DETERMINANTS OF MODERN CONTRACEPTIVE USE AMONG MARRIED WOMEN IN REPRODUCTIVE AGE GROUP IN SHEDER REFUGEE CAMP, SOMALI REGION, EASTERN ETHIOPIA

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Abstract

Background: *Countries in conflict and post-conflict including the case of refugee camps have the highest levels of maternal and child mortality in the world. While the use of modern contraception around the world has grown, prevalence of modern contraceptive use is still low in refugee camp settings.*

Objective: *The purpose of this study is to assess the prevalence and determinants of modern family planning use among married women residing in Sheder refugee camp Somali Region.*

Methods: *A community based cross-sectional study was conducted from March 25 to April 5, 2011. Simple random sampling technique was employed to select 329 married women in reproductive age group. Data was collected using structured and pre-tested questionnaire. Data was entered and analyzed using SPSS version 16.0 software.Frequency tables, graphs and descriptive summaries were used to describe the study variables. Both bivariate and multivariate logistic regression an analysis (P-value < 0.05 with 95% CI level) was used as a cut of was used to see an association and factor influencing the outcome variable. point to see significance of association.*

Results: *Most respondents, 284 (91.9%) were aware of at least one modern contraceptive method. However, only 55(17.8%) women were using modern contraceptive. Variables such as women's formal education [AOR = 6.76 95% CI:(2.11, 21.59)], those who had discussions with their partner [AOR=22.93(95% CI: 3.63, 44.82)], women having number of live children 3 to 4 [AOR=10.93 95% CI: 5.48(2.38, 50.15)], women who worked outside their home [AOR= 95% CI:(1.68, 17.89)], women whose husbands approve modern family planning use [AOR=10.7 95% CI:(1.82, 63)] and women who involved in decision making on modern contraceptive use[AOR =11 95% CI:(1.57, 36.96)] were significantly associated with modern contraceptive use.*

Conclusions and recommendations*: The finding showed that the practice of modern contraceptive use is low. Some of the socio demographic characteristics mentioned above were depicted as a factors determining use of modern contraceptive use among refugee women. Therefore, there is a need to promote and strengthen IEC/BCC programs in spheres of modern family planning programs and women empowerment shall be more encouraged through autonomy, education and employment to increase the proportion of family planning users.*

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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ARRA	Administration of Refugee-Returnee Affairs
CP	Contraceptive Prevalence
CPR	Contraceptive Prevalence Rate
DHS	Demographic and Health Survey
EC	Emergency Contraception
EDHS	Ethiopian Demographic and Health Survey
FP	Family Planning
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
IDPs	Internally Displaced Persons
IUD	Intrauterine Devices
KAP	knowledge, Attitude & Practice
MCs	Modern Contraceptives
MDG	Millennium Development Goal
SSA	Sub-Saharan Africa
TV	Television
UNFPA	United Nations for Population Affairs
UNHCR	United Nations High Commissioner for Refugees
WCRWC	Women's Commission for Refugee Women and Children
WHO	World Health Organization

Chapter 1: Introduction

1.1 Background

Family planning has been identified by the World Health Organization (WHO) as one of the six essential health interventions needed to achieve safe motherhood by reducing maternal and child mortality and supporting to the achievement of other Millennium Development Goals. [1,2,3] World Health Organization defines as family planning implies the ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through use of contraceptive methods and the treatment of involuntary infertility. [4]

The growing use of modern contraception around the world has given couples the ability to choose the number and spacing of their children and have saved the lives and protected the health of millions of men, women and children [2, 3, 5]. Globally, the use of modern contraceptive methods has increased dramatically over the past 30 years increasing modern contraceptive prevalence rate (CPR) from less than 10% in the 1960's (5) to 55% present day leading to a fall in fertility rates in developing world from six to less than three [5, 6]. Despite this great achievement in progress of modern contraceptive (MC) use worldwide, the world's poorest countries have made low progress in modern contraceptive use and there are still significant levels of demand for FP that are yet unmet. In the least developed countries of Sub Saharan Africa (SSA), the level of modern contraceptive method use has doubled since 1995, 6% to 12%, but the current level would have to triple by 2015 in order to satisfy existing demand for FP [3, 5]

The reproductive health needs and right including modern family planning of forcibly displaced people including refugees and internally displaced persons (IDPs) was neglected till the year 1994 despite they are significant in number. Globally, there were 43.3 million forcibly displaced peoples at the end of 2009 of which 15.2 million were refugees fell under United Nations High Commissioner for Refugees (UNHCR's) and United Nations Relief and Working Agency's (UNRWA) responsibility [7]. It was in 1994 in the International Conference for Population and Development (ICPD) held in Cairo that the needs of modern FP to these disadvantaged populations be given attention [8]. Since then United Nations Population Fund (UNFPA) together with UNHCR and other UN organizations were working to provide modern FP service for refugees and IDPs.

In these emergency situations, though there is no well organized evidence that show progress of MC use for refugee and IDP camps setting, some evidences indicated that there is an increase in modern CPR in some areas. The 2004 Inter-agency Working Group on Reproductive Health in Crisis Situations (IAWG) global evaluation report revealed that 90% of sites had at least one method available and modern CPR also had increased in some camps. In Uganda, Kiryandongo refugee camp, the CP was 2% for refugees in September 2003 but increased to 10% in 2004 and in guinea modern CP in the camps was much higher than either refugees' country of origin or host country (17% vs. 3.9 and 4.1% respectively) [9, 10].

However, the overall report of IAWG revealed that despite improvement in availability of modern FP, only 50% of sites were able to offer intrauterine device (IUDs) and 36% Sterilization, while implants were not mentioned at all and the overall proportion of women using MCs were by far low in most of the camps than the overall women [9]. Studies in past pointed out that lack of full understanding and considering factors influencing MC use during designing and service delivery is the main cause of the low contraceptive use beside service accessibility.

1.2 Statement of the problem

Improving maternal health and reducing maternal mortality have been key concerns of several international summits and conferences since 1980s (reference) However, analysis of trends shows that maternal mortality has decreased at an average far less than the annual decline necessary to achieve the fifth MDG at global level [11]. Universal access to reproductive health, one of the key goals of Program of Action of ICPD is still far from achievement resulted from the pressure of rapid population growth put on health care system of developing countries [12]. Although fertility declined throughout developing world, the least developed countries have high fertility rate averaging 5.5 births per woman in Sub-Sahara Africa indicating high unmet need for FP [3].

While the prevalence rate of modern contraceptive has increased globally at present, many of the developing countries are still suffering from consequences high unmet needs for MCs. Worldwide, there are around 200 million couples and individuals today that seek to delay or avoid birth but are not using contraception [13]. Sub-Sahara African countries have the lowest contraceptive prevalence and highest unmet need for modern FP, where 24% of married woman have an unmet need [12, 13] and only 17% of women of child bearing age (WCBA) use MC methods [6].

In case of refugee camps and conflict affected areas, the prevalence of modern contraceptive use is even very low and high unmet need is more likely in refugee and IDPs camps [14] because, many of the refugee camps are hosted in developing countries with majority of them in Africa [15]; social breakdown losing women their traditional information sources, assistance, protection, income reducing the refugee's ability to make free choices [15, 16]. In 2004, Uganda, CPR was 6% for refugees at Moyo [9] and in 2007, 11% for internally displaced person camps, much less than national 23% and unmet need of 58%, higher than national 41% [17], in refugee camps of Zambia, Nangweshi and Meheba, MC prevalence was below 1% in both the camps [18]. Meeting the unmet need for FP can prevent up to a third of maternal and tenth of child deaths globally allowing women to delay motherhood, space births, avoid unintended pregnancies and abortions [11, 15, 19].

Worldwide, nearly 80 million unintended pregnancies occur each year resulted in 19 million unsafe abortions and 68,000 deaths each year in developing countries and another 15 million women suffer long-term injuries from complications of abortion [20] and increasing incidence of neonatal and child mortality [3]. Complications and deaths of unsafe abortion is more common for refugee

women because of the physical and emotional stress women face and presence of high sexual violence causing high unintended pregnancies, then more deaths and complications[9, 16]. UNFPA estimated that 25–50% of maternal mortality among refugees as due to unsafe abortion [21]. In Pakistan, maternal causes were exceeding any other causes of maternal death among Afghan refugee where about 41% of all causes of maternal deaths were due to these and 60% of infants born to those mothers were either born dead or died after birth [22]. Women in Sierra Leone, a country at war from 1991–2002 and Uganda and Congo, lifetime risk of dying from complications of pregnancy and delivery was1:6 and 1:13 respectively [11].

Family planning programs were working to make modern family planning services more accessible and improve quality of services since 1960's, and modern family planning services are more accessible and given free of charge in most developing countries at present [21]. Again the ICPD acknowledged giving an emphasis to needs and rights of refugees and IDPs for modern family planning [8]. Despite these efforts made, still the proportion of married women using modern contraceptives is very low in the least developed world like Sub-Saharan African countries and in refugee settings in particular, and those factors indentified so far were found differ across setups. Generally, Studies in past pointed out that lack of full understanding and considering factors influencing modern contraceptive use during designing and service delivery is the main cause of the low contraceptive use beside service accessibility. In addition to this, there was no published study conducted in refugee camps hosted in Ethiopia including Sheder refugee camp providing information about the practice and determinants of modern contraceptives use. Therefore, determining factors influencing use of modern contraceptive among married women in refugee camp help program planners, implementers to design intervention pertaining to family planning promotion and further scaling up around for refugee and internally displaced peoples.

Chapter 2: Literature Review

Studies conducted in different countries to understand determinants of modern contraceptives use have identified various factors influencing modern contraceptives utilization and these factors identified in the past through different studies which were proposed to be determinants of modern contraceptive use can be categorized as demographic, socio economic, socio cultural, reproductive history related factors, knowledge and attitudes related factors. The expected relation between the independent and dependent variables is depicted pictorially in the conceptual framework below following the detail discussion of these factors.

2.1. Awareness, attitude and practice on modern contraceptive methods

2.1.1. Awareness and perception

In order to use contraception, people must know about it regarding its use as beneficial and be able to obtain the methods that they want to use. Recent evidences obtained from different literatures and studies conducted in different parts of the world showed that, awareness about modern family planning is high and becoming universal currently among married women across developing countries. Findings found from cross-sectional studies conducted in Gaza among Palestine refugee women and in Thailand among Cambodian refugee women who were in union at that time in both studies indicated that knowledge regarding modern family planning method was very high among married women. In these studies it was found that over 97% of women in Gaza and over 91% of women in Khao Phlu camp were found knowing any modern method or at least one modern method [23,24]. In contrary to this high level of awareness observed, another cross sectional study conducted in Kabul among Afghan married women showed that knowledge of modern family planning was very low among married women. In this study it was found that only 48% of women were aware of any method while 52% of them were not aware to delay or avoid pregnancy [25].

A cross sectional studies conducted among reproductive age group women of Sierra Leonean and Liberian refugees living in Guinea and Rwandan refugees living in Uganda, Kyaka refugee camp found that women's modern contraceptive methods knowledge was found high in which over 90% of respondents in these studies were found aware of at least one modern contraceptive method and the use of contraceptive methods. According to findings of these studies, 88% of women in Guinea were found able to explain family planning as a concept and over 90% of respondents were aware

where to access contraceptives and in Uganda, 92% of respondents were found aware of at least one modern method [10, 26]. In Ethiopia, according to Ethiopian Demographic and Health Survey (EDHS) 2005 report, over all married women's knowledge of modern contraceptives was found high in which 88% of women knew at least one method of MCs [27]. In contrast to the above findings, a study conducted in Angola found low level of knowledge about of modern contraceptive methods. In this study it was found that only 5% of women were able to name at least two modern contraceptive methods [28]. Knowledge towards specific method varies from country to country. For example in Gaza, IUD and pill were the most known methods in which more than 90% of women knew them followed by condoms and injections known for about 65% of women and in Ethiopia pill, injectables, and condom were the most known modern methods [23, 27].

Despite increasing women's knowledge throughout the developing world and conflict affected areas, findings obtained from different researches conducted in the past indicated that lack of knowledge of modern contraceptive methods or their sources, lack of information about the available family planning services and how to use them and misconception about MC methods (MC methods would cause health problems) were among the barriers which hindered women from using of modern contraceptive methods. Findings obtained from studies conducted in Gaza, Khao Phlu camp and in Kabul found that the main reason for why they didn't use contraceptives among women for women who did not wish to conceive in that time was: 27% feared side effects, 28% lacked knowledge and 13% lacked information about the available family planning services in Gaza [23]; 61% feared side effects, 24% lacked information, 40% discomfort over seeking contraceptives and some 30–48% of women did not know that various contraceptive methods were available at health facility Khao Phlu camp [24] and 11% because feared side-effects, 7% lacked information on of modern contraceptive methods and 3% doubted that contraceptive methods were effective in Kabul [25] and in Ethiopia 11.3% none users reported as lack of knowledge [27].

The 2004 IAWG report Global Evaluation of Reproductive Health Services for Refugees and Internally Displaced Persons from African countries among refugee women in Yemen, Congo and Rwanda revealed that negative perceptions and misinformation regarding modern family planning were found as main barriers for MC use. Findings of this survey obtained from group discussions indicated that, both women and men perceived that of modern contraceptive methods would cause infertility, or feared that modern contraceptive methods would cause severe side effects. It was also

found that some women perceived that women would became pregnant while using contraceptives, having many children is God's will and children brings wealth or assets and others perceive health staffs providing contraceptive lacks competence [9]. Lawrence W et al in their study to assess influencing factors of modern contraceptive methods use among married women in kayak refugee camp found that client perception of quality of FP service affects contraception use. Their findings indicated that users perceived that family planning services provided were of good quality [26].

2.1.2 Attitude towards modern contraceptive methods

The attitude held by both women and men towards FP is one of the factors that affect the use of modern contraceptives by married women. Different studies conducted elsewhere showed that approval of FP, women's discussion of FP with their partners were associated with higher odds of using modern contraceptives. Results obtained from DHS data analysis of six SSA countries, Mali, Qatar and Ethiopia showed that approval of FP by both women and husband and recent discussions on FP with their partner or others were found to influence the use of MCs. According to the findings of these studies, women who used modern contraceptives were found significantly higher for women who approved and their husband approved using FP compared to their counter parts and those women were discussed on FP with their partner [29-32] . However results found from studies conducted in Guinea and Gaza showed that despite favorable attitudes regarding modern FP women's had, their results indicated that insignificant difference was observed in contraceptive use between those who approved and disapproved MC use in that time [10, 23].

Many studies conducted in the past revealed that, approval of FP use in turn was found to be influenced by wealth, educational status, age, exposure to mass media, and number of live children. According to the findings of these studies, it was indicated that women in the highest quintile, those women with educational level of primary, secondary & above compared to illiterate, age greater than 20 years compared to less than 20 years, having one or more children compared to no child and those who were exposed to mass media were found significantly higher in approving FP use than their counter parts [26, 29-31]. Findings obtained from studies conducted in the past revealed that spousal discussion regarding using modern FP was found important factor in helping women to know their husbands attitude, to approve and use modern FP. According to these studies findings, women who know their partner's attitudes towards modern FP were used modern contraceptives significantly higher compared to those who don't know their husbands attitude [30, 32].

2.1.3 Practice of modern contraceptives

While awareness of family planning is almost universal among married women nowadays, practice of modern contraceptives by married women was found to differ across studies and setups. According to the findings of studies conducted among married women in Finland among Somalia women, in Gaza, in Kabul and in Kaho phlu camp, the CPR for modern methods was found 27%, 24%,16% and 12% for Somalian, Palestinian, Afghan and Cambodian women respectively [23-25]. Studies conducted in refugee camps hosted in African countries of Uganda, and Angola among refugee WCBA indicated that CPR at the time of study was found 26%, 18.2% and 2.5% for the studies conducted in Guinea, Uganda and Angolan women respectively [10, 26, 28]. According to EDHS 2005 report, modern CPR among married women who were in union at that time was found 13.9% nationally and 2.7% in Somali region where the refugees are living now which was somewhat higher than the practice of modern contraceptives in Somalian married women according to data found from 2010 population reference bureau statistics report, refugee's country of origin, in which modern CPR was only 1% for married women [6, 27].

2.2 Factors associated with modern contraceptive use

2.2.1 Demographic factors

Different studies conducted in many countries have indicated that demographic factors were found important factors in influencing the utilization of family planning services. These demographic factors include age, residence and ethnicity of the mother. Age of the mother is among these factors which affect modern contraceptives utilization. Results obtained from different studies conducted in the past indicated that older age women were found more likely to use family planning services than younger and women with age over 40 years were found less likely to use modern contraceptive methods. According to the findings of the following studies, it was found that proportion of women who had used modern contraceptive was significantly higher among women age 25 years or more over younger women in a study conducted in Afghanistan [25], older women with the highest practice among the age group 20-32 years over women less than 20 years in a study conducted in Guinea [10], among women who were at least 25 years old than those who were 15–19 years old with no difference observed between those aged 15–19 and those aged 20–24 in a study conducted in Mali and among age greater than 25 years old over women less 20 years in a study conducted in Uganda, kyaka refugees in the 25 to 32 age category than their counter parts. [226, 30] In the study

conducted in Gaza, it was found that the risk of not using any contraceptive method indicated an increased risk for the women over the age of 38 years [23].

Findings from a multivariate analysis of east African countries of Kenya, Malawi, and Tanzania demonstrated that women aged 38 to 49 years were used contraception significantly less or lower than women aged 30 to 37 years [32]. In Ethiopia, data analysis made by world bank in 2005 showed that woman in the age group of 20-29 and 30-37 years old were found significantly higher in using modern contraceptives methods compared to mothers in the age group less than 20 years. But though the odds of using contraceptives of women in the age group of 38-49 years in this study were found higher compared to the reference group, it was not found statistically significant [29].

2.2.2 Reproductive history

Results of studies conducted in different countries showed that, fertility related factors like number and sex of live children that women have, ideal number of children both women and husband desire to have were found to influence of modern contraceptive methods use. Studies conducted in Uganda, Kyaka refugee camp and Ethiopia found that the prevalence of modern contraceptives use was significantly higher in women who had more live children. In these studies, it was found that proportion of women who had used modern contraceptive was significantly higher among women who had one or two or more live children compared with no children in Uganda and mothers with parity of 3-4 and 5+ children compared to mothers of 0-2 children in Ethiopia [26, 29]. Similar findings were found from data analysis of modern contraceptive use in East African countries (Kenya, Malawi, and Tanzania) and Gaza. According to the findings of these studies, proportion of women who used contraceptives were found significantly lower among women with no children than women with 3 or 4 children in East African countries and in Gaza it was found that having one to three sons or four or more sons have a protective effect against the risk of not using any contraceptives. In this study it was found that women who believed that they had too few children used significantly lower and less likely to use any contraceptive methods [23, 32].

According to the findings of these studies, use of any contraceptive methods by women was found significantly higher and more likely among women who had no desire for more children compared with women who wanted more children in the study conducted in Kabul and among the nonusers who had reported knowing about family planning in the study conducted in Guinea, 80% who did

not used contraceptives reported main reasons for not using because they want another child though it was not tested for significance and 37.5% of none users due to fertility related factors [10, 25].

Previous studies conducted in different countries indicated that wealth, educational status and age of women were found influencing the number of children that a woman have and desire to have. Studies conducted in Gaza, Mali and Ethiopia found that the risk and desire of having many children decreases among educated and wealthier women while the risk and desire of having many children increases among less educated and in the lowest wealth quintile [23, 29,30]. Another study conducted in Pakistan among spouses also indicated that couple's approvals of family planning, knowledge of source family planning and discussion about family planning were found strongly correlated with the desire to have no additional children [33].

2.2.3 Socio-economic factors

Socio economic factors like educational status of women, income and employment status of both women and men were identified to be determinants of modern contraceptive utilization as well as attitudes and knowledge of women towards family planning in many studies. For example studies conducted in Kabul, Gaza, Rwanda, Mali, Ethiopia, Qatar and Uganda found that educational status of women was the most important determinant of modern contraceptive use. In these studies proportion of women who had used MC were found significantly higher in women with primary, secondary or above educational level compared to with no education [23, 25, 26, 29-31, 34]. However, in studies conducted in Mali and black and Hispanic women, their findings indicated that, although women whose partner had a primary education and those whose partner had secondary education were found significantly higher than they were among women with uneducated partners, it was found that there was no significant difference in MC use by woman's education income, and contraceptive knowledge [30, 35].

Income or wealth of house hold has been identified in different studies as strong determinant of modern contraceptive use by women. Results found from studies conducted in Mali, Ethiopia, Qatar, Uganda and 6 Sub-Saharan African countries revealed that, proportion of women who used modern contraceptives were found significantly higher among women in the highest wealth quintile than women in the lower wealth quintile [26,29,-32]. In the study conducted in Kabul among Afghan women, it was found that women whose husband have employed or permanent job used

modern contraceptives significantly higher than those whose husbands were unemployed [25]. Studies conducted in the past revealed that women who worked outside their home in Mali and women who were employed in Iran were found associated with modern contraceptive use [30, 36].

It is fact that women's visiting of health facility and exposure to family planning messages increases knowledge of women regarding modern contraceptive methods and its benefits then influences its utilization. Studies found that women who had exposure to family planning messages, visited by family planning worker were found strongly associated with modern contraceptive use over those who were not exposed or visited by family planning worker. However, finding from another study conducted in Bangladesh revealed that insignificant difference was observed in MC use between those exposed or visited women and not exposed to family planning messages [10, 29, 31-33].

Socio economic factors in turn were found influencing women's knowledge of modern FP. Women in the highest wealth quintile, educational level of primary, secondary or above, those exposed to FP messages, visited by FP worker [29, 32], women over 20 years old [29, 30] and those women who had discussed with their partner [32, 33] were found significantly higher to know modern FP methods and their sources than their counter parts. However in other studies, though women with formal education compared to with no education [34], women age group greater than 20 over less than 20 [31] were found more likely to know FP; it was found insignificant to affect MC use. Another study conducted in Bangladesh also found contrary result that women visited by FP workers knew fewer MC methods than those who did not visited by them [37].

Studies in the past noticed that women's decision making status regarding FP use was found as an important factor to influence their use of MCs [9, 25, 38]. According to results found from the study conducted in Kabul among, it was found that the odds of using contraceptive methods was significantly higher among women who reported they were involved in decision making of using contraceptives compared to those who did not involved in decision making [25].

2.1.4 Socio-cultural factors

Socio-cultural norms and values held by communities are the most common factors that exist today responsible for the weakening of FP interventions and the combination of these factors has led to low contraceptive use, high fertility rates in many countries. Studies conducted in different countries both in the local community and in refugee/IDPs camp settings showed that socio cultural

factors were found important factors that influence women's use of modern contraceptives which includes religion, culture, gender and social norms that prevent increased use of FP [3, 9, 18, 27, 39]. In the study conducted in Kabul, it was found that 11% of respondents said they were culturally not allowed to use any MC method [25]. Being Muslim in Guinea [28] and lack of support from male partner in Kyaka [26] were found strongly associated with not using of MCs. The 2004 IAWG report, in the case of Uganda revealed that culture was found an important factor in influencing the use contraceptives. According to this study's finding found from in-depth interview of health workers, health staffs working at the camps expressed their view that low contraceptive use, at Kiryandongo and in Moyo for refugees was due to cultural reasons or the perceived need to re-populate after the war though it was not tested if it was significantly affected women's contraceptive use [9].

Degni F, Koivusilta L and Ojanlatva A conducted a study in Finland among Somali married refugee women (18-50 years) to assess attitudes towards and perceptions about contraceptive use revealed that the attitudes and opinions of women towards contraceptive use were found predictors of MC use.. Their findings indicated that users were found less likely to be influenced by religious or gender issues compared to none users. Their findings also showed that the attitudes and opinions held by these women's found in their study were connected with religious beliefs and issues involving marital relations [40]. Comersamy H et al conducted a cross sectional study combined both quantitative and qualitative data in Somalia in 2003 to understand Somalian perspective of FP services. Their findings from their qualitative data extracted deeper issues, provided insights and explained the causal factor of low uptake of FP services which include religious teaching, status of men and women and an oral tradition were identified as fundamental to Somalian conceptualization of FP services [41].

Conceptual frame work

Socio-economic, demographic and cultural Variables (age, ethnicity, educational level, religion, work status, husband's education, exposure to media and FP messages, visited by FP worker), knowledge, attitude and couples discussion of FP, women's approval of FP use, husbands approval of contraception, perceived husband's or important others approval of modern FP, reproductive history of women (number of live children, numbers of children a women desire to have) while the dependent variable is current modern contraceptive use. According to the diagram shown below

socio-economic, demographic and cultural variables affect the use MCs directly or indirectly through altering or changing women's knowledge, attitude, and approval of modern contraception. Knowledge regarding modern FP also affects modern FP use directly or in directly through altering attitudes towards modern contraception and reproductive history. Likewise the other group of variables reproductive history related variables affects the use of modern contraceptives directly or indirectly through altering knowledge, attitude and approval of modern contraception. This conceptual frame work is adapted from previous study conducted by care-Ethiopia. Diagrammatically it is shown as follows [42].

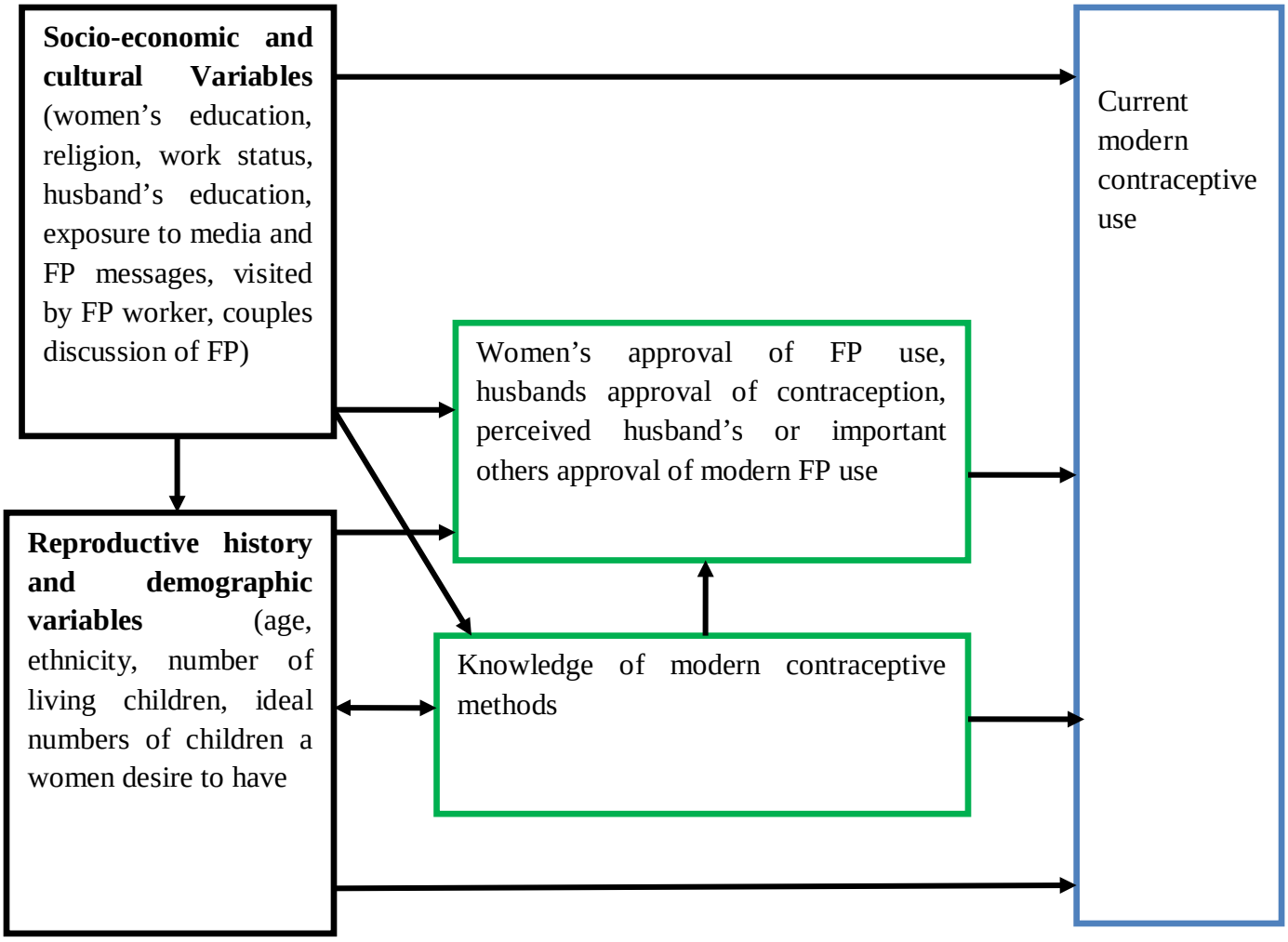

Figure 1: Conceptual frame work showing the relationship between the influencing factors and modern contraceptive use

2.3 Significance of the study

Studies and experiences in the past have identified that maternal and child deaths resulted from unmet need for family planning or low utilization of contraceptives were more experiences of refugees than any other people because: refugees are at high risk of gender based and sexual violence increasing the risk of unintended pregnancy, reproductive health services in general is low in availability and quality and, quality of emergency obstetrics care is limited, leading to increased maternal and child mortality**.**

Providing effective modern family planning service is among the interventions exist for reducing maternal and child mortality in the developing world and in emergency situations including refugee settings. Understanding of the factors that can influence modern contraceptive use of women in general and in refugee setting in particular is highly recommended in increasing uptake of modern family planning services**.** Although different studies conducted elsewhere have identified that socio economic and cultural, reproductive, demographic related factors that make difference in modern contraceptive use, there was no published study conducted in refugee camps hosted in Ethiopia in particular in Sheder refugee camp providing the practice and determinants of modern contraceptive use by women.

This study, therefore, aimed at identifying the practice and determinants of modern family planning use among married women of child bearing age in Sheder refugee camp Somali region, eastern Ethiopia. The findings of this study will give insight and information to family planning program managers and service providers to remove these obstacles and helping them in improving both uptake and quality of modern family planning service for these special populations by considering these factors which influence women's use of modern contraceptive methods in the planning and implementation process and at service delivery points. It will also serves as a baseline data for future studies.

Chapter 3: Objective of the study

3.1 General objective

To assess practice and determinants of modern contraceptive use among married women in reproductive age group in Somali region Sheder refugee camp

3.2 Specific objectives

1. To assess the magnitude of modern contraceptive use among married women 15-49 years old residing in Sheder refugee camp
2. To identify determinants of modern contraceptive use by married women aged 15-49 years residing in Sheder refugee camp

Chapter 4: Methods and materials

4.1 Study area and period

In Ethiopia there were around 124 thousand refugees who reside in all camps at the end of 2009 [7]. Sheder refugee camp is one of the three refugee camps, the other two Aw Bare (Teferi ber) and Kebri Beyah refugee camps, which are found in Somali region. Sheder town is found around 688 km far from Addis, the capital of the nation and 55km Northeast of Jigjiga. The camp comprising of three zones with 1580 households and total population of 10397 out of this, 2080 (20% of the total population) are females in reproductive age group.

In Sheder there is one clinic which gives service to the local community which is under the Somali Regional Health Bureau and one health center near the camp which serve for the refugees administrated by Administration of Refugee-Returnee Affairs (ARRA). In Sheder there are none governmental organizations working for the refugee community in different areas. UNHCR provides financial aid to the refugees. Development and Inter Church Aid Commission (DICAC) provide or run educational program. None governmental organizations working in health and health related activities include the International Rescue Committee (IRC) working in reproductive health, HIV/AIDS prevention and control and it also provide community based distribution of modern FP to the community through its community health agents , gender based violence and sanitation related activities; UNHCR supports health assistance with other implementing partners and Medicines' Sans Frontiers (MSF) gives support a needed ARRA's public health care activities in emergency situation under the coordination of Ministry of Health of Ethiopia. [43]

In the nearby town, Jigjiga, there is only one public hospital serving the entire local community as well as it gives referral services for the refugees when they are referred from Sheder and the other two refugee camps. The study was conducted in Sheder refugee camp, Somali region in March 2011.

4.2 Study Design

Community based cross-sectional study design was employed

4.3 Population

4.3.1 Source population

Quantitative study

All currently married women of reproductive age group (15-49 years) living in Shedder refugee camp.

4.3.2 Study population

Sampled women of reproductive age group (15-49 years) currently married found in Shedder refugee camp.

4.3.3 Sampling unit

Households in the camp with currently married women

4.3.4 Study unit

Women aged 15-49 years, currently married and living in the sampled households were taken as a study unit

4.4 Inclusion and exclusion criteria

4.4.1 Inclusion criteria

- Currently married refugee women of age group 15-49 years.

4.4.2 Exclusion criteria

- Pregnant women
- Lactating mothers of less than 6 weeks period
- Women unable to respond because of illness

Qualitative study: Currently married women in the reproductive age group and their husbands, family planning service providers, head of the health facility of the study area and religious leaders living in the camp.

4.5 Sample size determination and sampling technique

4.5.1 Sample size determination

Quantitative study**:** The sample size was calculated by using a single population proportion calculation formula considering the following assumptions.

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

ni= Sample size from finite population.

Z= the standard score (critical value) corresponding to 95% confidence level = 1.96.

d= the proportion of sampling error between the sample and the population = 5% (0.05).

P =50% (assuming proportion of women 15 – 49 years married women who used modern family planning among refugee camp)

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

Since sampling was from a finite population of size (N) less than 10,000, the final sample size, n, was calculated by using finite population correction formula as follows

$$n = \frac{n_0}{\left(1 + \frac{n_0}{N}\right)}$$, where, n_o = 384 and N = 1350

Adding 10% non response rate, the final sample size was calculated to be, n = 329

Qualitative data: This method was utilized to further build-up and supplements the results of quantitative study. Focus group discussions (4FGDs) were employed for married women (2FGDs) and married men (2FGDs) with 6-8 participants for each FGD, a total of 28 participants. In-depth interviews of 5 key informants were also employed for religious leaders (2), family planning service providers (2) and head of the health facility of the study area (1).

4.5.2 Sampling technique

Quantitative study: There are three zones in the camp (Zone1, Zone2 and Zone3). At the beginning, house to house census was conducted to identify households with currently married women between reproductive age group. A total of 1350 households with currently married

women were identified during census from the three Zones. Out of this, 1308 of the households were found with eligible study subjects. Then, sampling frame of households with married women was prepared for each of the three Zones. As all of the Zones were going to be included in the study, the number of study subjects from each zone was determined by probability proportional to size allocation. Finally, simple random sampling technique was employed to select and approach each study subjects from the three existing zones. Selected study subject who refused to participate in this study were considered as non-respondent.

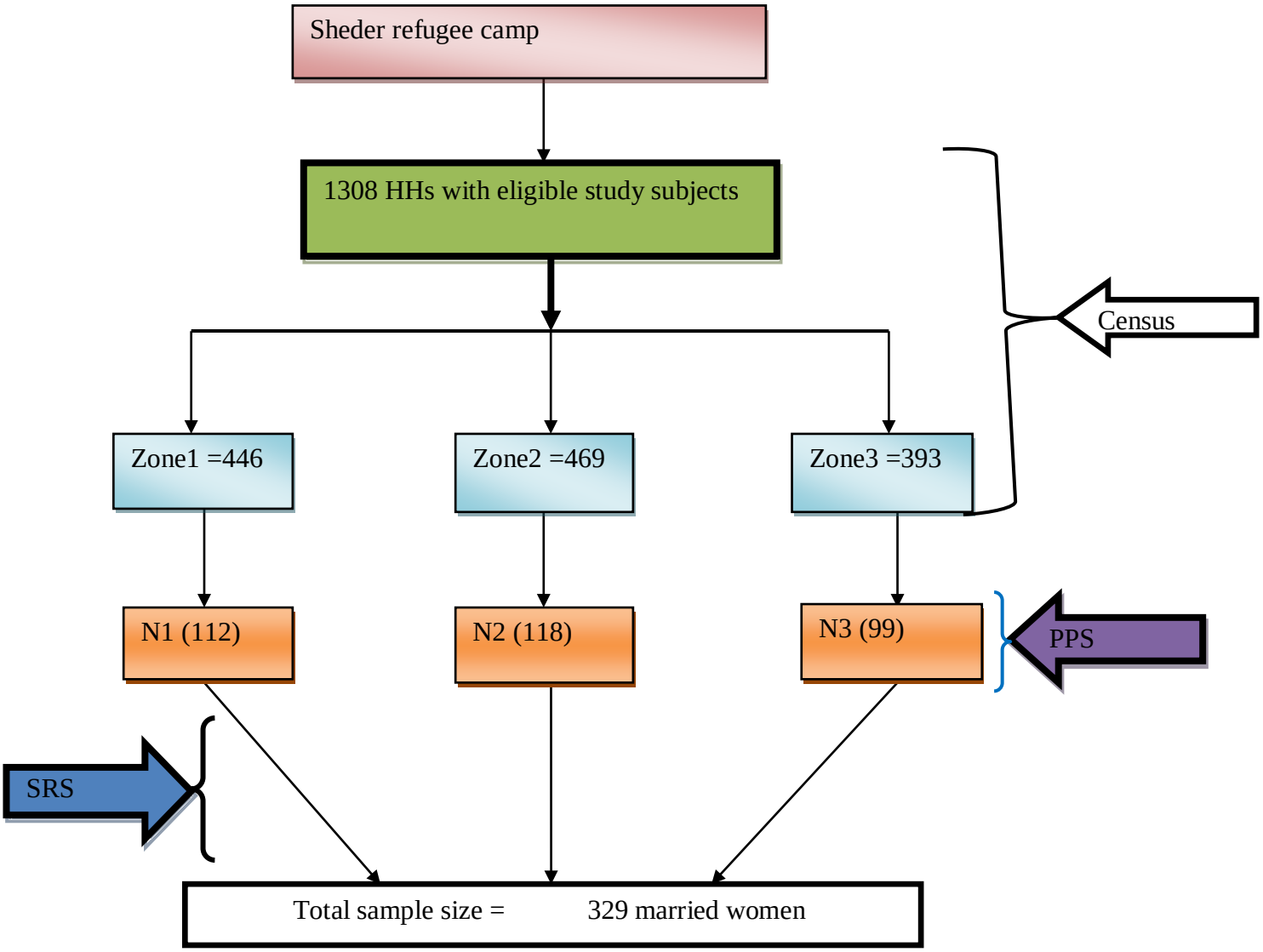

Figure 2: Schematic presentation of sampling procedure for the selection of study units in Somali region, Sheder refugee camp, eastern Ethiopia, May 2011 GC.

Qualitative study: Purposive sampling thechnique was used to select family planning service providers, head of the family planning service as well as head of the health facility, religious leaders and convenient sampling technique was employed to select study subjects for focused group discussions from both husbands and married women which were not involved in the quantitative part. Proportion to size allocation

4.6 Measurement and variables

4.6.1 Data collection instrument and procedure

Quantitative study: Structured interviewer administered closed ended questionnaire was used to collect data using interviewer administered technique which was developed after reviewing different literatures of similar studies. The questionnaire contains women's socio-demographic status, socio-economic and cultural factors, reproductive history, knowledge and attitudes of women and husband towards modern contraceptive use and practice of modern aceptives.

Questions concerning socio demographic, socio economic, cultural, reproductive history related factors, knowledge and practice of modern contraceptives are adopted from the Ethiopian Demographic and Health Survey, 2005 and questions related to attitudes of women regarding modern FP use are adopted from similar studies conducted in Guinea and Gaza [10, 23, and 27]. The questionnaire was prepared in English and it is translated to Somali language by an individual who have good ability of both languages and again translated back to English to check for conceptual equivalence.

Before the actual data collection, the questionnaire was pre-tested on 10% of the total sample size in Aw Bare (Teferi ber) refugee camp to ensure that respondents were able to understand the questions and to check the wording, logic and skip order of the questions in a sensible way to the respondents. Amendments were made accordingly after pre-testing. Finally ten female 12^{th} grade complete for data collection and two supervisors holding BSc in public health were recruited and included throughout the data collection after three days training on the study instrument, consent form, interview techniques and data collection procedure.

Qualitative study: For in-depth interview, semi structured interview guide was prepared and the interviews were conducted by the principal investigator. The interviews were tape recorded as

well note was taken. The interviews were held in quite and comfortable place. For the FGDs, FGD guide was prepared and compilation sheet was developed, then there was trained moderator for the discussion and trained note taker. One person from the study area who knows the local language very well was trained on audio transcription and note taking and was employed. Transcription using an audiotape recorder and note was taken during each and every discussion session. Homogeneity with in groups was considered and discussion session was end when information saturation occurs.

4.6.2 Study Variables

Dependent variable

- Current modern contraceptive use

Independent Variables

- Age
- Number of live children
- Ideal number of children a women and husbands desire to have
- Educational level of women
- Religion
- Ethnicity
- Work status
- Husband's education
- Exposure to mass media
- Exposure to FP messages
- Visited by FP workertr
- Women's decision making role in modern contraceptive use
- Knowledge about modern contraceptives
- Women's approval of modern contraceptive use
- Husbands approval of modern contraceptive use
- Perceptions toward contraceptive use
- Couples' discussion about FP

4.7 Data processing & analysis

Quantitative study

After data collection, questionnaire was checked for completeness and code was given. Data were entered, cleaned and explored for outliers, missing values and analyzed using SPSS version 16 software. Descriptive statistics like frequency tables, graphs and descriptive summaries were used to describe the study variables.

Bivariate binary logistic regression analysis was used to see the existence of association between dependent and independent variables. 95% CI and p- value less than 0.05 were used as cut of point to see presence of statistical significance.

To control the effect of confounding variables and to identify determinants of modern family planning use, stepwise backward multiple logistic regression analysis was used. All groups of explanatory variables which show significant association with the outcome variable in bivariate analysis were fitted to a single model. variables with p-value <0.05 were reported in this single model as determinants of modern family planning use using both P-values and adjusted odds ratios (AORs).

Q**ualitative study:** For the in-depth interview, after the interview data was transcribed word by word into the Somali language and then translated into English language. Then similar responses were grouped and summarized based on thematic area or the key variables of the study and results from focused group discussions were analyzed according to their thematic area descriptively. Finally results of the qualitative study were presented integrated with the quantitative results.

4.8 Data quality control

To achieve a good data quality:

- Questionnaire was retranslated to English back to check if there were inconsistencies
- Data collectors were selected based on ability to speak the local language and previous experience of data collection.
- Training was provided to selected data collectors for three days about the objective and process of data collection.

- Vague points and other problems encountered about the questionnaire were given explanations and clarifications. Closer supervision was undertaken during data collection.
- Every questionnaire was crosschecked daily by the supervisors and the principal investigator.
- Pre-testing was done in Aw Bare (Teferi ber) refugee camp outside the study area
- Data were cleaned and checked for outliers before analysis

4.9 Ethical consideration

The study was obtained ethical clearance from ethical committee of Jimma University, College of Public Health and Medical Sciences. Permission paper was also obtained from Administration of Refugee-Returnee Affairs (ARRA) country Head Office, Addis Ababa, ARRA head office Somali region, Jigjiga and from head of Sheder and Aw Bare (Teferi ber) refugee camps. Similarly after explaining the purpose of the study, verbal informed consent was obtained from each study participants while the study subjects right to refuse was respected. Identification of study participants by name was avoided to assure the confidentiality of the information obtained

4.10 Operational definitions and definition of terms

Current contraceptive user: A woman using any one of the modern methods at the time of data collection. It takes into account all use of contraception, whether the concern of the user is permanent cessation of childbearing or a desire to space births.

Exposure to family planning messages: Women who heard or saw a family planning messages on the radio or television or in a newspaper or magazine in the past 6 months were labeled as exposed to family planning messages otherwise none exposed.[30]

Exposure to mass media: Women who reads a newspaper at least once a week or watches television at least once a week or listens to the radio at least once a week or all three media at least once a week will be labeled as having exposure to mass media and if no media at least once a week, as not having exposure to mass media. [27]

Knowledge of modern contraceptive methods: Those who knew at least one modern method were labeled as having knowledge of modern contraceptive methods otherwise not having knowledge of modern family planning methods. [27]

Knowledge of source of modern contraceptive methods: Regarding knowledge of source of modern contraceptives, women were asked if they knew source of modern contraceptive methods and those respondents who respond correctly at least one source were labeled as having knowledge of source of modern contraceptive methods otherwise not having knowledge of source of modern contraceptive methods. [27]

Modern contraceptive methods: Methods which includes condoms (both male and female), spermicides, hormonal contraceptives (oral contraceptive pills), Copper IUDs (intrauterine devices), hormonal implants, Injectables and surgical contraception (both male vasectomy and female sterilization). [27]

Refugee: "Person outside his or her country and cannot return owing to a well-founded fear of persecution because of race, religion, nationality, political opinion or membership of a particular social group; or due to war and civil conflict". [44]

Internally displaced person: "Person displaced for the reasons noted above but who does not leave his or her country of origin". [44]

None contraceptive user: a woman who was not using any of the modern methods of contraceptives at the time of data collection.

Recent discussion on FP: Women who reported that they have discussed modern family planning with their partner in the last 12 months. [32]

4.11 Dissemination of the study result

The final result of this study will be presented to Jimma University, College of Public Health and Medical Sciences. It will be also disseminated to Administration of Refugee-Returnee Affairs (ARRA) office at different levels, Addis Ababa, Jigjiga, Sheder refugee camp and other concerned governmental and nongovernmental organizations. Further more, publications will be attempted to present in peer reviewed scientific journals

Chapter 5 Result

Socio-demographic Characteristics of respondents

A total of 309 study subjects were participated in the study making response rates of 93.92 %. The mean age of the study subjects in this study was 29.78 (± 8.59) years and the median duration of time since marriage is 9.74 years.

Among the total respondents, 257(83.2%) were from urban areas just before moving here to the camp and most of the respondents, 304(98.4%) were Muslims by religion. All of the respondents were from Somalia and Somalian by ethnicity. Majority, 225(72.8%) of the study participants cannot read and write (had no formal education) and 230(74.4%) were housewives. The mean number of live children women have was found 3.61 (± 2.35) children. Among the total respondents, majority, 254(82.2%) of study participants needs a child/more children to have, 209(67.6%) of them wants to have greater than 5 children and most women, 283 (91.6%) have no history of child death (Table1).

Table 1: Socio-demographic characteristics of respondents in Sheder refugee camp Somali region, eastern Ethiopia, May 2011

Back ground variables	Categories	Frequency	Percent
Residence of the mother just before moving here	Urban	257	83.2
	Rural	52	16.8
Religion	Muslim	304	98.4
	Protestant	3	1.0
	Orthodox	2	0.6
Women's educational status	No education	225	72.8
	Primary education	71	23.0
	Secondary or higher	13	4.2
Husband's education	No education	161	52.1
	Primary education	112	36.2

	Secondary or higher	36	11.7
Women's occupation	Housewife	230	74.4
	Works outside her home	79	25.6
Husband's occupation	Not employed	309	97.9
	Employed	7	2.1
Age of women	15-19 years	49	15.9
	20-29 years	111	35.9
	30-39 years	86	27.8
	40-49 years	63	20.4
Live number of children a women have	No child	22	7.1
	1-2 children	98	31.7
	3-4 children	82	26.5
	5+ children	107	34.6
Women's desire to have a child/more children	No need for more child	55	17.8
	Needs more child	254	82.2
History of child death	No history of child death	283	91.6
	Has history of child birth	26	8.4
Ideal number of children a women desire to have	>= 6 children	209	67.6
	<6 children	66	21.4
	God knows	34	11.0

Knowledge of modern contraceptive methods

Information was collected for 8 modern contraceptive methods; namely female and male Sterilization, pills, IUDs, injectables, implants, condoms and diaphragm/foam/jelly. Most of the study participants, 292(94.5%) have heard of modern contraceptive method, 284 (91.9%) knows at least one method of modern contraceptive and 253 (81.9%) of them knows at least one source where to access modern family planning methods. Pills and injectables were the most

known methods of modern contraceptives accounts 275 (89%) and 266 (86.1%) respectively (*Fig 3*)

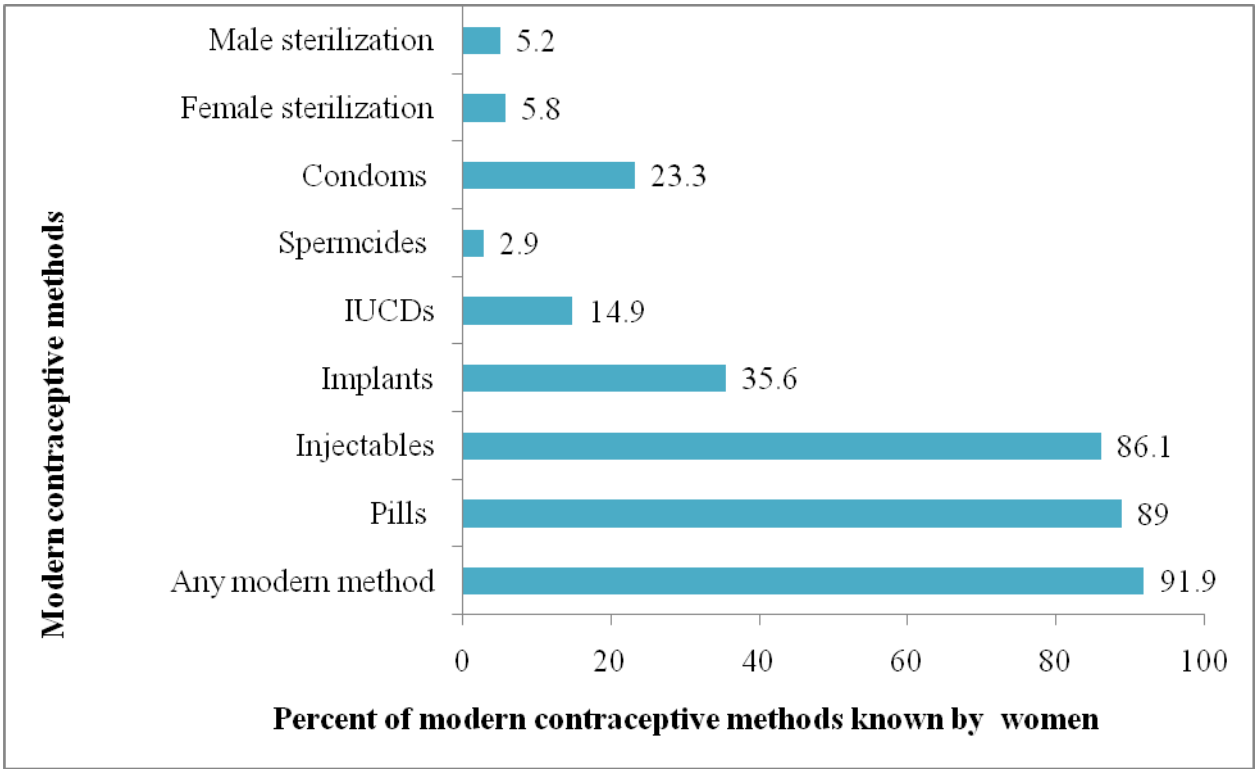

Figure 3 : Distribution of modern contraceptive methods known by married women aged 15-49years, Sheder refugee camp, Somali region, eastern Ethiopia, May 2011

Practice of modern contraceptive methods

The total proportion of women currently using modern contraceptive methods is 55(17.8%), 43(78.2%) for the purpose of child spacing and the rest for limiting a child. Pills and injectables are the most used modern methods by which 26(47.3%) and 22(40.0%) of the current users are using respectively. The rest 7(12.7%) were using Norplant. Non contraceptive users were asked the reason why they do not practice modern contraceptives. Among the total none contraceptive users, Majority 158(60.5%) gave a reason for desire to have more children, 108(41.4%) for religious reason, 41(15.7%) for moral and cultural reason, 40(15.3%) lack of information about modern contraceptives and 20(7.7%) of them reported that they are not using because of their husbands opposition to practice modern contraceptives (fig 4).

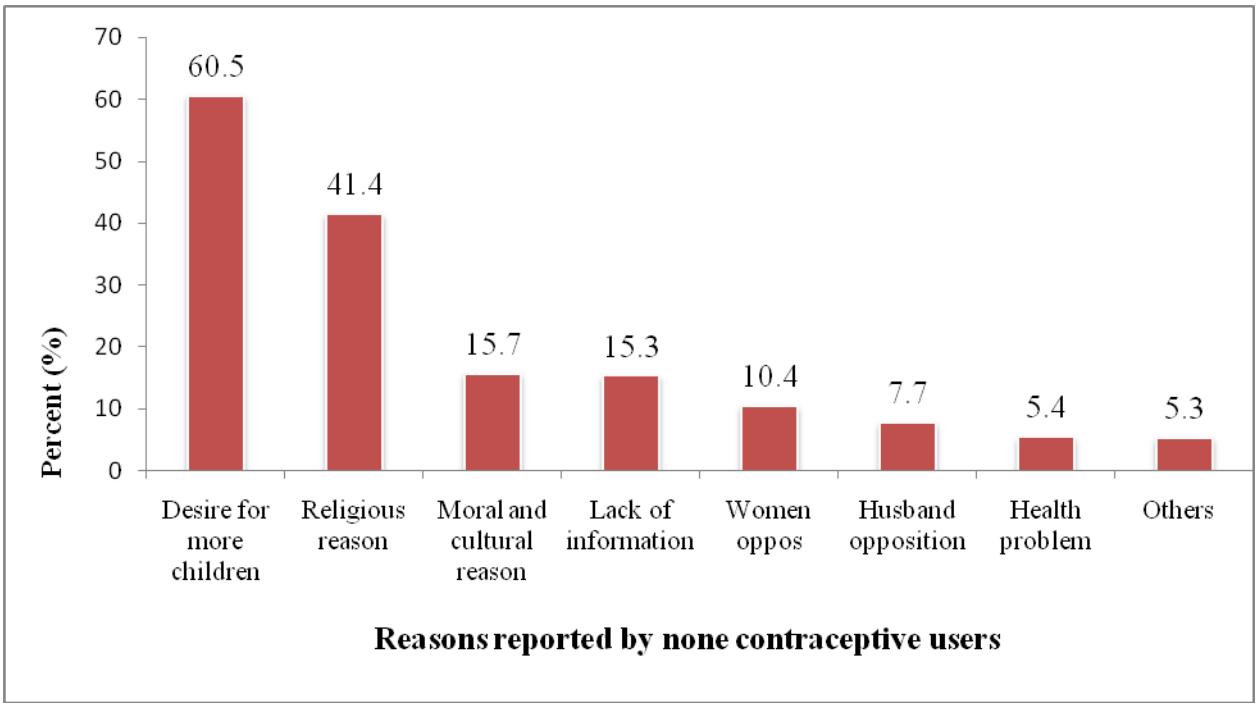

Figure 4: Reasons reported by non contraceptive current users, Sheder refugee camp, Somali region, eastern Ethiopia, May 2011.

Most women from FGD reported that main reasons for women not to use modern contraceptives were the need for more children. One FGD discussant (25 years old) said "…..*I don't want to use modern contraceptives because I want more children"*. The second reason forwarded by the FGD participants was for religious reason followed by husband opposition. One FGD discussant (35 years old women) also said "…*Yes it is a sin to practice modern contraceptive methods, because it denies a child that Allah would had given me and because that person become against the power of Allah that is what I believe"*. Another FGD discussant (32 years old women) also stated"….*we are here refugees, we are completely dependent on aid, so we want to practice modern family planning to limit our number of children but the problem here is that our religion don't allow and even we try to practice contraceptives, our husbands oppose us.* "From married men FGDs, most of the discussants reported that they oppose women or their wives to use modern contraceptives methods and the reason they forward for this was because our culture and religion encourages having many children. One FGD discussant (40 years old) said"….*I don't want to encourage my wife to use modern methods, because I need more children, it is our God's will to have many children , I also believe that it is produced to reduce the increase of Muslim population, so I will not encourage my wife to use contraceptives."*

Proportion of current modern contraceptive users by selected characteristics of women

Maternal age and residence

Proportion of current users was found 51(19.8 %) among urban women and 4(7.7%) among rural women. By mothers age group , proportion of mothers who used modern contraceptives were found higher among mothers with age 20-29 years 29(26.1%) and higher among mothers in the age group 30-39 years 25 (29.1%) compared to age groups less than 20 years (2%) and there was no current user in the age above 40 years (Fig 5).

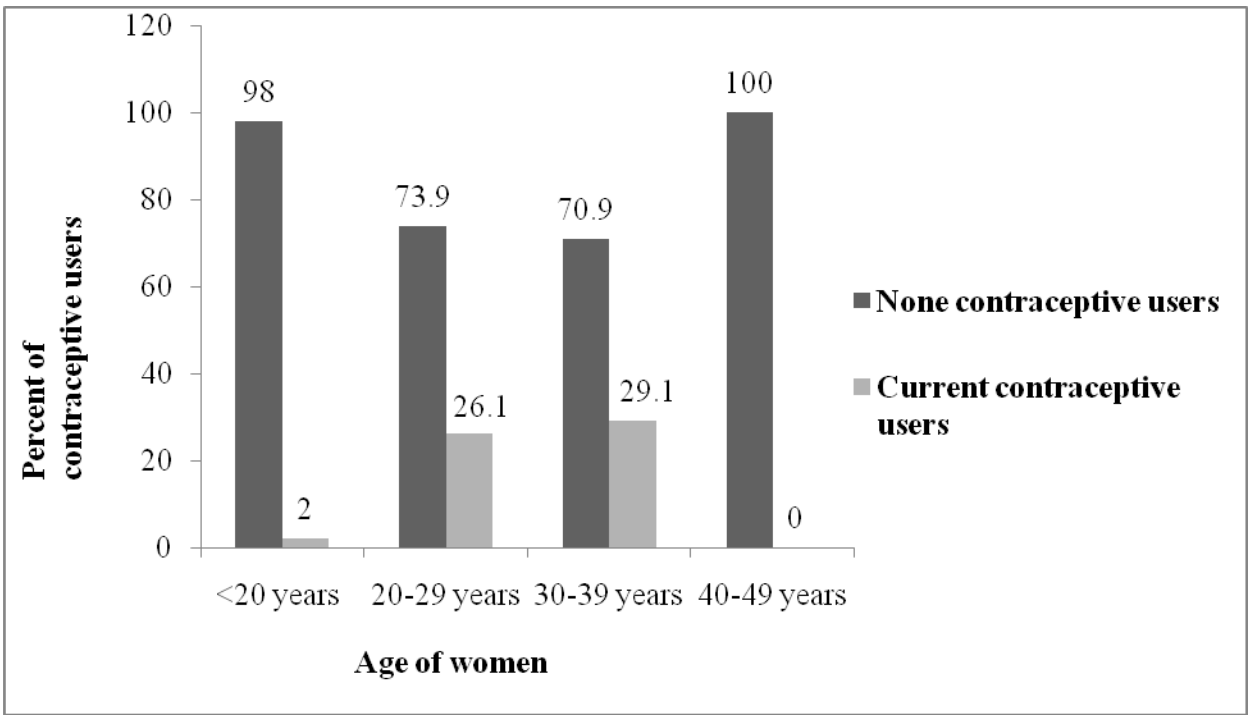

Figure 5: Distribution of current modern contraceptive use among married women disaggregated by age, Sheder refugee camp, Somali region, eastern Ethiopia, May 2011.

Maternal and paternal education

Proportions of current users were found increasing across educational levels of women. Prevalence of current users increases from 13(5.3%) in women with no education to 32(45.1%) among mothers with primary education and to 11(84.6%) among women with secondary or higher education (Fig 5). Similarly, proportion of current users among women whose husband's with primary education and secondary or higher education was found by 19.3% and by 33. 5% higher respectively compared with no education (Table 3).

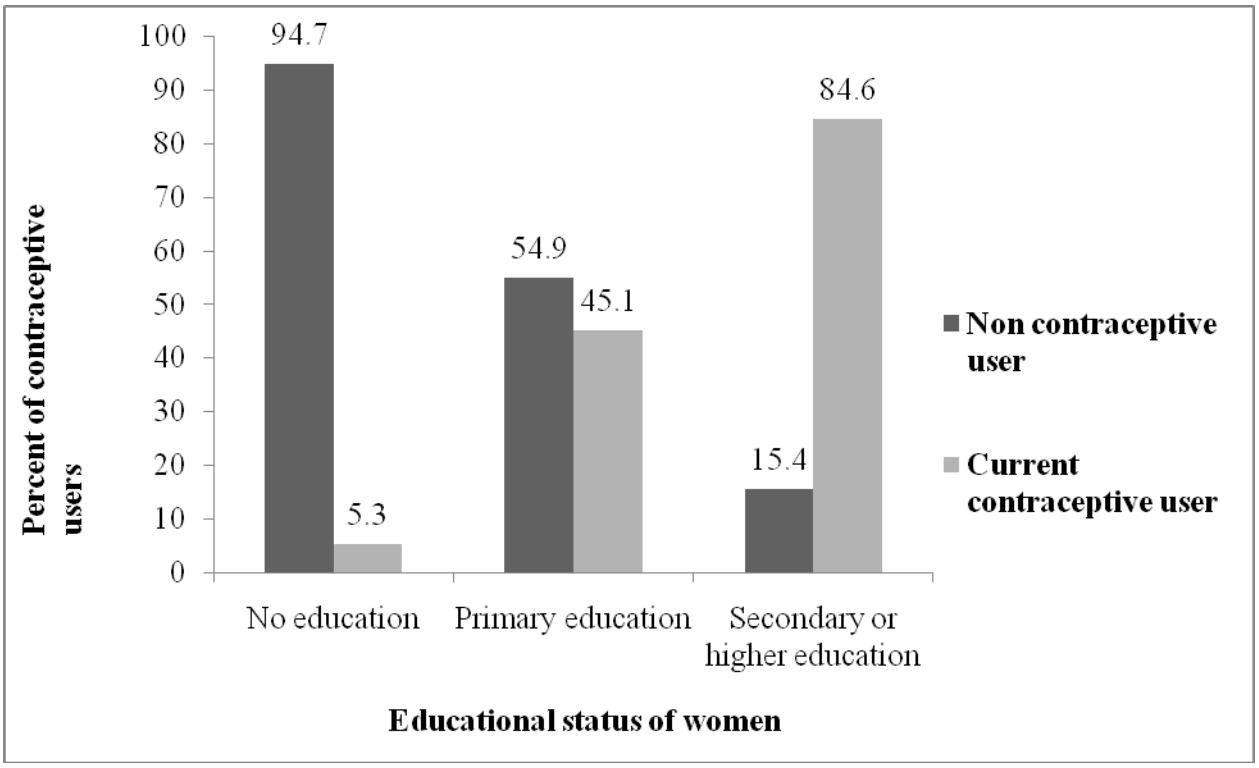

Figure 6: Distribution of current contraceptive users by their educational status, Sheder refugee camp, Somali region, eastern Ethiopia, May 2011.

Maternal and partner's occupation

Proportion of current users among women who work outside their home was found 39(49.4%) and 16(4.7%) among women who work at their home or housewives. By their partner's occupation, proportion of current users among women whose husbands employed was found 28.6% and 17.5% among women whose husbands have no employment (28.6% Vs 17.5%) (Table3).

Women's fertility history

Proportion of current users was found higher or increasing from 9 (4.5%) among women with no live children to 26 (31.7%) among women with 3 to 4 live children and then dropped to 20 (18.7%) among women with 5 and above live children (Fig 6). The proportion of current users is slightly higher among women who do not desire to have more children 10 (18.2%) than those who desire to have more children 45(17.7%) or mothers who do not desire more children. Similarly, proportion of current users among women with no history of child death was found

higher by 15.3% among mothers with no history of child death than those who had had history of child death (19.1% Vs 3.8%). (Table3).

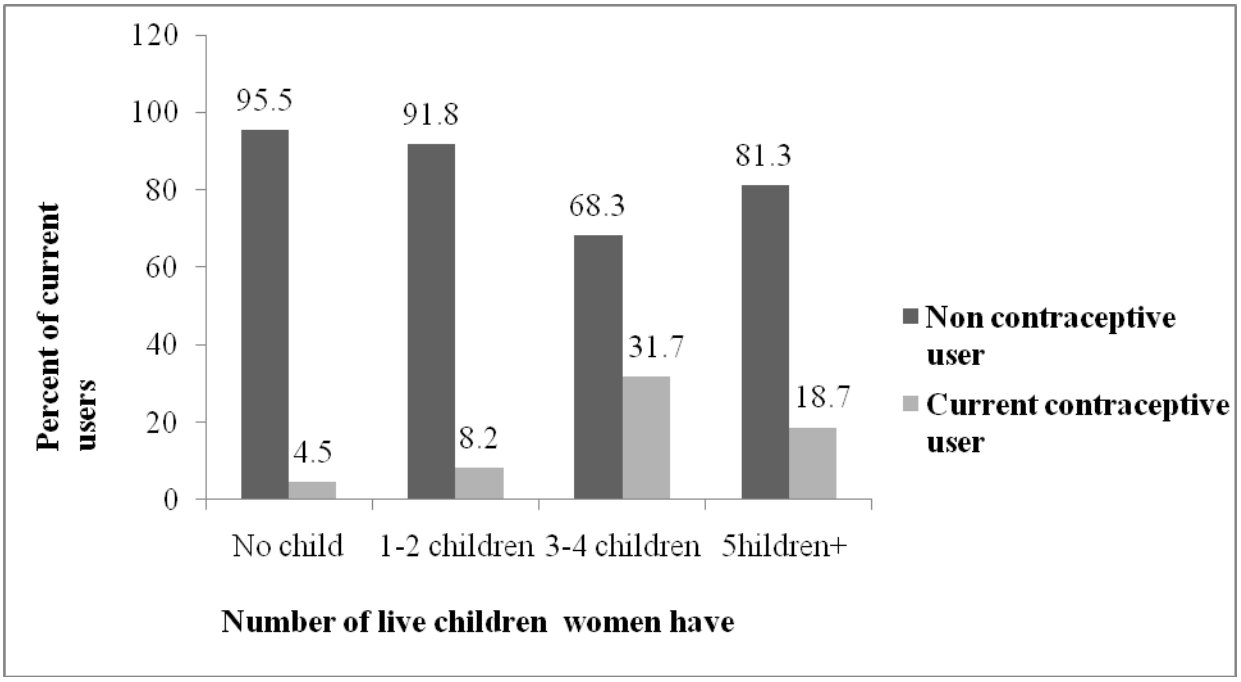

Figure 7: Distribution of current users by their number of live children, Sheder refugee camp, Somali region, eastern Ethiopia, May 2011

Exposure to family planning messages and mass media

Among the total respondents, greater than half, 170 (55%) of them were exposed to family planning messages either through radio or TV or magazines/ newsletter and 77 (24.9%) of them exposed to mass media. With regard to practice modern contraceptive, 50 (29.4%) of the participants' exposed to family planning messages were currently using modern contraceptives while only 5(3.6%) of women none exposed to these messages were using contraceptives. Moreover, current users were found 34 (44.2%) among women who were exposed to mass media and 21 (9.1%) among women who were not exposed.

Partner's discussion and women's decision making role on modern contraceptive use

Sixty three percent of participants reported that, they didn't discuss with their partners. Among the two groups, women who had had discussions on modern contraceptive use with their partners and tho not discussed, 44.7% difference in contraceptive use was observed. Proportion of current users among mothers who reported that they have had discussions on family planning issues was

found 53 (45.7%) and 2(1%) among women who do not discussed (45.7% Vs 1%). Concerning decision making role of women on modern contraceptive use, 143 (46.6%) of the participants reported that either they themselves decides or decides jointly with their partners. Of those who reported that they were involved in decision making, 53 (36.8%) of them were found currently practicing modern contraceptives while it was 2 (1.2%) to those women who were not involved in decision making on modern contraceptive use.

Attitude of women and husband towards modern contraceptive use

Among the total study participants, 121 (39.2%) of them were found infavour of modern contraceptives use or approved the use of modern contraceptives by couples while more than half of them 165 (53.4%) disapproved modern contraceptives use by couples. Concerning husband's approval of modern contraceptive methods use, 118 (38.2%) of the study participants do not know their husband's approval, 93 (30.1%) of participants reported that their husbands approve contraceptive use and the rest 98 (31.7%) reported their husbands disapprove the use of modern contraceptive methods by couples.

Perception related to modern contraceptive use

Twenty one percent of the study participants, 65 (21%) perceived that practicing of modern contraceptives is allowed by their religion or their religious leaders do not approve practicing modern contraceptives and 72 (23.3%) of study participants perceive that it is not culturally acceptable. Fifty eight percent of women who reported that it is culturally acceptable in their community and 43(66.2%) of study participants who perceived that their religion or religious leaders approve the practice of modern contraceptives were using modern contraceptives while only 10(5.1%) of women who reported that not acceptable and 11(5.6%) who reported their religion do not approve were using modern contraceptives (Table 4). One of the two religious leaders of Sheder refugee community (58 years old) from in-depth interview said *"….In fact children are the gift of God and our religion encourages having many children but it is not against child spacing. Our religion does not say stop getting children, but instead says there must be time between consecutive births so the first can grow enough. Many Somalis believes that it is against religion or religion do not allow to use modern contraceptive methods, because people do not understand very well what religion says and they think that religion do not allow,*

but that does not exist that means it is false". But the other religious leader (65 years old) of that community we interviewed said like …*"No, it is not need to stop to produce child but Allah said in Holy Koran, breast feed your child at least 2 years and that is comparative to injection and pills"*.

Factors associated with modern contraceptive use

From socio demographic and reproductive history related variables like age of the woman between 25-34 years, compared to women less than 25 years, maternal education with primary and above education compared to women with no education, paternal education with primary and secondary or above education compared to partners with no education, paternal education women who works outside their home compare to housewives, urban residence, live number of children with 3-4 and 5+ children compared to women with None - 2 live children and women's ideal number of children less than 6 compared to mothers whose ideal number of children is 6 and above were found statistically significant in the bivariate analysis (Table 2).

Table 2: Bivariate logistic regression result of contraceptive use by background and other selected variables, Sheder refugee camp, Somali region, eastern Ethiopia, May 2011.

Variables	Contraceptive use		Crude OR (95% CI)
	Yes, N (%)	No, N (%)	
Residence of women			
Rural	4(7.7)	48(92.3)	1.00
Urban	51(19.8)	206(80.2)	2.97(1.02, 8.62)
Age of women			
< 25 years	9(9.4)	87(90.6%)	1.00
25-34 years	37 (30.6)	84(69.4)	4.258(1.937, 9.361)
35 and above years	9 (9.8)	83(90.2)	1.048 (0.397, 2.770)
Maternal education			
No education	12(5.3)	213(94.7)	1.00
Primary and above	43(51.3)	41(49.7)	18.616(9.044, 38.319)
Paternal education			

No education	153(95)	8(5)	1.00
Primary education	82(73.2)	30(26.8)	7.00(3.07, 15.96),
Secondary or higher	19(52.8)	17(47.2)	17.11(6.51, 44.97)
Maternal occupation			
Housewife	16(7)	214(93)	1.00
Works outside home	39(49.4)	40(50.6)	13.04(6.66, 25.55)
Number of live children women have			
< 3 live children	9 (7.5)	111(92.5)	1.00
3-4 live children	26(31.7)	56(68.3)	5.73 (2.51, 13.04)
5+ live children	20(18.7)	87(81.3)	2.84(1.23, 6.54)
Women's desire for children			
No more child	10(18.2)	45(81.8)	1.00
Needs more child	45(17.7)	209(82.3)	0.97(0.45, 2.07)
Women's ideal number of children			
6 and above children	27(12.9)	182(87.1)	1.00
God knows	3(8.8)	31(91.2)	0.65(0.19, 2.28)
Less than 6 children	25(37.9)	41(62.1)	4.11(2.17, 7.80)
Women's history of child death			
No	54(19.1)	229(80.9)	1.00
Yes	1(3.8)	25(96.2)	5.9(0.78, 44.47)

In bivariate logistic regression analysis, women who were visited by family planning workers, women who were exposed to family planning messages in the last 6 months, mothers who were exposed to mass media, husband's approval of modern methods use compared to those whose husbands disapprove, women who were involved in decision making regarding modern contraceptive methods, women who have had recent discussions with their partner, women infavour of family planning, perceived approval of religion or religious leaders and perceived approval of women's culture show significant association with women's modern methods use in the bivariate analysis part whereas, women's history of child death, paternal occupation and

women's desire for more children showed no significant association with modern contraceptive use.(Table 3)

Table 3: Bivariate logistic regression result of contraceptive use by selected explanatory variables, Sheder refugee camp, Somali region, eastern Ethiopia, May 2011

Variables	Contraceptive use		Crude OR (95% CI)
	Yes N (%)	No N (%)	
Women's visit status by FP workers			
Not visited	4 (5.9)	64 (94.1)	1.00
Visited	51 (21.2)	190 (78.8)	4.3(1.49, 12.35)
Exposure to FP messages			
Not exposed	5 (3.6)	134 (96.4)	1.00
Exposed	50 (29.4)	120 (70.6)	11.17(4.31, 28.92)
Media exposure			
Not exposed	21 (9.1)	211 (91.4)	1.00
Exposed	34 (44.2)	43 (55.8)	7.95(4.21, 14.99)
Decision making role of women on FP			
Not involved	2(1.2)	163 (98.9)	1.00
Involved	53(36.8)	91(64.2)	47.47(11.3, 199.33)
Partners discussion on FP issues			
Not discussed	2(1)	191 (99)	1.00
Discussed	53(45.7)	63 (54.3)	80.34(19.03, 339.18)
Women's approval of modern contraceptive use by couples			
Disapprove	2 (1.2)	163 (98.8)	1.00
Don't know	1 (4.3)	22 (95.7)	3.71(0.32, 42.56)
Approve	52 (43)	69 (57)	61.42(14.55, 259.26)
Husband's approval of modern contraceptive use by couples			
Disapprove	2(2)	96 (98)	1.00
Approve	52(55.9)	41(45.1)	60.88(14.15, 261.84)

Don’t know	1(0.8)	117(99.2)	0.47(0.04, 4.59)
Perceived religious leaders approval of MC use			
Disapprove	11(5.6)	187(94.4)	1.00
Approve	43 (66.2)	22 (33.8)	33.23(14.99, 73.66)
Don’t know	1(2.2)	44 (97.8)	0.38(0.05, 3)
Perceived cultural acceptability of modern contraceptive use			
Disapprove	10 (5.1)	185 (94.9)	1.00
Approve	42 (58.3)	30 (41.7)	25.9(11.75, 57.08)
Don’t know	3 (7.1)	39 (92.9)	1.42(0.37, 5.41)

Determinants of modern contraceptive use

After ascertaining the existence of association between the explanatory variables and the dependent variable, all independent variables which showed associations with the dependent variable during bivariate analysis were fitted to multiple logistic regression model to see their independent effect on modern contraceptive use.

Variables like women’s education, number of live children a woman have, age of the mother, women’s involvement indecision making on modern contraceptives use, partner’s discussion of FP in the last 12 months, work status of women and approval of modern contraceptive practices by couples of husband or partner show strong association with modern contraceptive use in the stepwise backward multiple logistic regression analysis.

Women who attended formal education were 6.76 times more likely [AOR = 6.76, 95% CI: (2.11, 21.59)] to use modern contraceptives than women who did not. Women who worked outside their home were 5.48 times more likely [AOR = 5.48, 95% CI: (1.68, 17.89)] to use modern contraceptives than those housewives. The odds of being exposed to recent discussions with their partners were 22.93 times [AOR=22.93, 95% CI: (3.63, 44.82)] to use modern methods than those who didn’t discuss. Similarly women who reported that they were involved in decision making on FP use were more likely [AOR=11, 95% CI: (1.57, 36.96)] to use modern

methods than women who were not involved in decision making of FP use. Additionally, women whose husband's approved modern contraceptive use by couples were more likely [AOR=10, 95% CI: (1.82, 63)] to use modern methods than women whose husbands disapprove modern FP use. Women who had live number of children 3-4 were 10.93 times more likely [AOR =10.93, 95% CI: (2.38, 50.15)] to use modern contraceptives than with 0-2 live children (Table 4).

Table 4: Multivariate logistic regression result of modern contraceptive use with some important explanatory variables in Sheder refugee camp, Somali region, eastern Ethiopia, May 2011

Predictors	Contraception use		Crude OR (95% CI)	Adjusted OR(95% C.I)
	Yes	No		
	N(%)	N (%)		
Women's decision making role on FP				
Not involved	2(1.2)	63(98.9)	1.00	1.00
Involved	53(36.8)	91(64.2)	47.47(11.3, 199.33)	11(1.57, 36.96)*
Number of live children				
< 3 children	9(7.5)	111(92.5)	1.00	1.00
3-4 children	26(31.7)	56(68.3)	5.73(2.51, 13.04)	10.93(2.38, 50.15) **
5+ children	20(18.7)	87(81.3)	2.84(1.23, 6.54)*	8.72(2, 38.08) **
Partner's discussion on FP				
Not discussed	2(1)	191(99)	1.00	1.00
Discussed	53(45.7)	63(54.3)	80.34(19.03, 339.18)	22.93(3.63, 44.82) **
Husband's approval of modern contraceptive use				
Disapprove	2(2)	96(98)	1.00	1.00
Approve	52(55.9)	41(45.1)	60.88(14.15, 261.84)	10.7(1.82, 16.3) **
Don't know	1(0.8)	117(99.2)	0.47(0.04, 4.59)	0.78(0.03, 18.87)

Work status of women				
Housewife	16(7)	214(93)	1.00	1.00
Works outside home	39(49.4)	40(50.6)	13.04(6.66, 25.55)**	5.48(1.68, 17.89) **
Maternal education				
Illiterate	12(5.3)	213(94.9)	1.00	1.00
Primary and above	43(51.2)	41(48.8)	18.62(9.04, 38.32)**	6.76(2.11, 21.59) **

* Statistically significant at $p<0.05$ after adjusted for other variables

** Statistically significant at $p<0.01$ after adjusted for other variables

Chapter 6 Discussion

In this study, the magnitude and factors associated with the practice of modern contraceptives among married refugee women in Sheder refugee camp were identified. Thus, Ninety two percent of study subjects in this study area knew at least one modern contraceptive method and eighty three percent of the respondents knew at least one source where to access these methods. However, high awareness of women about modern contraceptive methods and their sources and the observed proportion of women's approval of modern family planning didn't correspond with the magnitude of contraceptive use in this study (17.8%). This implies knowledge and approval of family planning by women does not necessarily lead to practice. This finding is almost similar with finding obtained from study conducted in Uganda, Kyaka refugee camp [26] in which the contraceptive prevalence was 18.2% but low compared to studies conducted in Finland among Somalian married refugee women, 27% [40] and among Sierra Leonean and Liberian refugees living in Guinea, 26% [10], higher compared to findings obtained from studies conducted in Angola, 2.5% and from DHS report of contraceptive use among Somalian married women, 1% [6, 28]. This difference in contraceptive use between this study and the other studies might be due to socio cultural difference and service related factors like access to mix of choices influencing on modern contraceptive use. The possible explanation why the practice is low might also be explained by the influence of their culture and religion on family planning practice.

Pertaining to practice of modern contraceptives of women by educational status, our finding showed that, women with formal education were around 7 times more likely to use [AOR = 6.76, 95% CI: (2.11, 21.59)] contraceptives than women who had no education. Possible explanation or reason for the high rate of using modern family planning methods by women with formal education in this study may have been a result of the women's economic independence; less likely to be influenced with social value judgments, such as being independent on their husbands for decision-making, the effects of religion and women's value for many children may be changed when attend higher education. This implies, educating women helps in solving many of the barriers for women to practice modern methods. This finding of our study is consistent with many previous studies conducted in refugee camp settings and local community in which their

findings indicated that proportion of users were found significantly higher among women with primary and secondary or higher education [23, 26].

A cross sectional study conducted in Iran in 2010 revealed that women who were employed were found significantly higher in modern contraceptive use [36]. Similarly in this study, though women who were not employed but working outside their home were included, it was found that, women who work outside their home were 5.48 times more likely to use modern contraceptives [AOR = 5.48, 95%CI: (1.68, 17.89)] than those who are housewives. This difference in contraceptive use between women who works outside their home and house might be due to their economic freedom to decide or its indirect effect on women's approval and knowledge of modern methods.

Result obtained from study conducted in Mali showed that approval of family planning by women was found strongly associated with modern contraceptive use [30]. In this study, proportion of current users among women who approved family planning use by couples was found by 41.8% higher (43 % Vs 1.2%) compared to women who disapproved family planning use by couples and was significant in the bivariate analysis. Different from the above study but similar with findings obtained from studies conducted in Guinea and Gaza that insignificant difference was observed in contraceptive use between those who approved and disapproved modern contraceptive use [10, 23]. This difference might be due to religious and cultural differences between these studies which may contribute to higher resistance to use modern methods despite women's approval of family planning use. Or it might also be due to because proportion of women in favor of family planning was higher in the study in Mali in which 61% of women were infamous of family planning.

In the study conducted in Gaza, it was found that women whose husbands approved or infamous of family planning were found significantly more likely in using modern methods than those women whose husbands disapprove family planning [23]. Similarly, this finding revealed that women whose husbands approve family planning were found higher in using modern methods than those whose husbands disapprove [AOR = 10.7, 95%CI: (1.82, 63)]. This implies the risk of not using contraceptives is more likely higher among mothers whose husbands are against family planning which indicate that husband's opposition is one of the barriers for women's contraceptive practice in this study area. For example, proportion of users among mothers whose

husband's approve family planning is by 12.9% higher compared to mothers who approve family planning (55.9% Vs 43%). The qualitative result from FGD supports this that around 70% of the married men FGD discussants reported that they oppose it. One male 41 years old FGD discussant said like this… *"I don't want to encourage my wife to use modern methods, because I need more children, it is our God's will to have many children, I also believe that it is produced to reduce the increase of Muslim population, so I will not encourage my wife to use contraceptives"*.

Previous studies conducted in different countries indicated that, women's exposure to family planning messages was found strongly associated with modern family planning use [10, 29, 32]. In these studies, it was found that women who were exposed to family planning messages were more likely to practice modern contraceptives than those not exposed. In this study, proportion of current users among women who were exposed to family planning was 29.4% while only 3.6% of women who were not exposed to these messages were using modern family planning methods. Though the proportion of current users is higher among the exposed mothers and it was significant in the bivariate analysis part, it was not found significant in the multivariate analysis part which is different from the above findings [10, 29, 32]. This difference might be due to cultural and religion difference which may contribute to this difference.

Women's discussion with their partners on family planning was found among the determinants of modern contraceptive use of women in many previous studies [30-32]**.** Results of these studies indicated that, women who had had recent discussions with their partners were significantly more likely to practice modern contraceptives than those who reported they were not discussed. This finding is in line with our finding in which the chance of using contraceptives was found by 44.7% higher among mothers who discussed than not discussed (45.7% Vs 1%) which was statistically significant [AOR 95%CI: (3.63, 44.82)]. This observed difference between exposed and not exposed in contraceptive use might be due to discussion among partners may help in knowing partners attitude with regard family planning use and approval of family planning by both partners, hence influences contraceptive practice [33].

A study conducted among Afghan women in Kabul, 2004, it was found that, the odds of using contraceptive methods was found significantly higher among women who reported that they were involved in decision making on family planning with their partners compared to those who

did not involved in decision making [25]. This finding is in line in this study in which women who reported that they were involved in decision making about contraceptive use were more likely to use contraceptives than their counterparts. The difference in contraceptive use in this study between women who involved in decision making and not involved might be due to; women who can decide to use family planning may use it with regardless of husband's opposition. With regard to regard to live children a woman has and contraceptive use by women in this study, we found that women who have live children of 3 to 4 [AOR = 10.16, 95% CI: (2.38, 43.32)] was found significantly more likely in using modern contraceptives compared to women with None to 2 live children. The observed difference in contraceptive use in this study across the categories of live children women have might be due to its effect on modern methods and its source knowledge and women's approval of modern methods use [29]. This finding is supported by studies conducted in Kyaka refugee camp and Gaza in which women's modern contraceptive use was found to be influenced by the number of live children a women have [23, 26].

In this study, women's desire for no more child/children was not found associated with modern family planning use .This implies, women's desire to limit child birth does not necessarily make women to practice modern methods. This finding is inconsistent with finding obtained from study conducted in Kabul in which women's desire for no more children was found strongly associated with contraceptive use [25]. This difference might be due to socio cultural influences or differences influencing their practice of FP despite they want to limit their children. The other possible explanation for this difference might be due to; more than half of those women in our study who reported desire no more children were found in the age group 40-49 years then may influence their approval of FP use.

Limitation of the study

Due to cross sectional nature of the study, temporal relationships of the outcome variable and the predictor variables cannot be established. In addition, service related factors like quality of family planning service and participants attitude towards family planning providers that may contribute to difference in contraceptive use were not included in this study. There are also unusual large Odd Ratios and wide confidence interval observed in this study. In addition there are also some variables that were not significantly associated with the outcome of interest which might affect the precision. This might be due the sample is not adequate to justify the relationships between the explanatory variables and outcome of interest and the observed counts also so small in some of the variables let the Odd Ratios so large and so wide. Therefore any interpretation of this finding shall take into account the degree of precision.

Chapter 7 Conclusion and recommendation

Conclusion

Most of women in this study area knew at least one modern family planning method that women or men use to delay or limit unwanted pregnancy and at least one source of these modern family planning methods. Large proportion of study participants were found not practicing modern family planning or disapproved the practice of modern family planning which indicate a major challenge in increasing the prevalence of modern contraceptive use. Desire for more children, husband's opposition, religious opposition and lack of information on modern contraceptives were the main reasons reported by noe contraceptive users in this study.

Predictor variables like women's formal education, women's involvement in decisions on family planning issues, women's recent discussion with their partners, husband's approval of modern family planning use, work status of women (work outside her home and having number of children 3 to 4 and above were found strongly associated with modern contraceptive use in this particular study area.

Recommendations

To ARRA health service providers, Shedder

- ☞ The health service facility should involve religious leaders community leaders and other influential members of the refugee community in mobilizing the community for family planning utilization
- ☞ FP service providers should encourage partners' discussion on modern FP by visiting the community home to home and giving awareness creating activities.

- ☞ Husband's approval is significantly associated with contraceptive use. Both the community health agents and FP service providers at the health center should involve men in providing contraceptives and should create awareness about modern FP to the partners.

To NGOs working around refugees

- **NGOs working for refugees** (UNHCR, **DICAC** and other NGOs which provide financial aid and run educational program to the refuge community) need to promote and strengthen IEC/BCC programs in spheres of modern FP programs and women empowerment shall be more encouraged through autonomy, education and employment or other means of income generating activities for women's economic empowerment so that improving the decision making role of women to increase the proportion of family planning users

To researchers

- Any interested bodies can use further analytic research design incorporating the role of men on modern contraceptive use and other variables which were not included in this study.

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Annexes

Annex 1. Questionnaire: English version

Respondent information sheet for house to house Survey on determinants of modern contraceptive use among married women in the reproductive age group in Sheder refugee camp, Somali region, Ethiopia, 2011

Informed Consent

Dear Sir/madam;

Hello, my name is _____ I am working in a research team of Jimma University. This questionnaire is prepared to conduct a study on Determinants of modern family planning use among women in the reproductive age group in this area. You are selected and included in the study as part of the sample population to complete the questionnaire designed by the researcher . Thus this interview is prepared for this purpose to get appropriate information on the study we are conducting. The information that I will obtain using this interview will be used only for research purpose and none of your answers will be available to anyone. Your response will be kept confidential. For this purpose your name will not be written here and there will be no way of linking your individual responses to the final result of the study findings. The study has no risk to you and your family members except mild time consuming .Therefore I politely request your cooperation to participate in this interview. You do have the right not to respond at all or to withdraw in the meantime, but your input has great value for the success of my objective

Do you agree to participate in this study? Yes, ---------- continue No----------, thank you!

Name of the data collector_____ Sign_____Date _____

Questionnaire code_____

Enumerator's ID number _____ House number_____.

Part I - socio Demographic and Economic characteristics of respondents			
N_o	**Questions**	**Response category code**	**Skip to**
101	How long did you live/stay here? **Enter response in month and year**	_____mm/yy	
102	Just before you moved here, did you live in Urban or rural?	Urban . . . . . .……1 Rural . . . . . ……......2	
103	Where do you come from (country of origin)? **Enter response**	_____	
104	What is your age? **Enter age in years**	_____	
105	What is your educational level?	Illiterate (cannot read and write)...…..……1 Primary (grade 1-6)…….2 Junior (7&8)…….……...3 Secondary (9-12) and above….……..4	Q109
106	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	Almost every day…….1 At least once a week…….2 Less than once a week……..3 Not at all……..….4	
107	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	Almost every day…….1 At least once a week…….2 Less than once a week……..3 Not at all……..….4	
108	Do you watch TV almost every day, at least once a week, less than once a week or not at all?	Almost every day…….1 At least once a week…….2 Less than once a week……..3 Not at all……..….4	
109	What is your husband's educational level?	Illiterate (cannot read and write)...…..……1 Primary (grade 1-6)…….2 Junior (7&8)…….……...3 Secondary (9-12) and above….……..4	

		Don't know …….8	
110	What is your ethnicity? _____	_____	
111	What is your religion?	Orthodox…….....1 Catholic . . . . . ……2 Protestant . . . . ……3 Muslim . . . . . …….....4 Traditional . . . . ……..5 Others_____ (specify)	
112	What is your family size?	Number Male ____ Female ____ Total ____	
113	For how long are you married? **Enter No in years/months**	_____	
114	What is your main occupation?	Employed(GO/NGO) ……..1 House wife……2 Student……..…3 Self employee/merchant……..4 Daily worker ……...5 Others_____ (specify)	
115	What is your source of income? **Enter response**	_____	
116	What is your monthly income in birr? **Enter response in birr**	_____	
117	Do you have Television and/or Radio	TV Yes……..1 No…….….2 Radio	

		Yes……..1 No…….…….2	
119	What is your husband's occupation?	Employee(GO/NGO) …….1 Student…….…...2 Self employee/merchant……..…3 Daily worker …….…..4 Others_____ (specify)	
Part II Reproductive history related questions			
201	Have you had any pregnancy before?	Yes……1 No…….2 →	Q213
202	If yes to ques.201 how many pregnancies have you had? **Enter No**	_____	
203	Were all pregnancies wanted?	Yes……1 No…….2	
204	What was your age at first pregnancy? **Enter no age in years**	_____ Don't know……..8	
205	How many live births have you had? Enter no	Number Male _____ Female _____	
206	How many live children do you have now? **Enter response**	_____	
207	Have you ever-experienced abortion?	Yes ……1 No……..2 → No response……..99	Q209
208	How many times? **Enter number**	_____	
209	Did you have stillbirth?	Yes……1	

		No…….2 →	Q211
210	If yes how many times?	_____	
211	Did you have any child died after birth?	Yes……1 No…….2 →	 Q213
212	If yes, how many? **Enter number**	_____	
213	Would you like to have (a/another) child, or would you prefer not to have any more children?	Have (a/another) child ……..1 No more/none ……...2 → Says she can't get pregnant… ……..3 → Undecided…….4 → Don't know …… ……....8	 Q216 Q216 Q216
214	If yes, how many? **Enter number**	Male _____ Female _____ Total _____	
215	Why do you want more children?	Have only few children……..……1 Need more sons……..….2 Child/children died……...…3 Others_____ (specify)	
216	How many children do you want to have in your life time? **Enter number**	Number Male _____ Female _____	
217	How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?	Number Boys _____ Girls _____ Either _____	
218	How many children do your husband likes to have throughout life? **Enter No**	Number_____.....1 → Don't know…….8	Q220
219	Do you think your husband/partner wants the same number of children	Same number . . . . . ….. . . .. 1 More children . . . . . ……. 2	

	that you want, or does he want more or fewer than you want?	Fewer children . . . . . ……... . . . . 3 Don't know . . . . . ….. . . . . 8 →	Q221
220	Does your belief/religion influence the no of your children?	Yes……1 No……2 →	Q301
		I don't know……..8 →	Q301
221	If yes to the above question, how does it do? **Circle all applicable answers/ Multiple response is possible** (Don't read responses)	Our God needs many children……..1 Ancestors happy with children…….2 childlessness is a curse…….3 Others_____ (specify)	
Part III - Modern contraception knowledge and exposure to family planning messages			
301	Have you heard of any modern contraceptive methods that women and men can use to delay or avoid pregnancy?	Yes……....1 No…….……2 →	Q309
302	From where/whom did you first get the information? **Enter the response**	_____	
303	What type of methods do you know? **Circle 1 for all applicable answers**	Method Yes No Pills 1 2 IUDs 1 2 Injectables 1 2 Implants/Norplant 1 2 Spermicides 1 2 Condoms 1 2 Female sterilization 1 2 Male sterilization 1 2	
304	Why do women use modern contraceptives? **Circle all applicable answers/**	Prevention of unwanted pregnancy/ to limit family size……...…1 Child spacing……...……2 Medication…….....3	

	Multiple response is possible(Don't read the responses)	Prevention of STI/HIV…….....4 I don't know……..……...…8 Others_____ (specify)	
305	Do you know of a place where you can obtain a method of family planning?	Yes …….1 No…….……..2 →	Q307
306	Where is that? Name of place? **Enter response**	_____	
307	Can a breastfeeding mother get pregnant if she is not using contraception?	Yes ……1 No…….…….2	
308	What do you tell us regarding communication about MC with your husband in the last 12 months?	Never …….....1 Once……..2 Twice…….3 More often…….4	
309	In the last few months (6 months) have you heard about family planning : On the radio? On the television? In a newspaper or magazine? Others?	Yes No Radio 1 2 TV 1 2 Newspapers or magazine 1 2 Others _____ (Specify)	
310	In the last 12 months, were you visited by a community based health agent/distributor who talked to you about family planning?	Yes ……1 No……..2	
311	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	Yes ……1 No……..2	
312	Did any staff member at the health facility speak to you about family	Yes ……1 No……..2	

	planning methods?			
Part IV - Attitudes and perceptions towards modern contraceptives: Read all the attitude perception related questions listed below and circle only one plausible response from the three alternative response categories				
401	Having too many children will help to improve the income of the family?	Yes(1)	No(2)	I do not know (3)
402	Having too many children will guarantee generational continuity?			
403	High infant/child mortality should be compensated by too much birth?			
404	It is a sin to practice MC methods? (not religiously allowed)			
405	Men should share the responsibility of family planning use?			
406	Children will have better opportunities for education if their parents practice family planning			
407	family planning will help improve one's standard of living			
408	family planning helps a mother to regain strength before her next baby			
409	Child spacing helps protect the health of children and mothers			
410	A woman who has too many children looks tired and wear out			
411	Wives who practice family planning will be abandoned by their husbands			
412	A couple that practice family planning will have conflict in their marriage			
413	Contraceptive use may cause infertility in a woman			

414	Do you think it right for a married couple to decide how many children to have according to their wishes and economic situation?			
415	Are you in favor of family planning?			
416	Is your husband in favor of family planning?			
417	Do you think there is a need for more information on contraceptive methods?			
418	Do you believe that TV and radio are good means to provide information regarding family planning to the population?			
419	Are you planning to use any contraceptive methods in the future?			
420	Do you discuss with your husband the choice of a contraceptive method?			
421	Are you in favor of a workshop about family planning for women and men together?			
422	Since MC has side effects it will be dangerous to a mother?			

Part V - Practice of modern contraceptives			
501	Are you currently doing something or using any method to delay or avoid getting pregnant?	Yes……1 No……..2 →	Q506
502	If you are currently using a modern contraceptive method, for what purpose?	Birth spacing……1 Limiting birth……..2 Others_____ (specify)	
503	What is the method you are using now? **Enter the method**	_____	

504	Are you using the method you choose	Yes……1 → No……..……2	Q507
505	If no, what was the reason? **Enter the reason**	_____	
506	Why are you not using contraceptive? (for non users) **Circle all applicable answers/ Multiple response is possible** (Don't read the responses)	Desire for more children…….1 Health problem……...2 Religious reason…….3 Moral and cultural reason……..4 Lack of information about contraception……..5 family planning service not available…….6 Husband opposition……..7 Others_____ (specify)	
507	Is it culturally acceptable to practice MC in your community?	Yes……1 → No…….2 Don't know……..8 →	Q509 Q509
508	Do religious fathers approve MC use?	Yes……1 No…….2 Don't know……..8	
509	In your opinion, what is the most important reason/s for a woman not using MC methods? **Circle all applicable answers/ Multiple response is possible** (Don't read the responses)	Husband dominance…….1 For religious reason……..2 Sex preference……..3 Side effect of methods…….....4 Rumor……..5 Inaccessible…….....6 Don't know……..8 Others_____ (specify)	

510	Who usually makes decision about family planning in the family? **Circle only one plausible answer**	Jointly……1 Husband……2 Wife……...3 Others_____ (specify)	
511	The health center currently provides good quality family planning services?	Yes……1 No……2 Don't know……..8	

Approved by Supervisor:

Name _____

Signature_____

Date _____

Annex 2. Questionnaire: Somali version

Ogolaansho weydiisashada guri ka guri ee gu'aamiyaayaasha isticmaalaka qorsheyntga qoyska haweenka da'da taranka ku dhex jirta ee xerada qaxootiga ee qabri bayax, deegaanka soomalida, itoobiya

Numberka ogolaansho weydiisashada_____

Mudane iyo marwooyin;

Waxaan ahay arday Masters ka diyaariya jaamacdda Jimma. Qayb ka mid ah waxbarasahda waxaa la iga rajaynayaaa inaan ku sameeyo daraasada gu'aamiyaayaasha isticmaalaka qorsheyntga qoyska haweenka da'da taranka ku dhex jirta ee xerada qaxootiga ee qabri bayax. Warbixinta aan ka helo wareysigan kaliya waxaa loo isticmaalayaa ujeeedo daraasadeed, sidoo kale waxaan u baahanahay in aan idiin sheego in la xafidi doono waana tayadayda ugu muhiimsan. Daraasadu ma lahan wax khatar ah adiha iyo xubnaha qoyskiinuba marka laga reebo wakhtiga yare ay .Sidaa daraadeed waxaan idinka codsanayaa wada shaqeyntiina si aad uga qayb qaadataan waraysigan. Waxaad xaq u leedahay inaad jawaabto ama aanad ka jawaabinba ama aad iskaga tagi karaba. Laakiin in aad ka qayb qaadataan waxa ay qiimo weyn ugu fadhidaa guusha u jeedadan.

Miyaad ogoshahay in aad ka qayb qaadato daraasadan? Haa, ----------ka soco
May----------, waad mahadsantahay!

Magaca xog uririyaha_____saxeexca_____ Taariikhda ----------

Quetionaire code_____

Tiriyaha aqoonsi nambarkiisa (ID number) _____ House number_____

Qaybta I- Su'aalaha dhaqan dhaqaale			
N_o	**Su'aalaha**	**Qay baha jawaabaha Code**	**Kubood**
101	Wakhti intee le'eg yaald joogtay halkan? Ku qor jawaabta bilo ama sanooyin	_____bilood/sano	
102	Intaanad halkan iman xageed ku noolayd magaalo mise miyi	Magaalo . . . . . .……..1 Miyi . . . . . ……..…….....2	
103	Meeshee yaad ka timid? (Wadankaaga aad ku noolayd)? **Halkan kuuqor jawaabta**	_____	
104	Waa imisa da'daadu? **Ku qorf da'da inta sano**	_____	
105	Waa maxay heerkaaga waxbarasho?	Waxba ma baran(**qoraal iyo akhris aan garanayn**)……....1 → Q109 Dugsiga hoose (Fasalka 1-6)……....2 Dugsiga dhexe (7&8)..…….3 Dugsiga sare (9-12) iyo wixii ka sareeya….4	
106	Miyaad akhriday jaraa'id ama nuqula xayeysiiska ah inta badan maalin kasta, ama ugu yaraan hal mar todobaadkii, in ka yar hal mar todobaadkii, mise maba akhridid sida uu u dhanyahayba?	Inta badan maalin kasta……....1 Ugu yaraan hal mar todobaadkii..……...2 In ka yar hal mar todobaadkii…….....3 Maba daawadaba sida uu u dhanyahayba...4	
107	Miyaad dhageysataa raadiyooga inta badan maalin kasta, ugu yaraan hal mar todobaadkii, ka yar hal mar todobaadkii, mise maba dhagaysatid sida uu dhanyahayba?	Inta badan maalin kasta……....1 Ugu yaraan hal mar todobaadkii..……...2 In ka yar hal mar todobaadkii…….....3 Maba daawadaba sida uu u dhanyahayba...4	
108	Miyaad daawataa telefishanka inta badan maalin kasta, ugu yaraan hal mar todobaadkii, in ka yar hal mar todobaadkii, mise maba daawatidba sida uu dhanyahayba?	Inta badan maalin kasta……....1 Ugu yaraan hal mar todobaadkii..……...2 In ka yar hal mar todobaadkii…….....3 Maba daawadaba sida uu u dhanyahayba...4	

109	Waa maxay heerka aqoonta ee odaygaagu?	Waxba ma baran(**qoraal iyo akhris aan garanayn**)…….1 Dugsiga hoose (Fasalka 1-6)…….2 Dugsiga dhexe (7&8)..……..3 Dugsiga sare (9-12) iyo wixii ka sareeya….4 Ma garanayo …….8	
110	Waa maxay jinsigaagu?	_____	
111	Waa maxay diintaadu?	kiristiyaan…….....1 Catholic . . . . . ……..2 Beendee . . . . ……3 Muslim. . . . . …….....4 Diin dhaqameed. . . ……...5 Kuwo kale_____ (kala sheeg sheeg)	
112	Waa imisa tirada qoyskaagu?	Tiro Lab ____ Dhedig ____ Isku dar labdaba ____	
113	Intee in le'eg yaad xaas aad lahayd? Ku qor tirade bilo/sanadood	_____	
114	Waa maxy shaqadaadu?	Shaqaale(Dawlada/NGO) ……1 Shaqada guriga…….2 Arady…….....3 Shaqada aan waxayga ka shaqayso/ganacsi…….…..…4 Muruqmaal …….…..5 Kuwo kale_____ (kala sheeg sheeg)	
115	Halkee ayaad ka heshaa dakhligaaga?Ku qor jawaabtaada	_____	

116	Waa imisa dakhliga ku soo gala bil kasta Birr ahaan? **Ku qor jawaabta Birr ahaan**	_____	
117	Miyaad leedihiin Telefishan ama dhalo, sidoo kale miyaad leedihiin raadiyoo	Telefishan Haa……..1 May …….2 Raadiyoo Haa ……1 May……..…..2	
118	Waa maxay shaqada odaygaagu?	Shaqaale(Dawlada/NGO) ……1 Arady…….…....2 Shaqada aan waxayga ka shaqayso/ganacsi…….……..3 Muruqmaal ……...….4 Kuwa kale_____ (kala sheeg sheeg)	
Qaybta II – Su'aalo la xidhiidha taariikhda taranka			
201	Hada ka hor uur ma yeelatey?	Haa…….1 May……2 ⟶	Q213
202	Hadii ay Haa tahay su'aasha 8 aad imisa jeer yaad yeelatay uur? **Ku qor tirade**	_____	
203	Dhamaan intan jeer aad uurka yeelatay ma ahaayeen rabitaankaaga	Haa…….1 May……2	
204	Imisa ayey ahayd da'daadu xiligii kuugu horeysay uurka? **Ku qor tirade da'da sannado**	_____ Ma garanayo …….8	
205	Imisa ciyaal ah yaa nolol kuugu dhashay? **Ku qor tirade**	Tirada lab _____ Dheddig _____	
206	Imisa caruur ah oo nool ayaad imika leedahay? Ku qor tirda meesha horee	_____	

	banana		
207	Waligaa ma la kulantay ama ma kugu dhacday ilma iska soo xaadh (Abortion)?	Haa ……..…..1 May.……..2 →	Q209
208	ImiSub-saharan African jeer? **Ku qor tirade inta jeer**	_____	
209	Wali ilmo makaa shafeecay ama makaa noqday?	Haa……1 May……...2 →	Q211
210	Hadii ay Haa tahay imisa jeer? **Ku qor tirade inta jeer**	_____	
211	Wali ma umushay ama ma dhashay ilmo markuu dhashay dhintay ama geeriyooday ?	Haa……1 May……...2 →	Q213
212	Hadii ay Haa tahay, imisa jeer? **Ku qor tirada**	_____	
213	Miyaad jeceshahay inaad yeelato ama aad dhasho (kale) ilmo, mise waxaad door bidaa inaanad ciyaal kale oo badan inaanad dhalin?	Inaan dhalo ilmo kale ……1 Ma rabo kuwo kale…….2 → Waxay tidhi ma uuraysto… ……..3 → Maan gu'aansan/ ma garanayo uurna wan leeyahay.....4 →	Q216 Q216 Q216
214	Hadii ay Haa tahay, imisa jeer? **Ku qor tirada**	Lab ____ Dhedig ____ Isku dar labdaba ____	
215	Waa maxay sababta aad u rabtaa inaad dhasho ciyaal kale?	Inaan yeesho dhowr ciyaal ah oo kaliya……1 Waxaan u baahanahay wiilal badan……2 Ilmo/ciyaal yaa iga dhintay……..…3 Kuwo kale_____ (Kala sheeg sheeg)	
216	Imisa ciyaal ah yaad rabtaa ama aan	<u>Tirada</u>	

	doonaysaa inaad dhasho noloshaada? Ku qor tirade	Lab _____ Dhedig _____	
217	Imisa ka mid ah ciyaalkaaga yaad jeceshahay in ay noqdan wiilal ama noqdaan hablo, ama intee in le;eg yaanad danayn midka ay noqdaanba labadaba?	Tirada Wiilaal _____ Hablo _____ Labdaba midkood _____	
218	Imisa Ciyaal ah yuu ninkaagu ama odaygaagu jecelyahay in uu dhalo noloshiisa?	Ku qor tirada_____.....1 → Ma garanayo.....8	Q220
219	Miyaad jeceshahay in uu lamaanahaagu ama ninkaagu rabo in aad dhashaan inta ciyaal ah ee aad rabto inaad dhashaan, mise in kabadan intaad rabto mise in ka yar intaad rabto yaad jeceshahay in uu kula rabo?	Tiro isku mida . . . . . 1 Caruur ka badan tiisa . . . . . 2 In ka yar tiisa . . . . . 3 Ma garanayo . . . . . 8 →	Q221
220	Waxaad aaminsantahay ama diintaadu miyey saameyn ku leedahay tirade ciyaalkaaga?	Haa……1 May……...2 → Ma garanayo…….8 →	Q301 Q301
221	Hadii ay Haa tahay su'aasha kore side bay u saamaysaa? **Goobogali dhamaan jawaabaha saxda ah(Jawaabo badan waa suurtogal)** Do not read responses	Rabbigayo waxaa uu baahanyahay ciyaal badan ……...1 Awowyaasha yaa ku farxa ciyaalka……...2 Ciyaal la'aantu waa nacdal……..…...3 Kuwo kale_____ (kala sheeg sheeg)	
Qaybta III – Cilmiga ku saabsan dhalmo kala durkiyaha Part III - Modern contraception knowledge			
301	Miyaad garanaysaa wax habka casriga ah oo dumarka ama ragu isticmaali karaan si ay uurka u joojiyaan ama u kala	Haa……...1 May…….……..…2 →	Q309

	durkiyaan?		
302	Halkee iyo qofkee ayaad ka heshay markii hore warbixinta? **Ku qor jawaabta**	_____	
303	Noocyada qaabkee ah yaad taqaanaa? **Goobogali dhamaan jawaabaha saxda ah(Jawaabo badan waa suurtogal)** **Circle 1 for all applicable/ possible answers**	Qaabka ama nooca — Yes — No Kiniinka(Pills) 1 2 IUCDs 1 2 kuwa la isku turqo/mudo 1 2 Kuwa maqaarka (Implants/Norplant) 1 2 Kuwa shahwada dila (Spermicides) 1 2 Kandhamka(Condoms) 1 2 Qalitaanka xubnaha taranka ee haweynayda(Female sterilization) 1 2 Qalitaanka xubnaha taranka ee ninka(Male sterilization) 1 2	
304	Maxay dumarku u isticmaalaan dhalmo kala durkinta casriga ah? **Goobogali dhamaan jawaabaha saxda ah(Jawaabo badan waa suurtogal)**	Ka hortaga uurka aan la rabin /in la xadido baaxada qoyska……..……1 Kala durkinta ilmaha…….....……2 daaweeynta…….....3 ka difaacista xanuunada ku faafa galmada iyo aaydhiska……...4 Ma garanayo ……...…….8 kuwo kale _____ (kala sheeg sheeg)	
305	Miyaad garaneysaa meel aad ka heli karto noocyada qorsheynta qoyska?	Haa ……..…..1 May.……..2 → Q307	
306	Waa halkee meeshaasi? Magaca meesha? **Ku qor jawaabta**	_____	
307	Miyey uur qaadi kartaa hooyo naasnuujinaysa hadii ayna isticmaalaynin	Haa ……..…..1 May.……..2	

	dhalmo kala durkinta?		
308	Maxaad nooga sheegaysaa arinta ku saabsan wada xidhiidhka adiga iyo ninkaaga ee ku saabsan kala durkiyaha ciyaalka ee casriga? 12kii bilood ee ugu dambeeyey?	Waligay lamaan xidhiidhin…….....1 hal mar yaan la xidhiidhaa..……....2 laba jeer yaan xidhiidhaa.…….3 inta badan waan wada xidhiidhnaa…..…4	
309	Dhowrkii bilood ee la soo dhaafay waligaa miyaad ka maqashay wax ku saabsan qorsheynta qoyska dhawrkii bilood ee ugu dambeeyey (6 bilood): Raadiyooga? Telefishanka? Jaraa'idka ama nuqullada xayaysiiska ah? Kuwo kale?	<u>Haa</u> <u>May</u> Raadiyoo 1 2 Telefishan 1 2 Jaraa'idka ama nuqullada xayaysiiska ah 1 2 Kuwo kale_____ (kala sheeg sheeg)	
310	12 kii bilood ee ugu danbeysay, miyaad booqatey xubin/qaybiye caafimaad oo ku sal leh bulshada oo kaala hadlay wax ku saabsan qorshaynta qoyska?	Haa ……...1 May.……...2	
311	12 kii bilood ee ugu danbeysay, miyaad booqatey xarun caafimaad si aad uga hesho daryeel naftaada (ama ciyaalkaaga)?	Haa ……...1 May.……...2	
312	Xubin shaqaale ee xarumaha caafimaadka in uun miyuu kaala hadlay wax ku saabsan hababka ama noocyada qorsheynta qoyska?	Haa ……...1 May.……...2	

Qaybta IV - fikirka ku wajahan dhalmo kala durkiyaha casriga ah				
401	In la dhalo ciyaal badan waxay caawin doontaa in uu kobco ama bato dakhliga qoyska?	Haa(1)	May(2)	Ma garanayo (3)

402	In la dhalo ciyaal badan waxay keentaa oo ay dhidibada u aastaa hiddo socod?			
403	Sarreynta dhimashada ciyaalka waa in lagu badalaa meeshooda in aad loo dhalo ciyaal?			
404	Waa danbi in lagu dhaqmo noocyada dhalmo kala durkiyaha? (diin ahaan lama ogola)			
405	Nimanku waa in ay la wadaagaan mas'uuliyada isticmaalka qorsheynta qoyska?			
406	Hadii ay waalidku ku dhaqmaan qorsheynta qoyska, ciyaalku waxa ay u helaan waxbarashada fursad wanaagsan			
407	Qorsheynta qoysku waxa uu caawin doonaa kobcinta heerka nolosha ee qofka			
408	Qorshaynta qoysku waxa ay hooyada ka caawisaa in ay quwadu dib ugu soo noqoto inta ka horeysa ilmaheeda ku xiga			
409	Ilmo kala durkintu waxa ay ka caawisaa difaaca caafimaadka ciyaalka iyo hooyada			
410	Hooyada leh ciyaal sii badan waxay u muuqataa ama u eegatahay mid daallan ama diciif ah			
411	Dumarka la qabo ee ku dhaqma qorsheynta qoyska waxaa dayaca ama u diida nimankooda			
412	Lamaanaha ku dhaqma qorsheynta qoyska waxa ay is khilaafaan xilliga guurkooda			
413	Isticmaalka dhalmo kala durkiyaha waxa ay keeni kartaa madhalaysnimo ah dumarka			
414	Ma u malaynaysaa inay sax tahay in lamaanaha isguursada ay wada go; aamiyaan in ta caruur ah ee ay dhalayaan iyagoo eegaya rabitaankooda iyo xaaladooda dhaqaale?			
415	Adigu ma taageersan tahay isticmaalka qorshaynta qoyska?			

416	Odyagaagu ma taageersan yahay isticmaalka qorshaynta qoyska?			
417	Ma u malaynaysaa inay jirto baahi loo qabo in wax badan laga ogaado hababka kala durkinta dhalmada?			
418	Ma aaminsan tahay in TVga iyo Radiyogu ay yihiin siyaabaha ugu fiican ee bulshda lagu gaadhsiin karo macluumaadka qorshaynta qoyska?			
419	Ma kuu qorshysan tahay inaad isticmaasho hababka ka hortagista uur qaadista mustaqbalka?			
420	Ma kala sheekaysatay odaygaaga doorashada hababka ka hortagista uur qaadista?			
421	Ma taageersan tashay in tababar ku saabsan hababka ka hortagista uur qaadista loo qabto raga iyo dumarka oo wada jira?			
422	Maadaama uu hababka ka hortagista ama kala durkinta uurku ay waxyeelo keensankarto khatar ayey u tahay hooyada?			

Qaybta V - ku dhaqanka dhalmo kala durkiyaha casriga ah (Practice of modern contraceptives)			
501	Adigu imika ma qabanaysaa wax uun ama ma isticmaalaysaa hababka lagaga hortago ama lagu joojiyo uurka?	Haa……....1⟶ May…….……..…2	Q507
502	Hadii aad hadda isticmaalaysid noocyada dhalmo kale durkiyaha ee casriga ah, ujeedadee ayaad u isticmaashaa?	Dhalmo kala durkin…….……1 Xadidis dhalmada ah…….…..2 Kuwo kale_____ (kala sheeg sheeg)	
503	Waa maxay nooca aad hadda isticmaasho? **Ku qor nooca aad isticmaasho**	_____	
504	Miyaad isticmaashaa nooca aad dooratey?	Haa……....1⟶ May…….……..…2	Q507

505	Hadii ay may tahay, maxay ahayd sobobtu? **Ku qor sababta**	_____	
506	Sababta aanad u isticmaalayn dhalma kala durkiyaha? (su'aashan waxaa la weydiinayaa kuwa aan isticmaalin) **Goobogali dhamaan jawaabaha saxda ah(Jawaabo badan waa suurtogal)** Do not read responses	Rabitaanka caruur badan……1 Kor u qaadista caafimaadka ……2 Sabab diineed……..3 Sabab dhaqan iyo mooraal……...4 Odaygaa igu qalqaaliyey……..5 La'aanta macluumaadka qorshaynta qoyska…….6 Adeega Qorshaynta qoyska lama heli karo…7 Kuwo kale_____ (kala sheeg sheeg)	
507	Dhaqan ahaan miyaa la aqbalay in lagu dhaqmo dhalmo joojiyaha casriga ah bulshadaada dhexdeeda?	Haa……....1 → May…….……..…2 Ma garanayo ...……..……...…...8 →	Q509 Q509
508	Miyey ogalaadaan ama ku raacaan aabbayaasha diinta lehi isticmaalka dhalmo kala durkiyaha casriga?	Haa……....1 May…….……..…2 Ma garanayo ...……..…...8	
509	Ra'yigaaga waa maxay sobobta/sababaha ugu muhiimsanee ay haweynaydu ayna u isticmaalayn dnoocyada dhalma kala durkiyaha ee casriga? **Goobogali dhamaan jawaabaha saxda ah(Jawaabo badan waa suurtogal)** Do not read responses	Ninka oo leh talada ……..….1 Sababa diimeed awgeed…….…...2 Galmo doorbidashada……...…...3 Dhinaca waxyeelada ee noocyada…….....4 Waxa laga sheeg sheego…….....5 Helitaan la'aantiisa……....6 Ma garanayo ……..…8 Kuwo kale_____ (kala sheeg sheeg)	

510	Yaa had iyo jeer gaadha gu'aanka ku saabsan qorshaynta qoyska reerka ama qoyska dhexdiisa? **Goobogali hal jawaab kaliya**	Si wada jir ah…….……..1 Ninka ……...…2 islaanta……..3 kuwo kale _____ (kala sheeg sheeg)	
511	Xarunta caafimaadka imika waxay bixsaa adeeg qorshaynta qoyska ah oo taya leh?	Haa……....1 May…….……...…2 Ma garanayo ...……...…..8	

Waxaa ansixiyey kormeerahan

Magaca _____

Saxeexa _____

Taariikhda _____

Annex 3. Focus group discussion guide: English version

A. Introduction

We thank you all for coming to this session.

Your presence is very important.

My name is Mr. X. and my colleague here with me is called _____we are a team from_____

B. Purpose

1. We will be discussing your reactions to why contraceptive use is low in your community/ why majority of the women in your community are not using modern contraceptives.

2. I am interested in all your ideas, comments and suggestions.

3. There are no wrong or right answers.

4. All comments, both positive and negative to the point of discussion are welcomed.

5. Please feel free to disagree with one another. We would like to have many points of view.

We will audiotape all your comments and opinions so that we could not miss any of your ideas while trying to take notes. And I assure you that all your comments are confidential, used for research purpose only. I want our session to be a group discussion, so you need not wait for me to call on you. Please speak one at a time, so that the tape-recorder can pick up every of your suggestions and comments. We have a lot of points to cover, so I may change the subject or move ahead. Please stop me incase if you want to add something more.

Each participant is asked to introduce herself and tell us something about you.

Part I. For married women

1. Do people in your community know ways to avoid becoming pregnant?
    - What are they?
    - How do they help?
    - Any health problem due to unspaced pregnancy?

2. Contraceptives are very important for every married woman. Do you agree? / Disagree? Why?

3. Why do people in your community not using modern contraceptives/

<u>Tips,</u>

- # of sons,
- # of living children,
- husband influence,
- Important others influence.

4. Does a religion/ belief in your community something to do with the use of modern contraceptives?

Tips;

- Our religion encourages many children.
- Our ancestors' gods like too many children.
- Our lineages continue if we have many children
- Not to have children/ to have few children is taken as sin.

5. Are you currently using any modern contraceptives? If yes why?

Tips;

- Because I know the purpose
- I can decide using modern contraceptives by my self
- My husband supports me to use modern contraceptives
- I have reached my desired number of children

If not, why?

Tips;

1. # of sons,
2. # of living children,
3. husband influence,
4. Important others influence.

6. What do you think should be done to improve contraceptive use in your community?

Part II. For husbands of child bearing mothers

1. Do people in your community know ways to avoid becoming pregnant?

- What are they?
- How do they help?
- Any health problem due to unspaced pregnancy?

2. Contraceptives are very important for every married woman. Do you agree? / Disagree? Why?

3. Why do people in your community not using modern contraceptives/

Tips,

- # of sons,
- # of living children,
- husband influence,
- Important others influence.

4. Does a religion/ belief in your community something to do with the use of modern contraceptives?

Tips;

- Our religion encourages many children.
- Our ancestors' gods like too many children.
- Our lineages continue if we have many children
- Not to have children/ to have few children is taken as sin.

5. Do your wives currently use any modern contraceptives? If yes why?
If not, why?

6. Do you support and encourage your wife to use modern contraceptives? If yes why? if not why?

7. What do you think should be done to improve contraceptive use in your community?

Annex 4. In-depth interview guide of key informants: English version

Part I. In-depth interview guide for religious leaders

1. How do you conceive fertility from your religion point of view?
2. Do we need to control fertility? How?
3. What do you think should be done to control fertility?
4. What do you suggest about contraceptive use in line with your religious philosophy?
5. In your religion if someone is using contraception, does the spirit god/ 'Ayana' you believe in punish him/her? How? What does it do to him/her? (For traditional religion)

Part II. In-depth interview guide for care providers

1) What services are in provision to increase modern contraceptives? Justify in terms of availability and accessibility, and health professionals.

2) What is the current status of modern contraceptive use or proportion of married women using modern contraceptives?
3) What problems are facing in providing modern contraceptives? Or what are the reasons of not increasing modern contraceptive use prevalence in this community?
4) What is expected from concerned stakeholders?

Closing

A. Before we end, I would to go around the audience once more and ask each of you if there is anything else you would like or dislike to say about the idea of modern contraceptive use in your community we have described earlier. Anything else you like or dislike anything that we have not mentioned that would be important to you in modern contraceptive use.
B. Thank you so much for coming to this session. Your time is very much appreciated and your insights have been very helpful.

Annex 5. Focussed group discussion: Somali version

Nuqulka 2 aad

1. Koox la falanqeynta)

A. Hor dhac

Waxaan dhamaan u mahadnaqaynaa imaanshaha aad timaadeen meeshan ama arinkan

Joogitaankiinu aad buu muhiim u yahay

Magacaygu waa Mr. X. saaxiibadayda halkan waxaa la yidhaahdaa _____waxaan nahay koox ka socota____

B. U jeedo

1. Waxaan ka wada falanqayn doonaa fikirkiina ama jawaabtiina ah sababta uu u yaryahay isticmaalka dhalmo durkiyuhu buldhadiina dhexdeeda /iyo sababta ay haweenka bulshadiina badankoodu ayna u isticmaalin dhalmo durkiyaha casriga.

2. Waxaan xiisaynayaa dhamaan fikirkiina, faalladiina iyo waxa aad u malaynaysaan.

3. Ma jiraan jawaabo sax ah ama khalad ah.

4. Dhamaan faallooyinka, diidmo iyo yeelmaba ee qodobka la falanqaynayo waa la soo dhaweynayaa.

5. fadlan dareen inaad fasax u tahay inaad fikarad ad isku diidi kartaan midba midka kale. Waxaan jeclaan lahayn in aan helno qodobo aragtiyo badan leh.

Waxaan duuban doonaa dhamaan faallooyinka iyo ra'yigiina si aanaan u seegin in uun aragtidiina anakoo wax qorid ku howlan. Waxaanan idin ku war galinyaa in dhamaan faallooyinkiinu ay ilaashanyihiin loona isticmaali doono ujeedo daraasad oo kaliya kaliya. Waxaan rabaa in kulankeenu ama shirkeenu uu noqdo koox falanqayn, markaa waxaa loo baahanyahay inaydaan aniga I sugin inaan idiin yeedho. Fadlan hadal hal wakhti si uu cajalad duubuhu uu u duubo mid kasta oo kamida faaladiina iyo malihiina. Waxaan haysanaa qodoobo badan oo aan ka hadalno, markaa waan badali karaa mowduuca amah ore yaan uga socon karaa. Fadlan i joojiya hadii ay noqota inaad wax dheeraad ah ku dartaan.

Ka qayb qaate kasta waxaa la weydiinayaa in ay iskiin barto nafteeda oo ay inoo sheegto wax ku saabsan adiga.

QaybtaI. Haweenka la qabo

1. miyey yaqaanaan dadka bulshadiinu hababka loo fogeyn karo in uur la yeesho?

- Maxay yihiin?
- Siday u caawiyaan?
- Wax caafimaad darro ah oo ay keento uurka wakhti aan look ala dhaxaysiin ee isku xiga?

2. Dhalmo kala durkiyuhu aad yey muhiim ugu yihiin haween kasta oo la qabo. Miyaad ku raacsantahay? /mise kuma raacsanid? Sobobma?

3. Sababtee yaaney dadka bulshadiinu u isticmaalayn dhalmo kala durkiyaha

<u>Xogta ama warbixinta (tips),</u>

- Tirade wiilasha
- Tirade ciyaalka nool
- Saamaynta ninka xaaska leh,
- Saamaynta waxyaabo kale oo muhiima.

4. diintu/waxa la aaminsayahay bulsahdiina dhexddina wax miyey ka qaban kartaa isticmaalka dhalmo kala durkiyaha?

<u>Xogta ama warbixinta (tips);</u>

- Diintayadu waxa ay dhiiri galinaysaa ciyaalka
- Awoowyaashayo waxaa ay jecel yihiin ciyaalka aad ka u
- Xididkayagu wuu soconayaa hadii aan ciyaal badan
- In aan la yeelan ciyaal badan ama in inyar la dhalo waa danbi

  5. Miyaad isticmaashaa hadda dhalmo kala durkiyaha casriga? Hadii ay Haa tahay sababtee

<u>Xogta ama warbixinta (tips);</u>

- Maxaa yeelay waxaan aqaanaa ujeedada
- Waan gu'aansan karaa shakhsi ahaantayada isticmaalka dhalmo kala durkiyaha casriga
- Ninkayga ama xaaskayga yaa igu taageera inaan isticmaalo dhalmo kala
- Waan gaadhay rabitaankayga ahaa tirade ciyaal aan yeelan doona

  Hadii ay may tahay sababtee?

<u>Xogta ama warbixinta (tips);</u>

- Tirade wiilasha,
- Tirade ciyaalka nool,
- Saamaynta ninkayaga,
- Saamaynta waxyaabo kale oo muhiima.

6. Maxaad u malaynaysaa in la sameeyo ama la qabto si loo kobciyo isticmaalka dhalmo kala durkiyaha bulshadiina?

Part II. For husbands of child bearing mothers

1. Miyey yaqaanaan dadka bulshadiinu hababka loo fogeyn karo in uur la yeesho?
   - Maxay yihiin?
   - Siday u caawiyaan?
   - Wax caafimaad darro ah oo ay keento uurka wakhti aan look ala dhaxaysiin ee isku xiga?

2. Dhalmo kala durkiyuhu aad yey muhiim ugu yihiin haween kasta oo la qabo. Miyaad ku raacsantahay?/mise kuma raacsanid? Sobobma?

3. Sababtee yaaney dadka bulshadiinu u isticmaalayn dhalmo kala durkiyaha

Xogta ama warbixinta(tips),

- Tirade wiilasha
- Tirade ciyaalka nool
- Saamaynta ninka xaaska leh,
- Saamaynta waxyaabo kale oo muhiima.

4. diintu/waxa la aaminsayahay bulsahdiina dhexddina wax miyey ka qaban kartaa isticmaalka dhalmo kala durkiyaha?

Xogta ama warbixinta(tips);

- Diintayadu waxa ay dhiiri galinaysaa ciyaalka
- Awoowyaashayo waxaa ay jecel yihiin ciyaalka aad ka u
- Xididkayagu wuu soconayaa hadii aan ciyaal badan
- In aan la yeelan ciyaal badan ama in inyar la dhalo waa danbi

5. Xaaskaagu ama islaantaadu hadda miyey isticmaashaa dhalmo kala durkiyaha casriga ah? Hadii ay haa tahay sabab? Hadii ay may tahay sabab?

6. Miyaad ku taageertaaa oo aad ku dhiiri galisaa xaaskaaga in ay isticmaasho dhalmo kala durkiyaha casriga? Hadii ay may tahay sabab?

7. Maxaad u malaynaysaa in la sameeyo ama la qabto si loo kobciyo isticmaalka dhalmo kala durkiyaha bulshadiina?

Annex 6. In-depth interview guide of key informants: Somali version

2. Waraysiga qotada dheer leh ama sii faahfaahsan ()

Qaybta I. wareysiga hogaamiyayaasha diinta

1. Sideebaa loo qaadaa dhalmada marka aad ka eegto aragtidaada diimeed?
2. Miyaan u baahanahay inaan xakamayno dhalmada? Side?
3. Maxaad u malaynaysaa in la smaeeyo si loo xakameeyo dhalmada?
4. Waa maxay fikirkaaga ku saabsan dhlama kal durkiyaha ee ay isku waafaqsanyihiin sida diintaadu ka qabto?
5. Diintiina, hadii uu qof isticmaalo dhalmo kala durkiyaha, Rabbi miyuu ku ciqaabayaa ayada ama asaga? Sidee? Maxaa lagu sameynayaa ayda ama asagar? (Diimo dhaqameedkan)

Soo xidhis (Closing)

A. inta aanan dhamaystirin, waxaan jeclaan lahaa in aan mar labaad weydiiyo dhagaystayaasha hadii ay jiraan waxay ay jeclaadeen ama necbaysteen in sheegtaan oo ku saabsan fikrada isticmaalka dhalmo kala durkiyaha cariga ah ee bulshadiina aan horey u soo sheegnay. Iyo hadii ay jiraan wax aanan xusin oo aad ugu muhiim ah idinka isticmaalka dhalmo kala durkiyaha casriga ah.

B. waad ku mahadsantihiin imaanshaha kulankan. Wakhtigiina qaaliga ah aad nala qaaadateen aad yaan ugu faraxnay, fikirkiinunna aad yuu noo caawin