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Correlates of Unmet Need for Family Planning among Currently Married
Women in South Africa



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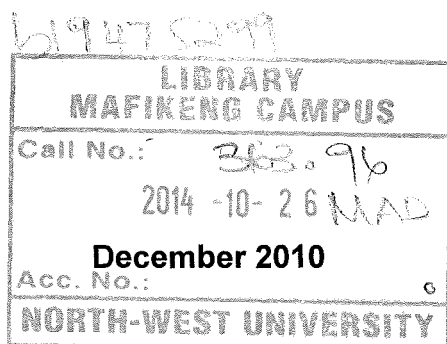
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A dissertation submitted in partial fulfilment of the requirements of the degree
of Masters of Social Sciences (Population Studies) in the Faculty of Human
and Social Sciences, Population Training and Research Unit, North West
University, Mafikeng Campus.

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DECLARATION

I, Paris Vusimuzi Maduna, declare that this dissertation for the Masters Degree of Population Studies at the Northwest University here by submitted, is my own work, and has not previously been submitted by me for a degree at this or any other University. All the design and execution in this study is my own and all materials contained herein have been dully acknowledged.

Signature.....

PARIS VUSIMUZI MADUNA

ABSTRACT

The study sought to establish the correlates of unmet need for contraception among currently married women in South Africa based on data drawn from the 1998 and 2003 South African Demographic and Health Surveys. Bivariate and multivariate analyses were used to determine the factors affecting unmet need in South Africa.

The results revealed that the total levels of unmet need for family planning declined from 15.0 per cent in 1998 to 13.7 per cent in 2003. Unmet need to space births was 4.7 per cent and 4.8 per cent in 1998 and 2003 respectively while unmet need to limit further childbearing declined from 10.3 per cent and 9.0 per cent in 1998 and 2003 respectively.

The results also showed that the total unmet need generally declined among women of all ages, except those in the age groups 25-29 and 30-34 years, among women in non-urban areas, KwaZulu-Natal and Mpumalanga provinces, those women with no education, those with six or more number of living children, among those who said they did not know their partner's level of education and those whose partners had no education.

The multivariate analyses indicate that the province of residence, population group, educational level of the respondents, partner's approval of family planning, number of living children, partner's and respondent's occupation were found to be the most significant factors correlated with unmet need for spacing among South African women of reproductive age aged 15-49 in 1998-2003 period. While age of the respondents, province of residence, population group of the respondents, educational level of the respondents, partner's approval of family planning, number of living children, partner's and respondent's occupation were the only explanatory factors for unmet need for limiting the number of children a woman will have throughout her reproductive years. With regard to the total unmet need for the South African women under study, age of the respondents, population group of the respondents,

educational level of the respondents, partner's approval of family planning, number of living children, partner's and respondent's occupation were found to be the most significant factors correlated with total unmet need for family planning in the study.

The findings have some important policy implications. It is therefore, recommended that raising the status of women through education and skills development, increasing participation of men in sexual and reproductive health, promoting communication between couples are of prime importance in eradicating barriers to the use of contraceptive methods.

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List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CSA	Central Statistic Authority
DHS	Demographic Health Survey
DOH	Department of Health
EDHS	Ethiopian Demographic Health Survey
HIV	Human Immunodeficiency Virus
HSRC	Human Sciences Research Council
IEC	Information, Education and Communication
ICPD	International Conference on Population and Development
IPPF	International Planned Parenthood Federation
IUD	Intra-uterine device
LSDS	Living Standards and Development
MRC	Medical Research Council
NRF	National Research Foundation
PRB	Population Reference Bureau
SADC	Southern Africa Development Community
SADHS	South African Demographic and Health Survey
SPSS	Statistical Programme for Social Science
TFR	Total Fertility Rate
UN	United Nations
UNFPA	United Nation Population Fund
UNICEF	United Nations Children Fund
USAID	United States
WHO	World Health Organization

CHAPTER I

INTRODUCTION

1.1. Background of the study

The concept of unmet need in family planning was developed more than 25 years ago (Westoff, 1978) and has been refined several times over the years (Westoff and Pebley, 1981, Westoff, 1988, Westoff and Ochoa, 1991). Its basic objective is to estimate the proportion of women not using contraception who either want to cease further childbearing (unmet need for limiting) or who want to postpone the next birth at least two more years (unmet need for spacing) (Westoff, 2006). These estimates, along with the proportion currently using contraception, are intended to measure the total demand for family planning. Its usefulness lies in identifying groups of women who might be receptive to programme efforts and in evaluating the effectiveness of these efforts. Another purpose is to assess the potential impact on the level of fertility because of a strong association that exists between contraceptive prevalence and fertility (Westoff, 2006).

Many women who are sexually active would prefer to avoid becoming pregnant, but without using any method of contraception. These women are considered to have "Unmet Need" for family planning. The concept "unmet needs" points to the gap between some women's reproductive intentions and their contraceptive behaviour (Westoff, 1988). Unmet need for family planning constitutes a significant fraction of all married women of reproductive age in developing countries (Pasha et al. 2001).

1.2. Problem Statement

To many commentators, over-population is not a treat any more, but regarding population structure and social, economic and cultural characteristics of some countries and areas, the rapid growth is sure to continue for decades. In addition, from more than 400,000 conceptions that take place around the world every day, almost half are

deliberate and happy decisions but the rest are unintended and many of these are regretted (Malcolm, 2000,2). This high level of unwanted fertility leads to high fertility and population growth rate that remains a significant impediment to development.

The unmet need in South Africa is investigated for a number of reasons. Unmet need has direct impact on total fertility rate. It is believed that if unmet need were eliminated, fertility would decline substantially (Omrana, 2001, 95). Henceforth, unmet need provides a powerful rationale for funding and organizing effective family planning programs. Sinding et al., (1994) argued that family planning programmes should attempt to meet unmet need rather than pursue government targets reflecting demographic considerations.

Unmet need can assure the wellbeing of mothers and women by preventing unwanted pregnancies. According to Davis (1987, 37), the way to reduce fertility is not just the adoption of modern family planning methods, the infanticide and induced abortion can be experienced as well. Therefore, unmet need leads to unwanted pregnancy, and since many women have no way of dealing with unwanted pregnancy, abortion becomes a special means to control fertility.

Restrictive laws and policies concerning abortion, particularly in developing countries, have resulted in many unwanted pregnancies and an escalation in obstetric complications and maternal deaths due to botched 'backstreet' procedures (WHO, 2004). Unsafe abortions pose a significant risk to the health of young women in developing countries (NRC & IOM, 2005). Every year, between 2.2- 4 million unsafe abortions are undertaken by adolescents in developing countries (UNFPA, 2007).

In South Africa, despite the legalization of abortion through the enactment of Termination of Pregnancy Act of 1996, most young women still do not consider the legal termination as a viable option (Kaufman, De Wit and Stadler, 2001; Varga, 2002).

According to Reproductive Rights Alliance (1999), three years after the enacting of abortion laws in 1996 only 40 000 legal termination each year were done, but by 2003

this number increased to 70 000 per year (Makiwane, 2009). Since the introduction of this legislation about 529 410 women have had safe and legal abortions in South Africa (IPAS, 2009). Survey data on termination of pregnancy among young women indicated that a very small percentage (3%) make use of the hospitals and clinics approved to provide termination of pregnancy, despite two thirds of pregnancies being unwanted (Pettifor et al., 2005). A qualitative study by Kaufman, et al. (2001) and Varga (2002) found that legal termination of pregnancy is still a seldom consideration.

As regards harmful consequences of abortion, decreasing unmet need could help to reduce maternal morbidity and mortality.

Reducing unmet need can be considered as a way to ensure women's rights. Women have the rights to choose the number of their children, the time of pregnancies, and taking part in decision-making in the home. But a big proportion of women with unmet need are forced by their husbands and their family to follow their commands and bring as many children as they want. From the standpoint of women's reproductive health rights, unmet need is considered as an indicator of the violation of such rights and one of several basic rationales for women's empowerment (McCauley et al., 1994, online).

Since some of the unmet needs are due to lack of services, investigation on unmet need can be considered as an evaluation of family planning programmes, too. Identifying the causes and the factors that contribute to unmet need can be an important step in improving family planning services and promoting the acceptance of contraceptives.

1.3. Study Rationale and Justification

In recent decades, there have been tremendous advances in the development of safer and more effective contraceptives, and in the provision of affordable and accessible family planning services. Yet, still millions of individuals and couples around the

developing world are unable to plan their families as they wish. Understanding the trends and correlates of unmet need for family planning is important in mapping strategies for addressing its adverse consequences. For instance, unmet need can lead to unintended pregnancies which pose numerous risks for women, their families and societies. For example, some of the unintended pregnancies are often aborted in unsafe conditions. It is estimated that about 18 million unsafe abortions take place in developing countries every year, contributing to the high rates of maternal mortality and injury in these regions (Murray and Lopez, 1998).

Despite the legalization of abortion in 1996 in South Africa, statistics on abortion are still difficult to obtain, because of the poor use of the public health facilities designated for providing abortion services (Pettifor et al., 2005). For example, since the legalization of termination of pregnancy (TOP) only about 529 410 women have had safe and legal abortions in South Africa (IPAS, 2009). The enactment of the Act has unfortunately been compounded by, morality and religious objections, poor knowledge and information about the Act particularly among adolescents and uneducated women in rural areas, negative attitude of health staff towards early pregnancy and termination and lack of confidentiality, no individual decision- mothers or older females in the family playing a significant role in deciding about termination often motivated by the need to protect the good name of the family, and the acceptance or rejection of paternity, especially among Black communities (Kaufman et al., 2001; Varga, 2002; DOH, MRC and Measures DHS, 2002; Ratlabala, Mafokane and Jali, 2007; Morron et al., 2006; NRC and IOM, 2005).

Further rationale for this study emanates from the overwhelming results which indicated that sub-Saharan Africa is the only region that has not responded adequately to the family planning stimulus (Dodoo and Landewijk, 1996). In a country like South Africa where one of the goals of the government is to have controlled Fertility trends- stated in the South African Population Policy, an important question is, how much of the reduction in fertility can be realized by the satisfaction of existing but unsatisfied demand for family planning services (Westoff, 1997).

The concept of “unmet need” has been a significant force in influencing the development of family planning programmes (see Bongaarts; 1991, Robey et al., 1996; Westoff, 1998). In particular, the assessment of unmet need helps planners, programme managers and policy makers by providing them with information concerning the magnitude and characteristics of the additional market for contraception and enabling them to estimate the impact on fertility that would result if the additional contraceptive needs of the market were met (Westoff and Bakole, 1995).

Understanding the trends and correlates of unmet need for family planning is also crucial in efforts aimed at the provision of reproductive health services in South Africa. Similarly, such information would be useful for research purposes. Unmet need for family planning is also reckoned as a pre-eminent rationale for investments in family planning programmes since it is related to unwanted childbearing (Jain, 1991). Such research contributes to existing scholarly work on unmet need for family planning in South Africa.

1.4. Objectives of the Study

1.4.1. Main Objective

The primary objective of this study was to establish the correlates of unmet need for spacing, limiting and total unmet need for family planning in South Africa between 1998 and 2003 in order to make recommendations for strategies that would help family planning programmes to address unmet need among currently married women in South Africa.

1.4.2. Specific Objectives

The following were the specific objectives of the study:

- To identify the extent of unmet need for family planning among married women in South Africa,
- To examine the changes in unmet need for family planning in South Africa between 1998-2003, and
- To explore the determinants of unmet need for family planning in South Africa.

1.5. Research Questions

In order to achieve the above objectives the study sought to answer the following research questions:

1. Are there differences in correlates of unmet need for family planning in the 1998 and 2003 period in South Africa?
2. What are the factors responsible for the determinants of unmet need for family planning in South Africa?
3. What is the likelihood of women experiencing unmet need for family planning given their demographic and socio-economic differences?

1.6. Hypotheses

The following Hypotheses were formulated for this study:

Hypothesis 1:

Unmet need for family planning in South Africa is declining.

Hypothesis 2:

Unmet need is influenced by age, place of residence, educational level, husband approval of family planning, and number of living children a woman has.

1.7. Organization of the Study

The study comprises five chapters. Chapter one serves as a general introduction of the study, describing the purpose, objectives and significance of the research. Chapter Two provides a literature review of topics related to this study whilst Chapter Three describes the methodology utilized in the study including the sources of data and the applicable statistical analysis techniques used. Chapter Four concentrates on the descriptive data analysis and discussions of results while Chapter Five focuses on, summary of the results, discussions, conclusion and recommendations emanating from the study.

CHAPTER II

LITERATURE REVIEW

2.1. Introduction

In this chapter the focus is given to defining the concept of unmet need for family planning and acknowledgement of the transition that the concept has undergone and a reflection on the literature by other researchers around the subject of unmet need for family planning around the world, in sub-Saharan Africa, and in South Africa.

2.2. The Concept of Unmet Need for Family Planning

The concept of unmet need was developed more than 25 years ago (Westoff, 1978) and has been refined several times over the years (Westoff and Pebley, 1981; Westoff, 1988; Westoff and Ochoa, 1991). For example, the definition of unmet need for family planning has been expanded to include pregnant and amenorrheic women, who became unintentionally pregnant because they had been unable to use contraception (Westoff, 1988; Westoff and Ochoa, 1991; Westoff and Moreno, 1992). In the second half of the 1990s a new surge of studies in developing countries followed a qualitative approach in data collection (e.g. national Population Council and Macro International Inc. 1996, Casterline et al. 1997, Leela 1997, Yinger et al., 1997, Casterline et al., 1999). Other studies have, over the years, refined or expanded the measure of unmet need to include husbands or to include abortion (e.g. Ngom, 1997; Nzioka, 1998; Mbizvo and Adamchak, 1991; Posner and Mbodji, 1989; Omondi-Odhiambo, 1997; Onyango, 2001; Otieno, 2000).

The basic objective of the concept of unmet need is to estimate the proportion of women not using contraception who either want to cease further childbearing (unmet

need for limiting) or who want to postpone the next birth at least two more years (unmet need for spacing), (Westoff, 2006).

Unmet need for family planning is measured using data that are gathered in special surveys such as the Demographic and Health Surveys (DHS), Reproductive Health Surveys (RHS) and national surveys based on similar methodologies (<http://www.measuredhs.com/help/Datasets/index.htm>).

The measure used in this study is essentially the same as the one that has been used in all of the DHS reports. This study focuses on married women only or women in a union. The choice to use this method is based on the argument that data from Demographic and Health Surveys (DHS), collected from ORC Macro, are the primary source of data on unmet need for developing countries. Married women or women in a union are used because women who are married or in a consensual union are assumed to be sexually active.

It is estimated that more than 100 million women globally, especially in less developed countries, or about 17% of all married women, would prefer to avoid pregnancy but are not using any form of family planning (Ross and Winfrey, 2002).

Within the less developed regions of the world, about one-fourth of all pregnancies are unintended (Haub and Herstad, 2002), while an estimated 18 million unsafe abortions take place each year (Murray and Lopez, 1998), thereby contributing to the high maternal mortality and injuries. In South Africa, it is estimated that about 15% of all married women have an unmet need for family planning (SADHS 1998), and South Africa's abortion rate was 5.3 per cent in 2007 (Roberts, 2009).

In doing so, it poses a challenge to family planning programmes: to reach and serve the millions of women whose reproductive attitudes resemble those of contraceptive users but who, for some reasons or combination of reasons, are not using contraception (Sinding and Fathalla, 1995).

2.3. Obstacles to reducing Unmet need

According to a report released from a U.S. Guttmacher Institute (2007), cited by Sara Maki of the Population Reference Bureau, barriers to implementing effective family planning programs and reducing unmet need for contraception persist for a variety of reasons in developing countries include:

- A woman's denial that she is at risk of getting pregnant.
- Lack of knowledge about contraceptive methods, or that she is not
- Concern about health risks and side effects.
- Contraception not readily available or the range of available methods being limited.
- The woman, her partner, or other close family members opposing family planning methods.

According to the above report, the reasons women often cite for not using contraceptives vary across regions and countries. For example, in North Africa and West Asia, more than 60% of women with unmet need do not use contraception because they believe that they are not at risk of getting pregnant (Lori, 2003). In Latin America, about half of the women gave the same reason. And so, in South and Southeast Asia and sub-Saharan Africa, approximately 35% of the women gave this same reason (Lori, 2003). In the case of South Africa, according to the 1998 South African Demographic Health Survey, some of the reasons given for non-use of contraception by married women interviewed included:

- Desire to have more children, a reason given by those under the age 30 (45%), followed by health reasons (18%).
- In some cases either the woman or her husband is opposed to using family planning (11 and 6 percent, respectively)
- In the over 30 age group, one-fifth (20 percent) cited wanting more children as the main reason for not wanting to use contraception. Health concerns were also a major reason in this group.
- The level of opposition from the husband in the under 30 age group was surprisingly similar to that of the 30-49 year age group.

2.4. Regional and National differences of Unmet need

In 1996, in developing countries as whole, with the exception of China, about 20% of married women of reproductive age had unmet need (Robey et al., 1996). However, there was a wide variation in this percentage among regions and countries for instance, the level of unmet need was high in Africa as a whole with 26%, Near East and North Africa had about 15%, Asia, with the exception of China constituted 18%, Latin America with only 17% (Robey et al., 1996).

In sub-Saharan Africa the level of unmet need was 26% in 1990-1995 and 24% in 2000-2005 (Population Reference Bureau, 2007). In some countries, one married woman in every three had unmet need. Among other developing regions, the levels of unmet need were the same, for example, sub-Saharan African countries like Botswana, Tanzania, and Uganda had yielded 27% of unmet need and the Near East and East, Africa Egypt, Jordan, and Tunisia had 20% of unmet need and Latin American countries like Ecuador and Mexico with 24% of unmet need. The greatest number of women with unmet need was also found to be in the Asian region (Robey et al., 1996).

The same study again found that, among countries surveyed by the Demographic and Health Surveys (DHS) of 1985-1994 in sub-Saharan Africa, unmet need ranged from 15% in Zimbabwe to 37% in Rwanda. Among Asian countries surveyed, unmet need

varied from 11% in Thailand to 32% in Pakistan. In North Africa and the Near East, unmet need was close to the 20% average for the developing world in every country with the exception of Turkey, where it was 11% with Thailand's, which was the lowest level recorded. In 6 of the 11 countries in Latin America and the Caribbean surveyed by the DHS, unmet need was below 20%. In Bolivia, Ecuador, El Salvador, Guatemala, and Mexico, the level was between 24% and 29% (Robey et al., 1996).

The International Planned Parenthood Federation (IPPF), estimated, that in developing countries, among 172 million women estimated to be using modern temporary contraceptive methods, 97 million i.e. over one-half of all such users, will probably stop using the method for a reason other than becoming pregnant and thus could be said to have an unmet need (IPPF, 1992, 36).

2.5. Trends of Unmet Need in Developing Countries

There is a decline in unmet need in most countries that have conducted more than one Demographic Health Survey (DHS) (Westoff et al., 2006). For instance, Bangladesh and Indonesia as examples for Asian countries have shown decreasing trends. In Bangladesh the total unmet need declined from 27% in 1993-1994 to 17% in 2004, and, India had a total decline from 27% in 1992-1993 to 24% in 1999. In North Africa, Egypt has shown no recent decline and seems to have plateaued in the recent past trends, for instance, the total unmet need increased from 16% in 2003 to 19% in 2005. With the exception of Nicaragua which showed no change (23% in 1997-1998 and 24% in 2001), a general decline is also apparent in the Latin American and Caribbean countries, though the level remains very high in Haiti with 70% in 1994 and 64 in 2000. Little change in unmet need is evident in West Africa where in several countries unmet need has increased (Benin- 35% -1996 and 37%-2001, Burkina Faso- 31%-1993, 33% 1999 and 36%-2003, Cameroon-27%-1991, 26%-1998, and 26%-2004, Chad 12%-1997 and 27%-2004, Ghana-41%-1988, 49%-1993, 46%-1998, 46%-2003, Nigeria-26%-1990, 22%-1999 and 22%-2003, and Mali 29%-1987, 32%-1996 and 37%-2001).

The same mixed picture appears in East and Southern Africa. Unmet need has increased in Mozambique-9%-1997 and 26%-2003 and Uganda-24%-1988-1989, 40%-1995 and 49%-2000, but shows plateaus in Eritrea- 34%-1995 and 33%-2002, Ethiopia- 50%-2000 and 48%-2005, Madagascar-48%-1992, 37%-1997 and 36% in 2004, Namibia-29%-1992 and 35%-2000, Zambia- 40%-1992, 34%-1997 and 38%-2002 and Zimbabwe-34%-1998, 21%-1994 and 19%-1999. A stall in the level of unmet need is the most common pattern in sub-Saharan Africa (Westoff, 2006).

It is imperative to note that these trends in unmet need are uniform in the different educational strata and declines in unmet need are led by the more educated populations (Westoff, 2006). For instance, in the countries of Asia (except in Pakistan-16%-2004-No Education, 30%-2003-Primary education and 27%-2003-Secondary education) and North Africa.

Studies have shown that the trends and patterns of unmet need are not static but flexible. For instance, according to Robey et al. (1996), the level of unmet need in a country is not static but always changing, depending on the interplay of two factors-fertility desired and contraceptive use. "Unmet need is a moving target," as Westoff and Bankole have observed. It rises as more women want to control their fertility, and it falls as more use contraception (Westoff and Bankole, 1995; Westoff and Pebley, 1981). Globally, the proportion of married women with unmet need declined from 19% to 17% in the 1990s (Lori, 2003).

A high level of unmet need does not necessarily indicate programme failure, nor does a low level necessarily indicate success. Moreover, even where the proportion of women with unmet need is declining, the absolute number with unmet need may be growing because the population is also growing (Westoff and Ochoa, 1991).

2.6. Unmet need in sub-Saharan Africa

Sub-Saharan Africa has the highest total fertility rate (5.4 births per woman on average) as of any region in the world with the exception of China and more than three times that of Europe. Every hour of every day, at least 30 women die from complications of pregnancy and childbirth in sub-Saharan Africa – about 270,000 deaths every year, one of the underlying causes being high maternal mortality (USAID, 2009). The use of modern contraception is low in sub-Saharan Africa. For example, only 18 percent of married women in sub-Saharan Africa use modern methods of family planning (USAID, 2009).

The largest cohort of young people in human history is now reaching reproductive age (1.2 billion in this decade) the majority of whom reside in sub-Saharan Africa, approximately 43 percent (USAID, 2009). This is surely the youngest region in the world. This tremendous size of youth cohort in the region is attributed mainly to high birth rates. As these young people enter their reproductive years, they join the estimated 35 million women in the region who already have an unmet need for family planning (USAID, 2009).

Current family planning programmes do not have the capacity to meet the existing high levels of demand and face even greater strain as these young people enter their reproductive years and desire to plan their families. Over the last decade, attention and resources for family planning programmes have decreased worldwide, with sub-Saharan Africa being particularly affected. For instance, the U.S. Agency for International Development's (USAID's) annual allocation for AIDS in Kenya rose from \$2 million per year in 1995 to \$108 million in 2006, and the allocation for family planning fell from \$12 million to \$8.9 million per year (USAID, 2009). This affected the progress achieved in reducing fertility rate (from 7.2 in 1979- the highest in the world, to 4.8 births per woman in 1998) in Kenya through family planning (Cleland et al., 2006).

Unmet need in West Africa ranges from 16 to 34 percent, whereas that of East and Southern Africa ranges from 13 to 38 percent (Westoff, 2006). The demand for family planning in East and Southern Africa averaged 57% and West Africa averaged 42% (Westoff, 2006). In Sub-Saharan Africa unlike other regions, unmet need and the use of contraception is for birth spacing, with the exception of South Africa, Namibia, Malawi, Lesotho, and Kenya, where smaller family norms are more developed. In West Africa on the other hand, greater use for contraception and unmet need is mainly for spacing rather than for the limiting of births (Westoff, 2006). The same pattern was also noted in the DHS publication on the subject (Westoff, 2001), the main fertility regulation behaviour in sub-Saharan Africa is birth spacing rather than limiting, in sharp contrast to other regions of the world.

Unmet need in Southern Africa is higher in rural areas than urban areas, for example, the 1998 SADHS showed unmet need in rural areas to be 21% with only 11% in urban areas, and Malawi 2004 DHS showed unmet need in rural areas to be 29% with 23% in urban areas (Westoff, 2006). This difference is mainly attributed to wealth, social, cultural and development disparities that exist between urban and rural areas. The explanation of these urban-rural differences, no doubt, includes the easier accessibility of family planning services in cities, the desire for more children in rural places, and the greater education in urban areas (Westoff, 2006).

2.7. Unmet need in South Africa

Unmet need for family planning in South Africa is mainly for the purposes of limiting births rather than spacing births (Department of Health, 2001). This is attributed to the pursuit of small family sizes (Westoff, 2006).

According to the 1998 SADHS, 15 percent of all South African women indicated an unmet need for family planning, despite the relatively high-level contraceptive knowledge and use. The high utilization of termination of pregnancy services, especially

among younger women may be a reflection of the continuing existence of an unmet need for family planning (Cooper et al., 2004). Termination of pregnancy is also an indication of using no (or less) efficient methods of contraceptives, or using it incorrectly. High levels of teenage and unintended pregnancies can, among other things, be ascribed to clinic staff's disapproval of youth's sexual activity (Jewkes et al., 2005).

Corresponding proportions for all women were 10 percent and for unmarried women 6 percent. Amongst currently married women the proportion with an unmet need for limiting outweighs the proportion with an unmet need for spacing. If all currently married South African women who have unmet needs for spacing or limiting were to start using family planning methods, the contraceptive prevalence rate will increase from 56 percent of married women to reach a level of 71 percent of married women (SADHS, 1998).

The pattern in unmet need for family planning follows an U-shaped pattern according to age group with the greatest unmet need observable for the under 25-age group and the 45 to 49-year age groups (Department of Health, 2001). Unmet need for spacing is the greatest at the younger age groups and the unmet need for limiting increases with age in South Africa. Unmet need for family planning is also marked by difference according to the place of residence, for example SADHS 1998 shows that the need in the non-urban areas is almost twice as high as in the urban areas. These differences are also marked for urban and non-urban African women (22 percent for non-urban African women and 14 percent for urban African women). (See also World Bank 2005)- Unmet need is even higher in rural areas compared to urban areas. This can be explained by the relatively high failure rate on the supply side of rural areas in meeting the demand for family planning compared to urban areas. According to SADHS 1998 results, the African population exhibited the high rate of unmet need (18%) for family planning as compared to other racial groups.

Total demand for limiting is more pronounced for urban women overall in comparison to the total demand for spacing (total demand for limiting is almost three times higher than the total demand for spacing), whereas these differences in the total demand (i.e.

difference between spacing and limiting) are more moderate for non-urban women (total demand for limiting is almost twice as high as the total demand for spacing) (Department of Health, 2001).

2.8. Determinants of Unmet need

There are many factors that are associated with unmet need for family planning. These factors can be categorised as attitudinal, demographic and socio-economic.

2.8.1. Attitudinal factors towards Family planning

African society is constructed so that high fertility and large surviving families have usually been economically and socially rewarding in contrast to the concern of westerns. Africans know from their personal experience that high fertility does not have economic penalties, while the foreigners experience has been very different (Caldwell & Caldwell, 1987). In this instance sub-Saharan Africa may well offer greater resistance of fertility decline than any other region in the world.

Sub-Saharan Africa is well known for low literacy rate, poor access to information and method of contraceptive use, dilapidated health care and other infrastructural services. Family planning programmes has a strong correlation with the above - mentioned variables. Awareness about family planning programmes is among the vital variables influencing the use of contraceptives (Belachew, 2007). According to UNICEF (2007), couples who aspire to delay or avoid a birth, the obstacles to contraceptive use include lack of knowledge about methods of how to use or where to obtain services and concern about the side effects of different methods. Various research findings also show that a woman may not use or even want to use contraceptives because of disapproval of the husband or the family for fear of side effect and others. In this regard, Binyam (2007: citing Setian, 2004) argue that the husband decides on the number of children disregarding his wife's opinion.

Belachew (2007), argues that a husband's approval is of paramount importance in the adoption of contraceptive use especially in traditional societies where issues related to procreation are hardly discussed by marital partners, husbands are the primary decision makers in reproductive matters. However, studies show that the situation is improving and this may be because more women nowadays are attaining high levels of education. For example, a study among the Yorubas of Nigeria shows that there is a relatively more influence on women by their husbands on reproductive if women have low educational attainment. On the other hand, as a woman's educational level increases the influence of their husbands gets minimized on their reproductive issues (Martin 2005). This means that there is a positive correlation between women's level of education and level of respect accorded to them by their partners (Feysetan, 2000; CSA, 2005; and Abdulahi, Assefa and Yacob, 1994).

A study by Sedgh (2008), concluded that the idea of unmet need for family planning is one of the indicators of the Millennium Development Goals (MDGs). New estimates and analysis of unmet need and potential demand for family planning in developing countries show that in a number of countries in sub-Saharan Africa many women with unmet need for family planning have never used family planning services and do not intend to use any contraceptive method in the future (Khan et al., 2007). Compared to other regions of the world, total unmet need is higher in sub-Saharan Africa than other regions, and much less of the demand for family planning is being met in the sub-continent (Ojakaa, 2008). In sub-Saharan Africa, an average of 43% of the total potential demand for family planning is met compared with 71% in other developing regions (Westoff, 2006).

2.8.2. Demographic Factors

Different studies indicate that demographic variables have been identified to influence the use of contraceptives. Among these variables, age of women, number of living

children, desired family size and experience of child death are the most important ones (Belachew, 2007).

Robey, et al., (1992) and CSA, (2005), state that, the prevalence of contraception in most countries is lowest among young women, reaches a peak among women in their thirties and declines among older women. This may be a reflection of the higher desire for child bearing among young women, and a high growing interest of spacing births among women in their thirties (Belachew, 2007). The percentage of users declines at older ages of reproduction, possibly because they are not at a risk of pregnancy.

The number of living children also appears to influence contraceptive use. For example, studies have shown that the use of contraception increases with parity of women up to the third or fourth child and then declines which results in an inverted U- shaped pattern (see Mamadani & Graner, 1993). This may be because, many women have a desire to space births at early reproductive age and seek to stop after the desired family size has been achieved. Belachew (2007: citing Ziidar et al, 2003) argue that women who had achieved or exceeded their ideal family size were about twice as likely to be current users as were women who had not yet reached their ideal number.

Age at marriage is another determinant of child bearing. According to CSA (2005), early age at marriage lengthens the reproductive period thereby increasing the level of fertility. Women who marry early will, on average, have longer exposure to the risk of pregnancy. Early age at first marriage favours early age at child bearing and a higher level of fertility unless controlled. On the other end, a higher level of education helps women to raise their age at marriage because education can help to open the door of employment opportunities for women, consequently the demand for contraception increases [CSA, 2005; See also Palamuleni et al., 2007].

The survival status of children is also likely to affect contraceptive practice. For example, parents who have been experiencing the death of a child may be less likely to use contraceptives than others of the same parity. Different studies have indicated that

there is the existence of a positive impact of infant and child mortality on fertility (Conley, McCord and Sachs, 2007; Palloni and Rafalimana, 1999; Bahargava, 2000). Palloni and Rafalimana (1999), for instance, have claimed that mortality reduction, at least initially, the rational response to the realization that with lower infant and early child mortality fewer births are needed to secure the desired number of surviving children. This means that the desire to replace a dead child or to ensure against childlessness contributes to high fertility. According to the World Bank (2007), societies with high infant mortality rates have high fertility rates, in part because couples try to compensate for infant deaths. Therefore, in such societies contraceptive use is almost none existent.

2.8.3 Socio-economic factors

Belachew (2007: citing Tigist, 2005) states that past experiences of many countries revealed that, fertility occurred as part of the more general goals of improving the living conditions of the nation and allowing women to take part in the economic and social development. This is through effective family planning services which result in immediate birth rate decline in many countries of the world. However, the different socioeconomic conditions that characterize countries make them to respond differently to the essence of family planning programmes.

Among the socio-economic factors, education, rural-urban residence, occupation, travel and time costs, wealth status of women, spousal opposition to contraception, search and information acquisition, out of pocket costs, disharmony in the extended family, threat to social norms (non conformity with religious and moral belief or social disapproval and fear of sanction), and the need to communicate with spouse about sex are the most important determinants of contraceptive use among women (Bogue 1983; Hermalin, 1983; Schearer, 1983; Easterlin and Crimmins, 1985; Robinson and Cleland, 1992).

Education

It has been found that there is a positive correlation between contraceptive use and level of education (Feyisetan, 2000; CSA, 2005).

A study conducted in Kenya has shown that unmet need among couples seemed to decline with increasing education (Otieno and Khasakhala, 2006). This study further stated that couples who are more educated can afford to buy contraceptives, are more likely to reside in the urban areas where contraceptives are more accessible, are more informed about the available methods and are more likely to prefer smaller families than their less educated counterparts. As a result, those with no education had the greatest unmet need. Otieno and Khasakhala (2006), also found that husband's education became insignificant when both husbands and wives education were put in the same model, to reduce couples unmet need.

The potential demand for contraception differs by place of residence. It has also been found that the larger proportion of potential spacers and limiters reside in rural areas, where there is poor means of transportation and less access to a range of family planning services than couples in urban areas. Due to this, the contraceptive prevalence rate in rural areas tends to be very low.

Current use of contraception increases five-fold from 10% among women with no education to 53% among those with secondary and higher levels of education (EDHS, 2005). World Bank (2007) adds that on average women with some primary education are 3.6% more likely to use contraceptives than women with no education, while women with more than primary education are 5.4% more likely to use contraceptives.

Woman's occupation

The work status of women has also something to work with the adoption of contraceptives. Working women, particularly, those who earn cash incomes, are

assumed to have greater control over household decisions and increased awareness of the world outside home. Consequently, they have more control over reproductive decisions (Assefa, Betemariam and Hogan, 1999: citing Gage 1995; Mason; 1987). The study adds that paid work also provides alternative satisfactions for women, which may compete with bearing and rearing children and may promote contraceptive use. This implies that information about family planning and use of the method is higher among those who are employed outside home than those who are employed at home (PR, 1992). There is evidence that women when employed outside the home get informed and are more likely to assume opportunity costs in rearing children than their counterparts employed at home.

Religion

The strength of one's religiosity or degree of one's adherence to the norms of a given religion may exert an influence on one's mode of life including reproductive behaviour (Belachew, 2007). Studies in developing countries reveal that social, cultural and religious unacceptability of contraception frequently emerged as an obstacle to the use of contraception (Vasoff, 1990; Oni and McCarthy, 1990; Caldwell and Caldwell, 1987).

Rural-Urban differences

Unmet need is even higher in rural areas compared to urban areas. This can be explained by the relatively high failure on the supply side of rural areas in meeting the demand for family planning compared to urban areas (World Bank, 2005).

The observed place of residence variation, in the practice of contraception, may be attributed to differences in the availability of social services such as education information about methods and access to family planning and health care services which are among the important ones (Belachew, 2007).

2.8.4 Health Concerns and Fear of Side Effects

Health concerns and the fear of side effects can discourage contraceptive use among otherwise motivated people in either of two ways. Some users of contraceptives may experience some side effects or discomfort or else attribute discomfort to contraceptives, leading them to discontinue use. Others may avoid starting contraception because they fear side effects. Their fear may be based on the experiences of others, or they may be based on unfounded rumours (Bushan, 1997).

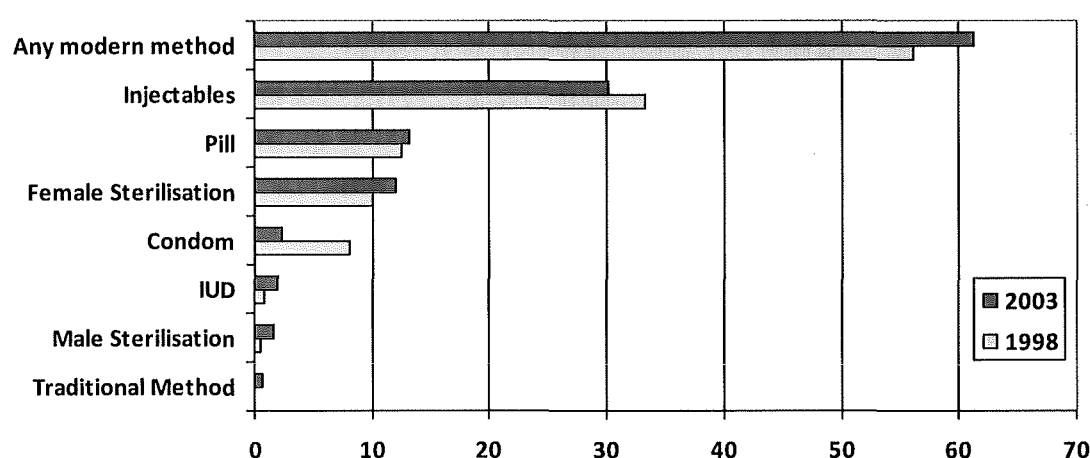
Extensive empirical evidence shows high rates of contraceptive discontinuation in developing countries. Over half of women using oral contraceptives and one-third of IUD users discontinue their method within a year of starting (Cornelius, 1986). A woman may discontinue contraceptive use because she wants to conceive. However, if discontinuation stems from dissatisfaction with her current contraceptive, a woman will have an unmet need and will be at risk of an unwanted pregnancy unless she quickly switches to another method. Evidence from various studies suggests that side effects and health concerns, both major and minor, are one of the main reasons for discontinuing contraceptive use (Belsey, 1988; Stover and Heaton, 1995; Hassan and Fathalla, 1994).

2.9. Contraceptive use in South Africa

Knowledge and use of contraception has remained consistently high over the past decade in South Africa. Available demographic data show that knowledge of contraception methods is nearly universal in South Africa. In the 1998 DHS 96.5% of all women aged 15-49 years knew of a modern method of contraception (Department of Social Development, 2009). Although the proportion decreased in 2003, it was still relatively high at 93.6% (Department of Social Development, 2009). The use of contraception is estimated to be 65 percent among sexually active women in 2003 across all ages (DOH, MRC, and Measure DHS, 2007). Among the sexually active women not in a union, the prevalence rate is even higher (68 per cent) (DOH, MRC, and

Measure DHS, 2007). The most commonly known methods are injections and the pill. In 2003, two thirds (65.3%) of South African women aged 15-49 years used a method of contraception, most of which are modern methods (see Figure 1 below) (Department of Health, 2003).

Figure 1: Current use of contraception among South African women, aged 15-49 years (1998 and 2003)



Source: Department of Health

Despite the high number of women being knowledgeable about contraceptives in South Africa, a variation between actual and preferred family size highlights poor communication and lack of female decision-making power regarding family planning and childbearing and this highlights persistent inequalities in sexual and reproductive relations (Department of Social Development, 2004).

Studies also show that women who are HIV positive are more likely to use contraception in South Africa, for example a study carried out in Soweto among 563 sexually active , non-pregnant women aged 18-44 years recruited from the Perinatal HIV Research Unit in Soweto (May–December, 2007), showed that 171 women were HIV-positive and were receiving HAART- highly active antiretroviral therapy (median duration of use = 31 months; IQR = 28, 33), 178 were HIV-positive and HAART-naïve, and 214 were HIV-negative. The results of the study revealed that HIV positive women

were significantly more likely to use contraceptives compared to with HIV negative women (Kaida et al., 2010).

The use of contraception is lower among women aged 15-19 years who are currently married (Department of Health, 2007). Since 1998 to 2003 male condom use has increased among young women in South Africa. However male condom use for contraception is very low among young women in a union (Department of Health, 2007).

2.10. Conceptual Framework

In research, a conceptual framework is used to outline possible courses of action or to present a preferred approach to a system analysis project. More specifically, this study is guided by a simple framework presented and explained in Figure 2 below.

It is possible to formulate a more realistic microeconomic model for contraception and unmet need using fertility theories. The matter of discussion is demand for contraception rather than demand for children. The demand is based on the economic framework that balances the expected returns of having an additional child at a certain time, the associated monetary and non-monetary costs, given preferences, family resources and contraception (Ahmadi and Iranmahboob, 2005). Unmet need is related to perceived cost of contraception. Bhushan (1997) states, that there are three categories of cost regarding contraception:

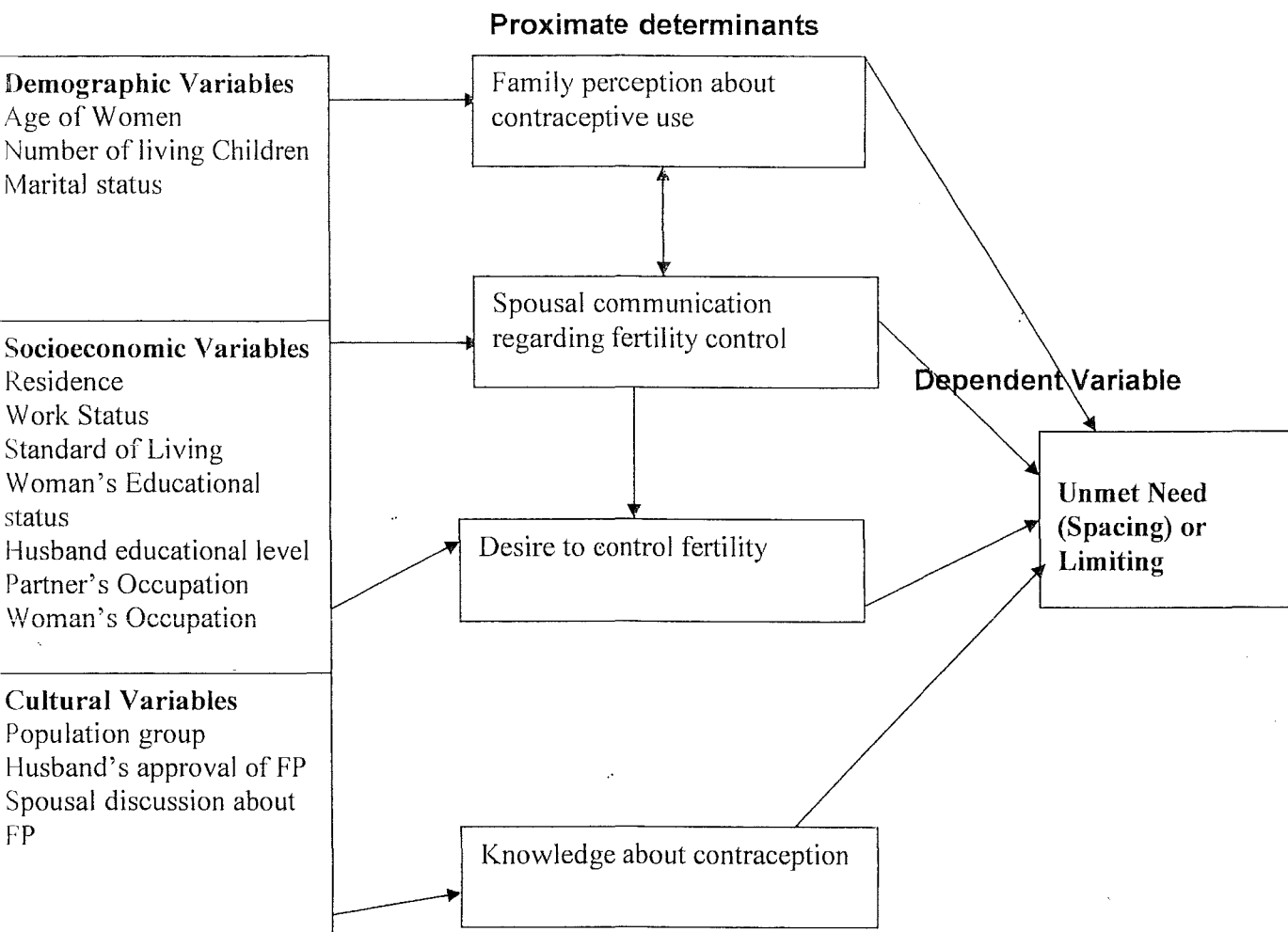
1. Costs related to availability (geographical and physical, qualitative and cognitive aspects of availability)
2. Costs related to health concerns and fear of side effects (discontinuation, fear of side effects among never users)
3. Cost related to social, cultural and familial disapproval of family planning (disapproval of family, religion and customs)

A persons' behaviour depends upon two sets of factors: personal and social influences. Personal factors include the individual's own positive or negative evaluation of the

behaviour, whereas social influence is the effect of other individuals' attitude on one's behaviour.

Figure 2: Conceptual Framework for unmet need

Independent Variables



1

¹ - Conceptual Framework a revised form of Kaushik's model, 1999,9)

Figure 2 lays the conceptual framework for this study. Three groups of variables are used to examine factors influencing unmet need for family planning. The independent variable which influence the unmet need for family planning of the women under study, are subdivided into four sets. The first three are the underlying factors that are indexed by some important demographic, socioeconomic and cultural variables. The fourth group is the proximate determinants that are indexed by various indicators of women's knowledge, attitude and perceptions.

The outcome variable is unmet need for family planning, the variable is treated as dichotomous consisting of unmet need and met need, those with met or unmet need can be further categorized as those who have a met or unmet need to space and limit child bearing. Demographic, socioeconomic and cultural factors are assumed to be the underlying determinants of unmet need or (spacing and limiting) for family planning. This means that, the effect of the underlying factors is expected to reach the ultimate dependent variable unmet need or (Spacing and Limiting) through the assumed proximate variables, knowledge, attitude and perception concerning family planning.

2.11. SYNTHESIS

The literature shows that unmet need for family planning in South Africa compared to other regions in the African Continent is relatively small. However the reported 15% of unmet need for family planning in 1998 cannot go without notice given the fact that South Africa's total fertility rate would be below replacement level (1.6 children born per woman) if unwanted pregnancies were eliminated, and contributes to abortion which result to maternal mortality, bearing in mind that some of these women who give births may have not been fully developed to give births. The out-come of unmet need for family planning spill to terrible psycho-social and dire economic conditions to communities which may lead to social ills.

Again little is known about unmet need in South Africa i.e. what are the demographic and socio variables that determine unmet need for family planning in South Africa.

While unmet need for family planning has been investigated in advanced analysis at an international literature, little has been done to investigate this phenomenon in the case of South Africa.

CHAPTER III

METHODOLOGY

3.1 Introduction

This chapter presents information regarding the sources of data and methods of analysis used in this study. It also includes a discussion of the quality of data and limitation of the study.

3.2 Sources of Data

This study utilizes data extracted from the 1998 and 2003 South African Demographic Health Surveys (Department of Health, 1998 and 2003). Both the 1998 and 2003 SADHS were conducted on behalf of the government of South Africa by the Medical Research Council (MRC) of South Africa in collaboration with Macro International (Department of Health, 2007). These data sets are national in scope.

3.2.1. Response rate for 1998 SADHS

A total of 12,860 households were selected for the sample and 12,247 were successfully interviewed. The shortfall was primarily due to refusals and to dwellings that were vacant or in which the inhabitants had left for an extended period at the time they were visited by the interviewing team. Of the 12,638 households occupied, 97 percent were successfully interviewed. In these households, 12,327 women were identified as eligible for the individual women's interview (15-49 years) and interviews were completed with 11,735 or 95 percent of them. In the one half of the households that were selected for inclusion in the adult health survey, 14,928 eligible adults aged 15 years and over were identified of which 13,827 or 93 percent were interviewed. The principal reason for non-response among eligible women and men was the failure to

find them at home despite repeated visits to the household. The refusal rate was about 2 percent.

3.2.2. Response rate for 2003 SADHS

A total of 10,214 households were selected in the sample, of which 9,181 were found occupied at the time of the field work. The shortfall is largely because of structures that were found to be vacant and destroyed. Of the existing households, 7,756 were interviewed, yielding a response rate of 85 percent. In the households interviewed in the survey, a total of 7,966 women were identified, of whom 7,041 were interviewed, yielding a response rate of 88 percent. With regard to the male survey results, 3,930 eligible men were identified in the sub-sample of the households selected for the male survey, of whom 3,118 were interviewed yielding a response rate of 79.3 percent. For the adults, 8,115 were interviewed out of 9,614 eligible, for a response rate of 84 percent. The cited principal reason given for non-response at all levels was refusal followed by failure to find individuals at home. Eleven percent of households, 6 percent of women, 10 percent of men, and 7 percent of adults refused to be interviewed. The analysis in this study uses data from the individual questionnaire only, with special focus to currently-married women only (Department of Health, 2007).

3.2.3. Reliability and Validity of Data

This section looks at the reliability and validity of the data used in the study, to ascertain if the data can be used for planning and looking at what were the shortcomings regarding the data. A snap short on the reliability and validity of the SADHS 1998 is given followed by the SADHS 2003.

3.2.4. Reliability and Validity of SADHS 1998

It can be deduced that the data on the SADHS 1998 is reliable and valid to be used for planning. However, like any other data set, the 1998 SADHS has its own shortcomings, and therefore, careful consideration should be taken when using it for planning purposes considering the underlying factors:

The 1998 SADH had only 89 cases with missing information which accounted for 0.15 percent. The data indicate very little preference to report on ages that end in zeros and fives (age “heaping” or digit preference) which is commonly found in countries where ages are not known well. There is some evidence of irregularities in the age distribution and the fact that interviewers “displaced” women aged 15 and 49 years outside of the eligible range (14-49) presumably in order to avoid the need to interview them. For example, the number of women aged 14 is substantially higher than the number aged 15. At the other range, the number of women aged 49 is lower than the number aged 50, implying that the interviewer assigned an age 50 or (51) to women in order to avoid interviewing them. The age distribution of eligible women from the de facto household population when compared with the age distribution of the sampled women shows that the distributions are very similar and show a consistent response rate. Overall, the percentage of cases with missing information on completeness of reporting on selected important variables is low. For full data quality details see Department of Health South Africa (2001).

3.2.5. Reliability and Validity of SADHS 2003

The data show little evidence of “age heaping” or digit preference to ages ending in zeros and fives as is commonly observed in countries where the populations do not know their age. However, there are strong irregularities in the age distribution with a strong displacement of women aged 15-49 years being shifted to outside the range 15-49 years, presumably in order to avoid the need to interview them using the detailed

women questionnaire. Similarly, there is displacement of men aged 15-59 years being shifted to outside the range 15-59 years.

There appears to be an over-representation in the age range 7-14 years. This has serious consequence on the estimates of fertility in the years preceding the survey and is particularly marked in KwaZulu-Natal. Comparison of the socio-demographic characteristics of the sample with the 2001 population census shows an over-representation of urban areas and African population group, and an under-representation of Whites and Indian females. Fertility levels and the child mortality estimates of the 2003 SADHS are not consistent with other data sources. The data problems appear to have stemmed from poor fieldwork, suggesting that there was inadequate training, supervision and quality control during the implementation of the survey. A careful analysis of the 2003 SADHS is therefore required considering the above raised data quality issues. For further details about the quality of the data set see Department of Health South Africa (2007).

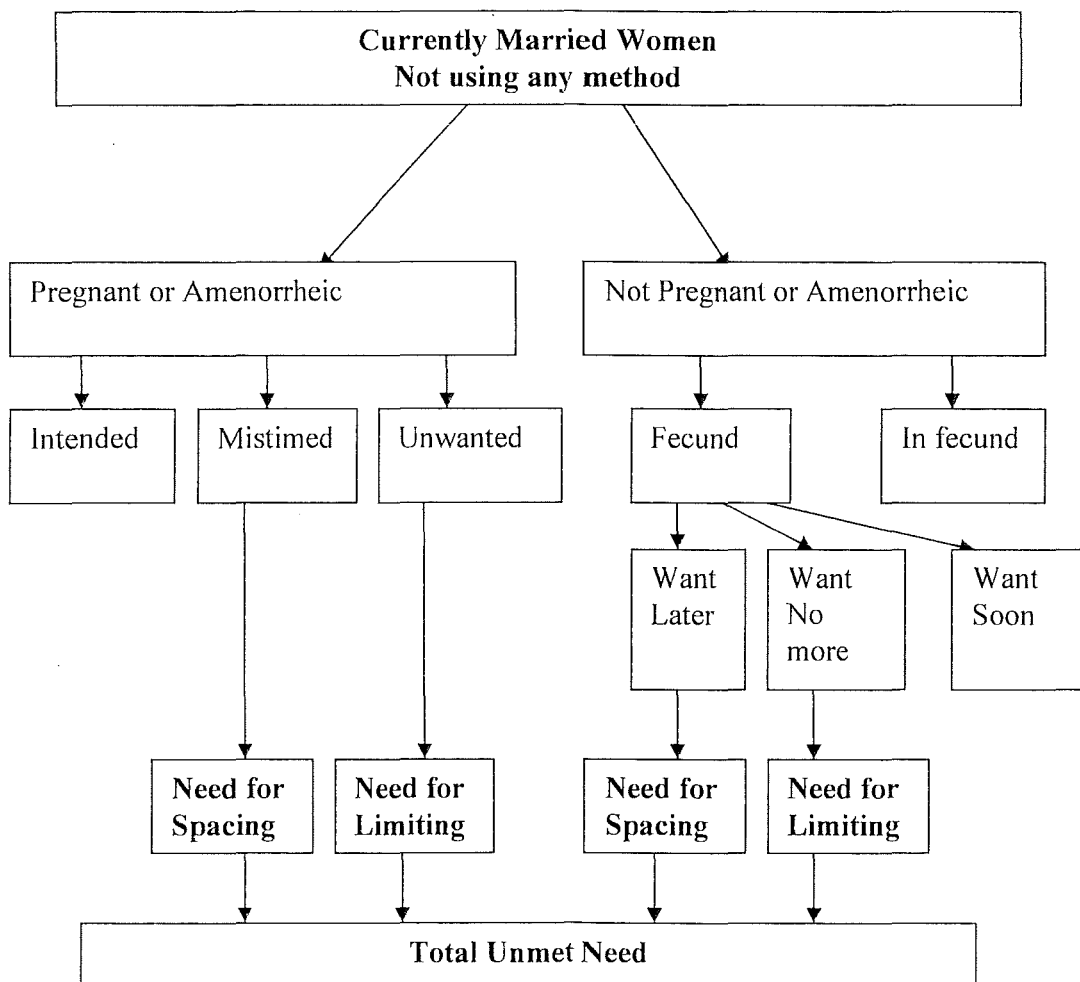
3.3 Study Population

In this study the interest is on women of reproductive age (15-49 years) who were either currently married or were in a union. These women constituted about 5,077 un-weighted cases during the 1998 survey out of the total of 11,735 of all women of reproductive age that were successfully interviewed. On the other hand, out of the total of 7,014 women (15-49 years) that were successfully interviewed in the 2003 survey, 2,770 constituted the un-weighted cases of women in a union or currently married women. Unmet need for family planning was computed from women's fertility preference and current use contraceptive behaviour (Department of Health, 2007).

Unmet need was determined based on information on marital status, contraceptive use and desire for additional children/fertility preferences derived using a women's questionnaires for this study. The details of the questions used of data analysis of this study can be seen in Appendix A and B. According to the DHS definition used in this

study, a woman has an unmet need for contraception if she is fecund, sexually active, not using any contraceptive methods, and does not want a child for at least two years (“spacers”) or wants no more children (“limiters”). This definition produces a conservative estimate because it excludes groups who are arguably “in need.” For example, many traditional method users who are motivated and at risk of unintended pregnancies are using traditional contraception for lack of access to more effective methods. Amenorrheic women who say they wanted their last birth are omitted even if they wish to delay their next pregnancy. Figure 3 illustrates how women with unmet need were determined.

Figure 3: A diagram illustrating how unmet need for Spacing, Limiting and Total Unmet need for family planning are derived.



According to figure: 3 above for currently married women or women in a union, unmet need refers to the percentage of those who are not currently using a method of family planning and want to stop (further) or postpone childbearing. Unmet need can be categorized into unmet need for spacing or for limiting. In the broadest sense, women with an, “unmet need for spacing” are not currently using a method of contraception and want to delay the next birth by at least two years, whereas women with an “unmet need for limiting” are not currently using a method of contraception and want to stop childbearing (Khan et al, 2008).

More specifically, a currently married woman or women in a union has an unmet need for spacing if she is not currently using a method, is pregnant or amenorrhoeic and the current pregnancy or last birth was mistimed, or the current pregnancy or last birth was unwanted, and the woman now wants to wait before having another child. Similarly, women who are currently married, are not currently using a method of contraception, are fecund, and want to wait for two or more years before having another child have an unmet need for spacing (Khan et al, 2008).

A currently married woman or woman in a union has an unmet need for limiting if she is not using a method of contraception, is pregnant or amenorrhoeic, and has an unwanted birth (does not want her current pregnancy or wants no more children). The unmet need for limiting among currently married women also includes women who are not using a method, who are not using or are amenorrhoeic, who are fecund, and who want no more children. Total unmet need is the sum of unmet need for spacing and for limiting (Khan et al, 2008).

3.4 Instrumentation (Questionnaire Design)

The 1998 SADHS involved the use of three basic questionnaires. The first questionnaire on households recorded information on all household members. The second questionnaire recorded detailed information on eligible women who were identified from the household questionnaires. A total of 11,735 women were interviewed using the

individual questionnaire. This questionnaire collected data on the respondents' background characteristics, reproductive history, knowledge and practice of family planning, breastfeeding practices, marriage, fertility preferences and so on, as well as information about husbands' background characteristics. The third questionnaire was administered to adults in every second household and a total of 8,156 women and 5,735 men were interviewed using this questionnaire. The analysis in this study uses data from the individual questionnaire only, with special focus to currently married women aged 15-49 years only (Department of Health, 2001).

The 2003 SADHS involved the use of five basic questionnaires. Like the 1998 DHS, the first questionnaire on households recorded information on all household members. The second questionnaire recorded detailed information on all eligible women identified from the household questionnaires. This questionnaire collected information on the respondents' background characteristics, reproductive history, knowledge and use of contraceptive methods, antenatal, delivery, and post natal care, breastfeeding and weaning practices, child health and immunization, marriage and recent sexual activity, fertility preferences, adult and maternal mortality, knowledge of HIV/AIDS, her husband's background and respondent's work. The third questionnaire recorded detailed information on all eligible men aged 15-59 years, the questionnaire was meant to collect information on why children were not staying with their biological mothers. This questionnaire collected similar information contained in the women's questionnaire, but was shorter because it did not contain questions on reproductive history, maternal and child health, nutrition, and maternal mortality (Department of Health, 2007).

The fourth questionnaire recorded information on adults. This questionnaire was conducted in households not selected for the men's questionnaire. All eligible men and women aged 15 and above were interviewed with an adult questionnaire. The respondents were asked questions on recent utilization of health services, family medical history, clinical conditions, dental health, occupational health, medications taken, habits and lifestyle, anthropometric measurements (height, weight, blood pressure etc.). The fifth questionnaire included the child's questionnaire. This was

conducted in households in which there was a child under six years of age whose biological mother was either not alive or did not live in the household. Information about the child was collected from the guardian. This questionnaire was instigated by the fact that the level of child fostering in South Africa is relatively high and data on children's health collected only from biological mothers might result in biased information (Department of Health, 2007).

3.5 Data Analysis

In this study, currently-married women or women in a union, including pregnant and amenorrhoeic women can be divided into those having met or unmet need, and no need for family planning. Those with met or unmet need can be further categorized into those who want to limit their family size- that is, to prevent all future births- and those who want to space births by delaying the next birth by two or more years. All other currently married women including non-sterilized women, who are infecund, are defined as having no need for family planning.

For the purpose of addressing the research aims and objectives, the following three statistical methods were employed, namely, the uni-variate, bi-variate and multivariate methods. Descriptive univariate analyses were performed to inspect the frequency distributions of the variables. Bivariate analysis was employed to examine the relationships of the independent variables and unmet need of family planning. Binary logistic regression was used to assess the effects of the explanatory variables on the unmet need for family planning. This is an appropriate statistical procedure since the dependent variable is dichotomous: (equal to one if the woman had unmet need for family planning and zero if a woman had no unmet need for family planning). Three separate logistic regression models were fitted for each aspect of unmet need (spacing, limiting and overall unmet need for family planning) to check the correlates of unmet need for family planning in South Africa. The logistic regression model takes this form:

$$\text{Logit}(p_i) = \ln [p_i / (1-p_i)] = \alpha + \beta_i x_i$$

With p_i being the probability that a woman had unmet need (that is, unmet need for spacing, unmet need for limiting, total unmet need) and $1 - p_i$ is the complement, α is the constant; β_i standing for the regression coefficient, x_i 's being the independent covariates and the ratio $[p_i / (1 - p_i)]$ being the odds that a woman did not experience the event.

The first model examined the relationship of unmet need for spacing and socio-economic variables. The second model examined the relationship of unmet need for limiting and socio-economic variables. The third model examined the relationship of unmet need and socio-economic variables. All the statistical analyses were conducted using Statistical Package for Social Sciences (SPSS) version 17.0.

3.6 Description of the variables

3.6.1. Out-come Variables

The dependent variable is unmet need for family planning which is coded as variable 626 (Unmet need definition) in both SADHS data sets. This variable has nine value labels.

In this study, all the value labels in this variable were used. Recoding was done on variable in the two data sets for the creation of the three out-come variables used in the three logistic regression models. The value labels were recorded as follows:

- Model 1 (unmet need to space): This variable was constructed from the variable 626 by coding it in such a way that unmet need for spacing was assigned the value of 1 (1=1) and all the other values were assigned 0 (2 thru 8= 0) (everything else = system missing).

- Model 2 (unmet need to limit): This variable was constructed from the variable 626 by coding it in such a way that unmet need for limiting was assigned the value of 1 (2=1) and all the other values were assigned 0 (1=0, 3 thru 8= 0) (everything else = system missing).
- Model3 (Total unmet need): This variable was constructed from the variable 626 by coding it in such a way that unmet need for spacing and limiting were assigned the value of 1 (1 through 2=1) and all the other values were assigned 0 (0=0, 3 thru 8= 0) and (everything else= system missing).

3.6.2. Independent variables

The explanatory variables used in this study include: age of the respondent, number of living children and education of the respondent, ethnicity, place of residence, region, partner's educational level partner's occupation and respondent's occupation. Past studies show that most of these factors are imperative explanatory variables of unmet need for family planning (see Westoff and Bankole, 1995; Robey et al., 1997; Casterline et al., 1997; Stash 1999; Ezech and Bankole, 1999).

Table 1: Description of Study Variables

Variable	Description
Unmet need to space	0= all other women 1= women with unmet need to space
Unmet need to limit	0= all other women 1= women with unmet need to limit
Total Unmet need	0= all other women 1= women with unmet need to space or to limit
Age of the woman	Age is in five year age groups.
Women's education status	Highest level of education attained is divided into four categories: 0=none, 1=primary, 2= secondary, and 3= post-secondary education.
Type of Place of residence	This variable was derived from the question on the type of place of residence; we compare urban residents with their rural counterparts.
Province of residence	South Africa is divided into nine provinces as follows: 1= Western Cape, 2= Eastern Cape, 3= Northern Cape, 4= Free State, 5=Kwazulu Natal, 6= North West, 7= Gauteng Province, 8= Mpumalanga Province, and 9 Limpopo Province. A comparison of provinces was done.
Population group	This variable in the context of South Africa population groups is used in stead of Ethnicity, South Africa comprised of four population groups namely: 1= Africans/Blacks, 2= Coloureds, 3 Whites, 4= Asians/Indians.
Partner's educational level	0= No education, 1= Primary education, 2 Secondary education, 3= Higher education, 4= Other
Partner's Occupation	1= Professional/ technician/ Manager, 2= Clerical, 3= Sales, 5= Agriculture-Self employed, 6= Services, 7= Skilled manual, 8= Unskilled manual, 9= Don't know
Respondent's Occupation	0= Not working, 1= Professional, 2= Clerical, 3= Sales, 5= Agriculture-self employed, 6= Services, 7= Household domestic, 8= Skilled manual, 9= Unskilled manual
Number of Living children	This variable was divided into three categories as follows: 0 = 1-2 children, 1 = 3-5 children and 3 = 6 and more children.
Spousal discussion about Family planning	This variable is divided into three categories namely: 0= Never, 1= Once or Twice, 2= More often.
Husband's approval of family planning	0= Disapproves, 1= Approves, 2= Don't know

3.7 Limitations of the study

This study, like many other studies, has limited unmet need to women due to a number of factors that include the fact that women had been the central focus of research because they are more directly involved in reproduction. However, such research may be limited in improving our knowledge and understanding of family planning practices as a dyadic process involving the support, cooperation and agreement of both partners. Therefore, using only women's data to make conclusion on unmet need status may be misleading. For example, studies elsewhere have shown that programmes aimed at couples do better than those targeting individual women or men (Terefe and Larson, 1993, Fisek and Sombuloglu, 1978; Becker, 1994). In addition, the ICPD Programme of Action encouraged reproductive health care programmes to move away from considering men and women separately and to adopt a more holistic approach that includes men and focus on couples (UN, 1995). The accuracy of the data again is one factor that has served as a limitation for this study, given that the 2003 SADHS suffered data quality problems because of the poor collection of data in the field.

Secondly, data on unmet need for family planning often exclude unmarried women, whose level of sexual activity (and therefore risk of pregnancy) varies greatly and is not measured, unmarried youth who are sexually active-who represent a large and growing segment of the population of many countries and women who are using contraceptive methods that are ineffective or personally unsatisfactory- these women may have an unmet need for a different method (Lori, 2003).

Thirdly, another limitation of the study is that it does not cover some important possible predictors of utilization of family planning services. This stems from the fact that both the 1998 and 2003 SADHSs did not collect such variables as distance to health facilities, transportation services, the price and quality of care and respondent's belief concerning health practices and attitudes toward modern medicine which are important factors influencing the use of family planning services in the country.

Fourthly, regarding the analysis of trends we can not say with confidence that the results give a true picture noting that the interval between 1998 and 2003 is a very short one to can conclude that the situation might have changed because for human beings to change behaviour takes a very long time.

Lastly, this study is based on data from 1998 and 2003 SADHSs. These data sets are 12 and 7 years old respectively. It is possible that the family planning situation in the country may have changed contrary to the situation presented in this study. If this is the case the results may not be as enlightening to policy and decision makers as one would have expected. However, if the situation has changed this study should be seen as providing a basis for comparisons for similar studies in future.

CHAPTER IV

ANALYSIS AND FINDINGS

4.1 Introduction

This chapter presents the findings of the study. The chapter consists of five main sections. Section 4.2, describes relevant characteristics of currently married women or women in a union in the period 1998 and 2003 in South Africa. In section 4.3 the focus shifts from describing the characteristics of currently married women, to describing the levels and patterns of unmet need for family planning among currently married women by their demographic and socio-economic profile. Section 4.4 gives a view on the trends of total unmet need and unmet need for spacing and limiting in the period 1998 to 2003 in the country. Lastly, in section 4.5 logistic regression was used to estimate the odds of currently married women to experience unmet need for family planning given their demographic and socio-economic characteristics.

4.2 Characteristics of respondents

Table 2 below provides selected demographic and socio-economic characteristics of currently married women in South Africa in both the 1998 and 2003 South African Demographic and Health Surveys. The literature has shown that the use of contraceptives is closely related to women's background characteristics.

Age

According to Table 2 the two demographic and health surveys show that the largest proportion of currently married women were in the age groups 30-34 and 35-39 years, totalling 42% in 1998 and 40% in 2003. The small proportion of young married women

was in the age groups 15-19 and 20-24 years and constituted only 11% and 3% both surveys combined.

Place of Residence

Table 2 indicates that in 1998, 59.8% of the currently married women were resident in urban areas and 40.2% of the currently married women were residing in rural areas. Similar percentages in 2003 were 62.4% and 37.5% respectively. These figures suggest that more participants in the surveys came from urban areas. The same pattern was observed in the 1996 and 2003 South African censuses, the percentage of urban population increased from 55.1 percent in 1996 to 57.5 percent in 2001 (Statistics SA, 2003).

Province of residence

According to the Table 2 below the largest proportion of the participants in the 1998 SADHS were from the Gauteng (24%) followed by Kwazulu Natal (19%) and Limpopo Province (13%). According to the results of the 2003 SADHS most of the participants came from Kwazulu Natal (19%) followed by Western Cape, Northern Cape and Gauteng both accounting for (12%), Free State and Limpopo with (11%) and Mpumalanga (11%). In 2003 SADHS the Eastern Cape was the only least represented by currently married women compared to other provinces in the country, and this raises methodological concerns.

Population Groups

Table 2 shows the largest proportion of currently married women interviewed in both surveys were Africans compared to other population groups, and this is in line with the findings of the 1996 and 2001 census that South Africa is a highly African population and then followed by coloureds. For example married women who were Africans were 72% in 1998 and 65% in 2003 followed by Coloured women with 11% in 1998 and 15% in 2003.

Level of education

The largest proportion of these women in both surveys had secondary and primary education. For example, those women with secondary education constituted 52% in the period 1998 and during the period 2003 they constituted 60%.

Number of living Children

According to Table 2 both surveys have shown that most of the women indicated that they have more than one child alive. For example, women who indicated that they have 1-2 children living were 43% in 1998 and in the 2003 SADHS they increased to 48%.

Husband approval

According to the results of both surveys, the majority of the respondents indicated that their husbands approved family planning, for example, about 70% of these married women said their husbands approved family planning in 1998 and this number rose to 72% in 2003. Only 21% of these women indicated that their husbands did not approve of family planning and this number was only 17% in 2003.

Spousal discussion of family planning

About 37% of the married women indicated that they did not discuss family planning with their spouses in 1998 and the same was observed among those who said they discussed family planning with their spouses once or twice in the same year. Only 25% said they discussed family planning with their husbands in 1998. This information, pertaining to spousal discussion on family planning, was not asked in 2003. This has some serious policy implications as this information is valuable to use as a proxy for men's involvement in family planning programmes.

Partner's level of education

Both surveys show that the majority of respondents were married to partners who had secondary education and primary education. For instance, 49% of women in 1998 said their partners had secondary education and this number increased to 55% in 2003.

Partner's Occupation

The majority of respondents indicated that their partners were doing skilled and unskilled manual work in 1998 whereas in 2003 the majority of the respondents said their partners were working as professionals and doing unskilled manual work.

Respondent's Occupation

The majority of these women were not working or doing service and unskilled work in 1998 and 2003 period.

Table 2: Characteristics of currently Married women, South Africa 1998 and 2003

Characteristics	1998		2003	
	N	%	N	%
Age group				
15-19	73	1.4	54	1.9
20-24	465	9.2	249	0.9
25-29	900	17.7	432	15.6
30-34	1008	19.9	503	18.2
35-39	1114	21.9	600	21.7
40-44	865	17	496	17.9
45-49	652	12.8	436	15.7
Total	5077	100	2770	91.9
Type of place of residence				
urban	3038	59.8	1728	62.4
Rural	2039	40.2	1042	37.6
Total	5077	100	2770	100
Province of residence				
Western Cape	543	10.7	330	11.9
Eastern Cape	583	11.5	151	5.5
Northern Cape	118	2.3	320	11.6
Free State	355	7	304	11
Kwazulu Natal	955	18.8	528	19.1
North West	352	6.9	208	7.5
Gauteng	1224	24.1	321	11.6
Mpumalanga	309	6.1	303	10.9
Limpopo	639	12.6	305	11
Total	5077	100	2770	100
Population group				
Black/African	3628	71.9	1797	64.9
Coloureds	553	11	415	15.0
White	615	12.2	180	6.5
Asian/Indian	250	4.9	376	13.6
Total	5045	100	2768	100
Respondent's level of educational				
No Education	518	10.2	213	7.7

Primary Education	1501	29.6	632	22.8
Secondary	2624	51.7	1653	59.7
Higher	434	8.5	271	9.8
Total	5077	100	2769	100
Husband approves fp				
Disapproves	1067	21.2	455	16.6
approves	3548	70.4	1962	71.8
Dont'know	426	8.5	317	11.6
Total	5041	100	2734	100
Discussed fp with partner				
Never	1860	36.9	Nd	Nd
Once or twice	1889	37.4	Nd	Nd
More often	1291	25.5	Nd	Nd
Total	5040	100	Nd	Nd
Number of living children				
0	424	8.4	259	9.4
12	2186	43.1	1322	47.7
35	2065	40.7	1063	38.4
6+	402	7.9	126	4.5
Total	5077	100	2770	100
Partner's education level				
No education	555	11	252	9.1
Primary	1471	29.2	610	22.1
Secondary	2465	48.9	1530	55.4
Higher	488	9.7	308	11.2
Don't know	60	1.2	60	2.2
Total	5039	100	2760	100
Partner's occupation				
Prof., Tech., Manager	448	9.2	435	19.7
Clerical	169	3.5	152	6.9
Sales	78	1.6	101	4.6
Agric-self employed	30	0.6	202	9.1
Services	728	14.9	126	5.7
Skilled manual	1750	35.9	154	7.0
Unskilled manual	1646	33.8	820	37.1
Don't know	28	0.6	218	9.9

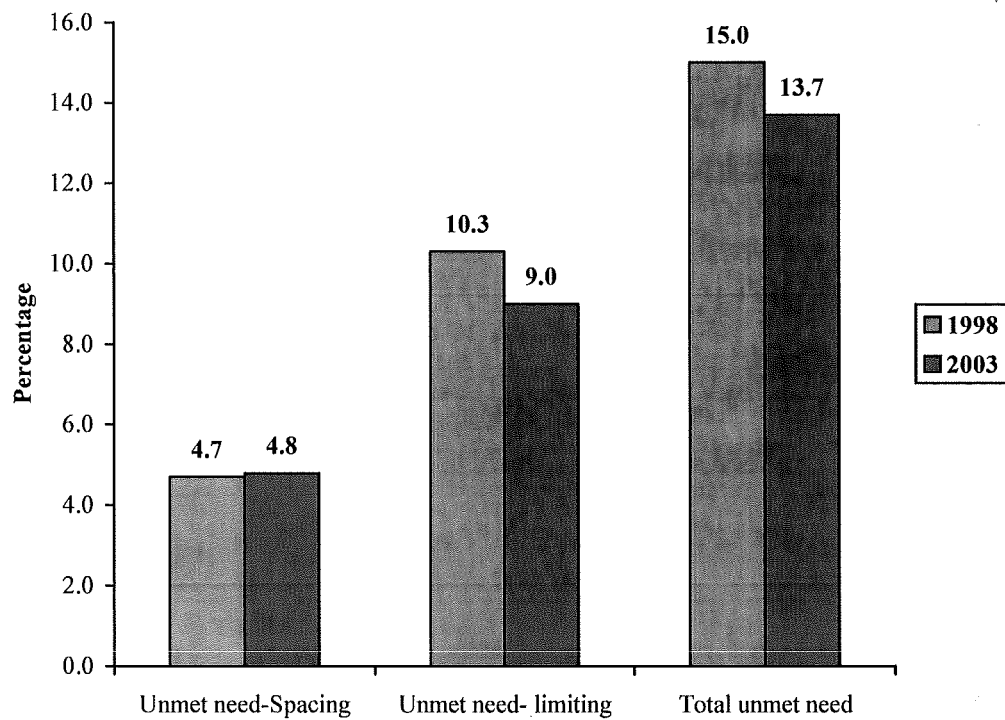
Total	4875	100	2208	100
<i>Respondent's occupation</i>				
Not working	2854	56.4	1516	55.3
Professional	335	6.6	270	9.8
Clerical	299	5.9	235	8.6
Sales	38	0.8	88	3.2
Agric-self employed	3	0.1	65	2.4
Services	226	4.5	259	9.4
Household & Domestic	-	-	66	2.4
Skilled manual	247	4.9	120	4.4
Unskilled manual	1055	20.9	124	4.5
Total	5056	100	2743	100

4.3 Unmet need for family planning in South Africa

The results in Figure 4 indicate that 15 per cent and 14 percent of South African women in a union had an unmet need for family planning during the 1998 and 2003 period respectively, with only a 1.3 per cent decline in the year 2003. According to Figure 4, the levels of unmet need remain fairly high but a slight decline during the 1998 – 2003 period occurred among currently married women who wanted to limit childbearing rather than spacing births (1.3 per cent versus -0.1 per cent respectively). However, despite this slight decline in unmet need to limit, the demand to use contraception for limiting childbearing among married women was still high in South Africa during the period 1998-2003 as compared to those who demanded contraceptives for spacing. This could be attributed to preference for a small family size.

These results are contrary to what research has found in other sub-Saharan African countries. For instance, the literature has shown that, in other sub-Saharan African countries, the need for spacing has been found to be greater than that to limit (Westoff and Ochoa, 1991; Robey et al., 1996; Ngom, 1997). To further attest to this, the findings of SADHS **1998 -19 % versus 52 %** and **2003- 19 % versus 55 %** also revealed that the demand for unmet need for limiting births is high among married women in South Africa as compared to those who want to space births (Department of Health, 2001 and 2007; Westoff, 2006).

Figure 4: Percentage Distribution of the Components of Unmet Need SADHS, 1998 - 2003



4.3.1. Unmet need for spacing

Table 3 shows the levels and patterns in the unmet need for spacing by selected characteristics of currently married women. The results reveal that the levels of unmet need for spacing generally decrease with the age of women and the levels of unmet need to limit births appear to increase with the age of women. The highest levels of unmet need for spacing were observed among women aged 15-19 years- (25 per cent in 1998 and 16 per cent in 2003) and 20-24 years- (13 per cent in 1998 and 15 per cent in 2003).

Unmet need for spacing also varies by place of residence.

The highest levels of unmet need for spacing were observed among women residing in non-urban areas, in Eastern Cape, Free State and Limpopo. These were Africans and Coloureds, those women with no education and those who had primary or secondary education, those women whose husbands disapprove of family planning and those who did not know if their husbands approved family planning. The others were those spouses who had no discussion about family planning, those women who had zero and 1-2 number of living children and among those women who said they did not know their partner's level of education or their partners had no education or had primary and secondary level of education. Others included those women whose partners were doing self agricultural work (farming) and skilled manual work and clerical work, and those women who were not working.

On the other hand, low levels of unmet need for spacing were seen among those women residing in urban areas, Western Cape, Northern Cape, North West, KwaZulu-Natal, Gauteng, and Mpumalanga provinces, including Whites and Asians/Indians, women with grade 12, those women who had 6+ number of living children, those women whose husbands approved family planning and those who had spousal discussion about family planning as well as those women whose partners had higher

level of education, those women whose partners were working as professionals and those women who were working as professionals.

Again, the highest levels of unmet need for limiting births were observed among women aged 40-44 and 45 -49 years, in non-urban areas, those in Eastern Cape, North West and Limpopo Provinces, including Africans and Coloureds, those with no education or had only primary education. Among those who said they did not know if their husbands approved family planning and whose husbands did not approve of family planning use, were those women with six or more living children, those whose partners had no education or had primary educational level, those women whose partners were working as self employed agriculturists or doing service and unskilled manual work, and finally, those women who were doing agricultural work, services, unskilled manual work and those who were not working.

Substantial low levels of unmet need for limiting births were observed among women in the lowest age groups, those living in urban areas, the whites and Asian population groups, among those living in KwaZulu-Natal and Western Cape Provinces, those with Grade 12 level of education, those whose husbands approved of family planning use, those women who had no children living, those women who said they did not know their husbands' level of education, those women whose husbands were doing clerical and sales work, and finally, those women who were working as professionals.

4.3.2. Total unmet need in South Africa

Table 3 shows the levels and patterns of the total unmet need for family planning by selected characteristics of women in a union in South Africa during the 1998 – 2003 periods.

The results also reveal that the unmet need for family planning amongst married women in South Africa follows a U-shape pattern according to age group with the greatest unmet need observed for the under 25- age group and 45 – 49 (age group at the end of

their reproductive years) in 1998 and under 30 – year age groups and the age group at the end of their reproductive years (45-59) in the period 2003.

According to Table 3, women residing in rural areas exhibited high levels of unmet need for family planning as compared to their urban counterpart during the 1998-2003 period. For instance, unmet need for family in non -urban areas was 21 per cent higher than the unmet need in the urban areas 11 per cent in 1998. Similar per centages in 2003 were 17 per cent and 12 per cent respectively. This could be due to the fact that urban residents have greater access to family planning and related services as compared to non-urban areas (see Dodoo, 1996).

The results further reveal that the unmet need for family planning was different for various provinces of South Africa with the Western Cape showing the lowest levels during the 1998 and 2003 periods compared to other provinces. Limpopo (22 per cent in 1998 and 21 percent in 2003) and the Eastern Cape (21 per cent in 1998 and 25 per cent in 2003) exhibited the highest levels of unmet need both in 1998 and 2003 period compared to other provinces. The highest levels of unmet need for family planning were observed among African and Coloured women as compared to other racial groups.

The results again revealed that unmet need for family planning in South Africa was inversely related to the level of education during both periods, with higher percentages of unmet need for family planning observed among women with no formal education or primary education.

The Table 3 also shows that the highest levels of unmet need were observed among those women whose husbands did not approve family planning and those who said they did not know whether their husbands did approve compared to those whose husbands approved family planning. For example, those women who said their husbands did not approve family planning had a 23 per cent of unmet need for family planning higher than only the 12 per cent who said their husbands approved family planning in 1998 and in

2003 as well as those who said their husbands did not were still 23 per cent higher than only the 11 per cent who said their husbands approved family planning.

Table 3 below again shows that unmet need was very high among spouses who did not discuss family planning or did so once or twice as compared to those who did, including those women who had more than six living children, whose partners had no education or had only primary education, whose partners were doing skilled and unskilled manual work or self employed agricultural work or farmers and services, those women who were not working or doing unskilled manual work and agricultural employees (farm workers) and those doing service work.

**Table 3: Levels and patterns of unmet need by selected characteristics of women,
1998 and 2003 SADHS**

		1998			2003	
Age	Unmet need to space	Unmet need to limit	Total Unmet need	Unmet need to space	Unmet need to limit	Total Unmet need
15-19	24.66	1.37	26.03	16.67	5.56	22.22
20-24	12.88	5.36	18.24	14.46	3.21	17.67
25-29	7.01	6.01	13.01	7.94	5.84	13.79
30-34	4.17	9.05	13.22	5.78	7.57	13.35
35-39	2.63	12.41	15.04	1.83	9.00	10.83
40-44	2.21	12.46	14.67	1.42	11.94	13.36
45-49	0.93	16.85	17.77	1.38	14.06	15.44
Place of Residence						
Urban	2.79	8.19	10.97	4.36	7.74	12.10
Rural	7.52	13.56	21.08	5.47	11.04	16.51
Province of residence						
Western Cape	2.43	2.80	5.22	3.66	7.93	11.59
Eastern Cape	4.80	16.64	21.44	7.95	16.56	24.50
Northern Cape	2.52	5.88	8.40	4.70	9.09	13.79
Free State	2.54	6.76	9.30	8.22	8.88	17.11
Kwazulu Natal	5.89	11.67	17.56	1.89	5.30	7.20
North West	2.27	10.80	13.07	3.37	13.46	16.83
Gauteng	3.13	9.56	12.69	3.80	8.54	12.34
Mpumalanga	5.84	12.66	18.51	2.32	8.94	11.26
Limpopo	10.20	11.62	21.82	10.49	10.16	20.66
Population Group						
Black/African	5.91	12.37	18.28	5.46	10.03	15.50
Coloured	2.37	6.01	8.38	5.08	8.72	13.80
White	0.66	3.99	4.65	3.41	5.11	8.52
Asian/Indian	0.81	4.86	5.67	1.86	6.12	7.98
Respondent level of Education						

No Education	6.19	19.15	25.34	2.36	15.57	17.92
Primary	5.88	13.16	19.04	4.75	13.95	18.70
Secondary	4.33	8.15	12.48	5.28	6.98	12.26
Higher	1.17	3.28	4.45	3.70	4.44	8.15
Husband's approval of FP						
Disapproves	9.49	13.53	23.03	9.89	13.19	23.08
Approves	3.26	9.02	12.28	3.58	6.95	10.53
Don't Know	4.94	13.65	18.59	5.10	15.29	20.38
Discuss FP with Husband						
Never	4.17	11.60	15.77	nd ²	nd	nd
Once or Twice	5.95	9.94	15.89	nd	nd	nd
More often	3.81	9.18	13.00	nd	nd	nd
No. Of Children						
0	7.78	0.94	8.73	9.34	3.11	12.45
1-2	5.47	6.58	12.05	6.30	6.90	13.20
3-5	3.66	12.73	16.38	2.36	11.32	13.68
6+	2.51	28.32	30.83	0.00	23.02	23.02
Partner's level of education						
No Education	7.21	17.12	24.32	5.16	13.10	18.25
Primary	5.25	12.21	17.46	3.11	13.44	16.56
Secondary	4.52	8.64	13.16	5.38	7.68	13.06
Higher	1.47	4.82	6.29	3.93	4.59	8.52
Don't know	5.00	16.67	21.67	8.33	3.33	11.67
Partner's occupation						
Prof., Tech., Manager	1.81	5.66	7.47	3.47	6.48	9.95
Clerical	6.51	7.10	13.61	4.64	4.64	9.27
Sales	0.00	8.00	8.00	1.98	4.95	6.93
Agric-self employed	0.00	13.33	13.33	7.43	11.88	19.31
Services	4.03	8.76	12.80	5.56	11.90	17.46
Skilled manual	5.16	11.41	16.57	6.49	6.49	12.99
Unskilled manual	5.23	11.50	16.74	3.80	9.93	13.73

² No data available

Respondent's occupation						
Not working	6.20	12.32	18.52	5.69	9.72	15.41
Professional	0.30	5.42	5.72	2.97	4.09	7.06
Clerical	2.69	7.07	9.76	2.15	6.01	8.15
Sales	0.00	2.63	2.63	5.68	5.68	11.36
Services	0.00	0.00	0.00	4.62	13.85	18.46
Agric employee	1.33	4.44	5.78	5.79	11.97	17.76
Household & Domestic	2.87	7.79	10.66	4.69	7.81	12.50
Skilled manual	3.99	9.59	13.58	2.50	7.50	10.00
Unskilled manual	4.71	10.33	15.04	2.42	10.48	12.90

4.4 Trends in Unmet need for family planning

The Table 4 below shows the trends in the components of unmet need for spacing and limiting by selected characteristics of women in a union in South Africa during the 1998 and 2003 periods.

4.4.1. Trends in unmet need for spacing

Table 4.3 indicates no change in unmet need for spacing during the period under review. Unmet need for spacing was 4.7 in 1998 and 4.8 in 2003.

The results in Table 4 below reveal that substantial decline in unmet need for spacing were observed among women aged 15-19 years, women residing in rural areas, KwaZulu-Natal and Mpumalanga provinces, among women with no education and women with six or more children living. For example, unmet need for spacing births among women aged 15-19 declined from 25 per cent in 1998 to 18 per cent in 2003 with an 8 per cent drop and from 6 per cent in 1998 to 2 per cent in 2003 among women with no education with a 4 per cent drop.

On the other hand; unmet need for spacing increased among women aged 20-24, 25-29, 30-34 and 45-49 years, among women in urban areas, those residing in Western Cape, Eastern Cape, Northern Cape, Free State, Gauteng, North West, Mpumalanga and Limpopo Provinces, among Coloureds, Whites and Asians population groups, those women with secondary and Grade 12 education, among women whose husbands approved of the use of family planning, among women who did not know if their husbands approved of the use of family planning, among women whose husbands did not approve of the use of family planning, those women with 1-2 living children, women whose partners had secondary and higher education or did not know their partners' education level, women whose partners' were working as agricultural employees, doing skilled manual work, professional work and sales work, service work, and finally, among women who were working as agricultural employees, doing service work, doing sales work or doing domestic and professional work.

4.4.2. Trends in unmet need to limit

Unmet need for limiting births declined most among women aged 35-39 and 45-49 years, those residing in rural areas, those in KwaZulu-Natal and Mpumalanga provinces, those women with no formal education, those women who did not know their husbands' education level or whose husbands had no formal education and those women whose husbands were doing skilled manual work. On the other hand, there was a substantial increase in unmet need for limiting births among those women aged 15-19 years, those in the Western and Northern Cape Provinces, among those in the Coloured population group, those whose husbands were doing service work, and those women doing service work or working as agricultural employees.

4.4.3. Trends in Total Unmet need for Family planning

Table 4 below shows the trends of total unmet need for family planning by selected characteristics of women in a union in South Africa during the 1998-2003 period.

The results reveal that total unmet need increased among women of all ages, except those in the age group 25-29 and 30-34 years. The highest decline of unmet need for family planning was observed among those women aged 35-39 years. The decline among this age group could be attributed to the response of these women to family planning services and to the fact that the majority of women around these age groups are settled down economically and matured to make informed decisions about the use of family planning.

Substantial declines in the total unmet need for family planning were observed among women from non-urban areas such as KwaZulu-Natal and Mpumalanga provinces, those women with no education, those with six or more living children, among those who said they did not know their partner's level of education and those whose partners had no education.

On the other hand, an increase in the total unmet need was observed among those women residing in urban areas, those residing in the Free State, Western Cape, Northern Cape and Eastern Cape Provinces, with Free State and Western Cape exhibiting the highest increase in total unmet need among the provinces. An increase in the total unmet need was also seen among the Coloureds, Whites and Asians population groups, among those women with grade 12, those women whose husbands did not approve of the use of family planning and those who did not know if their husbands approved family planning, those with none or 1-2 number living children, those whose husbands had higher level of education, and among those women who were doing service work, agricultural work, sales work, professional work and working as domestic workers. These patterns could be attributed to the demand of family planning services and the need for an increase in the knowledge and information about family planning.

Table 4: Trends in unmet need by selected characteristics of women, 1998 and 2003 SADHS

Age	Absolute % change to Space (1998-2003)	Absolute % to Limit (1998-2003)	Absolute % Change Total Unmet need (1998- 2003)
15-19	8.0	-4.2 ³	3.81
20-24	-1.6	2.2	0.57
25-29	-0.9	0.2	-0.77
30-34	-1.6	1.5	-0.13
35-39	0.8	3.4	4.20
40-44	0.8	0.5	1.31
45-49	-0.5	2.8	2.34
Place of Residence			
Urban	-1.6	0.5	-1.13
Rural	2	2.5	4.57
Province of residence			
Western Cape	-1.2	-5.1	-6.36
Eastern Cape	-3.1	0.1	-3.06
Northern Cape	-2.2	-3.2	-5.39
Free State	-5.7	-2.1	-7.81
Kwazulu Natal	4	6.4	10.36
North West	-1.1	-2.7	-3.76
Gauteng	-0.7	1	0.34
Mpumalanga	3.5	3.7	7.25
Limpopo	-0.3	1.5	1.17
Population Group			
Black/African	0.4	2.3	2.78
Coloured	-2.7	-2.7	-5.42
White	-2.7	-1.1	-3.87
Asian/Indian	-1.1	-1.3	-2.31
Level of Education			
No Education	3.8	3.6	7.41

³ A number with a negative implies an increase in Unmet Need for Family Planning

Primary	1.1	-0.8	0.34
Secondary	-1	1.2	0.22
Higher	-2.5	-1.2	-3.70
Husband's approval of FP			
Disapproves	-0.4	0.3	-0.05
Approves	-0.3	2.1	1.75
Don't Know	-0.2	-1.6	-1.79
Discuss FP with Husband			
Never	nd ⁴	Nd	NA
Once or Twice	Nd	Nd	NA
More often	nd	nd	NA
No. Of Children			
0	-1.6	-2.2	-3.72
1-2	-0.8	-0.3	-1.15
3-5	1.3	1.4	2.70
6+	2.5	5.3	7.81
Partner's level of Education			
No Education	2	4	6.07
Primary	2.1	-1.2	0.91
Secondary	-0.9	1	0.10
Higher	-2.5	0.2	-2.24
Don't know	-3.3	13.3	10.00
Partner's occupation			
Prof., Tech., Manager	-1.7	-0.8	-2.3
Clerical	1.9	2.5	4.34
Sales	-2	3.1	1.07
Agric-self employed	-7.4	1.5	-5.98
Services	-1.5	-3.1	-4.66
Skilled manual	-1.3	4.9	3.58
Unskilled manual	1.4	1.6	3.01
Respondent's			

⁴ No data available

occupation			
Not working	0.5	2.6	3.11
Professional	-2.7	1.3	-1.34
Clerical	0.5	1.1	1.61
Sales	-5.7	-3.1	-8.73
Services	-4.6	-13.8	-18.46
Agric employee	-4.5	-7.5	-11.98
Household & Domestic	-1.8	0	-1.84
Skilled manual	1.5	2.1	3.58
Unskilled manual	2.3	-0.2	2.14

4.5 Correlates of Unmet need for family planning in South Africa

This section looks at the correlates of unmet for family planning in South Africa. Table 5 shows the results of logistic regression of the combined effects of socio-demographic, economic and partners' characteristics on unmet need for family planning for spacing, limiting and total among South African women of reproductive age in 1998 and 2003.

Table 5: Logistic Regression of combined effects of socio-demographic, economic and partner's characteristics on Unmet Need for Family Planning among South African women of reproductive age between 1998 and 2003

Background Variables	1998			2003		
Age	Unmet need to space	Unmet need to limit	Total Unmet need	Unmet need to space	Unmet need to limit	Total Unmet need
	O.R	O.R	O.R	O.R	O.R	O.R
15-19	R.C	R.C	R.C	R.C	R.C	R.C
20-24	0.64	2.587	0.742	2.172	0.188*	0.91
25-29	0.406*	2.526	0.513	1.011	0.516	0.699
30-34	0.255**	3.797	0.515	0.76	0.612	0.63
35-39	0.170**	5.367	0.609	0.317	0.718	0.558
40-44	0.209**	6.184	0.732	0.486	1.071	0.855
45-49	0.072**	12.014*	1.181	0.576	1.359	1.147
Place of Residence						
Urban	R.C	R.C	R.C	R.C	R.C	R.C
Rural	1.316	1.176	1.259	0.693	1.206	1.025
Province of residence						
Western Cape	R.C	R.C	R.C	R.C	R.C	R.C
Eastern Cape	1.079	5.788**	3.485**	2.22	1.969	2.255*
Northern Cape	0.739	1.801	1.273	0.884	0.907	0.924
Free State	0.632	2.267*	1.441	1.639	1.189	1.426
KwaZulu-Natal	1.718	3.345**	2.698**	0.782	0.522	0.594
North West	0.46	3.339**	1.812	0.972	1.679	1.475
Gauteng	1.032	4.478**	2.735**	0.546	1.388	1.068
Mpumalanga	1.133	3.338**	2.320**	0.613	1.022	0.917
Limpopo	1.701	3.057**	2.647**	4.113*	0.89	1.686
Population Group						
Black/African	R.C	R.C	R.C	R.C	R.C	R.C
Coloured	0.678	0.944	0.855	1.398	1.222	1.285
White	0.307*	0.375**	0.362**	0.938	0.886	0.898
Asian/Indian	0.160*	0.418**	0.324**	0.825	1.686	1.35
Level of Education						
No Education	R.C	R.C	R.C	R.C	R.C	R.C
Primary	0.645	0.716*	0.677**	1.865	0.765	0.93
Secondary	0.475**	0.586**	0.542**	1.06	0.508*	0.587
Higher	0.433	0.234**	0.272**	0.84	0.551	0.574
Husband's approval of FP						
Disapproves	R.C	R.C	R.C	R.C	R.C	R.C
Approves	0.364**	0.690**	0.515**	0.295**	0.446**	0.355**
Don't Know	0.461**	1.429	0.983	0.335*	1.519	0.941

Discussed FP with Husband/Partner						
Never	R.C	R.C	R.C	R.C	R.C	R.C
Once or Twice	1.162	0.815	0.932	-	-	-
More often	0.79	1.018	0.932	-	-	-
No. Of Living Children						
0	R.C	R.C	R.C	R.C	R.C	R.C
1-2	0.836	4.409**	1.506	0.796	2.527	1.242
3-5	0.553	5.115**	1.515	0.316*	2.897*	1.107
6+	0.251**	10.343**	2.385**	0	3.462*	1.161
Partner's education level						
No Education	R.C	R.C	R.C	R.C	R.C	R.C
Primary	0.79	0.909	0.857	0.83	1.172	1.094
Secondary	0.808	1.038	0.956	1.284	1.226	1.282
Higher	0.645	1.492	1.177	1.812	0.909	1.296
Don't know	0.722	1.363	1.123	2.489	0.452	1.08
Partner's occupation						
Prof., Tech., Manager	R.C	R.C	R.C	R.C	R.C	R.C
Clerical	3.175*	0.995	1.53	1.174	0.67	0.878
Sales	0	1.719	1.464	0.369	0.532	0.461
Agric-self employed	0	4.421*	3.976*	1.598	0.911	1.093
Services	2.054	1.225	1.365	1.092	1.121	1.127
Skilled manual	2.331	1.346	1.579	1.459	0.673	0.911
Unskilled manual	1.827	1.099	1.253	0.912	1.022	1.003
Don't Know	0	1.078	0.837	1.241	0.889	0.971
Respondent's occupation						
Not working	R.C	R.C	R.C	R.C	R.C	R.C
Professional	0.135	0.819	0.647	0.908	0.696	0.721
Clerical	1.143	0.94	0.978	0.458	1.001	0.749
Sales	0	0.328	0.253	0.916	0.645	0.767
Agric-self employed	1.411	0	0	0.963	1.102	1.018
Services	0.257*	0.446*	0.372**	1.768	1.308	1.462
Household & Domestic	-	-	-	1.803	0.906	1.174
Skilled manual	0.837	0.697	0.712	0	1.049	0.698
Unskilled manual	0.738	0.703**	0.692**	0.207	1.29	0.882
Constant	-2.884	-1.569	-1.569	-2.95	-2.216	-1.75
2 log likelihood	1412.107	2585.58	3340.549	591.792	1067.529	1441.505
Model Chi-Square	302.354	443.131	464.905	155.75	148.255	144.463
Overall% correctly predicted	94.7	88.2	83.4	95.1	90	85.2

**Significant at $p \leq 0.01$; *Significant at $p \leq 0.05$; RC = Reference Category; O.R = Odds Ratio which is displayed as Exp (B) in SPSS output

4.5.1. Correlates of unmet need for Spacing

Table 5 indicates that age, population group, maternal education, husbands' approval of family planning, number of living children and partners' occupation are significantly related to unmet need for spacing births.

Age of the respondents is positively related to unmet need for spacing births. The odd ratios decrease with increasing age of the respondent implying that as the age of the respondent increases, the less likelihood of reporting total unmet need for family planning.

Unmet need for spacing also varies by population group. Coloured, White and Asian/Indian women were less likely to report unmet need for spacing when compared to their Black/African counterparts. For example, in 1998, Coloured women were 32% less likely than African women to have unmet need. Asian and White women were 52% and 69% respectively less likely than African women to have unmet need for spacing. It was only the White women who were less likely to have an unmet need for spacing than African women in 2003. Coloureds and Asian women were more likely to have unmet need for spacing than African women in 2003.

Another important determinant of unmet need for spacing births is maternal education. Women with primary education were 35% less likely than women with no education to have unmet need for spacing. Women with secondary education were 48 per cent less likely to report unmet need for spacing when compared to their counterparts with no formal education ($p \leq 0.01$). Women with higher education were 57 per cent less likely to report unmet need for spacing when compared to their counterparts with no formal education.

Unmet need for spacing births is also influenced by partner's approval of family planning. Women who reported that their partners approved family planning were 70% less likely than those whose husbands disapproved family planning to have unmet need for spacing. Women who do not know whether their husbands approve of family planning or not were 54% less likely than

whose husbands disapproved family planning to have unmet need for spacing. Another factor that influences unmet need for spacing is number of living children. For instance, having at least six living children significantly associates with 25 per cent less likelihood of reporting unmet need for spacing.

Those women whose partners are clerical workers were about 3 times more likely to report unmet need for spacing, while those women engaged in the services sector were significantly less likely to report unmet need for spacing in the study area.

4.5.2. Correlates of unmet need to limit

According to Table 5, age of the respondents, province of residence, population group of the respondents, educational level of the respondents, partner's approval of family planning, number of living children and partners' and respondents' occupation were found to have significant impact on unmet need for limiting the number of children a woman will have throughout her reproductive years.

Age of the respondents is positively related to unmet need to limit child bearing. The higher the age of the respondent the higher the likelihood to have unmet need to limit childbearing.

Women in the age-group 45-49 were 12 times more likely to report unmet need for limiting when compared to their counterparts in the age-group 15-19. The odds ratio increases with increasing age of the respondent.

Province of residence also determines unmet need to limit childbearing. Table 5 indicates that women living in other provinces outside of Western Cape were more likely to report unmet need for limiting when compared to their Western Cape counterparts. The results for all provinces with the exception of Northern Cape are statistically significant.

Unmet need to limit childbearing also varies by population. Coloured women are 6% less likely than African women to have unmet need to limit whereas White and Asian/Indian women were significantly less likely to report having unmet need for limiting when compared to their Black/African counterparts (O.R: 0.38 and 0.42 respectively; $p \leq 0.01$).

Another factor influencing unmet need to limit childbearing is maternal education. Women with primary education were 38% less likely than women with no formal education to have unmet need to limit ($p < 0.5$). Women with secondary education were 38% less likely than women with no formal education to have unmet need to limit childbearing ($p < 0.01$) whereas women with tertiary education were 77% less likely than women with no formal education to have unmet need to limit childbearing ($p < 0.01$).

Unmet need to limit childbearing is also affected by partner's approval of family planning.

Those women whose partners approved of family planning were 69 per cent less likely to report unmet need for limiting when compared to their counterparts whose partners disapproved ($p < 0.01$). Women who did not know whether their husbands approved family planning or not are 1.4 times more likely to report unmet need for limiting when compared to their counterparts whose partners disapproved. But the results are not statistically significant.

The number of living children also influences unmet need to limit childbearing. Having at least one living child makes it significantly more likely for women to report unmet need for limiting compared to those not having any living child. Women with 1-2 children are 4.4 times more likely to report unmet need for limiting when compared to women with no living children ($p < 0.01$). Women with 3-5 children are 5.1 times more likely to report unmet need for limiting when compared to women with no living children ($p < 0.01$). Women with 6+ children are 10.3 times more likely to report unmet need for limiting when compared to women with no living children ($p < 0.01$). The odds ratio increases with the number of living children indicating that the more the number of living children the higher the likelihood to have unmet need to limit childbearing.

Another factor that is significantly related to unmet need to limit is partner's occupation. Those women whose husbands were working as self-employed farmers were 4 times more likely to report unmet need for limitation of births when compared to those whose partners/husbands were professional, while those women respondents working in the services sector or as unskilled manual workers were both less likely to report having unmet need for limiting births compared to their unemployed counterparts.

4.5.3. Correlates of total unmet need for family planning

From Table 5, it is clear that province of residence, population group, educational level of the respondents, partner's approval of family planning, number of living children, partner's and respondent's occupation were found to have significant impact on total unmet need for family planning among currently married South African women of reproductive age aged 15-49 in 1998.

Province of residence is one of the variables determining total unmet need for family planning. When compared to the reference category, total unmet need for family planning is high in all other provinces. However the results are statistically significant in Eastern Cape, KwaZulu-Natal, Gauteng, Mpumalanga and Limpopo. Women that are resident in Eastern Cape, KwaZulu-Natal, Gauteng, Mpumalanga and Limpopo were 3.5, 2.7, 2.7, 2.3 and 2.6 times more likely to report having total unmet need for family planning when compared to their counterparts in Western Cape ($p \leq 0.01$).

Total unmet need for family planning varies by population. Coloured women are 14% less likely than African women to have total unmet need whereas White and Asian/Indian women were significantly 68% and 64% less likely to report having total unmet need for family when compared to their Black/African counterparts ($p \leq 0.01$).

Total unmet need for family planning also varies by maternal education. The higher the level of education, the less likelihood of reporting having unmet

need for family planning when compared to their counterparts with no formal education. Women with primary education were 32% less likely than women with no education to have total unmet need for family planning ($p \leq 0.01$). Women with secondary education were 46% less likely than women with no education to have total unmet need for family planning ($p \leq 0.01$) whereas women with higher education were 73% less likely than women with no education to have total unmet need for family planning ($p \leq 0.01$).

Total unmet need for family planning is also influenced by partner's approval of family planning. Women who reported that their partners approved of family planning were 52 per cent less likely to report having total unmet need for family planning when compared to their counterparts, who reported partner's disapproval for family planning ($p \leq 0.01$). Women who reported that they do not know whether their partners approved family planning or not were 7% less likely to report having total unmet need for family planning when compared to women who reported partner's disapproval for family planning. The results are however not statistically significant.

The number of living children also influences total unmet need for family planning. Women with 1-2 children, 3-5 children and 6+ children were respectively found to be 1.5, 1.5 and 2.4 times more likely to report having total unmet need for family planning when compared to those without any living children. Only women with 6 or more living children were statically significant.

Another factor that is significantly related to total unmet need for family planning is partner's occupation. Those women respondents whose partners were self-employed in the agricultural sector were about 4 times more likely to report total unmet need for family planning when compared to those whose partners were professional (O.R: 3.98; $p \leq 0.05$); while women respondents who were engaged in services sector or as unskilled manual workers were significantly less likely to report total unmet need for family planning respectively when compared to their unemployed counterparts (O.R: 0.37 and 0.69; $p \leq 0.01$).

4.5.4. Summary

This chapter has examined the pattern and trends of unmet need for family planning among currently married women in South Africa between 1998 and 2003. Total unmet need has declined from 15.0 per cent in 1998 to 13.7 per cent in 2003. Unmet need to space births was 4.7 per cent and 4.8 per cent in 1998 and 2003 respectively while unmet need to limit further childbearing declined from 10.3 per cent and 9.0 per cent in 1998 and 2003 respectively. The results presented in this chapter indicate that unmet need for family planning varies by socio-economic variables. This was supported by previous studies in other countries (see, Kekovole, 1998; Lori, 2003; Otieno and Khasakhala, 2006). The multivariate analyses indicate that age of the respondents, population group of the respondents, educational level of the respondents, partner's approval of family planning, number of living children, partner's and respondent's occupation were found to be correlates of unmet need for family planning in the study.

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the main findings of the study. It starts by briefly discussing the results obtained from the study. Characteristics of the respondents, the main determinants of fertility and their impact on fertility number are discussed in this section of the paper.

Furthermore, other factors responsible for fertility reduction are also discussed. The chapter closes with some recommendations based on the discussion and conclusion.

5.2 Summary

The results show that the levels, patterns and trends of unmet need among married women in South Africa from the period 1998 to 2003 have slightly declined. This decline can be attributed to general improvements in family planning services in the country. The results also show that unmet need generally follows a U- shape pattern according to age groups with the greatest unmet need observable among the under 25- age group and the 45-49 age groups.

As far as unmet need for spacing and limiting births goes, the results reveal that unmet need for spacing has slightly increased where as unmet need to limit births has slightly declined. However, the demand for limiting births in South Africa outweighs the demand to space childbearing and these findings are unique compared to other sub-Saharan African countries in which the need for spacing has been found to be greater than that of limiting births (Westoff, 1996). The results have also pointed out that unmet need for spacing decreases with age and that of limiting births increases with age and

these patterns and trends have been observed in most developing countries. It can be concluded that these bivariate analysis results show that unmet need is influenced by socio-economic characteristics of women.

Regression models

Regression models show that region, population group, educational level of the respondents, number of living children, husband's approval of family planning, partner's occupation and respondent's occupation are significantly associated with unmet need between 1998 and 2003. These findings affirm hypothesis number two that unmet need is influenced by demographic and socio-economic characteristics of women and answers the research question number two "what are the factors responsible for the determinants of unmet need for family planning in South Africa?" and also ascertain one of the study's specific objectives to explore the determinants of unmet need for family planning in South Africa.

5.3 Discussion

From Table 5 showing the logistic regression models for the combined effects of socio-demographic, economic and partner's characteristics on unmet need for family planning, unmet need for spacing shows that women in the age-group 20-49 years were all less likely to have unmet need for spacing when compared to the youngest age-group 15-19, while those in the age-group 20-29- years were shown to be more likely to have unmet need for spacing when compared to the young age-group (15-19) in 2003. A study by Du Plessis, also affirmed this, that younger South African women prefer spacing their children, as compared to older women, who prefer limiting the number of births (Du Plessis, 1996).

A study by Otieno and Khasakhala also observed that couples in the younger ages had the greatest need for spacing births (Otieno and Khasakhala, 2006). The likely reason for this scenario could be the fact that the demand for contraception for the purpose of spacing is low among women aged 20-49

years when compared to the youngest age-group. This may be due to issues around age at first marriage that falls above the youngest age-group, the desire for children when one enters into marriage and cultural factors (husband's disapproval of family planning).

On the other hand, unmet need to limit births shows an increase with age. This could be due to the fact that as a woman reaches her desired family size, there is concern for the use of contraception to limit the number of children. However, with regard to the total unmet need for family planning in 1998, the results show that women in the higher age-groups were significantly less likely to report unmet need when compared to those in the youngest age group. The same pattern was also observed for 2003. A study by Wafula and Ikamari in Kenya (2007), also observed the same pattern.

With regard to the Province of residence in 1998 the total demand for contraception for limiting births were higher in all other provinces compared to the Western Cape, although there was a mixed picture when overall unmet need is considered. This could be due to the access and availability of family planning services in the province. In 2003, three provinces namely, Eastern Cape, Free State and Limpopo were more likely to have unmet need for spacing when compared to the Western Cape. This makes sense considering the fact that these provinces are mostly rural (access and availability of family planning services) when compared to the Western Cape. A study by John Kekovole in 2003 on trends and correlates of unmet need for Contraception in Kenya between 1989 and 1993 also found that total unmet need and unmet need for spacing was high among provinces that were predominantly rural.

For limiting in 2003, Eastern Cape, Free state , North West, Gauteng and Mpumalanga were all more likely to have unmet need for limiting when compared to Western Cape. The likely reason for this observation relates to the rural-urban differentials and the kind of cosmopolitan people living in Gauteng province could be alluded to with regard to unmet need for limiting.

The same kind of pattern was observed for the overall unmet need for family planning in 2003.

In 1998, Black/Africans topped the list of those with unmet needs for spacing and limiting when compared to the other racial groups while this was significant for Whites and Asians/Indians. The likely reasons are easy access to family planning, high rate of urbanization, and lower desired family size among these other racial groups. The picture is slightly different when the 2003 figures were examined.

It is clear that the level of education of the women has an impact on unmet need for family planning. In 1998, having at least primary education reduces the odds of reporting unmet need both for spacing and limiting, and this was also significantly related to the overall unmet need for family planning.

The higher the level of education the better the attitude toward the up-take of family planning in the study area. On the issue of husband's approval for family planning, husband's approval significantly influences the reporting of unmet need for family planning among South African women. This means that partners/husbands and men in general are still relevant in decision-making the process regarding the uptake of family planning.

With regard to the number of living children, having at least one child in 1998 makes the women to be more likely to report unmet need for either spacing or limiting among the women sampled. This shows that the presence of a living child is an issue when considering the use of family planning. With the overall unmet need, those with six children and above were reportedly less likely to have unmet need for family planning. Issues around reaching of desired size, menopause for women and permanent family planning methods are likely reasons that can be adduced for the results.

On partner's occupation, those women whose partners were working as farmers were shown to be more likely to report unmet need for spacing and limiting. This is understandable in the context of the area the people live in when the issue of availability and access to family planning is considered.

With respect to the respondent's occupation, those women in the services sector were consistently significantly less likely to report unmet need for spacing and limiting in South Africa when compared to those unemployed. This may be related to the fact that skill acquired from their services sector may translate to better attitudes toward family planning. Also, information relating to reproductive decision is shared within the working women's networks compared to those not working.

5.4 Conclusion

The study sought to establish correlates of unmet need for contraception among currently married women in South Africa. The data drawn from the 1998 and 2003 South African Demographic and Health Surveys were used to achieve this objective. The results revealed only a minor drop in the total levels of unmet for family planning (15.0 per cent in 1998 and 13.7 per cent in 2003). Unmet need for contraception to space births was 4.7 per cent and 4.8 per cent in 1998 and 2003 respectively while that to limit further childbearing was 10.3 per cent and 9.0 per cent in 1998 and 2003 respectively. A slight decline was observed among women who were in need of limiting births while the levels seem to have remained unchanged among women in need of spacing births, although the demand for limiting still exceeds that for spacing in South Africa.

The province of residence, population group, educational level of the respondents, partner's approval of family planning, number of living children, partner's and respondent's occupation were found to have significant impact on unmet need for spacing among South African women of reproductive age aged 15-49 in 1998, while age of the respondents, province of residence, population group of the respondents, educational level of the respondents, partner's approval of family planning, number of living children, partner's and respondent's occupation were found to be the significant factors correlated to most components of unmet need for family planning in 1998 and 2003.

period. This addresses the research question one “Are there differences in correlates of unmet need for family planning in 1998 and 2003”. The findings revealed that unmet need for limiting births exceeded that for spacing. There is therefore the need for family planning providers to intensify the promotion of permanent methods of family planning among married women.

The study concludes that there is a decline in the overall level of unmet need for family planning and the unmet need for limiting in South Africa. Also, age of the respondents, province of residence, population group of the respondents, educational level of the respondents, partner’s approval of family planning, number of living children, partner’s and respondent’s occupation were the most important correlates of unmet need for family planning in the study between 1998 and 2003. Lastly, unmet need for family planning was found to increase (especially for limiting births) with the age of the women respondents.

5.5 Recommendations

First, intervention programmes that will make impact in reducing unmet need for family planning among South African women must take into consideration the biological age of the women concerned. This could assist in preventing high risk pregnancies among those women in young ages and those over 35 years of age. Again younger women are more prone to be refused contraceptive use by their partners.

Second, Western Cape seems to be doing better when compared to other provinces, hence, lessons have to be learnt from them with respect to the access and availability of family planning methods, and such lessons should be incorporated to other provinces.

Third, Black/African women must be particularly targeted with appropriate information, education and communication (I.E.C.) programmes related to the uptake of family methods. Also, efforts should be made to increase access to

formal education to girl-children and adult women in South Africa as this has a direct impact on the uptake of family planning.

Fourth, men are still found to be influential in reproductive decision-making in South Africa, hence, they should not be neglected in the design of appropriate intervention programmes aimed at reducing unmet needs for family planning in South Africa.

Fifth, family planning services should also prioritize those women with living children as the presence of living children serves as an important factor in the uptake of family planning methods for limiting births/childbearing.

Sixth, high unmet need for family planning in rural areas may be an indication of the disparities that exist in family planning services between rural and urban areas, therefore, rural areas and women on farms should need to be prioritised concerning family planning service.

Lastly, improving the skills of women could have an indirect link to the uptake of family planning methods. Hence, a programme that will reduce unmet need for family planning must take into consideration, the education and work status of the women concerned.

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APPENDIX A

1998 SADHS WOMEN'S BACKGROUND QUESTIONNAIRE

1. Information on respondent's place of resident

First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a city, in a large town, on a farm or in rural areas?

- City/ Town/Rural/Farm

How long have you been living continuously in (Name of Current Place of Residence)?

- Years/ Always/ Visitor

Just before you moved here, did you live in a city, in a town, or in the rural area /farm?

- City/Town/ Rural/Farm

What is the name of the place in which you usually live? (Name) Is that a large city, town, or rural area /farm?

- City/ Town/Rural/Farm

2. information on respondent's Province of residence

In which PROVINCE is that located?

3. Information on respondent's Age

In what month and year were you born?

- Month
- Don't know Month
- Year
- Don't know year

How old were you at your last birthday?

- AGE IN COMPLETED YEARS

4. Information on respondent's population group classification

Which race group do you consider yourself?

- African/Black
- Coloured
- White
- Asian/ Indian

5. Information on respondent's educational level

Have you ever attended school?

- Yes/No

What is the highest (standard/year) you completed?

Less than one year completed

- SUB A/CLASS 1 /SUB B/CLASS 2
- STANDARD 1/STANDARD 2 /STANDARD 3
- STANDARD 4 /STANDARD 5 /STANDARD 6
- STANDARD 7 /STANDARD 8 /STANDARD 9
- STANDARD 10 /FURTHER STUDIES INCOMPLETE
- DIPLOMA/OTHER POSTSCHOOLCOMPLETE
- FURTHER DEGREE COMPLETE.

6. Information on respondent's occupation

Aside from your own housework, are you currently working for money?

- Yes/No

As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?

- Yes/No

Have you done any work in the last 12 months?

- Yes/No

What is your occupation, that is, what kind of work do you mainly do?

- _____

Do you do this work for a member of your family, for someone else, or are you self-employed?

- Family member/ for someone else/ self employed

Do you usually work throughout the year, or do you work seasonally, or only once in a while?

- Throught the year/ Seasonal/ Part of the year/ Once in a year

7. Information on respondent marital status

Are you currently married or living with a man?

- Yes currently married/ Yes living with a man
- No, not in union

8. Information on respondent's fertility history

Have you ever given birth?

- Yes/No

9. Information respondent's number of children living

Do you have any sons or daughters to whom you have given birth who are now living with you?

- Yes/No.

How many sons live with you? And how many daughters live with you? Sons at home/ Daughters at home.

Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?

- Yes/No.

How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? Sons elsewhere/ daughters elsewhere.

Have you ever given birth to a boy or a girl who was born alive but later died?

- Yes/No.

In all, how many boys have died? And how many girls have died?

10. Information on respondent's unmet need for family planning

At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, or did you not want to have anymore children at all?

- Then/ Later/ Not want more children

At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, or did you want no (more) children at all?

- Then/ Later/No more

How much longer would you like to have waited?

- Months/ years/ Don't know

(Not Pregnant or Unsure): Would you like to (a/another) child or would you prefer not to have any (more) children?

- Have (a/ another) child
- No more/none
- Says she can't get pregnant
- Undecided/ don't know and pregnant

(Pregnant) After the child you are expecting now would you like to have another child or would you prefer not to have any more children?

- Have (a/ another) child
- No more/none
- Says she can't get pregnant
- Undecided/ don't know and pregnant

Not Pregnant or Unsure: when would you like to wait from now before the birth of (a/ another) child?

- Months
- Years
- Soon/now
- Says she can't get pregnant
- After marriage
- Other (specify)
- Don't know

Pregnant: after the birth of the child you are expecting now how long would you like to wait before the birth of another child?

- Months
- Years
- Soon/now
- Says she can't get pregnant
- After marriage
- Other (specify)
- Don't know

11. Information on reasons for not using

What are the main reasons you are not using a method of contraception to avoid pregnancy?

- Never had sex

Fertility reasons

- NOT HAVING SEX /INFREQUENT SEX
- MENOPAUSAL/HYSTERECTOMY /INFERTILE /POSTPARTUM/BREASTFEEDING
- WANTS (MORE) CHILDREN /PREGNANT

Opposition to use

- Respondent opposed
- Husband/ partner opposed
- Others opposed
- Religious prohibition

Lack of Knowledge

- Knows no method
- Knows no source

Method related reasons

- Health concerns
- Fear of side effects
- Lack of access/ too far
- Cost too much
- Inconvenient to use
- Interferes with body's normal processes
- Out of stock
- Other (Specify)
- Don't know?

What is the main reason that you think you will never use a method?

Fertility reasons

- INFREQUENT SEX
- MENOPAUSAL/HYSTERECTOMY /INFERTILE
- WANTS MORE CHILDREN

Opposition to use

- Respondent opposed
- Husband/ partner opposed
- Others opposed
- Religious prohibition

Lack of Knowledge

- Knows no method
- Knows no source

Method related reasons

- Health concerns
- Fear of side effects

- Lack of access/ too far
- Cost too much
- Inconvenient to use
- Interferes with body's normal processes
- Other (Specify)
- Don't know?

12. Information on respondent's discussion of FP with Husband/partner

In the last few months have you discussed the practice of family planning with your friends, neighbours, or relatives?

- Yes/No

With whom? Any one else?

- HUSBAND/PARTNER /MOTHER /FATHER
- SISTER/BROTHER/DAUGHTER /MOTHER-IN-LAW
- FRIENDS/NEIGHBOURS/ Other (specify)

13. Information on respondent's husband approval of FP

Do you think that your husband/partner approves or disapproves of couples using a method to avoid pregnancy?

- Approves/ Disapproves/ Don't know

14. Information on respondent' discussion of FP with husband/partner

How often have you talked to your husband/partner about family planning in the past year?

- Never/ Once or Twice/ More often

15. Information on respondent's husband/partner's educational level

Did your (last) husband/partner ever attend school?

- Yes/No

What was the highest (standard/year) he completed at school?

Less than one year completed

- SUB A/CLASS 1 /SUB B/CLASS 2
- STANDARD 1/STANDARD 2 /STANDARD 3
- STANDARD 4 /STANDARD 5 /STANDARD 6
- STANDARD 7 /STANDARD 8 /STANDARD 9

- STANDARD 10 /FURTHER STUDIES INCOMPLETE
- DIPLOMA/OTHER POSTSCHOOLCOMPLETE
- FURTHER DEGREE COMPLETE.
- Don't know
-

16. Information on respondent's husband/partner occupation

Does your husband/partner currently work?

- Yes/No/ Don't know

What (is/was) your (last) husband/partner's occupation? That is, what kind of work (does/did) he mainly do?

APPENDIX B

2003 SADHS WOMEN BACKGROUND QUESTIONNAIRE

1. Information on Place of residence

How long have you been living continuously in (name of place of residence)?
If less than one year record 00.

- Years
- Always
- Visitor

Just before you moved in here did you live in a city, in town or in the country side?

- City
- Town
- Countryside

Region _____

2. Information on Age of respondent

In what month and year were you born?

- Month
- Don't know month
- Year
- Don't know year

How old were you at the last birth day?

- Age in completed years

3. Information on education of respondent

Have you ever attended school?

- Yes/No

What is the highest level of school you attended: Primary, Secondary or Higher?

- Primary

- Secondary
- Higher

What is the highest (grade/form or standard) you completed at that level

- Grade/form/ standard

4. Information on Population Classification

COUNTRY-SPECIFIC QUESTION ON ETHNICITY. (Which race group do you consider yourself?)

- African/Black
- Coloured
- White
- Asian/ Indian

5. Information on respondent's occupation

Aside from your own housework, have you done any work in the last seven days?

- Yes/No

As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?

- Yes/No

Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave or any other such reason?

- Yes/ No

Have you done any work in the last 12 months?

- Yes/No

What is your occupation, that is, what kind of work do you mainly do?

- Work in Agriculture/ Does not work in Agriculture

Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?

- Own land/ Family land/ Rented land/ Someone's else land

Do you do this work for a member of your family, for someone else, or are you self-employed?

- Family member/ for someone else/ self employed

Do you usually work at home or away from home?

- Home/ Away

Do you usually work throughout the year, or do you work seasonally, or only once in a while?

- Throught the year/ Seasonal/ Part of the year/ Once in a year

Are you paid in cash or kind for this work or are you not paid at all?

- Cash only/ cash and kind/ not paid

6. Information on respondent's marital status

Have you ever been married or lived together with a man as if married?

What is your marital status now: are you widowed, divorced or separated?

Have you been married or lived with a man only once or more than once?

In what month or year did you did you start living with your husband or partner?

Now I would like to ask you about when did you start living with your first husband/partner. In what month and year?

7. Information on respondent's number of children living

Do you have any sons or daughters to whom you have given birth who are now living with you?

- Yes/No.

How many sons live with you? And how many daughters live with you? Sons at home/ Daughters at home.

Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?

- Yes/No.

How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? Sons elsewhere/ daughters elsewhere.

Have you ever given birth to a boy or a girl who was born alive but later died?

- Yes/No.

In all, how many boys have died? And how many girls have died?

8. Information on Respondent's unmet need for FP

In what year and month was the baby (name) born?

Probe : what is his or her birth day?

Are you pregnant now?

Yes/No or unsure

When did your last menstrual period start? (Date if given)

Days ago/ Weeks ago/ Months ago/ years ago

In menopause: has had Hysterectomy/ before last birth/ Never menstruated

Have you ever used anything or tried in any way to delay or avoid getting pregnant?

- Yes/No

I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. Use calendar to probe for earlier periods of use and none use, start with the most recent use, back to January 2001. Use names of children, Dates of birth and periods of pregnancy as reference points. Enter method use code or "0" for none use in each blank month.

Illustrative questions:

- When was the last time you used a method? Which method was that?
- When did you start using that method? How long after the birth of (Name)?
- How long did you use the method then?

Has your menstrual period returned since the birth of (name)?

Yes/No

Not Pregnant or Unsure: Would you like to (a/another) child or would you prefer not to have any (more) children?

- Have (a/ another) child
- No more/none
- Says she can't get pregnant
- Undecided/ don't know and pregnant
- Undecided/ don't know and not pregnant or Unsure

Pregnant: After the child you are expecting now would you like to have another child or would you prefer not to have any more children?

- Have (a/ another) child
- No more/none
- Says she can't get pregnant
- Undecided/ don't know and pregnant
- Undecided/ don't know and not pregnant or
- Unsure

Not Pregnant or Unsure: when would you like to wait from now before the birth of (a/ another) child?

- Months
- Years
- Soon/now
- Says she can't get pregnant
- After marriage
- Other (specify)
- Don't know
-

Pregnant: after the birth of the child you are expecting now how long would you like to wait before the birth of another child?

- Months
- Years
- Soon/now
- Says she can't get pregnant
- After marriage
- Other (specify)
- Don't know

9. Information on respondent's none use of contraception

What is the main reason that you think you will not use a contraceptive method at any time in the future?

- Not married
- Fertility related reasons
- Infrequent sex/ no sex
 - Menopausal/ Hysterectomy
 - Subfecund / in fecund
 - Wants as many children as possible
- Opposition to use
- Respondent opposed
 - Husband/ partner opposed
 - Others opposed
 - Religious prohibition
- Lack of Knowledge
- Knows no method
 - Knows no source
- Method related reasons
- Health concerns

- Fear of side effects
- Lack of access/ too far
- Costs too much
- Inconvenient to use
- Interferes with body's normal processes
- Other (Specify)
- Don't know?

10. Information on Husband/ partner's level of education

Did your (last) husband/partner ever attend school?

- Yes/No

What was the highest level of school he attended: Primary, Secondary or Higher?

- Primary
- Secondary
- Higher
- Don't know

What was the highest (grade/form/year) he completed at that level?

- Grade/ Don't know

11. Information on respondent's husband/ partner's occupation

What is your husband's/partner's occupation? That is, what kind of work does he mainly do?