DISCUSSION
CHAPTER V

5. DISCUSSION

Integrated Child Development Services scheme is a national effort for improving the health and well being of the most vulnerable group of population aged under 6 years. The other beneficiaries of the I.C.D.S. scheme are also pregnant women and nursing mothers. The scheme has extended its services in selected areas since 1975 (Tandon 1982) and Chirgaon Block, where the scheme was started in 1980-81, is the universe of this study. To have an appraisal of the services and to assess the impact of the scheme, the health status of 423 children of I.C.D.S. Block Chirgaon and 403 children aged under 6 years of the adjoining Non-I.C.D.S. block Baragaon of district Jhansi have been studied.

5.1 Bio-social characteristics of study population

Of the total children studied, lowest proportion in I.C.D.S. group (1.4 percent) were in age group 9 - 11 months and in age group ≤ 3 months in Non-I.C.D.S. group (3.7 percent). In remaining ages in both the groups of study, children have been fairly well distributed according to age and sex and the differences have been insignificant.

Most of the children were Hindus in both the groups but slightly more in Non-I.C.D.S. group. Nearly three-fourth of the children in I.C.D.S. (83.2 percent) and Non-I.C.D.S.
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Of the total children studied, lowest proportion in I.C.D.S. group (1.4 percent) were in age group 9 - 11 months and in age group ≤ 3 months in Non-I.C.D.S. group (3.7 percent). In remaining ages in both the groups of study, children have been fairly well distributed according to age and sex and the differences have been insignificant.

Most of the children were Hindus in both the groups but slightly more in Non-I.C.D.S. group. Nearly three-fourth of the children in I.C.D.S. (83.2 percent) and Non-I.C.D.S.
group (73.4 percent) belonged to scheduled and backward castes. More than half of the children in both the groups were from larger families comprising of more than 6 members.

Majority of children in the I.C.D.S. and Non-I.C.D.S. groups belonged to the joint families. Per capita monthly income of the families of the majority, in both the groups were having income of Rs. 60 - 139. Gupta et al (1984) have reported that majority of the children in both the groups were from larger families comprising of more than 6 members; and majority of the children of both the groups were from joint families but families of majority in both the groups were having per capita monthly income of less than Rs. 50/- per month.

The educational status of the father and mother in the two groups of children studied, though showed some variation, has not been significant. Majority of the parents in both the groups were illiterate. Gupta et al (1984) have also reported, majority of the parents in both the groups were illiterate. The main occupation of the family of both the groups of children showed some variation, but not very significant. Majority of the families were having agriculture as main occupation.

Most of the children (54.6 percent) were either 1st borne or second borne in I.C.D.S. group, while slightly less (49.4 percent) in Non-I.C.D.S. group. This difference is statistically not significant. Thus, the children in the
I.C.D.S. and Non-I.C.D.S. blocks have been fairly well matched in respect of their various biological, familial and economic characteristics.

5.2 Environmental conditions

In the present study 76.6 percent of the I.C.D.S. and 36.6 percent of Non-I.C.D.S. group were found dependent on open shallow wells for water supply. These findings have been in line of the observations of Shiva Ram (1969) and Singh (1970) and by and large support the observations of W.H.O. (1976) which states that 82.0 percent of rural population does not have access to the safe water supply. Recently, Maheshwari (1981) has also observed that 89.2 percent of population received water from open shallow wells and Gupta et al (1984) has also observed that 94.2 percent in I.C.D.S. and 97.8 percent of Non-I.C.D.S. group were dependent on open shallow wells for water supply. Interestingly, significantly higher percentage (23.4) of the I.C.D.S. group were receiving safe water than the children of the Non-I.C.D.S. group (13.4 percent).

Sanitary disposal of excreta was found in 3.8 percent of I.C.D.S. group. Shiv Ram (1969) and W.H.O. (1976) have reported 2.4 percent and 2.0 percent rural population having provision of sanitary disposal of excreta, while Maheshwari (1981) reported 7.0 percent in a rural areas of Lucknow and Gupta et al (1984) reported 2.7 percent in I.C.D.S. group and 2.0 percent in Non-I.C.D.S. group in a rural area of district Rai Bareli of Uttar Pradesh.
Hygienic environment all around the houses were better in I.C.D.S. group in comparison to Non-I.C.D.S. group (30.7 percent and 21.8 percent respectively). Over-crowding has been absent in 35.5 percent and 33.0 percent, while ventilation was adequate in 24.1 percent and 20.8 percent houses of the children of I.C.D.S. group and Non-I.C.D.S. group respectively. Shiva Ram (1969) reported the adequacy of ventilation in 20.9 percent of the population studied and Gupta et al (1984) reported adequacy of ventilation in I.C.D.S. group (11.2 percent) and (12.3 percent) in Non-I.C.D.S. group, and as such the observations of this study show a higher number having adequate ventilation than these researches. However, the criteria for adequacy of ventilation could not be compared to attach any significance to this finding.

5.3 Pregnant, Lactating women and Family Planning Services

More pregnant mothers (41.9 percent) availed ante-natal care in I.C.D.S. group as compared to Non-I.C.D.S. group (15.8 percent) in the form of iron & folic acid tablets and medical check-up facility. In I.C.D.S. group, tetanus toxoid was given to 32.3 percent pregnant women while in Non-I.C.D.S. group only 15.8 percent. 31.7 percent lactating women availed postnatal care in I.C.D.S. group and only 38.9 percent in Non-I.C.D.S. group by utilizing iron & folic acid tablets and health check-up facilities.
In I.C.D.S. area, family planning services was given to the eligible couple in form of tubectomy (12.1 percent) and vasectomy (0.6 percent) and in Non-I.C.D.S. area tubectomy (6.9 percent) and vasectomy (0.4 percent). Oral contraceptives was given to 9.5 percent women in I.C.D.S. area and only to 1.7 percent women in Non-I.C.D.S. area. Vasundhara et al (1983) have reported, the increase in the acceptance of family planning methods especially sterilization in the I.C.D.S. areas was highly significant in comparison to control area. 40.0 percent sterilized couples of I.C.D.S. group were already having 5 children and 35.3 percent sterilized couples of Non-I.C.D.S. group were having 6 or more children.

5.4 ANTHROPOMETRY

5.4.1 Weight

Children in I.C.D.S. group had higher values for weight as compared to Non-I.C.D.S. group in all ages and in both sexes, but the difference in males and females was statistically significant from 1 to 5 years of age and not significant from 0 - 1 year of age. Male children in all ages were having higher values for mean weight than that of the female in both the I.C.D.S. as well as Non-I.C.D.S. groups. Children in both the groups were having mean weight less than reported by I.C.M.R. (1972) in all ages. Similar has been the observations of Bakshi et al (1977), Chandra et al (1978), Verma et al (1980), Tomer et al (1982) and Gupta et al (1984)
who have also observed male children to be heavier than females and both sexes having mean weight less than I.C.M.R. standards.

5.4.2 Height

Children of both the sexes in I.C.D.S. group were having higher values for height in all ages as compared to Non-I.C.D.S. group and this difference was statistically significant at the age of 4+ years in males and 3+ & 4+ years in females. It may be due to the consideration that stunting occurs only in chronic malnutrition. This was observed by Secane and Latham (1971), Waterlow and Alleyne (1971) and Shastri et al (1973). Thus the deficit height, as an indicator of the duration of malnutrition, would be evident at an older ages.

In both I.C.D.S. and Non-I.C.D.S. groups, males were taller than females in all ages. Bakshi et al (1977) found boys to be taller than girls except at five years of age, while Srivastava et al (1980) and Gupta et al (1984) reported similar findings as observed in the present study.

In comparison with I.C.M.R. standards, children of both sexes in both groups were having lower values. Similar has been the observations of Chandra et al (1978), Srivastava et al (1980) and Verma et al (1980) & Gupta et al (1984).

5.4.3 Weight-Height Index

Weight/Height$^3$ ratio has been equally valid in comparison to weight for age method in detecting malnutrition
(Sen et al, 1980). Weight-height index showed that upto 6 months of age children in both I.C.D.S. and Non-I.C.D.S. groups, were normal according to this index. This reaffirms adequacy of breast milk for nutrition of infants upto the age of 6 months. However, after 6 months, children in Non-I.C.D.S. group showed below normal index in all ages except in 4+ & 5+ years, whereas, in I.C.D.S. group, this index was found below normal only at 2+ years of age in male and 1+ and 2+ years in females. This shows better nutritional status of children before 6 months and after 4 years of age and points out the most vulnerable age for malnutrition being 6 months to 3 years. Bakshi et al (1977) in their study of pre-school children have also observed better growth after passing vulnerable period of 1 - 3 years.

5.5 MILE STONES OF DEVELOPMENT

All mile stones except head holding and sitting were significantly delayed in Non-I.C.D.S. group of children. This could be attributed to the significantly higher prevalence of malnutrition in Non-I.C.D.S. group of children. Mathur et al (1974), Deoki Nandan (1978) and Gupta et al (1984) have also observed delayed milestones in malnourished children. It appears that basic objective of I.C.D.S. scheme in promoting development of children is being gradually achieved.
Protein energy malnutrition, in the present study has been classified as recommended by Indian Academy of Paediatrics (1972). Overall prevalence of P.E.M. was found significantly higher (32.1 percent) in Non-I.C.D.S. group of children in comparison to I.C.D.S. group (57.6 per 100). Moreover, prevalence of severe grades of P.E.M. (grade I, II, III, IV) was 4.2 per 100 in I.C.D.S. group, whereas it was significantly higher 6.6 per 100 in the Non-I.C.D.S. group. This shows positive impact of I.C.D.S. scheme on the prevalence of P.E.M. specially of severe grades. This observation corroborate the findings of Sunder Lal (1980), Tandon et al (1981), Patel (1982) and Gupta et al (1982). Contrary to this, Patowary (1982) while evaluating the I.C.D.S. project in Assam, could not establish a significant change in the state of severe grades of malnutrition. Also, Bhandari et al (1981) did not find any significant improvement in the grades of P.E.M. during the period of one year from 1978 to 1979. It is evident that benefits from the I.C.D.S. scheme have not been uniform all over the country. The reasons for these differences need further study.

Studies conducted in the general population (not covered by I.C.D.S.) in different parts of India have shown varying results depending upon the criteria adopted for P.E.M. and prevailing socio-economic conditions in those areas. Observations of study in Non-I.C.D.S. group have been in line with the observations of Chandra (1978) from
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There has not been significant difference in the prevalence of angular stomatitis in I.C.D.S. (5.0 percent) and Non-I.C.D.S. (6.9 percent) groups in the present study.
However, Patel (1982) noted decline of angular stomatitis from 1.7 to 0.2 percent in an I.C.D.S. area. Observations of this study regarding the prevalence of angular stomatitis have been similar to that of Srivastava et al (1979) and Soni et al (1980) & Gupta et al (1984). Chandra et al (1978) have observed angular stomatitis in 34.7 percent of rural pre-school children of Tamil Nadu. These wide variations in the prevalence of angular stomatitis could be due to differences in food habits of the people.

Significantly higher prevalence (38.2 percent) of anaemia was observed in Non-I.C.D.S. as compared to I.C.D.S. (23.5 percent) group of children. Patel (1982) has also reported declining trends in the prevalence of anaemia 15.0 percent in 1977 and 1.7 percent in 1980. On comparing the observations of Non-I.C.D.S. group with the studies conducted in area not benefited by I.C.D.S., findings of this study have been in line with the observations of Tandon et al (1981), Verma et al (1931), Tomer et al (1982), Gupta et al (1984) and Maheshwari et al (1985).

5.7 IMMUNIZATION

There was significantly higher coverage of all types of vaccination viz. B.C.G., D.P.T., Polio and Measles in I.C.D.S. group as compared to Non-I.C.D.S. group. Coverage for B.C.G. was 27.0 percent in I.C.D.S. and 23.6 percent in Non-I.C.D.S. group. D.P.T. and Polio vaccines were given according to doses. I, II & III doses of D.P.T. and Polio
were received by 58.9, 26.5 and 18.9 percent children respectively in I.C.D.S. group. Corresponding figures for Non-I.C.D.S. group of children were 41.4, 11.9 and 7.9 percent respectively. 2.4 percent children in I.C.D.S. group and only 0.7 percent in Non-I.C.D.S. group received booster dose of D.P.T. and Polio vaccine.

Measles vaccination was given to 30.0 percent children of I.C.D.S. group, while in Non-I.C.D.S. group 2.0 percent of the children received it. Sunder Lal (1980) reported coverage of B.C.G., D.P.T. & Oral Polio in 48.3, 69.9 and 44.0 percent children in an I.C.D.S. area.

Similarly, Tandon (1981) in his report from different I.C.D.S. projects of the country has found coverage of B.C.G. and D.P.T. to be 49.2 and 17.6 percent respectively.

From the foregoing discussions, it is evident that coverage of D.P.T. and Polio vaccination in I.C.D.S. group of the present study has been in line with the observations of other workers but the coverage for B.C.G. was poor.

Observations of present study in Non-I.C.D.S. group have been in conformity with the findings of Ramesh et al (1978), Chandra et al (1978) and Tomar (1982) who have also observed less coverage for all types of vaccinations. Tandon et al (1981) and Desale (1982) have also reported coverage of D.P.T. to be 7.0 percent and 7.5 percent only. However, Sharma et al (1978) and Gupta (1978) have reported higher coverage for all types of vaccination.
It has been pointed out by workers (Saxena, 1979) that immunization status depends much upon the educational standards of the parents, especially of the mothers and continuous health education has had a positive impact in improving the status of immunization in various regions. In addition to it, easy availability of vaccines and door to door facility, local customs, taboos and fear of complications are determinants of immunization status of a community. These may be the reasons for wide variations observed by different researchers in different areas.

In Non-I.C.D.S. group, Daltal et al (1985) and Bahu et al (1985) have been also observed less coverage of B.C.G. (25.0 and 12.8 percent respectively), but Mohill (1987) observed higher coverage for the measles (23.7 percent).

5.8 MORBIDITY

5.8.1 Morbidity at the time of study

In both I.C.D.S. and Non-I.C.D.S. groups, upper respiratory tract infections and diarrhoea & dysentery were major causes of sickness. There was significant difference in the prevalence of diarrhoea & dysentery and upper respiratory tract infections in I.C.D.S. (12.1 and 9.5 per 100 respectively) as compared to Non-I.C.D.S. group (18.9 and 15.4 per 100 respectively). Better personal hygiene of I.C.D.S. group of children may be the possible explanation for this difference. Mean spells of sickness per 100 children was 33.1 in I.C.D.S. group as compared to 54.5 in the Non-I.C.D.S. group. This shows better health consciousness of

Many investigators from India have reported gastro-intestinal and respiratory infections as major causes of morbidity in pre-school children (Ghai et al, 1970; Gulati 1974; Mata 1975 and Datta et al, 1975). Chandra (1978) and Tandon et al (1981) have reported URTI and diarrhoea to be the two major significant illnesses which has been in confirmity of present study findings. Whether it is diarrhoea or respiratory tract infections as a first cause of sickness which shows seasonal variation. It is evident that these are the two major sickness of pre-school age group.

In Non-I.C.D.S. group, significantly higher (41.6) percentage of children were sick at the time of study as compared to I.C.D.S. group (27.9). Better nutritional status and personal hygiene prevailing in the I.C.D.S. area may be responsible for this difference, apart from more awaken ing about health and availability of remedial measures in Anganwadi areas. Moreover, percentage of sick children was higher in Non-I.C.D.S. group as compared to I.C.D.S. group
in all ages. Percentages of sick children in both the
groups aged 1 - 2 years was highest. This further confirms
that 1 - 3 years age is the most vulnerable (Bakshi et al, 1977).

Vasudeva et al (1982) found 64.0 percent children
below 3 years of age to be ill at the time of study in an
I.C.D.S. area. On the other hand, Tandon et al (1980) in
the baseline survey of the project area (I.C.D.S.) have
reported that about 9.0 percent rural pre-school children
were sick at the time of study. These differences could
be due to the differences in composition of population
apart from the seasonal and regional variations.

5.8.2 Worm infestation

Out of the total stool sample examined (30.8 percent)
in I.C.D.S. and significantly higher (39.1 percent) in Non-
I.C.D.S. groups were positive for one or the other parasites.
Better personal hygiene in I.C.D.S. group could be one of the
factors responsible for this difference. Patel (1982) has
also observed downward trends in the prevalence of worm
infestation in an I.C.D.S. area. Interestingly there was no
significant difference in the prevalence of Ankylostoma and
the other parasites except in ascaris. This could be
attributed to the insignificant differences regarding sanitary
excreta disposal in the two groups. Ascaris was found to be
the most common parasite in I.C.D.S. (26.8 percent) as well as
in Non-I.C.D.S. (34.2 percent) group. Bildhaya (1977),
Deoki Mandan et al (1980), and Brar et al (1980) have reported
the prevalence of worm infestations (presence of one or the other parasite) ranging from 31 to 36 percent and ascaris to be the most common parasite, which is similar to that observed in Non-I.C.D.S. group of children in the present study. Malhotra et al (1976), Gupta (1977), Chandra (1978), Gupta et al (1984) and Maheshwari et al (1985) have also reported ascaris to be the most common parasite encountered in their studies.

5.9  PERSONAL HYGIENE

In I.C.D.S. group, significantly lower proportion of children (44.0 percent) than in Non-I.C.D.S. group (69.7 percent) were having poor personal hygiene according to the criteria adopted. This shows the positive impact of health and non-formal education on the level of personal hygiene of I.C.D.S. group of children.

5.10  CRUDE BIRTH RATE

In the I.C.D.S. group, birth rate was 16 per 1000 population, while in Non-I.C.D.S. group, it was 32 per 1000 population.

5.11  MORTALITY

Infant mortality rate in I.C.D.S. group was 100.0 per 1000 live births as compared to 111.1 per 1000 live births in Non-I.C.D.S. group. Sander-Engel (1985) has reported overall mortality in 6-year children to be 26.5 percent per 1000
C Gupta et al (1983) from Rajasthan and Shukla et al (1981) from Lucknow have reported infant mortality rate to be 124.0 and 117.6 per 1000 live births which have been higher with the observations of the present study in Non-I.C.D.S. group. Gupta et al (1984) reported infant mortality rate in I.C.D.S. group was 74.1/1000 live births, while it was 111.1/1000 live births in the Non-I.C.D.S. group, and Sunder Lal (1985) has reported infant mortality rate 107 per 1000 live births in I.C.D.S. blocks of Haryana.

Overall mortality (0-5 years) was 26.7 per 1000 population in I.C.D.S. group and 40.2 per 1000 in Non-I.C.D.S. group. 0-1 year mortality in I.C.D.S. group was 89.7 per 1000 population as compared to 107.5 per 1000 population in Non-I.C.D.S. group and 1-5 years mortality in I.C.D.S. group was 13.5 per 1000 population as compared to 21.2 per 1000 population in Non-I.C.D.S. group. This shows that I.C.D.S. scheme have reduced the mortality. Gulati (1967) has reported overall mortality in under five children to be 66 per 1000. However, in 1981, 25-44 per 1000 mortality has been reported in pre-school children by the Ministry of Health & Family Welfare, corresponds to the observations of the present study. Sunder Lal (1985) has reported overall mortality in 0-6 years children to be 24.3 per 1000 population.

Single major cause of 0-1 year mortality in I.C.D.S. area were respiratory infections (28.6 percent). While in Non-I.C.D.S. area single major cause of 0-1 year mortality was diarrhoeal diseases (30.0 percent). This may be due to better medical care in I.C.D.S. area. Shukla (1981) has
observed tetanus neonatorum (30.5 percent), diarrhoeal diseases (18.0 percent) and pneumonia (16.6 percent) as major causes of infant mortality, which is in conformity with the observations of present study in Non-I.C.D.S. group.

Major cause in 1-5 years of age in I.C.D.S. area were respiratory infections and typhoid fever (40 percent each), while in Non-I.C.D.S. area major causes were diarrhoeal diseases and marasmus (28.6 percent each).

5.12 **Utilisation of Health Services**

5.12.1 Utilisation of medical care agencies

Significantly higher percentage of children in I.C.D.S. group (71.4 percent) as compared to Non-I.C.D.S. group (54.9) were utilising government agencies for medical care either by paramedical including Anganwadi workers or doctors. 20.1 percent in I.C.D.S. and 22.6 percent in Non-I.C.D.S. group depended on traditional healers, advice of relatives and neighbours or self medication. Mutual trust by frequent home visits could be one of the reasons for better utilisation of government agencies as well as anganwadi workers has also been reported by Gupta et al (1981). Most popular amongst the private practitioners has been those of the allopathic system of medicine, which is similar to the observations of Tandon et al (1981) and Gupta et al (1984).
5.12.2 Antenatal care

Significantly higher percentage of mothers of children in I.C.D.S. (45.9) as compared to Non-I.C.D.S. (18.6) group availed antenatal care. Tandon et al (1981 A) have also reported increased coverage for ANC (53.3 percent) in comparison to their baseline survey (71.8 percent). Gupta et al (1984) have reported mothers of significantly more 61.3 percent children in I.C.D.S. as compared to only 19.9 percent in Non-I.C.D.S. group availed antenatal care.

5.12.3 Place of delivery and type of birth attendant

Most of the deliveries in both I.C.D.S. (93.1 percent) and Non-I.C.D.S. (81.6 percent) groups were conducted at home, but significantly higher (39.2) percentage of home deliveries in I.C.D.S. as compared to Non-I.C.D.S. (11.9) group were conducted by trained personnel. This shows more awareness of the people regarding natal care in I.C.D.S. area. Tandon et al (1981) in a baseline survey of different project area (I.C.D.S.) have reported more popularly of untrained personnel (untrained Dais, relative/ neighbours etc.) in rural areas. Findings of this study in Non-I.C.D.S. group have been in concordance to the above mentioned study. Sure et al (1976) have observed that majority (92.7 percent) of the deliveries were conducted at home which is in line with the observations of the present study.
5.13 **Feeding Practices**

Breast feeding was the most accepted method for feeding of newborns in I.C.D.S. as well as in Non-I.C.D.S. groups. This has been in conformity with the observations of Gupta (1979), Nirmal et al (1981) and Idris et al (1981) who have also noted the practice of breast feeding by almost all rural mothers. Prolonged breast feeding was observed in both I.C.D.S. and Non-I.C.D.S. groups, mean duration of breast feeding being 18.6 and 18.9 months respectively. Similar has been the observations of Sharma et al (1977), Bahl (1979), Katiyar et al (1981) and Ajay et al (1982) & Gupta et al (1984) who have also noticed prolonged total duration of breast feeding in rural area.

5.13.1 **Weaning**

Majority of children - 62.4 percent in I.C.D.S. group and only 32.9 percent in Non-I.C.D.S. group were weaned before attaining the age of 1 year. All children in I.C.D.S. group were weaned before the age of 2 years while in Non-I.C.D.S. group, 2.9 percent were weaned even after 2 years of age. Mean age at weaning in I.C.D.S. group was 11.8 months while in Non-I.C.D.S. group, it was 16.2 months. Although children in I.C.D.S. group were weaned at earlier age in comparison to Non-I.C.D.S. group which could be due to the health education by Anganwadi workers. Only 4.5 percent in I.C.D.S. group were weaned before the age of 6 months which is the recommended age for

In majority of the children of I.C.D.S. as well as Non-I.C.D.S. groups, cereals (83.7 and 84.4 percent respectively) and pulses (51.1 and 26.3 percent respectively) were used as weaning food. Vegetables and fruits were taken only by 22.0 percent and 20.8 percent of children in I.C.D.S. and Non-I.C.D.S. groups respectively.

5.14 SUPPLEMENTARY NUTRITION

Coverage for Vit. A and Iron & folic acid was significantly higher in I.C.D.S. (65.5 and 34.3 percent) as compared to Non-I.C.D.S. (17.2 and 10.9 percent) group. Sunder Lal (1980) has also observed increased coverage (58.0 percent) in repeat survey as compared to 2.3 percent in baseline survey. Tandon et al (1981 A) has reported that 43.6 percent rural children had received Vit. A supplementary nutrition through I.C.D.S., as compared to only 6.0 percent at the baseline survey and Gupta et al (1984) has reported that coverage of Vit. A and Iron & folic acid was higher in I.C.D.S. (76.3 and 41.0 percent respectively) as compared to Non-I.C.D.S. (17.9 and 10.4 percent respectively) group.

Foregoing discussions clearly shows that through the integrated services coverage for supplementary nutrition
has been tremendously increased. Possibly it is availability of these supplementary nutrients to the people (at Anganwadi centre of their village) and acceptability of these achieved through continuous health education.

No child in Non-I.C.D.S. and 27.4 percent children in I.C.D.S. group were given supplementary food. Coverage of I.C.D.S. group of children for supplementary food was much lower as compared to the observations of Sunder Lal (1980) and Tandon et al (1981) who have reported the coverage to be 97.0 and 57.3 percent respectively. Non-availability of supplementary nutrition at most of the Anganwadis, because of administrative reasons, could be the cause of the poor coverage found in the present study.

5.15 **PERIODIC MEDICAL CHECK-UP OF CHILDREN**

Higher percentage of children in I.C.D.S. (43.3) in comparison to Non-I.C.D.S. (9.9) groups had periodic medical check-up facility by A.N.Ms/H.V.