ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

MEASURING UNMET FAMILY PLANNING NEED DIFFERENCES AND LEVELS OF AGREEMENT BETWEEN HUSBAND AND WIFE, GEDEO ZONE, SNNPR

BY

YOSEPH TSEHAYE

May 2011

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A thesis submitted to the School of Graduate Studies Addis Ababa University in partial fulfillment of the requirements for Master of Public Health

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Approved by the Examining Board ……. ……

Chairman, Department Graduate Committee Signature ……

Advisor Signature ……. ……..

External Examiner Signature……..

Internal Examiner Signature …….

DEDICATION

This thesis is dedicated to my brother, the late Brook Tsehaye.

ACKNOWLEDGEMENT

Acknowledgement goes to the following:

I would like to express my gratitude towards Dr. Abera kumie and Wubegzier Mekonnen for devoting all their time & energy in correcting, shaping and continuous support throughout the entirety of both my proposal and final paper.

My appreciation extends to UNFP country office for funding this research. In addition, School of Public Health, Addis Ababa University is highly acknowledged for the support throughout the study period.

Southern Nation and Nationalities People's Regional Health Bureau, Gedeo Zone Health Department, Yirgacheffe and Wonago Health Office and the heads of the selected Kebeles are highly acknowledged for giving permission to conduct the study and for other cooperation.

My special thanks and appreciation goes to my mother, sister and friends for providing me moral support and encouragement to continue my study.

I would also like to extend my heartiest appreciation to all respondents who had participated in the study and data collectors as well as supervisors.

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LIST OF ACRYNOMS

BCC- *Behavioral change communication*

CPR - *Contraceptive Prevalence Rate*

DHS - *Demographic and Health Survey*

EDHS *– Ethiopia Demographic and Health Survey*

FP- *family planning*

IEC*- Information, Education and Communication*

RH*- reproductive health*

SNNPR – *Southern Nation and Nationality People Region*

SPSS *– Statistical Package for the Social Sciences*

UNFP- *United Nations Population Fund*

USAID *– United state agency for international development*

ABSTRACT

***Background:* -** The total fertility rate of Ethiopia was 5.4 with 34 percent unmet needs for family planning. Although the contraceptive prevalence rate among women of reproductive age (15-49 years) has doubled during the last ten years, it still remains very low. This may indicate the existence of some barriers that prohibit couples from using family planning even if they desire to limit or delay births in 2005 in Ethiopia.

Objective: - To assess the magnitude of unmet family planning need differences and levels of agreement between husband and wife, Gedeo Zone, Southern Nation and Nationality People Region.

Methods: - A cross-sectional comparative, community based study was conducted in Gedeo zone. The data were collected between 20 January and 15 February 2011. Wonago wereda and Yirgacheffe town administration were selected by simple random sampling method. Using random sampling technique, a total of 254 wives and 254 husbands in six rural and three urban kebeles were selected for the study. A structured pre-tested standard questionnaire was used for data collection. Data entry, cleaning and analysis were done using the EPI INFO version 3.5.1 and SPSS version 19 statistical package. Statistical tests such as Chi -square, logistic regression was used and also level of agreement amongst spouses was analyzed using Kappa statistics.

Results: Unmet need for family planning was 39.4% for wives and 11.4% for husbands. The difference was seen both in unmet need for spacing (28.8% for wives vs. 8.3% for husbands) as well as limiting family size (10.6% for wives vs. 3.1% for husbands). Overall, the observed concordance was 51.49% for contraceptive use, 72.05% for unmet need, 92.9% for ideal number of children and 96.85% for contraceptive attitude. The kappa statistic varied from a low of 0.062 ($P<0.004$) for ever use of contraception to a high of 0.887 for ideal number of children with contraceptive attitude 0.802 ($P<0.000$), unmet need 0.331 ($P<0.000$) and current use of contraception 0.122 ($P<0.000$).

Conclusion: Unmet need for family planning was significantly higher for wives compared to husbands and overall, a greater degree of agreement was observed regarding reproductive health events, family planning attitudes and unmet need. It is also evident that increasing awareness and acceptance of contraceptive use among women is not enough, the study recommends developing an effective family planning program intervention to involve men in the Reproductive Health/Family Planning (RH/FP) programs and raise awareness among both men and women.

1. INTRODUCTION

Background of the study

Ethiopia's population has been growing rapidly in recent years. It has been growing at a rate of 2.7% since 2000, which means increment by 2 million persons annually. With a total Population of 71.07 million in 2004, it has become the second most populous country in Africa, following Nigeria, which has a population of 140 million. At an annual growth rate of 2.7%, the population was also expected to reach 82.1 Million by the year 2009. Nearly half of the population (49.7%) was female (1). The total fertility rate was 5.4 children per women and contraceptive prevalence rate was only 15% while the unmet need for family planning was 34% in 2005 in Ethiopia (2).

Until recently, the concept of unmet need has most often been applied to women. Numerous factors have been found to prevent women who desire to postpone or stop childbearing from practicing contraception (3). Among these factors are the social costs of practicing family planning. Women's fertility preferences do not always translate into reproductive action because of the real or perceived resistance of others (such as spouses, family members, and community members). In particular, several studies have indicated that husbands' resistance, or perceived resistance, to using contraception can be a significant deterrent to women's family planning use across a variety of settings (4).

Rational of the study

Yet surveys and studies on fertility in the earlier years focused only on women and little is known about couples' fertility behavior. Reasons behind this are 1:- the perception that women are the major actors in the reproductive process and possible fertility control, 2:- there are those who argue that husband's desires provide a trivial influence in couples' fertility compared with wife's desires and that men's contribution are not essentially important for understanding reproductive behaviors (5).

Therefore, the study attempted to describe the unmet need that addresses the desires of both females and males to estimate future levels of contraceptive demand. Inclusion of male's unmet need may allow a clear understanding of why family planning programs have not been more successful. Thus, the present study explored the unmet need of family planning for husbands and wives and assessed the level of agreement regarding unmet need among them. In general, knowing which couples were likely to have unmet need and the characteristics of those couples could help family planning programs design unmet need strategies in Gedeo Zone.

2. LITERATURE REVIEW

This review focused on studies that assessed the levels of unmet need and the level of agreement between wives and husbands regarding unmet need as well as factors influencing the unmet need and the level of agreement between wives and husbands.

2.1 Desired family size

Study done in West Belessa Wereda, North Gondar of Amhara, Ethiopia showed that all categories have made a statistically significant contribution at $p< 0.05$ to explain unmet need for family planning. Thus, couples who had no child were 69% less likely to have unmet need than the reference category and couples who had one to four children were 40% less likely to have unmet need for contraception than the reference category (6).

The study done on determinants of contraceptive nonuse and unmet need among married women in urban Ethiopia. This finding showed that the number of surviving children and ideal family size are the most important determinants of unmet need for family planning in urban Ethiopia and also indicated that there were variation between women with unmet needs and the ideal number of children. The unmet need increased with the ideal number of children raised (7).

A study conducted in Yoruba of Nigeria confirmed that 87% of the couples reported similar fertility intentions. Of these couples, 59.5% wanted more children while only 27.8% reported wanting no more children. The finding suggests a fairly high level of agreement between partners' in their fertility intention. (8).

A study done in Ballabgarh, India showed that observed agreement between husbands and wives regarding reporting of reproductive health events and family planning attitudes and intentions varied from a low of 67.5% for ideal family size to a high of 97% for number of currently living children (9). In one study using data from six demographic and health surveys of Sub- Saharan Africa, contraceptive use agreement ranged from 47% to 82%, but among couples in whom one or both reported use, both categories represented less than half in all nation: Kenya, Malawi, Rwanda, Tanzania and Uganda except Zimbabwe (10).

2.2 Spousal Communication on desired family size and unmet need

Study undertaken in West Belessa Wereda, North Gondar of Amhara, Ethiopia showed that among couples who did not discussed at all, 42% had unmet need and couples who discussed at least once, 20.6% had unmet need for contraception. The first group (those who have never discussed), were taken as a reference category. the odds ratio Exp (B) = 0.470 for those who discussed at least once, showed us that couples who discussed with their spouse about family planning at least once were 53% less likely to have unmet need than the reference category (6).

Study conducted in Enderta District, Tigray Region, Ethiopia revealed that twenty-two percent of all wives and 34% of all husbands reported that they had discussion about contraceptive within the last six months (11).

A study done in Yoruba of Nigeria revealed that 59% of the couples discussed number of children and 66% on contraceptive use. Husband-wife communication on family size desire and contraceptive use was related to the demographic and social background characteristics of the individuals and couples. Discussion on family planning and size was more prevalent among couples with younger spouses and both marital partners were of the same age cohort (8).

Study conducted in Filipino showed that contraceptive use, spousal communication was significantly associated with couples likelihood of usage at $p<.001$. The very high odds ratio proved that family planning discussion with spouse is an important predictor for couple's contraceptive practice. This implies that obtaining information about family planning and discussing it are rational steps for couples to take when they want to regulate their fertility. Added to this, couples who discuss may have intentions to space the births of their offspring or to prolong the risk of getting pregnant but not to limit the number of children (12).

Review of literature on male attitudes and behaviors concerning family planning and male initiatives in Africa. The results indicated that men often have positive attitudes toward family planning, but women believe that their husband disapproves of family planning. The report further noted that spousal communication was positively associated with family planning method use (13). However, another study conducted in Ghana showed that spousal influence, rather than being mutual or reciprocal, is an exclusive right of the husband (14). According to the

Demographic and Health Surveys, many married women who want to avoid pregnancy are not using contraception because their husband objects. Nearly one in ten married women with unmet need cited husband's disapproval as the principal reason for nonuse of contraception (10). As well as opposition from husbands and in-laws and the desire for at least two sons were obstacles to the acceptance of contraception (15).

2.3 Demographic Factors

2.3.1 Age

A study conducted in Ethiopia showed that unmet need was highest among women age 15-19 (91 percent), declines to 84 percent among women age 20-24 and varies little after age 24 around 80 percent (7).

Study done in West Belessa Wereda, North Gondar of Amhara, Ethiopia showed that husbands who were in the <25 age group and wives who were between 25-34 age group had the highest unmet need for contraception. However, unmet need fluctuated with both husbands and wives age (6).

According to EDHS 2005 showed that unmet need for spacing decreased with age while the opposite is true for unmet need for limiting, with the exception of women age 45-49. Overall, unmet need remained relatively high at all ages but falls sharply at age 45-49 (2).

Young Ghanaian couples prefer smaller family compared to older age groups. Older couples are more likely to have traditional attitude on larger family and women have been exposed to longer reproductive years. The age difference of husband and wife may influence reproductive options and contraceptive use, and ideal family sizes vary across ages (16).

2.3.2 Sex (represented by wife and husband)

The differences in reported by female and male according to the DHS (Filipino) on circumstances related to reproductive decision-making, it was argued that women were more likely to give normative responses on their contraceptive use than men. These discrepancies were related to differences in motivation for having more children and to spousal disagreement or lack

of communication regarding reproductive goals or contraceptive use and women's clandestine use of contraceptive method and contraceptive use of men with extramarital partners (12).

2.3.3 Age at first marriage

Study conducted in Ethiopia showed that women who married for the first time before the age of 18 exhibit a lower demand for spacing than women who have been married for the first time after the age of 18. Alternatively, the former group displays a higher demand for limiting the number of children. The majority of women (more than 80 percent) who have been first married before the age of 25 were not able to satisfy their need for both spacing and limiting. On the other hand, about one in two women first married at age 25 or after have satisfied their demand for contraception (7).

Study conducted in West Belessa Wereda, North Gondar of Amhara, Ethiopia showed that age at first marriage had the influence on the level of unmet need. The level of unmet need decreased with increased of women age at first marriage. The level of unmet need was 36.3% while the age at first marriage was less than 15 and it was 20.2% while the age at first marriage of women was greater than or equal to 15. The bivariate result indicated that women's age at first marriage was significantly associated with couple unmet need $P<0.001$ (6).

2.4 Social Factors

2.4.1 Education

Study done in West Belessa Wereda, North Gondar of Amhara, Ethiopia revealed that among women whose education was below primary, 30.2% had unmet need and those whose education was at least primary, 22.2% had unmet need for contraception. With regard to the educational level of husbands, among those with no schooling, 29% had unmet need, and of those whose education was primary or above 32% had unmet need for contraception (6).

There are two patterns of unmet need related to women's education. Outside sub-Saharan Africa better educated women have somewhat less unmet need than women with little or no education, as in Turkey (17). In contrast, in most sub-Saharan countries, such as Ghana, levels of unmet need are about the same regardless of women's education levels (18). In sub-Saharan Africa,

however, women with more education are more interested in avoiding pregnancy than other women but face the same obstacles as other women (17).

Study done in developing countries revealed that the relationship of education and fertility was complex and its total effect may act through several channels. Education may influence fertility both indirectly by affecting the age of marriage and its duration and directly on marital fertility. Women with high educational aspiration tend to have lower fertility, tend to postpone marriage and fertility until the completion of full-time education, have higher exposure to urban living, modernization, and mass media (19).

2.4.2 Occupation/Employment status

Study conducted in West Belessa Wereda, North Gondar of Amhara, Ethiopia revealed that 30.4% of husbands who were participating in agricultural activities and 23.5% of husbands who engaged in non agricultural activities (merchant, government employee) had unmet need for contraception. Concerning women's occupation, among wives who were working at home (housewife) and among those who were working away from home 30.7% and 17% had unmet need respectively. The result indicated that husbands engaged in non agricultural activities and wives working outside home had lesser unmet need (6).

Study done in Pakistan showed that the women employed in modern sector tend to have lower fertility compared with those not working. Work and fertility are related as it influences family decision- making and opportunities in the labor market**.** Having more children and larger family may push women to join the labor force and to intensify her economic endeavors. Among husbands, having more children may push men to seek more economic activities for additional income to support the children and the family needs (5).

2.4.3 Religion

Differences in religious belief between husband and wife may create disagreement over fertility decisions. Couples who are of the same pronatalist religious group may have higher fertility. Study of the relationship of fertility and religious composition on Austrian couples found significant differences between religious affiliations among husbands and wives. Mormons and Catholics have higher predicted family size than Protestants. Similarly, Catholics and Islamic Muslims tend to have higher fertility than Protestants, Jews and non-Muslims (20).

2.4.4 Place of residence

According to study conducted in West Belessa Wereda, North Gondar of Amhara, Ethiopia revealed that among couples those who were residing in rural areas, 30.3% had unmet and about 26% of urban dwellers had unmet need for contraception. The result implies that respondents who were residing in urban areas had lesser unmet need that may be due to the higher contraceptive prevalence 46% in urban and 29% in rural areas (6).

According to EDHS 2005 revealed that rural women had twice the unmet need of urban women and less than one in four rural women had the demand for family planning satisfied, compared with three in four urban women. Unmet need was lowest in Addis Ababa (10 percent) and highest in Oromiya 41 percent (2).

2.5 Program Factors

2.5.1 Exposure to mass media on family planning messages

Study undertaken in West Belessa Wereda, North Gondar of Amhara, Ethiopia showed that 29% of women who had no exposure to media and 32% of women who had exposure to media had unmet need respectively. The same trends have been observed for men i.e. 28% of husbands who had no exposure to media and 31% of husbands who had exposure to media have unmet need for contraception. Exposure to different channels of family planning information was one of the factors that have bearing on current use of contraception. About 38.8% of wives and 35.7% of husbands who did not have any access of family planning information have unmet need and 25.2% of wives and 28.2% of husbands who had at least one channel of family planning information have unmet need for contraception (6).

Study carried out in Pakistan showed that the use of media provided a wider range of information to persuade couples to adopt small family norms and benefits of having lesser children. Women who were exposed to family planning messages were likely to desire to stop childbearing and were more likely to have concrete idea as to the ideal number of children (5).

Other study computed in Filipino further revealed that couples' fertility intention varied according to their media exposure status. Couples where both partners listened to a radio regularly in the past three months were more likely to desire to end child bearing relative to those

where one and none listens to radio. About 34.2% of the couples where both partners reported regular exposure to radio message wanted to end childbearing compared with 24.3% among those where only one partner listened to radio (12).

2.6 Unmet Need for family planning

Study conducted in Northwest Ethiopia revealed that thirty eight percent of currently married women had an unmet need for family planning, with 23% having an unmet need for spacing and 15% having an unmet need for limiting. The unmet need for family planning was much higher in rural areas (44%) than in big (21%) and small (26%) towns (21).

According to study conducted in Enderta District, Tigray Region, Ethiopia revealed that the contraceptive need status 48% of wives and 46.8% of husbands had unmet need. When classified according to spacing and limiting about thirty eight of wives and 37% of husbands had unmet need for spacing and 10% of wives and 9.8% had unmet need for limiting. Met need was 15%for wives and 21% for husbands. Contraceptive demands were 63.5 and 68%for wives and husbands respectively (11).

According to EDHS 2005 revealed that the majority of Ethiopian women (78 percent) and men (76 percent) prefer to space or limit the number of children they have, and have a potential need for family planning. One in three currently married women has an unmet need for family planning (34 percent). The need for spacing (20 percent) was higher than the need for limiting (14 percent). If all currently married women who say they want to space or limit the number of children were to use family planning, the contraceptive prevalence rate in Ethiopia would increase from 15 percent to 49 percent. Currently, only 31 percent of the demand for family planning is being met (2).

According study conducted in Ethiopia showed that knowledge of modern methods and women's approval of the advantages of family planning are very high (81 percent), even in rural areas (85 percent for married women). It is striking that the level of unmet need, i.e. the proportion of women who want to space (22 percent) or limit (14 percent) births yet do not do it, is extremely large, at 36 percent nationally. This is the highest unmet need in SSA. It is even high in rural areas (37.3 percent). This suggests a failure of the supply side to respond to a currently high

demand for family planning, even in rural areas. Large variations can be found between regions. Unmet needs were higher in Amhara (41 percent), Oromiya (36.4 percent), SNNPR (35.5 percent) and Tigray (28 percent). Tackling the lack of family planning in the high fertility rural areas of these regions which represent 80 percent of the country's population—appears to be a priority, particularly in order to reach the population policy objectives of 44 percent CPR by the year 2015 (22).

Study done in Lesotho showed that the calculated unmet contraceptive need in this study was 24.9%, this was slightly lower than the 31% estimated unmet need for Lesotho in general but agree with the lower limit of 25% found in the urban and more educated low land compares to 41% reported the rural less educated high lands. This study was done in a tertiary institution located in low land capital city of Lesotho (23).

A study conducted in Haryana, India showed that the unmet need for family planning was higher for wives compared to husbands (11% vs. 17.5%) in study respondents. The difference was seen both in unmet need for spacing (husbands -3.5% vs. wives -6%) as well as for limiting family size (husbands -7.5% vs. wives -11.5%). Overall concordance 93.5% and agreement between husbands and wives for unmet need, though very good, was significantly low compared to perfect agreement (24).

The age distribution of women with an unmet need indicate that women in the extreme ends of the reproductive ages, that is, between ages 15-24 and 40-49 had relatively higher level of unmet need for family planning services. On the other hand, unmet need was somehow lower in the age group 25-34 years. When looking at the distribution of unmet need by level of education, generally, illiterate and those with primary education had higher level of unmet need than others. This was particularly true among women in urban and rural areas of Oromiya and SNNPR (25).

Study conducted in Eritrea showed that the number of women who are currently married and who either want to wait for at least two years before another child (spacing) or want to stop childbearing (limiting) but are not using contraception is 27 per cent (with 21 per cent for spacing and 6 per cent for limiting) and has remained unchanged since 1995. This is higher than the average rate (25 per cent) for sub-Saharan Africa during the period 2000–05 and close to the

level in Ethiopia and other countries in the east (35 per cent), which is the highest level in sub-Saharan Africa (26).

According to study conducted in Enderta District, Tigray Region, Ethiopia revealed that currently married nonusers who do not intend to use a contraceptive method in the future by the main reasons for not intending to use family planning. Majority 32% of wives and 45% of husbands reported desire for more children, and 38% of wives and 28% of husbands due to little perceived risk of pregnancy (breast feeding, using traditional method, and so on), health problem was mentioned by of 12% of wives and 4.5% of husbands 7.5% of husbands and 4.3% of wives reported lack of knowledge, and religion prohibition accounted 2.5% of wives and 10.5% of husbands (11).

According to EDHS 2005 revealed that currently married nonusers who do not intend to use a contraceptive method in the future by the main reasons for not intending to use family planning. Around 40 percent cited fertility-related reasons for not intending to use contraception. In particular, 18 percent cited the desire for as many children as possible as the main reason for not intending to use. The proportion of women who cited a desire for more children has dropped markedly from 42 percent in 2000 to 18 percent in 2005, suggesting that women were realizing the disadvantages of large family sizes (2).

In Sri Lanka, the principal reasons cited by women with unmet need for non-use of contraception included: - health concerns (19.3 per cent); husband's disapproval (14.6 per cent); infrequent sex (13.3 per cent); lack of knowledge (10.4 per cent); religion (3.6 per cent); and lack of access (3.2 per cent) in 1994. In 2000, health concerns were still cited (11 per cent) as the single most important non-biological reason for not using contraception, followed by husband's disapproval (3.9 per cent) and religious opposition (3 per cent), among married non-pregnant women who were not currently using a method of contraception and who reported being unhappy if they became pregnant too soon (27).

According study conducted in Wolaita Soddo Town South Ethiopia showed that married men were asked whether they approve or disapprove (both the male and female method) the use of family planning method about 328 (77.5%) of the married men approve the use of family

planning at the time of the interview, while 80 (18.9%) disapprove the rest 3.5% gave no response for this question. The reason mentioned for disapproval 23(28.8%) were desire to have more children, 21(26.3%) respondent refusal, 9(11.3%) wife or partner refusal, 9(11.3) fear of side effect, 7(8.8%) religious prohibition, 11(13.5%) were others (28).

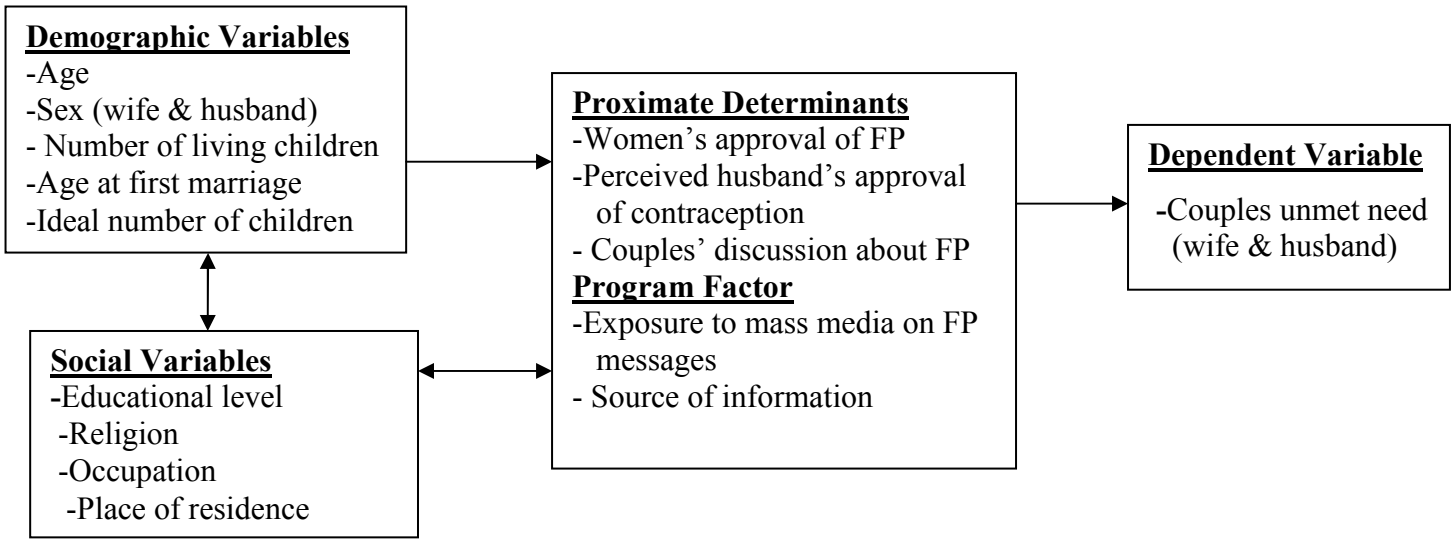
Study conducted in Pakistan revealed that family planning attitudes, about 41 percent of couples have given favorable responses and only 20 percent disapprove of family planning. However, it appears that among those who differ in their attitudes, more husbands approve of family planning use despite their wives' disapproval (25.2 percent), whereas the proportion of couples with only wife's approval of family planning is 13.4 percent (29).

According study conducted in Palestinian showed that couples where both the husband and wife agree with the use of family planning were more likely to use contraception. Women that were involved in decision making regarding the use of contraception were more likely to use contraception than women who were not involved (30).

3. CONCEPTUAL FRAMEWORK

The framework related the dependent variables with various categories of the independent variables. The independent variables are those influenced unmet need for family planning.

Independent Variables



4. OBJECTIVES

4.1 General Objective

- To assess the magnitude of unmet family planning need differences and levels of agreement between husband and wife, and their determinants in Gedeo Zone.

4.2 Specific Objectives

1. To assess the magnitude of unmet needs of family planning for husbands and wives.
2. To assess the level of agreement between husbands and wives regarding unmet needs of family planning.
3. To assess factors affecting the agreement and the unmet needs between husbands and wives.

5 METHODS

5.1 study area and population

The study was conducted in Gedeo Zone, SNNPR. Gedeo Zone is one of the 9 Zone under the regional government and in this zone there are 6 Weredas, 2 town administrations and 143 Kebeles. It has one government hospital and 18 primary health care units (PHCU) and 143 health posts at Gedeo Zone. The potential health service coverage is 100%. The total population of Gedeo Zone is about 958,528.

5.2 study design and period

A community based cross-sectional comparative study was conducted in Gedeo Zone. The data were collected between 20 January and 15 February 2011.

5.3 Source Population

The reference population of the study constituted all couples residing in Gedeo Zone during the study time.

5.4 Study Participants

The study population were married women aged 15-49 years and their husbands. Study units were married couples. Participants who fulfilled the inclusion criteria detailed in the next section were randomly selected and interviewed. One should note that the household is the unit that was randomly selected. In the presence of two couples in one house hold, one couple was selected using lottery method.

5.5 Inclusion and Exclusion criteria

Inclusion criteria included all fecund couple; wives aged 15-49 and living with their husbands, who were usual residents of the study area.

Excluded from the category of unmet need was menopausal or in fecund women, polygamous couples and couples not living in the study area or in the house hold.

5.6 Variables

1. **Dependent Variable**
    - Couples unmet need (wife & husband)
2. **Independent Variables**
    - Socio-demographic Variables which included age, sex (wife & husband), number of living children, age at first marriage, ideal number of children, educational level, religion, occupation and place of residence.
    - Proximate Determinants serve as intermediate variable which included women's approval of family planning, perceived husband's approval of contraception, couples discussion about family planning and exposure to mass media on family planning messages.

5.7 Sample Size

The sample size for the study were determined based on EDHS 2005 (2) total unmet need for family planning among married women was 34% and according Susane S. and Gebre-Egziabher K. were found that the total unmet need for men was 21.7% (31), 5 % marginal error, Z score corresponding 95% certainty, power of the test was 80% and allocation ratio of 1:1. Based on this assumption, the actual sample size for the study was determined using the formula for two population proportion by using EPI- INFO version 3.5.1 sample size calculate software.

$$n = \frac{\left\{Z_{1-\frac{\alpha}{2}}\sqrt{2\bar{P}(1-\bar{P})} + Z_{1-\beta}\sqrt{P_1(1-P_1)+P_2(1-P_2)}\right\}^2}{(P_1-P_2)^2}$$

The initial calculated sample size was 235 wives and 235 husbands. Therefore, with 10 % allowance for non-response, the estimated sample size was 235 + 24 which was 259 wives and 259 husbands.

Where: - n= the required sample size

Z=Standard score corresponding to 95% confidence interval

P is proportion of unmet need in the general population (0.28)

P1: proportion of unmet need among married women (0.34)

P2: proportion of unmet need among married men (0.22)

Power of the test: - $100(1-\beta)\%$ Values of Z for 80% power = 0.84

5.8 Sampling Technique

There are a total of 6 weredas and two town administrations in the Geode zone. A two staged sampling technique was used. The first stage was involved to select wereda. Among the six weredas and two town administrations of the Geode zone, Wonago wereda and Yirgacheffe town administration were selected by simple random sampling using lottery method. From the two selected districts included in this study (second stage), six rural kebeles out of eighteen kebeles were selected randomly using lottery method and in case of urban kebeles all three kebeles were taken. After selection of the kebeles, the sample size was allocated to each of the selected kebeles based on the number of couples in each selected kebeles. A systematic random sampling technique was used for the selection of the households in each selected kebeles. A sampling interval of thirty three was used to select the sample size of 259 out of 8520 household couples. The first household couple was selected randomly from the center of village. The second household was found after counting households, and thereafter continued until the required sample size was met. Couples who fulfill the criteria of the study subject were interviewed. In case when a couple does not fulfill the criteria in the household the next household were interviewed.

5.9 Data Collection Procedure

The data were collected by 20 high school completed students. Ten male interviewers, 10 female interviewers and 5 diploma nurse supervisors were selected. Those interviewers and supervisors were selected from the districts and hired to collect data from the districts. The interview was conducted at the respondents' home. Female interviewer's interviewed wives while male interviewers interviewed husbands on the same day separately, since most of the husbands were at work during working hours; their interviews were conducted in evenings or morning. A total of 5 data collection teams were formed, each team composed of two female interviewers, two male interviewers and one team supervisor. A two days training sessions were given for the interviewers and supervisors on the purpose of the research in general and interviewing skills and techniques.

Data were collected using a structured and pre-tested standard questionnaire. It has two parts. The first part was covered socio- demographic information of the respondents. The second part was containing information on family planning covering major parts of the research objectives.

Most of the questions were pre-coded. The instruments for husbands were similar to that for the wives. It was translated to Amharic language which is understood by the majority of the community and if incase the respondent didn't know Amharic language the data collectors was translate in to Gedeofa language because those interviewers were selected from the districts and a pretest was carried out in 52 individuals (26 couples) 10% of the total sample size in the non study area (Dilla zuria wereda). The instrument was finalized after necessary corrections.

5.10 Data Quality Control

Questionnaire was translated from English to Amharic and back to English as well to reconfirm consistency. Data collectors were trained to be familiar with the objective and the methodology of the research and to standardize their interviewing technique and question in consistent manner. The principal investigator was closely supervising the performance of the data collector in the field on a daily basis and supervisors were being with the data collector and also re-interviewed at least 5% percent of study participants by randomly selected interviewed wives and husbands and re interviewed the same question then the data from the first interview was checked against the data from the second interview for consistency. During data collection in the field and at the end of each day, the questionnaires were reviewed and checked for completeness, accuracy and consistency by the principal investigator and corrective measures were taken. Totally unfilled and partially filled questionnaires were excluded from the analysis. Data cleaning were performed by running frequencies of each variable to check for accuracy and inconsistencies.

5.11 Operational Definition

The unmet need group includes all fecund women who are married or living in union, and thus presumed to be sexually active, who either do not want any more children or who wish to postpone the birth of their next child for at least two more years but are not using any method of contraception. Pregnant women whose pregnancies were mistimed or unwanted and non menstruating women whose last births were mistimed or unwanted are also included in the definition (3).

Men are considered to have an unmet if they are sexually active, their partners are fecund and not pregnant, and they do not want their partners to become pregnant, but neither they nor their partners use contraception (17).

Couple is both married partners and those living together in informal unions.

In fecund couples – couples are considered in fecund if either spouses unable to reproduce.

Menopause – the time when a women stops having monthly periods, usually between the age of 49-55.
Usual place of residence refers who were permant residents of the study area, living in the area at least six months prior to data collection.

5.12 Data Processing and Management

Before the collection of all the necessary data, questions were pre-coded and template prepared for data entry by the principal investigator. Data entry and cleaning were done using EPI INFO version 3.5.1 statistical package. Data cleaning was performed by running frequencies of each variable to check for accuracy and inconsistencies.

Data Analysis

Data analysis were done using Epi info 3.5.1 version and SPSS version 19 statically packages.
The univariate analysis such as percentages, frequency distributions, measures of central tendency and measures of dispersion were used for describing data. Bivariate analysis of the independent and dependent variables were measured and tested using X^2 and P value. At the bivariate analysis, Chi-square test was used in order to identify the important explanatory variables.

The bivariate analysis was used to describe the association between socio-demographic characteristics and intermediate characteristics on their unmet need for contraception. In other words, the chi-square test detected whether there was a significant association between two categorical variables, i.e., unmet need for contraception and various independent variables. They also provide a basis for the selection of the more important variables to be included in the multivariate analysis. Logistic regression analysis was applied to identify the relative importance of the various independent variables. A number of control Variables included in the model were restricted to those significantly related to the outcomes at the bivariate level such as (age, ideal number of children, education, religion, place of residence, discussion about family planning with partner, approval of family planning use and media exposure of family planning messages in relation with the dependent variable, unmet need for contraception.

The relative contribution of each selected variables to the outcome of interest were assessed using logistic regression and the analyses were performed separately for husbands and wives. Binary logistics regressions were performed since the dependent variables were dichotomous and

logistics model related individual characteristics to the odds of occurrence or non- occurrence of an event or an outcome. It is an appropriate method because it is assumed that the relationships between the dependent variables with the independent variables and the method allowed estimation of the probability or odds of unmet need for family planning, P value, adjusted OR and 95 % CI in the population under study.

The level of agreement among spouses or partners was analyzed using Kappa statistics. The K value can be interpreted as follows, according to Landis and Koch's (1977) categorization is widely referenced and has been used: < 0 poor agreement, 0.0 to 0.20 slight agreements, 0.21 to 0.40 fair agreements, 0.41 to 0.60 moderate agreements, 0.61 to 0.80 substantial or good agreements and 0.81 to 1.00 almost perfect or very good agreements.

9.13 Ethical Consideration

1. Ethical clearance was obtained from the ethical clearance committee of Addis Ababa University's, School of Public Health.
2. Letter was written from Addis Ababa University's, school of public health to Southern Nation and Nationality People Region Health Bureau and Gedeo health department and formal permission was secured.
3. Before administration of questionnaire, verbal consent was obtained.
4. The respondents were informed about the objective and purpose of the study and informed consent were taken from each respondents also they were informed about their right not to participate in the study and interruption at any time.
5. The name of the study subject we're not be listed on questionnaire and more personal secret were be closed (confidentiality and privacy were be kept).
6. It had also an explanation of the study as did not incurred any risks because of their involvement, there may be no personal benefits to their participation in this study and the information they provided can contribute to the future development of the family planning program.

6. RESULTS

Findings of the study are presented in three sections. The first section deals with the univariate analysis on the characteristics of the respondents, unmet need and level of agreement between wives and husbands regarding unmet need; followed by the bivariate and chi-square tests between the independent variables (socio-demographic characteristics of husbands and wives) and intermediate variable with dependent variables (unmet need) and the third section is the multivariate analysis (binomial logistic regression) of husbands and wives characteristics.

6.1 Univariate Analysis

6.1.1 Describing study participants

This section showed the percentage distribution of study participants focusing on their socio-demographics characteristics, and intermediate variable. It would also deal with estimating unmet need and the level of agreement between wives and husbands regarding unmet need.

6.1.2 Socio-demographic characteristics of study participants

A total 254 wives and 254 husbands responded to the questionnaires, with a response rate of 98.1%. The age distribution of husbands and wives had a little different since husbands tend to be older than their wives. Husbands that were 15-24 and 25-34 years of age accounted for 5.9 and 53.9 percent, respectively while husbands aged 35 and above accounted for 40.2 percent of the sample. Meanwhile, wives aged 15-24, 25-34 and 35 and above years accounted for 27.6, 54.7 and 17.7 percent of the respondents respectively. Comparing the mean age of the couples, husbands were about 5.6 years older than their wives (33.5 ± 6.5 years and 27.9 ± 5.9 years) and the median age for wives were 28 years compared to husbands 33 years as well as the minimum and the maximum age for wives were 18 & 44 years respectively and for husbands were 20 & 49 years respectively.

Regarding age at first marriage, husbands tend to marry at older age (between 18- 24 years) compared to wives less than the age of 15 years. About 94.5 percent of wives were married less than the age of 24 years while 58.7 % of husbands married less than the age of 24 years. Mean age at first marriage for wives were about 18.4 years with a standard deviation 2.9 years while it was 24.1 years with a standard deviation 3.8 years for husbands and the median age for wives

were 18 years compared to husbands 23 years.

Only 28 % of the wives and husbands had five or more living children and 40.2 % had fewer children. The mean numbers of living children were 3.5 with the standard deviation 2.2 and also the median numbers of living children were 3 for both husbands and wives and the minimum and the maximum numbers of living children for wives and husbands were 1 & 12 living children respectively.

A little higher proportion of wives than husbands preferred to have one to four children (59.4% for wives and 53.1 % for husband) as ideal family size. Comparing, a little more husbands (46.9%) preferred five or more children than wives (40.6%). Husband and wife's mean ideal number of children is not different (4.6 vs. 4.5 respectively) and median ideal numbers of children were 4 for both wives and husbands (Table 1).

In general there was a low level of educational achievement throughout the sample. In the present sample, higher proportions of wives 42.5 percent and only 12.2 percent of the husbands have not attended school. Only 28.7 percent of the wives compared to 40.2 percent of the husbands went through primary education. About 2 8.7 percent of the wives and 47.6 percent of the husbands had attended secondary and above education. There is a difference between the educational levels of wives and of the husbands. Generally, the wives had considerably less education than their husbands.

Husbands and wives were engaged in various occupations. Majority of wives were house wife (74 %) while husbands were farmer (53.9 %). Only 18.1 % of wives and 26.8 % of husbands were Merchant. In terms of governmental occupation, more husbands were employed 19.3 % than wives 7.9 %. More than half of the couples were rural dwellers 68.1% and about 67.7% of husbands and 68.1% of wives were Protestant (Table 2).

Table 1:- Percentage and distributions of wives and their husbands by selected demographics characteristics, Gedeo Zone, SNNPR, February 2011

Characteristics	Wives		Husbands	
	Number (n=254)	Percent	Number (n=254)	Percent
Age group in years				
15-24	70	27.6	15	5.9
25-34	139	54.7	137	53.9
35-44 & above	45	17.7	102	40.2
Age at first marriage in years				
<15	15	5.9	0	0
15-17	86	33.9	0	0
18-24	139	54.7	149	58.7
25+	14	5.5	105	41.3
Number of living children				
1-2	102	40.2	102	40.2
3-4	81	31.9	81	31.9
5+	71	28	71	28
Ideal number of children				
1-4	151	59.4	135	53.1
5+	103	40.6	119	46.9

NA: - not applicable

Table 2:- Percentage and distributions of wives and their husbands by selected socio characteristics, Gedeo Zone, SNNPR, February 2011

Characteristics	Wife		Husband	
	Number (n=254)	Percent	Number (n=254)	Percent
Ever attended school				
Yes	146	57.5	223	87.8
No	108	42.5	31	12.2
Education Status				
Don't write and read	108	42.5	31	12.2
Completed 1 – 6 grade	73	28.7	102	40.2
Completed 7 – 12 grade & above	73	28.7	121	47.6
Religion				
Protestant	173	68.1	172	67.7
Orthodox	60	23.6	61	24
Moslem	21	8.3	21	8.3
Occupational Status				
House wife	188	74	NA	NA
Farmer	NA	NA	137	53.9
Merchant	46	18.1	68	26.8
Governmental employee	20	7.9	49	19.3
Place of residence				
Urban	81	31.9	81	31.9
Rural	173	68.1	173	68.1

NA: - not applicable

6.1.3 Attitudes and perceptions about family planning and mass media exposure on family planning messages

Attitudes and perceptions of wives and their husbands are examined by considering two selected variables: whether they ever discussed family planning with their spouses and wives and husband's approval of family planning.

The interpersonal communication between couples, more than half of the wives 56.7% declared that they discussed with their partner about family planning. Among those who discussed family planning issues; about 17.7% had discussed once while 39% had discussed more than once times. The proportions of husbands who discussed with their partner about family planning were 56.3%. Among those who discussed family planning issues; about 8.3% had discussed once the remaining 48% had discussed more than once times.

Couples were asked whether they approve or disapprove using a method of family planning. The majority of the wives (92.9 %) approve the use of family planning at the time of the interview compared to husbands that approved by 89.8 % the use of family planning. Among those couples who disapproved using a of family planning method, the reason mentioned for disapproval by 26 husbands were fear of side effect 46.2 %, desire to have more children were (30.8 %), medical problem (11.5 %) and (11.5 %) were categorized as other reasons while the sole reason mentioned by wives were only desire to have more children were 18 (100 %).

Couples exposure of FP messages from radio, TV, and newspaper, leaflet, at community event and others were also asked. About 171 (67.3%) of wives and 173 (68.1%) of husbands obtained family planning messages on radio and only 29.1 % of wives and 30.7 % of husbands saw family planning messages on TV. Few (13%) husbands and (14.2 %) wives read family planning messages in newspapers. Wives had a little higher percentage of exposure at community event (64.2 %) compared to husbands (62.6 %) (Table3).

Table 3:- Percentage and distributions of wives and their husbands by selected intermediate characteristics, Gedeo Zone, SNNPR, February 2011

Characteristics	Wife		Husbands	
	Number	Percent	Number	Percent
Discussed FP with spouse in the last six months(n=254)				
Yes	144	56.7	143	56.3
No	110	43.3	111	43.7
How many times discussed FP with spouse in the last six months (n=254)				
Never	110	43.3	111	43.7
Once	45	17.7	21	8.3
More than once	99	39	122	48
Respondent approves of FP (n=254)				
Approves	236	92.9	228	89.8
Disapproves	18	7.1	26	10.2
Reason for disapproval (wife n=18 vs. husband n=26)				
Fear of side effect	NA	NA	12	46.2
Medical problem	NA	NA	3	11.5
Desire to have more children	18	100	8	30.8
Others	NA	NA	3	11.5
Mass Media Exposure to FP message on (n=254)				
Radio				
Yes	171	67.3	173	68.1
No	83	32.7	81	31.9
TV				
Yes	74	29.1	78	30.7
No	180	70.9	176	69.3
Newspaper & magazine				
Yes	36	14.2	33	13
No	218	85.8	221	87
Leaflet, pamphlet & poster				
Yes	55	21.7	67	26.4
No	199	78.3	187	73.6
At community event				
Yes	163	64.2	159	62.6
No	91	35.8	95	37.4
Others*				
Yes	33	13	0	0
No	221	87	254	100

NA: - not applicable, **others* health facilities and health extenuation workers**

6.1.4 Unmet need for family planning among wives and husbands

When all couples were classified according to the contraceptive needs, about 39.4% of wives reported having unmet need of family planning as compared to 11.4% of husbands. This overall difference was analyzed separately for spacing and limiting. About 28.8% of wives reported having unmet need for spacing compared to 8.3% of husbands. Similarly, 10.6% of wives compared to 3.1% of husbands reported unmet need for limiting (table 4).

Table 4:- Distributions of wives and their husbands who have total unmet need for family planning and classified according to spacing and limiting needs, Gedeo Zone, SNNPR, February 2011

Characteristics	Wives		Husbands	
	Number (n=254)	Percent	Number (n=254)	Percent
Total unmet need	100	39.4	29	11.4
Spacing	73	28.8	21	8.3
Limiting	27	10.6	8	3.1
Without unmet need*	154	60.6	225	88.6

Without unmet need* groups includes those who answered the question either as they are currently contraceptive users or who wish to have another children soon or undecided.

6.1.5 Reasons for not using contraception: wives and husbands with total unmet need

The most frequently mentioned reasons cited by wives and husbands with unmet need for not using contraception, the principal reasons cited by wives were 29.6% for health concerns, 20.5% for not menstruated since last birth and fear of side effects and 17.3% for breastfeeding compared to the principal reasons cited by husbands were 62.1% for knows no method, 20.7% for method not available and 13.8% for health concerns (Table 5).

Table 5:- Percentage and distribution of wives and their husbands with total unmet need for contraception by main reason for non-use, Gedeo Zone, SNNPR, February 2011

Reasons for non-use	Wives		Husbands	
	Number(n=98)	Percent	Number(n=29)	Percent
Infrequent sex	6	6.1	NA	NA
Cannot get pregnant	2	2	NA	NA
Not menstruated since last birth	20	20.5	NA	NA
Breastfeeding	17	17.3	NA	NA
Knows no method	1	1	18	62.1
Health concerns	29	29.6	4	13.8
Fear of side effects	20	20.5	1	3.4
Interferes with body	1	1	NA	NA
Normal process	2	2	NA	NA
Method not available	NA	NA	6	20.7

NA: - not applicable

6.1.5 Wives and husband agreement on contraceptive practice, attitude, ideal family size and unmet need for family planning

Cross tabulation for ever use of contraception showed 35.8% agreement between wives and husbands. The kappa statistic was 0.062 and the strength of agreement was considered to be slight agreements.

Current use of contraception as reported by wives and husbands showed 51.49%, overall agreement. The kappa statistic was 0.122 which corresponds to slight agreements.

Regarding attitude toward contraception showed 96.85% agreement between wives and husbands. Both partners approved of contraception in 89.8% cases. The kappa statistic for contraceptive approval for wives and husbands was 0.802 which corresponds to very good agreement. In 3.1% of respondents, wives approved of contraception whereas husbands did not.

Unmet need of family planning revealed concordance amongst wives and husbands in 72.05% of respondents. Unmet need in both was reported by 11.4% and none by 60.6%. The kappa

statistic was 0.331 which corresponds to fair agreement. In all cases where disagreement was seen (28%), wives reported having unmet need for family planning whereas their husbands had none. There were no cases when husband reported unmet need and wife did not.

Cross tabulation of ideal family size showed that in 92.91% of cases there was agreement between wives and husbands. In 6.3% of respondents, the husband wanted more children than the wife, while in 0.8% of respondents the wife wanted more children than the husband. The unadjusted kappa statistic was 0.874 and weighted kappa, adjusting for more than two possible outcomes was 0.887 which assessed this way, the strength of agreement was considered to be very good (Table 6).

Table 6:- Agreement between husbands and wives regarding contraceptive practice, attitude, unmet need for family planning and ideal number of children, Gedeo Zone, SNNPR, February 2011

Ever use of contraception		**Wives**			**Kappa statistics**
Husbands	Yes	No		**Total**	
Yes	19	0		19	0.062
No	163	72		235	p< 0.004
Total	182	72		254	
Current use of contraception		**Wives**			
Husbands	Yes	No		**Total**	
Yes	18	0		18	0.122
No	114	103		217	p< 0.0001
Total	132	103		235	
Contraceptive attitude		**Wives**			
Husbands	Approve	Disapprove		**Total**	
Approve	228	0		228	0.802
Disapprove	8	18		26	p< 0.0001
Total	236	18		254	
Unmet need for family planning		**Wives**			
Husbands	Yes	No		**Total**	
Yes	29	0		29	0.331
No	71	154		225	p< 0.0001
Total	154	100		254	
Ideal number children		**Wives**			
Husbands	1-2	3-4	5+	**Total**	
1-2	17	2	0	19	0.874
3-4	0	116	0	116	p< 0.0001
5+	0	16	103	119	
Total	17	134	103	254	

NB. 19 women & men excluded from current use of contraception because of pregnancy

6.2 Bivariate Analysis

6.2.1 Relationship between socio-demographic characteristics of husbands and wives with unmet need for family planning

Some variation in unmet need among couple's of different age groups was observed. Unmet need was highest among couple's age 25-34 (43% for wives and 55.2% for husbands). As age increased the proportion of unmet need declined and reduced to only 26% for wives age over 35 and 9% for husband's age over 35. There was a positive association between age and unmet need for contraception for wives but not husbands.

Although, unmet need was comparatively high 51% for wives and 69% for husbands among couples with 18-24 age at first marriage as compared to couples with 25 or more age at first marriage 5% for wives and 31% for husbands but the variation was not significant. However, the difference of unmet need among couples with 1-2 number of living children was high (43% for wives and 51.7% for husbands) as compared to among couples with 3-4 number of living children (25% for wives and 24.1% for husbands) and with 5 or more number of living children (32% for wives and 24.1% for husbands) but this variation was not statistical significant.

The stated ideal family size of both wives and husbands showed large variation in unmet need. Both the wives and the husbands who stated their ideal family size as one to four children had higher unmet need (73 percent and 72.4 percent respectively) than those who want to have five or more children (27 percent and 27.6 percent respectively) and this variation was statistical significant for both wives and husbands (Table 7).

The study included four social variables; level of education, religion, occupation and place of residence of couples in the analysis. In terms of education, the highest proportion of couples (fifty five percent of wives and 51.7 percent of husbands) with no education indicated that they had unmet need, compared with 45 percent of wives and 48.3 percent of husbands have attained some level of education. Regarding variations of unmet need among couples, level of education showed with even a primary education contributing to considerable percent decrease in unmet need for family planning among couples. Wives with secondary and higher education had only

17% compared with 20.7% of husbands with unmet need and the association was statistically significant for both wives and husbands.

Regarding religion, occupation and place of residence couples showed some variations in unmet need. The higher proportions of unmet need were among protestant (76% for wives vs. 75.9% for husbands) compared to orthodox (15% for wives vs. 13.8% for husbands). Regarding occupational status of couples, housewife had the highest proportion with unmet need about 79% for wives compared to 65.5% farmer for husbands. Among place of residence, unmet need was the highest in rural dwellers (79% for wives and 79.3% for husbands) and the lowest in urban dwellers (21% for wives and 20.7% for husbands). In the analysis, religion and place of residence were found to be significantly associated with unmet need for wives but not for husbands (Table 8).

Table 7:- Distributions of wives and their husbands who have total unmet need for family planning by demographic characteristics, Gedeo Zone, SNNPR, February 2011

Characteristics	Wife (n=254)				Husbands (n=254)			
	Total unmet need			X^2 & P Value	Total unmet need			X^2 & P Value
	Yes	No	Total		Yes	No	Total	
Age group (years)								
15-24	31	39	70	**11.239**	4	11	15	**4.137**
25-34	43	96	139	**0.004**	16	121	137	**0.126**
35-44 & above	26	19	45		9	93	102	
Age at first marriage (years)								
<15 years	5	10	15		NA	NA	NA	
15-17 years	39	47	86	**2.013**	NA	NA	NA	**1.433**
18-24 years	51	88	139	**0.57**	20	129	149	**0.231**
25+ years	5	9	14		9	96	105	
Number of living children								
1-2	43	59	102		15	87	102	
3-4	25	56	81	**3.753**	7	74	81	**1.878**
5+	32	39	71	**0.153**	7	64	71	**0.391**
Ideal number of children								
1-4	73	78	151	**12.564**	21	114	135	**4.879**
5+	27	76	103	**0.0001**	8	111	119	**0.027**

NA: - not applicable

Table 8:- Distributions of wives and their husbands who have total unmet need for family planning by socio characteristics, Gedeo Zone, SNNPR, February 2011

Characteristics	Wife (n=254)				Husbands (n=254)			
	Total unmet need			X^2 &	Total unmet need			X^2 &
	Yes	No	Total	P Value	Yes	No	Total	P Value
Education Status								
Don't write and read	55	53	108	**13.983**	15	16	31	**48.172**
Completed 1 – 6 grade	28	45	73	**0.001**	8	94	102	**0.0001**
Completed 7 – 12 grade & above	17	56	73		6	115	121	
Religion								
Protestant	76	97	173	**6.805**	22	150	172	**1.916**
Orthodox	15	45	60	**0.033**	4	57	61	**0.384**
Moslem	9	12	21		3	18	21	
Occupational Status								
House wife	79	109	188		NA	NA	NA	
Farmer	NA	NA	NA	**2.689**	19	118	137	**3.429**
Merchant	16	30	46	**0.261**	8	60	68	**0.180**
Governmental employee	5	15	20		2	47	49	
Place of residence								
Urban	21	60	81	**9.005**	6	75	81	**1.891**
Rural	79	94	173	**0.003**	23	150	173	**0.169**

NA: - not applicable

6.2.2 Relationship between attitudes and perceptions about family planning and mass media exposure on family planning messages of husbands and wives with unmet need for family planning

In total, couples' unmet need differed by husband wife interaction. Among 56.7% of wives discussed about family planning they had only 20% unmet need as compared with among 43.3% of wives that had no discussion about family planning they had 80% unmet need where as among 56.3% of husbands discussed about family planning they had 34.5% unmet need as compared with among 43.7% of husbands that have had no discussion about family planning they had 65.5% unmet need and this difference were statistically significant.

Among couples those reported as they had discussed family planning with their spouses and as they had unmet need varied according to either never, once, or more than once discussed family planning. The higher proportion of the wives and husbands reported that they never discussed family planning they had 80% and 65.5% respectively while wives and husbands reported that they had discussed family planning once and more than once times their unmet need decreased significantly to 12% and 8% for wives and 13.8% and 20.7% for husbands respectively. This difference was statistically significant for both wives and husbands.

There was similarity of proportion of wives and husbands who approved family planning and those who disapproved have reported as they had unmet need, about 99 % wives and 96.6 % husbands approve of family planning have reported as having unmet need compared to 1 % of wives and 3.4 % husbands those who disapproved of family planning have reported as having unmet need and although a higher proportion of wives than husbands have reported favorable attitudes towards family planning. A couple's approval of family planning appears to be an important factor in the adoption of reproductive control behavior, perhaps this study revealed striking finding difference in unmet need among those who approve and disapprove family planning. This difference was statistically significant for wives but this difference was not statistically significant for husbands.

All six media were positively associated with couple's unmet need except newspaper or magazine for husbands. Husbands and wives who have not heard and seen family planning messages in various sources reported having higher proportion of unmet need than those with media exposure. Between husbands and wives, a little higher proportion of husbands were not exposed to radio (55.2%), television (86.2%), pamphlet (89.7%) and at community event (55.2%) reported having a little higher proportion of unmet need compared to wives radio (57%), television (83%), pamphlet (88%), at community event (60%) and others like at health facilities and health extension workers (81%). In spite of media exposure to radio and television, the prevalence of unmet needs 43% & 17% for wives and 44.8% & 13.8% for husbands respectively (Table 9).

Table 9:- Distributions of wives and their husbands who have total unmet need for family planning by intermediate characteristics and mass media exposure on family planning message, Gedeo Zone, SNNPR, February 2011

Characteristics	Wife(n=254)				Husbands(n=254)			
	Total unmet need			X^2 & P	Total unmet need			X^2 & P
	Yes	No	Total	Value	Yes	No	Total	Value
Discussed FP with spouse in last six months								
Yes	20	124	144	**90.446**	10	133	143	**6.333**
No	80	30	110	**0.0001**	19	92	111	**0.011**
How many times discussed FP with spouse in last six months								
Never	80	30	110		19	92	111	
Once	12	33	45	**94.923**	4	17	21	**9.87**
More than once	8	91	99	**0.0001**	6	116	122	**0.007**
Respondent approves of FP								
Approves	99	137	236	**9.28**	28	200	228	**1.641**
Disapproves	1	17	18	**0.002**	1	25	26	**0.201**
Mass Media Exposure to FP message on Radio								
Yes	43	128	171	**44.35**	13	160	173	**8.1705**
No	57	26	83	**0.0001**	16	65	81	**0.0043**
TV								
Yes	17	57	74	**11.762**	4	74	78	**4.4023**
No	83	97	180	**0.001**	25	151	176	**0.0354**
Newspaper & magazine								
Yes	8	28	36	**5.167**	1	32	33	**2.6379**
No	92	126	218	**0.023**	28	193	221	**0.1043**
Leaflet, pamphlet & poster								
Yes	12	43	55	**9.060**	3	64	67	**4.3335**
No	88	111	199	**0.003**	26	161	187	**0.0373**
At community event								
Yes	40	123	163	**41.92**	13	146	159	**4.4158**
No	60	31	91	**0.0001**	16	79	95	**0.0356**
Others*								
Yes	19	14	33	**5.266**	NA	NA	NA	
No	81	140	221	**0.022**	NA	NA	NA	

Others* health facilities and health extenuation workers NA: - not applicable

6.3 Multivariate Analysis

In order to examine the different effects of the socio-demographic status, spousal communication and mass media exposure of family planning messages on couples' unmet need for family planning, binary logistic regression were estimated.

The age of wives were positively related to unmet need. The increased age decreased the likelihood of unmet need among wives. For example, women age 25-34 were significantly less likely to have an unmet need as wives age 15-24.

As wives and husbands ideal number of children increased their unmet need was decreased. Wives and husbands who preferred ideal number of children 5 or more were positively associated with unmet needs. They were less likely to have unmet needs as compared to wives and husbands who want one to four children to have an unmet need.

Educations were positively related to unmet needs, wives and husbands with primary education had lower odds of unmet needs compared to those with no education. An increased in the education decreased the likelihood of wives and husbands to have unmet need than those with no education. Religion was positively related with unmet need but not for husbands. Orthodox wives were less likely to have unmet needs for family planning than protestant wives and urban wives were less likely to have unmet need than rural wives and the association was significant.

The discussion of family planning showed a significant association with unmet need. Husbands and wives who reported FP discussion with their spouse were less likely to have unmet need compared to those who did not discuss.

Wives and husbands who have seen family planning messages in TV had lower odds of unmet need for family planning. In the same way wives and husbands exposed to radio, leaflet and at community events, showed highly significant and less likely to have unmet need for family planning than those with no exposure to have unmet needs and also wives exposure to family planning messages to others like at health facilities and health extension workers showed more likely to have unmet need than those with no exposure to have unmet need.

After controlling for the confounding effect to socio-demographic variables, discussion of family planning and exposure of family planning messages on media; age, ideal family size, place of residence, discussion of family planning with spouse and exposure of family planning messages on radio, TV and at community events were remained significantly associated with unmet need for wives and also only education, exposure of family planning messages on radio and at community events were found significantly associated with unmet need for husbands (Table 10 & 11).

Table 10:- Logistic regression coefficients predicting wives who have total unmet need for family planning, Gedeo Zone, SNNPR, February 2011

Explanatory variables	Unmet need		Crude OR (95.0% C.I)	Adjusted OR (95% C.I)
	Yes	No		
Age group in years				
15-24®	31	39	1.00	1.00
25-34	43	96	0.56 (0.31 , 1.02)	0.20 (0.05 , 0.74) *
35-44 & above	26	19	1.72 (0.81 , 3.67)	0.59 (0.13 , 2.58)
Ideal number of children				
1-4®	73	78	1.00	1.00
5+	27	76	0.38 (0.22 , 0.65) *	0.25 (0.07 , 0.86) *
Education Status				
Don't write and read®	55	53	1.00	1.00
Completed 1 – 6 grade	28	45	0.60 (0.33 , 1.10)	1.38 (0.37 , 5.20)
Completed 7 – 12 grade & above	17	56	0.29 (0.15 , 0.57) *	2.43 (0.30 , 19.99)
Religion				
Orthodox	15	45	0.43 (0.22 , 0.82) *	1.63 (0.32 , 8.37)
Moslem	9	12	0.96 (0.38 , 2.39)	1.44 (0.16 , 13.40)
Protestant®	76	97	1.00	1.00
Place of residence				
Urban	21	60	0.42 (0.23 , 0.74) *	0.11 (0.01 , 0.91) *
Rural®	79	94	1.00	1.00
Discussed FP with spouse				
Yes	20	124	0.06 (0.03 , 0.11) *	0.01 (0.001 , 0.04) *
No®	80	30	1.00	1.00
How many times discussed FP with spouse				
Never®	80	30	1.00	1.00
Once	12	33	0.14 (0.06 , 0.30) *	0.05 (0.01 , 0.22) *
More than once	8	91	0.03 (0.01 , 0.08) *	0.01 (0.001 , 0.04) *
Mass Media Exposure to FP message on				
Radio				
Yes	43	128	0.15 (0.09 , 0.27) *	0.02 (0.01 , 0.09) *
No®	57	26	1.00	1.00
TV				
Yes	17	57	0.35 (0.19 , 0.65) *	0.05 (0.004 , 0.70) *
No®	83	97	1.00	1.00

Newspaper & magazine				
Yes	8	28	0.39 (0.17 , 0.90) *	3.11 (0.28 , 34.86)
No®	92	126	1.00	1.00
Leaflet, pamphlet & poster				
Yes	12	43	0.35 (0.18 , 0.71) *	0.44 (0.06 , 3.57)
No®	88	111	1.00	1.00
At community event				
Yes	40	123	0.17 (0.10 , 0.30) *	0.01 (0.001 , 0.04) *
No®	60	31	1.00	1.00
Others*				
Yes	19	14	2.35 (1.12 , 4.93) *	1.01 (0.14 , 7.32)
No®	81	140	1.00	1.00

*Statistical significant, ®- Reference categories, **others* health facilities and health extenuation workers**

Table 11:- Logistic regression coefficients predicting husbands who have total unmet need for family planning, Gedeo Zone, SNNPR, February 2011

Explanatory variables	Unmet need		Crude OR (95.0% C.I)	Adjusted OR (95% C.I)
	Yes	No		
Age group in years				
15-24®	4	11	1.00	1.00
25-34	16	121	0.36 (0.10 , 1.28)	0.63 (0.12 , 3.40)
35-44 & above	9	93	0.27 (0.07 , 1.01)	0.30 (0.05 , 1.98)
Ideal number of children				
1-4®	21	114	1.00	1.00
5+	8	111	0.39 (0.17 , 0.92) *	0. 46 (0.15 , 1.41)
Education Status				
Don't write and read®	15	16	1.00	1.00
Completed 1 – 6 grade	8	94	0.09 (0.03 , 0.25) *	0.12 (0.03 , 0.39) *
Completed 7 – 12 grade & above	6	115	0.06 (0.02 , 0.16) *	0.09 (0.02, 0.55) *
Discussed FP with spouse				
Yes	10	133	0.36 (0.16 , 0.82) *	0.55 (0.17 , 1.82)
No®	19	92	1.00	1.00
How many times discussed FP with spouse				
Never®	19	92	1.00	1.00
Once	4	17	1.14 (0.35 , 3.77)	1.58 (0.34 , 7.35)
More than once	6	116	0.25 (0.10 , 0.65) *	0.55 (0.17 , 1.82)
Mass Media Exposure to FP message on				
Radio				
Yes	13	160	0.33 (0.15 , 0.73) *	0.18 (0.04 , 0.84) *
No®	16	65	1.00	1.00
TV				
Yes	4	74	0.33 (0.11 , 0.97) *	0.28 (0.03 , 2.53)
No®	25	151	1.00	1.00
Leaflet, pamphlet & poster				
Yes	3	64	0.29 (0.09 , 0.99) *	0.67 (0.10 , 4.64)
No®	26	161	1.00	1.00
At community event				
Yes	13	146	0.44 (0.20 , 0.96) *	0.05 (0.01 , 0.25) *
No®	16	79	1.00	1.00

* Statistical significant, ®- Reference categories.

7. DISCUSSION

The purpose of this section is to discuss the findings of the study. The present study was set out to assess the magnitude of unmet family planning need differences and levels of agreement between wife and husband and examined the effects of selected socio-demographic and intermediate factors on the outcome variables i.e. unmet need for family planning.

The results have revealed that the total levels of unmet need for contraception (39.4% for wives and 11.4% for husbands). The unmet need for contraception to space was (28.8% for wives and 8.3% for husbands) while that to limit further childbearing was (10.6% for wives and 3.1% for husbands). This finding is consistent with similar studies done elsewhere (2, 11, 21, 22, 23, 24, 26).

In this study, the observed agreement between wives and husbands regarding reporting of ideal family size, unmet need, family planning intentions and attitudes varied from a low of 35.83% for ever use of contraceptive to a high of 96.85% for contraceptive attitude. A high level of agreement in attitude toward contraception and ideal family size was also reported in a study from other places (8, 9, 10).

Regarding the main reasons cited by wives and husbands with unmet need for not using contraception, this finding showed that the main reasons reported health concerns for wives and knows no method for husbands were the highest reasons for not using contraception. A similar finding was also obtained in a study conducted from other places (2, 11, 27).

It is interestingly noted that disapproval for the use of family planning methods cited by husbands and wives, perceived fear of side effects (46.2%) and desire to have more children (30.8%) were the major limitations to the use of family planning methods for husbands and while the sole reason mentioned by wives were only desire to have more children were 18 (100 %). The finding is similar with study done in Ethiopia (28).

Age in the bivariate analysis showed that unmet need of wives and husbands was highest at ages 15–24 as compared to older age groups and the association was not significant. The ages of respondents in the multivariate analysis were statistically significant with unmet need for wives.

The tapering off unmet need after age 35 is probably due to mainly couple's perceptions that they were no longer capable of having children. Previous study in Ethiopia also showed similar finding (2, 6, 7, 25).

The likelihood of having unmet need seemed too decreased with the desired number of children. Couples who desired more children were less likely to have unmet need than the ones who desired fewer children. Couples who desired more children have a greater desired to spacing childbearing. Results agree with previous study done in Ethiopia (7).

Although demographic factors were important in determining couple's unmet need, some of them proved rather insignificant, for example, number of living children and age at first marriage has been showed in other studies as a key factor that may determine unmet need for family planning (6, 7).

On religion result showed that orthodox wives had lower odds of unmet need compared to protestant. The finding also showed that rural women were more likely to have unmet need than urban women. The finding is similar with study done in Ethiopia (2, 6).

The level of education attained by both men and women had effect on their unmet need for family planning. The effect of education was positively related to husbands and wives unmet need. This is possibly due to an increased understanding of about the contraception. As education increased, it is assumed that people are more exposed to modern and new ideas. Results agree with previous study done in other places (6, 17).

The effects of spousal communication on family planning were as expected; communication about family planning was a significant covariate to have lower unmet need for family planning for wives and husbands. Thus, the hypothesis, couples who discuss family planning were less likely to have unmet need for family planning, it was supported by this data. Also, the argument that communication between husband and wife and the quality of the communication facilitates the diffusion of values supportive to the norms favoring contraceptive use, it was true for this study couples. This finding was similar with studies done elsewhere, that discussions about family planning are rational steps for couples to take when they want to regulate their fertility (6, 8, 12, 13).

The argument, when men and women who were exposed to family planning messages from any media were less likely to have unmet need for family planning compared to those without any media exposure. The logistic regression analysis revealed that husbands and wives exposure to family planning messages in four sources were positively associated with unmet need, less likely to have unmet need among wives and husbands when exposed to family planning messages on media than those not exposed to family planning messages in media. This finding was similar with studies conducted in other places reported media exposure had positive effects on contraceptive use (5, 6, 12).

8. STRENGTHS AND LIMITATIONS

8.1 Strengths

- A cross-sectional comparative study was undertaken.
- Such type of study was not conducted in the highly populated district before.

8.2 Limitations

- Qualitative data on couples' motivation as well as other factors that may influence husband and wife fertility decisions and family planning practices not supplemented.

9. CONCLUSIONS AND RECOMMENDATIONS

9.1 CONCLUSIONS

This section gives a summary of the findings of the study as well as a conclusion pertaining to these findings.

- Unmet need for family planning was significantly higher for wives compared to husbands.

- Overall, a greater degree of agreement was observed among wives and husbands regarding desired family size, family planning attitudes and unmet need for family planning; the nature of disconcordance reinforces to take into account the perspective of men.

- Women educational level was the main factor affecting the unmet need; from the intermediate behavioral factors negative attitude towards family planning service use and health concern (for wives) and knows no method (for husbands) were factors affecting the unmet need.

9.2 RECOMMENDATIONS

The study recommends to the SNPPR Health Bureau and Gedeo Zone Health Department:-

- Strengthening IEC/BCC in family planning which considers the local/specific community language and cultural context. Equally men and women should be reached through IEC/BCC by using health extension workers who works to promote family planning through home visits during which they will convince couples about the use and advantages of contraception.

- Improving the status of women's development, particularly through education and maintaining a strong commitment to family planning are presumed to be essential to achieve a population policy objective.

- Couples concerns about the discomfort of contraceptives as well as their fears of side effects or health concerns should be addressed by service providers. Women and men should be provided with complete information about the various contraceptive options as well as the risks involved. It is likely that some of women's and men's fears may stem from rumors or cultural attitudes, so it would be proper for these issues to be addressed by health professionals in a clear, respectful, and open manner.

- Maximize access to good quality family planning services should be available to all women and men at the health facility level. Health providers should be trained on effective counseling and proper service delivery skills.

- Finally, further research,

    - Particularly applying qualitative approaches should be undertaken to explore the extent of husband's role on couple reproductive decision-making which may reveal new insights about couples' motivation in family planning use and other factors that may influence wife and husband fertility decisions and family planning practices.

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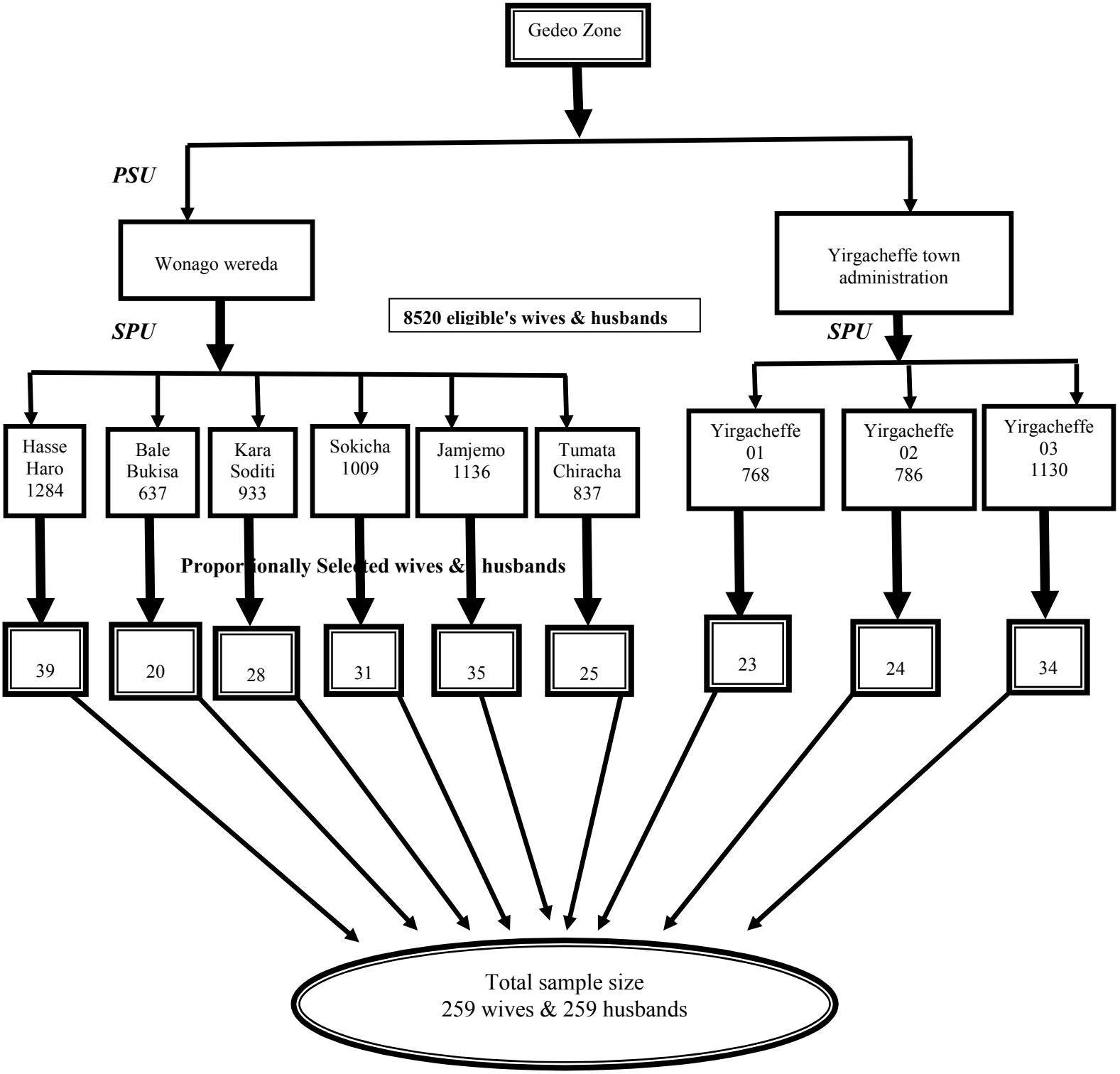
ANNEXES

Annex 1:- Schematic presentation of sampling techniques (multistage techniques)



Addis Ababa University, College of Health Sciences,

School of Public Health

Participant Information Sheet

Title of the study: Measuring unmet family planning need differences and levels of agreement between husband and wife, Gedeo Zone, Southern Nation and Nationality People Region.

Name of Principal Investigator: Yoseph Tsehaye

Advisor Dr Abera Kumie and Wubegzier Mekonnen, School of Public Health, College of Health Science, Addis Ababa University

Introduction

My Name is _____I came from _____I am a student of MPH in the Addis Ababa University. I would like to inform you that you and me would have a short discussion concerning this study. Before we go to our discussion, I will request you to listen carefully to what I am going to read to you about the purpose and general condition of the study and tell me whether you agree or disagree to participate in this study.

Purpose of the study

The purpose of this study is to assess the magnitude of unmet family planning need differences and levels of agreement between husband and wife, Gedeo Zone, Southern Nation and Nationality People Region. This research undertaking is a post graduate Masters of Public Health partial fulfillment research thesis.

Procedures and participation

You are selected to be one of the participants in the study. The study will be conducted through interviews. We are asking you for a little of your time, about 30 to 45 min, to help us in this study. At the end, it is hoped that the information you give us could help to design effective family planning programs to reduce the prevailing high level of unmet need. The interview involves questions on personal and reproductive issues of individuals.

Confidentiality and privacy

Interviewing will take place in a private. We would like to assure you that this privacy will strictly be maintained throughout. A code will be used to identify your participation and no name

will be used for your responses to any of the questions that will not be given to anyone else. No reports of the study will ever identify you. If a report of results is published, only information about the total group will appear. The original data will be locked in cabinets until the data analysis carryout and no person shall access except the PI and the advisor for data checking and cleaning purpose. It will then be destroyed in a secured manner after the research defense and final work is approved by the school of public health and academic commission and university senate.

Freedom to withdraw

The interview is voluntary. If you want to participant in the study, you have full right to with draw from the study any time you wish our participation/ non-participation, or refuse to respond to the questions will have no effect now or in the future.

Benefits, risks, and incentives

The study does not incur any risks because of your involvement. Please be informed that there is no any direct benefit in a form of incentives or money attached to your participation in this study. Your response is essential to generate information for designing effective family planning programs..

Contact persons

For any other additional information about the study, please contact the principal investigator and his advisor by the following address:

Name, address and Tel number of PI: Name: Ato Yoseph Tsehaye, School of Public Health, Tel: 0911757473.

Primary advisor: Dr Abera Kumie, School of Public Health, Addis Ababa University, Tel: 0911882912.

Co advisor: Wubegzier Mekonnen, School of Public Health, Addis Ababa University, Tel: 0911668606.

Should you be willing to agree to participate in this study, I would like to thank you for your time and for the information you are willing to share with me. If you have any questions about your rights as a study participant or questions or concerns about any aspect of the study, you may freely ask.

Addis Ababa University, College of Health Sciences,

School of public health

Informed Consent Form

Title: Measuring unmet family planning need differences and levels of agreement between husband and wife, Gedeo Zone, Southern Nation and Nationality People Region.

I have been well aware of that this research undertaking is a post graduate degree partial fulfillment of research thesis which is fully supported and coordinated by School of Public Health and the designate principal investigator is Yoseph Tsehaye. I have been fully informed in the language I understand about the research project an objective that is to understand the unmet family planning need differences and levels of agreement.

I have been informed that all the information I shall provide to the interviewer will be kept confidential. I understood that the research has no any risk and no composition. I also knew that I have the right to withhold information, skip questions to answer or to withdraw from the study any time I have acquainted nobody will impose me to explain the reason of withdrawal. It is also enlighten there would have no effect at all in my health benefit or other administrative effect that I get from the refuge.

I have assured that the right to ask information that is not clear about the research before and or during the research work and to contact:

a. Addis Ababa university, School of Public Health, Secretary office Tel. 01155157701
b. Yoseph Tsehaye Tel: 0911757473.
c. Dr. Abera Kume Tele: 0911882912
d. Wubegzier Mekonnen Tele: 0911668606.

I have read this form, or it has been read to me in the language I comprehend and understood the condition stated above, therefore, I am willing and confirm my participation.

Are you willing to participate in this study? 1, Yes 2, NO

Name of data collector: _____

Signature _____Date _____

Name of researcher and his address: Yoseph Tsehaye Tel: 0911757473.

Annex 3:-QUESTIONNAIRES

Questionnaire 1 – for women

PART ONE: – SOCIO-DEMOGRAPHIC CHARACTERISTICS

S.Nº	Questions	Choice of answer
101	Address	Write the kebele ____
102	In what date, month and year were you born	• Date------- • Month-- • Year--------
103	How old were you at your last birthday? Compare and correct 102 and/or 103 if inconsistent.	• Age in completed year----
104	Have you ever attended school?	0. No 1. Yes
105	What is the highest grade you completed?	1. Completed 1- 6 grade 2. Completed 7- 12 grade 3. Tech./Voc. Certificate 4. University /Collage Diploma 5. University /Collage Degree 6. Higher
106	**For grade 00-06** Now I would like you to read this sentence to me. Show card to respondent If respondent cannot read whole sentence, probe: Can you read any part of the sentence to me?	1. Cannot read at all 2. Able to read only part of sentence 3. Able to read whole sentence 4. Blind / visual impaired
107	What is your marital status now?	1. Single 2. Married 3. Divorced 4. Widowed 5. Separated
108	Religion	1. Orthodox 2. Islam 3. Protestant 4. Catholic 5. Others (specify
109	Occupation	1. House wife 2. Merchant 3. Daily laborer 4. House maid 5. Governmental employee 6. Others (specify)
110	Place of residence	1. Urban 2. Rural

PART - TWO: REPRODUCTIVE HISTORY

S.Nº	Questions	Choice of answer
201	How old were you when you first married or started living with him?	• Age----
202	Have you ever been pregnant?	0. No 1. Yes
203	If your answer to question 202 is yes, how old were you when you first got pregnant?	• Age----
204	Are you pregnant now?	0. No 1. Yes 2. Unsure
205	At the time you became pregnant did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all?	1. Then 2. Later 3. Not at all
206	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	0. No 1. Yes
207	If the answer to question 206 is yes, how many times?	• Enter number---
208	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	0. No 1. Yes
209	If your answer to question 208 is yes, how old were you when you first child was born?	• Age------
210	Do you have any sons or daughters to whom you have given birth who are now living with you?	0. N0 1. Yes
211	A. How many sons live with you? If none, record '00'.	• Sons at home ---
	B. And how many daughters live with you? If none, record '00'.	• Daughters at home
212	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	0. No 1. Yes
213	A. How many sons are alive but do not live with you? If none, record '00'.	• Sons elsewhere --
	B. And how many daughters are alive but do not live with you? If none, record '00'.	• Daughters elsewhere -
214	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	0. No 1. Yes
215	A. How many boys have died? If none, record '00'.	• Boys dead ------
	B. And how many girls have died? If none, record '00'.	• Girls dead -------
216	**Not pregnant** or **unsure** Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	1. Have (a/another) child 2. No more/none 3. Says she cannot get pregnant 4. Undecided/don't know
217	**Pregnant** Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	1. Have (a/another) child 2. No more/none 3. Says she cannot get pregnant 4. Undecided/don't know
218	**Not pregnant** or **unsure** How long would you like to wait from now before the birth of (a/another) child?	1. 00-23 months (00-01 year) 2. 24 or more months (02 or more years 3. Soon/now 4. Says she cannot get pregnant 5. Other 6. Don't know

219	**Pregnant** After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	1. 00-23 months (00-01 year) 2. 24 or more months (02 or more years) 3. Soon/now 4. Says she cannot get pregnant 5. Other 6. Don't know
220	**Not pregnant** or **unsure** Some people use various ways or methods to delay or avoid a pregnancy. Are you currently using any method to delay or avoid getting pregnant?	1. Not currently using 2. Currently using
221	If your answer to question 220 is not currently using, do you intended to use a contraceptive method?	0. No 1. Yes
222	If your answer to question is 221 yes, would you like to use a contraceptive method within?	1. 00-23 months (00-01 year) 2. 24 or more months(02 or more years) 3. Not yet decided
223	**Wants to have another child** You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. Can you tell me why you are not using a method? Any other reason? Record all reasons mentioned.	**FERTILITY-RELATED REASONS** 1. Not having sex 2. Infrequent sex 3. Can't get pregnant 4. Not menstruated since last birth 5. Breast feeding **OPPOSITION TO USE** 6. Respondent opposed 7. Husband/Partner opposed 8. Others opposed 9. Religious prohibition **LACK OF KNOWLEDGE** 10. Knows no method 11. Knows no sources **METHOD-RELATED REASONS** 12. Health concerns 13. Fear of side effects 14. Lack of access /too far 15. Costs too much 16. Incontinent to use 17. Interferes with body's 18. Normal processes 19. Method not available 20. Others (Specify) 21. Don't know
224	**Wants no more / none** You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. Can you tell me why you are not using a method? Any other reason? Record all reasons mentioned.	**FERTILITY-RELATED REASONS** 1. Not having sex 2. Infrequent sex 3. Can't get pregnant 4. Not menstruated since last birth 5. Breast feeding **OPPOSITION TO USE** 6. Respondent opposed 7. Husband/Partner opposed 8. Others opposed 9. Religious prohibition

		LACK OF KNOWLEDGE 10. Knows no method 11. Knows no sources **METHOD-RELATED REASONS** 12. Health concerns 13. Fear of side effects 14. Lack of access /too far 15. Costs too much 16. Incontinent to use 17. Interferes with body's 18. Normal processes 19. Method not available 20. Others (Specify) 21. Don't know
225	If your answer to question is 221 yes, Which contraceptive method would you prefer to use?	1. Female sterilization 2. Pills 3. IUD 4. Inject able 5. Implants 6. Female condom 7. Diaphragm 8. Foam/jelly 9. Lactational amenorrhea method 10. Periodic abstinence 11. Withdrawal 12. **Other (specify)**
226	If your answer to question is 221 no, What is the main reason that you think you will not use a contraceptive method at any time in the future?	**FERTILITY-RELATED REASONS** 1. Not having sex 2. Infrequent sex 3. Can't get pregnant 4. Not menstruated since last birth 5. Breast feeding **OPPOSITION TO USE** 6. Respondent opposed 7. Husband/Partner opposed 8. Others opposed 9. Religious prohibition **LACK OF KNOWLEDGE** 10. Knows no method 11. Knows no sources **METHOD-RELATED REASONS** 12. Health concerns 13. Fear of side effects 14. Lack of access /too far 15. Costs too much 16. Incontinent to use 17. Interferes with body's 18. Normal processes 19. Method not available 20. Others (Specify) 21. Don't know
227	Would you ever use a contraceptive method if you were married?	0. No 1. Yes

228	**HAS LIVING CHILDREN** If you could go back to the time you don't have children and could choose exactly the number of children to have in your life, how many children could that be? Probe for a numeric response	1. None 2. 1- 2 3. 3- 4 4. 5 or more 5. Other (specify)
229	**NO LIVING CHILDREN** If you could choose exactly the number of children to have in your whole life, how many would that be? Probe for a numeric response	1. None 2. 1- 2 3. 3- 4 4. 5 or more 5. Other (specify)
230	A. How many of these children would you like to be boys?	• BOYS
	B. How many would you like to be girls?	• GIRLS
	C. And for how many would the sex not matter?	• EITHER
231	In the last few months have you heard about family planning: A. On the radio? B. On the television? C. In a newspaper or magazine? D. In pamphlet/poster/leaflets/booklets? E. At a community event? F. Others	No Yes 0 1 0 1 0 1 0 1 _____
232	Does your husband/partner know that you are using a method of family planning?	0. No 1. Yes 2. Don't know
233	Would you say that using contraception is mainly your decision, mainly your husband's/partner's decision, or did you both decide together?	1. MAINLY RESPONDENT 2. MAINLY HUSBAND/PARTNER 3. JOINT DECISION 4. OTHER (SPECIFY)
234	Do you think your husband/partner wants the same number of children that you want, or does he want more or fewer than you want?	1. SAME NUMBER 2. MORE CHILDREN 3. FEWER CHILDREN 4. DON'T KNOW
235	Do you approve or disapprove of couples using a method of family planning?	1. Approve 2. Disapprove 3. Don't know
236	If the answer to question no 235 is to disapprove, Why? Tick all mentioned.	1. Religion prohibition 2. Fear of side effect 3. Medical problem 4. Desire for more children 5. Others, specify
237	Have you discussed about contraception with your husband within the last six months?	0. No 1. Yes 2. Don't remember
238	If the answer to question no 237 is yes, how many times have you discussed?	1. Once 2. Twice 3. Three times 4. Greater than 3 times 5. Don't remember exact no
239	What is your husband's attitude towards contraceptive methods?	1. Approve 2. Disapprove 3. Don't know
240	Does your husband know whether you are using or not using any contraceptive?	0. No 1. Yes 2. I am not sure
241	Do you know if your husband is using or not using any modern contraceptive?	0. No 1. Yes 2. I am not sure

Questionnaire 1 – for men

PART ONE: – SOCIO -DEMOGRAPHIC CHARACTERISTICS

S.Nº	Questions	Choice of answer
101	Address	Write the kebele ___
102	In what date, month and year were you born	• Date --------- • Month--------- • Year---------
103	How old were you at your last birthday? Compare and correct 102 and/or 103 if inconsistent.	• Age in completed year-----
104	Have you ever attended school?	0. No 1. Yes
105	What is the highest grade you completed?	1. Completed 1- 6 grade 2. Completed 7- 12 grade 3. Tech./Voc. Certificate 4. University /Collage Diploma 5. University /Collage Degree 6. Higher
106	**For grade 00-06** Now I would like you to read this sentence to me. Show card to respondent. If respondent cannot read whole sentence, probe: Can you read any part of the sentence to me?	1. Cannot read at all 2. Able to read only part of sentence 3. Able to read whole sentence 4. Blind / visual impaired
107	What is your marital status now?	1. Single 2. Married 3. Divorced 4. Widowed 5. Separated
108	Religion	1. Orthodox 2. Islam 3. Protestant 4. Catholic 5. Others (specify
109	Occupation	1. Farmer 2. Merchant 3. Daily laborer 4. House maid 5. Governmental employee 6. Others (specify)
110	Place of residence	1. Urban 2. Rural

PART - TWO: REPRODUCTIVE HISTORY

S.Nº	Questions	Choice of answer
201	How old were you when you first married or started living with him?	• Age----
202	Is your wife pregnant now?	0. No 1. Yes 2. Unsure
203	At the time your wife became pregnant did you want her to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all?	1. Then 2. Later 3. Not at all
204	Now I would like to ask about all that you have had children during your life. Have your wife ever given birth?	0. No 1. Yes
205	If your answer to question 204 is yes, how old were you when you first child was born?	• Age-----
206	Do you have any sons or daughters that you have fathered who are now livings with you?	0. No 1. Yes
207	A. How many sons live with you? If none, record '00'.	• Sons at home ---
	B. And how many daughters live with you? If none, record '00'.	• Daughters at home ----
208	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	0. No 1. Yes
209	A. How many sons are alive but do not live with you? If none, record '00'.	• Sons elsewhere ----
	B. And how many daughters are alive but do not live with you? If none, record '00'.	• Daughters elsewhere ---
210	Have you have fathered to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	0. No 1. Yes
211	A. How many boys have died? If none, record '00'.	• Boys dead ----
	B. And how many girls have died? If none, record '00'.	• Girls dead ---
212	**Wife not pregnant** or **unsure** Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	1. Have (a/another) child 2. No more/none 3. Says she cannot get pregnant 4. Undecided/don't know
213	**Wife pregnant** Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	1. Have (a/another) child 2. No more/none 3. Says she cannot get pregnant 4. Undecided/don't know
214	**Wife not pregnant** or **unsure** How long would you like to wait from now before the birth of (a/another) child?	1. 00-23 months (00-01 year) 2. 24 or more months(02 or more years) 3. Soon/now 4. Says she cannot get pregnant 5. Other 6. Don't know
215	**Wife pregnant** After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	1. 00-23 months (00-01 year) 2. 24 or more months (02 or more years) 3. Soon/now 4. Says she cannot get pregnant 5. Other 6. Don't know

216	**Wife not pregnant** or **unsure** Some people use various ways or methods to delay or avoid a pregnancy. Are you or partner currently using any method to delay or avoid getting pregnant?	1. Not currently using 2. Currently using
217	If your answer to question 216 is not currently using, do you intended to use a contraceptive method?	0. No 1. Yes
218	If your answer to question is 217 yes, would you like to use a contraceptive method within?	1. 00-23 months (00-01 year) 2. 24 or more months(02 or more years) 3. Not yet decided
219	**Wants to have another child** You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. Can you tell me why you are not using a method? Any other reason? Record all reasons mentioned.	**FERTILITY-RELATED REASONS** 1. Not having sex 2. Infrequent sex 3. Can't get pregnant 4. Not menstruated since last birth 5. Breast feeding **OPPOSITION TO USE** 6. Respondent opposed 7. Husband/Partner opposed 8. Others opposed 9. Religious prohibition **LACK OF KNOWLEDGE** 10. Knows no method 11. Knows no sources **METHOD-RELATED REASONS** 12. Health concerns 13. Fear of side effects 14. Lack of access /too far 15. Costs too much 16. Incontinent to use 17. Interferes with body's 18. Normal processes 19. Method not available 20. Others (Specify) 21. Don't know
220	**Wants no more / none** You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. Can you tell me why you are not using a method? Any other reason? Record all reasons mentioned.	**FERTILITY-RELATED REASONS** 1. Not having sex 2. Infrequent sex 3. Can't get pregnant 4. Not menstruated since last birth 5. Breast feeding **OPPOSITION TO USE** 6. Respondent opposed 7. Husband/Partner opposed 8. Others opposed 9. Religious prohibition **LACK OF KNOWLEDGE** 10. Knows no method 11. Knows no sources **METHOD-RELATED REASONS** 12. Health concerns 13. Fear of side effects 14. Lack of access /too far 15. Costs too much 16. Incontinent to use 17. Interferes with body's

		18. Normal processes 19. Method not available 20. Others (Specify) 21. Don't know
221	If your answer to question is 217 yes, Which contraceptive method would you prefer to use	1. Male sterilization 2. Condom 3. Periodic abstinence 4. Withdrawal 5. **Other (specify)**
222	If your answer to question is 217 No, What is the main reason that you think you will not use a contraceptive method at any time in the future?	**FERTILITY-RELATED REASONS** 1. Not having sex 2. Infrequent sex 3. Can't get pregnant 4. Not menstruated since last birth 5. Breast feeding **OPPOSITION TO USE** 6. Respondent opposed 7. Husband/Partner opposed 8. Others opposed 9. Religious prohibition **LACK OF KNOWLEDGE** 10. Knows no method 11. Knows no sources **METHOD-RELATED REASONS** 12. Health concerns 13. Fear of side effects 14. Lack of access /too far 15. Costs too much 16. Incontinent to use 17. Interferes with body's 18. Normal processes 19. Method not available 20. Others (Specify) 21. Don't know
223	Would you ever use a contraceptive method if you were married?	0. No 1. Yes
224	**HAS LIVING CHILDREN** If you could go back to the time you don't have children and could choose exactly the number of children to have in your life, how many children could that be? Probe for a numeric response	1. None 2. 1- 2 3. 3- 4 4. 5 or more 5. Other (specify)
225	**NO LIVING CHILDREN** If you could choose exactly the number of children to have in your whole life, how many would that be? Probe for a numeric response	1. None 2. 1- 2 3. 3- 4 4. 5 or more 5. Other (specify)
226	A. How many of these children would you like to be boys?	• BOYS
	B. How many would you like to be girls?	• GIRLS
	C. And for how many would the sex not matter?	• EITHER
227	In the last few months have you heard about family planning: A. On the radio? B. On the television? C. In a newspaper or magazine? D. In pamphlet/poster/leaflets/booklets? E. At a community event? F. Others	No Yes 0 1 0 1 0 1 0 1 _____

228	Do your wife /partner know that you are using a method of family planning?	0. No 1 Yes 2 Don't know
229	Would you say that using contraception is mainly your decision, mainly your husband's/partner's decision, or did you both decide together?	1 MAINLY RESPONDENT 2 MAINLY HUSBAND/PARTNER 3 JOINT DECISION 4 OTHER (SPECIFY)
230	Do you think your husband/partner wants the same number of children that you want, or does he want more or fewer than you want?	1. SAME NUMBER 2. MORE CHILDREN 3. FEWER CHILDREN 4. DON'T KNOW
231	Do you approve or disapprove of coupes using a method of family planning?	1. Approve 2. Disapprove 3. Don't know
232	If the answer to question no 231 is to disapprove, Why? Tick all mentioned.	1. Religion prohibition 2. Fear of side effect 3. Medical problem 4. Desire for more children 5. Others, specify
233	Have you discussed about contraception with your wife within the last six months?	0. No 1. Yes 2. Don't remember
234	If the answer to question no 233 is yes, how many times have you discussed?	1. Once 2. Twice 3. Three times 4. Greater than 3 times 5. Don't remember exact no
235	What is your wife attitude towards contraceptive methods?	1. Approve 2. Disapprove 3. Don't know
236	Does your wife know whether you are using or not using any contraceptive?	0. No 1. Yes 2. I am not sure
237	Do you know if your wife is using or not using any modern contraceptive?	0. No 1. Yes 2. I am not sure

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DECLARATION

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

Name Yoseph Tsehaye

Signature ----------

Place Addis Ababa, Ethiopia

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

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

Name Dr. Abera Kumie (PhD)

Signature----------

Date----------