ASSESSMENT OF THE MAGNITUDE AND DETERMINANTS OF UNMET NEED FOR FAMILY PLANNING AMONG CURRENTLY MARRIED WOMEN IN URBAN AND PERIURBAN COMMUNITY IN AWASSA, SOUTHERN ETHIOPIA

BY

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DECLARATION

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

Name _____

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Date of Submission _____

This thesis has been submitted with our approval as university advisor.

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_____ _____

Advisors Name Signature

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List of abbreviation

AAU Addis Ababa University

CBD Community based distribution of family planning.

CPR Contraceptive prevalence rate.

DCH Department of community health.

DHS Demographic and health survey.

FP Family planning

FGAE Family Guidance Association of Ethiopia.

FGD Focus group discussion

IPPF International Planned Parenthood Federation

I.U.C.D Intrauteral contraceptive device

KAP Knowledge, attitude and practice

MOH Ministry of Health

SNNPR Southern Nation, Nationalities and Peoples Region.

SPSS Statistical Package for the Social Science

UDAs Urban dwellers associations

ABSTRACT

This is a community based cross- sectional comparative study conducted in Awassa Town and periurban areas in November and December 2002, in Southern Nation Nationalities and peoples region to assess the magnitude and determinants of unmet need for family planning among currently married women in the reproductive age group. A multistage sampling procedure was carried out to interview 1218 women in both study areas. A pretested structured questionnaire complemented with focus group discussions was the main instrument used for data collection.

The study revealed that median age at marriage in the urban area was found to be 18 years, while 16 in the periuban area. Average number of children desired in the urban area was 3.5 and 7.8 in periurban. Ninety eight percent of the urban and 95% of the periurban study population had heard of contraception, and 95% in urban area and 72% percent in periurban knew at least one method of contraception.

The contraceptive prevalence in Awassa Town was 68.8%, and in the periurban area 48%. Among the non-users of family planning 50% in urban did not use due to desire to have more children and 26% did not use due to husbands or partners opposition to use family planning. Seventy one percent of women in the urban areas discontinued using family planning due to desire to have more children, and 61% in the periurban area.
Unmet need for family planning in Awassa Town was 23.6% of which 13.0% for spacing and 10.5% for limiting of child birth and unmet need in periurban was 40% of which 32.7% for spacing and 7.4% for limiting birth. Seventy percent of women with unmet need have never used family planning methods. Sixty-four percent of women with unmet need for family planning had intention to use family planning in the near future. Knowledge about contraception, family size, place of residence, discussion with husbands and husband's attitude to wards contraception were found to be determinants of unmet need for contraception. Maximize access to good quality services. Improving the quality of family planning services and making contraceptives easier to obtain and use will help meet the need of many women.

Introduction and statement of the problem

Currently, the world population is growing by over 80 million people every year**.**

Such a change is unprecedented. It was not until about 1800, that the world's total population reached 1 billion .It took approximately another century to reach 2 billion. In the past 50 years more people have been added to the world's population than during the previous 4 million years [1]. According to the UN projections, by 2025 the world would contain over 8 billion people, of which some 6.8 billion would live in developing countries [1,2].

The potential for economic development in Sub-Saharan Africa is greater now than at any time in the last quarter of the 20^{th} century. With the spread of democracy to more countries, a new generation of leaders appears more responsive to the needs of their people [3]. However, continued rapid increases in population derail these fragile political and economic gains. Never has a region faced such sustained, high population growth on its path to development [3]. Increasing at almost 3 % yearly since the mid 1970s, the population of sub-Saharan Africa has doubled in just 25 years. In less than three decades Africa's population is projected to double again from the current level of 620 million_ even after taking into account declining birth rates and rising deaths from AIDS [3]. Since large families are still the norm and a huge group of young people is about to enter their reproductive years.

Young women face heavy social pressure to marry and bear children early, more than half of women give birth by age 20,a proportion that has remained substantially unchanged over the years. It shortens the span between the generations, contributing to greater population

momentum and a high rate of population growth [3]. High population growth has put pressure on the already meager resources and poses a serious challenge to developing nations [4].

Many low-income countries are caught in a vicious cycle: efforts to improve living standards and alleviate poverty are overwhelmed by the need to provide basic services and jobs for the growing number of people. Government resources are stretched thin even to provide minimal level of education, health care, housing, water and sanitation [5]. For this reason provision of family planning services has become the intervention of choice to slow this demographic explosion [6]. Family planning as a program whose benefits touch all levels- individuals, family, community, national, and global- enhances the quality of life by reducing infant mortality, improving maternal health, and alleviating pressure on governments to meet social and economic needs. In addition, access to family planning can be seen as a human right and as a means to enlarge women's life options [5].

Since the 1960s, the rate of population growth has slowed. In what demographers have termed a reproductive revolution, fertility in developing countries has declined as contraceptive use has risen. Family planning programs have helped millions of couples avoid unwanted pregnancies and thus have contributed significantly to reducing fertility rates [7,8]. Because of family planning programs in the past, the world now contain 400 million fewer people than it would other wise [9]. Whilst the last 30 years have seen progress in the number of couples able to benefit from family planning there are still at least some 120 million, without access to contraception [10].

Unmet need, which is estimated from survey data, refers to married women who say that they would prefer to avoid or postpone childbearing, but who are not using any method of contraception [11]. Many unmarried adolescents are also sexually active and are at high risk of contracting unwanted pregnancy and other reproductive health problems. While they are more likely to use contraception than married teens, they too have a substantial unmet need for contraceptive services. As a result, many adolescents with unwanted pregnancies resort to unsafe abortion [3].

The concept of unmet need for family planning was first explored in the 1960s, when data from surveys of contraceptive knowledge, attitude and practice [KAP] showed a gap between some women's reproductive intentions and their contraceptive behavior. The term that came in to popular use to describe this group reflecting the source of the data-was" KAP- GAP " [12].

In 1974, Freedman and Lola Gene Coombs for the first time used survey data to identify the size of this group in several countries, and they found it to be substantial. They coined the term 'discrepant behavior" to describe the status of such women [12].

The level of unmet need in a country is not static, but always fluctuates, depending on the interplays of two factors –fertility desire and contraceptive use." Unmet need is a moving target" [12]. It rises, as more women want to control their fertility, and it falls as more use contraception. Thus, a high level of unmet need does not necessarily indicate program failure, nor does a low level necessarily indicate success. Moreover, where the proportion of women with unmet need is declining, the absolute number with unmet need may be growing as the

population is growing [12]. The need for family planning is positively related to the number of surviving children [44]. Women who already had given enough births showed a negative attitude towards contraception [24]. For each additional contraceptive method that is widely available in a country, contraceptive prevalence increases [12]. Many women do not use contraception because their husbands are opposed. Lack of support from extended family and community leaders also prevents some women from using contraception.

Ethiopia is one of the most populous countries in Africa. It stands third after Nigeria and Egypt [13]. With the highest annual population growth rate of 2.9 %, high maternal mortality of 871/100,000 live births and high infant mortality of 97/1000 live births. The population increased over the decade, from 42.6 million in 1984 to 53.5 million in 1994. There was a slight decline in the population growth rates over a decade, from 3.1% in 1984 to 2.9 % in 1994 [14].

In recognition of the need to address these issues the Government of Ethiopia adopted a population policy in 1993. The prime objective of the policy is to harmonize the rate of population growth with the socioeconomic development. The population policy also aims at reducing the total fertility rate from 7.7 children per women in 1995 to 4. Children per women in 2015 and an increase in contraceptive prevalence rate from 4% in 1995 to 44% in 2015 [14].

The International Conference on Population and Development [ICPD] held in Cairo in 1994 secured international agreement on population and development approach that put people first and places women at the center of development efforts [15]. These were already guiding principles of the national population policy adopted in Ethiopia as part and the center of the new

economic and social policies adopted by the Transitional Government of Ethiopia [15]. Regardless of program, country, religion, or economic status, control over one's fertility there is a basic need for family planning, which is as basic as food and housing. Any attempt to isolate family planning from development is not only outdated, but misguided [10].

The Southern Nations Nationalities, and Peoples Region of Ethiopia [SNNPR] is characterized by high infant mortality of 102/1000 live birth, a high level of fertility rate of 6.8 children per-women of reproductive age and low level of contraceptive use [16]. The new National Population Policy favoring fertility limitation was implemented in April 1993. The SNNPR Government, many international and national non-government organizations [NGOs] and numerous international organizations have promoted the delivery of family planning services. The Regional government has been delivering such services mainly through maternal and child services, as part of integrated program of health care services. The primary provider of family planning services has been the Family Guidance Association of Ethiopia, an indigenous NGO associated with the International Planned Parenthood Federation [IPPF]. The NGOs also have been active in community-based systems for distributing contraceptive services [17].

Literature Review

1. Contraceptive knowledge, Attitude and, Practice

Contraceptive knowledge- Knowledge of contraception is a precondition for its use [18]. In most developing countries surveyed by DHS, more than three quarters of women can name at least one modern method of contraception spontaneously. In seven African countries, however, Burundi, Ghana, Liberia, Mali, Niger, Senegal, and Uganda-fewer than 40% of married women were able to name any modern family planning method spontaneously [18]. In Nigeria, for example, the 1990 DHS reported that only 44% of married women recognized any family planning method, modern or traditional.

In all surveyed countries except Mali, Niger, Senegal, and Togo, awareness of modern methods exceeds awareness of traditional methods, often by a wide margin. For example, in Pakistan 77% of married women recognized a modern method compared with 26% who recognized a traditional method and in Mexico 93% and 72%, respectively [18]. Among all surveyed countries oral contraceptives and female sterilization are most widely recognized, followed by injections and IUCD. Male sterilization is least known [18].

Even though modern family planning in Ethiopia is a recent phenomenon, particularly in rural areas, knowledge of contraceptive methods is relatively high, with 82% of all women aged 15-49 knowing at least one method of family planning [19]. Knowledge is slightly higher among currently married women [86%] than among all women. The pill is the most widely known modern method, with 82% of currently married women having heard of it. It is followed by injectables, which are known by 7 in 10 married women. Vaginal methods are the least

recognized modern method, mentioned by 4% of currently married women. Traditional methods are less widely known than modern methods. Nearly one –fourth of currently married women reported that they know at least one traditional method [19].

Among women in a rural community around Jimma, western Ethiopia, knowledge of contraception was 41% and knowledge of any modern method 31%, knowledge of contraceptive limited to pills 67.3%, injectables 5.7% and rhythm 27%[20]. It was also noted during focus group discussions despite the agreement of the majority about fertility issues being a domain of ‘‘God’’ that there is a desire for more information about family planning services [20]. Poor rural women are about 25% more likely than better-off women to know about contraceptives: in contrast, poor urban women are about 40% less likely to know about contraceptive methods. Rural women in poor households are about 40% less likely than their better-off counterparts to have discussed family size and family planning with their husbands [17]. Knowledge of contraceptives and positive attitude to contraception was significantly associated with modern contraceptive use [21]. Despite this association however, misconception about modern contraception may lead to low approval of method as was seen in study done in Sudan [22]. The study showed in spite of high level of knowledge of vasectomies, approval was low due to misconceptions.

Attitude towards contraception.

A study conducted around Awassa revealed that nearly 80% of the respondents had a desire to know more about contraceptive methods and 76% of female respondents wanted to use modern contraceptive methods [23]. Among women 82.7% gave the responsibility to both the husband and wife [23]. Despite the influence of sociocultural backgrounds, the majority of the respondents evaluated modern contraception in a more favorable way [24]. Ninety-nine percent of the total respondents believed that family planning is important. Of those who were not using modern contraceptives, 72% and 86% of the female have positive attitude to-wards future use of contraceptives [25,26]. Modern contraceptives were perceived as a good means to control fertility by 83% of the respondents who claimed to have heard of family panning and there is a desire to use modern contraceptive methods among the population in remote rural areas [27,28].

Eighty [62%] of the urban and 134[62%] of the rural respondents wanted the decision to use contraceptives to be made by both partners [29]. However, less rural 6.5% than urban 17% respondents wanted the decision to be made by males. On the contrary, 6.2% of the urban and 22.7% of the rural respondents left the decision to God's will [29]. The majority of women 69 % approve of the use of family planning and 68% percent believe that their husband approves too. One-third of women reported that they did not know about their husbands' attitude, and another 8 % were unsure of their husband. Urban women are more likely to approve of family planning than their rural counter parts. Women with no family education were the least likely to approve of family planning [19].

Contraceptive Methods Use

Worldwide an estimated 570 million couples were using contraception in 1998, according to the United Nations [30]. In developing countries the percentage of married couples using contraception has increased substantially, from less than 10 % in the 1960s to 55% in 1998, and it continues. Each 15% increase in contraceptive prevalence results in approximately one less birth per women on average [30]. North America has the highest rate of modern contraceptive use, 67%, Africa has the lowest: 15%, Asia, including China, has the highest rate of contraceptive use in the developing world [31].

Different studies [16,17,19, 20,21,25,27,32,33] conducted in different parts of Ethiopia at different times showed contraceptive use rates with variation between urban and rural ranging from 2% in rural to 35.5% in urban areas. The ever-used rate was 17% for all contraceptives, 14% for modern and 6% for traditional methods. The most commonly ever- used modern method among currently married women is the pill [11%] followed by injection [7%][19]. The contraceptive prevalence rate for currently married women who are currently using a method of family planning is 8% for the country. The CPR for modern methods is 6 %, while only 2 % of currently married women are using traditional methods. There is a marked discrepancy between ever-use and current use of family planning. Whereas 17% of married women have used a method of family planning at some time, only 8 % are currently using a method. Currently married women in urban areas are nine times more likely than their rural counterparts to use a modern method and seven times more likely to use traditional method [19].

Unmet Need For Family Planning

Although the gap between the number of children the women say that they want and the number they have is small, it is widening-a strong indication that many women who wish to limit their family size face difficulty in doing so [34]. In developing countries, millions of women have unmet need –estimated by population reports in 1996 at about 100 million or one in five married women [12]. More married women with unmet need for family planning live in India than in any other country-about 31 million [12]. In China, the world's most populous country, there probably is little unmet need, given the high level of contraceptive use, an estimated 83% of married women of reproductive age in 1992[35].

In the developing world as a whole, excluding China, about 20% of married women of reproductive age have unmet need [12]. In fact, many women in Africa want to delay or avoid another pregnancy but are not using contraception; 26% of married women of child bearing age [22 million women] fit this definition of having unmet need for family planning – higher than any other region of the world. Strikingly, in only 12 countries does unmet need exceed 30 % of married women, 11 of them are in Africa. The rates are exceptionally high in Cote d'lvoire, 43% and Malawi [36%] [34]. The level of unmet need is highest in Sub- Saharan- Africa, where in some countries one married women in every three has unmet need .In most of these countries more married women have unmet need than are using contraception [12]. Among other developed regions levels of unmet need are similar. Because of the large population of Asia, however, by far the greatest number of women with unmet need live in this region [12].

Among countries, surveyed by the DHS [Demographic and Health Survey] in Asian countries, unmet need ranges from 11% in Thailand to 32% in Pakistan. In 6 of the 11 countries in Latin

America and the Caribbean surveyed by the DHS, unmet need was below 20% in Bolivia, and Ecuador [12]. In El Salvador, Guatemala, and Mexico, however, the level is between 24% and 29%. Among countries surveyed by DHS in Sub-Saharan Africa, unmet need ranges from 15% Zimbabwe to 37% in Rwanda. In North Africa and the Near East, unmet need is close to the 20% average for the developing world in every country except Turkey, where it is 11% - with Thailand's the lowest level recorded [12].

In most countries of Sub –Saharan Africa, the bulk of unmet need for contraception consists of an unmet need for spacing .In six of the Sub-Saharan-African countries for which DHS data were available [Botswana, Burundi, Ghana, Mali, Togo and Uganda], the unmet need for spacing accounted for at least 70% of total unmet need. In contrast, most of the unmet need in many Latin American countries consisted of an unmet need for limiting births. Only in Dominican Republic, El Salvador, Guatemala, and Trinidad and Tobago did an unmet need for limiting appear to be as important as that for spacing [36].

Unmet need also varies a great deal within countries by various social and demographic characteristics. The unmet need for spacing tends to be greatest among women in their early 20s and to decline thereafter, while the unmet need for limiting gradually increases and reaches its highest levels in the oldest age-groups [36].

In North Africa, Asia, and Latin America, rural women consistently experience high levels of unmet need [both for spacing and limiting] than do urban women [36]. In Sub-Saharan Africa, on the other hand, unmet need is generally similar in urban and rural areas. Likewise, levels of unmet need are consistently lower among women with higher level of education, except in Sub-Saharan Africa, where women with some primary education often have a greater unmet need than those with no education, particularly, for spacing births. The researchers comment that no doubt this finding reflects both a greater awareness of the possibility of controlling fertility and a more developed preference for regulating fertility, both of which are associated with literacy [36].

Two in five women in Sub-Saharan Africa classified as having an unmet need are pregnant or amenorrhoeic, as are about one –quarter in Asia and about one-third in Latin America. These proportion are around 50% in Bolivia, Burundi, and Uganda [34].

The proportion of women in need who intend to use contraception in the future varies widely among countries. From 60%-69% of women in need in Brazil, Colombia, Kenya, Peru, Thailand and Trinidad and Tobago stated that they plan to use a method in the future, but rates were 40 % or less in Burundi, ElSalvador, Ghana, Guatemala, Mali, Togo and Uganda [36]. In eight of the countries, the proportion of women with unmet need for family planning who have never practiced contraception exceeds 70%[Bolivia, Burundi Guatemala, Kenya, Liberia, Mali, Peru, and Uganda]. Only in Brazil, Colombia, the Dominica Republic, Thailand and Trinidad, and Tobago have a majority of women in need ever used a method [36].

Demand for family planning is greater in Sub-Saharan Africa than in Asia, North Africa or Latin America and the Caribbean. Demand is greater for spacing than limiting in Sub-Saharan Africa, while demand for limiting predominates in Latin America, and Caribbean. Demand for spacing declines with increasing age, while demand for limiting rises with age [36,37]. Two third of women, who are within one year of their last year of birth, have unmet need for contraception, and nearly 40% said that they plan to use a method in the next 12 months but were not currently doing so. Moreover, of all unmet need, on average nearly two -fifths falls among women who have given birth within the past year. Similarly, two in five women intending to use a method were within a year of their last birth [37]. On average, 37% of women with unmet need are pregnant or amenorrhoeic, ranging from a low of 21-22% in Bangladesh and Indonesia to a high of 53% in Zambia and 65% in Rwanda [36]. A study conducted in Chitwan District, Nepal, showed that unmet need among currently married women was 30%, of which 18% was for limiting and 13% for spacing [39].

Studies conducted in urban settings in Ethiopia showed the unmet need for contraception to be within the following range: 35.5%- 60%, of which that for limiting was 11.5%-43.5% and for spacing within 5.4 %-24%[40,41,42]. DHS of Ethiopia showed that unmet need for the country was 36 %, of which 22% was for spacing and 14% for limiting. Unmet need for rural areas was 35% while for the urban it is 25%. Unmet need for contraception in the SNNPR is 35.5%, of which 24.3% was for spacing and 11.2% for limiting births [19].

Factors affecting contraceptive use and unmet need for contraception.

There are different factors that affect contraceptive use and unmet need. These factors may be grouped into broad categories: demographic. Socio-economic and cultural [42].

Demographic Factors

Various studies have identified different demographic variables as they influence the use of contraceptives and unmet need. These variables among others include age, number of children surviving, desired number of children. According to Westoff women under 20 desiring spacing had contraception need five times higher than women desiring limitation [42]

A study conducted by Tizazu based on service statistics from Yirgalem family project, revealed that contraceptive use was lowest among women aged between 15—19 years and among those approaching the end of childbearing period [49]. Similar studies conducted in different parts of the country showed that age of the respondents was among the most important factors affecting unmet need and women between 15—19 years old were found at high risk of not using contraception, while women in the age group of 24—34 years are 1.68 times more likely to practice contraception than women in 15—19 years of age. [25,40,41,50].

The need for family planning is positively related to the number of surviving children [44]. Another study conducted in Addis Ababa showed that women who already had given enough birth as many or more than 5 living children showed a negative attitude towards contraception [24].

Socio-Economic and Cultural Factors

Among socio-economic factors that may affect contraceptive use and unmet need, place of residence, religion or fatalistic reasons, work status/occupation, education, husband or relatives disapproval, lack of knowledge about contraceptive methods, actual or perceived fear of side effects are considered to be important [42].

Difficulties with access to Methods and Quality of Services.

In most countries unmet need is greatest among two groups that have the least access to family planning programs -rural women and women with little education. In the DHS of 44 countries the percentage of women who cited lack of access as the main reason for not using contraception is higher among women who have never used contraceptive methods than among those who have tried contraception [43]. Family planning services have become widely available in many countries. However, recent studies using DHS data report that the distance to a source of contraception now has little relationship to the level of unmet need in country [12,43]. Even if distance to any service site may not be important to unmet need, lack of access to people's preferred method and service can be a formidable obstacle. Satisfying people's various contraceptive needs requires a range of contraceptive methods. Thus, the more contraceptive methods are available in a country, the lower the level of unmet need.

Analysis of DHS data from 44 countries showed that for each additional contraceptive method that is widely available in a country, contraceptive prevalence increases by an average of 3.3 %. More than half of this increase, or 1.7% points, comes from meeting unmet need [12].

In addition to lack of preferred methods various other costs limit family planning. Many potential clients do not use contraception because of monetary, psychological, physical and time related costs. Analyzing DHS data, John Bongaarts and Judith Bruce observed in 1995 that difficulties obtaining " adequate services that can be used without undue personnel costs-psychological costs, travel time, monetary outlay, and so forth" are reasons for much unmet need [43]. Poor quality services or the expectation of poor services keep some women from using family planning services. Some have been poorly treated at family planning clinics or have had problems with services [12]. Studies conducted in different parts of Ethiopia [16.20,21,33] showed, that some of the main reasons for not practicing contraception included inaccessibility and unavailability of contraception methods.

Health concerns and side effects.

In many countries concerns about health and contraceptive side effects cause much unmet need. These concerns come from a variety of sources, including women's own experiences in using contraception, experience of friends and the rumors that often result as these experiences are told and retold throughout the communities [43].

In Kenya women in focus group discussions spoke of pills accumulating into life, threatening masses in the stomach and other bizarre effects thought to accompany contraceptive use [12]. In Nepal some women said that they would not consider sterilization because it was said to cause weakness and so required additional nutritional foods that they could not afford [12]. Many women have discontinued contraceptive use, not because they wanted to become pregnant, but because they experienced side effects and health problems attributed to contraceptives.

Analysis of DHS data from six countries, Mohamed Ali and John Cleland found that health concerns, including side effects, were the most common for the discontinuation, even more common than the desire for another child [44].

Different studies in Ethiopia [19,20,21; 33] showed that some of the reasons for not using contraceptives were fear of side effects and health problems.

Lack of information.

Women who are aware of many contraceptive methods know where they can be obtained understand their side effects and know how to use them are less likely to have unmet need [12] The more contraceptive methods that women know, the lower their level of unmet need, as findings from DHS illustrate. In the Dominica Republic, for example, among women who know three methods or fewer, unmet need is more than twice as high at 35% as among women who know six methods or more at, 14%[12]. Lack of awareness of any contraceptive method is most likely to explain unmet need in countries with little contraceptive use, as in Sub-Saharan Africa. This is because, if a woman does not know about contraception then, she also does not know about lack of availability or side effects [12].

Knowledge of availability - To use contraception, women must not only know about the existence of contraception itself, but also what services are offered, where and when. Studies have shown that the more women find contraception to be available, the more likely they are to use it [12]. Studies in Ethiopia also have shown that lack of information and knowledge are among the reasons not to practice contraception [16,20]. Data from Yirgalem Family Planning Project indicated that the majority of contraceptive acceptors never had formal education [49].

Opposition from Husbands, Families, and Communities.

Many women do not use contraception because their husbands are opposed [45]. In seven Sub-Saharan Africa countries, contraceptive use among women whose husbands disapprove of family planning averages only one- third as much as among women whose husbands approve of it [42]. In Kenya, among women who had stopped using contraceptive for reasons other than having another child, 12% stopped because their husbands wanted another child, or forced them to discontinue for another reason [46].

According to the DHS data, women with unmet need are much less likely than contraceptive users to believe that their husbands approve of family planning. For example, in Botswana only 47% of women with unmet need think that their husbands approve of family planning compared with 22% of contraceptive users [12]. In Pakistan the difference is even more striking 32% compared with 83%[46]. Also, women with unmet need are much less likely than contraceptive users to have talked with their husbands about family planning. For example, in Ghana, only 44% of women with unmet need had discussed family planning with their husbands in the preceding year compared with 72% of contraceptive users [12].

Lack of support from extended families and community leaders also prevents some women from using contraception. In Kenya, mothers in- law prevent some women from using contraception because they think it would weaken the control of the husband's family or that their daughters-in- law should not expect anything different from their own experiences [12]. In most countries, religious opposition is not an important reason for unmet need .In few surveyed countries however, including Bangladesh, Nigeria, Pakistan, and Senegal, religious opposition is one of the main reasons that women gave in the DHS [12].

In each of these four countries more than 10% of women with unmet need who did not intend to use contraception cited religious objection.

According to the Demographic and Health Survey of Ethiopia, opposition from husbands was one of the reasons for not using contraception [19]. A similar study conducted in SNNPR showed that fatalism was one of reasons not to practice contraception [16].

Little perceived risk of pregnancy.

When a woman believes that she is unlikely to become pregnant, she is unlikely to be interested in contraception [12]. Women with unmet need for limiting birth are much more likely than potential spacers to think that they face little risk of pregnancy-probably because most women with unmet need for limiting are older. Among limiters who do not intend to use contraception, for example, 32% said that they were at risk of becoming pregnancy compared with only 15% among spacers [12].

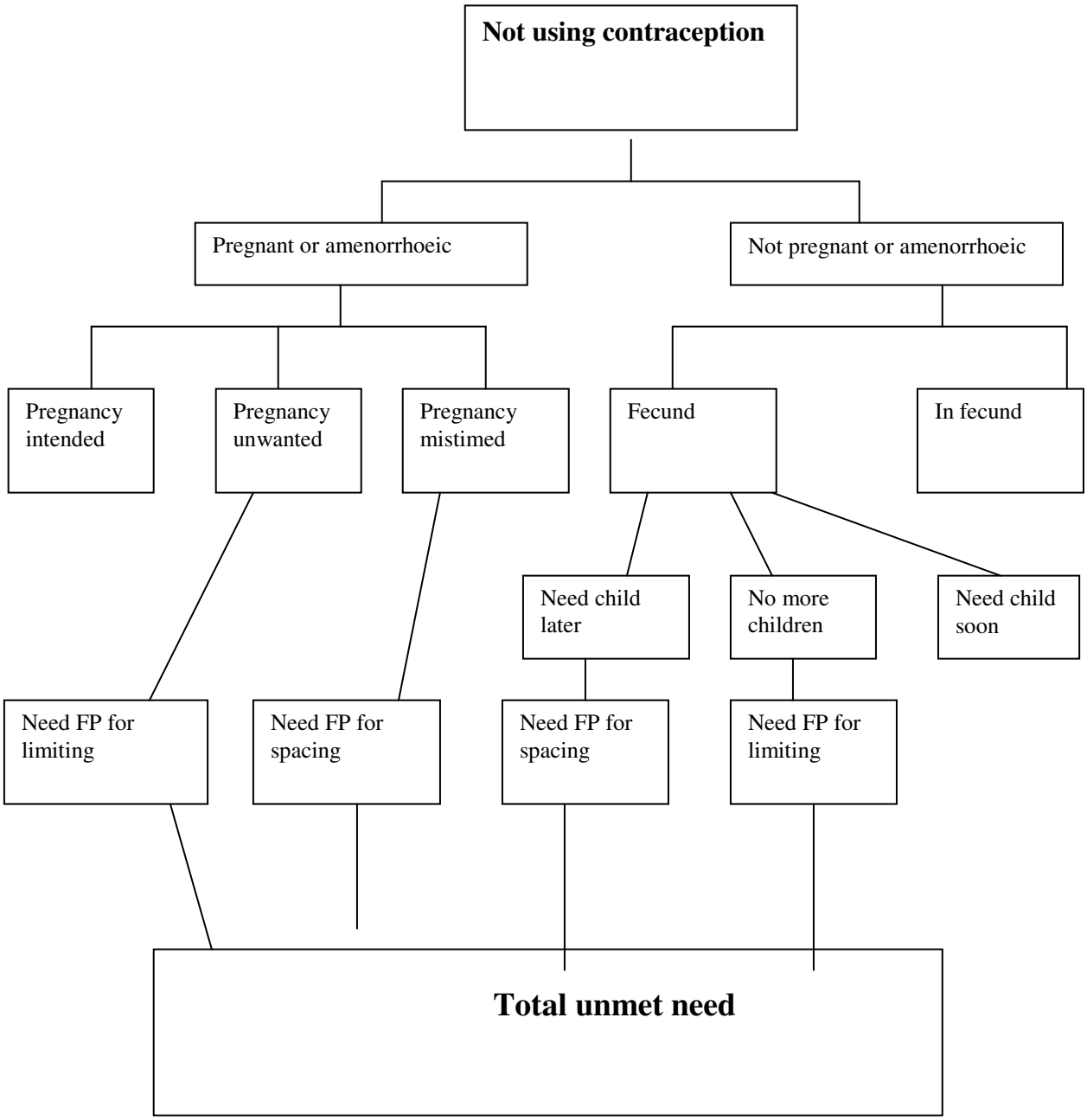
Rationale for the Study.

Family planning coverage for the SNNPR of Ethiopia is much lower [6 %] than in the study area [35.4%.] If family planning programs served all women with unmet need, the demographic impact would be substantial, contraceptive prevalence would rise, reducing fertility and slowing population growth [46,47]. The total fertility rate both for the region and the study area is 6 children per women, which is high [19]. By adopting strategies to address unmet need effectively, the program will have greater impact on contraceptives use and fertility levels. Meeting much of unmet need, if not all, would help millions of women avoid unintended pregnancies and probably also would prevent many abortion.

Past research conducted on the unmet need for family planning elsewhere in Ethiopia, was conducted in urban settings, and there is no research that compares the urban and periurban settings. Although, the DHS and Community and Family Survey conducted in the southern region compared the urban and rural unmet need, the analysis of the variables is descriptive and lacks a detailed analysis of associations (OR, X^2, logistic regression) between the dependent and independents variables. Moreover, statistical analysis makes it possible to look for the potential determinant factors, which enables the investigator to forward specific recommendations based on the findings.

Taking into consideration these factors this study intends to determine the magnitude and determinants of unmet need for family planning in Awassa Wereda, SNNPR. It is hoped that the result of this study will enable planners and program managers to design intervention strategies to address the gap between the contraception desire and practice. It is also expected to provide information necessary for further follow- up surveys on magnitude and determinants of unmet need for family planning in the Wereda.

Fig 1. Framework for determination of unmet need for family planning among currently married/union women in reproductive age



Objectives of the Study

General objective

The general objective of this study is to assess the magnitude and determinants of unmet need for family planning among currently married women in urban and periurban communities in Awassa Wereda of the SNNPR

Specific objectives

1 To identify the determinants of unmeet need among non-users.
2 To assess the general knowledge, practice and attitude toward FP and fertility.
3 To compare the unmet need for contraception of urban and periurban areas.

Methodology and material used

Study area and population

Though a relatively better access to family planning information and service prevails in Awassa wereda, the contraceptive prevalence rate was 9% in 1992 Eth. C. [53] that is considerably low, due to this fact; Awassa Wereda is selected for the study. Awassa Zuria Wereda is located in the northern part of the Sidama Zone. It is one of the ten weredas in the Zone. The wereda has an area of 920 square kilometers with a population density of 478 persons/km^2. There are 14 urban dwellers associations [UDAs] in Awassa Town under two kefitegnas and two other urban dwellers association out side Awassa. Awassa town has an estimated population of 87000 [52]

There are 69 peasant associations in the Awassa Wereda having an estimated population of 338,073[52]. According to Sidama health office [52] the total population of the wereda is estimated to be 439,684, of which 101,611[23%] are in urban and 338,073[77%] in rural area.

The sex distribution of the wereda shows 224,415 males and 215, 269 females with sex ratio 1:1.04. The predominant ethnic group is Sidama followed by Amhara, Wolaita, Oromo and Gurage. Protestant, Orthodox, Catholic and Muslim religions represent 59.2 %, 8.01 %, 9.7 % and 5.16 % of the total population respectively. According to the Sidama Health Office the family planning coverage of the wereda for 1993 E.C. was 35.4 % and health service coverage was 45%. Women in the age group 15-49 years make up 23.76 % of the total population, pregnant women accounting for only 3 % of the total population.

Study design- the study design is cross- sectional**.**

Source population- the source population is urban and periurban residence of Awassa wereda currently married women of childbearing age [15-49 years old].

Study population -comprised of those currently married women in childbearing age (15-49), randomly selected from the source population.

Sample size The sample size was calculated using the sample size determination formula for two population proportions using the following estimates: Prevalence of unmet need for family planning of the country is 25% for urban and 37 % for rural dwellers

Non-response rate 10%, design effect of two, allocation ratio 1:2 and confidence level of 95 %. Based on this, 407 samples from urban and 811 from periurban participants were selected, giving a total sample size of 1218

$$n_1 = \frac{Z_{\alpha/2}\sqrt{(1+1/r)\,p\,(1-p)} + Z\beta\sqrt{p_1(1-p_1)+p_2(1-p_2)/r}^{\,2}}{(p_1-p_2)^2}$$

Where P_1 [population proportion for urban]= 25

P2 [population proportion for rural]=37

R= urban to periurban ratio 1:2

n_1 =416[urban]

n_2= 2 x n_1=832[periurban]

$Z\beta$ Standard error of alternative hypothesis = 84

$Z_{\alpha/2}$ Standard error of null hypothesis = 1.96

Sampling Procedure.

Sampling procedure for peasant associations.

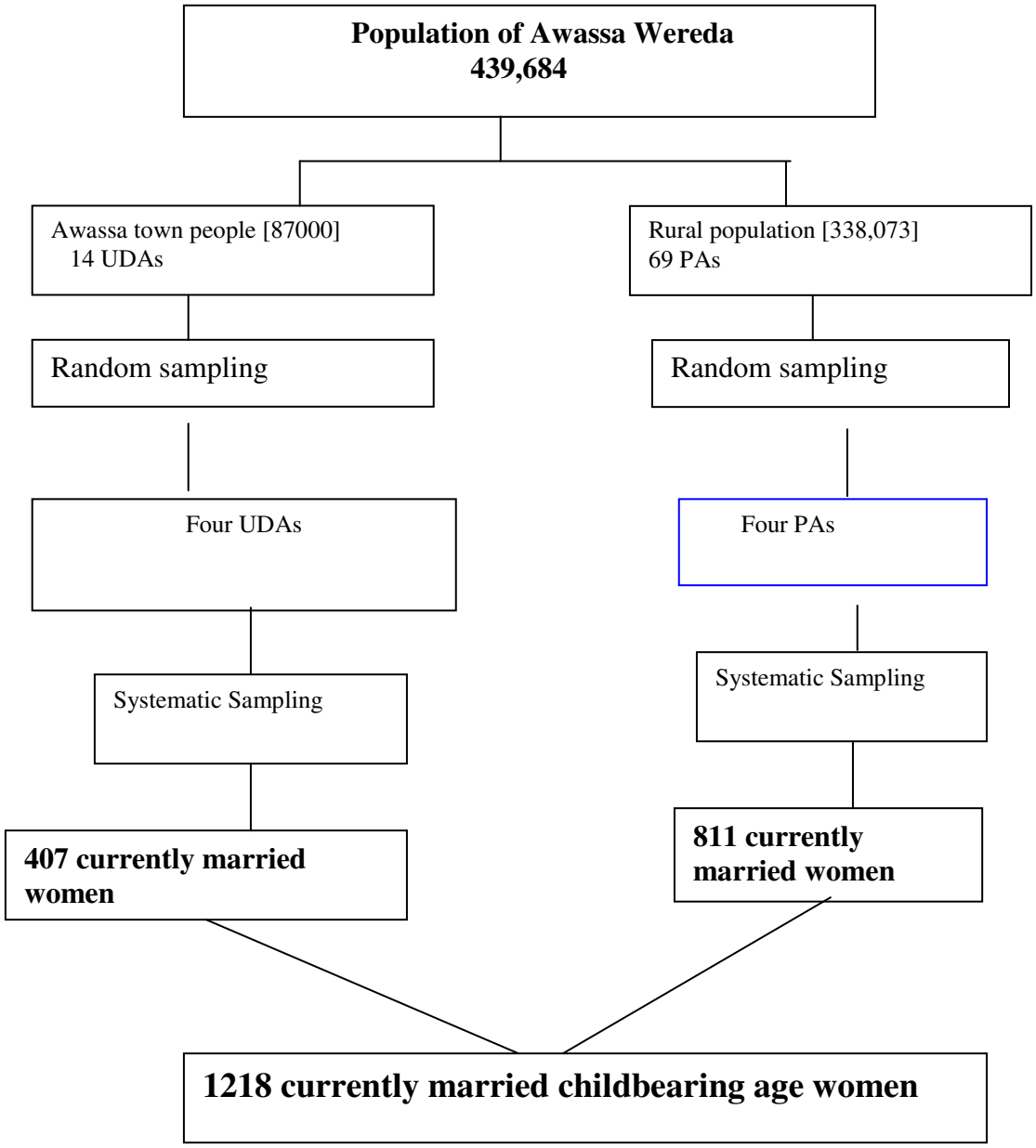
In the wereda there are 69 peasant associations. For the purpose of logistic feasibility four kebeles within 10 to 20 km radius of health institution [Awassa health center] were randomly selected. From each of the selected kebeles, using the kebele household unit lists, the number of households in each kebele unit was identified. By applying systematic sampling procedure that is the house number of each unit was divided by sample size [proportional to the total number of housing units in each kebele] and class interval was identified. In collaboration with kebele leaders the center of the kebele was identified and the interview was started in the nearest house to the right. If there were more than one eligible in the house lottery method was used to choice one eligible. Keeping the class interval we used to go around until we had the determined sample size.

Sampling procedure for Awassa Town

Awassa Town has two kefitegnas, each kefitegna consisting of 7 kebeles. Both kefitegnas were included in the study. From each kefitegna, two kebeles were randomly selected. Therefore, four kebeles were included in the study. From each of the selected kebeles, using the kebele housing unit list, the house number of each unit was identified. By applying systematic sampling procedure that is the house number of each unit was divided by sample size [proportional to the total number of housing units in each kebele] and class interval was identified. If there were more than one eligible in the house lottery method was used to choice one eligible. Keeping the class interval we used to go around until we had the determined sample size.

Figure 2.

Sampling procedure for Awassa Wereda



Qualitative study

In order to explain the result of quantitative study data, and to obtain much more detailed information or important issues that could not be quantified focus group discussion [FGD] were held during the qualitative data collection. Discussions were held with four focus groups, and each group consisting of 6—8 participants who were selected from the respective study sites.

The participants of the FGDs were selected from different groups including the following:

- Currently married women in the reproductive age group [15—49]
- Currently married men in the reproductive age group [25—49]
- Religious leaders
- Health service providers.

A checklist was prepared to guide the discussion in such way to provide relevant information. FGD was held in a quiet and comfortable place. It took one and half-hours with each group. The principal investigator was the moderator and there was one trained note- taker. All discussions were recorded using a tape recorder and notes were taken during discussion.

Inclusion and exclusion criteria.

The inclusion criteria included currently married childbearing women [15-49] living in the area. The exclusion criteria included currently not married or living in union and not fecund.

Tools for data collection. The survey questionnaire was adopted from different literature developed for similar purposes by different authors [19]; it was then reviewed to suit the local condition. The questionnaire was translated in to Amharic language and back to English to ensure its consistency. The survey questionnaire was pre-tested and the necessary arrangement and corrections were made to standardize and ensure its validity.

Methods of data collection: Using the questionnaire, currently married women of child bearing age [15-49] from the selected housing units were interviewed going from house to house by trained data collectors. Supervision was made on the process of the data collection. Twelve female students who completed 12^{th} grade collected the data. Three nurses and health officers were recruited and trained for thee days to supervise the data collectors. The data collectors and supervisors speak Amahregna and Sidamegna very well; some of them had experience in data collection and familiar with the study areas. The trainees were given the training with due attention to the following points. The purpose and scope of the study, how to approach the respondents, how to conduct the interview, how to handle the reluctant respondents [His participation is on a voluntary basis, if he do not wants to continue he can stop at any point and leave the interview. All responses will be kept secrete and will be used for the research proposes only] and there was practical session like interviewing practice and discussion of unclear issues.

Variables:

Dependent Variable

Proportion of women not using family planning but willing to use.

Independent Variables

A. Socio economic variables:

B. Monthly family income, occupation, and educational status of urban and rural residence

C. Demographic variables: age, sex, marital status, religion, number of children, and ethnicity of urban and rural residence

D. Knowledge, practice and attitude towards family planning and fertility of urban and rural residents.

E. Access and availability of the service to urban and rural residents.

F. Acceptability /convenience of the services to the urban and rural residents.

Operational definitions

Unmet need: refers to the contraceptive need of fecund women currently married or living in union and not using any contraceptive method who either are not pregnant or amenrrhoeic and want child latter or not at all, or who are pregnant or amenorrhoeic as result of a mistimed or unwanted pregnancy.

Current users: are women who are using contraception until the day of interview.

Ever users: are women who have used contraceptive some times in the past but have discontinued during the time of the survey.

Never user: is a woman who has never used contraception till the day of survey.

Unwanted pregnancy: is pregnancy that has occurred after a woman already had the desired number of children and she doesn't want to have any more children.

Mistimed pregnancy: is pregnancy, which has occurred without intention of the woman or the couples at specific time, but wants to be pregnant and have a child some time in the future.

Unintended pregnancy: includes both unwanted and mistimed pregnancies.

Intended pregnancy: is a pregnancy that is wanted and planned.

Knowledge of contraception methods: a woman aware of at least one method of contraceptives.

Post- partum amenorrhoeic: refers to women whose menstruation had not resumed since the birth of the last child.

Data quality.

Before the actual data collection commenced, pre-test was conducted in adjacent kebeles to ensure the validity of the survey tool and to standardize the questionnaire. Supervisors and the principal investigator made frequent checks on the data collection process to ensure the completeness and consistency of the gathered information. Any error found during the process was corrected immediately. The completed questionnaire was analyzed. Verbatim transcriptions of the tape-recorded, focus group discussions and observation notes were processed.

Data Analysis.

After insuring completeness of each questionnaire, data was entered into the computer and analyzed using EPI Info version 6 and SPSS version 10 statistical packages. During the analysis, frequencies of different variables were determined, followed by cross-tabulation to compare the frequencies.

OR [with confidence interval] was used to measure the association between selected variables and to see statistical significances. Multiple regression analysis was carried out to assess the relative effect of explanatory variables on dependent variables.

Ethical considerations

Ethical clearance was secured from the Ethical Clearance Committee of the Department of Community Health of the Addis Ababa University and the Faculty of Medicine.

The concerned officials at all levels, community leaders, and government bodies were informed, to get the assurance of the study.

The purpose, objectives, and importance of the study were explained and informed consent was secured from each participant. Confidentiality was maintained at all levels of the study.

Participation in the study was on a voluntary basis. Participants who were un willing to participate in the study and those who wished to quit from the study at any point in time were informed to do so without any restriction.

Results

A total of 1248 currently married women of childbearing age group from urban and periurban areas of Awassa Town were included. Out of 1248 women 1218[97%] responded to the questionnaire. For hundred seven [33.4%] were from Awassa Town and 811 [66.4%] from the periurban area. The reasons for non-response to the survey were: Three houses were closed, while the remaining 27 women refused to be interviewed.

Socio-demographic characteristics of the study population

Selected socio-demographic variables of the study population are summarized in Table 1.

The age of the respondents ranges from 15—49 years. The mean age was 29 years and 28.4 for the urban and periurban women respectively. The great majority of the periurban women were Sidama[96%] and most women in the town were Amhara[39.3%] and Wolaita[15%]. About 85% of the periurban women were Protestants and 70.0% of the urban women Orthodox by religion. Catholic was 3[0.7%] in urban and 80[9,9%] in periurban area. Ninety percent and 40% of the respondents were literate in the urban and periurban areas respectively. Whereas 60.4% of the periurban women were illiterate, 64.6% of the urban women had high school or higher education. In the Town, average family size was 4.9 and 5.4 in periurban area respectively.

The average monthly family income among urban respondents was 486 Birr and 162 Birr for periurban area.

Table 1 Socio-demographic characteristic of the study population, Awassa Town and periurban areas, 2003.

Variables	Urban N=407 n[%]	Periurban N=811 n[%]
Age [years]		
15 –19	25[6.1]	48[5.9]
20--24	88[21.6]	158[19.5]
25—29	117[28.7]	245[30]
30—34	74[18.2]	208[25.6]
35—39	63[15.5]	96[11.8]
40—44	29[7.1]	43[5.3]
45—49	11[2.7]	13[1.6]
Ethnicity		
Sidama	37[9.1]	778[96]
Amhara	160[39.3]	6[0.7]
Oromo	39[9.6	18[2.2]
Wolaita	61[15.0]	4[0.5]
Others	110[27.0]	5[0.6]
Religion		
Orthodox	285[70.0]	14[1.7]
Protestant	104[25.6]	687[84.7]
Catholic	3[0.7]	80[9.9]
Others	15[3.7]	30[3.7]

Table 1 continued

Variables	Urban n=407 n[%]	Periurban n=811 n[%]
Family size		
1—4	194[47.7]	330[40.7]
5—9	199[48.9]	428[52.8]
10 and above	14[3.4]	53[6.5]
Monthly family income in Birr		
< 65	12[2.9]	300[37]
65—194	37[9.1]	260[32]
195—344	148[36.4]	164[20]
345-- 5000	210[51.6]	87[10.7]
Occupation		
Housewife/farmer	314[77.2]	789[97.3]
Government and non government employee	55[13.5]	4[0.5]
Others	38[9.3]	18[2. 2]
Education		
Illiterate	41[10.1]	490[60.4]
Read and write	25[6.1]	97[12.0]
Primary school	78[19.2]	192[23.7]
Junior and high school	122[30]	32[3.9]
Higher education	141[34.6]	0[0]

Reproductive Characteristics

It was noted that age at first marriage was as early as 10 years and as late as 31 years [Table 2.] The median age at marriage in urban study subjects was 18 years, while for the periurban respondents the median age was 16 years. Urban women were less likely to marry at early age than periurban women [OR=0.05, 95%CI: 0.01,0.12]. Among of the 367 women in the urban area, age at first delivery ranged from less than 15[0.8%] to 25 years and above [11.4%]. The median age was 19 years .Out of the 789 women in the periurban area, ages at first delivery ranged from less than 15[1.8%] to 25 and above [1.0%]. The median age at first delivery for this group was 17 years. Women in the age group 20—24 in urban are 4.6 times more likely to give birth than women in the age group of 15--19 years in periurban. The average number of current children per women in the urban area was 2.7 and 4.0% in the periurban area, respectively. The percentage of women who had 5 and more children in urban study area was 14.4% and 35% in the periurban area. Urban women were less likely to have five and more children than periurban women [OR=0.19, 95%CI: 0.05,0.76]. Regarding the average number of children women desired to have was found to be 3.5 in urban, and 7.8 in periurban areas, respectively. Table 2. The average expected time before the birth of the next child in the urban area was 3.8, and 3.1 years in the periurban area. Current pregnancy and postpartum amenorrhoeic women were 27[6.6%] in urban, while 138[17%] in periurban. Pregnancies mistimed and unwanted were 5[18.5%] in urban and 34[24.6%] in periurban.

Urban women were less likely to be pregnant than periurban women [OR=0.35,95% CI: 0.21,0.57]. Intended Pregnancies were 7 times more likely to occur in urban women compared to periurban women.

Table 2. Comparison of the study population by reproductive characteristics in Awassa Town and periurban area, 2003

Variables	Urban N=407 n[%]	Rural n=811 n[%]	OR {95%CI}
Age at first marriage			
10—14	34[8.4]	145[17.9]	0.05[0.01, 0.12]
15—19	215[52.8]	592[73.0]	0.07[0.02,0.17]
20—24	127[31.2]	68[8.4]	0.36[0.12,0.19]
25 and above	31[7.6]	6[.7]	1.00
Age at first delivery	n=367	n=789	
< 14	3[.8]	14[1.8]	1.00
15—19	168[45.8]	613[77.7]	1.28[0.35,7.02]
20—24	154[42]	154[19.5]	4.57[1.28,25.72]
25 and above	42[11.4]	8[1.0]	24.5[4.93,152.53]
No of children alive	n=367	n=789	
None [0]	6[1.6]	6[.8]	1.00
1—2	190[52.0]	257[32.6]	0.74[0.19,2.81]
3—4	118[32.2]	252[32.0]	0.47[0.12,1.8]
5 and above	53[14.4]	274[34.7]	0.19[0.05,0.76]
No of children desired			
1-2	111[30.2]	46[5.8]	115.83[18.22,4709.3]
3-4	224[61.0]	230[32.0]	46.75[7.82,1892.6]
5—6	17[4.6]	307[38.9]	2.66[0.40,113.36]
7—8	13[3.5]	103[13.0]	6.94[0.99,300.28]
9 and above	1[0.3]	55[7.0]	0.87[0.01,69.92]
Others	1[0.3]	48[6.1]	1.00

Table 2. continued

Variables	Urban n=407 n[%]	Periurban n=811 n[%]	OR [95%CI]
Expected time before The birth of the next child	N=16	N=79	
< 2 years	0[0]	1[1.3]	1.00
2—3	1[6.2]	27[34.2]	0.04[0.00,5.8]
4--5	3[18.8]	18[22.8]	0. 17[0.00,17.41]
6 and above	12[75.0]	33[41.8]	0.0.06[0.00,7.12]
Current pregnancy	n=407	n=811	
Yes	22[5.4]	113[13.9]	0.35[0.21,0.57]
No	385[94.6]	698[86.1]	1.00
Current amenorrhoeic	n=385	n=698	
Yes	5[1.2]	25[3.1]	0.35[0.11,0.95]
No	380[98.7]	673[96.4]	1.00
Pregnancy intended	n=27	n=138	
Yes	22[81.5]	104[75.4]	7.14[1.07,305.2]
No	5[18.5]	34[24.6]	1.00
Pregnancy mistimed			
Yes	4[14.8]	27[19.6]	0.36[0.08,1.85]
No	23[85.2]	111[80.4]	1.00
Pregnancy unwanted			
Yes	1[3.8]	7[5.1]	1.39[0.17,64.92]
No	26[92,2]	131[94.9]	1.00

Knowledge of contraception

A total of 98.5% of urban and 95.4% of periurban women had heard of any contraception methods [Table 3]. About 97% of women in the urban and 72% of women in the periurban areas knew at least one contraceptive method used by the community. Urban women are more likely than periurban women to have heard of contraception and 14 times more likely than periurban women to have knowledge on contraception.

Attitude to ward contraception

Ninety eight percent of women in the urban and 80.4% of women in the periurban areas approved of the use of contraception. Slightly over 70% of respondents in the town and 63.1% respondents in periurban areas reported that they discussed contraception with their husbands within the year preceding the survey. Urban women were 1.4 times more likely than periurban women to discuss about contraception with their husbands. Urban 367[90.2%] husbands /partners approved using contraception and 17[4.2%] of respondents did not know their husband/partners attitude toward using contraception, while periurban 555[68.4%] husband/partners approved using contraception and 91[11.2%] respondents did not know their husbands/partners attitude toward contraception. Husbands' attitude in urban areas was 3 times more likely to be positive than in periurban areas. Urban women were 21 times more likely to approve the use of contraception than in periurban women. One hundred four [68%] of the respondents in the urban and 316 [65%] in periurban areas intended to use contraception in the future. Slightly over 82% of the urban and 87.3% of periurban respondents desired to know more about contraception. Table 3.

Table 3. Comparison of knowledge and attitude to wards contraception among the study population in Awassa Town and periurban areas, 2003

Variables	Urban n=407 N[%]	Periurban n=811 n[%]	OR[95% CI]
Ever heard of Contraception			
Yes	401[98.5]	774[95.4]	0.32[0.12,0.98]
No	6[4.6]	37[4.6]	1.00
Know at least one Method of Contraception			
Yes	396[97.3]	582[71.8]	14.16[7.62,29,12]
No	11[2.7]	229[28.2]	1.00
Desire to know More about Contraception			
Yes	335[82.3]	708[87.3]	0.68[0.48,0.95]
No	72[17.7]	103[12.7]	1.00
Intention to use Contraception	n=153	n=486	
Yes	104[68.0]	316[65.0]	1.25[0.59,2.91]
No	39[25.5]	132[27.2]	1.12[0.49,2.76]
Undecided	10[6.5]	38[7.8]	1.00
Discussed with husband Contraception	n=407	n=811	
Yes	287[70.5]	512[63.1]	1.4[1.07, 1.82]
No	120[29.5]	299[36.8]	1.00
Husband/partner attitude			
Approve	367[90.2]	555[68.4]	3.54[2.05,6.44]
Disapprove	23[5.7]	165[20.3]	0.75[[0.36,1.57]
Do not know	17[4.2]	91[11.2]	1.00
Respondent approve Using contraception			
Approve	399[98]	652[80.4]	20.8[3.46,847.77]
Disapprove	7[1.7]	125[15.4]	1.9[0.23,88.3]
Do not know	1[.2]	34[4.2]	1.00

Practice of Contraception

The contraceptive prevalence rate [CPR] in Awassa Town was 66.8% and 48.3% in the periurban area [Table 4]. The average age of starting contraception was 29.3 years in the urban and 28.8 years in the periurban areas, respectively, 4.7% in urban and 6.8% in periurban started to use contraceptive methods between 15-19 years of age, while 44.9 % in urban and 49.2% in periurban started at age 30 and above. Ninety eight percent of the urban and 92.6% of the periurban, with the contraceptive users decided jointly to use contraception, remaining responses involving the decision of respondents or that that of their husbands/partners.

In order to assess the knowledge about family planning methods, respondents were asked why women are using contraception and 64.6% of the urban and 30.5% of the periurban respondents mentioned child spacing, while 35.4% of the urban and 68.9% of the periurban respondents stated child limiting. The mean time to reach a health institution for family planning service was 60 minutes in the urban area and 85 minutes in the rural area. Table 4.

* Pregnant and post-partum amenorhoeic women are excluded during the calculation of contraceptive prevalence rate [CPR]. Table 4.

Type of contraception currently used

Injectables [Depo-Provera] were the most commonly used method by 54% of women in the urban and 77% in the periurban area [Table 4]. The second most commonly used method was oral contraceptives, used by 25.6% in the urban and 18.5% in the periurban areas followed by natural methods used by 12.6% and 0.6% respectively. The least used methods were: tubal legation [1.9%], Condom [2%]. Norplant [3.2%], I.U.C.D [4.7%].

Reasons for non-use of contraception

Various reasons were given during the interviews for not using contraception. In urban areas 50 % of women desired to have more children, followed by those who did not want to use contraception [26.1%]. In periurban areas 25.6% of respondents mentioned that husbands/partners did not want to use contraception, followed by respondents who themselves did not want to use it [22.6%], by a desire to have more children [17%], and fear of side effect and health concerns [19.1%]. Other reasons constituted small proportions. Husbands' opposition to use of contraception was less common among urban than periurban women [OR= 0.02, 95%CI: 0.00,0.2]. Table 4.

Reasons for discontinuing contraception

The ever- user of contraceptive methods among respondents was 26.3% of women in the urban and 12 % in the periurban areas. Among respondents in urban area who discontinued use of contraception, 76[71%] mentioned desire to have more children and 26[24.3%], health concern and side effects compared to 60.8% and 29.9% of periurban women respectively. Urban women were 4 times more likely than periurban women not to use contraception due to desire to have more children. Women in the urban areas were less likely than periurban not to use contraception due to husband opposition [OR=0.02, 95% CI=0.00,0.2]

Table 4. Comparison of the study population by practicing contraception and reason for use in Awassa Town and periurban areas, 2003.

Variables	Urban n-407 n[%]	Periuban n=811 n[%]	OR[95% CI]
Contraceptive practice			
* Current user	254[66.8]	325[48.3]	8.44[5.73,12.69]
Ever user	107[26.3]	97[12]	10.03[6.28,16.11]
Non user	46[11.3]	389[48.0]	1.00
Unmet need			
To space	53[13.1]	266[32.7]	0.28[0.17,0.47]
To limit	43[10.5]	60[7.4]	1.00
Age at start of Using contraception	n=254	n=325	
15—19	12[4.7]	22[6.8]	1.00
20—24	53[20.9]	64[19.7]	1.52[0.65,3.69]
25—29	75[29.5]	79[24.3]	1.74[0.76,4.14]
30 --34	48[18.9]	84[25.8	1.05[0.45,2.54]
35—39	40[15.7]	47[14.5]	1.56[0.64,3.91]
40—49	26[10.2]	29[8.9]	1.64[0.64,4.39]
Reason for use of contraception			
To space	164[64.6]	99[30.5]	3.31[0.17.196]
To limit	90[35.4]	224[68.9]	0.8[0.04,47]
Others	0[0.0]	2[0.6]	1.00
Type of contraception Methods used	n=254	n=325	
Pills	65[25.6]	60[18.5]	0.7[0.29,1.64]
Injectables	137[53.9]	250[76.9]	0.36[0.16,0.78]
Natural FP methods	32[12.6]	2[0.6]	10.4[1.97,101.01]
Others	20[7.9]	13[3.9]	1.00
Decision to use contraception			
Respondent	2[0.8]	17[5.3]	0.12[0.00,13.82]
Husband/partner	2[0.8]	6[1.8]	0.33[0.00,13.82]
Joint decision	250[98.4]	301[92.6]	0.17[0.00,13.3]
No response	0[0.0]	1[0.1]	1.00
Time taken to bring the method			
Less than 1 hour	229[90.1]	254[78.2]	7.21[0.95,321.94]
One to four hours	25[9.8]	63[19.4]	3.17[0.37,146.41]
More than 5 hours	0[0.0]	8[2.4]	1.00
Reason for not Using contraception	n=46	n=386	
No desire to use	12[26.1]	88[22.6]	1.66[0.51,6.33]
Husband/partner oppose	2[4.3]	100[25.6]	0.02[0.00,0.20]
Health concern and fear of side effect	4[8.7]	74[19.1]	0.66[0.13,3.22]
Desire for more children	23[50.1]	66[17]	4.25[1.45,15.1]
Others	5[10.8]	61[15.7]	1.00
Reason for discontinue	n=107	n=97	
Desire to have more children	76[71]	59[60.8]	2.32[0.65,9.24]
Health concern and fear of side effects	26[24.3]	29[29.9]	1.61[0.42,6.91]
Others	5[4.5]	9[9.3]	1.00

Unmet need

Unmet need to space births among women currently married and not using contraception was 53[55.2%] in the urban and 266[81%] in the periurban areas. Unmet need to limit birth in the urban area was 43[44%] and 60[18.4%] in the periurban. Unmet need to space among currently pregnant and post-partum amenorrhoeic urban women was 4[1%] and 27[3,3%] in periurban women and unmet need to limit births was 1[0 .2%]] and 6[0.7%], respectively.

Unmet need in the urban area was 23.6%, while 40.1% in the periurban area and total unmet need in Awassa wereda was 35.0% of which 26.5% was for spacing and 8.5% for limiting.

[Fig 3a, fig 3b].

Fig 3a Unmet need for family planning among currently married women in Awassa Town 2003

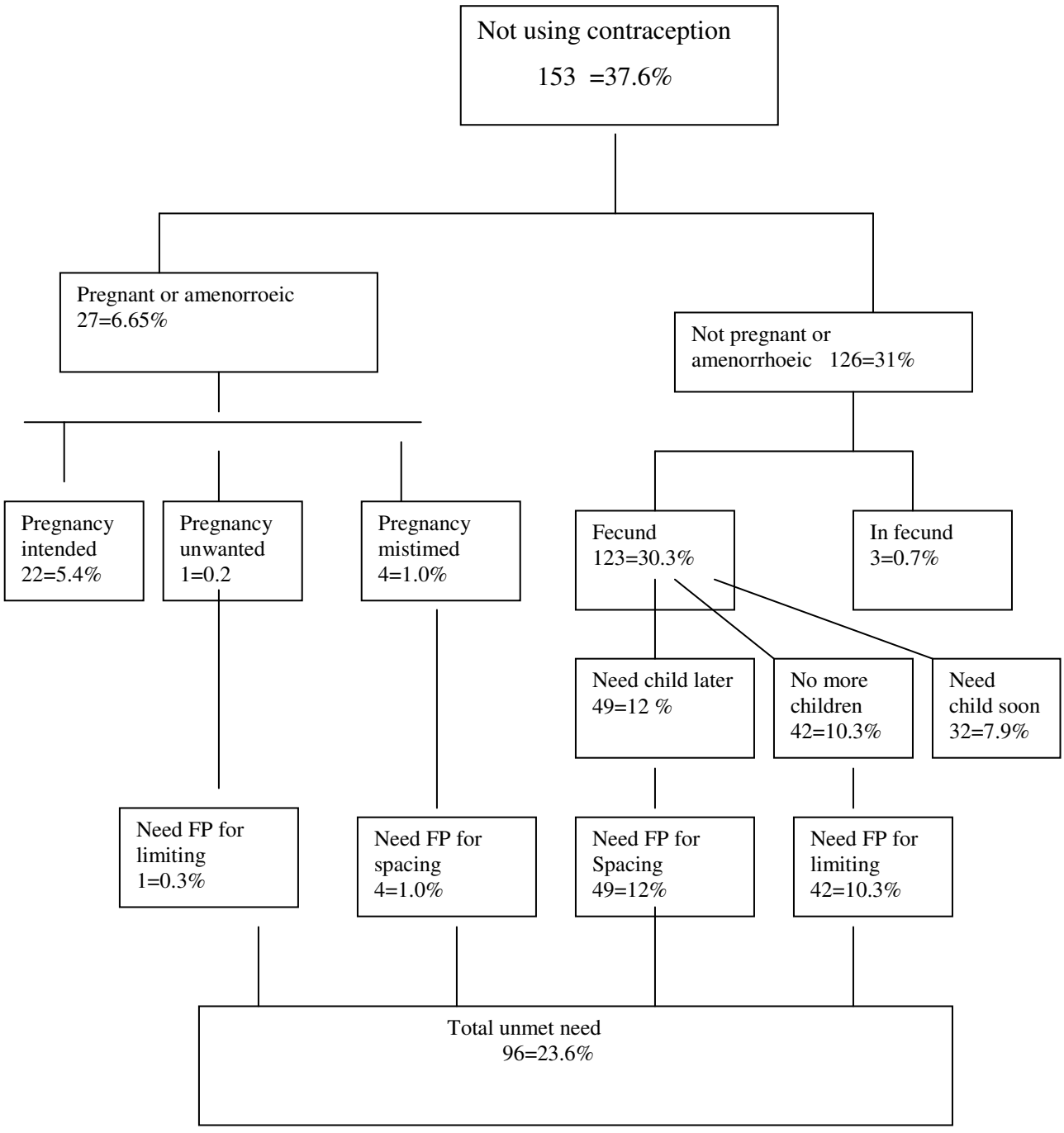
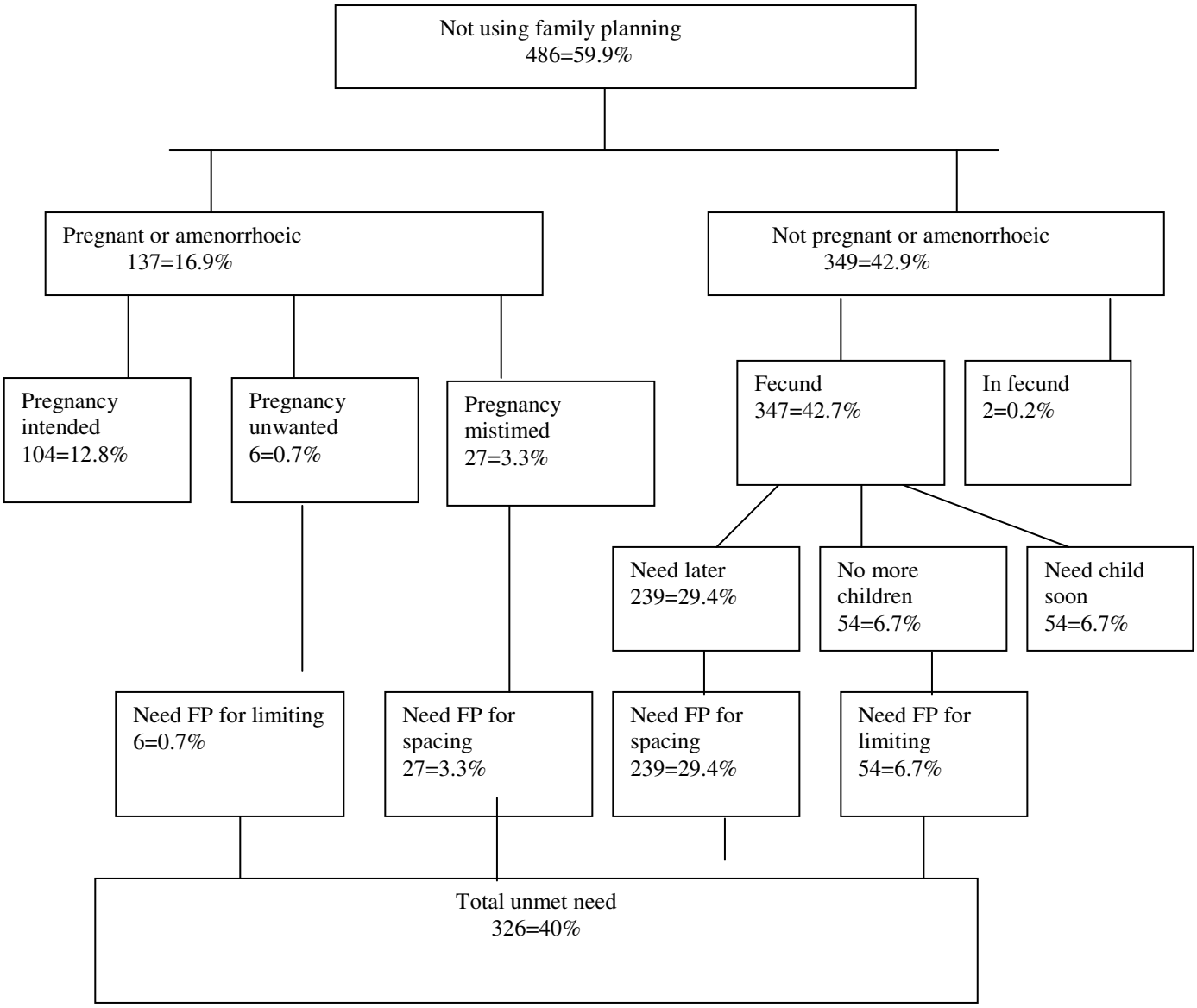


Figure 3b Unmet need for family planning among currently married women in periurban area Awasaa 2003



About 2% of the respondent in age group 15—19 in the urban area had unmet need for spacing and 7.5% in the same age group in the periurban area [Table 5]. Twenty five percent in urban and 13% in periurban had unmet need for limiting in age group of 40--49. Periurban women in age group 40-49 were less likely to have unmet need than women in age group 15-19[OR= 0.09,95% CI: 0.00,0.08]. Illiterate women in periurban are more likely to have unmet need for spacing [49 %] than illiterate women in urban [9.4%]. Women with primary level of education in periurban are 7 times more likely than women with higher education to have unmet need. Urban women with currently living children of 3 and above were less likely to have unmet need than women with currently living children of 0-2 [OR=0.17,95% CI: 0.06, 0.45] .In periurban women with current living children of 3 or above are 2.7 times more likely to have unmet than women with current children of 0--2. Women with currently living children of 3 or above have unmet need for limiting 70% in urban, and 83% in periurban. Ninety one percent of women with desired number of children of 1—2 have unmet need for limiting in urban, while 6% in periurban. In periurban women whose husbands do not approve using contraception are 3 times more likely to have unmet need for contraception than women whose husbands approve use of contraception. Sixty seven percent and 58% of women's: husband among limiters approve use of contraception in urban and periurban areas. Table 5.

Table 5. Comparison of the study population with unmet need by selected socio-economic variables, urban and periurban Awassa 2003

Variables	Urban n-96 n[%]		OR [95%]	Periurban n=326 n[%]		OR [95%CI]
Age	To space	To limit		To space	To limit	
15--19	1[1.9]	0[0]	1.00	20[7.5]	1[1.7]	1.00
20--24	16[30.2]	4[9.3]	4[0.03,205]	46[17.3]	8[13]	0.29[0.01,2.43]
25--29	20[37.7]	8[18.6]	2.5[0.03,205]	96[36.1]	10[16.7]	0.48[0.01,3.75]
30—34	11[20.8]	6[14]	1.83[0.02,156.78]	71[26.7]	19[26.7]	0.19[0.001,1.34
35--39	4[7.5]	14[32]	0.29[.00,27.9]	19[7.14]	14[23.3]	0.07[0.00,0.55]
40--49	1[1.9]	11[25]	0.09[0.00,14.2]	14[5.3]	8[13.3]	0.09[0.00,0.082]
Education						
Illiterate	5[9.4]	5[5.2]	1.0[0.19,5.37]	158[48.8]	34[10.4]]	4.65[0.06,367]
Read and write	1[1.05]	3[3.1]	0.33[0.01,4.85]]	37[11.3]	12[3.6]	3.08[0.04,248]
Primary	13[13.5]	11[11.4]	1.18[0.35,3.97]	65[20]	10[3.1]	6.5[0.08,0.5]
Secondary and high school	19[20]	9[9.4]	2.11[0.64,7.08]	5[1.5]	4[1.2]	1.25[0.01,117.5]
Higher education	15[15.6]	15[34.9]	1.00	1[0.3]	0[0]	1.00
Alive child						
0-2	38[71.7]	13[30.2]	1.00	102[38.3]	10[16.7]	1.00
>=3	15[28.3]	30[69.8]	0.17[0.06,0.45]	164[61.7]	50[83.3]	0.32[0.14,0.68]
Desired children						
1--2	48[90.5]	39[90.6]	0.98[0.18,4.92]	32[12]	19[31.7]	0.3[0.15,0.61]
>=3	5[9.4]	4[9.3]	1.00	234[88]	41[68.3]	1.00
Husband attitude						
Approve	43[81.1]	29[67.4]	1.00	122[45.9]	35[58.3]	1.00
Disapprove	8[15.1]	8[18.6]	0.67[0.2,2.33]	95[35.7]	10[16.7]	2.73[1.24,6.47]
Do not know	2[3.8]	6[14]	0.22[0.62.1.4]	49[6]	15[25]	0.45[0.94,2.02]

Reasons for non-use of contraception among women with unmet need.

About 44% and 4% of women in urban did not use contraception due to husband and respondent opposition. Twenty- six percent did not use contraception due to health problems and side effects. Twenty-two, 25% and 20% did not use contraception due to the same reasons in the periurban area. Seventy percent and 25% of the in urban women discontinued using contraception due to the desire to have more children, health concerns and fear of side effects, while 44% and 42% discontinued for similar reasons in the periurban area Table 6.

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Table 6. Percentage distribution of currently married women with unmet need by reasons not to use family planning method in Awassa Town and periurban area 2003.

Never users	**Urban n=23**		**Periurban n=271**	
Reasons	No	%	No	%
Respondent opposition	10	43.5	60	22.1
Husband opposition	1	4.3	67	24.7
Relatives opposed	0	0	2	0.7
Lack of knowledge	0	0	16	6
Do not know the place	0	0	8	3
Fear of side effects And health problem	6	26	53	19.6
Inaccessible	0	0	1	0.4
Little perceived risk of pregnancy	1	4.4	9	3.3
Too much cost	0	0	3	1.1
Inconvenient	0	0	5	1.8
Desire to have more children	4	17.4	42	15.5
Do not know	1	4.4	5	1.8
Ever users	**n=73**		**n=55**	
Fear of side effects And Health problem	18	24.6	23	41.8
Fear of infertility	0	0	2	3.6
Shortage of Preferred method	0	0	2	3.6
Desire to have more children	51	69.9	24	43.6
Little perceived risk of pregnancy	0	0	3	5.5
Do not know	4	5.5	1	1.9

Intention of women with unmet need to use contraception in the near future

In the urban area 39% of women with unmet need among never-users had intention to use contraception in the near future, while 58% in periurban had intention to use contraception in future. In urban 72.6% of women with unmet need among ever -users have intention to use, while 90.7% of women with unmet need among ever- users have intention to use contraception in the future. In general 65% of urban and 63% of periurban women with unmet need had intention to use contraception in the near future. Table 7.

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Table 7 Intention of women with unmet need to use contraception in the future.

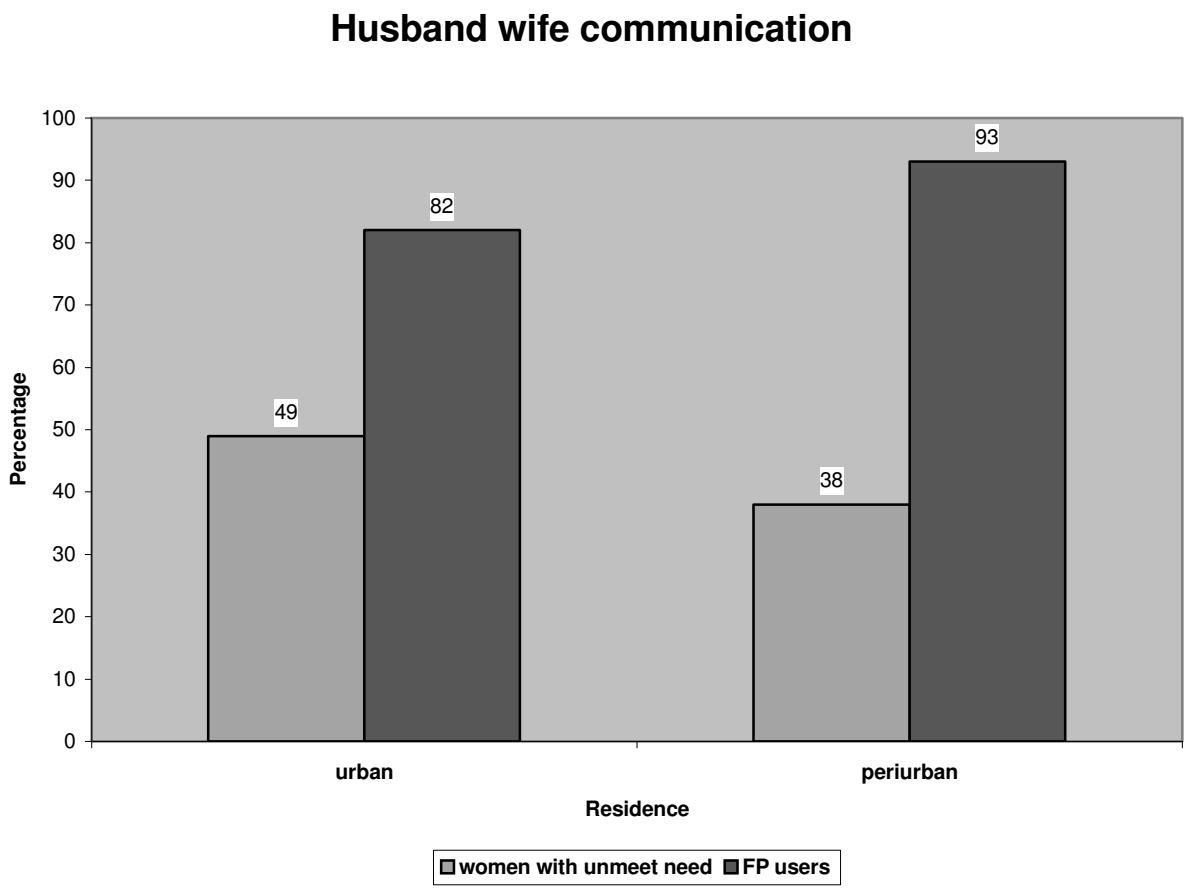
Urban N=23		
Never users	No	%
Intend to use	9	39.1
Do not intend to use	14	60.9
Did not decide	0	0
Do not know	0	0
Ever users N=73		
Intend to use	53	72.6
Do not intend to use	15	20.5
Did not decide	4	5.6
Do not know	1	1.3

Periurban N=272		
Never users	No	%
Intend to use	158	58.1
Do not intend to use	87	32
Did not decide	24	8.8
Do not know	3	1.1
Ever users N =54		
Intend to use	49	90.7
Do not intend to use	5	9.3
Do not decide	0	0
Do not know	0	0

Husband- wife communication

Forty nine percent of women with unmet need in the urban and 38% of women with unmet need in the periurban area had discussed with their husbands during the preceding year, compared with 82% of contraceptive users in the urban and 93% in the periurban area. Fig 4.

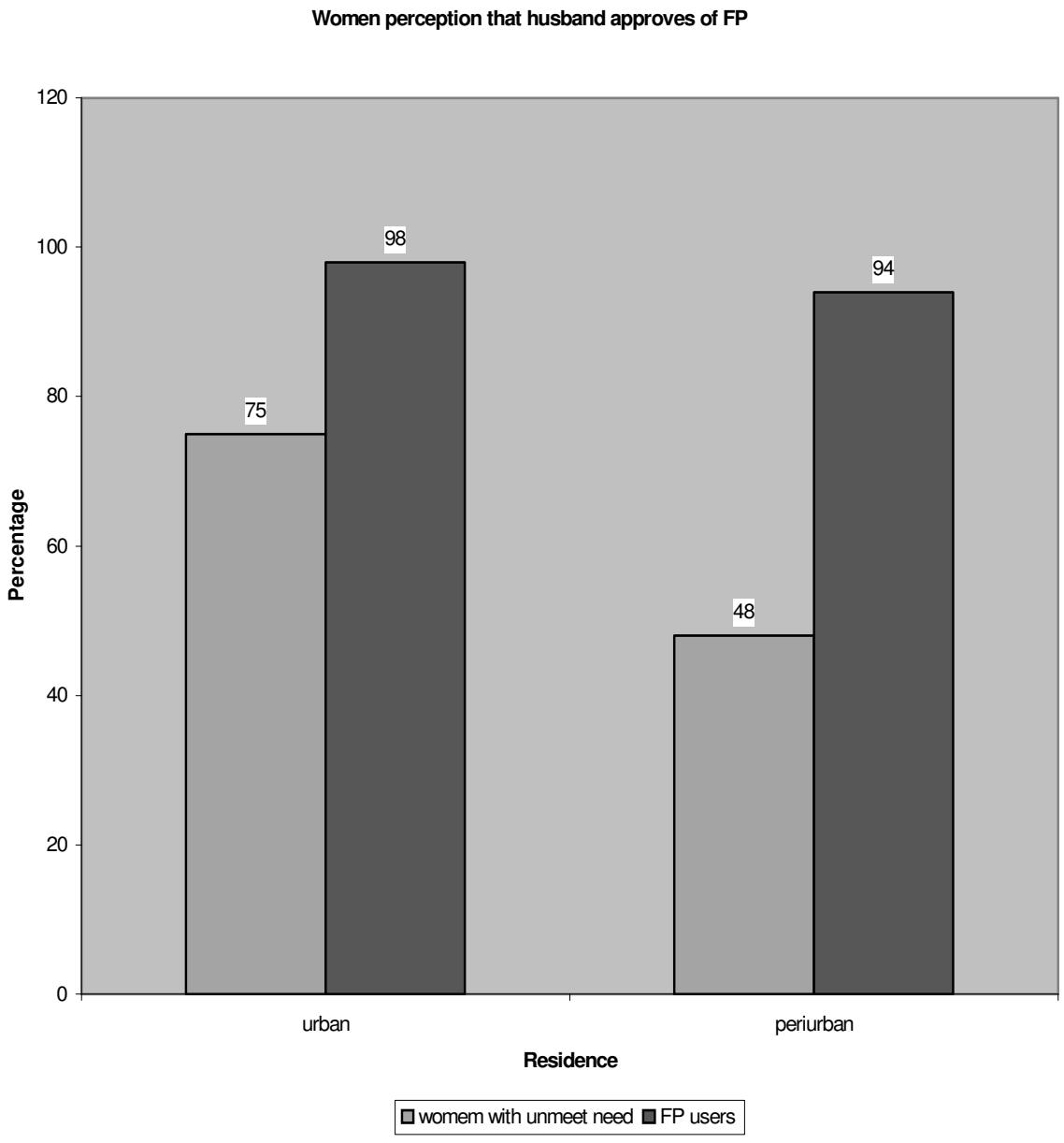
Figure 4



Women perception that husband approves of family planning

Seventy five percent of women with unmet need in the urban and 48% of women with unmet need in the periurban area thought that husbands approve of family planning compared with 98% of contraceptive users in the urban and 94% of contraceptive users in the periurban area. Fig 5.

Figure. 5


Women perception that husband approves of FP
120
100
80
60
40
20
0
Percentage
98
94
75
48
urban
periurban
Residence
womem with unmeet need
FP users

Logistic regression system analysis

Urban women were less likely to have unmet need for family planning than periurban women [OR=0.21,95% CI: 0. 103,0.43]. Women with family size of 1-4 were less likely to have unmet need for contraception than women living in family with 10 or more family members [OR=0.44, 95% CI: 23,0.86]. Women who have no knowledge about family planning were 27 times more likely to have unmet need for family planning than women who have knowledge about contraception. Women who have not discussed family planning issues with their husbands are 5 times more likely to have unmet need for family planning than women who have discussed family planning issues with their husbands. Women whose husbands do not approve use of family planning are 6 times more likely to have unmet need than women whose husbands approve use of family planning Table 8.

Table 8. Logistic regression analysis of women with unmet need, by selected variables

Variable	Unmet need			
	N=422	N=579	Crude	Adjusted
Residence	**Yes[%]**	**No[%]**	**OR [95%CI]**	**OR [95%CI]**
Urban	96[22.7]	254[72.6]	0.38[0,28,0.5]	0.211[0.103,0.43]
Periurban	326[50.1]	325[49.9]	1.00	1.00
Age				
15--19	22[39.3]	34[60.3]	1.00	1.00
20--24	74[38.7]	117[61.3]	0.98[0.51.1.9]	1.76[0.81,38]
25--29	134[46.5]	154[53.5]	134. [0.72,2.54]	1.45[0.80,2.64]
30--34	107[44.8]	132[52.8]	1.25[0.67,2.39]	0.94[0.54,1.63]
35--39	51[37]	87[63]	0.91[0.46,1.82]	0.99[0.58,1.71]
40--49	34[38.2]	55[61.8]	0.96[0.46,2.02]	1.12[0.63,2.01]
Ethnicity				
Sidama	314[48.5]	333[51.5]	3.06[1.86,5.19]	1.0[0.45,2.2]
Amhara	20[40.8]	29[59.2]	2.24[1.01,4.94]	0.64[0.29,1.41]
Oromo	51[34.2]	98[65.8]	1.69[0.93,3.14]	0.67[0.37,1.2]
Wolaita	13[24.1]	41[75.9]	1.03[0.43,2.37]	0.96[0.43,2.15]
Others	24[23.5]	78[76.5]	1.00	1.00
Family size				
1--4	180[45.3]	217[54.7]	1.54[0.85,2.86]	0.44[0.23,0.86]
5--9	221[40.6]	323[59.4]	1.27[0.71,234]	0.64[0.35,1.18]
10 and above	21[35]	39[65]	1.00	1.00
Religion				
Orthodox	82[31.7]	177[68.3]	1.00[0.47,2.21]	0.45[0.19,1.03]
Protestant	309[48]	335[52]	1.99[0.97,4.25]	0.64[0.31,1.3]
Catholic	18[31.6]	39[68.4]	0.99[0.39,2.6]	1.55[0.63,3.83]
Others	13[31.7]	28[68.3]	1.00	1.00

Table 8 continued

Variable	Unmet need			
Occupation	n=422 Yes [%]	n=579 No [%]	Crude OR [95% CI]	Adjusted OR [95%CI]
House wife/Farmer	393[43.6]	509[51.4]	2.15[1.12,4.35]	0.53[0.27,1.04]
Government	15[32.6]	31[67.4]	1.35[0.52,3.52]	0.47[0.18,1.2]
Nongovnm				
Others	14[26.4]	39[73.6]	1.00	1.00
Education				
Illiterate	202[48.4]	215[73.6]	1.25[0.37,4.46]	1.93[0.51,7.23]
Read and write	53[48.4]	51[51.6]	1.39[0.39.5.2]	1.34[0.33,5.31]
Primary school	99[43.2]	130[56.8]	1.02[0.3,3.67]	1.74[0.47,6.39]
Junior/High school	6226.2]	175[73.8]	0.47[0.14,1.73]	1.54[0.43,5.43]
Higher education	6[42.9]	8[57.1]	1.00	1.00
Alive child				
0--2	163[42.6]	220[57.4]	1.03[0.79,1.34]	0.74[0.51,1.06]
3 and above	259[41.9]	359[58.1]	1.00	1.00
Desired child				
1--2	138[25.1]	411[74.9]	0.2[0.15,0.26]	0.67[0.44,1.03]
3 and above	284[62.8]	168[37.2]	1.00	1.00
Knowledge				
Yes	252[30.6]	571[69.4]	1.00	
No	170[95.5]	8[4.5]	48.15[23.3,114]	27[12.5,58.8]
Discussed with husband				
Yes	171[25.1]	509[74.9]	1.00	1.00
No	251[78.2]	70[21.8]	10.7[7.69,14.86]	5.4[3.59,8.3]
Husband attitude				
Approve	229[29.1]	558[70.9]	1.00	1.00
Disapprove	121[89]	15[11]	19.7[11,1,36.89]	5.99[2.2,15.75]
Do not know	72[92.3]	6[7.7]	29.24[12.5,83.4]	0.77[0.25,2.36]

Focus group discussion [FGD]

The qualitative study was carried out through focus group discussion. Based on the checklist that was developed to guide the discussion, relevant information was obtained. The participants freely and effectively expressed the ideas about family planning issues. Almost all of the participants clearly understood the general concept of family planning.

The result of focus group discussion revealed that participants of the discussion have heard of family planning, but they have limited knowledge on specific methods. This might hinder some of the beneficiary to have a range of choice of contraceptive method and use. For instance the participants were asked to enumerate the contraceptive methods they know and those from urban and periurban areas. Most mentioned pill, injectables, Norplant, I.U.C.D, and condom, while few participants, especially from the periurban area, mentioned vasectomy, tubal legation and spermicides. Men and religious groups knowledge on contraceptive methods comparing to female group is not strong as expected. These groups could not mention what the female group had mentioned.

Family planning service issues were discussed, and the service was found to be available in both urban and periurban areas. Non-governmental organizations, such as Family Guidance Association of Ethiopia, charge for the services. Due to this reason it was not possible for those who cannot afford to get the service, specially the injectables. In male, religious and in periurban groups it was mentioned that in some places the family planning service was inaccessible due to shortage of health facilities and along distance. All groups found family planning services to be very useful.

Ideal family size issue was discussed and it was mentioned 4—6 children in urban and 5—8 children in periurban areas. However, both in urban and periurban groups said that it depends on the economic situation of each family. If a family can afford it they can have as much as 8-10 children. It was mentioned that the ideal number of children desired in urban and periurban areas can be achieved by discussing among the couples and utilizing modern contraceptive methods.

Problems mentioned regarding large family size were poor maternal and child health, maternal and child death, poor economic condition [children cannot go to school, shortage of food] streetism, unemployment and shortage of land to plough and pass to children in periurban area. Therefore, the consensus was that there is no need for large families. Women in the reproductive age group are highly affected in both urban and periurban by unwanted and mistimed pregnancies, which are accepted by society because it was been culture for women to give birth to 10 or more children. The health of mothers and children health is affected by malnutrition; disability and death, family break up, school drop out, streetism and abortion. The community due to unwanted and mistimed pregnancies faces these problems. These days most women use contraception, but still there are a few people who do not use them due to lack of knowledge, both in urban and periurban areas. The health education rendered by health providers is not on regular basis. Some people are expected to travel a long distance to get the service. There were a few men who said that it is up to' God' to determine the number of children, and children are assets. All these factors affect the utilization of family planning services.

Family planning issues are discussed openly in protestant churches. Orthodox Churches do not publicize it openly nor they do not oppose using family planning services. It was mentioned by one of the health workers that clients who use I.U.C.D family planning method are expected to

remove them, if they want to get in- patient health services in Catholic- owned health institutions.

Attitude and opinion of the community towards the family panning service providers depend on the quality of the services they obtained. If the clients do not get their choice of method, if they are not treated well and if they wait a long time to get the service, their attitude is not positive toward that health provider and also the opposite is true in both areas. Most clients said, that their experience was positive.

While people used modern contraception, traditional methods were not used widely, because they are known to be less effective than modern contraception methods. Breast-feeding, abstinence and withdrawal methods were mentioned in both urban and periurban areas.

Men are positive towards contraception and support utilization, but there still were some men who do not support using contraception and desire as much children as women can bear. There were also very few men who consider family planning are only for women and it is not men's concern. All FGD groups expressed this idea.

The community is very aware of the need for avoiding unwanted and mistimed pregnancies through family planning services, but there are people in urban and periurban areas who lack the awareness and do not use the family planning services.

Information passed through mass media on family planning is said to be very useful and it covers large areas. It was said by one of the health workers that the information through mass

media is limited by language and reflects a certain culture; therefore it is difficult for the non-Amharic rural community to understand. Now day's people discuss family planning issues in the working place, during meetings, among spouses and while traveling and also there are few people who do not discuss family planning issues in urban and periurban areas.

Major obstacles to alleviate the problem regarding family planning service mentioned were low awareness, since the health education rendered by health workers are not on a regular basis. Mostly the health education is given for the clients in the health institutions. It was said by health workers that the health education given in outreach is weak, the family panning service integration of outreach level with other maternal and child health services is not strong. The contraception method mix is not always stable; the methods that have acceptance by the clients are sometimes out of stock, while methods not preferred by the clients are available in excess. For instance, Norplant, injectables and I.U.C.D are often not available on demand, while pills are getting expired; sometime there is no syringe and needles for the injectables. In some places people are expected to travel a long distance to get the service. The family planning services rendered in government health facilities are free of charge, but the clients are supposed to wait a long time. Many health workers in governmental institutions get fed up due to client overload and thus tend to treat clients poorly. Non-governmental institutions charge for the services, which some of the clients cannot afford. These are some of factors that hinder the utilization of the family planning services both in urban and in periurban areas.

Discussion

Assessment of the magnitude and determinants of unmet need for family planning among currently married, pregnant, and post- partum amenorrhoeic women in Awassa Town and periurban area were carried out. Ten percent of the study population in urban and 60% in periurban have no education, which is lower than the DHS result for Ethiopia [19].

A significant difference was found with reproductive characteristics between urban and periurban areas. Median age at first marriage in urban was found to be 18, while 16 in periurban. The median age at first birth was 19 in urban and 17 in periurban areas. Urban girls are less likely to marry at early age than periurban girls, which is inline with other studies finding [16,19]. When compared with the report of a previous study in Sidama [16], age at first marriage in urban and periurban areas is relatively high. This could be due to relatively good access to information; education, communication and family planning services in both study areas .The difference may be explained by early age at marriage in periurban, which implies early age at child bearing and higher level of fertility and the desire to have more children due to religious and cultural taboos. This situation is due to less access to information, education, communication and family planning services in the periurban than urban area.

The median number of living children was 2 in urban, while 4 in periurban areas, which is in line with other studies [19]. Median number of children desired was found to be 3.5 in urban, while 7.8 in periurban. Women in periurban are more likely than women in urban to have five and more children. During the focus group discussion the ideal family size in urban was mentioned 4—6 and 5—8 in periurban. Current pregnancy in the urban area was 5.4% and 13.9% in periurban areas. The urban result is in line with DHS results for Ethiopia, while the

periurban result is higher [19]. Periurban women are more likely to be pregnant than urban women. Intended Pregnancy was 7 times more likely to occur in the urban than in the periurban area. Periurban women in the age group 15—19 are more likely to give first birth than urban women in the age group of 20—24. This can be due to lack of access to education, communication, and information and work in urban than in periurban.

Level of awareness about contraceptive methods in urban and periurban was not much different [98.5 % Vs 95 %] and 97.3% in urban and 72% in periurban knew at least one type of contraception. Urban women are more likely than periurban women to have heard of contraception. Urban women are 14 times more likely than periurban women to have knowledge about contraception. Women who have no knowledge of contraception are 27 times more likely than women who do have knowledge to have unmet need This could be explained by dissemination of information through different ways. The same findings was also registered in another study [50] and is in line with national figure [19]

In this study the contraceptive prevalence rate was found to be 68.8% in Awassa Town, which is higher compared with national urban CPR [53] and rural rates [25,27,50] The 48 %rate in periurban Awassa is much higher than the rates reported from around Gonder and Jimma [20,25]. This might be due to increased awareness and knowledge of the community about contraception, increased access of family planning services through CBD [community based distributor of contraception] agents and increased non-governmental and private organizations participation in the education and provision of family planning services.

Even though the majority of respondents have heard about contraception, the contraceptive prevalence rate is relatively low among periurban women compared to urban women. This could be attributed due to different reasons: desire to have more children, poor outreach family planning activities and scarcity of services in periurban area, cultural and religious taboos, and inadequate information on contraception. In focus group discussion mainly in periuban area the participants mentioned that some clients must travel a long distance to get family planning service, there are also some people who think children are an asset and it is up to God to determine the number of children. Other studies also support this finding [27,50]. Moreover, there is a gap between knowledge and contraceptive practice.

Sixty- five percent in urban use contraceptives for spacing, while 68.9% in periurban use for limiting the birth. This shows the majority of the urban women used the contraception for spacing, while the majority of periurban women used the contraception for limiting the birth. This can be explained by periurban women have the desired number of children earlier than women in urban areas.

Injectables and pills are the two most commonly used contraceptive methods both in urban and periurban areas. This finding is in line with other studies [19.50] conducted in other parts of the country.

In decision to use the contraception there is slight difference in urban and periurban [98% Versus 93%] decide jointly. This is higher than the DHS result for the country and greater than in other studies [25,50]. This can be explained by different reason: increased information,

education, communication and counseling services, increased the health facilities and out reach activities for family planning in the area.

An important indicator of the change in demand for family planning is the extent to which non-users of contraception plan to use family planning in the future. Intention to use contraception among non-users in urban and periurban was not much different [68% versus 65%]. This is higher than in other studies [16,19,42,50]

Spousal communication is an important intermediate step toward adoption and use of contraception. It is also an indication of acceptability of family planning. Seventy point five percent in urban and 63.0% of women in periurban have discussed with husbands or partners within the preceding one-year. Ninety percent in urban and 68% of husbands in periurban area approved of using contraception. Urban women are 1.4 times more likely than periurban women to discuss about contraception with their husbands. Ninety eight percent of women in urban and 80% in periurban approve using contraception.

During the group discussion, especially in periurban area, it was mentioned that there are women who do not use contraception due to cultural taboos. Their number is higher than in other studies [17.19,33,42]. The difference between urban and periurban may be explained by the fact that urban women have better access to information, education, communication, health facilities than their counterparts.

An understanding of the reasons why people do not like to use family planning methods is critical in designing programs that could improve the quality of the service. Twenty- six percent in urban and 23% in periurban are not using contraception because the women themselves do

not want to use the contraception This indicates [even though the contraceptive prevalence is still relatively high] that there is much need for strengthening education, information and counseling services for family planning. During the focus group discussions in both areas and in all groups it was mentioned that the health education rendered by health providers is not on a regular basis. Seventy- one percent of women in urban and 61% in periurban reported that the reasons for the discontinue was desire to have more children followed by health concern and fear of side effects [24% in the urban and 30% in the periurban area]. This again indicates that there is inadequate information, education, communication and counseling services that would help the client to continue use of contraception. The finding was also supported by focus group discussions. The finding is also in line with study findings reported from around Gonder [25] but these rates are higher than other studies [19,50]

Because not all users may need family planning services, an effort was made to identify those women who wanted to space or limit their fertility without using any form of contraception during the survey. This is important because it helps to estimate the contraceptive demand in the future and to select target groups for family planning programme intervention.

The level of unmet need for family planning was 23.6% in urban and 40% in periurban among currently married, pregnant and post-partum amenohrroeic women. The finding is in line with DHS results for Ethiopia [19] it is about the same as those of the sub-Saharan Africa countries [36]. This result is low from what Tekabe and colleagues found [40] and Daniel S. [42] in Addis Ababa and family planning project review in Yirgalem [48] and Community and Family survey in SNNPR [16]. However, their study estimates unmet need among ever- married, fecund and

not pregnant. The definition used in their study does not take into account pregnancy and post-partum- amenorhoeic women, which are considered in the present study.

In this study 12% of unmet need in the urban area and 32.7% in periurban was for spacing. This shows that the greater percentage of unmet need in urban as well as periurban women was for spacing, which is in line with the DHS result for Ethiopia [19] and Sub-Saharan African countries [36].

Unmet need for family planning in periurban women [40%] was found greater than unmet need in urban women [23.6%]. This is in line with DHS result for Ethiopia and Sub-Saharan [36] African countries. Examining unmet need for family planning across various demographic, social and economic variables suggests that unmet need for family planning is affected by some of these factors.

Unmet need is specifically high among the women in the 25—29 age group [32%]. Smaller percentages in need of family planning were found in the age group of 15—19[5%] and the oldest age group 40—49[8%]. In the case of young women, the reason might be that they have not yet achieved their desired number of children, while the older women might have considered themselves as no more at risk of conception due to perceived or actual sub fecund and menopausal state. Examining the age distribution of unmet need from the spacer and limiter perspective, there exists a difference in the age pattern. As expected, family planning unmet need for limiting increases with age toward the later age group. Among the limiters 58.2 % from urban and 36.7 % from periurban areas were in the age group 35—49, whereas among younger women [15—19] there is no limiter in the urban, while only 1.7 % women in periurban wanted to limit childbirth. Among the study population in the 35—49 ages group 9.4% in urban and

12.4 % in periurban had unmet need for spacing. Periurban women in age group 40—49 are less likely than women in age group of 15—19 to have unmet need.

Age is an important factor when total unmet need is decomposed into need for spacing and need for limiting. Otherwise its importance becomes negligible. Hence age is not an important determinant of overall unmet need for family planning. On the other hands family planning unmet need for spacing concentrated around the relatively younger age groups and declines towards the oldest age groups. Forty percent in the age group 15—24 were in urban and 24.8 % in periurban are spacers, while 9.3 % in urban and 14.7 % in periurban were limiters. As expected, only a small proportion of spacers were found in the last childbearing age group.

Women with large numbers of surviving children have a greater unmet need for family planning than those women with fewer children .On the other hands women with a larger ideal family size have a lower need for family planning services in urban than in periurban areas. The finding suggests that women prefer to go for their ideal number of children before accepting a family planning method especially in the urban area. Women with three or more living children are 3 times more likely than women with fewer children to have unmet need in periurban. In general 61.7 % periurban and 28.3 % urban women with three or more living children were spacers, while 83.3 % and 69.8 % with similar numbers of living children were limiters. Thus, unmet need for family planning, especially for limiting births predominates among women with 3 or more surviving children. Women with family size of 10 or more were more likely to have unmet need for family planning than women with family size of 1—4.

As is the case in most of countries, total unmet need for family planning was greater for those from periurban than urban [77.3 % vs. 22.7 %]. This was true especially for periurban women with unmet need for family planning for the purpose of spacing 81% compared to 55.2 % of the spacers from the urban area. This is in line with DHS result for Ethiopia and DHS result for sub-Saharan African countries [36]. There might be several reasons for the greater family planning need of women from periurban areas. Moreover, they are less educated, and family planning services are inadequate or non-existent in periurban areas compared to the urban area.

Total unmet need as well as unmet need for limiting and spacing is greater among junior and high school education levels in urban, while it is greater among illiterate in periurban. Illiterate women in periurban have unmet need for spacing [49%], while illiterate women in urban have need for limiting births [9.7%] respectively. Periurban Women with primary education were 7 times more likely than women with higher education to have unmet need. Thus, it is clear that unmet need is highest among women with low level of education. Unmet need declines as the education level of women improved. This is possibly due to the reason that the level of awareness of fertility control and preference for a smaller number of family is less understood among the less educated, while the better educated women appreciate the value of small planned family as well as the means in achieving it. Despite its statistically non-significant association education was negatively associated with unmet need. Hence education is not an important determinant of unmet need for contraception in this study population.

Looking into the characteristics of husbands of women with unmet need reveals that 49% of women with unmet need in urban and 38% of women with unmet need in periurban areas had discussed family planning with their husbands or partners in the preceding year compared with 82% urban contraceptive users and 93% periurban. This is comparable with finding in Ghana [12]. Our results indicate that women with unmet need are much less likely than contraceptive users to have talked with their husbands about family planning. Women who have not discussed family planning issues with their husbands or partners within the last one year are 5 times more likely to have unmet need than women who discussed it.

Seventy five percent of women with unmet need in urban and 48% of women with unmet need in periurban area thought that their husbands approve of family planning compared with 98% of contraceptive users in urban and 94% of contraceptive users in periurban areas. Husbands in urban are 4 times more likely to approve use of contraception than husbands in periurban. Women whose husbands do not approve using contraception are 6 times more likely to have unmet need than women whose husbands do approve use of family planning. Women with unmet need are much less likely to believe that their husbands approve of family planning than contraceptive users. This is similar to the situation in Botswana, where only 47% of women with unmet need think that their husbands approve of family planning compared with 82% contraceptive users [12].

As is the case in many other Sub-Saharan African countries, the majority of women with unmet need [69.7%] never used contraception in their lifetime. The proportion of women who had ever used a contraceptive method among those with unmet need for family planning constitutes 30.0% of all women with unmet need. Further investigation of women's intention to use family planning methods sometimes in the future showed that 39% percent of never-users and 72.6% of

past urban users and 58% and 90.7% of periurban users intended to use. This is in line with the family planning project review findings in Yirgalem [48] and higher than in another study [42] and with DHS finding for Sub-Saharan African countries [36].

Women who wanted either to space or limit their birth but were not using family planning methods were further asked to state the reasons for not using contraception. The main reasons of non-use mentioned by women with unmet need in their order of importance were husbands/wife opposition to using family planning [32%], fear of side effect and health problems [24%], and lack of information [5.7%] This rates are higher than reported by other studies [41,42] but it is comparable with finding in developing counties [43]. Twenty- six percent of the urban women with unmet need did not use contraception due to fear of side effects and health problems compared to 19,5% of the periurban women. Even though there is a better education in the town it is not followed by good counseling services this might be the reason for the differences

There were statistically significant associations between knowledge, discussion with husband, husband attitude towards use of contraception and urban residence. These results agree with the result of bivariate analysis.

The other variables: ethnicity, religion, occupation, education, number of living children, and desired children had no statistically significant association with unmet need.

Hence the following factors are identified as affecting unmet need for family planning among the study population.

- Family size
- Knowledge of contraception
- Husband's attitude

- Discussion with husband and
- Place of residence

Strength of the study

In this study qualitative and quantitative methods were used. These methods improve the research outcomes as qualitative study complement and strengthen the quantitative study. The study subjects were selected using random sampling technique, which help to avoid selection bias. Both urban and periurban women were included for the purpose of comparisons and to identify differences in use patterns in the two settings. Use of logistic regression helped to control possible confounding factors in order to assess the relative effect of independent variables.

Limitation of the study

Cross- sectional study design was used in the present study. This type of study design shows the exposure and outcome at the same point in time, so that we cannot formulate a cause and effect relationship. The other limitations are that the periurban study population may not represent a typical rural setting and that unmarried women were not included in the study population, which might have changed the outcome of the study. Other possible limitations are: Reliability of answers and sensitivity of the subject.

Concussion

There is difference in contraceptive prevalence rate in urban and periurban areas.
Most of the study population was found to have favorable attitude to wards contraception and their husbands or partners too.
There is difference in unmet need for contraception in urban and periurban areas.
Majority of women with unmet need never used contraception in their lifetime.
Opposition to use contraception, health problem and fear of side effects and desire to have more children were reasons to have unmet need for family planning among women who have never used contraception.
Health problem and fear of side effects were main reasons to discontinue use of contraception and to have unmet need for family planning.
Majority of women with unmet need, who have never used contraception have intention to use family planning in the future.
More than three-quarter of women with unmet need who used contraception in the past have intention to use family planning in the future.
Place of residence, family size, knowledge about contraception, discussion with husbands about family planning and husbands attitude to wards contraception were main factors affecting unmet need for family planning.

Recommendations

Based on the study findings the following are recommended

- Maximizing access to good quality services. Improving the quality of family planning services and making contraceptives easier to obtain and use will help meet the need of many women.

- The programs should advocate the minimal risk or side effects associated with contraceptive methods compared to health problems and maternal health incurred by unwanted pregnancies.

- Focus on men as well as women. Encouraging communication between couples and involving men more in family planning are key, while most couples agree on reproductive matters, husbands who oppose contraception or worry about its side effects often prevent their wives from using it.

- Currently pregnant and post-partum ammenorrhoeic women with unmet need will become pregnant again unless they start using contraceptives, therefore, integration of family planning services with maternal and child services should be strengthened.

- The younger women need spacing, while the older women prefer limiting but periurban/urban differences. This indicates that the family planning service has to take into account these needs and to provide methods that suit the needs of the target groups.

- Further research is needed to identify the extent of unmet need of different population groups, including unmarried women and the rural population.

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Annex I

Addis Ababa University Medical Faculty Department of Community Health.
Survey questionnaire on the Magnitude and Determinants of Unmet need for family planning among currently married Women in childbearing age
[15-49] In Awassa Zuriya Wereda, SNNPR.

Introduction.

My name is ---------- I am working in research team [project], which is conducted by Addis Ababa University in collaboration with Ministry of Health. We are interviewing currently married women in child bearing age to know the magnitude and

determinants of unmet need for family planning and the general knowledge, practice and attitude to wards family planning. I am going to ask you some questions that are not difficult to answer. Your name will not be written in this form and will never be used in connection with any of the information you tell me. You do not have to answer any question that you do not want to answer and you may end this interview at any time you want to. However, your honest answers to these questions will help as in identifying the magnitude and determinants of unmet need for family planning and improve the family planning services in the future to meet the unmet the need of the community. We would appreciate your help in responding to this survey questions .The interview will take about 30 minutes.

Would you be willing to participate [indicate by ticking the appropriate responses]?

Yes-------, no----------

Signature of the interviewer certifying that the informed consent has been verbally by respondents----------

Visit 1	Visit 2	Visit 3
Date		
Interviewers name		

Result 1 completed

Result 2 respondents not available

Result 3 respondent refused

001 –interviewer code ----------/----------/name----------

002 –Household number----------

003 – Date of interview in Ethiopian calendar---------/---------/------time

004 – checked by supervisor.

Signature---------- day----------month----------year.

Family Planning Method Users Or Defaulters Otherwise Never Users Are Asked, You Should Circle Among The Multiple Choice The Right Answers or write the code.

Part I Demographic and socioeconomic characteristics.

Question No	Questions	Choice of answers	Code	Skip to ques. No
101	Residence	1. Rural 2. Urban		
102	How old are you?	……..Age in year		
103	Educational status	1. Do not write and read [illiterate] 2. Read and write 3. Elementary school [1-6] 4. Junior high school 7-10] 5. Preparatory school [10-12] 6. Higher education		

104	Occupation	1 House wife 11 other specify 2 Farmer 3 student 4 Mass organization employee 5 Government employee 6 Local drink seller 7 Daily laborer 8 House maid 9 Merchant 10 Job less [family dependant]		
105	Ethnic origin	1 Sidama 2 Wolaita 3 Kambata 4 Hadiya 5 Gurage 6 Gamo 7 Amara 8 Oromo 9 Tigre 10 other specify…		
106	Marital status	1 Currently married 2 Divorced 3 widowed 4 Separated 5 other specify…		
107	Monthly income in Ethiopian Birr	1 ……..Birr in month 2 No response		
108	If you compare you monthly income with your neighborhood, where you put your economic status?	1 very poor 5 rich 2 poor 3 medium 4 sufficient		
109	Family size	1 Male 2 Female 3 total		
110	What is you religion?	1 Orthodox 2 Muslim 3 Protestant 4 Catholic 5 Other specify…		

Part II Reproductive History

Ques. No	Questions	Choice of answer	Code	Skip to question No
201	At what age were you first married?	….enter age in year		
202	Have you ever been pregnant?	1 Yes 2 No		208
203	How many pregnancies have you had?	…enter number		
204	How old were you when you first got pregnant?	…enter age in year		
205	How many live children do you have?	…enter the number		
206	How old were you when you first child was born?	…enter age in year		
207	If you could go back to the time you do not have children and could choose exactly the number of children to have in you whole life, how many children could that be?	… enter the number		
208	How many children would you like to have in	…enter the number		

	you life? [For those who do not have children]			
209	Are you currently pregnant?	1 Yes 2 No 3 Do not know		 223 223
210	If the answer was yes, is the pregnancy?	1 Intended 2 Mistimed 3 Unwanted 4 No response		215 213 213
211	Are you currently amenorrhic?	1 Yes 2 No 3 Do not know		 223
212	If the answer was yes, is the pregnancy?	1 Intended 2 Mistimed 3 Unwanted 4 No response		215
213	If you have been pregnant when you do not want to, what was the reason you could not avoid becoming pregnant?	1 Lack of awareness of contraception method? 2 Poor access to contraception method 3 Husband or partner disapproval 4 Relative disapproval 5 Contraceptive failure 6 Little perceived risk of pregnancy 7 Religion prohibition 8 Culture prohibition 9 other specify…		

Q.N	Questions	Choice of answers	Code	Skip to q
214	If it was due to contraceptive method failure, what was the method used?	1 Pill 2 IUCD 3 Injectable 7 Male sterilization 4 Implant [Norplant] 8 Spermicidal[foam,,injectables] 5 Condom 9 Natural methods [abstinence,wit] 6 Female sterilization 10 other specify…		
215	Time since previous birth?	…Enter the time in month		
216	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 child 2 No more 3 Undecided		

217	If you preferred to have another child, how long would you like to wait before the birth of another child?	1….months if less than 2 year 2 2 to 3 year 3 3 to 4 year 4 more than 4 year 5 Do not want to wait 6 Do not know		
218	After the birth of the child you are expecting now, do you think that you will use any method to delay or avoid pregnancy at any time in the future? [For pregnant. Women]	1 Yes 2 No 3 Not decided 4 Do not know		220 222
219	Do you intend to use family planning in the future to delay or avoid pregnancy? [For post partum amenorrheic women]	1 Yes 2 No 3 Not decided 4 Don not know		222
220	If the answer were yes, would you like to use method to space or limit pregnancy?	1 For spacing 2 For limiting 3 Undecided		
221	Which method do you prefer to use?	1 Pill 2 IUCD 3 injectable 4 implant [Norplant] 5 condom 6 Female sterilization 7 Male sterilization 8 Spermicidal [foaming tab. jelly] 9 Natural method [periodic abstinence, withdrawal] 10 Other specify…		

Q.no	Questions	1. Choice of answers	Code	Skip to q
222	If, you were not going to use any method to delay or avoid pregnancy at any time in the future would you tell me the main reason?	1 Not aware of contraception 2. Fear of side effect 3. Fear of infertility 4. Unacceptable in my culture 5. Medical problem 6. Preferred method is not available 7. Desire to have more children 8. Husband or partner disapproval 9. Religion prohibition 10. Little perceived risk of pregnancy 11. Other specify…		
223	If you are not pregnant or amenorrhic would you like to have another child or not to have another child?	1. Have child 2. No more child 3. I can not give birth 4. Undecided 5. Do mot know		
224	If you like to have a child how long would you like to wait from now before the birth of another child?	1….enter month if less than 2 year 2.2 to 3 year 3.3 to 4 year 4. More than 4 year 5. Do not know		

Part III Practice of contraceptive Methods

Question No	Questions	Choice of answer	Code	Skip to q No
301	Please tell me to which group you belong	1. Current user		309

	regarding contraceptive practice?	2. Ever used 3. Non user 4. Other specify…		315
302	If you have ever used contraceptive method, how old were you when you first started to use?	… enter age in year		
303	How many living children did you have at that time?	…enter number of children		
304	What was the method you used then?	1. Pill 2. IUCD 3. Injectables 4. Implant [Norplant] 5. Condom 6. Female sterilization 7. Male sterilization 8. Spermicidal [foaming tabs, jelly] 9. Natural method [periodic abstinence, withdrawal] 10. Other specify…		
305	What was the main reason that you stopped using contraceptive method?	1. Fear of side effect 2. Fear of infertility 3. Medical problem 4. Preferred method is not available 5. Desire to have more children 6. Little perceived risk of pregnancy 7. Unacceptable in my culture 8, Religion prohibition 9. Other specify…		
306	Do you intend to use any method to delay or avoid pregnancy at any time in the future?	1 Yes 2 No 3 Not decided 4 Do not know		
307	Tell me about rumors you hear concerning contraceptive methods?	1…. 2… 3… 4… 5…		
308	Who talks about these rumors?	1. Current users 2. Previous user/defaulters 3. Non users 4. Do not know 5. Other specify….		

Q.No	Questions	Choice of answers	Code	Skip to q
309	If you are currently using the contraceptive method for what purpose?	1. Spacing birth 2. Limiting birth 3. Do not know		

		4. Other specify…		
310	What type of contraceptive method do you use currently?	1 Pill 2 IUCD 3 Injectables 4 Implant [Norplant] 5 Condom 6 Female sterilization 7 Male sterilization 8 Spermicidal [foaming tab, jelly] 9 Natural methods [periodic abstinence withdrawal] 10 Other specify…		
311	Would you say that using contraception is mainly your decision, or your husband or partner decision, or did you both decide together?	1 Mainly respondent 2 Mainly husband or partner 3 Joint decision 4 No response		
312	For how long have you been on this present contraceptive method with out interruption?	…enter the period in month		
313	Are you practicing the same method currently?	1 Yes 2 No		
314	Time taken to travel to the source of contraceptive methods?	…..write time in minutes		
315	If you were not using any contraceptive method to delay or avoid pregnancy, would you tell me the main reason?	1 Respondent opposed 2 Husband or partner opposed 3 Relative opposed 4 Knows no method 5 Knows no source 6 Health concern 7 Fear of side effect 8 Lack of access or too far 9 Little perceived risk of pregnancy 10 Too much cost 11 Inconvenient to use 12 Other specify… 13 to have more child		
316	Do you intend to use any method to delay or avoid pregnancy at any time in the future?	1 Yes 2 No 3 Not decided 4 Do not know		320

Q.No	Questions	Choice of answers	Code	Skip to q
317	If, yes which method would you prefer to use?	1 Pill 2 IUCD 3 Injectables 4 Implant [Norplant]		

		5 Condom 6 Female sterilization 7 Male sterilization 8 Spermicidal [foaming tab, jelly] 9 Natural method [periodic abstinence, withdrawal] 10 Other specify…		
318	You will use the contraceptive method for what purpose?	1 Spacing 2 Limiting birth [no more child] 3 Do not know		
319	After how long you want to use contraceptive method?	1. ……Write in month if less than 2 year 2 2 to 3 year 3 3 to 4 year 4 More than four year 5 Do not know		
320	If you were not going to use a family planning method to delay or avoid pregnancy in the future would you tell me the main reason?	1 Respondent opposed 2 Husband or partner opposed 3 Relative oppose 4 Desire for more children 5 Religion prohibition 6 Culture prohibition 7 Knows no method 8 knows no source 9 Health concern 10 Fear of side effect 11 Lack of access or too far 12 Little perceived risk of pregnancy 13 Other specify…		

Part IV attitude to wards contraception methods

Question No	Questions	Choice of answer	Code	Skip to q No
401	Would you like to know more about contraceptive methods?	Yes 2 No		

		3 No response		
402	Do you yourself approve or disapprove of couples using methods of family planning?	1 Approve 2 Disapprove 3 Do not know		404
403	If no why?	1 Respondent refusal 2 Husband or partner refusal 3 Family disapproval 4 Religion prohibition 5 Culture do not allow 6 Fear of side effect 7 Medical problem 8 Other specify. 9.desire to have more children		
404	Do you have discussed about contraception with your husband or partner within the last one-year?	1 Yes 2 No 3 Do not know		406
405	If the answer were yes, how many times have you discussed?	1 Only 1 time 2 Discussed some time 3 Discussed often 4 I can not remember		
406	What is your husband or partner attitude to wards contraceptive methods?	1 Approve 2 Disapprove 3 Do not know		

Part V knowledge about contraception methods

Question No	Questions	Choice of answer	Code	Skip to q No
501	Have you ever heard of family planning methods?	1.Yes 2. No		

502	Do you know any way or methods that women and men can use to delay or avoid pregnancy?	1.Yes 2. No		509
503	If yes, is it possible to obtain this method?	1.Yes 2. No		
504	Which of the following contraceptive methods do you know about?[read and thick all mentioned]	1. Pill 2. IUCD 3. Injectables 4. Implant [Norplant] 5. Condom 6. Female sterilization 7. Male sterilization 8. Spermicidal [foaming tab. jelly] 9. Natural methods [periodic abstinence, withdrawal] 10. Other specify…		
505	Where is the main place that you or other women are able to get modern contraceptives from?	1. Hospital 2. Health center 3. Health station 4. Community health post 5. FGAE clinic 6. Private clinic 7. Pharmacy /drug vender 8. Shop 9. Do not know 10. Other specify…		
506	Which advantage of contraceptive methods do you know?	1. To avoid unwanted pregnancy 2. TO delay mistimed pregnancy 3. Regulation of period 4. Limit family size 5. Prevention of STIs 6. Other specify…		

Question No	**Questions**	**Choice of answer**	**Code**	**Skip to q No**
507	How do you think oral contraceptive pills	1. Ono pill daily from one menstrual cycle to the next		

	should be taken to prevent unintended pregnancy?	2. One pill ever other day 3. One pill following sexual intercourse 4. Do not know 5. Other specify… 6. Do not know		
508	How do you think injectable contraceptive should be taken to prevent unintended pregnancy?	1. One injection ever three month during menstruation 2. One injection every 6 month 3. One injection following sexual intercourse 4 Do not know 5. Other specify… 6. Do not know		
509	Suppose we compare using the pill and pregnancy, do you think using pill is more harmful to women's health than pregnancy, equally harmful, or less harmful?	1. Pill is more harmful 2. Equally harmful 3. Pill less harmful 4. Neither harmful 5. Do not know		
510	How do you think is the best way that, currently married women in the reproductive age should prevent unwanted or mistimed pregnancy?	1. Use modern contraceptive 2. Use natural methods [periodic abstinence. withdrawal] 3. Do not know 4. Other specify…		
511	Source of information for family planning?	1. Health workers 2. Radio 3. TV 4. News papers [Posters. leaf lets] 5. Friends 6. Other specify…		
512	Do you have radio and TV in your house?	1. Radio only 2. TV only 3. Both radio and TV 4. None		

END OF THE INTERVIEW
I THANK YOU VERY MUCH FOR YOU PARTICIPATION.

Annex II. Addis Ababa University Medical Faculty Department of Community Health. Summary of Focus Group Discussion result among currently married women and men in reproductive age and Community leaders in Awasaa Town and periuban areas, 2003.

Issues for Discussion		Currently married women in	Currently married	Religious Leaders

		reproductive age [15-49]	men in reproductive age[25-49]	
1.Issues for discussion				
Knowledge on contraception	Yes No	+ + + + + -	+ + + + + -	+++++ -
2.Contraceptive methods known	Pill Injectable Condom Norplant Tuballigation Vasectomy Spermicidal Natural methods	++ + + + + + + + + + + + + + + ++ + + +++++ + + + + + + +	+ +	+ + + ++ +++++ +++++ +++++ ++++ + + + + + +
3.Family planning service provided	Available Affordable Accessible Useful	+ + + + + + + + + + + + + + + + + + + +	+ + + ++ + + + + + + + + + + + + + + +	+++++ +++++ +++++ +++++
4.The best family size	2—4 5--8	+ + + + + + + +	+ + + + + + ++	+++++ +++
5.Method to achieve	Modern method Natural method	+ + + + +	+ + + + +	+++++
6.Problem regarding large family size	Poor maternal and child health Shortage of food Poor economy Job less	+ + + + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + + +	+++++ +++++ +++++ +++++
8.Women in reproductive age affected by unwanted/ mistimed pregnancies	Abortion Family break Maternal health problem School drop	+ + + + + + + + ++ + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + +++++

+ + + + + Indicates majority of respondents,+ + + + average,+ + + some + + few,+ very poor,_ nobody

Annex II continued Summary of Focus Group Discussion result among currently married women and men in reproductive age and Community leaders in Awasaa Town and periuban areas, 2003.

Issues for Discussion		Currently married women in reproductive age	Currently married men in reproductive age	Religious leaders
9.Why people do	Law awareness	+ + +	+ + +	+ +

Not use family planning	Culture and religious matter Inaccessible	+ + + +	+ + + +	+ + + +
10..Opinion of the community	Approve Disapprove	+ + + + + +	+ + + + + +	+++++ +
11..Traditional methods practiced	Breast feeding Abstinence Withdrawal	+ + + + + + +	+++ + + +	+ + + + + +
12.How commonly practiced	Widely practiced Not widely practiced	+ + + + + + +	++ + + + + +	+ + +++++
13.Contraceptive method practiced	Modern method Natural method	+ + + + + +	+ + + + + +	+++++ +
14. Community awareness on avoid ability of unwanted and mistimed pregnancies through use of family planning	There is awareness No awareness	+ + + + + +	+ + + + + +	+++++ +
15.Men opinion to ward family planning	Approve Disapprove	+++++ +	+ + + + + +	+++++ +
16.Usefullness of information passed through mass media	Useful Not useful	+ + ++ + -	+ + + + + -	+++++ -
17.Do people discuss on family planning issues	Yes No	+++++ ++	+ + + + + + +	+ + +++ ++
18.Major obstacles to alleviate the problem	Low awareness Too much cost Culture and religious matter Inaccessible	+++ + ++ ++	++ + + ++	++ + + ++

Summary of Focus Group Discussion result among health workers in Awasaa Town and periuban areas, 2003.

Issues for Discussion		Health workers
1.Family planning service	Available	+ + + + +
	Accessible	+ + + + +

	Affordable	+ + + + +
	Acceptable	+ + + + +
	Method mix	+ + + + +
2 Usefulness of information passed through mass media	Useful Not useful	+ + + + + + _
3.Attitude of the community to ward family planning	Approve Disapprove	+++ + +
4. Women in reproductive age are affected by unwanted and mistimed pregnancy	Common problem Not common problem	+ + + + + + _
5. Awareness of the community on the avoid ability of unwanted and mistimed pregnancies through use of family planning	Aware Not aware	+ + + + + + +
6. Why the people do not use family planning services	Not available Not accessible Not affordable Not acceptable	 + +
7 Major obstacles to alleviate the problem	Low awareness Too much cost Culture and religion matter Poor method mix	+ + + + +

+ + + + + Indicates majority of respondents,+ + + + average,+ + + some + + few,+ very poor,_ nobody

Annex III
Curriculum vitae

I Personal identification

1. Name: Shle Sita Siga
2. Nationality: Ethiopian
3. Date of Birth: 28/11/1957

4. Place of Birth: Chencha Wereda Gamo Goffa SNNPR

5. Marital status: Married

6. Address: Tele: 06-20-14-41 Awassa
P.O.Box:149
DCH,FOM, AAU

II Educational background

1. Degree in Medicine: Obtained from the Former Czechoslovakia Olomouce University July 1988

2. High School Attended: Arbaminch Comprehensive Secondary High School, 1974-78 Gamo Gofa Zone.

III. Work Experiences

1. Southern Regional Health Bureau: Family health team leader 1992-2000.
2. Yirgalem Zonal Hospital: General Practitioner 1990-1992
3. Kibre Mengist health center. 1999=1990

VII. Language Ability and Computer Literacy

1. Gamogna can read and right
2. Amharic, can read and right
3. English, can read and right
4. Computer, MS Word