

Impact of Mid-Day Meal Programme on Nutritional Status of School Children

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Abstract - Under nutrition during any period of childhood, even for relatively short term episodes, can have negative effects on the cognitive development thus leads to poor school performance among children. The research question is- does the mid-day meal scheme have an impact on the nutritional status of school children (6-12 years) in Agra? This was a cross-sectional study conducted at three government primary schools Mid Day Meal (MDM) in urban areas and three primary schools in rural areas in Agra district. Simple random sampling was used for selection of children. Study variables taken were height, weight and general physical examination. Results of the study indicated that the nutritional status of MDM children. The reason for poor result for schools providing Mid Day Meals could be irregular attendance of children in school, less amount of Mid Day Meal, poor quality of food items in Mid Day Meals, combined teaching of different standard, lack of class room etc. All these parameters need to be further studied and evaluated for these impacts on academic achievement.

Keywords - Nutritional, Meal, Mid, Day

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1. INTRODUCTION

The midday meal scheme is the biggest school lunch program in the country. It has been accounted for that midday meal has taken care of the nutritional requirements of school children in both provincial and metropolitan regions (Mehta et al., 2013). Children add to the fundamental human potential and bestow solidarity to the public economy and improvement. Sustenance is the main essential need, being a significant determinant of wellbeing, work usefulness and mental turn of events. Better the nutritional status of the children, higher will be the country's development (Yadav and Kumar, 2012). Wellbeing and nutritional status of 6 to 12yrs children are vital on the grounds that advancement in any country, 6-12 years age is a time of learning, development and actual turns of events (Kulshrestha and Sharma, 2011). Grade school age is a powerful time of actual development and mental improvement of the kid. Research unequivocally proposes that medical issue because of unhealthiness among grade school (Cynthia, 2015). The vitally nutritional issues confronting the school children incorporate development impediment, hindering, underweight, sickness and vitamin A lack. Separated for mid day meal program which is being controlled by the public authority of India in government run schools, there could be no different endeavors for children in age bunch 5-14 years (Alim et al., 2018). Sustenance assumes a significant part in advancement of wellbeing and avoidance of illness, food in the main

wellspring of fundamental materials, which the body needs for its prosperity. Great nourishment is a fundamental part of wellbeing. Nutritional help to essential instruction is considered as a way to accomplish the target of giving free and necessary general essential training of good quality to every one of the children beneath the age of 14 years by giving a lift to universalization of essential instruction through expanded enrolment, further developed school participation and maintenance and advancing nutritional status of elementary school children (Afridi and Farzana, 2019).

Unhealthiness keeps on being an essential driver of medical affliction and mortality among children in emerging nations. It is a significant general medical condition and records for about portion of all kid passages around the world. Since, its foundation mid day meal has been giving meals to large number of schools in pretty much every province of India and around 8.41 crore of children are covered under this scheme.

Mid Day Meal Programme

As indicated by the constitution of India, every one of the children reserve the option to get essential schooling. In spite of the fact that it of not hundred percent triumphs, it has appeared a steady enormous creating. Henceforth Government has advanced a change to enlist the most extreme number of understudies from the age gathering of 6

- 12 years with the expectation of complimentary training. The Mid Day Meal Scheme is a multi-reason program of the Government of India that, to resolve issues of food security, absence of nourishment and admittance to training. This Scheme was sent off in the year 1995 August fifteenth in cross country by the Department of Elementary Education and Literacy, Ministry of Human Resources Development, Government of India. In the year 2002, this scheme was reached out to cover the children examining in Education Guarantee Scheme (EGS) and Alternative Informal Education (AIE). In September 2002, an endeavor was made to modify the mid-day meal scheme giving 300 kilocalories and 8-12 grams of protein individually to all understudies of class I-V both government and government-helped schools. With all that productive outcomes, Scheme was reached out to the upper essential classes (VI to VII) in the year October 2007. It gives free lunch on working days both for Primary and Upper Primary classes. This scheme is the biggest school lunch program in India with an articulate target to offer the nutritional help for school children in both country and metropolitan regions.

Grade school age is a unique time of actual development and mental improvement of the children. Children add to the imperative human potential and they are the solidarity to the country's economy and advancement. During this period, critically the requirement for sustenance is obligatory as it is a determinant of wellbeing, work efficiency and mental improvement. Their Nutritional status and Health are observed to improve learning, development and furthermore actual turns of events. Actual development of children is reflected by their anthropometric estimations particularly weight and tallness. Then again, kid stature and weight is the proficient apparatus for acknowledgment of their nutritional status.

Malnutrition

Malnutrition in children is multi-layered, represented by organic, conduct and ecological variables. It puts a tremendous weight by expanding mortality as well as works on critical public wellbeing and advancement costs because of related morbidities, including decreased mental capacity. It lessens children's protection from contamination and builds the weight of illness in the networks. Unfortunate sustenance is probably the best issue in provincial India, coming about because of defective dietary propensities, unfortunate resistant framework and causes a huge development delay. The nation is as yet battling with these issues. Many elements can cause malnutrition, deficient food consumption, diseases, psychosocial hardship, insanitary climate, social disparity, absence of cleanliness and some hereditary commitment.

Prevalence

Malnutrition demonstrates that children are either excessively short for their age or excessively slim. India's exhibition on key malnutrition pointers is poor as indicated by public and worldwide examinations. As per UNICEF, India was at the 10th spot among nations with the largest number of underweight children, and at the seventeenth spot for the biggest number of hindered children on the planet. The WHO gauges that malnutrition represents 54% of youngster mortality around the world, youth underweight records for 35% of all demise around the world. In non-industrial nations, 52% are hindered and 34% to 62% are underweight.

2. OBJECTIVE OF THE STUDY

1. To study on midday meal scheme school lunch programme in the nation
2. To study on nutritional status of school children

3. RESEARCH METHODOLOGY

To evaluate the effect of program a bunch of three schools

Table 1: Comparison of mean stature for MDM young lady's metropolitan and provincial region with ICMR principles based on age

Age (Years)	ICMR Height standard (cm)	Urban area			Rural area		
		N	Girls Mean height (cm)	Difference value	N	Girls Mean height (cm)	Difference value
6	114.6	4	110.8	3.8	2	104.1	10.5
7	120.6	6	116.1	4.5	3	115.6	5.0
8	126.4	6	120.3	6.1	4	118.0	8.4
9	132.2	3	124.6	7.6	1	121.7	10.5
10	138.3	3	128.7	9.6	5	122.4	15.9
11	142.0	2	130.4	11.6	5	128.8	13.2
12	148.0	1	139.6	8.4	5	133.2	14.8
Total		25			25		

Table 2: Comparison of mean height for MDM boy's urban and rural area with ICMR standards on the basis of age

Age (Years)	ICMR Height standard (cm)	Urban area			Rural area		
		N	Boys	Difference value	N	Boys	Difference value
			Mean height (cm)			Mean height (cm)	
6	116.1	4	107.7	8.4	2	105.6	10.5
7	121.7	6	119.6	2.1	3	118.0	3.7
8	127.0	6	122.5	4.5	4	124.4	2.6
9	132.2	3	126.2	6	1	127.0	5.2
10	137.5	3	131.5	6	5	126.0	11.5
11	140.0	2	137.8	2.2	5	134.0	6
12	147.0	1	141.6	5.4	5	139.6	7.4
Total		25			25		

primary school in urban areas and three primary school in rural areas. The review was done among 100 grade school children having a place with the country and metropolitan regions were chosen from Agra 100 example respondents were chosen through the purposive arbitrary inspecting.

In each school, young men and young ladies were arbitrarily chosen from each class for anthropometry, clinical assessment and scholarly accomplishment. The nutritional status of children was surveyed by anthropometry (tallness and weight) and clinical assessment.

4. DATA ANALYSIS

The goal was to decide the effect of mid day meal scheme on the nutritional status of grade school children (6-12 years) in Agra area.

Table 1 showed that the dispersion of stature of young ladies demonstrated that the metropolitan regions young ladies were viewed as more limited than young ladies of ICMR guidelines by 3.8 cm to 11.6 across all ages. The most extreme contrast was found in age gathering of 11 years. If there should arise an occurrence of country regions young ladies the distinction goes from 5.0 cm to 15.9 cm from 6 to 12 years. The most extreme contrast was found in age gathering of 10 years. Information showed that the provincial regions young ladies were likewise seen as more limited than ICMR standard at all ages.

Table 2 showed that the dispersion of stature of young men demonstrated that the metropolitan

regions young men were viewed as more limited than young men of ICMR guidelines by 2.1 cm to 8.4 across all ages. The most extreme distinction was found in age gathering of 6 years. If there should arise an occurrence of country regions young men the distinction goes from 2.6 cm to 11.5 cm from 6 to 12 years. The most extreme contrast was found in age gathering of 10 years. Information showed that the metropolitan regions young men were additionally seen as more limited than ICMR standard at all ages.

Table 3 showed that the heaviness of metropolitan and country young ladies expanded with in age from 6 to 12 years. The load in the age bunch 6 to 12 years went from 20.1 kg to 30.0 kg in metropolitan young ladies. In rustic regions, the load in the age bunch 6 to 12 years went from 17.5 kg to 28.1 kg in country young ladies. In both metropolitan and rustic young ladies the weight was tracked down lower than the ICMR standard across all ages.

Table 4 demonstrated that the heaviness of metropolitan and rustic young men expanded with in age from 6 to 12 years. The load in the age bunch 6 to 12 years went from 20.0 kg to

33.0 kg in metropolitan young men. In rustic regions, the load in the age bunch 6 to 12 years went from 18.0 kg to 29.6 kg in provincial young men. In both metropolitan and country young men the weight was tracked down lower than the ICMR standard across all ages.

Table 3: Comparison of mean load for MDM young lady's metropolitan and country region with ICMR principles based on age.

Age (Years)	ICMR Weight standard (kg)	Urban area			Rural area		
		N	Girls	Difference value	N	Girls	Difference value
			Mean weight (kg)			Mean weight (kg)	
6	19.5	6	20.1	-0.6	3	17.5	2
7	21.8	4	20.6	1.2	2	18.7	3.1
8	24.8	2	24.0	0.8	6	22.8	2
9	28.5	4	27.3	1.2	2	23.3	5.2
10	32.5	4	28.6	3.9	2	22.2	10.3
11	33.7	2	29.6	4.1	5	27.6	6.1
12	38.7	3	30.0	8.7	5	28.1	10.6
Total		25			25		

Table 4: Comparison of mean weight for MDM boy's urban and rural area with ICMR standards on the basis of age

Age (Years)	ICMR standard (kg)	Urban area			Rural area		
		N	Boys	Difference value	N	Boys	Difference value
			Mean weight (kg)			Mean weight (kg)	
6	20.7	5	20.0	0.7	6	18.0	2.7
7	22.9	2	26.2	-3.3	4	19.4	3.5
8	25.3	2	25.8	0.98	4	22.0	3.3
9	28.1	3	26.7	1.7	3	24.3	3.8
10	31.4	3	30.6	0.8	3	26.9	4.5
11	32.2	5	29.7	2.5	3	27.0	5.2
12	37.0	5	33.4	3.6	2	29.6	7.4
Total		25			25		

5. DISCUSSION

The perceptions of the current review recommend that the circulation of stature of young ladies showed that the metropolitan regions young ladies were seen as more limited than young ladies of ICMR principles by 3.8 cm to 11.6 across all ages. The greatest contrast was found in age gathering of 11 years. If there should be an occurrence of country regions young ladies, the distinction goes from 5.0 cm to 15.9 cm from 6 to 12 years. The most extreme distinction was found in age gathering of 10 years. Information demonstrated that the rustic regions young ladies were additionally seen as more limited than ICMR standard at all age. Dissemination of stature of young men demonstrated that the metropolitan regions young men were seen as more limited than young men of ICMR principles by 2.1 cm to 8.4 across all ages. The greatest distinction was found in age gathering of 6 years. If there should arise an occurrence of provincial regions young men the distinction goes from 2.6 cm to 11.5 cm from 6 to 12 years. The greatest distinction was found in age gathering of 10 years. The heaviness of metropolitan and country young ladies expanded with in age from 6 to 12 years. The load in the age bunch 6 to 12 years went from 20.1 kg to 30.0 kg in metropolitan young ladies. In provincial regions, the weight went from 17.5 kg to 28.1 kg in country young ladies. The heaviness of metropolitan and provincial young men expanded with in age from 6 to 12 years. The load in the age bunch 6 to 12 years went from 20.0 kg to 33.0 kg in metropolitan young men. In rustic regions, the weight went from 18.0 kg to 29.6 kg in provincial young men. In both metropolitan and country young men and young ladies, the weight was tracked down lower than the ICMR standard across all ages.

Alim et al. (2018) detailed that the young ladies of MDM schools were more limited than the ICMR wealthy Indian young ladies at all ages besides at age of 6 and 12 years (higher by 1.7cm and 1.6 cm, individually) the greatest distinction was found in age gathering of 9 years. Results on the tallness of young men showed that the MDM young men were seen as more limited than young men of ICMR standard by 0.1 cm to 8.7 cm across all ages. The greatest distinction was found in age gathering of 12 years.

6. CONCLUSION

The Mid-day Meal Scheme in India is the biggest school meal program on the planet, covering an expected 139 million children. It likewise has the biggest youngster advancement program (the Integrated Child Development Services or ICDS), which gives free meals to the school children as a piece of the nutritional program. MDMS Scheme was started to further develop enrolment and participation of grade school children, while at the same time working on their nutritional status. mid Day Meal Scheme had ended up being compelling to check dropout paces of children from the low financial foundation, and furthermore tending to their nutritional requirements. Nourishment Support to Primary Education prominently alluded to as mid Day Meal program (MDM) is considered for of advancing superior enrolment, school participation, and maintenance. MDM was accommodating each school youngster around 33% of the day by day supplement prerequisite as a hot prepared meal. It was better for certain children from unfortunate families; the school meal might turn into a substitute rather than an enhancement for the home meal. It was essential to take note of that it was not simply the drawn out impacts of the school meal on the nutritional status yet its Short-Term Effects on better consideration, memory and learning limit. A ravenous youngster is an unfortunate student and absence of focus. A midday meal was a significant instrument for fighting homeroom hunger and advancing better learning. Numerous children arrive at school with an unfilled stomach toward the beginning of the day. Children from all standings and networks eating together, was additionally an instrument to bring better friendly combination. Genuinely the mean tallness and weight of MDM school young ladies and young men in the current review are lower than that of ICMR (2016) principles.

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