

ASSESSMENT OF KNOWLEDGE AND SKILLS ABOUT GROWTH MONITORING AMONGST MULTIPURPOSE WORKERS IN AN ICDS PROJECT

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ABSTRACT

Knowledge and skills amongst 34 multipurpose workers working in an ICDS project about growth monitoring was assessed using interview technique. All workers had correct knowledge about rationale of growth monitoring. A total of 73.5% and 94.1% had knowledge that flattened growth curve indicates no weight gain and descending growth indicates decrease in weight, respectively.

Key words: *Growth chart, Growth monitoring, Anthropometry, Malnutrition.*

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Growth monitoring (GM) is an excellent tool for assessment of growth and development, detection of earliest changes in growth and their management, promotion of child health and nutrition and education of mothers with regard to various aspects of health, growth and development of children(1). The concept of GM is frequently mis-understood and is confused with periodic nutritional assessment(2).

In India, Integrated Child Development Services (ICDS) Scheme, the largest National Nutritional Programme aimed at promotion of child health and nutritional status, is being implemented in 2424 blocks(3). Anganwadi worker (AWW), the most peripheral functionary of ICDS, conducts GM in children in a population of 1000 with the help and under technical guidance of multipurpose workers (MPW) of the health care system(4).

The present study was undertaken to assess the knowledge and skills of MPWs working in an ICDS project area regarding GM to identify gaps in their knowledge so that an action oriented on the job training course in GM may be initiated.

Material and Methods

The study was conducted in a rural ICDS block of District Rohtak, Haryana State, about 50 km from Delhi. The ICDS project area studied was used for training of different ICDS functionaries like Child Development Project Officer (CDPO), Mukhya Sevika (MS) and Anganwadi Worker (AWW). The MPWs actively participated in these training programmes. All the 34 MPWs working in the ICDS scheme area constituted the study population. A pretested semi-structured open ended questionnaire (38 Questions) was administered to each MPW using interview

technique to assess the knowledge about growth monitoring. Each question was read out and explained to them for better comprehension. The queries raised were clarified. Each MPW was also shown a set of six growth charts with filled-in data and were asked to interpret each growth chart readings. The percent accuracy in interpretation of growth chart was analysed.

Results

A total of 70% of MPWs were working in the ICDS project area for more than ten years. All MPWs were matriculate and had undergone 18 months training before joining the service. MPWs received inservice training from time to time, in implementa-

tion of different national programme for mothers and children including ICDS.

The knowledge and skills amongst MPWs about interpretation of growth curve is shown in *Table I*. All workers had correct awareness that ascending growth curve indicates improvement in nutritional status and growth curve direction helps in early detection of growth retardation. A total of 76.5% MPWs had knowledge that growth curve ascending on each monthly weighing indicates unhealthy child while flattening of growth curve indicates no weight gain (73.5%) and descending growth curve a decline in nutritional status (94.1%).

All workers mentioned that the best method for GM is serial periodic weigh-

TABLE I—Knowledge and Skills of MPWs about Interpretation of Growth Curves

S.No.		Correct response	
		No.	%
1.	Ascending growth curve indicates improvement in nutritional status (Yes)	34	100
2.	Descending growth curve indicates decrease in weight (Yes)	32	94.1
3.	Flattening of growth curve indicates no weight gain (Yes)	25	73.5
4.	Growth curve direction helps in early decision of growth retardation (Yes)	34	100
5.	Flattened growth curve indicates 'at risk' children (Yes)	18	52.9
6.	If a child is not taking adequate food for six months, his growth curve would be flattened or descending (Yes)	22	64.7
7.	A child with growth curve ascending on each monthly weighing is a healthy child (Yes)	26	76.5
8.	Flattened growth curve after attack of measles indicates growth flattening due to infection (Yes)	34	100

ment. The percentages of MPWs having knowledge about weight and height as more sensitive to acute PEM were 58.8 and 70.6%, respectively. Only 29.4% MPWs had correct knowledge about frequency of weighing of children above three years of age (*Table II*). A total of 82.3% of workers had correct knowledge about the cut-off point of low birth weight child while 23.5% and 29.4% had incorrect knowledge about weight of a child at 1 and 3 years, respectively (*Table III*).

All MPWs had knowledge that mothers should actively participate in weighing and plotting of weight on growth chart and be

taught interpretation of growth curve. Only 77% had opinion that the growth chart should be kept with AWW.

Discussion

Earlier studies have reported that GM has been done essentially for detection of PEM rather than its prevention(5,7). It was encouraging to note in the present study that all MPWs had correct knowledge about rationale of GM activities. A total of 73.5 and 94.1% of workers had correct knowledge about interpretation of flattened and descending growth curve.

TABLE II—Knowledge about Tools for Growth Monitoring

S.No.			Correct response	
			No.	%
1.	Growth is increase in size of the body	(Yes)	28	82.3
2.	All children who are normally nourished should be weighed regularly	(Yes)	32	94.1
3.	Best method of growth monitoring is serial periodic weightment of child	(Yes)	34	100
4.	Weight is more sensitive to acute PEM	(Yes)	20	58.8
5.	Height is more sensitive to acute PEM	(No)	24	70.6
6.	Children below three years should be weighed every months	(Yes)	30	82.2
7.	A child above three years should be weighed at three months frequency	(Yes)	10	29.4
8.	Growth monitoring can be started for a child at any age below 6 years	(Yes)	26	76.5
9.	Assessment of correct age is not essential for growth monitoring	(No)	24	70.6

TABLE III—Knowledge about Nutritional Anthropometric Parameters

S.No.			Correct response	
			No.	%
1.	Weight of one year old optimally nourished child is 15 kg	(No)	26	76.5
2.	Weight of three year old optimally nourished child is 20 kg	(No)	24	70.6
3.	MUAC of 2 year old optimally nourished child should be less than 12 cm	(No)	22	64.7
4.	MUAC of 4 year old optimally nourished child should be less than 13.5 cm	(No)	24	70.6
5.	Stationary weight of a two year old child for three months is a sign of growth retardation	(Yes)	24	70.6
6.	A child doubles his birth weight within five months	(Yes)	20	58.8
7.	A child below 2.5 kg of birth weight is a low birth weight	(Yes)	28	82.3

Comparable observations have been reported by other workers(4,8). Inadequate knowledge amongst MPWs have been documented in projects where inservice training was not provided(9).

All workers had knowledge about role of anthropometry in decision of nutritional status. The high awareness about GM activities in present study group was may be due to intense, repeated and action oriented inservice training received by MPWs during regular pre-placement training courses conducted for ICDS functionaries like CDPOs, MS and AWWs in which MPWs actively participated. This provided continuous on the job orientation to MPWs.

A total of 71% of workers had wrong knowledge about frequency of weighing of

children above three years of age. This may be due to inadequate emphasis on this aspect during inservice training of MPWs.

It is concluded that during inservice training courses of workers involved in growth monitoring activities, emphasis should be given on GM as a tool for early detection of growth retardation and its early prevention.

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NOTES AND NEWS

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—Editor