INTRODUCTION

Human population is an important resource of a country and its quality of life determines the progress and development of a nation\(^1\). No other factor not even that of peace or war is so tremendously fatal for the long time destinies of democracies as the factor of population. Population as a human problem appears in varied forms in different parts of the world depending on size of population, density, resources, distribution of community amenities and several othr deeply rooted factors in various cultures\(^2\).

At the beginning of the Christian era nearly 2,000 years ago world population was estimated to be around 250 million. It required all the human history up to the year 1800 for the world population to reach 1 billion. The second billion came in 130 years i.e. around 1930, the third billion in 30 years i.e. around 1960, the fourth billion in 15 years i.e. in 1974, the fifth billion in just 12 years i.e. in 1987 and the sixth billion in 12 years i.e. 1999. On October 12\(^{th}\) 1999 world population become 6 billion and in 2011 it became 7 billion. It is expected to reach 8 billion by 2025\(^3\).

Indian population has been steadily increasing since 1921. It was 238 million in 1901, doubled in 60 years to 439 million (1961) doubled again in only 30 years to reach 846 million by 1991, it crossed 1 billion mark on 11\(^{th}\) May 2000, as of now it is about 1.2 billion and is projected to reach 1.53 billion by the year 2050\(^3\). India is the 2\(^{nd}\) most populous country in the world and 7\(^{th}\) in land area. This population growth is diluting all the socio economic developments, lowering the quality of life and degrading the environment by putting further strain on natural resources. Emphasis should be given on control of conception rather than prevention of conception so as to help couples to decide freely and responsibly the number and spacing of their
Introduction

children. India is in the third stage of demographic transition, that is the late expanding stage where though birth rate has decreased over the few years but still it is more than death rate. If women restrict their family size without adequate spacing of 3-4 years between children, then these children would enter their reproductive life much earlier, hence population doubling would occur faster.

Unintended fertility fuels a rate of population growth that is outpacing the country’s efforts to meet the social needs of its citizens and achieve national developmental goals. The quality of life of large proportion of humanity during the coming century and future size of the global population will depend on how quickly the world can satisfy the current unmet need (UMN) for family planning (FP). When the population grows rapidly the natural resources fail to meet the demands, it also poses severe environmental and health problems in the coming century throughout large parts of the world. In less developed countries fast growing population is causing much human misery.

Over the past 30 to 40 years use of modern family planning methods has increased in developing countries which has lead to the fall in fertility rates. In spite of this, demand for the needs of family planning are unmet. A recent study has estimated that about 200 million women in the developing countries have unmet need for family planning. These needs have to be met so that unintended pregnancies would be fewer.

Everyday 400,000 conceptions take place around the world, out of that only 50% are intended pregnancies. Worldwide about 40 to 60 million abortions are estimated to be performed annually, out of it half are performed illegally and many
are unsafe, putting the life of pregnant women at risk. This is one of the indicators of high rate of unmet need for family planning\textsuperscript{7}.

In developing countries over 100 million women of reproductive age have unmet need for spacing or limiting their pregnancies. India has almost 31 million women whose need for contraception is unmet\textsuperscript{8}. Unmet need for family planning leads to unintended pregnancies. One of the consequences of unintended pregnancy is abortion. More than 50 million out of 190 million pregnancies worldwide each year end in abortions, many of these procedures are clandestine performed under unsafe conditions causing maternal mortality and morbidity\textsuperscript{9}.

The level of unmet need in a country is not static, but always fluctuates, depending on the interplays of two factors – fertility desire and contraceptive use hence unmet need is a moving target. Unmet need rises as more women want to control their fertility, and it falls as more women use contraceptives. Hence a high level of unmet need does not necessarily indicate programme failure, nor does a low level necessitate success, because some women in spite of having more children may not feel the necessity of controlling their fertility. Even though prevalence of unmet need for family planning is decreasing in many countries but due to increase in population the absolute number of women with UMN is also increasing\textsuperscript{10}.

Many factors are responsible for unmet need, factors responsible for increase in UMN are lack of knowledge about contraceptives, culture, beliefs, customs, parity, religion, cost of contraceptives, availability and accessibility of contraceptives, opposition from husband and family members, fear of side effects etc. Factors that are responsible for decrease in UMN are high level of education, better socio economic
status, good motivation force, support from husband and other family members etc. These factors vary in different countries and also in rural and urban settings\textsuperscript{11}.

Understanding the levels, patterns and the reasons for UMN for family planning is important in mapping strategies for addressing its adverse consequences. Reasons for UMN are specific to geographical areas depending on socio demographic and other factors, which helps the programme managers to address the selected specific problems in reducing the UMN.

International Conference of Population and Development (ICPD) states that, Government goals for family planning should be defined in terms of UMN, which in turn helps to provide good quality family planning services (UN 1994). ICPD 5\textsuperscript{th} conference called for total reduction of UMN for family planning by 2015.

One of the immediate objectives of Reproductive and Child Health programme (RCH) is to address the UMN for contraception. Medium term objective is to bring the total fertility rate to replacement level (2.1) by 2010. Long term objective is to achieve a stable population by 2045\textsuperscript{12}.

Although broad national strategies must continue to be evolved, there is desperate need to evolve appropriate state specific strategies to meet the UMN in each state of a country. Further each state needs to evolve region specific, district specific and block / Panchayat level strategies in order to reach out household levels\textsuperscript{13}. Because UMN for contraception varies substantially according to the demographic and social characteristics of women, estimation of covariates of UMN will enable the identification of women with greatest need, which helps programme managers to formulate targeted strategies for reducing the UMN for contraception by judicious use of resources.
Introduction

According to standard Demographic and Health Surveys (DHS) definition, women with an “Unmet need for family planning” include all fecund women who are married or living in a consensual union, hence presumed to be sexually active, who either do not want any more children or who wish to postpone the birth of the next child for at least two years but are not using any method of contraception. The unmet need also includes pregnant women whose present pregnancies were either mistimed or unwanted, similarly women who have recently given birth (in the last 6 months, who are considered as amenorrhoic women) are considered to have unmet need for FP if their last birth was mistimed or unintended\textsuperscript{14}. Unmet need for family planning is the discrepancy between individual’s contraceptive behaviours and their stated fertility preferences. An estimate calculated in the year 2000, showed that about 105 million married women in developing countries had UMN for family planning\textsuperscript{15}.

In India data on UMN is available through National Family Health Survey (NFHS), District Level Household Survey (DLHS), these surveys do not include pregnant and post natal amenorrhoic women while estimating UMN because these women are temporarily not in need of contraception. These surveys include women with undecided intention for child bearing as having UMN for spacing; Some surveys have shown that such women did land up giving birth to children within one or two years, hence they cannot be included in UMN group. There is also controversy in deciding whom to consider as amenorrhoic women (post natal), some authors include up to 6 months after the delivery, some till MW get their menstrual cycle after delivery, some till they begin their sexual activity. According to Charles Westoff pregnant and amenorrhoic women with unplanned or unintended pregnancy or child birth are included in the UMN group, because their pregnancy / recent child birth was
unintended and these women are of proven fertility and soon would require contraceptives. World Health Organization and Demographic and Health Survey (DHS) also include pregnant and amenorrhoic women with unintended pregnancy / child birth while estimating UMN for FP. There is variation in estimating the prevalence of UMN for FP which makes comparison difficult across the world because of different definitions, as UMN for FP is one of the indicator for Millennium development goals, uniformity should be maintained.

Tubectomy being the major contraceptive method used by women especially in rural areas after achieving desired number of children, without using temporary method to space the children. Frequent pregnancies are detrimental to the health of mother which may lead to abortion, preterm delivery, postpartum haemorrhage and it may also cause neonatal, infant mortality. About 30% - 40% of women opt for tubectomy after having more than 2 children, hence couple protection rate may not be a good indicator to assess FP performance of a country, instead UMN for FP would be a better estimate of contraceptive need. Apart from NFHS and DLHS, studies have been done using either lesser samples or non representative sample, lacking generalisability of the study.

UMN for FP is a valuable concept that is widely used for advocacy in developing family planning policies, their implementation and also for monitoring of Family Welfare programme worldwide. Hence the present study had been undertaken to know the magnitude of UMN for family planning among married women residing in a rural community by using standard DHS definition of UMN for FP and also to know the factors responsible for the unmet need for FP and help women make decision regarding their fertility. The results of this study definitely contribute in
planning specific strategies to reach women with UMN for FP which along with lowering the unmet need for family planning also strengthen the existing programme.