

Original Research Article

A comparative study: Dr. APJ Abdul Kalam amrut ahar yojana and take home ration scheme, Armori block, Gadchiroli, Maharashtra

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ABSTRACT

Background: Even after forty-five years of ICDS, nutrition, still, continues to be a major public health challenge in India. The impact of ICDS on child growth and development has been rather slow. The present study is a comparison of Dr. A. P. J. Abdul Kalam amruta ahar yojana and take home ration scheme.

Methods: The study adapts a combination approach, i.e. qualitative and quantitative method. Qualitative method is used to study the perception of beneficiaries as well as the providers while quantitative method is conducted among 80 beneficiaries with an aim to identify the utilisation pattern of food and level of satisfaction with both the schemes.

Results: A total of 80 pregnant women and lactating mothers participated in this study. This study used a questionnaire containing socio-demographic data and utilisation pattern of one-time square meal and dry ration; socio-demographic questions including concerned age group, their education, religion, employment status and income. This study reveals that one-time square meal of amrut ahar yojana is advantageous compared to the dry ration of THR. Amrut ahar beneficiaries were pleased with the hot cooked meal provided under this scheme.

Conclusions: The findings depict that the provision of amruta ahar is in demand compared to the dry ration of Take-Home Ration Scheme. According to the beneficiaries, amruta ahar yojana is more advantageous as it leads healthy eating practices which are essential during pregnancy and lactation.

Keywords: ICDS, Nutrition, AWW, Take home ration, Amruta ahar yojana, PESA

INTRODUCTION

Nutrition warrants special attention during pregnancy and lactation as foetus as well as infant needs high nutrients.¹⁻⁷ Poor maternal diet affects mother's health, which thereafter poses a potential risk of maternal and child death.⁵ However, it is important for the mother to maintain a healthy nutritional status during the time of pregnancy and lactations as it affects her own health, her ability to give birth and breastfeed a healthy infant.

Integrated child development services (ICDS) scheme is one of the flagship programs of Government of India, which was launched in 1975, aimed to reduce infant

mortality rate, incidence of malnutrition and nutrition related diseases.² It offers a package of multiple services including pre-school education and referrals. Under ICDS, supplementary nutrition is being provided through Anganwadi centers to improve the nutrition and health status of pre-school children, pregnant women, lactating mothers, and adolescent girls. They are provided with supplementary nutrition under take home ration (THR) scheme. Children between the age of 7 months to 3 years are provided 7 packets if normal weight and 10 packets if severely underweight, pregnant women, lactating mothers and adolescent girls are given sukhadi (1 packet of 1 kg/month), sheera (3 packets of 500 g each) and upma (2 packets of 500 g each).³

In scheduled areas, the prevalence of underweight babies is high due to the lack of dietary calories and protein.¹ If the mother is underweight during her last trimester, it may have an effect on the weight of the baby. The first three months after birth, the baby is completely dependent on the mother. Therefore, it is necessary that mother must remain healthy during this period.

Even after forty-five years of ICDS, nutrition still continues to be a major public health challenge in India.⁸⁻¹⁰ The impact of ICDS on child growth and development has been rather slow.¹¹⁻¹⁵ Thus, effective measures need to be taken to overcome the challenges such as malnutrition, infant mortality and low birth weight. Against this grim backdrop, the Government of Maharashtra has introduced Dr. A. P. J. Abdul Kalam amruta ahar yojana to provide one-time square meal to all pregnant women and lactating mothers.¹ They get free meals during the entire duration of their pregnancy and for six months post-delivery.¹⁶ This scheme has been implemented only in the PESA (panchayat extension to schedule areas) villages of sixteen tribal districts of Maharashtra under hundred and five child development projects¹⁷. Under this scheme, hot cooked meal is provided to beneficiaries through Anganwadi centers (AWC) of scheduled areas. The hot cooked meal includes bhakri/roti, rice, dal, green vegetables (cooked in iodized salt), jaggery-groundnut laddoos, and boiled eggs/banana/nachani halwa and soya milk.¹ A committee of four members (two pregnant or lactating mothers, an anganwadi worker and female panchayat member) has been appointed for every AWC to procure all the ingredients required for the preparation of hot cooked meal and it is headed by the female panchayat member.¹ Anganwadi workers (AWW) and helpers receive an additional amount of five hundred rupees per month along with the regular honorarium for preparing the meal.¹⁷

The scheme, launched in November 2015, has replaced the earlier THR scheme to tackle the challenges of malnutrition among the children in the scheduled areas.¹ Thus, the present study was undertaken with the objective to compare the utilisation pattern of food among both schemes and study the perceptions of beneficiaries and providers.

METHODS

This study was carried out in the Armori block of Gadchiroli district, Maharashtra. It uses mixed method design which is the combination of quantitative and qualitative approach. Quantitative method was used to assess the utilisation pattern of food among Amruta ahar yojana and THR scheme. In quantitative approach, beneficiaries consisted of eighty pregnant women and lactating mothers from anganwadis of twenty villages in Armori block. A structured questionnaire with standardized questions was used to collect the primary data of eighty samples.

Qualitative method was used to study the perceptions of beneficiaries as well as the providers. In the qualitative approach, beneficiaries consisted of eighty pregnant women and lactating mothers and twenty AWWs. Focus group discussions (FGDs) were conducted among beneficiaries and in-depth interviews were conducted among providers by using semi-structured questionnaire. Informed consents were taken prior to the interview.

Sampling

Ten villages (PESA) of amruta ahar yojana and ten villages of THR scheme were selected by purposive sampling method. One AWC from each village and beneficiaries were selected by simple random sampling method.

Data collection

The data was collected between August 2017 and September 2017.

Data analysis

The quantitative data was analysed using SPSS software which yielded percentages and frequencies as mentioned in tables below. Qualitative data was analysed by cataloguing the data, determining the patterns and interpretation. A thematic content analysis is presented in narrative texts as inferred by the interviews.

RESULTS

Quantitative part

A total of 80 pregnant women and lactating mothers participated in this study. This study used a questionnaire containing socio-demographic data and utilisation pattern of one-time square meal and dry ration; socio-demographic questions including concerned age group, their education, religion, employment status and income.

Comparison of socio-demographic profile of the respondents (n=80)

39 (97.5%) participants of amrut ahar yojana and 36 of THR scheme were in the age group of 18-30 years while 1 participant of amrut ahar yojana and 4 of THR scheme were in the age group of 31-40 years. Most of the respondents were literate; some of them were graduates and post-graduates. A detailed comparison of socio-demographic profile of the respondents is given in (Table 1).

Beneficiaries availing services under both the schemes

65% of Amrut Ahar beneficiaries and 32.5% of THR beneficiaries were availing the services since registration. Subsequently, 15% Amrut Ahar and 25% THR beneficiaries from second trimester, 7.5% Amrut Ahar

and 17.5% THR beneficiaries from third trimester while 12.5% Amrut Ahar and 25% THR beneficiaries were availing the services post delivery.

Table 1: Comparison of socio-demographic profile of the respondents (n=80).

Variables		Amruta ahar yojana		Take home ration scheme	
		F	%	F	%
Age (years)	18-30	39	97.5	36	90
	31-40	1	2.5	4	10
Education	Illiterate	3	7.5	4	8
	Primary	2	5	6	17
	High School	16	40	8	20
	Higher secondary	14	35	18	45
	Graduation	3	7	2	7
	Post-graduation	2	5	2	3
Religion	Hindu	24	60	16	40
	Christian	1	2.5	2	5
	Muslim	2	5	2	5
	Buddhist	6	15	7	17.5
	Others	7	17.5	13	32.5
Caste	SC	6	15	9	22.5
	ST	18	45	20	50
	OBC	14	35	8	20
	GEN	1	2.5	2	5
	Others	1	2.5	1	2.5
Employment status	Employed in Government	2	5	1	2.5
	Employed in private	1	2.5	2	5
	Self-employed	10	25	3	7.5
	Housewife	27	67.5	34	85
Family income	1000 - 5000	12	30	14	35
	5001 - 10000	18	47	17	42.5
	10001 - 15000	6	15	5	12.5
	15000 - 20000	2	5	3	7.5
	>20000	2	3	1	2.5

Comparison of the source of information

Comparison of the source of information included front-line health workers (ASHA/AWW/ANM), healthcare facility (SC/PHC/CHC/ DH), media sources (radio/newspaper/internet), caregivers and others such as religious leaders or NGOs. 55% amrut ahar beneficiaries received scheme information through front-line health workers while 12.5% through healthcare facility, 25% through media sources, 2.5% through caregivers and 5% beneficiaries through other sources.

In similar manner, 65% THR beneficiaries received scheme information through front-line health workers while 17.5% through healthcare facility, 7.5% through

media sources, 3% through caregivers and 7% beneficiaries through other sources.

Comparison of regular utilisation of food and ration

With respect to regular consumption of food and ration, percentage (72.5%) of amruta ahar beneficiaries is higher compared to the percentage (52.5%) of THR beneficiaries. This study reveals various reasons for irregularity in diet consumption and availing ration. The details are given in (Table 2).

Table 2: Reason for irregularity in diet consumption and availing ration.

Amrut ahar yojana			Take home ration		
Reasons	F	%	Reasons	F	%
Absence of child monitor	12	30	Inferior or compromised ration quality	21	52.5
Employment constrains	14	35	Short supply of ration	13	32.5
Dislike for the diet provided	5	12.5	Expired ration	4	10
Lack or difficulty in conveyance	7	17.5	Other reasons (unavailability or time constrains)	2	5
Domestic and Health Constrains	2	5	-	-	-

Table 3: Diet and dry ration inclusions.

Amrut ahar yojana			Take home ration		
Diet	F	%	Dry ration	F	%
Basic meal (chapati/bha kri, rice, dal, cooked vegetables)	6	15	Only sukhadi packets	13	32.5
Basic meal and eggs	28	70	Sukhadi and sheera packets	17	42.5
Basic meal with eggs, jaggery-peanuts laddoo and soya milk	6	15	Sukhadi, sheera and upma packets	10	25

Under amrut ahar yojana, only 15% of beneficiaries were given complete one-time square meal while under THR, 25% of beneficiaries were getting complete ration (as per scheme guidelines). Details are given in (Table 3).

Amrut ahar beneficiaries availing meals at anganwadis

75% beneficiaries consumed their meal at anganwadis and 25% did not consume their meal at anganwadis.

Beneficiaries, who did not consume the meal at anganwadis, would pack the meals for home. Study listed various reasons and constrains in availing the meal at anganwadis as shown in (Table 4).

Table 4: Reasons of failing to avail the meal at anganwadis.

Amrut ahar yojana	F	%
Reasons		
Absence of child monitor	11	27.5
Employment constrains	19	47.5
Lack of preference	8	20
Domestic and health constrains	2	5

The details of utilisation of meal which was brought home by amrut ahar beneficiaries and dry ration by THR beneficiaries is depicted in (Table 5).

Table 5: Comparison of the utilisation of amrut ahar meal and dry ration at home.

Amrut ahar yojana			Take home ration		
Beneficiaries	F	%	Beneficiaries	F	%
Lone consumption	13	32.5	Lone Consumption	4	10
Familial consumption	27	67.5	Familial Consumption	12	30
			Cattle Feed	24	60

Consumption standards of meal and dry ration

67.5% of Amrut Ahar beneficiaries found one-time square meal up to the standard of food consumption while only 32.5% of THR beneficiaries deemed the dry ration to the standard of food consumption.

Comparison of level of satisfaction with the quantity and quality of food

The satisfaction level was determined by using 5-point Likert scale, a significant difference was observed with the quantity and quality of one-time square meal and dry ration provided under both the schemes. 52.5% of amrut ahar beneficiaries were strongly satisfied with the quantity of meal received while 62.5% of THR beneficiaries were strongly dissatisfied with the quantity of dry ration received. In similar manner, 55% of amrut ahar beneficiaries were strongly satisfied with the quality of meal received while 57.5% of THR beneficiaries were strongly dissatisfied with the quality of dry ration received.

Qualitative part

The qualitative data was analysed by using 'thematic approach'. Therefore, the analysis was arranged in two broad themes.

Understanding of beneficiaries and providers about THR scheme

Most of the beneficiaries mentioned that THR scheme should be discontinued and amrut ahar yojana should be implemented across the villages as the major of the villagers would prefer a ready-to-eat meal instead of dry ration from THR. The ration obtained from THR is either not received on time or even if received, it is expired. In some of villages, beneficiaries always get irregular and short supply of ration. Only 'sheera' packets are consumable whereas other two packets (sukhadi and upma) often smell bad.

One ANC beneficiary complained, "sometimes, the ration smells very bad and it feels like it's not edible for humans, it's for animals. How do we eat such a low-quality ration?". From provider's perspective, there are few issues with THR scheme. The ration usually arrives with a delay to the anganwadis and the distribution to the beneficiaries is further pushed back as the ration must be reviewed for quantity and quality by AWW before it is rolled out.

Once the ration arrives at anganwadis, AWW engage in a door-to-door advertisement so that beneficiaries can come and collect their ration and yet it was realised a lack of motivation and response among the eligible population of that area. This further leads to wastage of the stock.

Understanding of beneficiaries and providers about amrut ahar yojana

Amrut ahar beneficiaries were pleased with the hot cooked meal provided under this scheme. Most of the beneficiaries responded that it is a good initiative by Government of Maharashtra that they replaced the earlier implemented THR scheme with amrut ahar yojana. One PNC beneficiary said, "when we (women) have food together as a group, it becomes an emotionally fulfilling experience and we eat more, which is necessary during pregnancy and breastfeeding."

In few villages, there were some issues with this scheme as AWW fail to provide the meal as promised by the scheme. For instances, protein-rich food such as eggs and milk were not provided to the beneficiaries and meal often contains same vegetables, which causes them to feel discouraged to consume their meals.

As per discussion with providers, most of them responded that amrut ahar yojana is beneficial for pregnant and lactating mothers but AWW are responsible for number of tasks from buying vegetables to ensuring the distribution of food among the beneficiaries. THR scheme had some issues but they were manageable. In this scheme, there is an issue of estimation and leftover food as every day at least 3-4 beneficiaries missed the meal.

DISCUSSION

This study reveals that one-time square meal of amrut ahar yojana is advantageous compared to the dry ration of THR. Considering provider's concern; various tasks can be shared by involving village health sanitation and nutrition committee (VHSNC) members to ensure the smooth implementation of amrut ahar yojana. This collaborative approach will help reducing the workload of providers and beneficiaries can get complete one-time square meal along with variety of vegetables.

Therefore, it is advisable to replace the supply of dry ration with provisions of amrut ahar as dry ration is of poor quality and often expires till it reaches the beneficiaries. Against malnutrition; Dr. A. P. J. Abdul Kalam amrut ahar yojana is a remarkable initiative by Government of Maharashtra. If the guidelines of the schemes are followed with diligence and the realised loopholes are taken care of properly, this scheme would not only prove beneficial to the current beneficiaries, but can also be successfully implemented in other states including non-PESA villages.

CONCLUSION

The findings depict that the provision of amruta ahar is in demand compared to the dry ration of take home ration scheme. According to the beneficiaries, amruta ahar yojana is more advantageous as it leads healthy eating practices which are essential during pregnancy and lactation. In the opinion of providers, take home ration Scheme is more convenient as it includes only the distribution of dry ration; while in amruta ahar yojana, anganwadi workers are responsible for number of tasks from buying vegetables to ensuring the distribution of food among the beneficiaries.

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