

IS 'TAKE HOME RATION' REALLY IMPROVING THE NUTRITIONAL STATUS OF CHILDREN? A STUDY OF SUPPLEMENTARY NUTRITION FOR UNDER 3 CHILDREN IN FOUR DISTRICTS OF MAHARASHTRA

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ABSTRACT

Under the ICDS programme, supplementary nutrition in the form of hot cooked meals is provided to children in the age group 3-6 years while 'Take home ration' packets are provided to children aged less than 3 years. The present study was carried out with the objective of assessing two different strategies used for providing supplementary nutrition for under-3 children provided through ICDS scheme. These two strategies are giving Take Home Ration packets vs. giving cooked food to the children. The comparison was done to see the differences in the distribution, consumption, and nutritional value of food provided through THR versus cooked food. Data were gathered through interviews of caretakers of under-three children, direct observation of food preparation and records from Anganwadi. It was seen that, only 11% children in the THR districts were frequent users of the packaged food. In the overall analysis cooked food for children below 3 years was found to be better strategy of providing supplementary nutrition than THR packets due to better acceptability, consumption and adequacy of calorie and protein content (actual consumption). The study indicates that the government should make appropriate modifications to improve the efficacy of the Take Home Ration scheme.

Keywords- Nutrition, Take Home Ration, Consumption, Children, Cooked food, Quality

INTRODUCTION

One of the major objectives of the Integrated Child Development Scheme (ICDS) is to improve nutritional status and health of the children in the age group of 0-6 years. Under this scheme, Anganwadi centre provides hot cooked meals to children in the age group 3-6 years, and adolescent girls, for 25 days per month while supplementary nutrition in the form of 'Take Home Ration' (THR) packets are provided to children aged less than three

years as well as to adolescent girls, pregnant women and nursing mothers for 300 days in a year [1].

Maharashtra government currently spends over three billion rupees per annum on THR [2], yet there have been several complaints about these packets. Besides the fact that supplementary nutrition become the synonym for ICDS [3], which is also known as food dole program, these scheme has not been able to fulfill its role to the extend expected. There are certain studies [4] which talks about various gaps in overall supplementary nutrition however there are no specific studies conducted in the context of Maharashtra, throwing light on usage of THR in the community. In Dharani and Chikhaldara blocks of Amravati, the strategy for supplementary nutrition for 0 to 6 years was modified and instead of THR packets, cooked

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food is being distributed to all children in the under-three age group. In these blocks, as a part of Nutrition rights coalition, Community Based Monitoring and Action (CBMA) process is being implemented to monitor the functioning of Anganwadis. This monitoring exercise revealed that, the uptake of supplementary food was better when cooked food is provided as compared to the provision of THR packets.

Keeping this background in mind, the present study was carried out to assess two different strategies for providing supplementary nutrition for under-3 children, comparing the effectiveness of THR packets vs. cooked food in terms of distribution, usage, nutritional value and nutritional status of the children.

METHODOLOGY

Districts and blocks selected in this study are those, where Community Based Monitoring and Action (CBMA) on ICDS services is being implemented by Nutrition rights coalition [1] in Maharashtra. For the study, one block each was taken from Pune, Nandurbar, and Gadchiroli districts where THR is being given whereas two blocks were taken from Amravati district since here daily cooked food is being provided. In each block, three villages were selected by simple random sampling. Hence total 15 villages were covered: nine villages in THR districts and six villages in the cooked food district. In each study village, fifty per cent of the children below three years of age listed in the Anganwadi register were selected using systematic random sampling method. Interviews of mothers/caretakers of these selected children were conducted. In the THR districts, the sample size was 105 children while in the cooked food district, 106 children were selected, making a total sample of 211 children covered by the study.

Data collection involved four main aspects

1. Observation of actual preparation of food using THR mix in households, and noting down its recipe with amounts of ingredients added.

Usually three different types of THR packets are distributed from Anganwadi. So attempt was made to observe three to four recipes per village. Recipes of various types of cooked food given in the Anganwadi were noted down in a similar manner.

2. Interview of caretakers of under-three children to understand-
 - a. Actual usage of THR
 - b. Food frequency recall for understanding THR consumption and overall dietary intake by the child. (weekly consumption data)
3. Records from Anganwadi -details about THR distribution

Data from interviews was analyzed using Microsoft excel while protein and calorie content in both cooked food and THR packets were derived using data from actual observation and detailed recipes.

Ethical consideration

Informed consent was taken from each participant prior to conduction of their interview. Confidentiality of information would be ensured.

RESULTS AND DISCUSSION

Supply of THR packets

In terms of the regularity of the supply, cooked meals far outweighed THR packets as the overall availability of THR packets was only 53 percent of the total requirement. As per the programme policy, every child should get three packets of THR every month, so the 105 children were expected to get 315 packets in a month and 945 packets in a period of three months. . However in reality, 60 percent mothers reported that they received only two THR packets per month and 40 percent mothers received only one THR packet per month, during the last three months. On the other hand, all the respondents from Amravati reported that they received hot cooked meals i.e. khichdi and matki usal from the Anganwadis regularly during working days.

¹The 'Nutrition Rights Coalition' is a coalition of six civil society organizations working on Nutrition Rights in Maharashtra, - Amhi Amachya Arogyasathi (Nagpur and Gadchiroli), Janarth (Nandurbar), Rachana Trust (Pune), Lok Seva Sangam (Mumbai) and Khoj (Amaravati)- which are involved in carrying out the activity of CBMA, and a network of CSOs coordinated by SATHI, Pune.

Actual consumption of THR

On asking about consumption of supplementary food in the last one week, it was found that only 11 percent children in THR districts were frequent users [2] of THR, while 88 percent of children from Amravati, where cooked food is being given, were frequent users of cooked food (Table I). Hence, frequent usage of

cooked food is eight times higher than frequent usage of THR. On exploring what do people do with the unused THR packets, some interesting responses came up. Out of nonusers of Upma packets, 79 percent respondents said they give it to animals or use it for fishing, followed by 11 percent respondents who throw it away and remaining mentioned that they mix it with other flour.

TABLE NO. I: FREQUENCY OF CONSUMPTION OF SUPPLEMENTARY NUTRITION

Frequency of consumption	THR Distribution districts	Cooked Food Distribution District
Frequent users	11%	88%
Infrequent Users	28%	0%
Non Users	61%	12%
Total respondents (N)	105	106

Quality of THR

One of the main reasons behind non-usage of THR is its poor quality, reported by majority of the respondents. 69.4 percent respondents reported that Upma is often bitter in taste and 22.4 percent reported that it tastes very salty. 58 percent respondents reported that Sattu and upma smells bad. Most of the respondents recommended that except for shira, supply of all other THR packets should be stopped.

Nutritional content of THR

It was found that Calories and protein content in THR prepared by mothers is significantly lower than what is mentioned in GR. For example As per GR, calorie and protein content in per serving of Shira should be 567Kcal and 16.3g respectively (Table no. II). However, if we see actual recipes prepared by mothers, calorie and protein content in per serving of Shira was 130Kcal and 7.5g respectively.

TABLE NO. II COMPARISON OF CALORIES AND PROTEINS FROM COOKED FOOD AND THR PACKETS

Type of food	Average calories / protein consumed by child per serving	
	Kcal	Protein (g)
Cooked food	253	9.2
THR	113	3.7

Conclusion

In the ultimate analysis, data suggests that cooked food for children below 3 years is a much better form of supplementary nutrition than THR packets in terms of Acceptability, Consumption and Effective calorie and

protein content (actual consumption).

Following are some recommendations to improve the efficacy of this scheme

- Instead of centrally purchased THR, daily hot

Frequent users- Consumed Supplementary Nutrition 3 times or more in last week

Infrequent Users- Consumed Supplementary Nutrition less than 3 times in last week

cooked food should be provided to under-3 children. Cooked food should be prepared using adequate amount of dal, oil and vegetables. Special foods would be required for children under one year.

- A second option could be local preparation of appropriate and acceptable dry supplementary foods by local groups, to be provided regularly. As the concept of such packaged food would be relevant in villages which are far from Anganwadi.
- Based on the principle of community based monitoring, in order to ensure proper implementation of the scheme, ICDS should regularly take feedback from mothers' groups, Village health Nutrition Sanitation Committee members and civil society organisations about the quality and acceptability of supplementary foods being provided to children. Based on such feedback, modifications should be made in the forms of supplementary food.

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