REVIEW OF LITERATURE

Literature review is done under following headings:

- Problems of uncontrolled population growth
- Government efforts in controlling the population growth in India
- Prevalence and determinants of contraceptive use among married women
- Unmet need for Family Planning among married women is dealt under following headings -
  a. Concept of unmet need for Family Planning
  b. Extent of unmet need for Family Planning
  c. Determinants of unmet need for Family Planning
  d. Strategies to address the unmet need for Family Planning
Problems of uncontrolled population growth

After getting independence in 1947, there were many challenges the country had to face like wide spread poverty, illiteracy and burden of diseases; to add to all this, uncontrolled fertility diluted the efforts done to improve socio economic status of the people. The problem of population growth was visualised quite early by the planners, political leaders and administrators. Until 1921 the population growth was not much, but then onwards it started increasing faster and from 1961 – 1981 it reached the stage of population explosion\(^{17}\). According to 2011 census the population was 1.21 billion, even though significant reduction in the growth rate of the population was registered\(^{18}\).

Population Growth depends upon three important factors; they are mortality, fertility and migration. It is very difficult to predict about migration and its contribution to population size, which is also negligible. Crude death rate declined in India from 30 per 1000 in the year 1941- 1951 to 10 per 1000 in 1991-2001, as of now it is 7.48 per 1000 population. Life expectancy has increased over the years presently it is 65.77 years for men and 67.95 years for women (Census 2011 data), due to improved medical care, socio economic development and other reasons, life expectancy is increasing which adds to population growth. The total fertility rate was 6.5 births between 1941–1951 and it became 3.7 births during 1991 – 2001, but it has fallen from 3.8 in 2000 to 2.8 in the year 2010, may reach close to replacement level by 2025. Reduction in population growth or zero growth of population requires multi pronged approach to reduce fertility rate to replacement level that is 2.1. By 2025 India’s population would be equal to that of China’s. But India’s population would still be growing by 1% per annum in spite of achieving required level of fertility. By
2025, about 40% of people in India would be living in Urban area, which will increase pressure on urban amenities.\textsuperscript{17}

The phenomenal increase in the population in the last 5 decades along with rapid industrialization and high rate of urbanization, has created tremendous pressure on natural resources including land, air and water which has lead to environmental pollution growth of urban slum population contributing to urban poverty high morbidity and mortality. Poverty is said to be both cause and effect of environmental degradation, as they depend on natural resources for their survival, like use of forests for food and fuel, ponds and rivers for water etc. Hence there will be over exploitation of natural resources.\textsuperscript{18}

**Government efforts in controlling the population growth in India**

Within India, Karnataka was the first state to start Government sponsored family planning clinics in Bangalore and Mysore as early as in 1930. Series of activities were initiated by various organisations after independence. The Indian Army introduced family planning in its Health and Welfare Organisation in 1949. In Bombay Family Planning Committee was established in 1949, which was later named as Family Planning Association of India. Growth of the population in India made the Government of India to initiate family planning programme as a National Programme during the first five year plan. In this plan under the Health panel a subcommittee on population growth and Family Planning was appointed. Family Planning programme was started as modest programme in 1952, mainly it was a clinic based service\textsuperscript{15}. With the adoption of the family planning programme as a national programme by the Government of India in 1952, the programme became part of the developmental activities of the state with the establishment of several Primary Health Centres (PHCs)
and sub centres(SC). As observed elsewhere in the country, as per NFHS 3 data, fertility rate declined to 2.7 in India but in Karnataka also the fertility rate declined to 2.08 since the inception of the family planning programme in the state.\\n
By the end of the second five year plan reasonably good clinical service facilities came to existence in the country. The population growth continued, planners decided to revise the approach from clinic based to extension approach. Extension approach included giving education to people regarding family planning at their doorstep. This plan was launched in the third five year plan. Lippes loop was introduced in the programme as a newer strategy to control fertility. Various conventional contraceptives were also made available to the people free of cost. In this period incentives were introduced for Intra uterine Contraceptive Device (IUCD), Tubectomy and Vasectomy acceptors, to meet the cost of drugs, dressings etc. Even doctors and promoters were also paid incentives. In 1966-67 Family Planning programme was made as centrally sponsored programme with 100% assistance from central Government for both recurring and non recurring expenses. Many voluntary organizations working in the field of family Planning were given grants of about rupees 50,000, either to start or to continue the work and it was the responsibility of the state government to supervise their work. A new Department of Family Welfare was created in the Ministry of Health, and the Department was named as Ministry of Health and family Welfare. Ministry of Health advised Medical Council of India (MCI) to include the subject family Planning in the MBBS curriculum and advised all the Universities to include the same from the year 1967. Health workers were given time bound targets to achieve the number of sterilization operations, incentives to the clients also helped to make up for loss of wages and system of granting special casual leave to workers undergoing sterilization was started.
In the fourth plan also family planning was made central sponsored programme. Along with stepping up of sterilization and IUCD insertion, emphasis was also was given to widen the acceptance of oral and injectable contraceptives. To improve the acceptability of contraception, maternal and child health services were integrated with Family Planning services. In fifth plan nutrition programmes were integrated with Family Planning programme and Vertical Family Planning programme workers were converted into multipurpose workers to emphasize Family Planning motivation work.

In the fifth plan aim was to reduce birth rate to 25 per 1000 population, by the end of sixth plan. Again emphasis was on integration of family planning services with other health services, MCH and Nutrition services and provision of health education using audio visual media. Minimum needs programme was introduced in this period which gave importance to uniform availability of public health facilities and family planning was one of such services. A major Policy declaration was made by then Health minister Dr. Karan Singh that was known as National Population Policy to control the population growth. A working group on Population Policy was appointed for suggesting feasible and operational level of achievements for the plan and also suggestions for the basis on which population policy should be planned subsequently. In the period 1978-79 and 1979-80, family Planning Programme was renamed as “Family Welfare Programme”. Emphasis was laid on the voluntary acceptance of the Programme.

In the sixth plan stress was given for making Family Planning programme as people’s movement. It was made clear that there was no role of disincentives in Family Planning. Role of education of females, extension education, involvement of
Voluntary Organizations and Panchayat Raj were emphasized. Family Planning was included as one of the component of 20 Point Programme and National Health Policy was also adopted by Government of India in 1983.

In the Seventh Five year plan, the Health Policy targeted Net Reproduction rate of one by 2000 AD. Targets were given to achieve desirable couple protection rate and for each contraceptive methods. Stress was not only given on improvement of the programme and infrastructure but also on increasing its acceptability. About 554 Post Partum Centres were sanctioned in medical Colleges, District Hospitals and Maternity Hospitals to enhance Family Welfare Programmes, financial support was also given to Voluntary Agencies, Municipal Corporation Hospitals for sterilization beds.¹⁷

The rate of population growth during the eighties, though marginally slower than what it was during the seventies, was still around 2.1% per annum, which implied an addition of around 18 million to the nation's population every year. It was predicted that the country would cross 1 billion mark by the year 2001 at this rate of growth. If not halted, it would never be possible to render social and economic justice to millions of our masses. Hence Eighth Plan had to make vigorous efforts to contain the population growth.

Current family planning efforts, through National Population Policy 2000, provided framework for achieving two objectives of population stabilization and promoting reproductive health within the wider context of sustainable development. The tenth Five year plan outlined efforts in three broad areas, meeting unmet need for contraception, reducing infant and maternal mortality and enabling families to achieve
their reproductive goals. To address the issue of unmet need focus has been on adolescent reproductive health, unintended pregnancies and access to safe abortion\textsuperscript{20}.

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

One of the immediate objectives of Reproductive and Child Health programme (RCH) and 11\textsuperscript{th} five year plan is to address the unmet need for contraception. Medium term objective is to bring the total fertility rate to replacement level i.e., 2.1 by 2010. Long term objective is to achieve a stable population by 2045\textsuperscript{12}.

Prevalence and determinants of contraceptive use

As per 2011 UN data the overall prevalence of modern contraceptive was < 20\% in many South African countries, India it was between 20 -50 \%, European continent it was between 50 – 70\% and in American and Australian continent it was > 70\%. Prevalence of Tubectomy was 19\%, IUD 14\%, OCP 9\%, Male condom 7\%, Injectables 4\%, Vasectomy 2\%.

Demography and Health Survey done in Vietnam in the year 1997 showed that 55.8\% of women were using modern contraceptive methods like oral contraceptives, Condom etc., 19.5\% were dependent on traditional contraceptive methods like safe period, abstinence, etc. Use of modern contraceptives was more in rural area (56.2\%) compared to urban area (54 \%). On the contrary use of traditional method was more (25.4\%) in urban area compared to rural area (18.2\%). This study also showed that
about 73% of women lived within 1 kilometre of a facility providing family planning services; not all methods were available for clients like injectables etc. IUCD was popular both in rural and urban area, but condom was more popular in urban area. Source of family planning service in urban area was mainly community Health Centre (87.9%), Medical shop (84.3%), Health worker (41.9%), Private doctor (47.2%) and Programme worker (36.8%), least was from mobile van. In rural area Community Health Clinic (47 %), Drug store (37.5%), Health worker (39.4%), Programme worker (25.4%), least was from mobile van. This study highlighted that Health worker and Programme worker’s role should be improved in distributing contraceptives. This study also showed that accessibility was positively associated with use of contraceptives; women aged between 25 – 34 years, with more education and having at least three children were more likely to use contraceptives when services were accessible. The limitation of this study being considering convenient sampling method and choosing households nearer to the health centre. They have assessed the accessibility and not the quality of service received by the clients.  

A cross sectional study conducted in Tajikistan in the year 2003-04 revealed that 35.8% of married women were using contraceptives, out of it 27.7% opted for permanent method of contraceptives where as 8.1% were users of temporary method. 3.5% did not know about the method, 38 % knew 2-3 methods, 44% knew 4-6 methods and 14.5% knew about 7-8 methods. Despite good knowledge use of contraceptives was very low. The main reason for non use was not having ideal number of children. With negative child bearing motivation there was increase in the use of contraceptives, also with more number of known contraceptive method use increased. This study also showed that women who had abortion in the past had better knowledge of contraceptives compared to those who never had abortion, because
undergoing abortion is a sign of women’s intention to control her fertility. Younger women (15–24) had less knowledge regarding contraceptives. Women residing in urban area had better knowledge about contraceptives. 80% of women who had 1-11 years of schooling knew about 1-6 methods, in contrast 80% of women with secondary and tertiary education knew 4 - 8 methods. Higher proportion of women who were working knew about 7-8 methods of contraceptives compared to unemployed women.

In a study conducted in rural area of Pakistan in the year 2005 revealed that 81% of married women aged between 15-45 years had heard about FP methods. 53% of them were using one or the other FP methods, out of which 33.9% were using condoms, 22.6% had undergone tubectomy, 18.8% were using injectable contraceptives, 13.2% IUCD and 11.3% OCP. About 76% had positive attitude towards FP. Use of temporary method and also use of injectable contraceptive was more compared to other studies. 64% of married women got information about FP methods through mass media, 21% from health worker, 15% through social circle.

According to a study done at Patiala in the year 2008-09, 75.3% were using modern contraceptives. Most predominantly used method was tubectomy i.e., 34.7%, followed by condoms 30.5%, OCP 5.8% and IUCD 4.3%, none of the husbands opted for vasectomy. This study found out that women in the age group of 35 -39 were not using temporary contraceptives, among tubectomy users 89.5% were in the age group of above 35 years. Contraceptive use was more among Sikh (82.1%), among Hindus it was 72.84% and among Muslims it was 61.2%, this difference was statistically significant. This study also revealed that sterilization was popular among Hindus and Sikh but condom was popular among Muslims, such knowledge will help the health
care workers to satisfy the demands of the people by providing uninterrupted supply of contraceptives. This study also showed that contraceptive use was more among women who were literates, in the age group 35 – 39 years, whose husbands were in service, who had more than 3 children or having at least one son.

In a task force study conducted by ICMR in rural districts of Uttar Pradesh (UP) and Tamil Nadu (TN) showed that prevalence of contraceptive use was 22.7% in UP and 51.4% in TN. Average age at marriage was 16.7 + 2.8 in UP and 18.3 + 2.7 in TN. In both the states tubectomy was the preferred method, mini lap was more in UP while laparoscopy was more in TN. This study showed that temporary methods were used by less than 2% of married women.

According to National Family Health Survey 3, conducted in the year 2005 – 2006 prevalence of current use of modern family planning methods among married women aged between 15 – 49 years was 64.7% for rural and 59.2% for urban area respectively. Among married women of rural area female sterilization was most popular method, out of total 64.7% of contraceptive users, maximum i.e., 62.1% opted for tubectomy, 1.4% opted for IUCD, 0.8% Condom, 0.7% OCP and only 0.1% opted for Vasectomy. In urban area again female sterilization was opted by more women (49.9%), prevalence of IUCD use was 5.7%, Condom use was 4.0% and OCP use was 1.7%. Use of temporary method was more in urban area compared to rural area.

A study conducted in East Delhi among married women belonging to higher middle, lower middle and lower socio economic group showed that 65.9% of women in higher middle class used contraceptives and about 56% in lower middle and lower class. Among all the methods condom was the most popular method (33.4%),
followed by tubectomy (27.3%), OCP (16.6%), and IUD (15.7%), none had opted for Vasectomy. In this study temporary method of contraceptives were preferred by women compared to permanent method and about 90% of women in the study group knew about contraceptives, which made them use temporary and permanent methods.

A study was conducted in rural and urban area of Uttar Pradesh to know the reasons for not practicing family planning; these reasons were classified into two categories, they were programmatic factors and non programmatic factors. Programmatic factors were awareness and knowledge of family planning methods, misconceptions about family planning methods, accessibility to contraceptive services. Non programmatic factors were husband’s apathy towards contraception.

In a cross sectional study conducted to know the epidemiological correlates of contraceptive prevalence in rural population of Dehradun District in the year 2003-04 showed that out of 2778 married women aged between 15 – 49, about 49.86% were practicing FP methods at the time of survey. Most common method was tubectomy (28.88%), among spacing methods, Condoms, OCPs and IUDs were used by 11.68%, 4.78% and 1.71% of couples respectively. Contraceptive use was maximum in the age group 35 – 39 years, it was more among Sikhs (63.70%), followed by Hindus (55.70%) and low among Muslims (25.65%). Among Hindus tubectomy was more popular and among Muslims Condom was more popular. This study also revealed that rate of use of contraceptives increased with education, as it was 46.17% in illiterates and 56.93% in those educated up to high school. More women whose husbands were in Government job were using contraceptives compared to those whose husbands were labourers, but this difference was not statistically significant. Only 6.18% of
women with no living sons used contraceptives, where as 63.47% of women with 3 sons used contraceptives, this difference was highly significant; only 1.2% of married women who did not have sons accepted permanent method, 50.77% of women who did not have child loss used contraceptives when compared to 36.84% of women who had suffered 2 or more child losses. The conclusion of this study was younger age of women, illiteracy, Muslim religion, no living son in the family and experience of child loss were associated with lower use of contraception.  

In a cross sectional study conducted to know the awareness and practice of temporary methods in a rural block of Haryana in the year 1999-2000, revealed that 52% were using FP methods; out of them about 27% had undergone tubectomy and 0.35% vasectomy, 13.3% were using IUCD, 9.1% Condoms and 2.6% OCPs. 25% knew only one method, 31% two methods and 44% three methods. Among users of FP 70% knew about 3 spacing methods, where as only 35% of non users knew 3 methods. Maximum number of users of spacing methods were in the age group 25-29 years (32%), as the age increased users of spacing method decreased. More number of women having 1 or 2 children used spacing methods (72%), women who had no children did not use FP methods. This study showed that concept of using contraceptives immediately after marriage to postpone 1st child birth was not in practice. As the level of education increased for both husband and wife, the use of spacing method also increased. In this study they did not attempt to find association between the variables associated with use of contraceptives among married women.  

In a study conducted to find the profile of never users of contraceptives in an urban slum of Delhi, in the year 1997, showed that more number of never users were illiterate (65%) compared to ever users (35%), more number of ever users were
Hindus and employed compared to never users. This study showed that maximum number of never users belonged to lower class (64%) as compared to ever users (36%). 75% of never users said that, because of fear of side effects they did not use FP methods, 44% due to ignorance about the use of the methods, 32% due to religious reasons, 26% lack of knowledge about contraceptives, 14% opposition from family members and 9% opposition from husband. Most of the never user’s knowledge about fear of side effects was more for IUCD compared to other spacing methods. About 70% told that loss of wages was the main problem for undergoing sterilization, about 50-60 % feared of the procedure, anaesthesia and pain abdomen. This study also showed that, as the number of contraceptives methods known by the participants increased even their use also increased, 4% of MW used contraceptives who knew about 2 methods and more than 30% of MW who knew about 3 to 5 methods used contraceptives. Hence giving information about the contraceptive methods, their use and provision of wide range of contraceptives and information about incentives would help in increasing the use of FP methods\textsuperscript{31}.

In a study conducted to know the profile of acceptors of no scalpel vasectomy (NSV), attending NSV clinic in Delhi found that 50% of NSV acceptors were in the age group of 36-40 years, 95% of them were Hindus, only 1.6% had no education and 15% were belonging to lower socio economic class, about 56% of them belonged to joint family. Out of these users 90% had used one or the other method of FP in the past; 47% had used condoms, 40% and 11% of wives had used Copper T and OCP respectively, 2.7% had used more than 1 method. 20% of acceptors said, they opted for NSV on the advice of doctor, 6% said ill health of wife, 2.4% felt NSV was more easier than tubectomy and 1.6% said wife was not ready to undergo tubectomy. This
study showed that role of public health nurse and social worker in motivating these patient was substantial (88%)\(^ {32} \).

A study done in Rajasthan to know the source of information regarding contraceptives among people residing in poor, medium and better performing villages as far as FP programme was concerned; the study showed that, inter personal communication (IPC) was most effective method (40%), followed by Radio (17%), Television (11%). This study suggested the use of IPC effectively by health workers to give correct information about FP methods, so as to motivate couples to use both spacing and permanent methods of FP\(^ {33} \).

In a study conducted in an industrial township of Greater Bombay in the year 1992, showed that 84.2 % of married women were ever users of contraceptives, out of these 75.5% were current users, about 15.8% never used any contraceptives. Out of the current users, 47.9 % were users of terminal method. This study also showed that 11.3% were practicing Rhythm method. Contraceptive competence (ability to use a particular method efficiently) was associated with higher education, high level of contraceptive knowledge and inter spousal communication in this study. Contraceptive prevalence rate was more in this study compared to National level. The odds of preference for contraceptive method increased with contraceptive competence, it was (3.1153) for condom, for IUCD (2.0218), least was for rhythm method (1.3799). The odds of choosing Rhythm method or condom increased for those who were apprehensive about the side effects of other methods\(^ {34} \).

In an article on changing FP scenario in India in the year 2004, revealed that contraceptive prevalence rate varied among states, from less than 30% in Bihar, Meghalay and Uttar Pradesh to more than 60% in Delhi, Haryana, Kerala, Punjab,
Maharashtra and West Bengal. Between NFHS I and II about 18% of increase in use of contraceptives in most of the states. Cafeteria method had been in theory, but in reality health worker promoted non-reversible method especially female sterilization. A review of contraceptive behaviour by adolescents in Asian region showed that India was the only Country where tubectomies were the most widely used method. Use of male methods was very scarce, as men are excluded from most of the surveys; one in 10 couples were using male/couple dependent methods (abstinence, rhythm method). Discontinuation rate was more among younger women (15-24 years) compared to older women. Especially younger women from North Eastern states felt access to contraceptives was difficult.

In a study conducted to know the socio-cultural determinants of methods of contraceptive choice in Goa and Kerala showed that, CPR was high in Kerala compared to Goa, in spite of being one of the forward state CPR was lower in Goa. Temporary method and traditional method users were more in Goa (36%) and less in Kerala (24%). Median age at marriage was more than 20 in both the states. In both the states use of temporary method declined as the age advanced from 14% in 15-24 age group to 4% among 40-44 years. Use of permanent method increased from 22% in 15-24 year age group to 48% in the age group 24 to 29 years and 57% in 35 to 39 years, but the rate was 48% among the age group 40-44 years. In Kerala 87% to 92% used contraception, if they had 3 or more children. In Goa women with at least one male child preferred sterilization; about 40% of women in Kerala with no male children opted for tubectomy but only 6% in Goa opted for tubectomy. This study shows the effect of male preference could have an impact on fertility.
In a study conducted in five villages and a town in South Arcot District of Tamil Nadu during 1993 found that almost all participants irrespective of their economic status knew about contraceptive methods. 97% of the respondents in rural area knew about tubectomy, laparoscopy and vasectomy, 100% of urban rich knew about tubectomy, 76%, 68.5%, and 63.8% knew about condoms, OCP and IUCD respectively. About 89.3% had positive attitude towards the use of contraceptives. 15.5% of rural poor and 9% of urban poor disapproved contraceptive use, where as 10.1% of rural rich and 2.2% of urban rich disapproved contraceptives. As far as acceptance of contraceptive method was concerned, it was more among poor compared to rich both in urban and rural area. The reason could be lucrative amount of incentives paid after accepting family planning method. Among the acceptors of family planning methods, 39.4% were users of permanent method. Most of the acceptors were women. Acceptance rate improved with the age of the woman, peak being 30-34 years.

A cross sectional study conducted in different areas of Manipur State showed that the overall prevalence of contraceptive use ranged between 61%, to 64% amongst Hindus, 17 % in Muslims. Use of IUCD among married women ranged from 8.3% to 36.5%, tubectomy from nil % to 25.8%, male sterilization from nil % to 2.5%, Condom use from 3.1% to 16.3%, OCP from nil to 19.5%.

An analysis of NFHS II data for Southern states of India was done to know the son preference and use of contraceptives showed that, in Karnataka mean number of sons before opting for terminal methods was 2.34, in Andhra Pradesh (AP) it was 2.27, Kerala 1.96 and Tamil Nadu (TN) 2.02; for use of temporary methods mean number of sons was 1.52, 2.01, 1.45 and 1.45 in Karnataka, AP, Kerala and TN.
respectively. This study showed that as the number of sons increased use of permanent methods also increased.

In a study conducted in Dakshina Kannada district in Karnataka state showed that, 70.7% of the women with 3 or more children accepted permanent method of contraception and only 29.3% with 1 or 2 living children accepted temporary method, which was statistically significant. This showed that couples prefer to adopt an irreversible and permanent method after they have reached the desired family size and at older ages and at higher parities. Non-use of contraceptives was more in Muslim women (81%) compared to Hindu (62%). This study showed that despite the low couple protection rate, the fertility rate was low in this community, author said that reason could be increased age at marriage, more number of women in this study were in the peri-menopausal age group.

A study done in 1990 in rural areas of Belgaum and Gulbarga District revealed that Couple protection rate (CPR) was 40.6% among women, reversible method use was very less. Average number of living children borne by contraceptive users was 3.9. Most of the community leaders like Panchayat members etc, knew about terminal methods, 73 – 90 % of them said they knew about reversible methods also on probing. About 25 % of them did not know about source of supply of reversible contraceptive methods. The community members felt that side effects and failure rate of contraceptives were the reasons for the non-use of temporary methods of contraception.

According to District Level Household Survey- 3 for Belgaum District prevalence of contraceptive use among married women was 62.8 % for rural area and 59.2 % for urban area. Tubectomy was popular method among both rural and urban...
area that was 59.8% and 48.2% in rural and urban area respectively. In urban area next popular method was IUCD (3.7%), followed by Condoms (3.0%), OCP (1.9%) and vasectomy 0.1%. In rural area also next popular method was IUCD (1.1%), OCP and Condom both 0.6% and Vasectomy 0.2%. The data from Karnataka showed the need for enhancing the popularity of temporary methods of contraception.

Unmet need for Family Planning

Concept of unmet need for family planning

One of the important issues in population control has been estimation of the extent of unintended fertility and also to measure the extent of unsatisfied demand for fertility regulation. This helps in developing strategies to reduce fertility and ultimately stabilize the population. Hence in early 1960s surveys on knowledge, attitude and practice (KAP) regarding Family Planning were conducted in various parts of the world. These surveys showed that in all countries discrepancy existed between women’s reproductive preferences and their contraceptive preferences, this was called as “KAP gap”. These women wanted to control their fertility but they were not using contraception. This became an important milestone in the development of policies for population control. In 1972 based on women’s responses to three KAP studies conducted in Taiwan, Ronald Freedman and colleagues first identified specific group of women who were expected to adopt contraception as they did not want to have more children, but in reality they were not using any contraception. They found that in many countries there are many women who belonged to this group. For such behaviour they coined the term “discrepant behaviour”. In United States Leo Morris also found significant gap between the need for family planning and its use. Followed by this world fertility survey was conducted between 1972 – 1984 in 41
developing countries. With the help of first set of World Fertility Survey data from 5 Asian countries Charles Westoff coined a new word “Unmet need for Family Planning” for KAP gap. In the first analysis Westoff excluded pregnant and amenorrheic women from the analysis of unmet need for family planning thinking that they do not have immediate need for contraception. Later Westoff and Pebley developed several definitions for Unmet need, finally enlarged to cover fecund women who desire to space births as well as those who would like to limit their births, and also pregnant and amenorrheic (Post natal women- within 6 months of delivery) women whose current pregnancies or most recent births were mistimed or unwanted.

Later on Demographic and health surveys included unmet need concept in their surveys, which helped in the measurement of trends of unmet need for family planning in different countries. In 1990s unmet need for family planning was established as core concept in the family planning and population policy literature. This helped to accelerate the expansion of family planning services.

Unmet need concept is one of the frequently used indicators for monitoring the family planning programmes; it was included in the Millennium developmental goals to improve the maternal health. Estimation of some other indicators like couple protection rate, the method mix of contraceptives, sources of contraceptive supplies and reason for non use of contraceptives in addition to unmet need for FP would help in planning of the programme.

According to WHO standard method of computation of unmet need, recommends inclusion of women (married or in union) who are not using contraception, are fecund and desire to either stop childbearing or postpone their next birth for at least two years and pregnant women whose current pregnancy was
unwanted or mistimed and women in post-partum amenorrhoea who are not using contraception and at the time they became pregnant who wanted to delay or prevent the pregnancy.\textsuperscript{45}

In District Level Household and Facility Survey (DLHS), unmet need is estimated using two definitions, in both pregnant and amenorrhoeic women are not included.

Definition I:

Unmet need for spacing includes the proportion of currently married women who are neither in menopause or had hysterectomy nor are currently pregnant but want more children after two years or later and are currently not using any family planning method. The women who are not sure about whether and when to have next child were also included.

Unmet need for limiting includes the proportion of currently married women who are neither in menopause or had hysterectomy nor are currently pregnant and do not want any more children but are currently not using any family planning method.

Definition II:

Unmet need for spacing includes fecund women who are neither pregnant nor amenorrhoeic, who are not using any method of family planning, and say they want to wait two or more years for their next birth. It also includes fecund women who are not using any method of family planning, and say they are unsure whether they want another child or who want another child but are unsure when to have the birth.
Unmet need for limiting includes fecund women who are neither pregnant nor amenorrhoeic, who are not using any method of family planning, and who want no more children (These definitions are similar to NFHS-3)\textsuperscript{46}.

Westoff argued that pregnant and post-natal amenorrhoeic women may soon be in need of contraception. Though post-natal amenorrhoeic women might not be at risk of pregnancy at the time of survey they might soon return to a state of at risk within one year. If these women say their present pregnancy / birth was mistimed or unwanted should be considered as having UMN for FP. These women would need contraceptive services soon after their fertility returns, by excluding them we may not know the proportion of unintended pregnancies and if no action is taken to address their needs again they may land up in having unintended pregnancies.

Nortman and Bongarts proposed a solution for the problem of inclusion or exclusion by estimating upper and lower limits for the level of unmet need. Upper level includes pregnant and amenorrhoeic women and lower level excludes them.

Regardless of the way unmet need for FP was defined or measured, there is a consensus that infecund women should be excluded. These women who would not be at risk of becoming pregnant because in them contraceptive use would have no demographic impact hence they should not be included in the numerator of UMN calculation.
Globally the proportion of married women with unmet need declined from 19% to 17% in 1990s, but the number of women with unmet need has remained the same because of population growth. Over the period some countries experienced
small decline in unmet need (Haiti, Rwanda), in some countries there was an increase in unmet need (Mali, Senegal and Uganda), which was due to the increasing tendency among married women to control their fertility, who either wanted to postpone or limit childbearing⁴⁷.

According to DHS 2000 UMN in Bangladesh, total UMN was 15.3% out of it, UMN for spacing was 8.0% and for limiting it was 7.3% by using conventional method. In this study they tried to estimate unconventional UMN by including Health risk UMN which included MW with 3 or more children, with short birth interval, too young non users and women >35 years and non users. Poor contraception UMN, which included, limiters using less effective methods (Condom), or traditional methods without correct knowledge, pregnancy occurring due to contraceptive failure, by this method UMN for spacing was 15.3% and for limiting 18.8% making total UMN 34.1%⁴⁸.

According to population reports based on findings from 45 DHS, in developing countries millions of women had unmet need, to the extent of one in five married woman was considered to be having unmet need. In India about 31 million women had unmet need followed by Pakistan with 5.7 million, Indonesia & Bangladesh 4.4 million each, Nigeria 3.9 million etc⁴⁹.

In a study done in the year 1996 to know the prevalence of UMN for FP in different regions showed that, UMN among married women was 26% in Africa, 15% in East and North Africa, 18% in Asia except China. 17% in Latin America and 19% in all developing countries except China. In African continent it was different in different countries, lowest being Zimbabwe (15%) and highest being Rwanda (37%). In Near East and North African region lowest was in Turkey (11%) and highest was
in Egypt and Jordan (22%). In Asian region lowest was in Thailand (11%) and highest in Pakistan (32%). In Latin American region lowest prevalence of UMN was in Colombia (12%) and highest in Guatemala (29%). This study showed wide variation in the prevalence of UMN for FP among married women belonging to different regions of the world and also variations within the different regions of the countries\textsuperscript{50}.

Demographic and Health survey was conducted in the year 2000, its analysis was done to know the levels of unmet need in low and middle income countries. Unmet need was higher for limiting than spacing in all regions except Sub Saharan Africa, where UMN for spacing was twice that of limiting. Range of UMN was from 11% in Middle East and North Africa to 26% in Sub Saharan Africa\textsuperscript{51}.

A study done in Chitwan, Nepal in the year 1999 showed that about 31% of women in the reproductive age group (15-49) had unmet need for family planning. It was 18% for limiting and 13% for spacing\textsuperscript{52}. In another study done in Nepal in the year 2006 showed the prevalence of unmet need was 25%, out of it 9.5% was for spacing and 15.5% was for limiting. This study showed that to achieve replacement fertility, unmet need issue had to be addressed on war footings\textsuperscript{11}.

In a study done in the year 2003 at Awassa town, Southern Ethiopia among currently married women showed that, total UMN was 21.6%, for spacing it was 13% and 10.6% for limiting. The same study also was extended in peri urban area where the overall unmet need was 40%, out of it 32.7% for spacing and 8.3% for limiting. This study showed wide variation in the prevalence of unmet need in urban and peri urban area. In both these areas unmet need was more for spacing than limiting\textsuperscript{12}. The reason for high UMN in peri urban area could be poor health facility.
In a cross sectional study done to know the factors determining high level of unmet need for family planning among adult women at Lungwena in Ethiopia showed that 81.4% of women were not using contraceptives. Among them over all prevalence of unmet need was 32.37%, for spacing it was 14.25% and limiting it was 18.12% \(^{12}\). In this study UMN for limiting was more than spacing.

Demographic and Health Survey in Zimbabwe was conducted to know the trends in unmet need and the demand for Family planning from 1994 to 2006, which showed that UMN among currently married women was 14.9% in 1994, 12.9% in 1999 and 12.0% in 2005/6. Unmet need for spacing decreased from 9.2% to 7.3% and to 7.0% respectively in the year 1994, 1999 and 2005/6, but there was no much change for the prevalence of UMN for limiting which was 5.6% both in the year 1994 and 1999, decreased only to 5.0 % in the year 2005/6\(^{53}\). Such studies will definitely evaluate the existing programme and help to plan specific strategies to reduce UMN for FP.

A study conducted in the year 2001 in Dar Assalam, Sudan showed that about 30.7% of women had unmet need for family planning, it was for spacing and none of them had unmet need for limiting. This study was conducted among mixed group from different tribes and different parts of Sudan. Among pregnant women unmet need for spacing was 27.5% and in non pregnant it was 3.2%\(^{54}\). This study emphasized the importance of inclusion of pregnant women in the estimation of unmet need, otherwise this study would have under estimated prevalence of UMN.

A study done in Nnewi, South- east Nigeria in the year 2008 -09 showed that unmet need for spacing among pregnant women was 6.2% and for limiting 15.2%, giving total prevalence of 21.4%\(^{55}\). This study revealed that unmet need among
pregnant women was very high hence while assessing the magnitude of unmet need it is important to include pregnant women while estimating UMN for FP which also helps health worker to provide contraceptive services to them after delivery.

In a study conducted to know the unmet need in one of the provinces in Iran in the year 2005 showed that, unmet need ranged from 3.7% in Mazandaran rural area to 31.3% in rural Sistan, Balouchestan area. Among urban area, it was lowest i.e., 3.6% in Tehran city and highest (17.7%) in Urban Sistan Balouchestan. This study also showed that there was wide difference in the prevalence within the country and between Urban and Rural area.

A cross sectional study conducted in Iraq showed that, out of 1786 married women, 56.8% were not using contraception. UMN for spacing was 11.9% and for limiting 8.3% hence the total unmet need was 20.2%. This study showed more need for spacing than limiting.

A cross sectional study done in West Belessa Wordea, North Gondar of Amhara, Ethiopia to know the determinants of unmet need for contraception among married couples showed that unmet need was 39.5% among married women.

Unmet need for family planning is not static but always influx, depending on the interplay of two factors- fertility desires and contraceptive use. Unmet need is a moving target, it rises as women want to control their fertility and it falls as more women use contraception. Though the prevalence of unmet need is decreasing but the absolute number of women with unmet need is rising because of increasing population.

In a study conducted in rural area of Patiala in the year 2008-09 showed that out of 1123 married women, 24.67% were not using FP methods, total unmet need
was 13.98%, out of it UMN for spacing was 5.79 % and for limiting 8.19 %. In spite
of high couple protection rate (75.33%), unmet need for FP was 13.98 %. Unmet need
for FP among pregnant women was 1.25 % and among fecund women who were non
users of FP was 12.73 % 24. This study showed that just estimating couple protection
rate is not sufficient we must also estimate prevalence of UMN and the reasons for
UMN for FP24.

A cross sectional study conducted to know the prevalence of unmet need
among pregnant women attending Hospital at Chandigarh, showed that unplanned
pregnancies were reported by 54.8% of rural pregnant women and 21.7% of pregnant
women belonging to urban area. Unplanned pregnancies were more than two and half
times in rural area compared to urban area58.

A study conducted in Haryana, India in the year 2003 showed that unmet need
among married women was 17.5% and among their husbands it was 11%. This study
showed that many times women want to space or limit the births more compared to
their counterparts, hence male involvement in family planning is very essential and
also couple negotiation in deciding fertility reduces discrepancy 59.

In a study conducted in Uttar Pradesh and Kerala in the year 1994, to know the
level of UMN for FP among married women showed that in Uttar Pradesh it was 21%
and in Kerala it was 1.8%. This study also showed that there was wide variation in the
prevalence of UMN between states with better educated and least educated
population43. A study was conducted in Kolkata to know the unmet need for
contraception among married women of reproductive age attending immunization
clinic, showed that 23.1% had unmet need for family planning. This being a hospital
based study may have some bias as these women are not representative of particular
geographical area, or awareness regarding fertility control may be more among these women who are attending hospital as compared to those women who do not go to hospital to seek medical care.

In a study done in urban slum of South Maharashtra in the year 2010 showed a high level of unmet need, which was 45.1%, out of this 19.1% was for spacing and 26.0% for limiting. In this study unmet need was more for limiting compared to spacing. As this study was done in urban slum UMN was very high due to lack of properly organized health services.

In a study conducted to know about the extent of unwanted pregnancies among the adolescents, showed that overall prevalence of mistimed pregnancy was 18.8% in adolescents aged between 15- 19 years, which was 16.2% in early adolescents (15-17 years) and 21.8% in adolescents aged between 18-19. This study also revealed that 43.6% of literate adolescents’ pregnancy was mistimed as compared to 15.9% among illiterate adolescents. Also adolescents, who were not exposed to mass media had more number of mistimed pregnancy (41.5%) as compared to those who were exposed to mass media (17.5%) in one block. According to this study decision making power of women in the household did play a role in reducing UMN for FP but was not statistically significant.

According to District Level Household Survey 3, conducted in the year 2007 – 2008, unmet need for family planning was 14.8% for whole Karnataka state; out of it 7.9% was for spacing and 6.9% was for limiting for the age group between 15 to 49 years. The same survey showed that for Belgaum district total unmet need was 14.7%, for spacing it was 10.5% and for limiting it was 4.2%. Maximum prevalence for unmet need was found in Dakshina Kannada District with total unmet need being
26.7%, for spacing 9.7% and for limiting 17.0%. Least prevalence was found in Mandya District with total prevalence 7.7%, out of which 4.7% for spacing and 3.0% for limiting. This survey not only showed wide range of prevalence from 7.7% to 26.7% but also variation in the percentages for spacing and limiting. Gulbarga District showed maximum percentage of UMN for spacing where as Dakshina Kannada district had more number of married women with UMN for limiting, which was 17.0%. There is need for assessment of prevalence of unmet need by all the health centre to estimate the prevalence in the respective area and develop specific strategies to meet the need."
Determinants of unmet need for family planning

Conceptual framework to know the various reasons for unmet need

- Socio-economic factors
  - Residence
  - Educational status
  - Occupation
  - Religion
  - Exposure to mass media

- Family Planning factors
  - Knowledge of contraception
  - Discussion with Health workers about FP
  - Couple discussion about FP
  - Sources of information
  - Availability of FP services

- Demographic factors
  - Age
  - No. of living children
  - Age at marriage
  - Age at 1st pregnancy
  - No. of pregnancy wastage/ death of children

A study done in Iraq stated that, the reasons for unmet need for family planning are complex, various researches conducted in different part of the world since 1990 revealed a range of obstacles and constraints which come in the way of women’s desire to control their fertility.
According to National Population Council Secretariat Accra, Ghana, the reasons for unmet need differed depending on whether these women ever used contraception or not, among these again whether they intend to use FP method in future or not; because by categorising women into these sub groups and then knowing the reasons for non use would help programme managers to develop specific strategies to meet the needs. They classified the reasons into four categories, fertility related reasons, method related reasons, opposition to use and lack of knowledge. Fertility related reasons being infrequent sex, being menopausal, being sub fecund or infecund or wanting more children. These issues would be difficult to address through family planning programmes. Method related reasons being fear of side effects, lack of access, high cost, inconvenience of using a method, belief that the method interferes with body’s natural process. Opposition to use could be by themselves, by their husbands or in laws/ parents, others or religion. Under the category of lack of knowledge they included not knowing the contraceptive method or not knowing a source for a method. About 20% of women in this study, stated fertility related issues for non use of contraceptives. About 8 % and 12 % women said that post partum amenorrhoea and breast feeding were the reasons for non use respectively, 10% women wanted more children. 20% of women said health concern and fear of side effect as the reason for non use of contraception. Women with UMN for spacing quoted this reason than women with UMN for limiting. Cost of contraceptives, lack of access and inconvenience to use were not the important causes of UMN for FP. There was very little variation among ever users and never users of FP method. About 15% of women cited opposition as the reason for non use; never users cited this reason more than ever users. Opposition to use was almost similar for women with UMN for limiting as well as spacing. Majority of women said lack of knowledge as a reason for
non use, there was no difference between women with UMN for spacing or limiting as far as lack of knowledge about FP method was concerned. The reasons given by women for not using FP method in future were health concern and side effects of the method, these reasons increased over a period of time from 1988 to 1993 and to 1998\textsuperscript{63}.

Main reasons for unmet need for family planning identified by DHS conducted in many countries since 1990, were classified into three categories; lack of information; opposition to family planning; not deciding about future childbearing. Other reasons included were, fear of side effects, little exposure to the risk of pregnancy and non availability of contraception. The mix of these reasons differed for unmet need for spacing and limiting. The same survey done in Philippines especially in manila and other rural areas showed that fear of side effects and their husband’s fears were the main reasons for unmet need. In Nepal women with unmet need were not using contraceptives because of poor response at the family planning clinic, also there was opposition from their husbands for family planning and non users had less number of relatives who were using contraceptives when compared to contraceptive users. In Dang District there was difficulty in accessing contraceptives, women did not know who gave information and distributed contraceptives, others felt the need of having more than desired number of children because of high infant mortality. In Guatemala women restrained from contraceptives because of side effects, some had experienced dissatisfaction with particular method. In India in two communities of Tamil Nadu women felt that unmet need for family planning was due to lack of contraceptive choices, emphasis was more on female sterilization, owing to the side effects many husbands opposed use of temporary methods of contraception\textsuperscript{64}.
In a DHS conducted in Kenya to know the trends and determinants of UMN for FP showed that fertility related reasons like, wanting more children, desire for male children cited during 1993 was 31%, which reduced to 11% in 1998 and then to 9% during 2003 survey. Method related reasons like ignorance about the methods, non availability, fear of side effects etc for non use increased from 41% to 46% and 54% in 1993, 1998 and 2003 respectively. Opposition to use the method increased from 24% in 1993 to 38% in 1998 and marginally reduced to 37% in 2003. In the age group between 15-19 years, opposition for the use was more, for the age group 20-24 both opposition for the use as well as method related reasons were more, for the age group above 24 years method related reasons were the cause of non use of contraception. This study also showed that with increase in age, UMN decreased (by 47% among 25-29 years compared to women in the age group 15 -19 years). UMN was less among women belonging to wealthy family and in women with six or more children, UMN decreased six folds when compared to women with 2-3 living children65.

In a study conducted to know the role of couple negotiation in UMN for contraception done in Uganda showed that, when there is agreement between husband and wife to stop child bearing, use of any contraceptive method was more, but when only men wanted to stop child birth use of modern method was more, when women wanted to stop child bearing the use of traditional method was more. This study showed that couple agreement was an important factor to control fertility66.

A Kenyan study conducted to know the Levels, Patterns and Trends in UMN for FP among currently married women, showed that age of the women, number of living children, husband’s approval for FP, province of residence were associated
with odds of experiencing UMN for spacing in both the surveys conducted during 1998 and 2003. Women with incomplete primary schooling had two times more likely to have UMN for spacing compared to women with secondary education. For limiting also respondents age, education, number of children, husband's approval were significantly associated with UMN. This study concluded saying that there was marginal reduction in total UMN from 1998 to 2003 from 26.8% to 24%. UMN for spacing reduced from 16% to 13.4%, but UMN for limiting did not show much of the difference (10.7% to 10.6%). Non availability of full range of temporary methods of FP was the reason for high rate of UMN for spacing. Lack of spousal agreement was also responsible for considerable amount of UMN for FP.  

A study conducted in Karachi, Pakistan showed that distance of health centre from the residence of MW was not a barrier for use of contraceptives, but the main barrier was, someone else was taking decision on the behalf of MW as far as issues regarding health was concerned. Mother in law also played an important role in the use of FP methods. Communication between husband and wife regarding fertility also helped in decreasing the UMN for FP. Number of male children was also associated with UMN, women with more than two male children had low level of UMN for FP compared to women with less than two or no living male children.  

Assessment of UMN for FP was done in an urban slum of Delhi in 1999 showed that, 65% of women were not using any FP method, maximum UMN for FP was in the age group 15-19 years as they had already had at least one child, UMN was highest for limiting in the age group 40-45 years, the reasons for UMN being opposition from husbands/ families for using FP methods and male child preference (19.8%), 18.2% had health concern about contraceptives and side effects, 8.2% and
5.8% felt difficulty to access and quality of FP programme as the reason for non use of contraceptives respectively, 9.1% felt little perceived risk of pregnancy as the reason for non use \(^{69}\).

In a study done in an urban slum of south Maharashtra in 2011 to know the epidemiological correlates of UMN for contraception revealed that about 57% of women among unmet group said lack of information about FP methods was the main reason for non use, followed by opposition from husband, family or community (19%), health concerns (10%), inconvenience or unsatisfactory services and other reasons 7% each. UMN for FP was less in educated women, working women and also among Hindus and this difference was statistically significant \(^{61}\).

**Strategies to address the unmet need for Family Planning**

In a study done to evaluate unmet need for contraception in Ghana over one decade, classified women with unmet need into three groups to differentiate the reasons for non use of contraceptives; they were i) women who were not using contraceptives at the time of survey but intend to use in the future, ii) women who were not using contraceptives at the time of survey but did not intend to use in the future, iii) women who had stopped using a method temporarily or permanently. Such classification would help programme managers to cater to the needs of these groups efficiently. Programme needs of these women differ as never user’s concern would be different from those who had discontinued the method. Fertility related reasons were more compared to other reasons, hence this study concluded stating that, information, education and counselling (IEC) regarding contraceptives, reproductive health and sexually transmitted diseases should be provided to young adults in schools and youth clubs. This study also suggested that women with ambivalence about future child
bearing should be convinced that contraception is for both spacing and limiting and wide range of contraceptives to be made available. This study also suggested counselling for women who were never users, who were having fear of side effects and for women who stopped using contraception due to side effects

Study conducted in Ethiopia to know the determinants of UMN recommended that health workers should increase their efforts to contact married women and discuss about their intention to use FP method and assure them about regular follow up. Good health education would help women to know the available services, to choose method of her choice, reducing misconception about the methods, improve couple communication and help people assess risky behaviour which would help in preventing unwanted pregnancies. Health education would also help in increasing age at marriage, empower women to control their fertility and reduce the gap between contraceptive knowledge and practice

A study done at Karachi Pakistan suggested involvement of older women in FP programmes who would act as an obstacle for the use of FP methods by their daughters in laws. This study also emphasized on social changes outside the domain of FP like, education and economic autonomy, equality in order to address the role of son preference and provision of social security net, which prevents parents to depend on their male offspring in advanced age

A study conducted in Zimbabwe in the year 2006 to compare the trends in UMN and demand for FP by using Demographic and Health Survey conducted in the year 1994, 1999 and 2005-06, suggested that to reduce the unintended pregnancies and associated maternal morbidity and mortality the programme managers should focus on addressing issues related to unmet need and also continue to improve the
serves to contraceptive users. They also suggested that provision of FP methods being one of the proven, feasible, cost effective interventions, which could make an immediate impact on maternal health especially in low income countries; hence to achieve Millennium goal number 5 women with UMN for FP should be considered as distinct audience and clientele requiring specific strategies to address their needs.\(^{53}\)

A study done in Dar Assalam, Sudan in the year 2001 suggested that integrated FP service and collaboration of service providers with other medical and social service providers in the area like school teachers, social workers, women’s union leaders and religious leaders. Community based distribution of FP methods could be improved by expanding the role of midwives and female teachers, because by involving female distributors social barriers could be minimized.\(^{54}\)

A Nigerian study conducted to know the prevalence and determinants of UMN for FP in the year 2008- 2009, suggested intensified reproductive health education and to include men in such programmes so as to improve the family planning practices among the couples and to reduce the opposition from men folks for the use of FP methods.\(^{55}\)

According to a study done in Iran, the reasons for unwanted fertility being, failure of contraceptive methods, hence improving access and quality of reproductive health and FP services would help in reducing prevalence of unintended fertility. To address the health concern about particular method, wide range of FP methods would be required. This study also suggested involving men in counselling for FP, which would address the issue of opposition from husband and others for use of FP method. Emphasis on general and specific education of women to decrease UMN for FP. Integrated population and development policy to bring about improvement in socio
economic status of the population. More thrust on use of mass media in disseminating information about FP methods.\textsuperscript{56}

A study conducted in Mosul city of Iraq to know the FP and UMN profile of women suggested that under reporting or over reporting of causal association and extent of UMN would be possible in case of cross sectional studies; hence a longitudinal study design would be helpful in assessing the extent and determinants of UMN for FP as such studies include long term follow up of participants.\textsuperscript{57}

According to a cross sectional study conducted to know the UMN for FP in Bangladesh in the year 2001, to increase the use of contraception among married women, the use of proxy variables like distance from health facility, access to static health facilities, behavioural change communication could be more beneficial rather than just knowledge imparting communication regarding contraceptives. This in turn would help in reducing the UMN for contraception.\textsuperscript{48}

In a study conducted in Uttar Pradesh based on the NFHS 2 (1998 – 1999) data showed that among the non users with unmet need for spacing, 74\% did not intend to use contraception in future, 10\% said fear of side effects, opposition from husband or family members, non availability of the methods etc. Hence improving the quality and range of contraceptive alone would not be sufficient to reduce unmet need and to improve the use of FP method, counselling of couples and improving the communication skills of HW should be given importance. Greater emphasis on use of temporary method before completing the family and before going for permanent method, to have adequate spacing between the children. Many of the women with unmet need for limiting (54\%) said no for future intention to use contraception, the study suggested that even after completing the family many women may prefer to use
some temporary methods rather than sterilization. Hence emphasis should be given on use of different methods by married women at different stages of married life\textsuperscript{71}.

A study conducted in an urban slum of Karad, Maharashtra in 2010 suggested to give health education to the couples about small family norm and counselling couples to use various contraceptive methods to overcome the reasons for non use of FP methods, because 57\% of MW said due to lack of information about contraceptive they did not use them and 19\% said they faced opposition from husband and family members to use contraceptives\textsuperscript{61}. Supply of good quality of contraceptive service, emphasis on communication, focus on both men and women and clubbing of other services for mother and child along with FP will help in reducing the unmet need for FP among married women\textsuperscript{8}.

In a study conducted to know the magnitude and determinants of UMN for FP in the year 2003 suggested that, Family welfare programme should highlight the minimum risks or side effects associated with the use of FP methods compared to health problems caused by unwanted pregnancies. Involvement of men would reduce their opposition to use FP methods. To cater to the needs of pregnant and lactating mothers with UMN for FP, integration of maternal and child health services and FP services and provision of need based FP services to the married women by increasing the contraceptive options\textsuperscript{10}.

Unmet need for contraception could be present in women who are using contraceptives but are not satisfied with the current method. Surveys that collect qualitative data along with quantitative information about men’s and women’s reproductive intentions and contraceptive choices, experience with side effects, discontinuation of contraceptive use and other problems related to FP would help
programme managers to plan better services to satisfy clients needs. Once the contraceptive users are happy with the improved FP services, may act as the peer counsellors to motivate non users to use contraceptives. This approach would help in extending the focus of UMN to improving the quality of FP services which includes follow up services also. After such surveys, we can identify satisfied clients, who could be used as peer counsellors to motivate others. Hence addressing UMN for FP through specific interventional strategies also cater to the current users of contraceptives and enhance the sustained use of contraceptives, which eventually will help in achieving millennium goals.