



## EVALUATIVE STUDY OF MID DAY MEAL PROGRAMME IN AMRAVATI AND NAGPUR DISTRICT

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### ABSTRACT:

The school programmes were started in our country keeping in mind the social and economic advancement of the country. Urbanisation, Industrialisation and an increase in the number of working mothers frequently brought about longer school days. This mean, that children often did not receive proper meals at home and therefore needed to have a meal at school. Thus, a free compulsory primary education became more common and pressures were brought to bear on governmental authorities to provide school lunch

Descriptive research design will be use for the Study. 27-30 schools will select and 1000 samples, Students (Both Boys and Girls) will be select from rural and urban primary and secondary schools of Amravati and Nagpur District for the above study. Evaluation of MDM at school level. This phase was conducted l in the selected schools. All the children studying in 5th to 8th standard were enrolled in the study after obtaining a written consent. Data on anthropometry, socio economic status as well as practices and perceptions regarding MDM, sanitation at cooking place were collected. through spot observations implementation of MDM at school level was also studied. Data on covid condition record of school during pandemic period. Raw food distributes, like chana chole, mug dal, green gram, dal, Rice and money transfer in students parent account also. Serving was done by MDM helpers and senior students in the schools.

Observation and evaluation of mdm finds in result are serving spoons being used in the schools were of different sizes. Jugs and other utensils were also used in some schools for serving. Plates for consuming MDM were provided from school. Somewhere tiffins are brought by children for mdm menu.It was observed that teachers were present at the time when meals were started being served. However, presence of teachers for monitoring throughout MDM serving as well as motivation by teachers were lacking. Most (93%) of the children consumed MDM in schools Main reason for not consuming MDM was not liking the taste among those who reported that they didn't eat MDM at school.Khichadi vegetable fried rice is the most liked item (28.7%) and chana (24.6%) was the most disliked item served under MDM, among children.Three fourth of the children opinioned that MDM is beneficial for them. The main benefit of MDM as reported by the children, was improvement in health (28.7%).

**Keywords:** *Mid day meal , Evaluation, School childrens, School management etc.*

### INTRODUCTION :

As per the Global Nutrition Report 2020, India is among 88 Countries that are likely to miss global nutrition targets by 2025. Global hunger Index (GHI) 2020 India has been ranked at 94 among 107 countries in the GHI 2020 India has a level hunger that is serious.(14) **Ref . Global Nutrition Report 2020** The situation of children in India is very concerning for planners of our country. Presently nearly half of the Indian children are undernourished. This is rightly called as “Silent Emergency” by Khera (2006). This makes primary education and basic health facilities as fundamental challenges of human development in India (Afridi 2005) (15) Midday

meal scheme was launched by the Ministry of Human resource development during 1995-96 for the benefit of students in primary schools. Food grains (rice and wheat) were supplied by FCI free of cost to the states and union territories. However FCI charges the economic cost of the food grains supplied under the Scheme from the Ministry of HRD. A quantity of 1.91 lakh metric tons of wheat and 3.74Lakh tons of rice was lifted under the scheme during 1995-96 .Initiated in 1995 the NMMP aims to increase primary school attendance and retention as well as improve the nutritional status and learning achievements of school

children generally in the 6 to 11 years old age group. Some states emphasize the education of young girls through this programme. (**Ref. Nutrition and Dietetics - Shubhangini A. Joshi 2002**)

The school programmes were started in our country keeping in mind the social and economic advancement of the country. Urbanisation, Industrialisation and an increase in the number of working mothers frequently brought about longer school days. This mean, that children often did not receive proper meals at home and therefore needed to have a meal at school. Thus, a free compulsory primary education became more common and pressures were brought to bear on governmental authorities to provide school lunch.

Mid-day meal programme for school children is comes under Ministry of education. On the recommendation of National school health committee, the government of India started a scheme for providing midday meal to school children is extended to all states with effect from is 15<sup>th</sup> August 1995. The government of India pays 40% of expenditure and 60% is borne by the states. The meal is usually prepared from special foods such as Balahar, Soya fortified Bread, Indian Multipurpose food, Skim milk Powder and Wheat. The children studying in corporation schools are given midday meals. The meals given are based on a combination of cereals, pulses and leafy vegetables. Eggs are given once a week. Such a diet would increase the amountof vitamins and minerals result in weight gain and clearance of deficiency symptoms. (**Ref. B. Srilakshmi second edition**)

#### **Locale of Study –**

Amravati district is a district of Maharashtra state in central India. It is the administrative headquarter of Amravati division, which is one of the two divisions in Vidarbha (other being Nagpur), out of total 6 regions in state of Maharashtra. The district is situated between

20°32' and 21°46' north latitudes and 76°37' and 78°27' east longitudes. The district occupies an area of 12,235 km<sup>2</sup>. The district has boundaries with Betul District of Madhya Pradesh state to the north, and with the Maharashtra districts of Nagpur to the northeast, Chindwara district of Madhya Pradesh to the northeast Wardha to the east, Yavatmal to the south, Washim to the southwest, and Akola and Buldhana.

Nagpur is the third largest city and the winter capital of the Indian state of Maharashtra. Total population of city is 4,653,570 according to 2011 data. It has been proposed as one of the smart cities in India .The total area of Nagpur (Rural) is 659.59 sq. km. with population density of 458 per sq.km. Out of total population 49.11% of population lives in Urban Area and 50.89 % lives in rural area. There are 19.45% Scheduled caste (SC) and 8.5% Scheduled Tribes (ST) of total population in Nagpur (rural) Taluka. Urban population of Nagpur 2405665 of which 1225405 are males and 1180260 are females.

#### **Sample size and sample design**

27-30 schools will select and 1000 samples, Students (Both Boys and Girls) will be select from rural and urban primary and secondary schools of Amravati and Nagpur District for the above study.

#### **Data analysis**

#### **Comparison between male and female respondents with respect to responses given to statement no. 1**

Comparison between male and female respondents with respect to responses given to statement no. 2

Based on the provided data, here's a summary and analysis of the comparison between urban and rural respondents with respect to their responses to statement no. 2.

**CONCLUSION:**

The analysis demonstrates that there is no statistically significant difference in the responses to Question 2 between urban and rural respondents. Both groups show a similar pattern of responses, with a large majority responding "Yes" and a small minority responding "No." This result suggests that the factor of being from an urban or rural area does not influence the responses to the specific statement in Question 2. Based on the data provided in the image, here is an analysis of the comparison between male and female respondents with respect to their responses to statement no. 4.

Comparison between male and female respondents with respect to responses given to statement no. 3

This was a cross-sectional study. The area was divided in a way that each region schools from each area were randomly selected for this phase. Specific objectives of this phase were:

1. To study the implementation of Mid-Day Meal Program at the school level
2. To investigate the storage, food handling and cooking practices in the centralized kitchen
3. to study the attendance and menu prepared in mdm program in school.
4. to study the policy perspectives of scheme.

Evaluation of MDM at school level. This phase was conducted in the selected schools. All the children studying in 5th to 8th standard were enrolled in the study after obtaining a written consent. Data on anthropometry, socio economic status as well as practices and perceptions regarding MDM, sanitation at cooking place were collected. through spot observations implementation of MDM at school level was also studied. Data on COVID condition record of school during pandemic period. Raw food distributes, like chana chole, mug dal, green gram, dal, Rice and money transfer in students parent account also.

Socio Economic Status

- Majority of the children were Hindu (97.3%) and only 2.7% were momedian.
- One fourth (43.9%) children were from nuclear families followed by joint (29.1%) and extended nuclear (26.8%) families.
- Majority of the children belonged to lower middle income to lower income class class
- 45 boys% and 55%girls from target population and study group
- Practices and policy perspectives and Perceptions regarding Midday Meal
- Most (93%) of the children consumed MDM in schools
- Main reason for not consuming MDM was not liking the taste among those who reported that they didn't eat MDM at school.
- Khichadi vegetable fried rice is the most liked item (28.7%) and chana (24.6%) was the most disliked item served under MDM, among children.
- Three fourth of the children opinioned that MDM is beneficial for them. The main benefit of MDM as reported by the children, was improvement in health (28.7%).

**Practices and Perceptions regarding kitchen**

All the children reported to be washing their hands before handling or consuming food, after eating and after using toilet,

- Only 43.2% children were washing hands after going home from outside followed by 31,5% washing their hands after doing household chores.
- The food cook is hygienic and clean and ready to eat in safe condition.
- The utensils like plates used are clean and serving pots are good.
- Only 38.9% and 48.2% of the children are met the nutrient energy and protein in required amount as per their age. More boys consumed amount of MDM that met nutrient norms as compared to girls.

### Observations findings of MDM at School

- Regular supply of safe drinking water in the schools was recorded in most of the observations.
- Open spaces like corridors, play grounds and open shaded dining areas were used for serving MDM in the schools. carpets to sit for children at mealtime lunchtime use in school daily.
- Serving was done by MDM helpers and senior students in the schools.
- Serving spoons being used in the schools were of different sizes. Jugs and other utensils were also used in some schools for serving.
- Plates for consuming MDM were provided from school. Somewhere tiffins are brought by children for mdm menu.
- It was observed that teachers were present at the time when meals were started being served. However, presence of teachers for monitoring throughout MDM serving as well as motivation by teachers were lacking. Waste-bins for collecting plate waste, were present in all the schools.

Phase 1 B: Evaluation of MDM at centralized kitchen

Some schools specifically Gramin, use vegetables grown at school from kitchen garden and in mdm cooking and some have not kitchen garden.

### Major findings of the analysis are given below.

- The MDM lunch menu provided by the centralized kitchen included curry-based items (dal and subji), rice-based items (jeera rice, chana rice, vegetable pulao, peas pulao and khichadi) as well as roti and thepla,
- In addition to this, snack items such as fried groundnuts, sukhadi, bataka poha, idli
- Energy content of rice-based items ranged from 65 Kcal/100 gm for khichadi to 173 Kcal/100 gm for chana rice, Curry based items had lower calories per 100 gm as compared to rice-based

items and rotis like puri, Aloo subji had the lowest caloric content (37 Kcal/100 gm). All the snacks served as MDM breakfast were high calorie foods, except for Idli (159 Kcal/100 gm.). Fried groundnuts had the highest calorie content (whole groundnuts-643 Kcal/100 gm and split groundnuts-597 Kcal/100 gm.).

- High calorie and protein provided.

The Kitchen Garden, parasbag develop in some school near about 35% school having their own parasbag. Student of school grown leafy vegetables there and use them for MDM menu. These activities can be useful into the existing MDM programmer to ensure adequate knowledge on nutrition, health and hygiene among children. prevalence of under nutrition is found by observation method only among children studying in Government run primary and upper primary schools of rural Amravati and Nagpur schools

### RECOMMENDATIONS:

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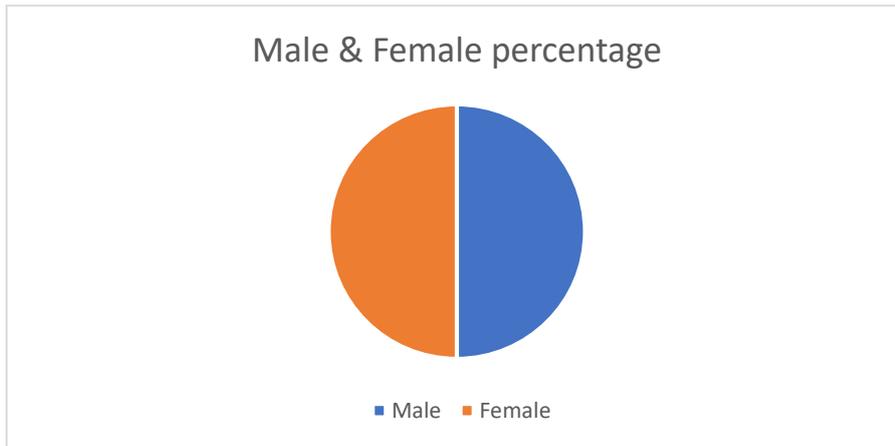
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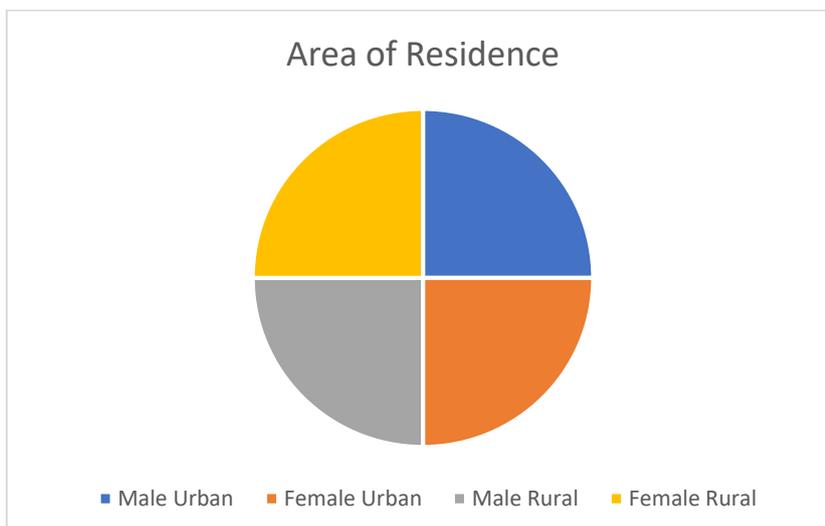
**Table No. 1 Showing frequency and percentage of male and female respondents**

Gender	Frequency	Percentage
Male	500	50%
Female	500	50%
<b>Total</b>	<b>1000</b>	<b>100%</b>



**Table No. 1 Showing frequency and percentage of Urban and Rural male and female participants**

Area of residence	Male	Female	Total
Urban	250	250	500
Rural	250	250	500
Total			1000



**Comparison between male and female respondents with respect to responses given to statement no. 1**

**Table 1**

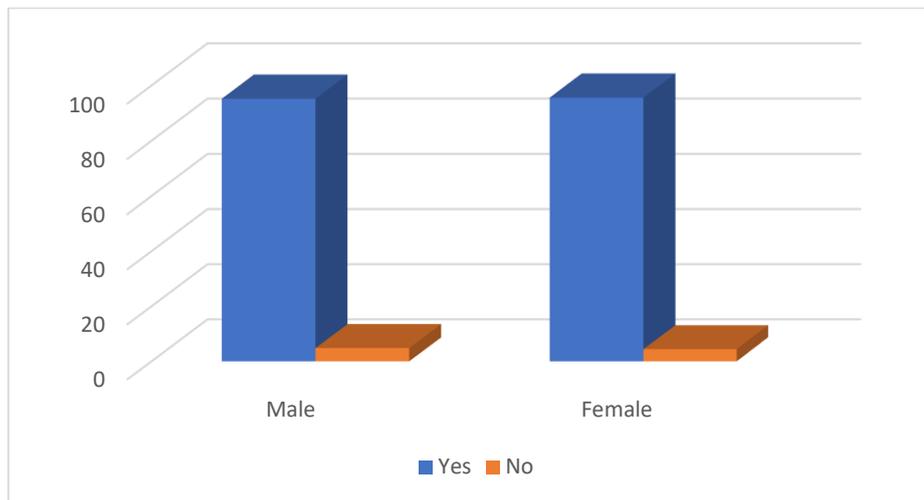
Gender	Frequency count & Percentage	Responses (Q1)		Total
		Yes	No	
Male	Count	476	24	500
	Expected Count	477.0	23.0	500.0
	% within Gender	95.2%	4.8%	100.0%
Female	Count	478	22	500
	Expected Count	477.0	23.0	500.0
	% within Gender	95.6%	4.4%	100.0%
Total	Count	954	46	1000
	Expected Count	954.0	46.0	1000.0
	% within Gender	95.4%	4.6%	100.0%

Chi-square = .091

p-value (0.763) is greater than chi-square value hence non-significant

p-value of 0.763, indicating no significant association between gender and Q1 responses.

**Figure No. 1**



**Comparison between male and female respondents with respect to responses given to statement no. 2**

**Table 1**

Gender	Frequency count & Percentage	Responses (Q2)		Total
		Yes	No	
Male	Count	479	21	500
	Expected Count	478.0	22.0	500.0
	% within Gender	95.8%	4.2%	100.0%
Female	Count	477	23	500
	Expected Count	478.0	22.0	500.0

	% within Gender	95.4%	4.6%	100.0%
Total	Count	956	44	1000
	Expected Count	956.0	44.0	1000.0
	% within Gender	95.6%	4.4%	100.0%

Chi-square = .095.

p-value (0.757799) is greater than chi-square value hence non-significant

p-value of 0.757799, indicating no significant association between gender and Q2 responses. Figure No. 2

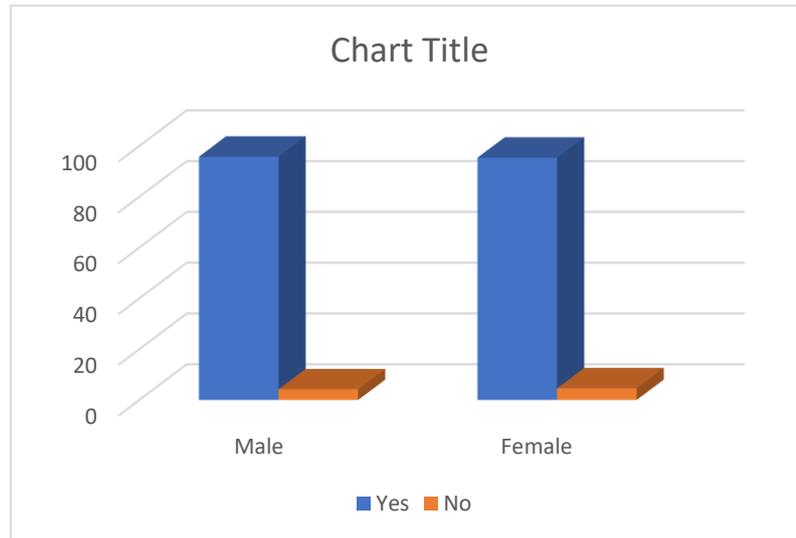


Table 3

Gender	Frequency count & Percentage	Responses (Q3)		Total
		Yes	No	
Male	Count	413	87	500
	Expected Count	418.5	81.5	500.0
	% within Gender	82.6%	17.4%	100.0%
Female	Count	424	76	500
	Expected Count	418.5	81.5	500.0
	% within Gender	84.8%	15.2%	100.0%
Total	Count	837	163	1000
	Expected Count	837.0	163.0	1000.0
	% within Gender	83.7%	16.3%	100.0%

Chi-square = .887

p-value (.346) is greater than chi-square value hence non-significant