# A STUDY TO ASSESS THE NUTRITIONAL STATUS OF SCHOOL CHILDREN AND ITS RELATION TO MID DAY MEAL PROGRAMME IN A SELECTED RURAL SCHOOL, BANGALORE 

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#### Abstract

The health of children and youth is of fundamental importance. Over $1 / 5$ th of our population comprises of children aged 5-14 years, i.e. the group covering primary and secondary education. As today's children are the citizens of tomorrow's world, their survival, protection and development are the prerequisite for the future development of humanity. Without ensuring optimal child growth and development efforts to accelerate economic development significantly will be unsuccessful. Many children reach school with an empty stomach in the morning, since a good early morning breakfast is not part of household routine. Poverty is the main issue, and it has impact on primary education as well. Because of poverty the participation in primary education is low. The challenge for us in the country has been to ensure fewer and fewer children go to bed hungry. The Supreme Court of India in one of its landmark decisions linked a feeding programme to the government's quality education programme. This was to encourage poor families to enroll their children in government schools and there by enable those to guarantee at least one square meal a day called as MDMS, (midday meal scheme) all State Governments in the country have to ensure that every child coming to a government school gets one wholesome meal for lunch on school days. Objectives: 1. To assesses the nutritional status of school children. 2. To identify the relation of nutritional status with mid-day meal programme Design: Descriptive survey design was used to study to assess the nutritional status of school children and its relation to mid-day meal programme in a selected rural school, Bangalore. 66 primary school children, in selected rural schools Bangalore were recruited by non-probability purposive sampling technique. Necessary administrative permission was obtained from concerned authority. Structured interview schedule was used to elicit the baseline data and structured questionnaires were used to elicit the knowledge regarding mid-day meal among selected rural school children, Bangalore. Setting: The study was conducted in selected rural schools, Bangalore, 66 samples were recruited for the present study. Result: The data was analyzed by using descriptive and inferential statistics. Nutritional status of school children was assessed and tabulated, out of 66 school children according to weight for age status out of 66 school children, 14 only (21.21 percentages) is having normal nutritional status. Out of that 24 (36.36\%) are having first degree malnutrition and 26 ( 39.4 percentages) are having second degree malnutrition. Only $2(3.03 \%)$ are having third degree malnutrition. It is evident that males are more prone to malnutrition. Out of 66 school children, $40.9 \%$ are having normal nutritional


status. Out of 66, $57.5 \%$ are mildly impaired and $1.6 \%$ is severely impaired. Only $3.03 \%$ of the school children are having third degree malnutrition. It is evident that males are having more impairment ( $3.12 \%$ ), when compared to females ( $1.6 \%$ ). Conclusion: - The overall experience of conducting this study was satisfying and enriching the knowledge. The study was a new learning experience for the investigator. The study shows that there is a great need to develop and implement Nutritional Status of School Children and Its Relation to Mid-Day Meal Programme.

## INTRODUCTION

Poverty is the main issue, and it has impact on primary education as well. Because of poverty the participation in primary education is low. The challenge for us in the country has been to ensure fewer and fewer children go to bed hungry. The Supreme Court of India in one of its landmark decisions linked a feeding programme to the government's quality education programme. This was to encourage poor families to enroll their children in government schools and thereby enable them to guarantee at least one square meal a day. Called as MDMS, all State Governments in the country have to ensure that every child coming to a government school gets one wholesome meal for lunch on school days. [1]

Logistically, the problem was tackled through government schools in India that educate 60 per cent of the country's children, most of them being from below Poverty-line background (the family earns less than Rs 700 a month). With parents (often single) going off for wage labour early in the morning, the children usually come to school hungry because kitchen fires at home are only lit in the evenings after the father or the mother brings home the daily wage.[2]

To address, the Government of India, in its wisdom, launched the MDMS. It was designed to provide every child enrolled in a government school, nutritiously cooked afternoon meal every day. The meal not only fights hunger, it brings a hungry child's attention back to the lessons, and it also encourages out-of-school children to get enrolled so that they can at least be assured of one wholesome meal every day. [3]

The MDMS is a well-intentioned programme. Government of India has attempted to address the fundamental problems of health, education, and overall development of children in the country by implementing programme all over the country. It provides children with at least one nutritionally adequate meal a day. This program is known to lead to higher attention spans, better concentration, and improved class performance.

[^0]School meal program also provides parents with a strong incentive to send children to school, thereby encouraging enrollment and reducing absenteeism and dropout rates. It supports health, nutrition, and education goals and consequently will have a multi-pronged impact on a nation's overall social and economic development [4]

There is also evidence to suggest that apart from enhancing school attendance and child nutrition, mid-day meals have an important social value and foster equality. As children learn to sit together and share a common meal, one can expect some erosion of caste prejudices and class inequality. Moreover, cultural traditions and social structures often mean that girls are much more affected by hunger than boys. Thus, the mid-day meal programme can also reduce the gender gap in education, since it enhances female school attendance [5]

Poor enrollment and high rate school dropouts are attributed to poor socio-economic conditions, child labor, poor motivation and poor nutritional status of children. Mid-day meals scheme was initiated on the philosophy that "when children have to sit in class with empty stomach, they cannot focus on learning." This scheme is important for improving enrolment, attendance and retention of primary schools and also it addresses the nutritional needs [7] Mid-day meals seeks to provide for each school child roughly a third of the daily nutrient requirement in the form of hot fresh cooked meal. It is important to know that it is not merely the long term effects of school meal on the nutritional status but its short term effects are better attention, memory and learning ability. In a landmark order that dated Nov 28, 2001 the supreme court of India directed all state Governments to introduce cooked mid-day meals in primary schools within six months. The coverage has steadily expanded, and cooked lunches are rapidly becoming part of the school routine across the country. [6]

Studies suggest that well devised school meals have much to contribute to the achievement of elementary education, child nutrition and social equity [9] However then achievements depend a great deal on the quality aspects of food provided during mid-day meals. The mid-

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day meal scheme has succeeded in bringing children to school, they may forget to bring their books but not forget to bring their plates ${ }^{10}$. Mid-day meal scheme has been one of the earliest supplementary nutrition programs in the country. It was initiated in 1963 as part of applied nutrition program in the state of Karnataka for school children, aged 6-11 years, with the assistance of Cooperative for American relief everywhere (CARE). Under the programme each beneficiary is expected to receive 330 calories and [7-10] grams proteins a day [7].

So, it is clear that the mid-day meals play an important role in health status of primary school going child. Hence conducting the prospective researches on overall significance and implementation of mid-day meals.

## MATERIALS AND METHODS:-

The research design adopted for this study is Evaluative Research Approach. The research design used for this study was Descriptive survey design research design. The study was conducted in selected rural school, Bangalore. The sample size of this study comprised of 66 school children from selected rural school, Bangalore, who met the inclusive criteria were selected through the purposive sampling technique. Structured interview schedule was used to elicit the baseline data.

Necessary administrative permission was obtained from concerned authority. A letter requesting
permission was sent to the concerned authority of the selected rural schools, Bangalore, prior to the data collection and permission was granted for the same. The data was collected from 66 rural school children by using purposive sampling technique. The purpose of the study was explained to the group and confidentiality of their responses was assured. After obtaining the permission and consent, the pre-test was administered using the questionnaire. After 7 days, the post-test was administered by using same questionnaire for evaluating the Nutritional Status of School Children and Its Relation to Mid-Day Meal Programme Bangalore rural area.

Table 1(a) shows that, according to weight for age status out of 66 school children, 14 only ( $21.21 \%$ ) is having normal nutritional status. Out of that $24(36.36 \%)$ are having first degree malnutrition and 26 (39.4 percentages) are having second degree malnutrition. Only $2(3.03 \%)$ are having third degree malnutrition. It is evident that males are more prone to malnutrition.

Table 1(b) shows that out of 66 school children, 40.9 $\%$ are having normal nutritional status.[11] Out of 66, $57.5 \%$ are mildly impaired and $1.6 \%$ is severely impaired. Only $3.03 \%$ of the school children are having third degree malnutrition. It is evident that males are having more impairment $(3.12 \%)$, when compared to females ( $1.6 \%$ ).

Table 1(a):- Frequency and percentage distribution of degree of malnutrition of school children according to weight for age status
$\mathrm{n}=66$

| Sl. No | Degree of malnutrition | Males |  | Females |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percentage | Frequency | percentage | Frequency | Percentage |
| 1 | Between 90\&110\% (Normal) | 6 | 18.75 | 8 | 23.5 | 14 | 21.21 |
| 2 | $\begin{gathered} \text { Between } 75 \\ \& 89 \% \\ \left(1^{\text {st }}\right. \text { degree } \\ \text { malnutrition }) \end{gathered}$ | 12 | 37.5 | 12 | 35.3 | 24 | 36.36 |
| 3 | Between 60 \& 74\% ( $2^{\text {nd }}$ degree malnutrition) | 14 | 43.75 | 12 | 35.3 | 26 | 39.4 |
| 4 | Below 60\% | 0 | 0 | 2 | 5.9 | 2 | 3.03 |
|  | OTAL | 32 | 100 | 34 | 100 | 66 | 100 |

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Table 1(b):- Frequency and percentage distribution of degree of impairment of school children according to height for

| age |  |  |  | $\mathrm{n}=66$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sl.No | Degree of Impairment | Males |  | Females |  | Total |  |
|  |  | Frequency | Percentage | Frequency | Percentage | Frequency | Percentage |
| 1 | Normal (>95) | 10 | 31.25 | 17 | 50 | 27 | 40.9 |
| 2 | Mild impaired (87.5-95) | 21 | 65.63 | 17 | 50 | 38 | 57.5 |
| 3 |  | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | Moderately Impaired(8087.5) <br> Severely impaired (<80) | 1 | 3.12 | 0 | 0 | 1 | 1.6 |
|  | Total | 32 | 100 | 34 | 100 | 66 | 100 |

## DISCUSSION:-

The present study was conducted to assess the nutritional status of school children and its relation to mid day meal programme in a selected rural school, Bangalore.[12] In order to achieve the objective of the study, descriptive survey design was adapted. 66 samples, those who fulfilling the inclusion and exclusion criteria, where selected by using non probability purposive sampling technique. This study was conducted on scheduled date. The data was collected among 66 respondents.

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## CONFLICT OF INTEREST: Nil

SOURCE OF FUNDING: Self

## ETHICAL CLEARANCE:-

Permission was sought from the concerned authorities of the college of nursing, before conducting the study.

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