CHAPTER - II
AN OVERVIEW OF FAMILY PLANNING

The purpose of this chapter is to furnish guidance in evolving a comprehensive layout of study through the help of related materials, which includes meaning, definition and importance of family planning, historical background in international, national and state perspective, etc. It also discusses the some of the determinants and variables of family planning.

2.1 Meaning and Definition

The dictionary meaning of family planning is “the practice of controlling the number of children in a family and the intervals between the births, particularly by means of artificial contraception or voluntarily sterilization”. Allman defines family planning “as the conscious action of couples to regulate the number and spacing of their children in accordance with personnel preferences”. According to Ritzer and Stark, family planning is “the knowledge and information about the reproductive physiology and contraceptives techniques and supports the small family ideal and the acceptability of contraception”. Tietze defines family planning as “the individual and couples adopting patterns of birth control in accordance with their cultural values, reinforced by formal or informal social pressures” (International Encyclopedia of the Social Sciences, 1968). The above definitions of family planning represent the traditional views. Now a day, the term family planning implies a broader meaning than just controlling family size or spacing births. Along with birth control exercise, it also deals with health and welfare measures of mother, children and family groups, contributing effectively for socio-economic development of the society. Lugne and Manguera have defined family planning from modern perspective as “the rationale voluntarily and moral management of all the processes of
family life including human reproduction” (Lydia, 1974). The meaning of family planning can be best explained from the definition put forwarded by World Health Organization. The WHO Expert Committee (1971) has defined family planning as “a way of living that is voluntarily adopted upon the basis of knowledge, attitude and responsible decision by individuals and couples, in order to promote the health and welfare of the family, group and thus contributes effectively to the social development of the country”. According to United Nation, family planning is ‘the enrichment of human life, not its restriction, that by assuring greater responsibility to each person, free man to attain his individual dignity and reach his full potential’ (Declaration on Population: The World Leaders Statement, 1966).

The above definitions imply family planning as the totality of human efforts to achieve human dignity, economic stability, health and happiness and promote welfare through: (i) Birth regulation and spacing of children by the use of accepted scientific methods (ii) Treatment for infertility (iii) Family life and sex education (iv) Premarital guidance and marriage counseling and (v) Prenatal and Postnatal care (International Planned Parenthood Federation, 1970). Thus, it can be conclude that there has been a shift in the traditional meaning of family planning from merely using contraceptives for birth control to a new perspective, which includes both maternal and childcare in order to promote improvement in the quality of life for people.

2.2 Importance

Lack of access to the family planning always results unintended pregnancies, closely spaced regular births and early child bearing. These always increase the risk of high maternal and infant mortality rates. In the year 2000 alone, around 105 million women in developing countries were in the need of family planning (Ross and Stover, 2005). According to a report of WHO, about 90 per cent of global abortion and obstetric related mortality could have been averted in 2000 by use of contraception
(WHO Report, 2004). More than half a million women dies every year due to complication in pregnancy and childbirth, of which 99 per cent of women dies in developing countries. More than 74000 women die each year due to abortion related cases. Ross and Winfrey (2007) has studied in 27 countries and found that in 2001, two third of women had unmet need for family planning. Studies have also found that birth taking place within eighteen months of first birth are at the greater risk of fetal death, low birth weight, pre-maturity, etc (Conde-Agudelo et al., 2006). Besides all these, unintended pregnancies always lead to high population growth undermining all developmental efforts. Studies have found that promotion of family planning in countries with high birth rates has reduced the poverty and hunger and avert maternal and infant deaths. Thus, family planning not only enables the women to avoid unwanted and unintended pregnancies by providing desired spacing between births, but also provides life saving services to mother and child. It also allows women and families to better manage their household, secure education and address health care problems of the whole family members. Therefore, to meet the reproductive health needs of couples and to get the desired fertility, family planning is very essential. The importance of family planning can be outlined in following ways: (i) It improves the lives of women, girls, their children and families (ii) It reduces the number of times a women becomes pregnant (iii) It reduces the number of unintended and unwanted pregnancies, mother and infant mortality rates (iv) Family planning helps men to care and to provide a better life to their families (v) Family planning helps nation in true development by reducing the excessive burden of the population.(vi) Increasing the ability and freedom of married couples to determine the number and spacing of their children. Reducing the number of illegal abortions by enabling women who do not want to bear children to substitute safe contraceptive method (vii) Improving the health of mothers and infant and reducing the number of illegitimate births.
Thus, family planning is not only stopping of childbirths or spacing births, but its ultimate objective is the development or improvement of the quality of life of the family and society.

2.3 Historical Background

2.3(i) International

The family planning programmes carried out in many developing countries from 1950s through 1960s represent one of the important social experiments of the post-World War II period. Reverend Thomas Malthus was the first person who tried to highlight the consequences of increasing population in Western Europe in late 18th century. In his writings, he showed the imbalances between rapidly growing numbers of people and stagnating agricultural products. The first pioneers of family planning who initiated the family planning movement in the early years were Margaret Sanger and Marie Stopes along with few companions. Their main concern was women’s right and empowerment, particularly to generate awareness to avoid unwanted pregnancies. Their primary objective was individual well being of women. It was on October 16, 1916 Sanger opened the first birth control clinic of the world in Brooklyn, United States. However, US administration did not allow Sanger to run the clinic and she was imprisoned for one month. Again in 1921, she founded the American Birth Control League and continues her work. The population control movement got its impetus when India launched its first National Population policy in the year 1951 with its objective of reducing the birth rate to stabilize the population. In its initial period, the path for population control movement was never an easy task. Clashes of opinion between fervent proponent of population control and stern supporters of individual reproductive freedom took place in early period.

The establishment of International Planned Parenthood Federation in 1952 was a major step forward in the world family planning movement. This organization was against the coercive approach of family planning and strong
proponents of individual reproductive freedom to reduced population growth. They organized a number of seminars and training sessions for persons involved in family planning process. During this period a number of organizations and Governments came forward to help the organizations working for controlling population growth. The most prominent among these was the Ford Foundation who provided funds for doing research, organizing seminars and training camps for family planning personnel’s. In 1962, the Swedish government provided large scale funding for implementing family planning program in Sri Lanka, India and Pakistan. By 1966, a strong consensus developed internationally for reducing the alarming population growth.

India, Pakistan and Sri Lanka in south Asia and Honkong, the Republic of Korea, Singapore and Taiwan in the East Asia were the first countries in the world to adopt family planning program. However, due to the incompetence of the programme implementing agencies and cultural resistance from the population, the family planning programme could not be success entirely. By early 1970s, the international efforts to reduce rapid population growth in developing countries got new momentum. Many industrial European nations including United States came forward with substantial funding for implementing population control policies in developing countries. The UN had created United Nation Fund for Population Activities (UNFPA) through which it provided fund for carrying population research. The World Bank also came forward to support various family planning oriented research. William Draper, the founder of Population Crisis Committee in US was one of the chief profounder of population control policies. He not only persuaded the U.S. government to increase funds for population activities but also convinced European countries and Japan to support the International Planned Parenthood Federation and created the UN population fund.
The first world population conference on family planning was held at Bucharest in 1974. In this conference, a consensus was reached among the participatory nations on the implementation of family planning programme with increase investment on development and the World Population Plan of Action was chalked out. The think tanks of the conference realized that development is the best contraceptives that will reduce the demand for more children.

After Bucharest conference, a large numbers of countries started to launch family planning programme. As a result of which, a significant decline in fertility rates was observed in many countries. Between mid-sixties and mid-nineties, average fertility in developing countries including China fell from around six children per women over her reproductive period to three children. The use of contraceptives also rise from merely ten per cent to sixty percent, respectively. The family planning programme became highly successful in East Asia and later it spread to other developing countries of the world. Even country like Kenya, which has the dubious distinction of possessing world highest birth rate, more than eight children per women have reduced their fertility rate to half in between 1975 and 1995. In Latin America, many countries had able to reduce their birth rate to two children per women. In the Middle East and North Africa, some Islamic countries like Algeria, Arab Republic of Egypt, Morocco, Tunisia etc had successfully implemented family planning programme rejecting the notion that Islam is against birth control. Few other Sub-Saharan countries like Zimbabwe, Botswana and Ghana had brought their birth rates even lower than the Kenya.

A global conference was held at Mexico in 1984 to mark the 10th anniversary of the Bucharest conference. The main objective of the conference was to reaffirm the basic principles of the World Population Plan of Action that was adopted in Bucharest. In this conference, USA made a dramatic shift in its population policy from long standing commitment to
population and family planning programme to neutrality, along with categorical opposition to abortion. By 1994, the demographic picture was very different from 1974. The effect of family planning programme implemented by various countries became visible and a massive change in the demographic pattern was observed throughout the world. There occurred a rapid decline in fertility rate across Asian and Latin America countries. The fertility rate in industrial and developed countries fell far below the replacement level. The situation in some countries became so serious that it even threatened the existence of few indigenous tribes. In other words, the fear of population explosion was completely disappeared in developed countries. During this period, a number of international women organizations came up in different parts of World and started movement for transforming the population and family planning programme into reproductive health and rights movement. These movements focused on the rights and health of individuals while respecting their reproductive freedom.

The International Conference on Population and Development was held at Cairo in 1994. This conference advocated for a broader policy of family planning instead of concentrating only on birth control measures. A broad consensus was reached to include a range of reproductive health measures along with family planning with emphasis on women’s overall reproductive health needs, as well as a series of social and economic policy designed to empower women and to strengthen their rights. After this conference, the attention of global community shifted from population control policy to other serious population related issues like AIDS death and HIV infection etc. This was witnessed in the UN’s Millennium Development Goals, which was signed by almost all nations in 2000. In reality, this conference was almost like the end of family planning movement. It witnessed the abandonment of long standing slogan of population control. In addition to this, the family planning movement received another great setback
in 2001 when United States joined the Vatican City and passed legislation opposing all forms of abortion. Gradually, the developed nations which have brought population control under their grip withdraw their financial commitment for family planning. Over the decades, the financial resource crunch has caused serious setback to the family planning movement in developing and backward countries.

2.3(ii) India

Population growth has long been a concern of the Indian government and it has a lengthy history of explicitly population policy. It has the distinction of world first country to adopt national population policy in 1951. Even before the launched of the population policy there was serious concern about increasing population pressure. Several methods of preventing conception are referred in the works of ancient writer’s. In the early parts of 20th century a number of persons and organization have urged the necessity of practicing birth control. An Indian scholar Pyare Kishan Wattal in 1916 warned the dire consequences of the population growth of Indian population through his book “the Population Problem in India”. In 1923, the India’s first birth control clinic was opened in Poona but it was forced to close due to the strong opposition against artificial methods of birth control. In 1928 a Neo Malthusian league supporting artificial birth control was formed in Madras. In 1930, the then Mysore government issued an order to open the first government birth control clinic in India. In 1933, the then government of Madras also agreed to open a birth control clinic at Madras Presidency. On invitation of All India Women’s Conference, Mrs Margeret Sanger came to India in 1935 and suggested several measures for family planning. Subsequently, in 1937, several birth control clinics were came up in different parts of Uttar Pradesh supported by several organizations like “Birth Control World Wide”, Matru Sewa Sangh, etc. However the outbreak of World War II
interrupted the organized activities carried out by several organizations in the field of family planning.

A series of events preceding India’s first Five Year Plan (1952-57) led to the urgency of controlling population growth. The findings of the causes of Bengal famine of 1940 has made the situation more worse. The enquiry committee set up to find the causes of famine revealed that the root cause of famine was the uncontrolled population growth. It also expressed serious concern that if population is allowed to increase without check, the population of India may reach up to 100 million between 1945 and 1960. The enquiry committee recommended for setting up birth control clinics as a measure for controlling population. In 1943, the Government of India has setup a Health Survey and Development Committee (popularly called as Bhore Committee) to study the health status of the country population. This committee recommended for implementation of National Family Planning Policy. In 1947, the government of India adopts the National Programme of Family Planning. Subsequently in 1950, the government formed the population policy under the chairmanship of health minister and subsequently, a family planning cell was set up in the office of the Director General Health Services, India. However, during this period, there was no aggressive effort to encourage the use of contraceptives for limitation of family size.

In the initial years after the independence, the government could not initiate family planning programme due to the strong opposition from the staunch supporters of Gandhian philosophy who were against the use of artificial birth control methods. Rajkumari Amrit Kaur, the then minister of health and an ardent loyalist of Mahatma Gandhi, herself insisted for natural methods of contraception instead of artificial. In 1951, on her request Dr Abraham Stone visited India for undertaking research on natural methods of birth control and designed a special necklace consisting of 28 beads for
married women so that they can keep track of their menstrual cycle enabling them to practice rhythm method.

Despite opposition from various circles, the then Prime Minister Jawaharlal Nehru insisted for an effective family planning programme. On his suggestion, in 1955, Dr L Baumgarther, the then director of the Princeton Office of Population Research was entrusted to prepare a detailed report on India’s family planning scenario. He recommended for setting up a National Family Planning Board. The first phase of family planning in India was started with the establishment of a number of birth control clinics. By early sixties, India had an estimated 4000 birth control clinic, which offers various contraceptives to the married couples for birth control. However, for a large country like India, attempt to control population growth merely by opening birth control clinics was not possible.

Nonetheless, the clinical approach continued and was extended during the second Five Year Plan (1956-61). The 1961 population census report revealed an unabated rise in population growth. The decadal population growth rate has reached all time high of 24.8 percent and this has created havoc among the policy makers of our country. To create a dent in population growth, the Government of India was compelled to redesign and reframed the family planning policy. Subsequently, the clinical approach policy was replaced by an extension approach, and house to house motivation campaign for family planning was adopted (Srinivasan, 2006). Lt.Col B.L.Raina, the then director of Health and Family Planning and Dr Moye Freyman, the founder of The Institute of Rural Health at Gandhigram in the south of India work whole-heartedly to make the programme successful. They made an early success through this programme and had able to brought down the live birth rate from 43 per 1000 in 1959 to 28 in ‘1968 in a pilot area of one lakh population. The Institute of Rural Health, Gandhigram conducted a series of research and training programs on programme implementation and suggested
for an extension approach, which Government of India had accepted in mid-sixties.

In India’s third Five Year Plan (1961-66) there has been substantial ten times increase in funds for family planning. In 1963, India completely replaced the clinical approach by extended family planning campaign. The target of the planning was set to reduced the birth rate from 41 live births per 1000 population to 25 per 1000. To make this policy in force, more than one lakh of personnel were appointed throughout the country. Government launched a number of financial incentives to encourage medical personnel to participate in the family planning program. The government set targets for contraceptives acceptors to all states, districts, subdivision and even to individual family planners. In 1966-67, the all India target was 2.33 million for Intra Uterine Devices (IUD) insertion, 1.38 million for sterilization and 1.83 million for condoms. By 1970-71, these targets were increased and it became 19.69 million for IUDs, 4.51 million for sterilization and 4.66 million for condoms. In 1969, All India Hospital Post Partum Program was launched. In this program, that woman who recently delivered or aborted in hospital was targeted for birth control method. To make the family programme more effective, the government restructured the government machineries and in late 1960s, the Ministry of Health was renamed as the Ministry of Health and Family Planning and a separate department of Family Planning was set up within the ministry. In 1965 two new institutions, the National Institute of Health Administration and Education and Central Family Planning was established to improve the government effort. As part of programme, these institutions selected nineteen districts for demonstration of project. A series of training camps were organized for family planning administrators. In addition to these, the Ford Foundation extended financial help by providing twelve fellowships to Indian family planning officials for advanced training in United States. Later on, in 1977 these two institutes merged together into the
National Institute of Health and Family Welfare. In 1971, a milestone was achieved in family planning when the parliament of India brought the legislation to legalized abortion as a measure to avoid unwanted pregnancies.

In between 1970-77, the Indian family planning was marked by a number of vasectomy camps organized by Ministry of Health and Family Planning. Vasectomy along with monetary and in-kind incentives became the defining features of Indian family planning policy. Hundreds of vasectomy camps were organized at primary health centre as part of the programme. In 1970, the most spectacular vasectomy camp was organized in the Ernakulam district of Kerala, where altogether 78000 men and women were sterilized. In 1971-73, altogether 4.6 million vasectomies was done, which was equal to the half of total vasectomy performed throughout the world.

During national emergency in 1975, declared by the then prime minister of India Mrs Indira Gandhi, India witnessed harsh measures to curb the rising rate of population growth. On initiative of Sanjay Gandhi, four point agenda with top priority to population control through harsh and forceful measures for sterilization throughout the country was adopted. Subsequently, the national population policy 1976 directed the state governments to passed legislation to make family planning compulsory for citizens and to stop child bearing after three-child. Following this, all the states raised their sterilization target and coercive measures were adopted to achieve the targets. As a result, the total number of sterilization conducted during 12 months beginning in April 1975 scaled to 8.26 million, which is more than the total number of sterilization done in any other country in the world until that time. The coercive measures adopted by Indira Gandhi and her son Sanjay Gandhi met with tremendous backlash and forced the subsequent government to replaced the programme by voluntary nature of family planning programme. After the change of government, a revised reformative population policy was adopted in 1977 and gradually the target of
sterilization was brought down. Emphasis was given to promote education and motivation among the needy couples for providing proper spacing between births rather than lowering fertility. The age at marriage of Indian girl’s was very low during that period and government took a significant step to raised the age at marriage of girl’s and boy’s to 18 and 21 years, respectively.

During the 1980s, an increased number of family planning programmes were implemented through the state governments with the assistance from the central government. In rural areas, the programme further extended through a network of primary health centers and sub-centers. In the Seventh Five Year Plan (1985-89) four separate specific family planning programmes were launched throughout the country. The first was All India Post Partum Programme which was launched in the district and sub-district hospitals. Another was the establishment of primary health care facilities in urban and slum areas. The third was to reserve a specified number of hospital beds for tubal ligature operation. The fourth was aimed at renovation and remodeling of intra uterine devices insertion room in rural family welfare centers attached to the primary health centers. These measures have given a new momentum to Indian family planning movement and by 1991, more than 150000 public health facilities came up in the country through which family planning services were extended to different backward areas.

The 1990s witnessed dramatic changes in the family welfare policy and programme in the country. The 72nd and 73rd constitutional amendments and the Panchayati Raj and Nagar Pallika act, 1992 brought the family welfare programme under the domain of Panchayati Raj. The International Conference on Population and Development in1994 and Beijing Women’s Conference in 1995 further catalyze the process of policy change. In 1996, government took the radical decision of abolishing method specific contraceptive targets with target free approach, where needs will be identified
at community level, rather than centrally assigned. In 1997, the target free approach was renamed as the Community Assessment Approach and emphasis was given on decentralization of the programme. The Reproductive and Child Health Programme was launched in 1997 with the objective of providing services for the prevention of unwanted pregnancies, reproductive tract infection and sexually transmitted diseases. This new approach emphasized the target-free promotion of contraceptive use among eligible couples (IIPS & ORC Macro, 2000). Safe motherhood and child survival were also the goal of this programme. The programme was extended to include all section of people including adolescence and socially and economically disadvantageous groups like urban slum dwellers and tribal population. To make the programme successful, initiatives were taken to involve several stake holders including NGO’s, private sectors, panchayati raj institutions and civil societies.

The National population Policy, 2000 (NPP) was framed with twin objectives to stabilize the growth rate of population on one hand and to promote reproductive health care of women on the other. To fulfill the objectives of the National population Policy, policies were framed to address the unmet need of contraception, development of health care infrastructure and to provide integrated service delivery for basic reproductive and child and health care. In medium term, the National Population Policy was aimed to achieve the goals of bringing down the total fertility rate to replacement level by 2010, so that in long term, the population of the country can be stabilized by 2045. Other goals of NPP related to family planning are to promote delayed marriage for girls, to achieve universal access to information/counseling, and services for fertility regulation and contraception, to provide wide basket of contraceptive choices and to promote the small family norm to achieve the replacement level. In 2001, the National Population Commission was set up to monitor and implement the National Population Policy 2000. In
March 2001, an Empowered Action Group was set up to facilitate the implementation of the Reproductive and Child Health Program in the states of Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan, Orissa, Chhattisgarh, Jharkhand and others. Several states have taken their own initiative to implement specific community-oriented programs to achieve the goals set up by the Reproductive and Child Health Program (Report of the Working Group on Population Stabilization for the 11th Five Year Plan).

In 2005, realizing the importance of health in the process of economic and social development, the Government of India launched the National Rural Health Mission (NRHM) to carry out the necessary correction and strengthening the basic health care system (Ministry of Health and Family Welfare, 2005). It seeks to provide effective health care to rural population with special focus on 18 states, which have weak public health infrastructure and indicators. These states are Assam, Arunachal Pradesh, Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu and Kashmir, Manipur, Mizoram, Meghalaya, Madhya Pradesh, Nagaland, Rajasthan, Sikkim, Tripura, Uttaranchal and Uttar Pradesh.

2.3 (iii) Assam

Assam is marked by a complex social and demographic structure with a predominantly agrarian economy. Due to heterogeneity of population composition, the uniformity of the impact of family planning policies also varies widely in the state. During pre-independent period, the population growth rate of Assam was almost steady. The table 7 and fig 5 revealed that the population of Assam has been increasing rapidly, i.e., from 80 lakhs in 1951-61 to 108 lakhs in 1961-71. Further it increases to 146 lakhs in 1971-81 to 199 lakhs in 1981-91 and then 224 lakhs in 1991-2001. Now, in 2001-2011, it has reached 311 lakhs. The table clearly shows that the population
growth rate of Assam was exceptionally higher during 1951-61 and 1961-1971. This abnormal increase was mainly due to decline in death rate but

Table 7: Population growth rate of Assam, India

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (in lakhs)</th>
<th>Growth Rate (in percentage)</th>
</tr>
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<tbody>
<tr>
<td>1951-1961</td>
<td>80</td>
<td>34.98</td>
</tr>
<tr>
<td>1961-1971</td>
<td>108</td>
<td>34.95</td>
</tr>
<tr>
<td>1971-1981</td>
<td>146</td>
<td>23.6</td>
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<tr>
<td>1981-1991</td>
<td>199</td>
<td>23.87</td>
</tr>
<tr>
<td>1991-2001</td>
<td>224</td>
<td>18.92</td>
</tr>
<tr>
<td>2001-2012</td>
<td>311</td>
<td>16.93</td>
</tr>
</tbody>
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Note: Due to absence of census in 1981 in Assam, the figure for 1981 is based on interpolation.

Source: Census of India, 2011, Provisional population totals, Figure 8

comparative slow decline in birth rate. Besides this, migration both from outside and inside of India contributed considerably in the growth of the state population. This population boom has compelled the Government of Assam to implement family planning policies in more effective manner. From seventies onwards, there was a gradual decrease in the population growth from around 35 percent in fifties and sixties to little higher than 23 per cent in seventies and eighties. This declining trend in growth rate continues during 1991-2001 and 2001-11, and reached 18.92 and 16.93 percent as against national growth rate of 21.54 and 17.64 percent, respectively. According to the Census 2011, the total population of Assam is 3.11 crores and it shares 2.58 percent of the total Indian population. Though there are several reasons for this declining trend, we cannot deny the role of various family planning programmes introduced and implemented in the state in different periods.
An overall family planning scenario of Assam can be judged from the findings of several government survey reports. According to NFHS-3 (2005-06), in Assam, though more than 85 per cent of people live in rural areas, the knowledge about family planning is almost universal (IIPS & ORC Macro, 2000). National Family Health Survey-3 (NFHS) has found that 98 per cent of the currently married women know at least one modern method of family planning. Women are most familiar with female sterilization (96%), followed by pill (87%), male sterilization (85%), condoms 71% and IUD (70%). The Contraceptive Prevalence Rate (CPR) has also increased from 47 percent found in NFHS-1 and NFHS-2 to 57 percent in NFHS-3 (Fig. 6). Among the modern method of contraception, the survey has found that female sterilization (13%) is the most popular method, followed by oral pill (10.3%).
Fig. 8: Contraceptive prevalence rate in Assam among currently married women, 15-49 year (according to NFHS-1, NFHS-2 and NFHS-3).

Among other spacing methods, the IUD is least used method (1.3%). Similarly, the percentage of condom users (2.4) is also very less. The use of traditional method (rhythm, withdrawal folk method) is quite high (16%). According to DLHS-RCH (2002-04) report also, 28.7 percent of couples used traditional method of contraception.

The total fertility rate (TFR) is another important indicator to measure the success of family planning programme. According to NFHS-2 and NFHS-3, the TFR also decrease from 3.5 children in NFHS-2 to 2.4 children per women (Fig. 7). According to the NFHS-3, the total unmet need for family planning is around 10 percent of women in Assam as against 7.5 percent of national average. However, as per DLHS-3, it is around 24 percent. With around 24% of girls getting married below the legal age of18 years and 41% of them having more than three children, Assam call for an urgent need of effective family planning programme. The family planning programme in
Assam received a boost when the Government of India launched the National Rural Health Mission (NRHM) in Assam on April 12, 2005. One of the major

**Table 8: Total unmet need of family planning in Assam, India**

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<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Total</td>
</tr>
<tr>
<td>For spacing</td>
<td>3.5</td>
<td>9.2</td>
<td>5.7</td>
</tr>
<tr>
<td>For limiting</td>
<td>7.1</td>
<td>15.5</td>
<td>11.0</td>
</tr>
<tr>
<td>Total unmet need</td>
<td>10.5</td>
<td>24.6</td>
<td>16.8</td>
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**Source:** NFHS-3, DLHS-2 and DLHS-3
focus areas of NRHM is to promote family planning for stabilizing population. Besides this, it also aims to improve the health status of pregnant women and children especially in rural areas. After implementation of NRHM

Fig. 10: Trends in use of contraceptive method among currently married women, 15-49 years.
Source: Key Findings for Assam, NFHS-3

Fig.11: Family planning performance: Male sterilization in Assam
in Assam, the Government gave more emphasis on sterilization for population control. Several schemes and policies were introduced to attract the married couples for family planning. These schemes gradually started to show positive results.
Fig. 12: Family planning performance: Female Sterilization in Assam

Fig. 13: Family planning performance: IUD insertion

(The figures cited in Fig. 11, Fig. 12 and Fig. 13, for 2011-12 years was up to Oct, 2011)

Source: NRHM, Assam.

The number of sterilized male which was only 84 in 2005-06 increased to 14072 individuals in 2009-10. However, in 2010-11, this figure slightly declines to 12,398 individuals. On the other hand, the trend in female sterilization is far better in Assam compared to male sterilization. During
2005-06, the total number of female sterilization was 24201 and it increased to 68198 during 2010-11. Along with female sterilization, another officially sponsored contraceptive method IUD was also inserted in different health centers of the state. However the trend of IUD insertion is not uniform. During 2005-2006, the total number of IUD insertion was 38073 females, but it decreased to 32560 in 2006-07, 29083 in 2007-08, and 311521 in 2008-09. Again in 2009-10, it increased to reach 40069 females.

The Government of Assam has launched several ambitious family planning schemes to promote family planning among the rural masses. Some of the schemes are:

**The Mamata (care) scheme** was introduced on April 2010 which provides complete post-natal care to mother for 48 hours. Besides these, a baby kit comprising of a mosquito net, baby soap, towel, cloth and a plastic sheet is given to the new born baby.

**The Janani Suraksha Yojna** is another motivated scheme for safe delivery of babies in government hospitals. Under this scheme, an amount of Rs 1400 is given as financial incentives to the mother in the event of delivery in government hospital. Besides this, an amount of Rs 1000.00 is given if the family opted for family planning.

**The Majoni scheme** was introduced to do away with traditional gender bias by offering financial assistance to a girl child and radical measures to improve the health status of would-be mothers. Under this scheme, a new born girl child would be given a fixed deposit of Rs 5000.00, while would be mother would get Rs 1000.00 in cash in two separate installment of Rs 500.00 each during first two checkups. An another cash-benefit scheme was also launched in 2009, where couples choosing not to have babies for two years after marriage is given Rs 5000.00 and those who opt not to have children for three years is given Rs 7000.00.
2.4 Methods of Family Planning

Various types of contraceptives are available to both men and women. The preferences and the use of contraceptives depend on the availability and the price of the contraceptives. The contraceptives available today can be categorized into following way:

(a) Hormonal Contraceptives
These contraceptives are used through hormone medication. It contains both estrogen and progestin or only progestin that blocks ovulation process and prevent pregnancy. Following hormonal contraceptives are available in the market or governmental agencies.

(i) Norplant Implants
The Norplant implants systems are capsules containing progestin, which are placed under the skin of a woman’s upper arm. It releases progestin very slowly at least for five years.

(ii) Intra Uterine Device (IUD)
The IUD looks like a T-shaped plastic device with strings attached. Doctors or helpers placed the device in the uterus and it remains for 5 to 8 year before doctors remove it.

(iii) Vaginal Ring: Vaginal rings are inserted into the vagina. The ring slowly releases hormones into the blood stream to prevent pregnancy.

(b) Barrier Method
Barrier methods are those contraceptives which work physically by preventing sperm from entering the female reproductive tract. The following methods are available:

(i) Diaphragm
Diaphragm is soft rubber cup that covers the cervix. It is used with spermicidal jelly or cream. It blocks sperm for entering the uterus and tubes, where sperm could meet an egg.
(ii) Cervical cap
Cervical cap is also akin to diaphragm, but smaller in size. It also blocks sperm from meeting egg.

(iii) Sponge
This is a single size device placed high in the vagina covering the cervix. It is made up of polyurethane that contains spermicidal which kills sperm.

(iv) Male Condoms
Condoms are made up of latex. These are worn by male on the reproductive organ and prevent sperm from getting contact with the egg of the female partner.

(v) Female condom
The female condom is a polyurethane pouch inserted into the vagina. It serves as a barrier to prevent male’s sperm from getting to the cervix and vaginal canal.

(c) Spermicides
Spermicides are chemical agents that are placed into vagina before sexual intercourse. It works by immobilizing or killing sperm on contact. Some of the spermicides are:

(i) Gels and Jellies
These are come in prefilled single dose, disposable plastic applicators or in a tube with reusable applicators.

(ii) Foams
It comes in aerosol cans along with an applicator and is inserted into the vagina before sexual intercourse.

(d) Sterilization
Sterilization is the surgical method done on both male and female for preventing contraception. Depending on the sex of the individuals, sterilization is of two types:
(i) Female Sterilization

It is the most popular and safe contraceptive method. In this method, the doctor blocks off or cut the two fallopian tubes of the women, preventing eggs from coming out of ovaries.

(ii) Male Sterilization

Male sterilization is also known as vasectomy. It is a surgical procedure that involves cutting, tying or sealing the tube through which sperm travel to the penis for ejaculation.

(e) Natural Methods

Withdrawal, periodic abstinence or rhythm methods are the two natural methods of family planning.

(i) Withdrawal

In this method, the male partner used to withdraw his male reproductive organ before ejaculation, thus prohibiting sperm from getting contact with egg of the female partner.

(ii) Periodic Abstinence or Rhythm method

Periodic abstinence or Rhythm method is considered as natural family planning method and is based on the awareness of the women. This method is practiced by keeping the record of the likelihood fertility period (called as safe period) of the women, based on the length of the previous menstrual cycle. During this period, the couples abstain from sexual contact to avoid unwanted pregnancies.

2.5 Socio-Cultural Determinants of Family Planning

2.5(i) Age at Marriage

Age at marriage, especially of girls plays a pivotal role in determining the family planning behavior of the couple. Early marriage extends the effective reproductive span of the women and thus increases the possibility of having more pregnancy. Early age at marriage leads to early child bearing which has serious implication on the well being of mother, children, family
and the nation as a whole. It is evident from several studies that girls getting married before attaining 15 years run a very high risk of complication in pregnancy and childbirth (Intl. Women’s Health Coalition, 2008). Various Demographic Health Surveys have also reported that pregnancy-related deaths are the leading cause of maternal mortality for girls of age group 15-19 years worldwide. It is reported that mothers of age group 15-19 years face a 20 percent of high risk of dying in pregnancy than aged 20-24 years. According to a report published by WHO, girls getting married before 15 years has five times more likely to die as compared to women of age 20 years (WHO, 2000).

In Indian context, the issue is more serious. More than 117000 women die every year due to pregnancy and childbirth complication. It is to be mentioned that our country has the dubious distinction of having the highest maternal Mortality rates (450/10000 live births) and accounts for one fifth of all global maternal deaths (WHO et al., 2005).

In addition to pregnancy and childbirth complication, several studies have revealed that the young married girls are more vulnerable to sexually transmitted diseases and infections. A study carried out in Kenya has revealed that HIV infections rates are nearly 33 per cent among married couples of girls ages 15-19 years as compared to 22 per cent among unmarried sexually active groups (Intl. Women Health Conditions, June 2008). Early marriages not only affect the health of mother, it also causes health problems to the newborn. It is evident that infant mortality of young mothers is always higher than the mothers of older age.

Another important disadvantage of early marriage is that the women getting early married suffer from social and personnel disadvantage. Early marriage causes both loss of adolescence and forced sexual relationship. Besides these, the women lost her freedom of movement and end up her life within the confinement of the four walls of the house. Such social isolation from her own family, friends and social network exerts serious psychological
and emotional consequences (IWHC on Health & Rights, June 2008). Study carried out in Rajasthan and Madhya Pradesh of India has found that inadequate socialization, discontinuation of education etc due to repeated pregnancies caused severe devastating effect on the girls (Saxena, 1999). The most serious implication of early marriage is the abandonment of school life halfway adversely affecting the personality development of the girls. Most often, they become submissive to husband physical needs and exposed her to all kinds of violence and injustice.

Increased age at marriage increase the possibility of female education develops modern outlook and enhance the capacity to earn an independent income. It also helps to generate awareness, interest and create favorable attitude towards family planning. The age at marriage also determines the use of contraceptives. Various studies carried out in India and abroad correlate the use of contraceptives with age. It is found that the use of contraceptives increases with age from lower to middle aged women and declines during older age (Shakilarani 1989). Audinarayana (1986) in his studies at Andhra Pradesh found that the percentage of family planning adopters increased from 33 per cent to 52 per cent as the age of wives at marriage increased from 13 year to 18 year and above.

In India, the average age at marriage of girls is gradually increasing. In 1951, the average age at marriage was 15.2 year, which increased to 19 year by 1991 (Bhatt and Halli, 1999) and 19.7 by 1999 (IIPS and Macro, 2000). However, The NFHS-3 revealed that 44.5 per cent of Indian girls get married even before they attain the legal age of marriage 18 year. As per 1991 census, 5 per cent of girls get married in between age group 10-14 year, 35 percent in between 15-19 year and 82 per cent in between 20-24 year. In India, the minimum legal age of marriage is 21 year for boys and 18 year for girls. The Chinese government, which is facing the same population explosion problem like India has increased the age of marriage to 22 year for male and 20 year
for female. In Bangladesh, the age at marriage for women has been increased from 14 year to 18 year and 21 year for boys’. The Morocco Government has also brought legislation in 2003 to increase the age of marriage of girls from 15 year to 18 year to curb the fertility rate. In Yemen, where early marriage of girls is becoming a major barrier in curbing population growth has implemented a special project ‘Safe age of Marriage’ in 2008 to ban child marriage before 18 year.

2.5(ii) Occupation and Economic Status

Occupation, financial autonomy and power of decision making by women are the most significant factors that influence the adoption of family planning methods. Generally, it is observed that women having higher occupational status associated with sound financial footings with equal share in decision making are expected to be the higher adopters of family planning measures. Several studies conducted in different countries including India have almost established that the rate of adoption of family planning is higher among working women against non-working women. Brown and Brown (1980) in their study in Zaire found that the proportion of white-collar worker accepting family planning was higher than those general populations.

The World Fertility Survey (1981) conducted in Bangladesh, Korea and Mexico found that there exists a strong correlation between occupation and contraceptive use. Lloyd (1991) found that in developing countries contraceptive rate was highest among the non-working women. Orubuloye (1997) in Ekiti, Africa also reported that women lacking decision making power were less confident to use contraception as against those having a due share in decision making. Amazou and Becker (2009) in their study in Kenya have found that wealth is significantly associated with intention to stop child bearing. However, in the same study, wealth was found negatively associated with child bearing in Ghana. A study was carried out by USIAD and CARE in
collaboration with John Hopkins University in Mali in 2009 and found that the women who were involved in economics activities were likely to use contraceptives twice than the general women.

2.5(iii) Education

Education is one of the major determinants of family planning programme. Various studies have shown that there exists a positive relationship between educational level and adoption of family planning programme. Studies carried out by different scholars (Calwell et al., 1977; Diamond et al., 1999) have shown that the fertility rates declines with increase in the educational level of mother. This is because education increases the level of awareness among women that helps to take decision about the use of family planning measures. Besides this, staying in educational institution automatically postpones the age at marriage and thereby lowers the fertility rates. In 1992, the World Bank Development Brief compared the efficiency of family planning and educational programme. It was found that educated women choose to have fewer children. An extra year of female schooling reduced female fertility by around 5 to 10 percent. Stycos (1970) in his study has found that women with no education have 3.3 times more children than those women with one or more years of college education. Another study carried out in Zimbabwe has interestingly found that low levels of education have no any clear association with use of contraceptives. However, the impact of education on family planning is apparent on those women who have completed primary schooling. The impact is more on those women who have completed secondary schooling. The study has also revealed that the use of contraceptives is twice the times in those women who have completed secondary schooling than those who completes primary school (World Bank,1996). Fisek and Sumbulogu in their study on the effect of husband and wife education on family planning in rural Turkey have found
that education had a positive impact on the changing attitudes towards family planning. Similar studies were carried out in Uganda by Agyei and Migadde in 1995. They also found that secondary and higher education strongly influenced contraceptive use. To them education is one of the strong predictors of knowledge and favorable attitudes towards contraception. Similar findings were reported from a study carried out in Ghana by Tawiah.

In India, education is one of the main factors that strongly correlate with contraceptive use. Various studies have reported that nearly fifty per cent of the married women with some primary schooling use contraceptives compared with one third of illiterate women (Adlakha, 1997). Drez and Murthi (2001) have strongly favored the role of female education in fertility decline in India. However, a study carried out by Bhatt (2002) revealed a contrary picture. He has found that the fertility is declining mainly due to its decline among illiterate women. It has been found that the rise in female education accounted only for less than 20 per cent of the fertility decline, whereas 49 per cent of the fertility decline is among illiterate women. In case of contraceptive use also, contribution of educated women is around 18 per cent in between 1993-99, whereas that of illiterate women is more than 70 per cent (Source: IIPS, 1995; ORC Macro, 2000).

2.5(iv) Son Preferences

Son preference is one of the vital sociological factors that directly affect the impact and outcome of family planning policies. In most of the societies, particularly in Asian countries, desire for having a son from wedlock is almost universal. In most of the societies, couples want their first birth to be a son. They are considered as a sign of prestige for the family and belief to be a flag bearer of family lineage. Son preferences may vary from place to place and society to society depending upon cultural set up, beliefs, literacy, economic condition, etc. Studies carried out by Arnold (1977),
Arnold and Liu (1986), Bairagi (2001), Vlasoff (1990), et al., have reported that son preferences over daughter is higher in Asian countries, particularly in China, India, Bangladesh, South Korea and Nepal. Arnold and Liu have found that preferences for sons in China, South Korea and Taiwan are both pervasive and extreme. In Bangladesh, Nepal and South Korea, more than 95 percent of women with both son and daughter, who want another child typically, want a son. According to the International Symposium on Issues related to sex preferences for Changing Demographic Dynamics in Asia, held in Seol, 1994, the highest son preferences is found in Mainland China, Taiwan, South Korea, India, Pakistan, Bangladesh, Nepal, and Vietnam. On the other hand, in some Asian countries like Indonesia, Thailand and Sri Lanka, there is barely any detectable differences between sons and daughters (Judith, 1994).

In India, the highest son preferences are observed in North Central and North West India. It is particularly strong in Punjab, Rajasthan, Uttar Pradesh, Bihar and Gujarat. But, son preference is comparatively weaker in Kerala, Delhi, Assam, Goa, Karnataka and Tamil Nadu (Mutharayappa, et al., 1997). A strong son preference exerts effect on the demographic outcomes, such as contraceptives use, fertility behavior, birth spacing and induced abortion. Although son preferences are considered as a barrier in fertility reduction, no consistent association is found between sex preferences and fertility reduction. However, in many societies, the fertility rate is found to be higher where son preference is prevalent. This is simply because, when couples desire for more sons to complete the family size, the size of family automatically increases leading to high fertility rate. In India also this association is found, but substantially varies from region to region. According to an estimate, if there were no any gender preferences, the fertility level would decline by 8 percent (Mutharayappa, et al., 1997) in India. The NFHS Subject Reports revealed that 81 percent of women with three births but no
living son go on to have a fourth birth compared with seventy percent with two or more living son (Gandotra, et al., 1998) On the other hand some of the studies (Arnold, 1997; ORG, 1990) have demonstrated a different scenario. These studies have found that in many countries where son preferences are extreme, like China and South Korea, fertility has declined dramatically. It has been found that son preferences exhibits effects only in those countries or societies where fertility is in the middle of transition, like India and not on those societies where fertility is very high or low.

Son preferences also affect family planning behavior. It is an established fact that the women with two sons are more likely to use contraceptives than women with two daughters. Rahman and Da Vanzo (1993) found stronger effects of gender preference effect in the population that has more access to and use of contraceptives. Khan and Khanum (2000) in Bangladesh have found that the sex composition of the surviving children moderately influences the decision regarding the contraceptive use at lower parities. Ramakumar and Devi (1989) studied the gender preference and use of contraceptives among the married women of three districts of Kerala and have found that the acceptance rate of contraception was higher among women who had only one son than those women who had only one daughter.

**Causes of Son Preferences:**

The most possible causes for existence of son preferences in the societies are : (i) In most of these societies, there is the common perception that son(s) will contribute in the economic activities of the household and will contribute to the family income. Besides this, most of the parents hope that their son(s) will help in illness and old age in future (Bardhan 1988; Basu1989). This belief is highly prevalent not only in India, but also in many Asian countries. (ii) The second vital factor for son preferences, particularly in India is the prevalence of heavy dowry system in many societies. In these
societies sons are always considered as assets, whereas girls are looked as liabilities. (iii) Another important cause stems from socio-cultural dimension. In countries like China, South Korea and India, having a son always gives a special status and family strength (Karve 1965, Dyson and Moore 1983, Reddy and Caldwell 1989). Traditionally, in these societies, sons are imperative to maintain family line. The patrilineal and patrilocal societies completely rely on sons to carry family line. In these societies, the women are considered as only biological reproducers and boys are considered as the inheritor of social order. This is because, girls after marriage goes into husband family and only sons remain in the natal home to continue the family lineage. In South Korea, where son preferences are highest in the world, it is attributed to patriarchal family system and low female autonomy. In China, studies have reported that the stringent fertility regulation is responsible for discrimination against girls (World Bank, 2003).

The other most plausible cause for son preference is the religious outlook of the societies. In Hindu religion, sons are only entitled to perform certain religious functions, particularly in death ceremonies. In these societies, sons are considered as imperative for performing death ceremonies and rituals of the parents. Therefore, couples always expect a son in their family to perform these pious duties.

2.5(v) Religion

Religion is an important factor influencing the contraceptive behavior of the people. The demographers and researchers for a long time hypothesized that certain religious group acts as a facilitator and some act as a barrier to family planning programme. Each and every religion has certain views on birth control and family planning. But there exist no uniformity with regard to family planning among the religious groups. Rather it is marked with plurality of views among the followers of religious groups, leaders and scholars. Even
within the same religion, different sects used to interpret religious teachings differently about family planning. However, there are many couples found to ignore religious teachings on family planning (Srikanthan and Reid, 2008).

**Hinduism and Family Planning**

In Hindu religion, there is no any prohibition against birth control. Hinduism always encourages procreation within marriage, yet there is no any opposition against contraception. To form a family along with children’s is considered as sacred duty for each and every eligible Hindus. The begetting of sons is regarded as a primary religious obligation to continue family line. Many sacred scriptures of Hindu religion describe birth control methods and suggest advice on what a couple should do to promote contraception.

**Islam and Family Planning**

There is always a strong debate over the causes of differential growth rate between Hindus and Muslims in India. Several studies in India and outside have revealed that the Muslim population had higher fertility than the Hindus (Balasubramanian, 1984) in India. Many scholars have tried to explain the cause of higher fertility among Muslim from socio-religious perspective. Very casually and simplistically, it is argued that the higher growth rate of Muslim is due to religious influence. In Islam, the Quran and the Prophetic tradition are the primary source of religious authority. However, they do not talk explicitly about contraception and family planning. The verse and the sayings in the Quran related to family planning leave enough room for speculation and interpretations. Due to this fact, both the opponents and proponents of family planning try to interpret the Quranic injunctions in their own way to support their respective positions. The jurists and the ulemas who are opposed to the use of contraceptives in Islam tries to justify their views on the basis of a particular Quranic verse ‘kill not your children, on a plea of want, we provide sustenance for you and for them’ (Q 6:151). On the other
hand, the supporters of family planning are of view that the above passage explicitly refers to ban on infanticide and not on contraception. Even the famous Islamic scholars, Sa’diya Sheikh was of view that this verse was a response to pre-Islamic Arab custom of burying female children alive and not on family planning (Sheikh, 2003).

In Islam, marriage is portrayed as companionship and mutual protection, rather than as primarily for procreation (Ali, 1993). Therefore, as marriage is not directly linked to child bearing, definitely some sort of contraception is permitted in Islam. Historically, various Islamic scholars and legal schools have permitted ‘Coitus Interrupts’ called as ‘Azl’ (meaning withdrawal) as a method of contraception. It is belief that even Prophet Muhammad practiced withdrawal during coitus. The only condition Prophet attached to acceptability of this practice was the husband need to secure the permission of the wife before practicing withdrawal. The famous Islamic physicians Ibn Sina in his ‘Qanun’ listed 20 different methods of contraceptives, while another physician Abu-Bakr-al Razi listed 176 birth control substances. Thus, in Islam, the practice of using contraceptive is evident in both theory and practice (Sheikh, 2003). The use of contraceptive is also permitted when the health condition and well being of the family is concerned. The Islamic scholar Al-Ghazzali also supported the use of contraceptive for a number of reasons including economic factors, where large number of offspring may impose economic hardship on the family.

In Islam though abortion is considered as a criminal offence and is prohibited, yet there is some sort of flexibility when the mother’s life is in danger or where the fetus is expected to be abnormal, in such cases abortion is permitted. With time, the thought and perception towards abortion is also changing among the jurists and scholars of Islamic faith. The Zyadi School and some Hanafi and Shafi scholars permit unconditional permission to
terminate a pregnancy. The Hanbali School allows abortion within 40 days of contraception through the use of oral abortifacients. The Hanabi and Shafi scholars are of view that if there is an abortion without a valid reason, it is disapproved but not forbidden. Whereas, the Zahri, the Ibadiyya and Imamiya legal schools unconditionally prohibits abortion. In Islam, it is forbidden to permanently end mans or women’s ability to produce children. Thus, sterilization, both male and female is not sanctioned religiously. Besides reservation towards abortion and use of contraception, polygamy is permitted and allows easy divorce in case of infertility in Islamic societies. Remarriage of widow is also permitted in Islam. These factors also tend to increase exposure to the risk of pregnancy for Muslim women (Balasubramanian, 1984). However, in contemporary Islamic societies, the classical views on family planning are gradually changing. In present day’s context, various studied have revealed that there is much flexibility in Muslim societies towards family planning. The high fertility rate among Muslim is not due to religion, but due to poverty, illiteracy and lack of awareness and inaccessibility of the family planning services. Until 1970’s, in most of the Muslim countries, the TFR was as high as 6 children per women. But from mid-1980s onwards, their fertility started to decline and along with that, the notion that Islam is against family planning also gradually started to disappear. A study carried out by Carol Underwood (2000) among the Jordian religious Islamic leaders and their constituents in 2000 have found that 80 percent of men, 86 percent of women, 82 percent of male religious leaders and 98 percent of female religious leaders have stated that family planning is not against the tenets of Islam.

2.5(vi) Role of Mass Media in Promoting Family Planning

Mass media intervention always plays an important role in bringing family planning information to the vast majority of the population.
Governmental and non-governmental agencies extensively used mass media to promote and communicate the people about the different contraceptive methods, techniques and various family planning programmes in order to influence contraceptive behavior and decisions. It is found that in most of the countries three major sources of mass media i.e., Radio, Television and Newspaper are used to disseminate the knowledge of family planning. The messages used in mass media are in different forms ranging from soap operas on radio and television to advertisement in print media. This are designed to persuade married couples about personnel and social advantages of smaller families.

Various studies carried out in different parts of globe have shown that there is always a potential impact of the role of mass media in family planning. A survey conducted by Mainichi group of newspaper in Japan (1950) has found that 50 per cent of the respondents approved of contraception and about 20 per cent were practicing contraception when they read newspaper advertisement on contraception. Hymen and Sheatsley (1974) studied the role of mass media in family planning and opine that it exerts influence on knowledge and attitudes, but its impact on behavior is very little. A study carried out in Jamaica in early eighties by Rowley also indicated that awareness about family planning was brought by soap operas, songs and other messages communicated through mass media (Rowle, 1986). Parlato (1990) argues that well-designed media can be effective in creating a positive social environment for a behavior by bringing about a shift in popular opinion (Parlato, 1990). Piotrow et.al., (1990) reported that mass media can be a powerful tool not only for creating awareness about new technology but also for stimulating people’s desire for more information and facilitating their efforts to apply the information to their own behavior. However, Ruijter (1991) in his works on Africa found that mass media alone are not effective
tools in bringing change in knowledge, attitude and practices relating to family planning in widespread section of the society. According to his study, the flow of information reached to the people through intermediary of change agents. Change agents were recognized as the key factor in bringing change in people’s practices (Ruijter, 1991). Westoff and Rodriguez (1993) examined the relationship between exposure to the media messages on family planning and a number of indicators for reproductive behavior (including ever and current use of contraception to use among non-users, desire for more children, ideal family size). The results indicate that women who are exposed to such messages in the media are more likely to use contraceptives and to desire fewer children (Westoff & Rodriguez, 1993). Bankole (1995) works in Nigeria also supports the findings of Westoff and Rodriguez. Gupta et.al.,(2003) works on the association between multimedia behavior change communication campaign and women’s and men’s use of and intention to use modern contraceptive method in target areas of Uganda found that the exposure to BCC messages was associated with increased contraceptive use and intention to use. Barber and Linn (2004) investigate the role of mass media as a social change that shapes individual behavior in the Chitwan valley family study. The study revealed that the exposure to the mass media is related to the child bearing behavior and to preferences for smaller families, weaker son preferences and tolerance of contraceptive use.

Radio, Television and Newspaper are the three main sources of mass media used for disseminating family planning knowledge. Olenick (2000) analyzed the National Health Survey data of India, Pakistan and Bangladesh and revealed that women in all the three countries who regularly watch television and those who exposed to explicit family planning programme messages are more likely to approve family planning programme than the other women, who are not exposed to television.
2.6 Contraceptive Prevalence Rate

Contraceptive is the direct method of reducing population growth and its prevalence rate is the most important indicator of the success of family planning programme. The contraceptive prevalence rate can be define as the percentage of currently married women of age group 15-49 years who are currently using a contraceptive method or whose husband are using a contraceptive method. The contraceptive method can be categorized into two types, a permanent or irreversible and a temporary or reversible method. Permanent contraceptive method is by definition usable only for limiting child bearing, whereas temporary methods are used for both spacing births and limiting children. Generally, the contraceptive use in close intervals corresponds to spacing childbirths and contraceptives used in terminal open interval following last birth correspond to limiting. Sterilization, both male and female is the only permanent method, whereas Oral pills, Intrauterine device (IUDs) more popularly called as Loops, Condoms and Injection are the temporary contraceptive methods prevalent in India. Besides these methods, some section of population also used traditional contraceptive methods for limiting family size. The Rhythm method and Withdrawal are the two traditional contraceptive method found to be practiced among Indian Population in minimum percentage.

Of the total contraceptive users, 86 per cent are using modern methods and only 14 percent are using traditional methods. Sterilization alone accounts for 84 percent of contraceptive prevalence rate (IIPS and ORC Macro 2000). According to Indian Reproductive Health Survey, 2003, the contraceptive prevalence rate is 48.3 per cent. Female sterilization is the most common contraceptive used by married women. It alone accounts for 34.2 per cent, followed by condom (3.1), pills (2.1), male sterilization (1.9), IUD (1.6), traditional methods (5.4). The total average of married couples not using any method of contraceptive method is 51.7 percent. NFHS-2 revealed that there
has been overall increase in contraceptive use in almost all the states during 1990s. The exception is only in Goa, Jammu & Kashmir and Meghalaya. The North eastern states of Arunachal Pradesh and Nagaland recorded the maximum increase (by 133% and 50%), respectively. Contraceptive prevalence rate increased with age except in the older age (8% among adolescent and 67% among women aged 35-39 years).

Education, place of residence, religion, etc. are some of the factors that strongly correlate with contraceptive use in India. The contraceptive prevalence rate in urban women is 51 per cent and in rural, it is 37 per cent. The use of modern spacing method is considerably higher in urban areas than the rural areas, however the prevalence rate of sterilization and traditional method is almost same both in rural and urban areas. There is strong relationship between contraceptive use and education. Among illiterate women, the contraceptive use is 43 per cent as against 57 per cent women with high school education (IIPS and ORC Macro, 2000). Current use of IUDs, condoms, rhythm method and withdrawal generally increases and current use of female sterilization generally decreases with an increase in the educational level of women.

By religion, the highest contraceptive prevalence rate is among the Jains (75%), followed by Buddhist and Sikhs (68% and 67%, respectively). The lowest contraceptive prevalence rate is found among the Muslims (46%) whereas, among Hindus and Christian, the prevalence rate is 58 per cent each. The female sterilization is highest among the Buddhists (54%) and lowest among the Muslim (21%). The use of condoms, pills and IUDs is also highest among the Jains (27%), followed by the Sikhs (26%). Use of traditional method is highest among Muslims and Christian (9%).
A differential in contraceptive prevalence rate is observed among the caste and tribe. The highest contraceptive prevalence rate is found among those who do not belong to scheduled tribe, scheduled caste and other backward classes'. There contraceptive prevalence rate is 62 per cent followed by scheduled caste (55%) and other backward classes (54%). Contraceptive prevalence rate is lowest among the scheduled tribe women.

Another important variable in use of contraceptive is the number and sex of the children. Again it is found that within the number of living children, contraceptive uses increases with the number of sons. This is because of the strong preferences for sons in Indian society.