CHAPTER VIII

SUMMARY AND CONCLUSIONS

The main objective of the study is to have a comprehensive examination of the family planning programme in the state of Madhya Pradesh. Efforts have been made to study factors which are directly or indirectly influencing the use or non-use of contraception. It is tried to identify key programme and non-programme inputs that are determinant for the adoption or non-adoption of contraception, and tried to explore the mechanism of relationship among the selected key factors.

The present study is undertaken in Madhya Pradesh (old Madhya Pradesh, present Madhya Pradesh and Chhattisgarh states together. The study is based on both secondary and primary data both. Government of India initiated Rapid Household Survey (RHS) in all the districts of India during 1998-99. The RCH data for the state of Madhya provides detail information on reproductive cares of women and contraceptive use practices for 41,254 currently married women in the age-group 15-44 covering 45 districts of Madhya Pradesh. The data is used to study regional variation in contraceptive use and factors responsible for regional differentials in contraceptive use.
In the RCH-RHS data detail information on programme inputs was lacking. So, the relevant information in this regard was collected through field survey undertaken in the three districts of Madhya Pradesh. For the selection of three districts, at first stage all districts are grouped into two categories. The first category comprised all those districts having good performance of contraceptive use. The second category included all those districts having poor performance of contraceptive use. From the first group of districts, Indore district was selected representing good performance of health and family welfare. From the second group, Panna district was selected representing poor performance of health and family welfare. Further, since the proportion of scheduled tribe population in Madhya Pradesh is high, one district purposely was selected where dominance of scheduled tribe population is more. For this, the district Jhabua was considered where proportion of scheduled tribe population is highest, being more than 80 percent of the district population as scheduled tribes. From each of the three districts, 15 villages are covered, and from each village 15-25 women were interviewed to get the necessary information. In total 998 women were interviewed from 45 villages covering 15 PHCs from the three districts. Apart from household survey from each of the selected PHCs and sub-centres, detail information regarding availability of infrastructural facilities, staff, trained manpower, drugs and medicines, necessary instruments, vehicles, staff quarters, vacant posts etc. are taken. Apart from availability of resources,
service providers from PHCs and sub-centres like doctors, LHVS, ANMs are interviewed to know trainings they received, knowledge about RCH, work experience, supervision and monitoring work done, linkages with other departmental workers, involvement of NGOs and private doctors etc.

Various statistical analyses were done through SPSS package according to requirement of the study. The various techniques employed here included multiple regression analysis, hierarchical regression analysis, logistic regression analysis, multiple classification analysis, and path analysis.

Using RCH survey data, a regional variation in contraceptive use and factors influencing contraceptive use differential are studied here. The factors whose influence on contraceptive use are studied here included district level variables like district human development index, and district scheduled tribe population, and individual level characteristics like region, place of residence, religion, caste/tribe, education, age, age at marriage, marriage duration, number of living children, number of living sons. All districts are grouped into seven regions, Chhattisgarh, Vindhya, South central, South western, Northern, Central, and Malwa Plateau.

It is seen knowledge of contraceptive methods is almost universal in Madhya Pradesh, with 97 percent of women aware of at least one
modern method. However, knowledge of all the modern methods is low (35 percent). Three percent of women don’t have knowledge of any modern method of family planning. Not much regional variation in level of knowledge of any modern method is noticed, but a wide variation in knowledge of any temporary method is found. Comparatively, a low level of knowledge is found in Chhattisgarh region. A wide regional variation in level of knowledge of any spacing method is noticed. Hardly, one-third of women in Chhattisgarh region as compared to more than three-fourths in South western, Central, and Malwa plateau regions have knowledge about spacing method. Traditional methods of contraceptive use are less known in Chhattisgarh region as compared to the other regions. Majority of women having 'no' knowledge about any modern contraceptive methods reside in rural areas, or illiterates, or got married at an early age of before 18 years of age.

Less than half of the currently married women have ever used any method of contraception and current contraceptive prevalence rate is found as 45 percent. The ever use is found high among relatively older women having 3 or more living children, or 2 or more living sons. The ever use is seen relatively low in Vindhya region and high in South western region. The current contraceptive use prevalence rate is found highest in South central and South western regions, and least in Vindhya region. The contraceptive use is found low among scheduled tribes, Muslims,
illiterates, young age 15-24 years, or women having 'no' living children or having. Contraceptive use is found lowest among Muslims, scheduled tribes, and illiterates in Vindhya region.

The proportion of never users is found lowest in South western followed by South central, and Malwa plateau regions, and is highest in Vindhya region. A decrease in proportion of never users is seen with increase in level of district HDI. It is lowest among 'other' religious group (other than Hindus and Muslims). The never users is seen highest among scheduled tribe women. In urban areas the never use is seen least in Malwa plateau and highest in Vindhya region. Among Muslims the never use is least in Malwa Plateau and highest in Vindhya region.

It is noticed that female sterilization is most popular and spacing methods are neglected in all regions. Four-fifths of the current users adopted female sterilization. Choice of female sterilization is found more in rural areas as compared to urban areas, more among Hindus as compared to Muslims. With increase in education the preference for sterilization declines. For more than four-fifths of the current users in Vindhya and Chhattisgarh regions the choice is female sterilization as compared to about three-fourths in South western, and South central regions and a little above three-fifths in the other regions.
It is seen in case of about four-fifths of adopters in all the regions they were motivated by self or by husband. Hardly, 10 percent of the current users reported that any health worker motivated them. Role of relatives/friends or of media is seen insignificant. Majority (94 percent) received services from public health services. Also, more than four-fifths of oral pill or condom users mentioned about their regular supply. About 15 percent of adopters experienced post-adoption complications or side effects. Slightly more proportion of side effects are reported from Vindhya and Malwa Plateau regions. About three-fourths of users who had any side effects sought treatment. About half of them went to a private doctor. Majority (93 percent) users expressed satisfaction with the method of use.

Main reason for discontinuation of the method of use by past users is seen as they wanted to have a child. A few reported supply related or method related problems. Main reason for non-use of any method by never users is seen as ‘opposition to family planning’, ‘health related problems’ or ‘side effects’. Very few reported about method or service related problems. Comparatively, ‘Opposition to family planning’ is referred most in South central and Northern regions and is least in Malwa Plateau regions. Health related problems are reported in more proportion in Vindhya region and least in South central region.
A multivariate hierarchical regression analysis is carried out to estimate adjusted contraceptive use after controlling socio-economic and demographic variables one by one based on pre-determined causal ordering. It is seen unadjusted regional difference of 17 percentage points in contraceptive use narrows down to 13 percentage points after controlling. The analysis shows that although socio-economic and demographic factors are important in influencing contraceptive use regional difference persists even after their controlling.

Among other variables considered here, differentials in contraceptive use due to HDI reduces substantially from 15 percentage points to 9 percentage points after controlling. The rural-urban gap in contraceptive use reduces substantially from 13 percentage points before adjustment to 2 percent after controlling. The apparent cast/religion differential in contraceptive use reduces to a large extent after controlling of place of residence and age. After controlling all variables the unadjusted difference of 31 percentage points reduces to 14 percentage points. The education differentials in contraceptive use persist after controlling. Before adjustment no clear cut relationship between education and contraceptive use is observed. However after adjustment, the contraceptive use is seen to increase with the increase on level of education. The unadjusted difference in contraceptive use due to age of
woman, or marital duration or sex preference reduces substantially after control of all variables.

It is seen that 73 percent of currently married women in Madhya Pradesh have a need either met or unmet for family planning, 28 percent have unmet need and 45 percent have met need of family planning. A little above one-fourth (27 percent) of women have no need of family planning due to menopausal or never menstruated or may be due to need of a child immediately within 1 year. Differentials among 'no need' of family planning is seen to vary more by demographic characteristics and less by socio-economic characteristics. It is further seen that 27 percent of demand for limiting and 65 percent of demand for spacing is unmet.

Unmet need is seen to high for women from Chhattisgarh, Vindhya, Northern, regions, and is least in Malwa plateau regions. Among other socio-economic characteristics a higher unmet need is seen among women belonged to poor HDI districts or rural areas or among Muslims, or illiterates. Unmet need is seen to decline with age or marital duration.

An attempt is made here to assess the effect of socio-economic variables like HDI, district scheduled tribe dominance, place of residence, region, religion, caste, education, and demographic factors like age, age at
marriage, number of living children, number of living sons, and child loss on contraceptive use. The four basic need categories of unmet need for spacing, unmet need for limiting, met need for spacing, and met need for limiting are considered. Separate multiple classification analysis is carried out for women having 0, 1, 2, 3, 4, 5, and 6 or more living children.

Among women with ‘no’ living children the adjusted unmet need for limiting and met need for spacing are negligible and met need for limiting is zero for all the regions. Among women with one living child the unmet need for spacing is highest in Chhattisgarh and is least in Central and Malwa plateau regions. Among women with two or three living children the trend remains same, but the magnitude of the need reduces. With further increase in number of living children the unmet need for spacing decreases in all the regions. The adjusted unmet need for limiting remains low among women of 1 living child. It is seen to increase with the increase in number of living children. For ‘no’ living children, met need for limiting is seen always zero, and unmet need for limiting and met need for spacing are negligible. With increase in number of living children, the adjusted met need for spacing remains low. Similar analyses were carried out for the other variables one by one.

Unmet need women for limiting or spacing who do not intend to use any method of family planning in future provided several reasons for non-use.
Several reasons are cited by women with unmet need for limiting as 'fear of side effects', 'opposition', 'health related problems' etc. A few reported 'lack of knowledge', 'method related problems', 'cost too much' etc. Unmet need women for spacing referred mainly reasons for non-use as 'opposition', 'health related problems', 'lack of knowledge', 'fear of side effects'. A few reported 'method related problems', 'cost too much', 'against religion' etc. It is further seen that majority of unmet need women for limiting or spacing belonged to poor HDI districts, or reside in rural areas, or illiterate women.

The RCH data lacks information on family planning programme inputs or about involvement and cooperation of other agencies in the programme. So, client perspectives on contraceptive use are studied based on necessary information that were collected during the field survey.

The majority of male and female spouses were in favour of family planning. Relatively, a less favourable attitude towards family planning is noticed among scheduled tribes, illiterates, and never communicated couples. A wide gap between knowledge, attitude, and practice exists. While the knowledge, and favourable attitude towards family planning is seen as universal, practice is limited to a little above half of the women only. A wide gap is noticed among women having no surviving children
or among younger women less than 25 years of age or among women belonging to a joint family. Self/spouse themselves did the decision of adoption of any method of family planning. Hardly in one-third cases a health worker played the role of motivator. Role of friends/relatives is found minimal. For majority of potential users, method in mind is seen as female sterilization.

About one-fourth of ever users switched from one method of use to another method of current use. Major cases of switchers shifted from a temporary method to a permanent method due to completion of their family size. Past users who discontinued the method of use and currently not using any method of family planning, majority belonged to joint family, scheduled caste or tribe community, young age group (less than 25 years), and have poor exposure to mass media. Majority of discontinuers discontinued the method of use to have a child. A few reported method related problems like experiencing side effects, or excessive bleeding, method failure, and method failure. A very few reported non-availability of the method as a reason of discontinuation.

Like RCH data, the field survey data also shows female sterilization as major share of current users. Spacing methods are neglected. A strong relationship between contraceptive use and sex preference is noticed.
The contraceptive use increases steadily with the increase in number of living sons.

It is seen a few women believe certain socio-cultural inhibiting factors which act as barriers of family planning. A few believed in misconception/ rumours about family planning or have religious/ cultural belief, which prohibits the use of any family planning method. A few women received opposition from family member. It is further noticed that women who have such socio-cultural belief belonged in more proportion among scheduled caste or tribe, poor, illiterate, and have poor exposure to mass media.

Regular supply of condom and oral pills to the users is maintained. Only a very few mentioned about non availability of the supply, when it is needed. Source of supply is mainly seen as government sources like hospital/ PHC/ Sub-centre. A very few reported depot holder as a source of supply.

Inter-spousal communication that is very vital for initiating dialogue between husband and wife for discussions about family size formation or choice of contraceptive method is found neglected. Ideally, only less than one-fourth of the couples discussed the matter before the birth of their first child. Also, among couples who ever communicated, for
majority the first discussion on it took place after having 3 or more children. Never communicated couples belonged in more proportion among scheduled tribes, poor or illiterate couples.

Credibility of health delivery services is very crucial to improve acceptability of the services to the people. It is encouraging to see majority of women are satisfied with government health services and recommend others to avail the services. It is seen relatively a more proportion of dissatisfied women belonged to young age group, less than 25 years. A more proportion of satisfied women are from poor standard of living households.

Various factors directly or indirectly influence contraceptive use, their roles and linkages are very complex. In the present study 60 variables are considered here to study their influence on contraceptive use. The variables are grouped into four categories, programme effort factors, non-programme effort factors, district setting factors, and social setting factors. Thirty-eight Programme effort variables considered here includes 16 variables related to availability and accessibility of inputs, 5 variables to training received by health functionaries, 5 variables to knowledge of health functionaries, 5 variables to supervision and monitoring work, 6 variables to IEC and social/ mass/ inter-spousal communications, and 1 variable is related to credibility of health delivery services.
Three non-programme effort variables considered here included 'interdepartmental linkages', 'support from NGOs for their cooperation', and 'support from private doctors for their cooperation. Four district level setting variables included, 'district human development index', 'district tribal dominance', 'availability of basic amenities in the district', and 'distance of district H.Q. from state H.Q., Bhopal'. Fifteen social setting variables included 3 household level characteristics, 9 individual characteristics of women, and 3 variables pertaining to believe in barriers of family planning or opposition from family member.

For quantitative analysis each of the variable is suitably coded. For some variables like infrastructural facilities available at PHC or village level or for measurement of knowledge about high risk factors (HRFs) or for measurement of standard of living index, composite indices are computed based on relevant information collected during field survey. It is seen women belonging to PHCs having better 'infrastructural facilities', or 'OPD/ OT/ Delivery room' use contraceptives in more proportion. The variable 'vacant health functionaries in PHC/ SC' shows a negative relationship with contraceptive use. No clear-cut relationship is observed with other PHC/ SC level facilities like 'availability of quarters', 'availability of vehicles', 'expenses incurred on IEC' etc.
Among village level facilities considered here, variables like 'infrastructural facilities', 'availability of any doctor/health personnel (in any system)', 'staying of any health functionary', 'availability of trained dai/VHG/AWW' are found to have positively linked with contraceptive use.

Among variables related to training of health functionaries most of the variables considered here are found to have positively linked with contraceptive use. It is seen three-fifths of women went for contraceptive use in case women belonged to PHC area where 'MOI received training in hospital management'. Knowledge of health functionaries like 'knowledge about HRFs', 'knowledge about oral pill', 'knowledge about immunization', 'knowledge about RTI/STI/AIDS' are seen to have positive impact with contraceptive use.

Further, it is seen that regular supervision and monitoring work by district authorities or more time given by MOI in supervision work or proper maintenance and updation of records are positively linked to contraceptive use. More IEC activities, exposure to mass media, interspousal communication are seen positively related to contraceptive use. It is also seen satisfied beneficiaries due to good quality of services went in more proportion of contraceptive use. Good interdepartmental linkages, support of NGOs or private doctors influenced positively contraceptive use.
An attempt has been made to select few key elements that effectively influence contraceptive use. The impact analysis is carried out at two stages, at first stage selection of key elements, and at the second stage various impact assessments are carried out using various statistical methods like multiple regression analysis, multiple classification analysis, logistic regression analysis, and path analysis.

To select key programme effort variables regression analysis is carried out with 38 programme effort variables as independent variables and three dependent variables (current use of any method, any modern method, and limiting method) one by one. The four key variables which are statistically significant are seen as ‘availability of doctor/ any health personal (in any system) in the village’, ‘knowledge of ANM’, ‘interspousal communication’, and ‘satisfied beneficiaries due to quality of care’. All the three non-programme effort variables consider here are statistically significant in the regression. They are ‘inter-departmental linkages’, ‘support from NGOs’, and ‘support from private doctors’.

Out of the 15 social setting variables considered here, ten variables related to socio-economic and demographic characteristics of women are statistically significant in the regression. The selected variables included ‘household income per person’, ‘type of family’, ‘education’, ‘age’, ‘age of effective marriage’, ‘number of living children’, ‘number
of living sons', 'loss of children', 'additional children desired', and 'belief in rumours/ misconception about family planning'.

As contraceptive use is influenced by differences in social setting factors, so to know true effect of programme and non-programme effort variables on contraceptive use social, setting factors here are controlled through multiple classification analysis. The analysis shows that adjusted contraceptive use is seen to increase steadily with increase in the 'knowledge of ANM', 'interdepartmental linkages', and 'inter-spousal communication' among couples. It is further seen that in case of three variables, 'availability of any doctor/ health personal (in any system) in the village', 'linkages with NGOs', and 'linkages with private doctors' the positive relationship reverses after adjustment.

The similar analyses are carried out keeping key social setting factors as predictor variables and controlling key programme and non-programme effort variables as control variables. The analysis shows importance of demographic factors as compared to socio-economic factors in influencing contraceptive use. Although the positive relationship of contraceptive use with 'age', 'number of living children', 'number of living sons', and negative relationship with 'additional children desired' is maintained after adjustment, but the gap reduces substantially.
Further, logistic regression analysis is carried out to estimate risk factors in contraceptive use due to inclusion of women in particular groups. Here, all key programme, non-programme, and social setting factors are included as predictor variables and the three dependent variables of contraceptive use as considered earlier are taken into view. The three analyses suggest that women belonging to area having better 'knowledge of ANM', or 'inter-departmental linkages', or 'inter-spousal communication', or women having higher 'age', or 'number of living children', or 'number of living sons', or women having not exposed to 'loss of children' have higher chance of contraceptive use.

Path analysis is carried out in order to estimate the direct and indirect effect of influence of key variables on the contraceptive use, which will help to study mechanisms of relationship. To make the path model simple, only few key variables are considered which can be logically interlinked. Here, a composite index of programme effort variables is computed based on all key programme effort variables using principal component method of factor analysis. Similarly, a composite index of non-programme effort variables is also computed based on all key non-programme effort variables using factor analysis. The analysis is also carried out for three marriage cohorts separately to get marital duration differential of the path coefficients.
It is seen that direct influence of 'additional children desired' on contraceptive use is ranked 1st among the key nine variables considered here, in the first two marital duration groups, and also among all women. In the 'old' marital duration group 'programme effort' variables ranked first. The second most influencing variable came out as 'son preference' among 'young cohort' and 'programme effort' among 'middle cohort women'.

The indirect effect on contraceptive use among all women is found highest for 'age' followed by 'son preference'. It is seen that indirect effect is highest for 'age' among 'young cohort' followed by 'son preference'. In the middle cohort the most important variable is 'son preference' followed by 'age' and 'education'. Among 'old cohort' the highest indirect effect is seen 'education' followed by 'son preference'.

The analysis shows that 'programme efforts' variable is most important in influencing contraceptive use among 'old' age women having at least 20 years of marriage duration. It is also important being 2nd most important variable among middle-aged women having 10-19 years of marriage duration. However, for 'young' and 'middle' aged women the demographic and social factors are crucial in influencing contraceptive use.
Here, an attempt has been made to study impact due to interactions of different combinations of key programme, non-programme, district, and social setting factors on contraceptive use. Ten models are attempted here considering different sets of variables as the predictor variables. For each model three regression analyses are done considering dependent variables as contraceptive use of any method, any modern method, or any limiting method. Predictors in the models considered as programme and non-programme variables in Model I, programme effort and district setting variables in Model II, programme efforts and social setting variables in Model III, programme, non-programme, and district setting variables in Model IV, programme, non-programme, and social setting variables in Model V, programme, district, and social setting variables in Model VI and so on. The analyses show that major determinant of changes in contraceptive use are changes in social factors. The predictive power is .393. When programme effort variables are added to social setting factors the predictive power is .441. After further inclusion of non-programme, and district and setting factors the predictive power increases marginally to .458, an increase of hardly 2 percent. The similar findings are noticed when the other two dependent variables are considered in the analysis.

It seems programme effort variables alone has limited impact on contraceptive use. For an effective impact of programme effort
variables, one should take into view of variation of social setting factors of individuals for whom the programme is planned.

To conclude, it can be mentioned that the concept of RCH programme was to provide the beneficiaries need based client centered demand driven high quality and integrated RCH services. But, the programme effort strategies are still user specific rather than method specific. An overall emphasis on the achievement of terminal method is reflected and the multiplier effects of spacing are not promoted. A very limited effort is done to make the clients acquainted with positive benefits of spacing on mothers or children's health. Even the functionaries are not aware of long term demographic impact of spacing on fertility. The contraceptive use is found mainly female oriented. All the post-adoption side effects they faced were related to mainly these methods. So, an urgent need is to strengthen follow-up services and also screening of cases before their adoption.

Communication message should take note of the prevailing customs, tradition, and religious belief. A strong linkage between contraceptive use and number of living sons is observed. The preference for a son is universal. However, an effort should be made to mitigate the son biases by raising women's status in the society. Also more emphasis should be given to old age security for disadvantaged section of the society.
There is a need to shift in motivational strategy. The emphasis is generally given to approach a couple after having 2 or 3 children. Younger clients after marriage or after having one child are not given due importance for the motivation purpose. This has resulted the inter-spousal communication process also at the later stage of reproductive life. An effort should be made to initiate the dialogue at an early date.

Quality of service delivery component is seen very important aspect for the acceptance of services. An all-out effort should be made how to improve the quality of the services. This will also improve the image of the health functionaries. An effort should be made to increase the operational capabilities of the health workers by organizing regular in-service orientation training for them. Also an effective supervision and monitoring of the work may add to the programme performance.

Inter departmental cooperation or linkages are to be more seriously considered. Although horizontal linkages of grass roots level workers with ICDS worker, or Sarpanch, revenue worker, school teacher etc. is noticed. But more serious attempt should be made to exploit these linkages. Their involvement in the programme will provide more credibility to the programme.
There is an urgent need to evolve area specific programme to reach to the unreached clients in tribal areas or inaccessible remote villages. The programmes efforts should be envisaged to involve more effectively 'beyond family planning activities' like increasing age at marriage of females, education of females, reduction of infant and childhood mortality etc.