

**Status of Growth Monitoring
Activities in Selected ICDS
Projects of Rajasthan**

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Growth Monitoring (GM) was devised as a tool for assessing the growth and development of a child, for detecting the earliest changes in growth and to bring about appropriate responses to ensure that the growth continues uninterrupted(1). However, various studies in the past have shown that GM has not been able to bring about the desired improvement in the health and nutritional profile of the beneficiaries(2-5).

In India, GM is conducted on a regular basis in Integrated Child Development Services (ICDS) scheme which covers nearly 3908 administrative blocks throughout the country(6). The present study was conducted in selected ICDS projects of Rajasthan to assess the knowledge and practices about GM amongst Anganwadi workers (AWWs) and to assess the status of GM activities.

Methods

All the districts in the state of Rajasthan with ICDS projects functional for more

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than 3 years duration were enlisted. Keeping in view the operational feasibility, five districts namely Jaipur, Ajmer, Udaipur, Bharatpur and Bikaner were selected. In each district, one ICDS project with more than two years in operation was selected again in view of the operational feasibility (except Udaipur where two projects were selected). A total of six ICDS projects (2 rural and 4 urban) were selected for the detailed study. In each project, 20 Anganwadi Centers (AWCs) which were within 20 km of the block headquarters were further selected. The study sample thus comprised of 120 AWCs from 6 ICDS projects.

A pretested semi-structured questionnaire was administered to 120 anganwadi workers (AWWs) to collect information about their knowledge, practices regarding GM and the status of GM activities. Observations method was used to assess the GM skills of AWWs. The AWWs were asked to undertake GM of 5 children present on the day of the survey. They were also asked to interpret the pre-filled growth charts with ascending, descending and flattened growth curves. Secondary data on growth monitoring consisting of growth charts and registers available at AWCs was also scrutinized to assess the status of GM activities undertaken by AWW.

Results

The present study revealed that 88% of the AWWs were educated upto primary school level. Sixty seven per cent workers had worked for more than 5 years in the ICDS programme. Preplacement training and subsequent in-service training was received by 88.3% and 67.5% of AWW's respectively. However, no special training on GM was received by any of the AWW studied.

Seventy five per cent AWCs had Salter

type weighing scales. In 9% of the AWCs, weighing scales were not in working condition. About 7% AWCs did not have any weighing scales. Growth charts for conducting GM activities were available at 83.3% of AWCs.

It was found that 38.3% AWWs mentioned that GM is undertaken to only identify malnourished children. Almost 90% of the AWWs were not aware of the correct sequence of steps required for conducting GM. More than half (54.2%) of the workers did not know about the type of intervention measures to be taken on findings of GM. About 33% of the AWWs conducted GM at AWC. Eighty nine per cent of the AWWs mentioned that they had "adequate time" for conducting GM despite other responsibilities.

It was observed that nearly 75% of AWWs were not able to use the Salter weighing scales correctly. Only 10% of the AWWs followed the practice of plotting the weights immediately after weighment. Nearly half of the AWWs plotted weights incorrectly on the growth charts. The skills of the AWWs regarding assessment of GM is depicted in *Table I*.

The growth chart of each child registered was scrutinized and it was found

TABLE I-Distribution of AWWs According to Their Skills in GM as Observed by the Research Team (n=120).

Skills in GM	AWWs	
	No.	%
1. Correct use of tools	31	25.8
2. Correct plotting on growth charts	59	49.2
3. Correct interpretation of		
(i) Ascending growth curve	78	65.0
(ii) Descending growth curve	76	63.3
(iii) Flattened growth curve	51	42.5

that the weights of only 60% children were being recorded regularly (*i.e.*, 4 or more weight recordings for children less than 3 years and 1 or more weight recording for children more than 3 years during the last 6 months). About 40% of the severely malnourished children were not being weighed regularly. However, no significant difference ($p < 0.05$) was documented between the growth faltering amongst children weighed regularly or irregularly (*Table II*).

Discussion

GM is useful measure which can significantly contribute to the promotion of child health and nutrition. GM brings about two way communications between the parents and the health worker. GM can serve as a focal point for offering multiple services for child and family welfare and increase community participation. Growth data if collected appropriately can be used at various levels such as sector, project, state and even national level to gauge change in nutritional status and to evaluate impact of development programmes on childhood under-nutrition.

The success of GM activities, however, depends on proper knowledge, objective

TABLE II- Distribution of Children According to Change in their Growth Status During Previous Six Months and Regularity of Plotting Weights as per the Growth Charts (n=1358).

Change in growth status	No. of children		
	Regular	Irregular	Total
Improvement	335 (37.2)	169 (36.9)	504
Deterioration	439 (48.8)	239 (52.2)	678
No Change	126 (14.0)	50 (10.9)	176
Total	900	458	

* Figures in parentheses denote percentages.

and practical training of AWWs, availability and maintenance of adequate tools, resources for follow-up action and most importantly, community participation(7,8).

In the present study education, training status and experience of most of the AWWs was adequate. However, most of the AWWs still considered GM to be a regular weighing exercise aimed at detection of malnutrition. Many AWWs were not aware about the follow-up actions required to be taken on findings of GM, apart from providing extra supplementary nutrition. These findings are consistent with earlier studies(7,9).

The availability and maintenance of tools for GM, *i.e.*, weighing scales and growth charts were adequate in the present study. However, incorrect use of the tools was common. Earlier studies have also documented inaccuracies in weighing and charting of weights by AWWs(10,11).

It was also seen that the interpretation of all kinds of growth curves was generally poor. More than half of the AWWs could not interpret a flattened growth curve which meant that inadequate weight gain was not being recognized as a danger signal(11). Mother's (of the children surveyed) understanding about GM was also inadequate. This indicated that as the AWWs themselves could not comprehend the growth curves adequately, they could not make the growth trajectory of the child visible to the mother. Thus, Nutrition and Health Education (NHE) and other follow-up action on GM including the mother's participation in improving the growth status were given low priority. The present study supports the findings of the earlier reports(1,5,10,11).

In the present study, GM activities in the study areas were by and large being limited to be weighing of children who attended the AWCs. The findings indicate that there is a need for reinforcement of the importance of growth monitoring activities of all children in the community. During the training courses of the AWWs, special emphasis should be given on correct age

assessment, regular weight recording, plotting of weight on growth charts, interpretation of growth curves, NHE and follow up action.

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