SUMMARY & CONCLUSION
Chapter VII

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ICDS, the well-conceived programme with innovative approach has yielded the best results in improving the nutritional status of children. The factors responsible for better nutritional status of ICDS children are the availability of health care facilities, supplementary nutrition and other ICDS components at Anganwadis. There was all around improvement in the nutritional status of children.

ICDS is a unique programme and it has made important contributions to promotion of nutritional status of children in India. The success of the programme however depends on the commitment of the functionaries, public awareness and cooperation and participation rendered by the community towards the upliftment of the child care.

The preschool children are of concern from nutrition point of view as they are still in a growing age both physically and mentally. Inadequate nutrition impairs the physical and mental development of children along with their performance.

The present study was conducted to find out “Impact of ICDS on the nutritional status of children belonging to age-group (3-6 years)”. The objectives of the study were -

1. To study the socio-economic status of the family.
2. To measure the anthropometric measurements and to conduct clinical examination of pre-school children.
3. To assess the effect of improved nutrient on children.
4. To assess the psychological development of the child by the standard scale.

Research Methodology

The study was conducted in Moradabad district. One block Chandausi was randomly selected. Total ten Anganwadis were selected. Total 200 samples were selected. The children were chosen from 3-6 years. The study was conducted by totally survey method, dietary survey, and clinical assessment. Dependent and independent variables were used and statistical tools were used in the study such as mean, correlation, chi-square etc.

Major Findings

The results and discussion of present study is summarized below:

1. More than fifty per cent children were of age group 4 to 5 years and 25.5 per cent children were of age group 3 to 4 year, used to go Anganwadis.

2. 60 per cent children were boys and 39.5 per cent children were girls.

3. 56.5 per cent children were belonged to Hindu family whereas 28.0 per cent children belonged to Muslin family.

4. 33.0 per cent father were high school and 11.0 per cent father passed graduate and above. 31.0 per cent mother were having educated up to secondary level whereas 26.5 per cent mothers were passed high school.

5. There were 63.0 per cent of total household under study were having nuclear families. 37.0 per cent respondents were having joint family system.
More than 60 per cent families have less than five members and 38.5 per cent families have more than five members.

43.5 per cent father were labour whereas 28.0 per cent father were adopted business as their main occupation.

79.5 per cent mother housewives and 20.5 per cent were working lady among all females.

47.0 per cent families earned between Rs. 1500 to Rs. 3000 monthly, followed by 29.0 per cent families earned up to Rs. 1500 per month and only 24.0 per cent families earned between Rs. 3000 to Rs. 4500 monthly.

94 per cent preschool children had mass media contact as they were watching T.V. and radio.

Height deficit observed in comparison to ICMR standards was 5.5 per cent, 5.0 per cent and 3.4 per cent for age group 3-4 years, 4-5 years and 5 years and above, respectively. However, correlation coefficient between age and height was found to highly significant.

Height is a linear measurement made up the sum of four components legs, pelvis, spine and skill. "It is a reliable measures that affect the total increase in size of the individual up to moment it is determined.

Weight per cent deficit in comparison to ICMR standard analysis of correlation between the age and weight of children was found to be highly significant at one per cent level of significance.

Weight for age is commonly used an indicator of body size and it reflects the level of food intake.
MVAC deficit standard observed in children. It was 1.3, 0.6 and 1.9 per cent, respectively. The observed value of correlation coefficient was found to be significant at 5 per cent level of significance.

Head circumference per cent deficit was 0.8, 1.9 and 1.6 per cent as per ICMR standard.

The lower head circumference deficit recorded for their age by the children indicate under nourishment due to lower nutrient intake.

Chest circumference of children per cent deficit 4.2, 2.6 and 2.5 per cent as compared to ICMR standard. The correlation coefficient was (0.6812) found to be significant. The lower chest circumference deficit recorded for their age due to lower nutrient intake.

9.0 per cent male and 11.5 per cent female children were having lack of luster. lack of luster of hairs was higher in female children. The prevalence was due to the protein and vitamin deficiency and improper care of hair.

58.5 per cent male and 35.5 per cent female were having normal eye, whereas 1.5 per cent male and 3.0 per cent female were having Bitot spot in eyes. There were some other causes of eye infection due to irritation, emotional and physical effects.

9.0 per cent male and 8.0 per cent female were suffering from mild cheilosis.

9.0 per cent children (3.0 per cent male and 6.0 per cent female) were suffering from raw tongue. The slight percentage of coated tongue was due to fungal infection and due to improper cleaning habits.
20. 24.0 per cent children (11.0 % male and 13.0 % female) were suffering dental caries. 12.0 per cent children (6.5 % male and 5.5 % female) were suffering mottled enamel.

21. It is concluded that the different symptoms of teeth of among the children are due to mineral deficiency and also due to unhygienic practices, there is prevalence of bacterial infection.

22. 9.5 per cent male and 3.5 per cent female were suffering spongy gums and 8.5 per cent male and 10.5 per cent female were suffering bleeding gums. It can be stated that the symptoms of gums were commonly present among children, this was due to vitamin C deficiency, unhygienic practices, use of high fluoride water and nutrient deficient diet.

23. 11.5 per cent male and 10.0 per cent female children were suffering pellagrous dermatitis skin whereas 4.0 per cent male and 5.5 per cent female were suffering xerosis skin.

24. 9.5 per cent male and 6.0 per cent female had brittle nail whereas 4.5 per cent male and 5.5 per cent female children had patched nails. Brittle, pale and spoon shape nail was due to improper diet, care and unhygienic practices and in these symptoms iron deficiency occurred.

25. 7.5 per cent female and 6.5 per cent male children were having muscle wasting whereas, 2.0 per cent male and 4.0 per cent female children were suffering oedema muscular symptom. It is concluded that the different symptoms of muscular system of among the children were due to lack of nutrient diet.
26. 61.5 per cent children started weaning from 6 to 12 months followed by 23.0 per cent children started weaning from 12 to 18 months. Locally available snacks like biscuits and bread or dal rice formed the main supplement.

27. 55.0 per cent children have started taking solid food from 6 to 12 month of age followed by 32.5 children in 12 to 18 months.

28. 61.5 per cent children between 12 to 18 months of age terminated of breast-feeding followed by 21.0 per cent children were below 12 months of terminated breast-feeding.

29. 82.5 per cent children were taking meal twice whereas 17.5 per cent children were taking meal thrice a day.

30. 56.0 per cent preschool children were suffering from the disease in past two years. 15.5 per cent preschool children suffered from typhoid, 11.0 per cent from malaria, 10.5 per cent from jaundice and 19.5 per cent from diarrhoea respectively.

31. 74.5 per cent children were vaccinated by BCG, 88.0 per cent children were vaccinated by polio drop and 79.5 per cent children were vaccinated by DPT.

32. Energy intake by the children per day was 1192.75 Kcal, 1489.3 Kcal and 1493.4 Kcal for age group 3 to 4 years, 4 to 5 years and 5 years and above age group, respectively. Per cent deficit was 3.8, 11.9 and 11.6 per cent and the adequacy of calorie consumed by the children were significantly high.

33. Average protein intake was found as 21.1 g, 28.2 g and 28.6 g according to age group 3 to 4 years, 4 to 5 years and 5 & above age.
As compared to RDA per cent deficit 4.1, 6.0 and 4.7 per cent according to age-group.

34. Fat deficit standard observed in comparison to ICMR standard as 4.4, 3.2 and 4.0 per cent for 3 to 4 years, 4 to 5 years and 5 & above age respectively.

35. The actual intake iron of different age group were 11.7 mg, 15.2 mg and 16.7 mg and the deficit standard observed in comparison to ICMR standard was 2.5, 15.5 and 7.2 per cent. Iron is needed to make haemoglobin and most of the iron in the body is in the blood.

36. The actual intake of calcium was 378.8 mg, 380.3 mg and 366.2 mg/day and per cent deficit standard was found to be 5.3, 4.9 and 8.5 per cent for age group 3 to 4 years, 4-5 years and 5 years & above respectively.

37. Average intake of vitamin C was 37.9 mg, 36.2 mg, and 36.8 mg and deficit standard in comparison of RDA was 5.3, 9.5 and 8.0 per cent. RDA for 3 to 4 years to 40 mg/day. Standard deviation 7.9 was found in more 4 to 5 years age group.

38. Average β-carotene intake by children as compared to RDA, the actual intake by the children was 1596.2 µg, 1517.1 µg and 1539.3 µg than per cent deficit standard was found to 0.2, 5.2 and 3.8 per cent.

39. Physical development significantly related to 4 to 5 and 5 years & above age group. Social and emotional development significantly related to in all age group category same as cognitive development. It was concluded that psychological development of the child significantly dependent to age group.
40. Physical and motor development significantly related to family monthly income Rs. 1500 to 3000 and Rs. 3000 to Rs. 4000. Social and emotional development of the child significantly related to income wise in all category. Cognitive development of the child significantly related to income Rs. 3000 to Rs. 4500.

Conclusion

On the basis of summarize result in respect of nutritional status of children, it was concluded that the nutritional status of children were not very good because the values of height, weight, mid upper arm circumference, head circumference, chest circumference was lower than the values suggested by ICMR for 3-6 years age group.

From the above findings, it was recorded that dietary intake and nutrient intake was also low in these children except vitamin A in 3-4 years children due to supplementation of vitamin A doses to the children at ICDS centers by the programme.

It was also found that the nutrient intake was less in case of 3-6 years children who showed deficiency signs.

The ICDS programme has not got beneficial effect on its subjects due to its integrated approach of nutrition intervention and education. Doubtless increased work efficiency of workers coupled with enough supplementation of diet to beneficiaries would have way to absolute success of the ICDS programme. The quantity of supplements given to children seems to be low to substantiate the normal growth pattern. Low nutritional status of the ICDS children was because of low socio-economic status and illiteracy, lack of knowledge, absence of children. The success of the programme however, depends on the commitment of the