

UTILIZATION OF ICDS SCHEME IN CHILDREN ONE TO SIX YEARS OF AGE IN A RURAL BLOCK OF CENTRAL INDIA

Sangita Trivedi
Bharat C. Chhparwal
Sharad Thora

ABSTRACT

The evaluation of nutritional and immunization services was undertaken in the rural ICDS block Sanwer (Madhya Pradesh) where the project is functioning from last 3 years. A door to door survey was conducted in 1993 in six Anganwadi areas in ICDS block and five randomly selected matched non ICDS rural areas served as controls. There were a total of 709 children in ICDS and 500 in non ICDS block in 1-6 years age group. The difference was not statistically significant for nutritional status in the two blocks, but a remarkably better immunization status ($p < 0.005$) was observed in non ICDS block. The coverage for DPT (3 doses), and measles vaccination in ICDS block was 79.57% and 45.7%, respectively, while in non ICDS block it was 94.4% and 62.03%, respectively.

It seems the ICDS scheme is under utilized by the community and requires immediate attention by the health authorities.

Key words: ICDS scheme, Immunization status, Nutritional status.

In the pursuance of the National Policy for Children, the Government of India launched 'Integrated Child Development Services' scheme on 2nd October, 1975 in 33 pilot projects. Each project aimed at delivery of a package of services in an integrated manner to preschool children, expectant and nursing mothers and women in the age group of 15-44 years. Success of the scheme stimulated the expansion of ICDS scheme to 2696 projects by the end of March, 1992 of which 231 are in Madhya Pradesh(1). One of the objective of ICDS is to improve the delivery of nutritional and health services to the above mentioned beneficiaries and thereby reduce the prevalence of malnutrition and related morbidity and mortality.

The utilization of ICDS scheme varies from place to place and depends on involvement of the community in the programme. We had a rural block near Indore, where the scheme is in operation since 1990. This study was designed to evaluate if the services provided by the scheme are utilized adequately by the community or not. Such studies will make the authorities aware of the factual situation regarding the scheme.

Material and Methods

The Integrated Child Development Scheme is in operation from 1990 in rural block of Sanwer which is located 35 Km from Indore City in Madhya Pradesh. The

From the Department of Pediatrics, M.G.M. Medical College, M. Y. Hospital and Chacha Nehru Bal Chikitsalaya Avam Anusandhan Kendra, Indore 452 001.

Reprint requests: Dr. Sharad Thora, Lecturer in Pediatrics, Medical College Campus. Near M.Y. Hospital, Indore 452 001.

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present study was conducted to compare the nutritional and immunization services rendered to children between 1 to 6 years of age in ICDS and non ICDS blocks and thus to assess the impact of the scheme in its three years of operation.

Selection of 6 Anganwadis was done in ICDS block, 3 located in subcentre head quarter and 3 located 5 kilometers outside the subcentre head quarter. Five identical villages in non ICDS rural area were taken as controls. A team of trained medical staff conducted the door to door survey during March-April, 1993.

The total number of houses surveyed in ICDS and non-ICDS blocks were 814 and 635, respectively. The total population surveyed was 4993 in ICDS and 3505 in non-ICDS blocks.

The nutritional status of children between 1-6 years and immunization status of children between 1-2 years were assessed. Children between 0-1 year age group were not included in the study because they do not reflect the full impact of nutritional and immunization services rendered in at least past one year. Correct age of the children was determined if necessary by taking the help of local events calendar, birth certificate, vaccination card and any other eligible records. Nutritional status was ascertained according to weight for age criteria laid down by the Nutrition sub-committee of Indian Academy of Pediatrics(2).

Immunization status was assessed by interviewing the mothers and taking the help of vaccination cards. Lactating mothers (who had given birth to a child in last one year whether living or dead)(3) were interviewed for the receipt of tetanus toxoid during their gestational period.

The data in ICDS and non-ICDS blocks

were compared and for knowing the statistical significance of variations, 'Z' value and 'P' value were applied.

Results

The population studied in ICDS (n=709) and non ICDS (n=500) blocks comprised of children between 1-6 years. The children between 1-2 years were 20.0% and 21.6% and in 2+ to 6 years were 79.9% and 78.4%, respectively. Thus there was no statistically significant difference in age distribution in the two groups.

The comparative figures for nutritional status in ICDS and non ICDS blocks in normal and Grade I malnutrition were 74.3% and 72.4%, in Grade II malnutrition were 18.1% and 20.8% and in Grade III malnutrition were 7.05% and 6.8%, respectively, indicating no significant difference in nutritional status between the two groups.

Immunization status of children between 1 to 2 years in ICDS and Non ICDS areas for BCG was 80.2% and 88.8%, DPT (3 doses) 79.5 and 94.4%, Polio (3 doses) 88.0% and 95.3% and measles 45.7% and 62.0%, respectively (Table I).

Discussion

The ICDS scheme after 19 years of existence and progressive expansion has entered into a new and more exciting phase for mothers' and child care.

The annual survey data of Central Technical Committee report a significant difference in ICDS and non-ICDS blocks for severe malnutrition (3.6% and 38.5%, respectively)(4). Similarly, in a longitudinal study severe malnutrition declined from 19.1% in baseline survey to 6.3% after 8 years of ICDS scheme. The corresponding decline for moderate malnutrition was from

TABLE I—Immunization Status of 1-2 Year Old Children.

Immunization	ICDS		Non-ICDS		P
	No.	%	No.	%	
* BCG	114	80.2	96	88.88	>0.05
* DPT (3 doses)	113	79.57	102	94.44	<0.005
* OPV (3 doses)	125	88.02	103	95.37	0.05
* Measles	65	45.77	67	62.03	<0.005

27.0% to 19.7%(4). Various studies have confirmed a decline in moderate to severe malnutrition and increase in normal and Grade I undernutrition(5-8). Such an impact of the scheme was, however, not observed in our study which may be due to its short period of operation in the area under study and/or failure on the part of functionaries to organize growth monitoring activities and supplementary nutrition properly. Some specific areas of deficiencies as reported by Kapil are irregular supply of supplementary nutrition, improper implementation of nutritional therapy for severely malnourished children and non-coverage of malnourished children who cannot come to Anganwadi for various reasons(9). There is a need to improve supply, quality and quantity of supplementary nutrition.

The immunization status for DPT (3 doses) and measles was significantly lower in ICDS as compared to non-ICDS blocks (Table I). It is difficult to explain this observation. This could be due to female literacy, other available health services in non-ICDS areas, utilization of health services by the community and socio-economic status of the family. The coverage requires boost up efforts so that 85% of children are covered as per goals laid for achieving 'Health for

all by 2000 A.D'. In contrast to our study, the Annual survey data from CTC reveals a significantly better coverage of immunization in ICDS as compared to non-ICDS blocks. BCG was received by 46.4% and 23.3%, DPT (3 doses) by 50.6% and 29.3%, OPV (3 doses) by 48.8% and 27.4% and measles by 20.5% and 8.4% of children in ICDS and non-ICDS blocks, respectively^).

Various other individual studies confirm an increase in immunization coverage of BCG, DPT, OPV and tetanus toxoid(8,10,11). A longitudinal study conducted by Bhandari and Nagori in 1979 in Garhi block (Rajasthan) reported no difference in nutritional and immunization status of children after 14 years of functioning of ICDS project(12).

Thus, one of the aim of ICDS scheme, improvement of nutritional and immunization status of children has not yet been fulfilled in Sanwer block of Madhya Pradesh after 3 years of its implementation. This requires immediate attention by the health and ICDS authorities.

The package of MCH services promoted by the scheme is either not properly utilized by the community due to lack of their

knowledge or lack of aptitude and devotion on the part of health and ICDS workers. Periodic assessment of the functioning of the whole system and correction of specific areas of deficiencies are major requirements.

REFERENCES

1. Tandon BN, Sachdev YN. Monitoring, Motivation, Continuing Education, Evaluation, Research and Training System. ICDS, Central Technical Committee, Department of Women and Child Development, Ministry of Human Resource Development, New Delhi, 1992, p 1.
2. Nutrition Subcommittee of Indian Academy of Pediatrics. Report of Convenor. *Indian Pediatr* 1972, 9: 360.
3. ICDS-General guidelines and instructions for data collection and tabulation analysis. Biostatistics Division of Central Cell, Central Technical Committee, Annual Survey, 1992-93.
4. Tandon BN, Gandhi N. ICDS evaluation and research 1975-1988. CTC, Department of Women and Child Development, Ministry of Welfare, Government of India, New Delhi, 1990, pp 11-13.
5. Chaturvedi S, Gupta SB. The impact of ICDS scheme in North India. *Acta Pacific J Public Health* 1989, 3: 291-296.
6. Chaturvedi S, Shrivastava BC, Singh JV. Impact of 6 years exposure to ICDS scheme on growth and health status of target children in Uttar Pradesh. *Indian J Med Res* 1986, 12: 766-774.
7. Tandon BN. Nutritional intervention through primary health care: Impact of ICDS projects in India. *Bull WHO* 1989, 67: 77-80.
8. Lai S. Better primary health care services—Utilization through ICDS scheme in Haryana. *Indian J Pediatr* 1980, 47: 293-297.
9. Kapil U, Chaturvedi S, Nayar D. National nutritional supplementation programme. *Indian Pediatr* 1992, 29: 1601-1603.
10. Tandon BN. A co-ordinated approach to children's health in India. *Lancet* 1981, 3: 650-653.
11. Gupta SB, Srivastava BC, Bhushan V, Sharma P. Impact of ICDS scheme in Uttar Pradesh. *Indian J Med Res* 1984, 79: 363-368.
12. Bhandari B, Nagori G, Madovara SL. Nutrition and immunization status of children in an ICDS block. *Indian Pediatr* 1981, 18: 187-192.