CONCLUSIONS AND SUGGESTIONS
CHAPTER VI

6. CONCLUSIONS AND SUGGESTIONS

The following conclusions have been drawn on the basis of the observations of this study.

6.1 BIOSOCIAL CHARACTERISTICS OF THE GROUPS STUDIED

There has been no significant difference in the age and sex composition of the children of I.C.D.S. and Non-I.C.D.S. study groups. Majority were Hindus in both I.C.D.S. (95.0 percent) and Non-I.C.D.S. (99.5 percent) groups. Among Hindus, 11.9 percent and 26.1 percent in I.C.D.S. and Non-I.C.D.S. groups respectively were of upper caste and remaining backward and schedule castes. More than half of the children in I.C.D.S. (61.7 percent) as well as Non-I.C.D.S. group (50.2 percent) belonged to family of more than 6 members.

The single largest number of children in I.C.D.S. group (31.4 percent) were of birth order of II and in Non-I.C.D.S. (26.8 percent) of I, the difference being insignificant. In both the groups, the parents of a majority of children were illiterate, illiteracy being more prevalent amongst mothers. No significant difference was found in I.C.D.S. and Non-I.C.D.S. groups regarding the main occupation of the families and a majority of the
children in both groups belonged to the main occupation of the families having agriculture. Majority of the children in both groups belonged to the families having per capita monthly income of Rs. 60 - 139.

6.2 ENVIRONMENT

Common source of drinking water in I.C.D.S. (76.6 percent) as well as Non-I.C.D.S. (86.6 percent) groups has been open shallow wells. However, a significant difference was observed regarding safe water supply, i.e. hand pumps which was more in I.C.D.S. area.

There has been no significant difference in the methods of excreta disposal. Insanitary methods have been the commonest mode of excreta disposal in both the groups.

No significant difference was observed in housing conditions except environment surrounding of the child's house which was hygienic in respect of significantly higher percentage in I.C.D.S. (30.7 percent) as compared to Non-I.C.D.S. (21.8 percent) group.

6.3 PREGNANT, LACTATING WOMEN AND FAMILY PLANNING SERVICES

Higher percentage of pregnant and lactating women in I.C.D.S. area as compared to Non-I.C.D.S. area has been utilising antenatal care and postnatal care respectively.

Family planning services were utilised in more percentage in I.C.D.S. area as compared to Non-I.C.D.S. area.
The need, therefore, is to educate and motivate eligible couples for these services in both the groups by auxiliary nurse midwives, anganwadi workers and other health workers.

6.4 NUTRITIONAL STATUS

The values of anthropometric measurements - weight, height, were found lower in Non-I.C.D.S. group of children as compared to I.C.D.S. group. The male children showed higher values than females for weight, height measurements in both the groups. Mean values of weight, height, in both the groups however, were lower than the I.C.M.R. standards.

The weight-height index was below the standard (less than 0.15) at the age of 2+ years in males and 1+ & 2+ years in females of I.C.D.S.; and at 6 months to 3 years in males and females of the Non-I.C.D.S. group. This has been indicative of better nutritional status of I.C.D.S. group of children as compared to Non-I.C.D.S. and also of better nourishment of male children than the females in both the groups.

The overall prevalence of protein energy malnutrition was significantly higher in Non-I.C.D.S. (82.1 percent) as compared to I.C.D.S. (67.6 percent) group. Moreover, there was significantly higher prevalence of severe grades (III & IV) of P.E.M. in Non-I.C.D.S. (8.2 percent) than the I.C.D.S. (4.7 percent) group.
Vitamin 'A' deficiency has shown significantly lower prevalence in I.C.D.S. (0.7 per 100) as compared to Non-I.C.D.S. (3.9 per 100) group of children. No significant difference was observed in the prevalence of angular stomatitis in I.C.D.S. (5.0 per 100) and Non-I.C.D.S. (6.9 per 100) group.

Of the total children investigated for Haemoglobin in I.C.D.S. (63.5 percent) and Non-I.C.D.S. (82.4 percent) groups, significantly lower percentage of I.C.D.S. (19.3) than the Non-I.C.D.S. (31.6) group showed a value of less than 10 gm%. Only 4.2 percent in I.C.D.S. and 6.6 percent in Non-I.C.D.S. group were having Haemoglobin below 7 gm% indicating borderline anaemia to be more prevalent in both the groups.

6.5 DEVELOPMENT

Except in head holding and sitting, all mile stones in the children of Non-I.C.D.S. group were found significantly delayed as compared to the I.C.D.S. group.

6.6 FEEDING PRACTICES

Prolonged total duration of breast feeding has been observed in both the groups, mean duration 18.6 and 18.9 months in I.C.D.S. and Non-I.C.D.S. groups respectively. But the weaning was found to be started at an earlier age in I.C.D.S. as compared to Non-I.C.D.S. group, mean age at weaning being 11.8 and 16.2 months respectively. Cereals
and pulses were the common food items given as weaning food to the children in both the groups.

6.7 **PERSONAL HYGIENE**

According to the criterion adopted, a majority (46.1 percent) of the children in I.C.D.S. group were found having fair personal hygiene, while the majority (69.7 percent) in Non-I.C.D.S. group had poor personal hygiene, the difference being statistically significant.

6.8 **MORBIDITY**

A significantly higher percentage of children in Non-I.C.D.S. (41.6) as compared to the I.C.D.S. (27.9) groups were sick at the time of study; average sickness per sick child being 1.2 and 1.3 respectively. Upper respiratory tract infections, diarrhoea & dysentery, skin diseases and fever have been the major causes of sickness in both the groups of children. Significantly higher prevalence of diarrhoea & dysentery, and respiratory infections (18.9 & 15.4 per 100 respectively) has been found in Non-I.C.D.S. group as compared to the I.C.D.S. group (12.1 & 9.5 per 100 respectively).

Significantly higher percentage of stool samples in Non-I.C.D.S. (39.1) as compared to I.C.D.S. (29.8) were found positive for one or the other parasites. *Ascaris* was the most common parasite encountered in both the groups.
6.9 **CRUDE BIRTH RATE**

Crude birth rate in I.C.D.S. area has been 16 as compared to 32 per 1000 mid year population in the Non-I.C.D.S. area.

6.10 **MORTALITY**

Infant mortality rate in I.C.D.S. area has been 100.0 as compared to 111.1 per 1000 live births in the Non-I.C.D.S. area. The mortality in 0 - 1 year age group was found 89.7 per 1000 population in I.C.D.S. group and 107.5 per 1000 population in the Non-I.C.D.S. group. Single major cause of 0 - 1 year mortality in I.C.D.S. area has been Respiratory infections (28.6 percent), while in Non-I.C.D.S. area the single major cause of 0 - 1 year mortality was Diarrhoeal diseases (30.0 percent). The mortality in 1 - 5 years age group was found to be 13.5 per 1000 in I.C.D.S. and 21.2 per 1000 in the Non-I.C.D.S. groups. Respiratory infections and typhoid fever in I.C.D.S., marasmus and diarrhoeal diseases in Non-I.C.D.S. group were found to be the major killer in this age group. The mortality in 0 - 5 years age group was found to be 26.7 per 1000 population in I.C.D.S. and 40.2 per 1000 population in the Non-I.C.D.S. groups.

6.11 **UTILISATION OF HEALTH SERVICES**

A significantly higher percentage of children in I.C.D.S. (71.4) as compared to Non-I.C.D.S. (54.9) groups have been utilising government agencies for medical care.
Mothers of significantly more (45.9 percent) children in I.C.D.S. group as compared to only 18.6 percent in Non-I.C.D.S. group availed antenatal care.

Home deliveries have been the common feature in both I.C.D.S. (93.1 percent) and Non-I.C.D.S. (81.6 percent) groups, but a significant difference has been observed regarding the type of birth attendant. Majority of home deliveries in I.C.D.S. group (39.2 percent) were conducted by trained persons, while majority of the deliveries (69.7 percent) in Non-I.C.D.S. group were attended by untrained persons.

Coverage for all types of supplementary nutrition Vit. 'A', Iron & folic acid tablets and supplementary food, was significantly more in I.C.D.S. as compared to Non-I.C.D.S. group.

Significantly more children (43.3 percent) in I.C.D.S. group as compared to only 9.9 percent in Non-I.C.D.S. group availed periodic medical check-up facility by ANMs/MVs.

From the above, it is concluded that the health status of children in I.C.D.S. group has been better than those of the Non-I.C.D.S. group, but, not up to the level to have significant impact on mortality. I.C.D.S. scheme has produced an impact, but whether it is commensurate to inputs provided, is a debatable matter.
SUGGESTIONS

The following suggestions and recommendations have emerged on the basis of foregoing conclusions.

The health status of children studied from I.C.D.S. area has been better than those of the Non-I.C.D.S., yet there is ample scope for improvement which would follow the overall socio-economic development.

Programme of adult education particularly of women need be further strengthened so as to achieve functional literacy necessary for inculcation of health full habits and practices in the family especially children.

All out efforts need to be undertaken to improve the economic status of the population. Implementation of newer agricultural techniques can be a positive step in this direction.

Protected supply of water and sanitary disposal of excreta are the areas requiring immediate attention. This would need coordinated efforts of Government and local agencies, besides creation of a felt need in the population. In those areas where I.C.D.S. scheme is being implemented, more effective inclusion of environmental sanitation programme in the package of services provided under the scheme may significantly reduce associated morbidity and can be a step towards better health. As a first step each Anganwadi should have a hand pump and a F.R.A.I. type latrine to serve
as a model for the women and children who avail its services. This may ultimately prove more effective in educating the community by developing aspirations amongst the women who may influence the head of families for appropriate action.

Though, the immunization coverage is comparatively impressive but it is still below the satisfactory level and there is lot of room for further improvement. Regular supplies of vaccines, storage facilities at sub-centres and motivation of the parents for getting their children immunized, require a strategy for better achievement. Attention need also be given to booster dose of D.P.T. and Oral Polio Vaccine.

Irrespective of the improvement in the levels of personal hygiene, there is much to do. Anganwadis have to play a catalytic role in this situation. It seems that not much attention is given to this important aspect as many of the morbidity conditions observed, could have been prevented by improvement in personal hygiene. The need therefore, is not only to educate mothers and children but also to ensure that education is put to practice.

The work area of M.C.H. staff has been reduced with the expectation of effective and adequate coverage but it has still not attained satisfactory levels. It needs concerted efforts to improve the quantity and quality of services rendered by Auxiliary Nurse Midwives.
There has been the signs of relative improvement in the nutritional status but various anthropometric measurements showed lower values than those of well nourished group of Indian children. It may be due to the fact that supplementary food is not regularly available to beneficiaries of I.C.D.S. scheme. This on one hand neutralises the effect of the supplementary food given earlier, and on the other it develops a sense of dependence and expectation in the beneficiaries.

This is not advantageous for long term implications of the programme. It is suggested that purchase of supplementary food should be entrusted to the local village committee which will take keen interest in the availability of locally based supplementary foods and educate people about its necessity even if it is not available at Anganwadi centre.

There is no denying of the fact that services of I.C.D.S. have made an impact on the health of beneficiaries studied but at the same time it would not be appropriate to consider that maximum has reached to the children than that envisaged. The scheme's effectiveness lies in regularity, adequacy and acceptance of its services. People's active participation is of utmost importance and it becomes necessary that various welfare agencies in the rural areas co-ordinate with the scheme, to supplement and supplant the overall benefits. Co-ordination between Anganwadi workers (A.W.W.)
and Auxiliary Nurse Midwives (A.N.Ms) leaves to be desired. It is worth considering that the officers of the respective departments be made responsible for imparting effective co-ordination amongst A.N.Ms and A.W.Ws so that they may not work in isolation but as complementary to each other.