CHAPTER V

SUMMARY & CONCLUSIONS
The maternal and child health in the country has not been satisfactory despite the huge health infrastructure and manpower. The simple MCH interventions available through the health care delivery system can dramatically reduce the mortality and morbidity among women and children, which form 65 percent of the total population and are the most vulnerable segment of the population.

Various studies have shown that there has been under utilisation of Governmental health facilities. The need therefore is to study the operational aspects of health care delivery system and the socio-economic and cultural variables operating in the rural communities affecting the utilisation of these MCH interventions by mothers in the rural areas.

The present study attempts to analyse the MCH related socio-cultural practices, level of knowledge of rural women about MCH interventions, extent of adoption of these interventions, and the functioning of Governmental health care delivery system in the study area.

The study was carried out in Block Beri of district Rohtak, Haryana. Out of the 15 sub-centre villages under the Primary Health Centre, Dighal, four sub-centre villages were selected randomly considering their distance from PHC. In each of these selected villages, list of households with women, (having children below the age of 6 years) was prepared and one-fourth of these women were included in the
study. They were interviewed on a schedule prepared for the purpose considering the objectives of the study and administered a tool developed to assess the knowledge of these women about MCH & FP interventions. The Primary Health Centre Dighal, Rural Hospital Beri, and the four sub centres were studied for their functioning in respect of MCH & FP. The health functionaries and patients visiting these institutions were interviewed. The relevant records, reports and registers at these Institutions were also reviewed.

The data collected was analysed manually and with the help of Computer using SSP-PC Software. The statistical tools used were Karl Pearson's Correlation Coefficient, regression analysis, F test student's 't' and Chi square tests.

The main findings of the study have been summarised under the following heads:

I. Socio-cultural practices related to maternal and child health.
II. Knowledge of women about MCH & FP interventions.
III. Adoption of MCH & FP interventions by women.
IV. Health services infrastructure and functioning.
V. Conclusions.
I. Socio-Cultural Practices Related to Maternal and Child Health

1. The social ceremonies were usually being held with the birth of a male child and were being avoided for female child birth. These ceremonies included ceremonial washing of mother's breast by Sister-in-Law on 3rd day of child birth ("Doodhi Dhona"); "Chati", "Dasutan", "Piliya", and "Kuan Pujan". The "Doodhi Dhona" ceremony was related to delaying of breast feeds to the newborn children in the rural area.

2. Special food items like "Gola", "Gond", "Ajwain" etc. were being given to women after delivery of child, since these were considered to help the women in recovering and "Ajwain" was considered to have a "cleansing" effect on uterus.

3. Almost all the food items were classified in terms of their effect on body into "hot" or "cold". Foods like Pulses, Undiluted Milk, Egg, Jaggary, Meat, Tea, Mango, Apple, Halwa etc. were considered "hot". Rice, Diluted Milk, Curd, Butter Milk, Oranges, Banana, Green Leafy Vegetables, Kheer, Khichri etc. were considered "Cold". The items like ghee, fried foods, meat, egg and undiluted milk were considered "heavy". Potato, Tomato, Guava, Pulses etc. were considered as "wind" producing foods.
4. The causative factors for common childhood diseases, were as follows: Tuberculosis was considered to be due to weakness and untreated cough or fever. Exposure to 'cold' in fever, defect in blood or evil eye were considered to be the causes for poliomyelitis. Measles was considered to be due to untreated fever, "Heat" in body and some attributed it to Goddess. The diarrhoea in children was related to teeth eruption, intake of spicy foods and chilies by lactating mother, and displacement of intestine ("Dharan"). The worm infestation in children was associated with eating sweet foods like Jaggary and soil eating behaviour.

5. The indigenous practices in common ailments were mentioned to be as follows:

The decoction prepared from leaves of Tulsi, Ginger, Dry Date Fruits, Black Peper and Water was considered to be very effective in management of fever. For dry cough Ginger juice in honey, or dry date fruits boiled in milk, and decoction were considered to be useful. The paste of neem leaves in Jaggary was the indigenous practice for round worm infestation. For thread worm infestation in infants, placing of cotton swab dipped in mother's milk on the anal region of the infant was considered to be curative. The paste of neem's bark in oil, or "multani" in water were considered to be effective in common skin infections. For discharging red eyes, Kajal, Honey and Paste of
Garlic (boiled in milk) were the indigenous practices. The intake of "Herad" in warm water, or massage of hands and abdomen were the remedies for pain abdomen. The use of turmeric powder in ghee at local site was considered to facilitate healing of wounds. Intake of Isabogol husk in Curd, Mint Leaves boiled in water, Ghee added to tea, Onion juice, Paste of Mango seed, Opium etc. were considered to cure diarrhoea. For pneumonia in children, massage of chest with hot oil and placing cotton around the chest was the usual indigenous practice. Old Jaggary, Kala Jira, Ajwain were considered useful in infertile women. For menstrual irregularities intake of Ghee prepared from Cow's milk and Carrot seeds boiled in milk were suggested.

II. Knowledge of Women About MCH & FP Interventions

1. The Likert's type of scoring scale to measure knowledge of MCH & FP interventions was developed. The scale had 21 statements related to child care, 6 to maternal care and 10 to family planning. There were 10 positive and 27 negative statements. Each item measured a specific concept related to MCH & FP and did not provide any clue to the correct answer. The items were framed in Hindi using local dialect and vernacular names. In the final scale only those items were included which had a difficulty index between 30-75 and a discrimination
index of $\geq +0.25$. The reliability of the scale was measured using Kuder-Richardson formula. The concurrent validity of the scale was estimated by calculating Karl Pearson's correlation coefficient between total score and each of three sub-scale scores. The scale was administered to 163 women having children below the age of six years in the four selected villages namely Dhandhalan, Wazirpur, Jahajgarh and Achej. The mean total score was 125.58 and it ranged from 69 to 161. The mean knowledge score for maternal care, child care and FP was 18.46, 73.98 and 32.24 respectively.

2. The child care score was positively and significantly correlated with education of women, education of husbands and with exposure to mass media. There was a significant positive correlation between maternal care score and exposure to mass media. The FP score was also significantly correlated to exposure of women to mass media.

3. The various socio-economic and demographic variables among the high scoring (total score more than 3rd quartile value, 138) and low scoring (total score less than first quartile value, 113) were compared. Of the high scoring women 59.5 percent had received formal schooling as compared to 41.1 percent in low scorers. This difference was statistically significant. The
educational level of the husbands was also higher in high scoring women. In 48.7 percent of the high scoring women the family was headed by their husbands as compared to the figure of 29.7 percent in low scorers. There was significantly higher exposure of women to mass media in high scoring group. The mean total adoption index for MCH & FP interventions was 60.2 in high scorers and 43.2 in low scorers.

III. Adoption of MCH & FP Interventions by Women

1. The MCH & FP practices of the women were studied by interview on a structured interview schedule. The schedule comprised of 13 items related to child care practices, 10 items related to maternal care and 7 to FP. The adoption index was calculated by dividing the number of practices adopted, by total number of practices applicable and multiplying it by 100. The mean total adoption index for MCH & FP interventions was 51.47 percent among the women. The average value of adoption index of FP was lowest (39.01), and highest for child care interventions (60.44). The average adoption index for maternal interventions was 46.83. Nearly 45.3 percent of the women had a total adoption index value exceeding the mean.

2. The mean value of total adoption index was 52.5 for women residing in villages located near health institutions (Dhandhalan, Wazirpur and Jahajgarh) as
compared to the mean index value of 48.2 for women residing in village Achej located far away from health Institutions.

3. The education of the respondent was observed to be positively and significantly correlated with the maternal, child, FP and total adoption index. The education of husband was observed to be positively and significantly correlated with FP adoption Index.

4. The child care, FP and total adoption indexes were positively correlated with exposure of respondents to mass media.

5. The knowledge score for maternal care, child care and FP were observed to be significantly and positively correlated with maternal, child and total adoption indexes. However there was no significant correlation between knowledge score for FP and adoption index for FP.

6. The multiple regression equation's for prediction of adoption index from education, exposure to mass media, and total knowledge score, had been as follows:

   \[ X_1 = 10.53 + 0.256 X_2 + 4.362 X_3 + 1.957 X_4 - 1.209 X_5 \]

   \( (X_2 = \text{total knowledge score} \)
   \( X_3 = \text{education of women,} \)
   \( X_4 = \text{education of husband,} \)
   \( X_5 = \text{exposure to mass media) \}

   (R^2 = 0.4224)
iv) \( X_1 = 8.805 + 0.251 X_2 + 4.029 X_3 + 1.441 X_5 \)
\[ R^2 = 0.4243 \]

iii) \( I_1 = 10.065 + 0.267 X_2 + 4.160 X_3 \)
\[ R^2 = 0.4272 \]

IV. Health Services Infrastructure and Functioning

These were studied at PHC Dighal, RH Beri, and four sub-centres in Block Beri of district Rohtak. The main observations were as follows:

1. The average number of cases seen at PHC Dighal were 3045.7 (OPD), 12.08 (indoor) and 169.66 (emergency) per month, whereas for RH Beri, the number was 3195.3, 83.41, and 176.5 respectively for OPD, indoor and emergency, during the period January to December 1990. The indoor bed occupancy rate was 16.9 percent for PHC Dighal and 76.0 percent for RH Beri. The difference could be attributed to relatively better functioning of indoor services at RH Beri and to the availability of nursing staff and Lady Medical Officer at RH Beri.

The performance of four sub-centres in the Block Beri, was also compared. The sub-centres Dandhalan (0.6 Kms. distance from the PHC Dighal), Wazirpur (7.5 Kms. from PHC Dighal), Jahajgarh (12.5 Kms. from PHC Dighal) and Achej (19.6 Kms. from PHC Dighal) were studied. It was observed that the average number of immunisations done, OPD cases attended and antenatal
cases seen per month were highest for sub-centre Dandhalan and least for sub-centre Achej. The percentage of eligible couples using various family planning methods was also highest for sub-centre Dandhalan. The difference in the performance was explained on the basis of better availability and accessibility of services to population in village Dandhalan as compared to village Achej. Moreover, the MPW (F) was staying in the village Dandhalan and was thus available to the villagers, whereas MPW (F) of village Achej was not maintaining her headquarters and was commuting from Rohtak city.

2. Near 56 percent of OPD cases at RH Beri and 63.4 percent of OPD cases at PHC Dighal were of males. For indoor treatment also, the proportion of males was higher at both the institutions. The sex differential in utilisation of services could be explained on the basis of factors like social barriers for women, hesitation of women to go to male Doctors, clash of working time of rural women with working time of these Institutions and different treatment seeking behaviour of women (not seeking treatment unless severely ill).

3. It was observed that nearly 56.2 percent of patients coming to OPD and 68.7 percent of indoor patients at RH Beri; and 94 percent of patients at OPD and 60.0 percent of indoor patients at PHC Dighal belonged to
villages located within 3 miles distance. The average time spent on visit to RH Beri was 115.0 minutes (for patients coming from within 3 miles) and 163.1 minutes (for patients coming from villages located at more than 3 miles). Out of this the patients spent 3-4 minutes with Doctor in consultation. Similarly at PHC Dighal the average total time spent by patients for visit was 87.0 minutes (for patients coming from within 3 miles) and 150.0 minutes (for patients coming from more than 3 miles) and the average time spent with Doctor was 2.6 minutes and 1.85 minutes respectively. About 70.9 percent of patients visiting RH Beri and 81.8 percent PHC Dighal mentioned that the attending Doctor had only talked to them during consultation, whereas 21.9 percent and 10.2 percent of the patients visiting these institutions mentioned that the Doctor had examined them. When asked to express about their satisfaction of the services utilised during the visit, 13.6 percent of patients at PHC Dighal and 29.0 percent of patients at RH Beri replied positively.

4. The evaluation of the specialists services under the ROME Scheme in the block, revealed that these services were available on adhoc basis and it was observed that during the year 1990, most of the times post-graduate students, or House Surgeons working in different specialities at Medical College visited PHC Dighal and RH Beri, representing the respective specialities. The
result of non-participation of senior faculty from Medical College was that the desired physical and material resources were not being mobilised from the Medical College.

5. The review of 350 prescriptions written by Generalists (MBBS) and 110 of Specialists (Post-graduate Diploma or Degree) revealed that none of the Generalists' prescriptions had brief clinical features written on them. Correct dosage schedule was observed for all drugs in 45.6 percent of the prescriptions of Generalists and 73.0 percent of the prescriptions written by Specialists. The duration of treatment and instructions for patients were not written in majority of the prescriptions. 84.5 percent of the prescriptions given by Generalists and 83.1 percent by Specialists had more than 2 drugs.

6. The market cost of drugs indented in one year (1988-89) for PHC Dighal and ROME Scheme for the Block was Rs.1.5 Lakh. 56.3 percent of the cost was towards the purchase of antibiotics, 12.6 percent for sulfa drugs, 8.3 percent for anti-pyritic analgesics, 7.9 percent for anti-spasmodic drugs, 5.1 percent for vitamins, 2.3 percent for drugs used in eye infections, 5.6 percent for drugs used for skin infections and 1.7 percent for mixtures, lotions, ointments etc. It was further observed that more money was being spent on costlier
preparations and a meager proportion on cheaper ally effective drug formulations.

**ds of drugs issued to sub-centres under PHC year 1988-89, were examined against the -centres issued by the Government of observed that Iron Folic Acid Tablets, Planning Methods (Nirodh, Copper-T, Oral s) were available in plenty, where as the other drugs were in inadequate amount, at these sub-centres. The average amount of drugs issued to the sub-centre during 1988-89 was nearly 24.7 percent of the norm.

The analysis of the available records for one year (1989-90) revealed that the Medical Officer Incharge PHC Dighal had made on an average 7.5 field visits, Health Assistants 17.7, MPW (M) 14.7, and MPW (F) 15.2 field visits per month. Nearly 60.0 percent of these field visits were mentioned to be for family planning work. Thus it was observed that most of the efforts of PHC staff was directed towards the family planning work, with relative neglect of other preventive and promotive health activities.

9. The mean job dissatisfaction score was highest for Medical Officers. Nearly half of MPW, 60 percent of Health Assistants and Medical Officers, 66 percent of Anganwadi workers and 20.0 percent ICDS Supervisors had a job dissatisfaction score exceeding the mean values for the respective categories.
V. CONCLUSIONS

The conclusions which can be drawn from the study are as follows:

1. The socio-cultural beliefs and practices of women in the study area were observed not to favour acceptance of the so called simple maternal and child health interventions, available through the health care delivery system.

2. The knowledge level of the rural women in the area about the MCH and FP interventions was related to education of the respondents, education of their husbands and their exposure to mass media especially TV. This observation highlight the need to exploit the TV in dissemination of health education messages.

3. The adoption of MCH and FP interventions by women was also related to the education, exposure to mass-media and knowledge level of the women.

4. The utilisation of health institutions remained confined to masses residing near the institutions.

5. The persons who visited the Primary Health Centre and the Rural Hospital in the study area, had to spent a lot of time (87.0 - 163.1 minutes) for their visit to these institutions.
6. The interaction of patients with doctors in the Governmental health institutions was observed to be restricted to 2-3 minutes and the communication hardly clarified the doubts and queries of the patients about their ailments. The consultation process needs to be improved to cover the various aspects of disease causation, prevention and therapeutic procedures.

7. The prescribing pattern of doctors in the Governmental health institutions was found not to conform to the general principles of prescription writing. A good and complete prescription is likely to be more effective, would result in better follow up may result in the saving of scarce drug resources in the Governmental health institutions.

8. The field visits of the health personnel in the study area were observed to be poorly planned, and the field activities were almost totally limited to the family planning work in all the categories of health persons. The need is to expand the scope of field visits to cover all the activities related to child survival and safe motherhood.
9. The peripheral functionaries were having high level of job dissatisfaction, which could be a factor affecting their job performance. The present system does not provide for adequate incentives for good work. Motivated teams of health functionaries are necessary to improve the qualitative aspects of the health care delivery system.

10. There is need to strengthen the infrastructure in the Governmental health institutions in the rural areas.