Impact of Mid day Meal Programme in India: A review

LALITA VERMA
Faculty, Department of Food and Nutrition, Lady Irwin College, New Delhi, India

ABSTRACT:

Mid Day Meal in schools has had a long history in India. The Midday Meal Scheme in India is the largest school meal programme in the world, covering an estimated 139 million children. The Midday Meal Scheme has bold objectives: it aims to enhance enrolment, retention and attendance among primary school children while simultaneously improving their nutritional levels. The prevalence of underweight children in India is highest in the world. There was a need to relook at the nutritional scenario of children with regard to the prevalence of major nutritional deficiencies. The MDM scheme is the largest school lunch program in the world covering millions of children with the major objective of improving the nutritional status of children. In order to improve the nutritional status of children, the MDM is being strengthened from time to time. Therefore there is the need to see the acceptance and impact of ongoing MDM program. The Midday Meal Scheme in India is a programme covering primary school children to improve nutrition as well as increase educational enrolment, retention and attendance. This article review history of national and international mid day meal programme and highlighted nutritional deficiencies in the school children. Mid day meal programme has its own characteristic and impact on its implementation but it depends how it is implementing.

INTRODUCTION:

Many Indian children reach school on an empty stomach in the morning, as early-morning breakfast is not part of the household routine. In the absence of a mid-day meal, pupils often go hungry after a few hours and find it hard to concentrate. This problem is now largely resolved (31).

Studies suggest that interventions for protein-energy malnutrition are more cost effective at early ages (3). Feeding programs for school-age children do not feature as a cost-effective intervention in the World Bank study (4), although feeding integrated with micronutrient supplements and deforming is cost-effective for this age group (5).

The Mid Day Meal Program, otherwise known as school lunch program, is aimed at providing one meal out of the three meals for a child in the school, at least one third of the calories and half of the protein RDA per child per day. In low socio-economic communities, the meal should be able to fill the nutrient gap that exists in the diets of children (25).

Early malnutrition or micronutrient deficiencies can adversely affect physical, mental and social aspects of child health. They have been linked not only to lower enrolment and completion rates but also to poorer cognitive functioning in those children attending school (28).
World Bank, 2003 noted that “The child malnutrition of India is higher than most countries in Sub-Saharan Africa” (18). A report released as part of the 2009 Global hunger Index ranks India at 65 out of 84 countries. The 2008 report says that India has more people suffering hunger – a figure above 200 million – than any other country in the world, it says. The report also says "improving child nutrition is of utmost urgency in most Indian states". So, mid-day meal program (MDP) is a right solution in this respect (19).

HISTORY OF MID DAY MEAL PROGRAMME IN INDIA:

In 1925, a Mid Day Meal Programme was introduced for disadvantaged children in Madras Municipal Corporation. By the mid 1980s three States viz. Gujarat, Kerala and Tamil Nadu and the UT of Pondicherry had universalized a cooked Mid Day Meal Programme with their own resources for children studying at the primary stage. Mid Day Meal was also being provided to children in Tribal Areas in some States like Madhya Pradesh and Orissa. By 1990-91 the number of States implementing the mid day meal programme with their own resources on a universal or a large scale had increased to twelve, namely, Goa, Gujarat, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Mizoram, Nagaland, Sikkim, Tamil Nadu, Tripura and Uttar Pradesh. In another three States, namely Karnataka, Orissa and West Bengal, the programme was being implemented with State resources in combination with international assistance. Another two States, namely Andhra Pradesh and Rajasthan were implementing the programme entirely with international assistance (6).

Table 1: Beginning of MDMS across states:

<table>
<thead>
<tr>
<th>Sr. no</th>
<th>Period</th>
<th>MDMS Functioning states</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Before 1980</td>
<td>Tamil Nadu</td>
</tr>
<tr>
<td>2</td>
<td>1980-1990</td>
<td>Gujarat</td>
</tr>
<tr>
<td>3</td>
<td>1990-2000</td>
<td>Karnataka, Kerala, Madhya Pradesh, Orissa, Rajasthan, Tripura, West Bengal, Utter Pradesh</td>
</tr>
<tr>
<td>4</td>
<td>November 28, 2001 onwards</td>
<td>Supreme court order to implement MDMS in all states</td>
</tr>
</tbody>
</table>


MID DAY MEAL IMPLEMENTATION IN PRIMARY SCHOOLS IN INDIA:

MDMS was first implemented for the children aged between 6-11 years to maximize enrolment and reduce school dropout rates, which were important from the viewpoint of universalisation of elementary education as well as achievement of higher literacy rates in the country (16).
### Table:2 Mid Day Meal Implementation in India

<table>
<thead>
<tr>
<th>State</th>
<th>Implementation Date</th>
<th>Mid day Meal Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>01/01/03</td>
<td>Rice, sambar, egg/banana twice a week</td>
</tr>
<tr>
<td>Assam</td>
<td>January 2005</td>
<td>Rice, dal, vegetables</td>
</tr>
<tr>
<td>Bihar</td>
<td>September 2004 (Pilot) January 2005</td>
<td>Rice with sabji, dhal, pulao, karhi or khichri</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>April 2002</td>
<td>Rice with dal or vegetables</td>
</tr>
<tr>
<td>Gujarat</td>
<td>November 1984</td>
<td>Wheat, rice, pulses, oil, spices</td>
</tr>
<tr>
<td>Haryana</td>
<td>August 2004</td>
<td>Mitha rice, vegetable pulao, Dalia, paushtic khichri or bakli by rotation</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>September 2004</td>
<td>Grains, seasonal vegetables, fruit, eggs</td>
</tr>
<tr>
<td>Karnataka</td>
<td>July 2002 (Pilot) June 2003</td>
<td>Rice, pulses, oil, salt, vegetables</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>July 2004</td>
<td>Dal-roti/dal-sabji (in wheat predominant areas) or dal-rice/dal-rice-sabji (in rice predominant areas)</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>January 2003</td>
<td>Rice, dal, vegetables, spices, oil, banana/egg at least once a week</td>
</tr>
<tr>
<td>Orissa</td>
<td>June 2001 (Pilot) September 2004</td>
<td>Rice, dal, egg/soya twice a week</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>July 2002</td>
<td>Ghooghari (mixture of gur/jaggery and boiled wheat), dalia</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>July 1982</td>
<td>Rice, eggs, boiled potatoes, cooked black Bengal, vegetables with variation</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>September 2004</td>
<td>Food grains, pulses, oil, salt, spices</td>
</tr>
<tr>
<td>Uttaranchal</td>
<td>November 2002- July 2003</td>
<td>Rice, dal, kheer, fruits and eggs alternately</td>
</tr>
</tbody>
</table>

Source: State government documents: The National Programme of MDM in Schools, Annual Work Plan and Budget, 2009-10 (15). B (1+)

### HISTORY OF SCHOOL MEAL PROGRAMME AT INTERNATIONAL LEVEL:

The provision of meals for pupils in schools has been a feature of the English education system since 1906, the concept of breakfast provision via schools was until recently given little attention across the United Kingdom. Consequently, the provision of a meal in UK schools has almost exclusively been restricted to lunch. In contrast to the slow development of interest in school breakfast provision in the United Kingdom, other countries have been
providing morning meal programmes for a relatively long time and more research has been undertaken abroad evaluating the impact of school breakfast provision (12).

The School Lunch Programme is not a recent phenomenon. At the global level, Victor Hugo introduced the school lunch programme in France in 1885. Since then the school lunch programmes have been introduced in various parts of the world – US and Switzerland (1946), Australia (1950), and Singapore (1975). It has also received the attention of developing countries like Thailand (1970) and Korea (1973). The Global School Feeding Report of the United Nations World Food Programme endorses that school feeding programmes have often doubled enrolment within a year and produced improvements in academic performance (13).

There are countries where food is distributed during breakfast and pre-lunch period. The school feeding programmes are government assisted, sponsored by National, International and Non-Governmental Organizations and at times Student’s Participatory Schemes (14).

**REASON OF IMPLEMENTATION MID DAY MEAL IN INDIA:**

Extreme poverty and social discrimination are the major cause of literacy several programs have been launched to attract children to schools. The mid-day meals is a major programme launched all over the country, not only to attract the children into the embrace of primary schooling but also to provide nutritional support for generating, necessary interest both physical and psychological among the children to ensure their presence in the school (28, 29).

Children are the future of mankind. Education and Health are the two basic requirements of children. These primary needs are found to be more basic and urgent for school going children as we go down to the level of primary school. The nation is committed to achieving universalization of Elementary Education Covering Children in the age group of 6 to 14 years (30).

**THE IMPACT OF SCHOOL LUNCHES ON PRIMARY SCHOOL ENROLLMENT:**

Mid Day Meal Scheme (MDMS) was initiated on the basis of the philosophy that "when children have “to sit in class with empty stomachs, they cannot focus on learning”(1)

India’s midday meal scheme is the largest school nutrition program in the world. In 2006, it provided lunch to 120 million children in government primary schools every school day (11). The caste wise investigation shows that the scheme has a great impact on the enrolment of backward classes and Muslim Communities than other communities (2).

Most of the studies revealed that there exist a positive relationship between mid-day meal program and enrolment and attendance of students in schools including education and health outcomes of students (17). In many studies have shown that research on primary education in rural India suggests that mid-day meals enhance school participation, especially among girls (31).

Primary education is thought to be associated with especially high returns (9). Its importance is enshrined in the Millennium Development Goals (MDGs), which call for universal primary education by 2015. In fact, primary education is far from universal and this MDG remains
elusive. UNICEF, the agency responsible for tracking progress on this MDG, estimates a net primary school enrolment rate in developing countries of 84 per cent; this is also its estimated average for India. In view of this, governments across the developing world have instituted a wide range of policies aimed at encouraging school enrolment (10).

The national level impacts of midday meals in educational, nutritional and other dimensions remains to be understood in depth, the evidence available suggests that MDM have had positive effects at least on enrolments (26).

The study’s findings thus indicate that the Mid-Day Meals Scheme has had some impact on enrolment and attendance in Udaipur district, but that this effect has been uneven across age groups and communities. The school meals have likely boosted the enrolment and attendance of the youngest primary school children, but their ability to affect the attendance and retention of older students is questionable (27).

THE IMPACT OF MID DAY MEAL ON NUTRITION:

For young children below the age of 5, experiencing drought has a significant negative impact on both height-for-age and weight-for-age. Controlling for other factors, the positive effect of the midday meal on height–for-age is greater than the negative impact of drought. This positive effect might also have been enhanced by the 2004 Supreme Court order mandating the provision of midday meals during the school summer vacation in drought-affected areas (8).

ACCEPTANCE OF SCHOOL MEAL PROGRAMME AND ITS EFFECT:

In Germany study they emphasis on, pupils’ acceptance. Healthy school meals is particularly relevant because if acceptance is low, pupils tend to eat unhealthy snacks or fast food as this type of food often finds greater acceptance among peers and is readily available (20,21).

As participation in most schools is optional in Germany, it is of increasing importance to provide meals that are acceptable to pupils in order to encourage them to use the canteen regularly. Otherwise, there is a risk that pupils will consume unhealthy foodstuffs. Researchers have analyzed the impact of the consumption and availability of healthy and unhealthy food and concluded that the higher the availability of a type of food, the higher the consumption.

Service quality and customer satisfaction is also important. A perceived high quality of service that would lead to high customer satisfaction could very well result in regular participation. (22).

The importance of school-meal programmes and their influence on healthy food choices among children and adolescents. All-day schools, as government-supported institutions, represent an opportunity to influence nutrition patterns by offering a highly nutritious lunch. This might contribute to the development of long-lasting healthy food-related lifestyles and good behavior and dietary habits (24).
In Chhattisgarh the provision of mid-day meals seems to have been somewhat half-hearted, both financially and politically. The picture emerging from the field survey is one of deficient arrangements and scant monitoring. Casual implementation is likely to be one major reason why mid-day meals in Chhattisgarh have failed to catch the imagination of school teachers (31).

**REGULAR CONSUMPTION OF MDM**

In Varodara study they found that regular consumption of MDM was not observed. Nearly 9% of the students did not consume the MDM at all. Regular consumption of MDM did not have any influence on overall prevalence of anaemia but a stepwise increase in the prevalence of moderate anaemia was seen as the degree of compliance decreased (23).

In Tamil Nadu, mid-day meals seem to enjoy all-round support from the village community. Teachers, too, are enthusiastic. With sound arrangements in place, the mid-day meal does not interfere with their teaching duties, and most of the teachers we met had a deep appreciation of the positive aspects of school lunches. As one of them put it, mid-day meals are conducive to "improved education" (31).

**CONCLUSION:**

The Midday Meal Scheme is the well known name for school meal programme in India which started in the 1960s. It includes provision of lunch free of cost to school-children on all working days. The key objectives of the programme are: protecting children from classroom hunger, increasing school enrolment and attendance, improved socialization among children. The impact of mid-day meal on students’ academic achievement but no systematic effort has yet been made to look into the role of factors on which impact of midday meal is associated in academic achievement with a comprehensive manner. Through a targeted intervention, the MDMS has a long term vision to be able to address the hidden issue of malnutrition in India.

**REFERENCES:**

i. Save the Children India (2009) „Freedom from Hunger for Children under Six”, New Delhi: Save the Children India


