acting reversible contraceptive is increased in some parts for instance, China has the largest proportion of IUD user among all married women 33% while the lowest use is in North American, 1.5% South Asian and Sub-Saharan African 0.8% in spite of many benefits (Mohamed M. *et al.*, 2015; Ritu *et al.*, 2015).The use of modern contraceptive methods was increasing in Ethiopia from 14% in 2005 to 41% in 2019,most commonly used method is injectable 27% but the use of long-acting reversible contraceptive method 10% to11% and has taken off for more than ten years (EDHS, 2016, 2019).

Studies, reported in low- and middle-income countries particularly in Sub-Sahara African on the utilization’s of postpartum long-acting reversible contraceptive method showed that less than 15%(Margo andRobert, 2017).According to EDHS 2019, utilization of long-acting reversible contraceptive among reproductive age group women were < 11% (EDHS, 2019). In Tigray region the utilization of long acting reversible contraceptives is 2% IUCD and 5.6% for implant, Arba Minch, over all prevalence of IUD was 14% and In Gonder City the proportion of IUD utilization were 11% (Abera S.T. andG., 2018; Alemayehu *et al.*, 2012; Getinet *et al.*, 2014).Therefore, increasing use of long-acting reversible contraceptive methods play vital role particularly in Countries like Ethiopia which has high fertility rate, maternal mortality, child mortality and unmet needs of contraceptive methods. Also using modern

contraceptivemethods after delivery in postpartum period is crucial for the mother to prevent unintended pregnancy.

Henceforth, the Government of the Federal Democratic Republic of Ethiopia has committed Itself to achieve the Sustainable Development Goal three, (SDG) which is aimed to reduces total fertility rate to at least 3.0 per women in 2030 and 20% of married women (15-49) years will use LARC in 2030 work for the improvements of maternal and child health,through expansion of infrastructures like, constructing of health facilities and deploying of health extension workers to each kebele's in the country(FMOH, 2011; UN., 2017)

1.2. Statement of theProblems

Globally, 44% of unintended pregnancy are estimated to occur mostly in developing countries ,65% than developed and around 270 million women have an unmet need for contraceptive (B. Jonathan *et al.*, 2014; WHO., 2013b). The evidence from 27 countries analysis of Demographic and Health Surveys, 95% of women who are 0-12 months post-partum wanted to avoid pregnancy for the next 24 months but 70% of them are not using contraception (UN., 2017).

With the availability of various types of modern contraceptive methods globally, 68% of maternal mortality is occurred directly related to pregnancy and childbirth complicationwhile possible to reduce by long-acting reversible contraceptives. The highest contributing region to the world is, Asian (20%) and Sub-Saharan African(66%)(WHO., 2017). Almost two-thirds, 65% of all maternal death occurred in Africa region, also vary widely among countries and population depending on their economic status. Ethiopia is among them with Maternal Mortality Rate estimated to be 401 death which is much higher among other neighboring Eastern African countries, Kenya 342, Sudan 295, and Djibouti 248 (UNFPA., 2016; WHO., 2019).

According to different studies and reports on utilization of LARC globally,14.2% among married and postpartum women which is varies from country to country for instances, in China,33%. However, its utilization is low specially in sub-Saharan African, 0.8% Malawi, 9.76% Rwanda, 5.6% Cameron,1.6% Chad,1.8% Zambia, 8.5% Zumbabe,8.5% Ghana, 4.3% and Mali, 2.8% including Ethiopia, 11% (Adedini SA. *et al.*, 2019; EDHS, 2019; Mohamed M. *et al.*, 2015),Sociodemographic variable like, educational level, age, income, exposure to media,occupational status, spousal discussion, knowledge and attitude about contraceptive

were significantly associated with utilization of long-acting reversible contraceptive methods(Ajibola *et al.*, 2015; Ebrahim M. *et al.*, 2016; EDHS, 2019; Endalamaw andHailyesus, 2017; Fekadu *et al.*, 2016; Gizaw *et al.*, 2014; WHO., 2017; Yeshewas *et al.*, 2015).

Even though, many attempts are tried to reduces maternal mortality by introducing different types of initiatives like that of Millennium Development Goal (MDG) and Sustainable Development Goal (MDG) globally to reduce the global maternal mortality ratio to less than 70 per 100,000 live births by using family planning but still difficult to achieve. In Ethiopia, even Ministry Of Health is doing many improvement strategies, but difficult to achieve only 9% of reproductive age group women in Ethiopia use implants and 2% use IUCD(EDHS, 2019; UN., 2017). However, using modern contraceptive plays essential role in decreasing unwanted pregnancy, unsafe abortion, preventing preterm delivery and reducing maternal deathby 30%and 10% child mortality (WHO., 2013b).

Despite multiple impacts, limited studies are conducted on the prevalence of long-acting reversible contraceptive use and its associated factor among extended postpartum women in the study area. Accordingly, studying this topic helps to plan good intervention towards maternal morbidity and mortality particularly related to unwanted pregnancy, unsafe abortion and malnutrition by short child spacing. Hence, this study was aimed to determine the prevalence of long-acting reversible contraceptive methods use and its associated factors among extended postpartum women in the public hospitals of East Hararghe Zone, Eastern Ethiopia.

1.3. Significance of the Study

Determining the prevalence and factors associated with utilization of long-acting reversible contraceptive methods among extended postpartum women is crucial to make appropriate plans and intervention measures. The finding of this study will help the study community through measures that will be taken to improve utilization of LARC, by the nearest health institutions. At Zonal level it will helps also health care managers,to train health care professionals and intervention in the area of contraceptives and maternal health to plan new strategies and prepare training programs based on the identified factors and local non-governmental organizations working on family planning like, Family Guidance Association of

Ethiopia.Additionally, it will help researchers as input for other studies that will be conducted in the related subject matter in the future and to add on existing literature.

1.4. Objectives

1.4.1. General objective

- ✓ To determine the prevalence of long-acting reversible contraceptives use and associated factors among extended postpartum women in public hospitals of East Hararghe Zone, Eastern Ethiopia, from May 1 to 31, 2020.

1.4.2. Specific objectives

- ✓ To determine the prevalence of long-acting reversible contraceptive use.
- ✓ To identify factors associated with long-acting reversible contraceptive use.

2. LITREATURE REVIEW

2.1. Prevalence of Long-Acting Reversible Contraceptives Use

Globally, prevalence of modern contraceptive method accounts,58% among women of cohabited, married and those of in reproductive age group, its utilization has shown different statistical figure around the world, in West Africa 23%, middle Africa 43%, east Africa 38% and sub-Saharan African, 20% (UN., 2017). However, the estimated prevalence of long acting reversible contraceptive method use among reproductive age women has shown variation across region and declined globaly since 1994(UN., 2019).Long-acting reversible contraceptive methods prevalence were most commonly used in Eastern Asian, 24.3% while low prevalencewas observed in Southern Africa, 3.9% West Africa 4.8% and Sub-Saharan countries, 5.2% and Ethiopia is among them 11%(EDHS, 2019; UN., 2019) .

Several studies conducted in different parts of Ethiopiarevealed that the prevalence of postpartum contraceptive use was between 12.3-50%. For instances, a facility based cross-sectional study conducted in HossanaTown, Southern Ethiopia revealed that the prevalence of long acting reversible contraceptive among extended postpartum was 36.5 %(Biruktawit F., 2020(Biruktawit F. *et al.*, 2020. Similarly, another facility based cross-sectional study in pastoral community of Afar region revealed that prevalence of long acting reversible contraceptive methods, 33.4% the main reason not to use long-acting reversible contraceptive method were related to heavy menstral bleeding caused to implants {Muhammed, 2020 #98).

In the same way, facility based cross-sectional study conducted in Gonder City, Northwest Ethiopia revealed that the prevalence of long-acting reversible contraceptive in the city33.7%,(Abera S.T. andG., 2018) Moreover, community based cross sectional study conducted at Durame town,souther Ethiopia showed prevalence of long acting reversible contraceptive method use among mothers in extended postpartum period 36.7% (Yirga *et al.*, 2015).

Additionally, facility based cross-sectional study conducted in Sidama Zone, Southern Ethiopia among postpartum intrauterine contraception device user account, 21.6% (Lidetu B.T. *et al.*, 2017).

In the other hand, an analysis of`demographic and health searvey data set in 8 countries depending on the basis of contraceptive prevalence rate on long acting reversible contraception in sub-Saharn African shows an average of 0.48-9.76 % indicated low prevalences related to their economic status, place of residence and educational level of women (Adedini SA. *et al.*, 2019).Cross sectional facility based study conducted in Bale Zone to assess the prevalence of postpartum intra uterine contraceptive devices utilization showed 12.4% (G. Alemayehu *et al.*, 2017). While, a facility-based cross-sectional study conducted in Adama, Ethiopia showed prevalence of long acting reversible contraceptives 27% (Ebrahim andMohammed1, 2017). However other institutional based cross sectional study conducted in Jimma showed more prevalence of LARC use than other parts of study area 53.2% (Wariyo *et al.*, 2017).

Study conducted on overall postpartum contraceptive use by systematic review and Meta-analysis methods revealed 48.11%

Furthermore, institutional based cross-sectional studies on prevalence of long acting reversible contraceptive method in different parts of Ethiopia revealed slightly different statistical figures, Harar City, 38% Behardar,26.4% and Debere tabor Town 25.4%(Abera S.T. andG., 2018; Endalamaw andHailyesus, 2017; Shiferaw *et al.*, 2017; Takele *et al.*, 2016; Tsegaye M *et al.*, 2020) .

2.2. Associated Factors Related to the Use of Long-Acting Reversible Contraceptives Use

2.2.1 Socio-demographic factors

Studies in high and middle income countries identified that age of women, educational level and occupation were factors for long acting reversible contraceptive method(G. Alemayehu *et al.*, 2017; Danie *et al.*, 2018; Ebrahim M. *et al.*, 2016; Endalamaw andHailyesus, 2017; Tamirat *et al.*, 2018). The study conducted in Sudan(Kennedy, 2016)andEthiopia(Endalamaw andHailyesus, 2017) on the long acting reversible contraceptive method utilization in extended postpartum, religion and income of women had significant association to the uptake of long acting reversible contraceptive methods respectively.

The finding from Uganda and Ghana revealed that discussion with partner on family planning was significantly associated with the utilization of postpartum contraceptives (AOR=1.80,

95% CI:1.36-2.37), (AOR=3.1, 95% CI:1.03-9.2) respectively (I. C. Jonathan andAbubakar, 2018; Ronald *et al.*, 2014). However, other study finding in Ethiopia women having no discussion with partner were (AOR=1.92, 95% CI:1.50,2.45) more likely associated with the utilization of long acting family planning (Tamirat *et al.*, 2018). Additionally a cross-sectional study conducted in Uganda showed significant association with high parity (AOR=4.07,95% CI 1.08-15.4) (Ronald *et al.*, 2014)

The study conducted in Kenya and Ghana revealed that age of respondents was positively associated for the utilization of contraceptive methods inpostpartum period (I. C. Jonathan andAbubakar, 2018; Rose *et al.*, 2017). Contrary finding was observed in Ethiopia that the age of women was negatively associated to the utilization of long acting reversible contraceptives in extended postpartum period (Ebrahim M. *et al.*, 2016).

A study conducted in Ethiopia on the factor associated with long acting contraceptive method services utilization revealed that women lived in rural area,[AOR=0.65; 95% CI: 0.50, 0.81, P=0.0009], inadequate women's level of knowledge [AOR, 0.29; 95% CI 0.10 , 0.83, P=0.02], women not having electronics media [AOR, 0.65; 95% CI: 0.53, 0.79, P< 0.0001] and age of women [AOR ,0.82; 95% CI: 0.53, 0.93, P=0.01] were associated to the use of long acting reversible contraceptives(Tamirat *et al.*, 2018).

The study conducted in different parts of Ethiopia on the utilization of long acting reversible contraceptives among extended postpartum women revealed that educational status of women on the uptakes of contraceptive has significantly association (G. Alemayehu *et al.*, 2017; Fekadu *et al.*, 2016; Gizaw *et al.*, 2014; Yirga *et al.*, 2015).Other study done in Gojeme revealed that residences of women (AOR=3.1, 95% CI:1.14, 8.36) had significantly associated with the utilization of long acting reversible contraceptives in the extended postpartum women (Gizaw *et al.*, 2014). Generally, the study conducted in Ethiopia at different places by many authors on the utilization of long acting reversible contraceptives showed that occupation of women has significantly associated for the uptake of long acting reversible contraceptives among extended postpartum women (Ebrahim M. *et al.*, 2016; Endalamaw andHailyesus, 2017; Fekadu *et al.*, 2016).

2.2.2 Access and information related factors

Access to contraceptive methods, women having electronics media, getting contraceptive at health facility, are considered as predictors in previous study for the utilization of long-long acting reversible contraceptives in extended postpartum period (Heike *et al.*, 2014; Rose *et al.*, 2017; Tamirat *et al.*, 2018).

The study conducted in United states of America, at Californiarevealed that access to contraceptive methods in the postpartum period was significantly associated with the utilization of contraceptive in the postpartum period (Heike *et al.*, 2014).

Study conducted in Sub-Saharan Africac countries on trends, patterns and determinants of long acting reversible contraceptives factors like, exposure to media were associated to utilization of LARC (Adedini SA. *et al.*, 2019).

Another study conducted in Kenya concluded that there were significant association between utilization of postpartum contraceptive and getting contraceptives at health facility (Rose *et al.*, 2017).

2.2.3 Contraceptive Use and reproductive health care service factors

A descriptive cross-sectional study conducted in South Sudan and Uganda revealed that prior use of long acting reversiblecontraceptives was significantly associated with utilization of long acting reversible contraceptives on postpartum women (Kennedy, 2016; Ronald *et al.*, 2014). Similarly study conducted in Ethiopia revealed that previoususe of long acting reversiblecontraceptives were significantly associated with utilization of long acting reversible contraceptives in extended postpartum period (AOR:7.84, 95% CI:3.78-16.23) (Yirga *et al.*, 2015).

The study conducted in Nigeria and Uganda on the long-acting reversible contraceptive among extended postpartum women, prior experiences of using contraceptive in extended postpartum period [AOR=7.15, 95% CI:1.58-32.37] was significantly associated for its uptake (Ajibola *et al.*, 2015; Sileo, 2014). Another study done in Ethiopia revealed that odds of women who had previous experiences of using long acting reversible contraceptive were up to eight folds higher than mother never used long acting reversible contraceptive (Yirga *et al.*, 2015). Study conducted in Kiramu district on the utilization of modern contraceptive method on the

extended postpartum women concluded that, fear of side effect was significantly associated to the uptake of long acting reversible family planning (Kenate andAmenu, 2015).

Counselling women on family planning during antenatal, delivery and postnatal period, knowledge about family planning, prior use of contraceptive and having antenatal care on previous study revealed that having a significant association with the uptake of postpartum contraceptive(I. C. Jonathan andAbubakar, 2018; Kennedy, 2016; Mariam *et al.*, 2015; Sileo, 2014).

The study conducted in America and Ghana revealed that counselling about family planning during antenatal and postnatal period [AOR= 3.5, 95% CI:1.3-9.9] have significant association with utilization of long acting reversible contraceptives in extended postpartum period (I. C. Jonathan andAbubakar, 2018; Lauren *et al.*, 2015).

Generally, the study conducted in, Sudan, Kenya and Ghana on the uptake of contraceptives in extended postpartum period revealed that counselling during antenatal, postnatal and delivery was associated with utilization of long acting reversible contraceptive method(I. C. Jonathan andAbubakar, 2018; Kennedy, 2016; Lauren *et al.*, 2015; Ronald *et al.*, 2014). Similarly finding in Ethiopia concluded that counseling during pre and post-natal with [AOR=5.72; 95% CI:2.68-12.28] was association with utilization of contraceptive in extended postpartum period (Teklehaymanot *et al.*, 2015).

2.3. Conceptual Framework

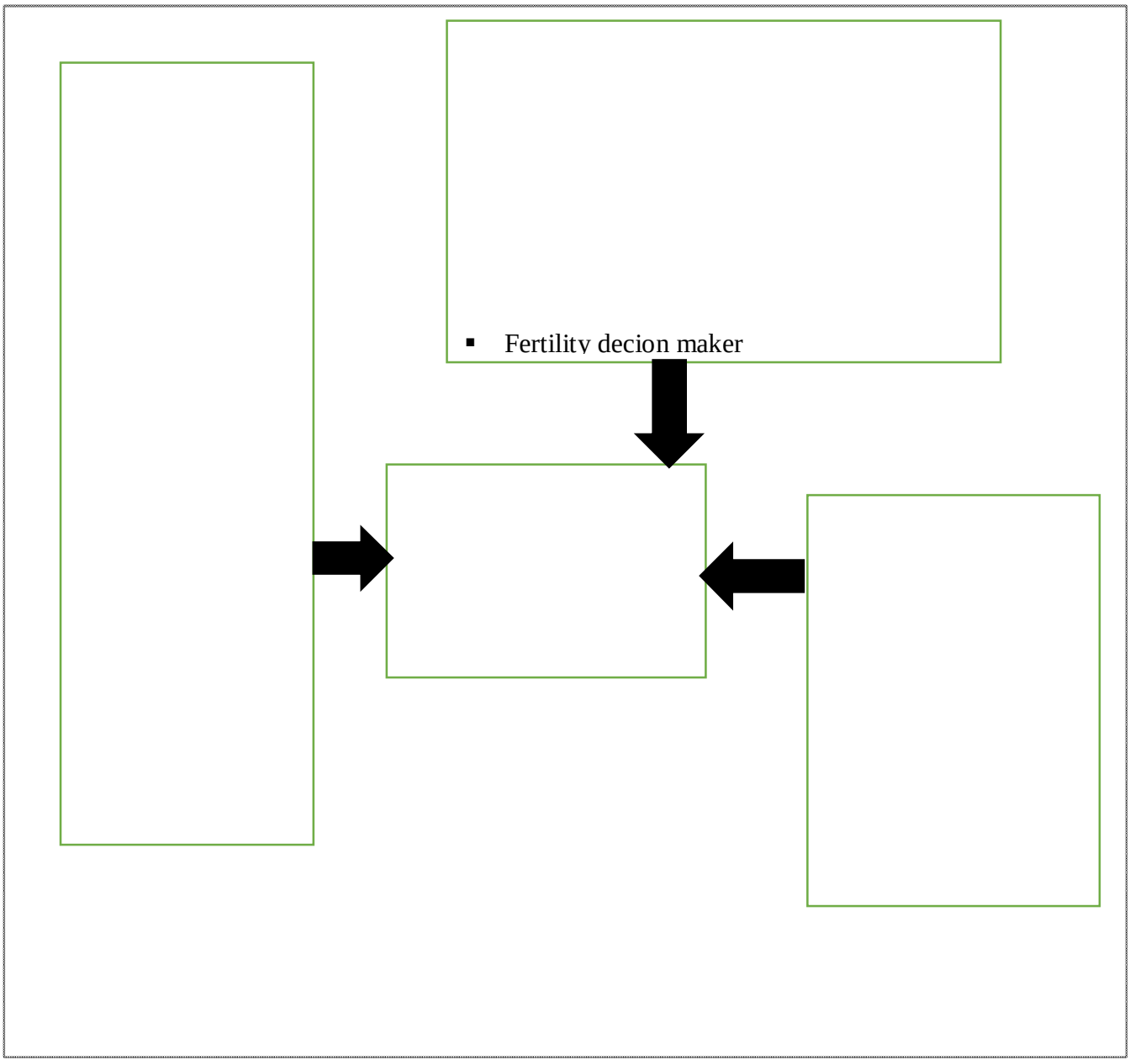

Figure 1: Conceptual framework including factors associated with the use of long-acting family planning (Ramesh *et al.*, 2017)

3. METHODS AND MATERIALS

3.1. Study Area and Period

East Hararghe zone is one of Oromia regional state zones in Oromia regional inEthiopia. This zone is located to the eastern part about 526km away from Addis Ababa, the capital city of Ethiopia. It covers the area of 17,935.40 square kilometer. Currently it has an estimated total population of 3,897,441. Out of these, reproductive age women account 861,335 and there are 5 public Hospitals, 121 Health Centers, 548 Health Posts and 175 Private clinics (EHZHO, 2019).The study was conducted in all public hospitals of East Hararghe Zone(Haramaya, Garamuleta, Deder, Bisidimo and Chelenko Hospitals) at East Hararghe Zone from May 1 to 31, 2020.

3.2. Study Design

Hospital based cross-sectional study design

3.3. Source of Population

All extended postpartum women who were living in East Hararghe Zone.

3.4. Study Population

All extended postpartum women who were available during the actual data collection period after visiting maternal and child health clinics for immunization of their child in five public hospitals of East Hararghe zone.

3.5. Inclusion Criteria

- ✓ All women in extended postpartum period visiting maternal and child health clinics for immunization services to their child, who were available during the study period.

3.6. Exclusion Criteria

- ✓ Extended postpartum women who were unable to communicate.

3.7. Sample size determination

To determine the sample size for this study, outcome variable and various factors significantly associated with the outcome variable were considered. Accordingly, for the first and second specific objectives the sample size was calculated separately and the larger sample size was taken to be used for this study.

Specific objective 1: To determine the prevalence of long-acting reversible contraceptive methods

The sample size was determined by a single population proportion formula as follows:

n= $\frac{(Za/2)2xp(1-p)}{d2}$

Where:

n=desired sample size

Z a/2=value of standard normal distribution in 1.96 level of significance with a 95% confidence interval (Luchowski *et al.*)

p=proportion (36.7%) of prevalence of long acting reversible contraceptive which was taken from study conducted in Durame Town (Yirga *et al.*, 2015)

q=1-p=1-o.367= 0.633

d=desirable error/ margin of error between the sample and the population or desired precision (4%) =0.04

n=$\frac{(1.96)\ 0.367*0.633}{(0.04)2}$=558

Adding 10% non-response rate=56+558=614

Specific objective 2: Factors associated to the use of long-acting reversible contraceptive methods

The sample size of second specific objective of this study was determined by considering factors that were significantly associated with the outcome variable, two-sided confidence level of 95%, margin of error 5%, power by 80% and the ratio of exposed to unexposed 1:1 using Epi Info Version 7 software.

Table 1: Sample size determination to the second objective for different factors associated with utilization of long-acting reversible contraceptives among extended postpartum women in five public hospitalsof East Hararghe zone, Eastern Ethiopia, 2019/20.

Factors considered	Exposed group	Unexposed group	Total sample size plus 10% non-response rate	References
1-Family planning history	80.3(previous used)	63 (has no history)	257	(Eden *et al.*, 2019)
2-Age of respondent	6.8(between 25-34)	27.9(above 25-34)	130	(Ebrahim M. *et al.*, 2016)
3-Discussion with husband	30.1(has discussion)	12.4(has no discussion)	297	(G. Alemayehu *et al.*, 2017)

Previous history of using contraceptive, age of respondents and lack of discussion with husband were the most common factors for utilization of long-acting reversible contraceptive methods. As it can be seen from table 1, the calculated sample size of the first objective was larger than the second objective. By adding 10% of non-response rate, the first objective was taken for sampling 614.

3.8. Sampling Procedure

All five public hospitals in Eastern Harareghe Zone were included in the study. Based on the information obtained from the immunization registration book of the five hospitals (Garamuleta, Bisidimo, chelenko, Haramaya and Deder hospitals) in average about 418, 346, 96, 95 and 264 respectively extended postpartum women used to visit the health facility for immunization services for their child. The total number of extended postpartum women who were visited the immunization clinic within six months was calculated and used to determine the interval. The total sample size was met by the systematic random sampling technique of daily case load from the total number of women who visited child immunization clinics was estimated by considering the immediate previous one-month record of Extended programme on immunization charts as sampling frame. Every second women were included in the sample until the total of 614 participants were selected based on their proportion allocation. Based on registration number of clients, which was used as a sampling frame, the first number was

randomly selected. The procedure was continuing throughout the data collection period until the required sample size was achieved.

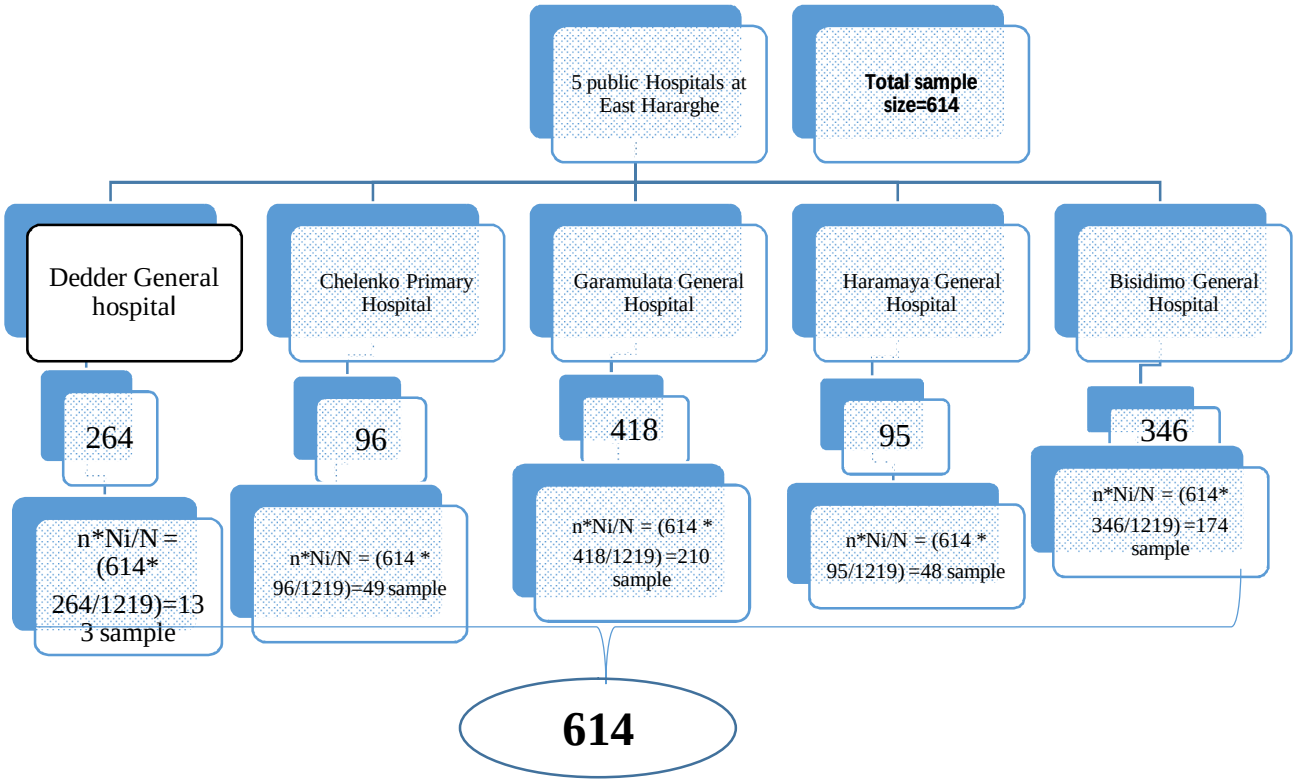

Figure 2:Schematic presentation of sampling procedure for the study on prevalence of long acting reversible contraceptives use and its associated factors among extended postpartum women in five public hospitalsat East Hararghe, Eastern Ethiopia 2019/2020

3.9. Data collection methods

3.9.1 Data collection tools

A semi-structured, interviewer-administered questionnaire was adapted from different literatures developed for a similar purpose by different authors in English (Biruktawit *et al.*, 2018). Then variables were reviewed to suit the local condition. The questionnaire was contained three parts socio-demographic information, use of long-acting reversible contraceptive and related factors.

To check the consistency of the questionnaire, first, it was prepared in English; then it was translated into the local language (Afan Oromo and Amharic) by persons who have a good ability for both languages (English and the local languages) for better understanding of data. The questionnaire was again re rechecked by another person having a good ability to see the consistency of the contents of the tool and then back into English. The questionnaire was pre-tested for appropriateness and contextually on 5% (31) of the total sample size before the actual data collection, and then the questionnaire again was revised and amended for necessary modification and correction in the Jugel hospital, which is different from the selected study area.

3.9.2. Data collectors

Ten Midwives (diploma) for data collection and two Midwives (BSc) for supervision were recruited who were fluent in Amharic and Afan Oromo and were not working in the study sites were recruited for data collection. Two days training was given the first day theoretical which was about the objectives of the study, patient's rights, and second day practical training was provided to data collectors mainly about participants right, informed consent, and interviewers techniques. The supervisors and principal investigator were supervised the data collection process throughout the data collection period. All filled questionnaires were reviewed each night and errors were corrected.

3.9.3. Data collection procedure

Data was collected from immunization service clinics in hospital. The data collectors were started data collection after reviewing chart for eligibility. The participants as soon as they were stable and informed about the study title, purpose, procedure, risk and benefit, rights and confidentiality of the study. Those women who were not fulfilled the inclusion criteria were replaced by next eligible women. The interviews were taken on average 30-40 minutes and carried out in private setting service.

3.10. Study Variables

3.10.1. Dependent Variable

Ever use of long-acting reversible Contraceptive methods

3.10.2. Independent Variables

Socio-demographic characteristics:

Age, educational level, marital status, women's occupation, husbands 'occupation, husband's educational level,residence, media use

Reproductive health information and characteristics: Parity, fertility decision makers,ever heard, information on LARC

Contraceptive use related characteristics: Prior use of LARC, ever used,discussion with husband'sfear of side effect, counseling.

3.11. Operational Definition

Extended postpartum period: The first 12 months after child birth (Ronald *et al.*, 2014).

Long-Acting methods: Methods that comprise of IUCD and implants (Ronald *et al.*, 2014).

Ever use of LARC: Current or last one year's use of contraceptive method(Biruktawit *et al.*, 2018).

Factors: Socio-demographic, information related characteristics that could hinders the acceptance and utilization of long -acting contraceptive methods (Gizaw *et al.*, 2014).

3.12. Data Quality Control

To ensure data quality, first, properly designed data collection tool was adapted. Second, data collectors and supervisors were well trained related to the objective of the study, eligible study subjects, consent benefit of the study, items in the questionnaire. and rights of the study participants. Third, a pre-test was done on 5% of the sample size (614) on 31 women of extended postpartum who used reversible long-acting contraceptives methods at Jugel Hospital before the actual data collection period to check the reliability and construct the validity of the questionnaire. Finally, the data was entered into Epi data software as part of data management. During data cleaning, a logical checking technique was employed to identify errors. Furthermore, the data collectors, supervisors, and the principal investigator checked the collected data each day; double data entry was done by two data clerks and consistency of the entered data was cross checked by comparing the two separately entered data on Epi data version 3.1., making corrective measure was made.

3.13. Method of Data processing and Data Analysis

Data management- After data collection, each questionnaire was checked for completeness, accuracy and those returned questionnaires were rechecked for completeness, cleaned with a manual inspection at the field. Those questionnaires lacking important variables were rejected and no longer used as a predictor variable. The data was sorted in a secured place for confidentiality and in time of need for aback up of the data.

Then data entry and cleaning were done by Epi- data 3.1, and double data verification was made using this software. Lastly, the data was exported to SPSS (Version 22) for analysis and bivariate analysis was performed to see the association of each variable to reversible long acting contraceptives methods at $p < 0.25$. Multi collinearity test was carried out to check the linear correlation among independent variables by using standard error and collinearity statistics. Variance inflation factor > 10 and standard error >2 was checked to be dropped but there are no variables which have collinearity. Hosmer-Lemeshow goodness of fit was used to check model fitness. Omnibus test was significant (p-value <0.0001) and Hosmer-Lemeshow's test was found to be insignificant (p-value=0.194) which indicate that the model was fitted. Based on the findings of bivariate analysis, variables with p-value <0.25 were entered in to multivariate logistic regression analysis with 95% confidence level and 5%

significant level after checking for multi-collinearity with 95%CI, and level of significant at p-value < 0.05 was considered. Variables with p-value less than or equal to 0.05 in the multivariate logistic regression analysis were considered as statistically significant with the long acting reversible contraceptive methods used. Then, the result was presented using tables, figures, and narratives.

3.14. Ethical Considerations

First, the study was approved by Haramaya university college of Medicine and Health Sciences Institutional Health Research Ethics Review Committee (IHRERC). Then an official letter of cooperation was written to East Hararghe zone Health Bureau which also wrote an official letter of cooperation to each of all hospitals in which study was conducted. Informed voluntary, written and signed consent was obtained from each participants and head of respective hospitals. Participants were informed clearly about the purpose and benefits of the study and written informed consent was obtained from the participants. Those who are signed written consent were only participated in the study and the confidentiality of respondents was maintained throughout the research process by giving code for participants. Personal privacy was respected. The respondents had the right not to participate in study or withdraw from the study at any time or stage of interview.

4. Result

4.1. Socio-demographic Characteristics

In this study, out of 614 respondents, 602 women were included, yielding a response rate of 98%. The age of respondents was ranged from 15 to 48 years with mean age =26.3, SD±6 years). More than half, 335 (55.6%) of them were rural residents and majority,532 (97.8%) were married by marital status (Table 2).

Table 2: Socio-demographics characteristics of the respondents in health facilities of East Hararghe zone, Eastern Ethiopia, 2020 n=602

Variables		Fréquences	Percentage
Age	15-19	58	9.6%
	20-24	179	297%
	25-29	173	28.7%
	30-34	120	19.9%
	35-39	52	8.6%
	40-44	15	2.5%
	45-49	5	0.8%
Women's Educational Status	Post-secondary	140	23.3%
	Secondary	38	6.3%
	Primary	214	35.5%
	No forma éducation	210	34.9%
Marital status	Married	532	88.4%
	Others	70	11.6%
Place of residence	Urban	267	44.4%
	Rural	335	55.6%
Media use	Yes	540	89.7%
	No	62	10.3%
Type of media use	Radio and Television	345	64.0%
	News Paper	13	2.4%
	Other's	53	9.8%
	Use more than one media	127	23.6%

Others*cohabited, divorced, separated, single and widowed, other** Facebook, telegram

4.2 Contraceptives useand reproductive health care service characteristics

In this study,participants were asked various questions to determine ever use of LARC and associated factors. The prevalence was 33% (95% CI:29.4-36.9) and 342 (56.8%) respondents had given birth more than five times while 148 (24.6%) participants gave birth two to four times. Out of those who gave birth, 292 (48.5%) women had one to two alive children and 310 (51.5%) had more than three alive children.

Table 3:Contraceptives use andreproductive health care services usedrelated factors to long-acting reversible contraceptive methods user among extended postpartum women in Health facilities of East Hararghe zone, Eastern Ethiopia, 2020, n=602

Variables		Frequencies	Percentage
Heard about contraceptives	Yes	540	89.7 %
	No	62	10.3 %
Over all contraceptives use	Yes	309	51.3
	No	293	48.7
Types of contraceptives used during Extended postpartum period	Intra-uterine devices	14	4.5%
	Implant	186	60.19 %
	Other's (depo, COC)	109	35.3 %
Long acting reversible contraceptive use	Yes	200	33.2
	No	402	66.8
Types of LARC used	IUCD	14	7%
	Implanon	186	93%
Source of information about contraceptives	Television/radio	292	54.1 %
	Healthextension	201	37.2 %
	Family/friends	42	7.8%
	Others	5	0.92 %
Parity	1	112	18.6 %
	2-4	148	24.6 %
	5 and more	342	56.8 %
Number of alive children	1-2	292	48.5 %
	3 and more	310	51.5 %
Future children need	0	16	2.6%

	1-3	125	20.7 %
	4 and mores	461	76.5 %
Birth interval (in months)	0-23 months	553	91.5 %
	>23 month's	49	8.1%
Time to reach a healthinstitution	< 15 minutes	176	29.2 %
	Between 16- 30 minute's	327	54.3 %
	>30 minutes	99	16.4 %
Place of delivery	Health facility	509	84.5 %
	Home	93	15.4 %
Decision on Fertility	Myself	37	6.14 %
	My husband	225	37.2
	Both	340	56.4 %

4.3. Major reason for not using long acting reversible contraceptives

Majority of the study participants, 50.6%, reported that religious belif was their major reason not to use LARC.Major factors stated by the study participants for not using long acting reversible contraceptives were religious belief, husbands' influence and lack information as shown in figure 4.

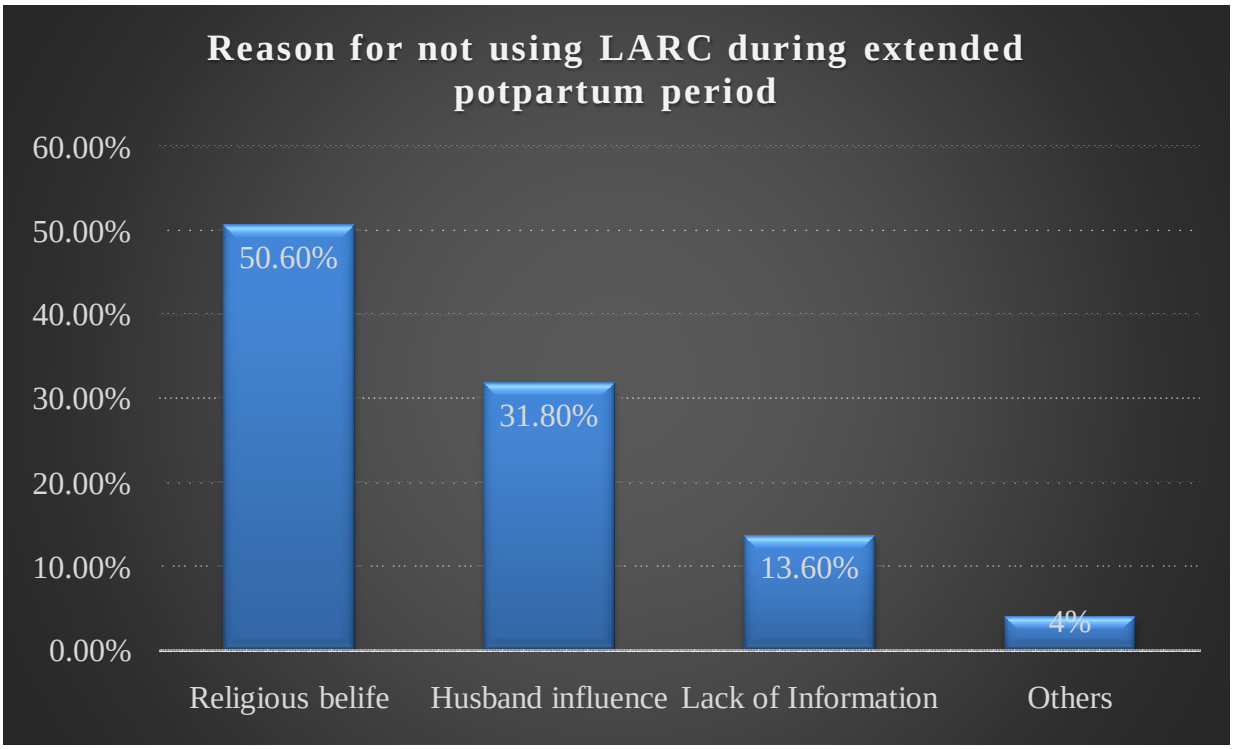

Figure 3:Major stated reasons by women for not using long acting reversible contraceptives in health facilities of East Hararghe Zone, Eastern Ethiopia, 2020, n=602

4.4. Factors Associated with Long-acting Reversible Contraceptive

Discussion on LARC with husband's, Prior use of LARC, Women's occupation, Husbands' occupation, Women's level of educaction,Postpartum counseling and Residence were candidate variables in the bivariate model less than 0.25.

Table 4: Bivariate logistic regression analysis output of factors associated with LARC in East Hararghe Zone, Eastern Ethiopia, 2020, N=602

Variables	**LARC**		**Crude OR (95% CI)**
	Use	**Non-use**	
Women's occupation			
Public employed (public or private)	138(46.3%)	160(53.7%)	**2.195(1.054-4.572)**
Farmer	10 (7.9%)	117(92.1%)	0.218(0.084-0.563)
Merchant's	41 (29.7%)	97 (70.3%)	1.076(0.490-2.364)
Others	11 (28.2%)	28 (71.8%)	1
Women's level of education			
Post-secondary	96(68.6%)	44(31.4%)	**4.182(2.649-6.602)**
Secondary	5(13.2%)	33 (86.8%)	0.290(0.109-0.776)
Primary	27 (12.6%)	187(87.4%)	0.277(0.169-0.454)
No formal educations	72 (34.3%)	138(65.7%)	1
Counseling at PNC			
Yes	71 (55.9%)	56 (44.1%)	**3.401(2.269-5.096)**
No	129(27.2%)	346(72.8%)	1
Prior use of LARC			
Yes	101(44.3%)	127(55.7%)	**2.209(1.560-3.128)**
No	99(26.5%)	275(73.5%)	1
Husbands' occupation			
Private	26(16.8%)	129(83.2%)	0.222(0.085-0.576)
Public employee	126(58.6%)	89(41.4%)	1.557(0.634-3.824)
Farmer	20(14.1%)	122(85.9%)	0.180(0.068-0.48)
Merchant	18(26.1%)	51(73.9%)	0.388(0.141-1.067)
Others	10(47.6%)	11(52.4%)	1
Spousal discussion about LARC			
Yes	119(46.3%)	139(53.8%)	**2.78(1.936-3.898)**
No	81(23.5%)	263(76.4%)	1
Residence			
Rural	57(17%)	278(83%)	0.178(0.122-0.258)
Urban	143(53.6%)	124(46.4%)	1

Significant at: *p=<0.05, **p=<0.01, ***p=0.000, 1=reference

In the multivariable logistic regression analysis, theprior use of LARC, women's level of education, postpartum counseling and discussions with husbands,have a significant association

with the ever use of LARC methods. Women who were prior use of LARCwere 7 times more likely to use LARC compared to others (AOR= 7, 95%CI: 3.79-15.202). Women who had counseling were 3 times more likely to use LARC compared to who did not have (AOR=3.65, 95%CI: 1.88-7.08).

Women who had discussion with husband's on LARCwere 2 times more likely to use LARC compared to who did not have such experience (AOR=2.749, 95%CI:1.562-4.838). (Table 5 and 6).

Table 5: Multivariable logistic regression analysis output of factors associated with LARC in East Hararghe Zone, Eastern Ethiopia, 2020, N=602

Variables	**LARC Use**	**Non-use**	**Adjusted OR (95% CI)**
Women's occupation			
Public Employed (private and public)	138(46.3%)	160(53.7%)	0.652(0.233-1.826)
Farmer	10(7.9%)	117(92.1%)	0.058(0.014-0.241)
Merchant	41(29.7%)	97(70.3%)	1.007(0.329-3.076)
others	11(28.2%)	28(71.8%)	1
Women's level of education			
Postsecodary	96(68.6%)	44(31.4%)	**11.3(4.672-27.393) ****
Secondary	5(13.2%)	33(86.8%)	8.948(3.381-23.682) *
Primary	27(12.6%)	187(87.4%)	1.029(0.508-2.082)
No formal education	72(34.3%)	138(65.7%)	1
Counseling			
Yes	71(55.9%)	56(44.1%)	**3.648(1.88-7.080)*****
No	129(27.2%)	346(72.8%)	1
Prior use of LARC			
Yes	101(44.3%)	127(55.7%)	**7(3.790-15.202)****
No	99(26.5%)	275(73.5%)	1
Husbands' occupation			
Private	26(16.8%)	129(83.2%)	0.034(0.008-0.155)
Public Employed	126(58.6%)	89(41.4%)	0.571(0.140-2.320)
Farmer	20(14.1%)	122(85.9%)	0.042(0.009-0.191)
Merchant	18(26.1%)	51(73.9%)	0.161(0.036-0.724)
Others	10(47.6%)	11(52.4%)	1
Spousal discussion			
Yes	119(46.3%)	139(53.8%)	**2.749(1.562-4.838)***
No	81(23.5%)	263(76.4%)	1
Residence			
Rural	57(17%)	278(83%)	0.028(0.013-0.060)
Urban	143(53.6%)	124(46.4%)	1

Significant at: *p=<0.05, **p=<0.01, ***p=0.000, 1=reference.

5. DISCUSSION

In this study, the prevalence of ever userLARC among extended postpartum women was33 % (95% CI: 29.4-37) which was low. Factors such as maternal educational status, postnatal councelling, prior use of LARC and spousal discussion were significantly associated factors to utilization of long-acting reversible contraceptive methods.This finding was in line with studies conducted in Afar region, 33.4%(Muhammed andRitbano, 2020).However, this finding was lower than studies conducted at Jimma, Town, 53% (Wariyo *et al.*, 2017) and Harar City, 38% (Shiferaw *et al.*, 2017). This result variation slightly might be due to study nature of participants. Study conducted in Harar City the participants more than 55 %, were from urban but in this study, most of participants were from rural57%. As a result, information and access to health care services towards the behaviors of contraceptives might be better at urban residents. In additon to this, counecllling being provided by health care providers and awareness creation given to the community about LARC methods.

In this study, previous use of LARC was found to be significantly associated with postpartum LARC use. This finding was in line with studies conducted in Hadiya Zone**,**(Beyene *et al.*, 2019)Adama Town**,**(Ebrahim M. *et al.*, 2016)**,** Durame Town**,**(Yirga *et al.*, 2015) Hossana Town,(Biruktawit F. *et al.*, 2020) and Jimma Town (Wariyo *et al.*, 2017)**.** The possible explanation was those women who had previous experiences of LARC use had better understanding of different types of contraceptive with its advantages and dis advanagesit can helpto decided types of contraceptive they used.

According to this study, women who hadpost-secondary educational level were eleven times more likely to use LARC, (AOR=11.3; 95%CI:4.67-27.393) as compared to those educational status were primary level.This is in line with studies conducted at Gondar City (Abera S.T. andG., 2018), Bale zone (G. Alemayehu *et al.*, 2017), Adaba Town (Fekadu *et al.*, 2016)and Durame Town (Yirga *et al.*, 2015). It might be due to similarities in educational status, which leads to enhanced capacity of understanding towards the characteristics of contraceptives. Additionaly education has great effect tochange attitudes of women and better understanding on the choice and decision-making skills towards LARC methods.

Women who had counseling were three times more likely to use LARC, (AOR=3.65; 95%CI: 1.88-7.08) compared to their counterparts. Which is consistent with studies conducted in Somali Region, KebrebeyaTown (Nigussie *et al.*, 2016). This might be counselling womenbring result to change perception, and misconception of women towards LARC.

Generally, the prevalence of LARC highpoints, the importance of empowering women to make their decision about their contraceptive method needs. Husbands being the major decision-makers in reproductive issues particularly on contraceptive use these could make them not to use when they need to use. This contributes to a wide range of women's health problems,including maternal death related to pregnancy (WHO, 2019).

Strength and limitation of the study

Strength of the Study

The study was focused on LARC; as it is an important intervention against maternal morbidity and mortality related to pregnancy. So, this was important to explore reasons for why women's do not use such prevention methods. Involving female data collector, local language speakers and know the study participants' norms as it is very helpful to investigate the actual information and clarifying any question raised from participants. To increase precision of study the marginal error was adjusted to 0.04. As a result, the sample size was increased from 398 to 614.

Limitation of the Study

Since the study design was cross-sectional, cause and effect could not be identified. as this study was conducted at Hospital level berkinson bias were expected, there were more perception among participants, they assumed better quality of care than Health Centers.

6. CONCLUSION AND RECOMMENDATIONS

6.1. Conclusions

The prevalence of LARC was 33%in the East Hararghe Zone Public Hospitals which was low. Women's educational level, discussion with spousal about LARC methods, counseling at postnatal period and prior LARC use experience showed a significant association with the use of LARC.

6.2. Recommendations

Recommendations were forwarded for the responsible body based on study findings as follows:

To East Hararghe Zonal Health Office and Hospital administrators

Health organizations and other stake holders could develop program to work on health care providers that enhance intervention measure on awareness creation to improve utilization of long acting reversible contraceptives among community.

To Health Service providers at East Haraghe zone.

- Health professionals should focus to implement the program of counselling, on giving emphasis it helps to improve women's information, misconception, myths and beliefs towards use of LARC. In addition to this, health providers could give more emphasis for women whose educational status are primary and below during education.
- Awareness creation among couples about possible benefits of LARC recommended to reduce husband influence
- Mobilize men to participate in family planning use and support their partners to promote and enhanced utilizartion of LARC.

Researchers: Other researchers ought to do further study using different study design approaches**.**

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8. Annexes

8.1. Information sheet and informed Voluntary Consent Form for Heads of Hospitals

My name is Daniel Negash------- (BSc.) and I am attending MPH study on Reproductive Health in Haramaya University. I am here to conduct a study in your hospital under Haramaya University, college of Health and medical sciences, for partial fulfillment of Master of Public Health on Reproductive health track. It will also have a paramount importance for your organization to know the problem under study and act accordingly. So, I kindly request you to give me time to explain about the study importance, ethical issues and how the study will be conducted to you. First, I would like to thank you for your time and help.

The study title: Long- Acting Reversible Contraceptives Use and its Associated Factors among Extended Postpartum women attending Public Hospital in East Haraghe, Zone Ethiopia from June, 20-July, 20/2020.

Purpose/aim of the study:

The finding of this study may be used as a guide for health care providers working in family planning clinics and postnatal wards to identify the main determinant of factors related to utilization of long acting reversible family planning among extended postpartum women and try to improve maternal and neonatal health care in the institution to take the appropriate intervention. It can also provide important information for the East Hararghe Zone Health Bureaus to plan and set strategies and expand services about health information dissemination. Furthermore, the aim of this study is to write a thesis as a partial requirement for the fulfillment of a Master's program in Reproductive Health for the principal investigator.

Procedure and duration:

The study will be conducted from February, 02 to March,01/2020 among extended postpartum women attending family planning clinics during the study period. Semi-Structured interviewer administered questionnaire will be used to Assess the prevalence of long acting reversible family planning and its associated factors for30-40 minutes of interview. Before I started the data collection, I will introduce the data collectors to you. So, I kindly request you to permit to me to collect data only for this particular study.

Risks and benefits: The risk of participating in this study is very minimal. The study participants will be informed that participating in this study will not have special tests, emotional stress or other foreseeable risks associated with the research except for few minutes of their time.

Confidentiality: The information that will be provided will keep confidential. There will be no information that will identify the individual clients because their name will not be included in the data extraction tools. The finding of the study will be general for the study area and will not reflect anything particular to individual persons. The questionnaire will be coded to exclude showing names. No reference will be used in oral or written reports that could link participants to the research.

Rights: Allowing data collection for this study is fully voluntary. Considering the importance of the research to your health institution you are free to decide. If any violation of ethical rules and conduct is seen throughout study, your health institution has full right to withdraw and stop study.

Contact Address: If there are any questions or enquires any time about the study or the procedures, please contact: Principal investigator: Daniel Negash.

E-mail: hasetdani@gmail.com Mobile phone: +251-912756208

Institutional Health Research Ethics Review Committee;

Office phone: +251-0254-66-2011 P.O. Box 235, Harar, Ethiopia

Declaration of informed voluntary consent:I have read and understand the Institution Information Sheet very well. I have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the rights and the contact address for any quires. I was informed that the health institution has the right to stop the study in a case where certain misconduct and unethical procedures are reported according to the health institution premises. Also, I understand that the health institution has the right to use the result of the study as public property. Therefore; I declare my voluntary consent on behalf of ----------to allow this study to be conducted in the institution with my own name and signature below.

Name and signature of the medical director: _____Date----------

Principal Investigator: Daniel Negash: _____Date----------

Thank you for your cooperation!

8.2. Participants Information sheet and Informed Voluntary Consent Form

My name is …… I am working as a data collector for the study being conducted in this hospital by Mr. Daniel Negash who is studying for his master's degree in Haramaya University, College of Health and Medical Sciences. I kindly request you to lend me your attention to explain you about the study and being selected as the study participant.

The study title: Long- Acting Reversible Family Planning Use and its Associated Factors among Extended Postpartum women attending Public Hospital in East Haraghe, Ethiopia

Purpose/aim of the study: This study will be conducted for partial fulfillment of the requirement for Degree of Master of Public Health in Reproductive Health track, at Haramaya University. The result of this study may contribute some importance for policy makers and health care planners including the respective zonal health office to improve and scale up maternal and neonatal health care.

Procedure and duration:

I will interview you using a questionnaire to provide me with pertinent data that is helpful for the study. The interview will take about 30-40 minutes, so I kindly request you to give me this time for the interview. Your cooperation and willingness to answer each question is helpful in identifying problems related to the subject matter.

Risks and benefits:

The risk of participating in this study is very minimal, but only taking a few minutes from your time. There will not be any direct payment for participating in this study. But the findings from this research may reveal important information for the hospital and also to the community.

Confidentiality:

The information you will provide us 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 used in oral or written reports that can link participants to the research.

Rights: Your participation is voluntary and you are not obliged to answer any question you do not wish to answer. You have the right to declare to participate or not in this study and you have the right to withdraw from the study at any time. Your refusal to participate has no penalty or loss of benefits.

Contact address:

If there are any questions or enquires any time about the study or the procedures, please contact: Principal investigator: Daniel Negash

E-mail: hasetdani505@gmail.com Mobile phone: +251-912756208

Institutional Health Research Ethics Review Committee; Office phone: +251-0254-66-2011

P.O. Box 235, Harar, Ethiopia

Declaration of informed voluntary consent

I have clearly read /heard understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the rights of participating and the contact address for any queries. I have been given the opportunity to ask questions for things that may have been unclear. I was informed that I have the right to withdraw from the study at any time or not to answer any question that I do not want. Therefore, I declare my voluntary consent to participate in this study.

Name of participant _____Signature----------date----------

Name and signature of data collector _____Signature----------date----------

Thank you for your volunteer participation!!!

8.3. Participants Information sheet and Informed Voluntary Consent Form for Guardians of women age less than 18 years.

My name is …… I am working as a data collector for the study being conducted in this hospital by Mr. Daniel Negash who is studying for his master's degree in Haramaya University, College of Health and Medical Sciences. I kindly request you to lend me your attention to explain you about the study and being selected your wife /daughter as the study participation.

The study title: Long- Acting Reversible Contraceptives Use and its Associated Factors among Extended Postpartum women attending Public Hospital in East Haraghe, Ethiopia.

Purpose/aim of the study: This study will be conducted for partial fulfillment of the requirement for Degree of Master of Public Health in Reproductive Health track, at Haramaya University. The result of this study may contribute some importance for policy makers and health care planners including the respective zonal health office to improve and scale up maternal and neonatal health care.

Procedure and duration:

I will interview your wife/daughter using a questionnaire to provide me with pertinent data that is helpful for the study. The interview will take about 30-40 minutes, so I kindly request your wife/daughter to give me this time for the interview.

Risks and benefits:

The risk of being participatingin this study is very minimal, but only taking a few minutes from your wife/daughter's time. There will not be any direct payment for participating in this study. But the findings from this research may reveal important information for the hospital and also to the community.

Confidentiality:

The information your wife/daughter provide us will be confidential. There will be no information that will identify your wife/daughter in particular. The questionnaire will be coded to exclude showing names. No reference will be used in oral or written reports that can link participants to the research.

Rights: Participation for this study is fully voluntary and your wife/ daughter has the right to declare to participate or not in this study. If your wife/daughter decides to participate, she has the right to withdraw from the study at any time and this will not lable her for any loss of benefits which she otherwise is entitled. She does not have to answer any question that she does not want to answer.

Contact address:

If there are any questions or enquires any time about the study or the procedures, please contact: Principal investigator: Daniel Negash

E-mail: hasetdani505@gmail.com Mobile phone: +251-912756208

Institutional Health Research Ethics Review Committee; Office phone: +251-0254-66-2011

P.O. Box 235, Harar, Ethiopia

Declaration of informed voluntary consent

I have read /was read to me the participant information sheet on behalf of my wife/daughter, I have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the rights of participating and the contact address for any queries. I have been given the opportunity to ask questions for things that may have been unclear. I was informed that she has the right to withdraw from the study at any time or not to answer any question that she does not want. Therefore, I declare my voluntary consent on behalf of my wife/daughter to participate in this study with my initials signature us indicated below.

Name and signature of parent/guardian: _____ Signature----------date----------

Name and signature of data collector _____Signature----------date----------

Thank you for your volunteer participation!!!

8.4 English Version Questionnaire

Tittle: Long- Acting Reversible Contraceptives Use and its Associated Factors among Extended Postpartum women attending Public Hospital in East Haraghe zone, Eastern Ethiopia, 2020.

Name of Facility ----------

Name of interviewer's/data collector----------

Date of interview -----//--------//----- Code number------

Instruction: Encircle the response of the respondents in front of each question.

Part 1: Socio-demographic Characteristics

Ser.no.	QUESTIONS	Réponses	Skip
101	What is your Age in years?(DD /MM /YY)	_____	
102	What is your level of education?	1. No formal education 2. Primary education 3. Secondary education 4. Post-secondary education	
103	What is your current marital status?	1. Single 2. Married 3. Cohabiting 4. Divorced 5. Separated 6. Widowed	
104	What is your Occupation (job) currently?	1. House wife 2. Self employee 3. Public employee 4. Farmer 5. Merchant 6. Others (specify)__	
105	What is your husband's current job?	1. Self employee 2. Public employee 3. Farmer 4. Merchant 5. Others (specify)----	
106	What is your husband's educational level?	1. No formal education 2. Primary education 3. Secondary Education 4. Post-secondary	

107	Where is your résidence currently?	1. urban 2. rural	
108	Do you use any media?	1. Yes 2. No	
109	If question108 is yes, what type of mass media do you use weekly?	1) Exposed to Radio only 2) Exposed to Television only 3) Exposed to Newspaper only 4) more than one media	
Part-two – Information about contraceptions			If no skip
110	Have You Ever Heard of about long-acting réversible contraception?	1. Yes 2. No	
111	If yes, which types of long-acting réversible Contraceptive do you heard?	1. Implant 2. Intra uterine device *3.* More than one	
112	From Where do you get the Information?	1. Radio/Television 2. Health extension worker 3. Family/friend 4. Others (specify) ____	

113	Do you support to use long-acting? Réversible contraception ?	1. Supportive 2. Neutral 3. Not supportive	
114	Have you ever discussed on long-acting reversible contraception with your husband?	1. Yes 2. No	If no skip
Part-3-Reproductive health characteristics			
115	How many children have you given Birth ? (Parity)	_____	
116	Total number of alive children	_____	
117	How many children do you want to have in the future?		

118	For how long do you want to space the next pregnancy?		1. Between 0-23 montnths 2. >23 months	
119	What time it takes from home to Health FacilityOn foot ?	1.15 minutes and less 2. 16-30 minutes 3. Above 30		
120	Did you give birth at health facility ?	1. Yes 2. No	If no, skip	
121	If question 120 is yes, did you receive counseling on long-acting reversible contraception during post delivery time ?	1. Yes 2. No	If no, skip	
Part 4 : Utilization of contraceptives characteristics				
122	Have you ever use of long-acting reversible contraceptive methods ?	1. Yes 2. No		If no go to 124
123	If question 122 is yes, which types of long-acting reversible contraceptives ever used ?	1. Implant 2. Intrauterine devices 3.Others		
124	Reasons for not using LARC	1. Belief 2. Husband influence 3. Lack of information 4. Other specifies		
125	Who make a decision on fertility?	1. Myself 2. My husband 3. Both of us 4. Others (specify)		

8.5. Participants Information sheet and Informed Consent (Amharic Version)

እንደምንአሉ! ስሜ----------ይባላል፡፡እኔበሀረማያዩኒቨርሲቲ፤የሁለተኛ፤ድግሪውንየሚያጠናውለአቶዳንኤል፤ ነጋሽለሚያደርገዉጥናታዊ፤ምርምር፤በመረጃ፤ሰብሳቢነትእሰራለሁ።

የጥናቱርዕስ:-

በ2012አ/ምስለረሻምጊዜየሚያገለግሉየእርግዝናመከላከያዘዴዎችንአጠቃቀምናተዛማችምክንያቶችላይእሳቸውንወክዬመረ ጃለመሰብሰብነው፡፡

የጥናቱዓላማ:- የዚህጥናትግኝትበቅድመወሊድእናበማህጸንናጽንስክፍልየሚሰሩየጢናባለሞያዎች፡፡ በዚህዙሪያመመሪያአውጪዎችእናፕሮግራምማናጀሮችጠቃሚመረጃእንደሚሆንሌላዉየጥናቱዓላማየእናቶችናየጨቅላትህጻ ናትእስፒሻሊቲጤናዘርፍየሁለተኛዲግሪየመመረቂያጹሁፍለማዘጋጀትይጠቅመዋል፡፡

የጥናቱሂደትናጊዜ:-እኔጥያቄዎቹንበማንበብእርሰዎደግሞለጥያቄዎቹምላሽበመስጠትከ30-40 ደቂቃዎችአብረንእንቆያለን፡፡ የጥያቄዎቹብዛትም 30 ነዉ፡፡ስለዚህእኔጥያቄዎቹንአነብልሽናየምትሰጭኝንየጥያቄመልሶችበቦታቸዉእሞላለሁ፡፡

ጥቅምናጉዳት:-ይህጥናትየርሰዎንየተወሰነሰዓትከመሻማትበቀርየሚያመጣዉብዙየሚባልጉዳትየለም፡፡

በጥናቱስለተሳተፉየሚያገኙትቀጥተኛየሆነጥቅምየለም፡፡

ነገርግንየጥናቱዉጤትበአካባቢዉበጤናዙሪያለሚሰሩድርጅቶችጠቀሚየሆኑ : መረጀዎችንይሰጣል፡፡

ምስጢራዊነት:- የሚሰጡትመረጃምስጢራዊነቱየተጠበቀነዉ፡፡

በመጠይቁምዉስጥየርሰዎንማንነትበተለየሁኔታየሚጠይቅጥያቄየለም፡፡

የጥናቱምዉጤትጥናቱለተካሄደበትአካባቢጠቅለልያለመረጃየሚሰጥሲሆንየአንድንግለሰብወይንምቤትማንነትየሚያንጸባርቅ አይደለም፡፡

ጥናቱምበምንምዓይነትመልኩበቃልምይሁንበጹሁፍየጥናቱንተሳታፊማንነትበሚሳዉቅሁኔምታሳቢአድርነአያቀርብም፡፡

የተሳታፊዉመብት፡-በጥናቱመሳተፍሙሉበሙሉበፈቃደኝነትላይየተመሰረተነዉ፡፡

በጥናቱየመሳተፍምሆነያለመሳተፍመብትአለዎት፡፡

ለመሳተፍፈቃደኛከሆኑደግሞበማንኛዉምሰዓትየማቆምወይንምመመለስያልፍለጉትንጥያቄያለመመለስመብትአለዎት፡፡

በማንኛዉምሰዓትጥናቱንቢያቆሙትበተለየመልኩየሚፈረጁበትነገርየለም፡፡

ጥናቱንየተመለከተማንኛዉምዓይነትጥያቄወይንምአሰተያየትካለዎትበሚከተሉትአድራሻዎችመረጃማግኘትይችላሉ፡፡

የጥናቱባለሙያስምዳንኤልነጋሽ

ኢ.ሜይል፡ hasetdani@gmail.com

በሐረማያዩኒቨርሲቲየህክምናትምህርትቤትየጥናትናምርምርየስነ-ምግባርክትትልኮሚቴስልክቁጥር፡

0254662011 ፖ.ሳ. ቁጥር፡235፤ሐረር

ፈቃደኛነዎትበመጠይቆአዎ……..አደለዉም……

በፈቃደኝነትላይየተመሰረተበዚህጥናትለመሳተፍመወሰንንየሚገልጽመግለጫ

ይህየስምምነትመግለጫበሚገባተነበልኛል፡፡እኔምየጥናቱንዓላማበሚገባተረድቻለሁ፡፡ጥቅምናጉዳቱን፣ምስጢራዊነቱን፣

መብቴንእንዲሁምጥናቱንየተመለከቱጥያቄዎችናአስተያየቶችካሉኝማንንመጠየቅእንደምችልተገንዝቤአለሁ፡፡

ግልጽያልሆኑነገሮችንእንድጠይቅእዲሉተሰጥቶኛል፡፡

እኔምበማንኛዉምሰዓትመጠይቁንየማቆምወይንምመመለስያልፈለኩትንጥያቄያለመመለስመብትእንዳለኝተነግሮኛል፡፡

ስለዚህበፈቃደኝነትላይበተመሰረተበጥናቱለመሳተፍወስኜከዚህበታችፊርማዬንአስቀምጫለሁ፡፡

የተሳታፊስም ……..……ፊርማ……

መጠይቁንያስሞለዉሰዉ……ፊርማ……..

ስለተሳትፎዎበጣምእናመሰግናለን!

8.6. Participants Information sheet and Informed Voluntary Consent Form Guardians of age less than 18 years (Amharic version)

እንደምንአሉ! ስሜ----------ይባላል፡፡እኔበሀረማያዩኒቨርሲቲ፤የሁለተኛ፤ድግሪውንየሚያጠናውለአቶዳንኤል፤ ነጋሽለሚያደርገዉጥናታዊ፤ምርምር፤በመረጃ፤ሰብሳቢነትእሰራለሁ።

የጥናቱርዕስ:-

በ2012አ/ምስለረኽምጊዜየሚያገለግሉየእርግዝናመከላከያዘዴዎችንአጠቃቀምናተዛማችምክንያቶችላይእሳቸውንወክዬመረጃለመሰብሰብነው፡፡

የጥናቱዓላማ:- የዚህጥናትግኝትበቅድመወሊድእናበማህጸንናጽንስክፍልየሚሰሩየጢናባለሞያዎች፡፡ በዚህዙሪያመመሪያአውጪዎችእናፕሮግራምማናጀሮችጠቃሚመረጃእንደሚሆንሌላዉየጥናቱዓላማየእናቶችናየጨቅላትህጻናትእስፒሻሊቲጤናዘርፍየሁለተኛዲግሪየመመረቂያጹሁፍለማዘጋጀትይጠቅመዋል፡፡

የጥናቱሂደትናጊዜ:- እኔጥያቄዎቹንበማንበብእርሰዎደግሞለጥያቄዎቹምላሽበመስጠትከ30-40 ደቂቃዎችአብረንእንቆያለን፡ ፡የጥያቄዎቹብዛትም 30 ነዉ፡፡ስለዚህእኔጥያቄዎቹንአነብልሽናየምትሰጭኝንየጥያቄመልሶችበቦታቸዉእሞላለሁ፡፡

ጥቅምናጉዳት:-ይህጥናትየርሰዎንየተወሰነሰዓትከመሻማትበቀርየሚያመጣዉብዙየሚባልጉዳትየለም፡፡

በጥናቱስለተሳተፉየሚያገኙትቀጥተኛየሆነጥቅምየለም፡፡

ነገርግንየጥናቱዉጤትበአካባቢዉበጤናዙሪያለሚሰሩድርጅቶችጠቀሚየሆኑ : መረጃዎችንይሰጣል፡፡

ምስጢራዊነት:- የሚሰጡትመረጃምስጢራዊነቱየተጠበቀነዉ፡፡

በመጠይቁምዉስጥየርሰዎንማንነትበተለየሁኔታየሚጠይቅጥያቄየለም፡፡

የጥናቱምዉጤትጥናቱለተካሄደበትአካባቢጠቅለልያለመረጃየሚሰጥሲሆንየአንድንግለሰብወይንምቤትማንነትየሚያንጸባርቅ አይደለም፡፡

ጥናቱምበምንምዓይነትመልኩበቃልምይሁንበጹሁፍየጥናቱንተሳታፊማንነትበሚሳዉቅሁኔምታሳቢአድርነአያቀርብም፡፡

የተሳታፊዉመብት፡-በጥናቱመሳተፍሙሉበሙሉበፈቃደኝነትላይየተመሰረተነዉ፡፡

በጥናቱየመሳተፍምሆነያለመሳተፍመብትአለዎት፡፡

ለመሳተፍፈቃደኛከሆኑደግሞበማንኛዉምሰዓትየማቆምወይንምመመለስያልፍለጉትንጥያቄያለመመለስመብትአለዎት፡፡
በማንኛዉምሰዓትጥናቱንቢያቆሙትበተለየመልኩየሚፈረጁበትነገርየለም፡፡
ጥናቱንየተመለከተማንኛዉምዓይነትጥያቄወይንምአሰተያየትካለዎትበሚከተሉትአድራሻዎችመረጃማግኘትይችላሉ፡፡
የጥናቱባለሙያስምዳንኤልነጋሽ
ኢ.ሜይል፡ hasetdani@gmail.com
በሐረማያዩኒቨርሲቲየህክምናትምህርትቤትየጥናትናምርምርየስነ-ምግባርክትትልኮሚቴስልክቁጥር፡
0254662011 ፖ.ሳ. ቁጥር፡235፤ሐረር
ፈቃደኛነዎትበመጠይቆአዎ……አደለዉም……
በፈቃደኝነትላይየተመሰረተበዚህጥናትለመሳተፍመወሰንንየሚገልጽመግለጫ
ይህየስምምነትመግለጫበሚገባተነቦልኛል፡፡እኔምየጥናቱንዓላማበሚገባተረድቻለሁ፡፡ጥቅምናጉዳቱን፣ምስጢራዊነቱን፣
መብቴንእንዲሁምጥናቱንየተመለከቱጥያቄዎችናአስተያየቶችካሉኝማንንመጠየቅእንደምችልተገንዝቤአለሁ፡፡
ግልጽያልሆኑነገሮችንእንድጠይቅእዲሉተሰጥቶኛል፡፡
እኔምበማንኛዉምሰዓትመጠይቁንየማቆምወይንምመመለስያልፈለኩትንጥያቄያለመመለስመብትእንዳለኝተነግሮኛል፡፡
ስለዚህበፈቃደኝነትላይበተመሰረተበጥናቱለመሳተፍወስኜከዚህበታችፊርማዬንአስቀምጫለሁ፡፡
የተሳታፊስም ……..……ፊርማ……
መጠይቁንያስሞለዉሰዉ……ፊርማ……..**ስለተሳትፎዎበጣ ምእናመሰግናለን!**

8.7. Amharic Version Questionnaire

የተቋሙስም..... መጠይቁየተሞላበትቀን.....

የመረጃሰብሳቢውስምናፊርማ..... የመጠይቁመለያኮድ.....

ክፍል 1፡- ማህበራዊናስነ-ህዝባዊጉዳዮችንየሚመለከቱጥያቄዎች፡፡

ተ.ቁ	ጥያቄ	መልስ	ወደጥያቄቁጥር ዝለዪ
101	እድሜዎስንትነው ?	(በዓመት)---------	
102	የትምህርትደረጃዎስንትነው?	1. ያልተማረች 2. ከመጀመሪያደረጃበታች 3. ሁለተኛደረጃ 4. ከሁለተኛደረጃበላይ	

103	የጋብቻሁኔታዎምንድንነው?	1. ያላገባች 2. ያገባች 3. ያለህጋዊጋብቻአብሮየሚኖር 4. የተፋታች 5. አብረውየማይኖሩ 6. የሞተባት	
104	በየትኛውየስራመስክተሰማርተዋል?	1. የቤትእመቤት 2. የግልስራተኛ 3. የመንግስትሰራተኛ 4. አርሶአደር/ገበሬ 5. ነጋዴ 6. ሌላካለይገለፅ.....	
105	የትዳርአጋርሽስራ/ሙያምንድነው ?	1. የግልስራተኛ 2. የመንግስትሰራተኛ 3. ነጋዴ 4. ሌላካለይገለፅ.....	
106	የትዳርአጋርሽየትምህርትደረጃዎስንትነው?	1. ያልተማረች 2. ከመጀመሪያደረጃበታች 3. ሁለተኛደረጃ 4. ከሁለተኛደረጃበላይ	
107	የመኖሪያቦታሽየትነው?	1. ከተማ 2. ገጠር	
108	የመገናኛብዙሀንንትጠቀሚያለሽ?	1. አዎ 2. የለም	መልስዎየለ ምከሆነወደ ጥያቄ 201 ይሂዱ

109	ከላይለተጠቀሰውጥያቄመልስአዎከሆነየትኛውንመገናኛብዙሀንይጠቀማሉ?	1. ከራዲዮ 2. ከቴሌቪዥን 3. ከጋዜጣ 4. ከአንድበላይ 5. ሌላካለይገለፅ.....	

ክፍል-2፡ቤተሰብምጣኔበተመለከተየኖህደረጃንየሚጠይቁጥያቄዎች

110	ስለተመላሽረጅምጊዜየቤተሰብምጣኔሰምተሽታውቂያለሽ?	1. አዎ 2. የለም	ዝለል
111	ጠጥቄቁጥርአዎከሆነ፣ ከረጅምጊዜየቤተሰብምጣኔ/ዕቅድአገልግሎትውስጥየቱንታውቂያለሽ?	1. ክንድስርየሚቀበር (ኢምፕላንት) 2. መሀፀንውስጥየሚቀመጥ 3. ክንድስርየሚቀበር (ጃድል) 4. ከሁለትበላይካወቀች	
112	ስለረጅምጊዜየቤተሰብምጣኔመረጃውንከየትሰማሽ?	1. ከራዲዮ/ቴሌቪዥን 2. ከጤናኤክስቴንሽንባለሙያዎች 3. ከቤተሰብ/ ከጋደኛ 4. ሌላካለይገለፅ.....	
113	የረጅምጊዜየቤተሰብዕቅድአገልግሎትየመጠቀምፍልጎትአለሽ?	1. እፈልጋለው 2. ገለልተኛ 3. አልፈልግም	
114	ስለረጅምጊዜየቤተሰብዕቅድከባለቤትሽጋርተወያይተሽታውቂያለሽ?	1. አዎ 2. የለም	

ክፍል3፡የስነ-ተዋልዶሁኔታ

115	ስንትልጆችወልደሻል ?	----	
116	ስንትበህይወትያለልጅአለሽ ?	----	
117	ወደፊትስንትልጅትፈልጋለሽ ?	-----	

118	በምንያክልጊዜርቀትመውለድትፈልጋለሽ ?	----	
119	ከመኖሪያቤትጤናተቋምለመሄድበእግርስንትጊዜይፈጃል?	1 30 ናያነሰደቂቃ 2-ከ30 ደቂቃ-1 ሳት 1. ከ 1 ሳትበላየይ	
120	የመጨረሻውንልጅሽንበጤናተቐምነውየወለድሽው	1. አዎ 2. የለም	
121	ከላይለተጠቀሰውጥያቄ ((120)መልስዎአዎከሆነስለረጅምጊዜየቤተሰብዕቅድምክርተሰጦታል?	1. አዎ 2. የለም	
ክፍል-4፡ረጅምጊዜየቤተሰብእቅድ/ የወሊድመቆጣጠሪያመጠቀም			
122	ከዚህበፊትየወሊድመቆጣጠሪያ/የቤተሰብዕቅድአገልግሎትተጠቅመሽታውቂያለሽ?	1. አዎ 2. የለም	
123	ጥያቄቁጥር 122አዎከሆነ፣ከዚህበፊትረጅምጊዜየቤተሰብእቅድ/ አገልግሎትተጠቅመሽታውቂያለሽ ?	1.በክንድየሚቀበር (Implant) 2.በማህጸንየሚቀበር (Intrauterine devices) 3. ሌላካለይጠቀስ.....	
124	የረጅምጊዜየቤተሰብእቅድመጠቀምትፈልጊያለሽ?	1.አዎ 2. የለም	
125	ከላይለተጠቀሰውጥያቄ 124መልስዎአይከሆነምክንያቱምንድንነው?	1. ሀይማኖት 2. የባላቤቴተፅዕኖ 3.የእውቀትማነስ/ስለሌለኝ 4. ሌላካለይገለፅ--	

126	በቤተሰብዎስለስነ-ተዋልዶናየቤተሰብብዛትየሚወስነውማነው?	1. እኔ 2. ባለቤቴ 3. ሁለታችንም 4. ሌላካለይጠቀስ.....	

8.8. Information Sheets and Informed Voluntary Consent Afan Oromo Version

Gaafanoolee Gucha odeeffannoo fi feedhii qayyabannaa

Uunkaalee Sassaabbii odeeffannoo fedhinnaa irratti hundaaye Afaan oroomiffa dhan qophaaye.

Akkam jirtuu, maqaan kiyya/koo----------kanaann hojecha jiruu namoota qorannicharrattii hirmaataniif odeeffannoo sassaabuu yoo ta'u Ogessa fayyaa maqaan isaa kana jalattii ibsameen walqunnamuun yoo ta'u obbo Dani'eel Nagaash Univarsittii Haramayaatii damee kolleejjii saayiinsii fayyaa hararittii baratta diigrii lammafaa baraatannifii. Yeroo keessanii fi xiyyeeffannoo keessan waa'ee qorannoofii calallii hirmaaattina ibsuu danda'uu kiyyaaf galatooma.

Mata-Duree Qoraaniichaa/ The study/project title

Ittii fayyadama karoora maattii yeroo dheerra fi sababoota hanqina itti fayyadama dubartoota da'uumsaa boodee

keessa jiran, dhabbilee fayyaa Goodiinaa haarargee Bahaattii argaman,naannoo Oromiyyaa, Bahaa Ityoophiyaa.

Kaayyoo Qorannichaa (Purposes/ aim of the study)

Bu'aan qoraannoo kannaa irraa argaamuu faayidaan guddaan innii kennuu danda'uu kanniinsaa geggeessuu hojjattota fayaa, jarmayaa tajaajilaa fayyaa babbaaliisuuf kan gaargaruu ta'aa. haa ta'uu malee dabbalataan kayyoon qorannoon kanaa innii ijoon barataa diigrii lamafaa qaceelfama pirooppoozaalaa Siirnaa wal-hoormaata fayyaa baruun qopheessuurraa Qolchuuf ta'aa.

Hojimaataa fi yeroo inni fudhatu/ Procedure and duration:

Ani gaafii kanaa kanin siif godhu gaafannoo qophaa'een yoo ta'u, qorannichaaf deeggarsa ol'anaa waan qabuufii hiirmaa chuudhaf feedhiinaa yoo qabataan Gaafannichi sa'aan fudachuu danda'u daqiiqaa 20-30 yoo ta'u, yeroo kee kana waan naaf kenniteef sin galateeffadha.

Faayidaa fi Miidhaasaa (Risk and beifits)

Miidhaan qorannoo kanaa xiqqaa yoo ta'u innis yeroo hirmaataa fedhiiraa fudhatu xiqqaadhaa. Qorannoo kanarrattii kafaltiin kallatti kamiyyuu hirmaataa fedhiitiif hin kennamu, ta'ullee garuu bu'aan qorannoo kanaa Odeeffanoo jarmayaa fayyaa Zoonittiif, Hoospitaalf fi karoora tarsiimoo fayyaa baasuuf gargaara.

Iccitummaa /iccitii eeguu (Confidentiality)

Iccitiin hirmaataa fedhii kan Eegammee dhaa. Lakkofsi iccitii hirmaataa fedhii maqaa kan qabuu yoo ta'u maqichisaa gutumaa guutuutti hin ibsamu Bifa kamiinuu jechaanis ta'ee baruudhaan iccitii hirmaataa fedhii qorannicha keessaa baasuun yoo ta'uu lakkofsii addaa waan keennamuuf namaa qoorrannoo kana gaggeesuu malee namoottaa biirraattin akka hin ibsamnee nii godhama.

Mirga (Rights)

Qorannoon kun kan adeemsifamuu hirmaattoota fedhiinaa guutu qabaanniin. qorannoo kanarratti hirmaachuu fi hirmaachuu dhabuu mirga guutuu qabdaa. Hirmaachuf haayyamtuu yoo hin taanee yeroo kamiyyuu qorannicha dhiftee bahuu /addaan muruu mirga qabdaa. kana jechuun mirga kee kan si hin dhabsiisnee yoo ta'u, kanaan ala mirga kee gaafachu ni

dandeessaa. Gaafiilee kaniiyyuu kan qoranniicharra jiraniif deebii kan itti kennuu hin barbaanne deebisuu dhiisuu mirga qabdan.

Teessoo itti Argamtu is a

- Qoranniichaa fi hojimaatichaa irratti gaafi kamiyyu yoo qabaattan yeroo kamittuu lakkofsa bilbilaa asii gaditti tarreeffamaniirratti bilbiiluu mirga qabdaa galatoomii.
- Daani'eel Nagaash
- E-mail: hasetdani@gmail.com
- Mobile. 0912756208

Koree Jiddu Galeessa Qorannoo fi Qo'annaa

Haramaayaa Yunibarsiitii, Koollejjii Saayinsii Fayyaa

L.S. P 235

Bilbila 025-666/899

Jecha Ragummaa hirmaataa fedhii/ Declaration of informed voluntary consent

Waraqaa qoranniichaa kanin dubbisee yoo ta'u/ kan annaaf dubbifamee yoo ta'uu hojimaataa saa, faayidaa fi miidhaasaa, Ifftoominasaa, mirga hirmaattootaa, teessoo hiirmaattootaa gutumaan guutuutti hubadhee wantootta ifa naaf hin ta'in gaafachuuf carraa kanin qabaachaa ture yoo ta'u yeroo kamittuu qorannichaa dhaabuuf, addaan muuruu fi gaafiin deebisuu hin barbaanne kamiyyuu mirga deebisuu dhabuu akkan qabu naaf ibsamee jira.

Kanaafuu ani hirmaataan fedhii jecha ragummaa kennuu kiyya mallattoo kiyyaanin mirkaneessa.

Maqaa Guutuu hirmaataa_____

Mallatoo_____

Maqaa walitti qabaa Odeeffannichaa_____

Guyyaa_____

Hirmaannaa Keessaniif gaalatooma.

8.9. Information Sheets and Informed Voluntary Consent Afan Oromo Version for Guardians of women age less than 18 years

Gaafanoolee Gucha odeeffannoo fi feedhii qayyabannaa Uunkaalee Sassaabbii odeeffannoo fedhinnaa irratti hundaaye Afaan oroomiffa dhan qophaaye.

Akkam jirtuu, maqaan kiyya/koo----------kanaann hojecha jiruu namoota qorannicharrattii hirmaataniif odeeffannoo sassaabuu yoo ta'u Ogessa fayyaa maqaan isaa kana jalattii ibsameen walqunnamuun yoo ta'u obbo Dani'eel Nagaash Univarsittii Haramayaatii Damee Kolleejjii Saayiinsii Fayyaa Hararittii baratta diigrii lammafaa baraatannifii. Yeroo

keessanii fi xiyyeeffannoo keessan waa'ee qorannoofii calallii hirmaaattina ibsuu danda'uu kiyyaaf galatooma.

Mata-Duree Qoraaniichaa/ The study/project title

Ittii fayyadama karoora maattii yeroo dheerra fi sababoota hanqina itti fayyadama dubartoota da'uumsaa boodee keessa jiran, dhabbilee fayyaa Goodiinaa haarargee Bahaattii argaman,naannoo Oromiyyaa, Bahaa Ityoophiyaa.

Kaayyoo Qorannichaa (Purposes/ aim of the study)

Bu'aan qoraannoo kannaa irraa argamuu faayidaan guddaan innii kennuu danda'uu kanniinsaa geggeessuu hojjattota fayaa, jarmayaa tajaajilaa fayyaa babbaaliisuuf kan gaargaruu ta'aa. haa ta'uu malee dabbalataan kayyoon qorannoon kanaa innii ijoon barataa diigrii lamafaa qaceelfama pirooppoozaalaa Siirnaa wal-hoormaata fayyaa baruun qopheessuurraa oolchuuf ta'aa.

Hojimaataa fi yeroo inni fudhatu/ Procedure and duration:

Annii gaafannoowan tokko tokko haadha manaa yookaan Intala kee gaafadhaa kanaa gaafadhuu gaafannoo qophaa'een yoo ta'u, qorannichaaf deeggarsa ol'anaa waan qabuufii hattii manaa yookaan intalii kee akka hiirmattuu feedhiinaa yoo qabataan Gaafannichi sa'aan fudachuu danda'u daqiiqaa 20-30 yoo ta'u, yeroo hadhaa manaa yookaan intaaa kee waan naaf kenniittaaniif issiin galateeffadha.

Faayidaa fi Miidhaasaa (Risk and beifits)

Miidhaan qorannoo Kanaan irraattii hiirmachuun waal-qabbattee haadha manaa yookaan intalaa keettiitii dhuufuu baay'ee xiinnoo yoo ta'u innis yeroo hirmaataa fedhiiraa fudhachuu ta'aa.Qorannoo kanarrattii kafaltiin kallatti kamiyyuu hirmaataa fedhiitiif hin kennamu, ta'ullee garuu bu'aan qorannoo kanaa Odeeffanoo jarmayaa fayyaa Zoonittiif, Hoospitaalf fi karoora tarsiimoo fayyaa baasuuf gargaarsa.

Iccitummaa /iccitii eeguu (Confidentiality)

Iccitiin haadha manaa yookaan intaalii keettii kan Eegammee dhaa. Dabbalaattaan oddeefannoon waa'ee haadha manaa yookaan intalaa keettii kaan issannii ta'uu issaa addaa ta'ee muullisuu hin jiirruu. Lakkofsi iccitii hirmaataa fedhii maqaa kan qabuu yoo ta'u maqichisaa gutumaa guutuutti hin ibsamu Bifa kamiinuu jechaanis ta'ee baruudhaan iccitii hirmaataa fedhii qorannicha keessaa baasuun yoo ta'uu lakkofsii addaa waan keennamuuf namaa qoorrannoo kana gaggeesuu malee namoottaa biirraattin akka hin ibsamnee nii godhama.

Mirga (Rights)

Qorannoon kun kan adeemsifamuu hirmaattoota fedhiinaa guutu qabaanniin. Haattii manaa yookaan intaalii kee qorannoo kanarratti hirmaachuu fi hirmaachuu dhabuu mirga guutuu qabdaa. Hirmaachuf haayyamtuu yoo hin taanee yeroo kamiyyuu qorannicha dhiftee bahuu /addaan muruu mirga qabdaa. kana jechuun mirga keessan kan issiin hin dhabsiisnee yoo ta'u, kanaan ala mirga issaanii gaafachuu ni danda'uu. Gaafiilee kaniiyyuu kan qoranniicharra jiraniif deebii kan itti kennuu hin barbaanne deebisuu dhiisuu mirga guttuu qabaan.

Teessoo itti Argamtu (Contact Address)

Qoranniichaa fi hojimaatichaa irratti gaafi kamiyyu yoo qabaattan yeroo kamittuu lakkofsa bilbilaa asii gaditti tarreeffaman iirratti bilbiiluun mirga qabdaan galattoomaa.

Daani'eel Nagaash

E-mail: hasetdani@gmail.com

Mobile. 0912756208

Koree Jiddu Galeessa Qorannoo fi Qo'annaa Haramaayaa Yunibarsiitii, Koollejjii Saayinsii Fayyaa

L.S. P 235

Bilbila (+251)-025-666/899

Jecha Ragummaa hirmaataa fedhii/ Declaration of informed voluntary consent

Waraqaa qoranniichaa kanniin dubbisee yookaan kaan naaf dubbifammee haadha manaa yookaan intalaa tiyyaa bakka bu'uun yoo ta'u hojimaataa saa, faayidaa fi miidhaa issaa, Ifftoomina issaa, mirga hirmaattootaa, teessoo hiirmaattootaa gutumaan guutuutti hubadhee wantootta ifa hin ta'in gaafachuuf carraa kanin qabaachaa ture yoo ta'u yeroo kamittuu qorannichaa dhaabuuf, addaan muuruu fi gaafiin deebisuu hin barbaanne kamiyyuu mirga deebisuu dhabuu akka qabaan naaf ibsamee jira. Kannaafuu haattii manaa yookaan intalii koo akkaa hiirmaattaan iddoo issaannii bakkaa buu'ee qoorannoo kannarraattii akkaa hiirmattaan mallaattoo koottiin miirkannessa.

Maqaa Guutuu bakkaa buu'aa_____Mallatoo_____

Maqaa walitti qabaa Odeeffannichaa_____ Guyyaa_____

Hirmaannaa Keessaniif gaalatooma.

8.10. Afan Oromo Version Questionnaire

Mata-Duree Qoranuoo

Ittii fayyadama karoora maattii yeroo dheerra fi sababoota hanqina itti fayyadama dubartoota da'uumsaa boodee keessa jiran, dhabbilee fayyaa Goodiinaa haarargee Bahaattii argaman,naannoo Oromiyyaa, Bahaa Ityoophiyaa.

Maqaa Gaafataa _____

Maqaa Gaafatamaa _____

Guyyaa gaafii_____

Lakkofsaa iccitii_____

Ajaja:- Gaafiilee tokko tokkoon armaan gaditiif filannoo deebiirratti marii

Kutaa-1 Odeeffannoo dhunnfaa diinagideefi hawaasummaa waliigalaa

Lakk.	Gaffii fi Deebbisaa		yaada
101	Umriin keessan meeqa?	-------	
102	Sadarkaan barumsa kessan meeqa?	1. Baarnotaa kan hin baraatiin 2. Sadarkaa 1ffaa dha gadii 3. Sadarkaa 2ffaa 4. Sadarkaa 2ffaa oli	
103	Haalii buultii keessanii maal fakkaata?	1. Buultii kan hin ijaaratiin 2. Kan buultii qaabduu 3. Buultii ossoo hin ijaariin wajjiin jirrachuu 4. Kan walhiikan 5. Abaan manaa Iddoo birraa jirruu/Adaan bahaan 6. Abaan manaa kan irraa booqaattee/ Du'ee	
104	Hojiin Iddilee keessanii yeroo ammaa kannnattii maalii?	1.Hadhaa mana 2.Hoojii dhunfaa 3.Hojettuu mootummaa 4.Qoottee bulaa 5.Daldaltuu 6. Kan biirraa yoo jiirraatee haa ibsamuu……..	
105	Hoojiin Idileen Abaa manaa keettii maalii?	1.Hoojii dhuunfaa 2.Hoojataa mootumaa 3. Daldalaa 4.Kaan birraa yoo jiirattee haa ibsamuu……	
106	Sadaarkaan baarnootaa Abaa mana keettii hagaammii?	1.Baarnoota kan hin baraatiin 2.Sadarkaa 1ffaa	

		3.Sadarkaa 2ffaa 4.Sadarkaa 2ffaa dha ollii	
107	Iddoon jireenyaa keessaani eessa?	1.Magaalaa 2.Baadiiyaa	
108	Meeshallee Sab-qunnamtii fayadaamtuu?	1. Eyyen 2. Hitii	
109	Gaafii 108 ollittii ibsameef deebiin keessan eyyen yoo ta'ee goosaa kaam torbeedhaann fayaadamtu? 1.	1 Radi'oo qoofa fayyadamaa 2 Teeleviizinii qoofa fayyadamag 3 Gazeexaa qoofa fayyadamag 4 Tokkoo fi isaa oll	
	Kuuttaa 2; Iyyaaffannoowaa'ee karoorraa maattii yeroo dheerraa		
110	Waa'ee karroora maattii yeerroo dheerraa dhagessanii beektuu?	1. Eyyeen 2.Mittii	Lakki yoo ta'ee gara gaafii 204
111	Gaffiin 110 eyyen yoo ta'ee deebiin kessan issaa kaam beektuu?	1. Irree harkaa keessa kan awalamu. 2. Gadameessa keessa kan. Awalamu 3. Irree harkaa keessa kan awalamu fi lamaa ool ta'ee 4. Lamaa fi isaa oll	

112.	Oddeefanoo issaa essaraa argataan?	1.Raadiyoo fi teleeviijiinii 2.Hoojjatuu eeksteenshinii fayyaa 3.Hiirriyyaa ykn fiiraa 4.Kan biiroo yoo jiirratee haa	

		ibsamuu	
113	Karooraa maattii yeero dheerraa fayyaadamuu deeggartaa?	1.Naan deeggara 2.Giddu galeessa	
114.	Waa'ee kaarroora maattii yerroo dheerraa Abaa manaa keettin wajjiin maarrii'attaaniibeektuu?	1.Eyyeen 2.Mittii	
Kutaa3: Haal-dureewaan siirnaa waalhoormattatiin walqabataan			
115.	Da'iimmaan meeqaa deessee?	----------	
116.	Da'iimmaan dessee keessaa kan lubbuu dhan jiirraan meeqaa?	----------	
117	Daa'iimaan meeqaa akkaa qabbatuu barbaadaa fuulduuraaf?		
118	Yeroo lamaafaa daa'iimaa goodhachuuf yeroo meeqaa tuuruu barbaadaa?	.1. Jii'a0-23 gidduu 2.Jii'a23 oll	
119	Faageenyii manaa jiireeenyaatii fi dhabbillee fayyaa giidduu millaan adeemuuf yeeroo hamaam sitii fuudhata?	✓ Daqiiqaa 15 gadii ✓ Daqiiqaa 15-30 ✓ Daaqqiiqqaa 30 oll	

120	Manaa yaalaattii dessee?	1.Eyyeen 2.Mittii	Yoo mittii ta'ee deebiin garaa lakoofsaa 501 daarbii
121	Gaafii ollitii eerameef 120eyyen yoo ta'ee waa'ee taajajiilaa karroora maattii yeerro dheerraa irrattii eerrgaa dessee boodee goorsii siif laattamee jiirraa?	1. Eyyeen **2.** Mittii	
	Kutaa 4; Ittii fayyadamaa karroora maattii yeerroo dheerraa		
122.	Karrooraa maatti kaannan durraa fayyaadamtee beektaa?	1. Eyyen 2. Mittii	
123.	Gaafii ollitii 122 eerameef deebiin kessan eyyen yoo ta'ee karroraa maattii yerroo dherraa kannaan duraa goosaa kaam fayyadamtee beekta ?	1. Kaan irree harkaattii Kaá 'amuu 2. Kaan gadammeesa kessaa ka'aamuu 3.kann birraa yaa ibsamuu	
124	Karrorraa mattii yerro gabbaba fayyadamma jiirrtaa yoo ta'ee issaa kaam ?	1.kaan liqqiimfamuu 2.Kaan baattii sadditti warranamuu warranamu 3.kaan birraa yoo jirraattee	
125	Gaafii ollittii ibsaameef 123 mittii yoo taa'ee deebbiin kessan maallif ?	1.Amantaa kiyyaan kan waal-qaabattee 2.Dhiibbaa Abaa manaa kottin 3.Waanniin hin beekneef 4.Kan birraa yoo jirraattee haa	

		ibsaamuu	
126	Yabbina maattii keessan eenyuu tuu muurteessaa ?	1.Annaa 2.Abaa manaa kiyyaa 3.Nuu lammenuu 4.Kan birraa yoo jiirraattee haa ibsaamuu	

Gaafii koo xuummureera Hiirmanaa keessaniif Galaatoomaa