

Assessment of growth monitoring activities under Integrated Child Development Services (ICDS) in western Rajasthan

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Abstract

Background: In India, the Integrated Child Development Services (ICDS) Scheme represents one of the most unique programs for early childhood development by network of “Anganwadi Center” (AWC), which provides integrated services comprising supplementary nutrition, immunization, health checkup, referral services, preschool education, and health and nutrition education. Growth monitoring by the field level worker called anganwadi worker (AWW) is an excellent tool for assessing the growth and development of a child and for detecting the earliest changes in growth to enable one to take appropriate action at the earliest.

Objective: To assess the knowledge and practices of AWWs regarding growth monitoring activities and study the difficulties faced by AWWs in growth monitoring activity.

Materials and Methods: The study was conducted in five randomly selected AWCs to witness the process of growth monitoring by AWW. Data were compiled, and charts were made using Microsoft Excel. Analysis was done using SPSS software, version 21.

Result: Of the 543 children, 283 (52.11%) were male and 260 (47.89%) were female subjects. All AWWs were aware of the colors in the growth chart but how to mark the absentee period in growth chart was unknown to all. The practice of weighing the child was not ideally followed by 80% of anganwadis. Approximately, 80% were showing upward trend in growth chart.

Conclusion: The study concludes that AWWs show inadequate knowledge about the growth monitoring and growth charts. The difficulties faced by the anganwadis are also a hindrance in giving their best in field. So, both the knowledge and the problems should be addressed on time in the benefits of the children of the nation.

KEY WORDS: ICDS, anganwadi worker, Rajasthan

Introduction

The Integrated Child Development Services (ICDS) Scheme represents one of the most unique programs for early childhood development. ICDS is applied to aid mothers to

ensure useful health and nutrition care, prior detection, and timely treatment of disorders. The scheme aims at development of children in the age group 0–6 years, adolescent girls, and pregnant and lactating mothers. A network of “Anganwadi Center” (AWC) provides integrated services comprising supplementary nutrition, immunization, health checkup, referral services, preschool education, and health and nutrition education. Today, in India, the ICDS has a network of more than 5,000 projects covering more than 75% of the Community Development Blocks and 273 urban slum pockets of the country.^[1]

The anganwadi worker (AWW) in ICDS program assumes a pivotal role in AWC owing to her close and continuous contact with the community. By virtue of her position in the

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community, the AWW presents more chances to interact and educate the mothers. Growth monitoring and supplementary feeding are directly associated with the obstruction and control of undernourishment in children. Very few studies are available in Rajasthan on this important function; therefore, this study was undertaken. This study seeks to assess the knowledge of AWWs regarding growth monitoring activities, the practices of AWWs regarding growth monitoring activities, and to study the difficulties faced by AWWs in growth monitoring activity.

Materials and Methods

This cross-sectional study was conducted at five AWCs in western Rajasthan for a period of 2 months.

Sampling Technique

A list of AWCs under ICDS was procured from Chief Development Project Officer (CDPO). For the purpose of study, five AWCs were randomly selected, namely Haddi Mill (AW1), Mahaveer Colony (AW2), Ishaiyon ka Kabristaan-1 (AW3), Ishaiyon ka Kabristaan-2 (AW4), and Meghwalon ki Dhani (AW5). This study was conducted after the ethical clearance from the ethical committee of the Institute.

Tools of Data Collection

The knowledge component of AWWs was assessed using a pretested, predesigned questionnaire. Interpretations of the preplotted growth charts showing normal, decreased/static growth and overnutrition by AWWs were also evaluated.

1. For assessing practices with regard to growth monitoring at AWCs, structured observations on weight measurement were made using a check.
2. Growth charts for the current year were examined for correct plotting of weight measurements and completeness.
3. Open-ended questions were asked to explore the perceived difficulties in carrying out growth monitoring activities, followed by focus group discussion (FGD).

Statistical Analysis

Data were presented in terms of proportions and percentages. Data were compiled and charts made using Microsoft Excel. Analysis was done using SPSS software, version 21.

Result

A total of five AWCs (AW1, 2, 3, 4, and 5) were taken as study units. Total children as beneficiaries were 543. Of the total, 283 (52.11%) were male and 260 (47.89%) were female subjects [Table 1]. Regarding knowledge, all AWWs were aware of the colors in the growth chart but how to mark the absentee period in growth chart was unknown to all [Table 2]. AW2 was the major defaulter in growth monitoring as nearly 40% of the growth charts were incompletely or partially plotted.

The practice of weighing the child was not ideally followed by 80%. AW3 had got maximum downward curve (16.3%) denoting malnourishment, and, overall, approximately 80% were showing upward trend in growth charts [Table 3].

Focused Group Discussion (FGD) with Anganwadi Workers

The FGD was conducted at one of the AWC. It included five AWWs and three Anganwadi Helpers. They were assessed through open-ended questionnaire regarding different aspects of growth monitoring, the difficulties faced by them while filling up the growth charts, and other problems that they faced in day-to-day functioning of AWC. The possible solutions and the help that the institute could provide were also discussed [Table 4].

- A. Difficulties faced during weight monitoring
- B. Issues related to logistics
- C. Issues related to training and retraining
- D. Response from population
- E. Operational issues
- F. Solutions to their problems

(A) Difficulties Faced During Weight Monitoring

- (1) Do the children come for weighing on the due date?

Majority of the parents are uninterested in sending their children for weekly or monthly weighing sessions. They either forget or are preoccupied with daily chores. One of the AWW commented: *Mujhe khud baccho ko bulakar lana padta hai.*

- (2) What problems do you face while weighing students?

They told that they did not face any serious problem while weighing them. But, on further scrutinizing, they told that a few children cry inconsolably and their mothers ask to weigh next time.

(B) Issues Related to Logistics

- (3) Are the growth charts provided on time?
All the AWWs answered positively.

- (4) Are there any other logistic problems that you face?

We have to purchase stationary items ourselves. They asked to provide these stationary items.

(C) Issues Related to Training and Retraining

- (5) Which training programs do you attend?

All of them attend the meetings held monthly at district level. Moreover, the supervisor also visits monthly and guides them to correct any fallacies. All of them have attended retraining courses during the past 5 years. They do not face any problems in attending the training programs and say that they always get to learn something new.

Table 1: Distribution of children beneficiaries at anganwadi centers

Anganwadi centers	Males (n = 283)		Females (n = 260)		Total
	<3 years	3–5 years	<3 years	3–5 years	
AW1	32	26	32	23	113
AW2	36	15	38	17	106
AW3	31	18	33	11	93
AW4	37	21	32	22	112
AW5	43	24	34	18	119
Total	179	104	169	91	543

Table 2: Questions regarding knowledge and practices of anganwadi workers

S. no.	Particulars	Desired answer	Correct response (%)
1	How you can assess that chart is of boy/girl	Color	20
2	Between two indicators, growth curve plotted is called	Growth monitoring curve	40
3	Meaning of different colors in growth chart	Green–healthy Yellow–malnourished Orange–severely malnourished	100
4	How much maximum weight can be measured by machine	Salter's scale–25 kg	80
5	At which place date of birth will be shown	At 0 month	60
6	In growth chart, small lines indicate	Weeks	80
7	Monitoring helps in early detection of slow growth	Yes	80
8	Identification of children needing help even at home care	Yes	80
9	Identification of severely malnourished children for timely referral	Yes	60
10	Identification of cause of malnourishment	Yes	20
11	For overall growth, monitoring, and development	Yes	40
12	Grade of weight of child can be determined	Yes	40
13	If one child is of 6½ months, then, at which point you will mark his weight?	At position marked by investigator	20
14	Interpretation of growth chart	As assessed by investigator	80
15	If weight measurement left between some period in that condition, how you will show it on growth chart?	By dotted line	0

Table 3: Observation of the curves in growth chart of children at anganwadis

Anganwadi centers	Upward curve	Flat curve	Downward curve	Not filled	Total
AW1	93 (82.3)	10 (8.8)	1 (0.9)	9 (8)	113
AW2	63 (59.4)	0 (0.0)	2 (1.9)	41 (38.7)	106
AW3	68 (73.1)	7 (7.5)	15 (16.1)	3 (3.2)	93
AW4	98 (87.5)	10 (8.9)	4 (3.6)	0 (0.0)	112
AW5	114 (95.8)	0 (0.0)	1 (0.8)	4 (3.4)	119
Total	436 (80.3)	27 (5.0)	23 (4.2)	57 (10.5)	543

Percentages in parentheses.

Table 4: Assessment of skillful knowledge of anganwadis

S. no.	Particulars	Desired	Correct response (%)
1	Basic elements of growth	3	20
2	Maximum growth of child	<1 year	20
3	Most sensitive variable for measuring growth	Weight	40
4	At what age child should be weighed?	As early as possible	20
5	If child's weight is not increasing continuously for 2 months, this indicates	Disturbed growth	80
6	At anganwadi, how many times weight measuring sessions should be conducted?	Weekly	20

(D) Response from Population

(6) How do the people of your region respond toward the activities of AWC?

All the AWWs agreed that it is a mixed response. While a part of the population takes the activities positively and understands the government for their child's betterment, there is also a section that considers these activities as a waste of time. They feel that AWWs are doing all the activities in order to make money. A few consider it a stigma to send their children to AWC.

(E) Operational Issues

(7) What difficulties do you face with the day-to-day activities at your center?

"Poora time toh register bharne mei chala jata hai."

Most of them complained of excessive workload. They say that they toil so hard, then also they get just a meager amount of pay. They feed children, teach them, weigh them, fill the charts, attend monthly meetings, and explain to mothers about their child's present condition. But, they do not get much favor from the authorities.

(8) What do you feel the authorities should do?

They say that the authorities should make extra efforts. They should explain the importance of their activities through road shows, posters, etc. as they do for their other schemes. They should increase the pay, and those who do good work should be duly awarded.

(F) Solutions to Their Problems

We discussed a few solutions. They can put up their problems to their CDPOs in written. We have also told them that institution will make efforts to solve the health problems by opening an Outreach Health Center for them. We have also asked them to tell the mother importance of active participation in health activities. They should also highlight those children who are growing well and appreciate their mothers for their efforts. This will encourage other mothers too, and they will take necessary steps toward the improvement of their child's health.

Discussion

It is well-known fact that growth monitoring is (important for child's development) an important component of ICDS and has to be undertaken by peripheral workers, particularly AWWs. Because the nutritional status of Indian children is alarmingly poor, onus of improving the nutrition of community lies in the hands of AWWs. To improve the nutrition, assessment of the same is an important aspect which can easily be done with the help of growth chart and its monitoring. Therefore, it is paramount for these workers to possess the correct knowledge and practices in their routine activities.

In our study, the aggregate percentage of correct responses with regard to questions asked to assess the knowledge regarding growth monitoring is around 54.4%. This is in concordance with the study done by Thakare *et al.*^[2] where 48.8% responses were correct but in contrast to study carried out in Delhi^[3] where 78% possessed the correct knowledge. The low level of knowledge can be attributed to the lack of quality training and on the spot correction of mistakes by their supervisors. In regard to practices pertaining the same, this study showed only 20% anganwadis were following ideal practices of growth monitoring, and similar results were seen in a study at Jammu and Kashmir where 25% anganwadis were assessing the growth correctly using growth chart.^[1] The practices of growth monitoring by weighing the child and plotting it on growth chart were even poor, and only 20% (1 of 5) followed the right technique observing all the precautions. This may be attributed to the callousness and the absence of reinforcement of the correct ones and inadequate supervision. The growth charts filled by the anganwadis showed that around 80% children are having normal nutrition with upward trend, which raises doubt on the growth monitoring activity as this is discordant with the level of knowledge and practices. The problems faced by the anganwadis were very well evident in the FGD and were more or less same in other studies.^[4-12]

Conclusion

The study concludes that AWWs present inadequate knowledge about the growth monitoring and growth charts. The difficulties faced by the anganwadis are also a hindrance in giving their best in field. So, both the knowledge and the

problems should be addressed on time in the benefits of the children of the nation. This study helped in understanding the status of growth monitoring of children at AWC at Jodhpur. Larger studies can be designed on current methodology, which will help in identifying need and frequency of in-service trainings for updating knowledge and skill domain of AWWs.

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