

To Determine The Prevalence Of Malnutrition Among Children Younger Than Five Who Get Their Meals At An Anganwadi Centre

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Abstract

Introduction: Malnutrition was a global epidemic, especially among under-5-year-olds. Children need parental care. **Objectives:** The study compared the growth rate of under-5 children to Indian standards. **Methodology:** Study on under-5 children to analyse Anganwadi children's nutritional status and growth rates according Indian norm. 120 Anganwadi mothers were chosen. Children were selected using a multiphase stratified selection technique, structured questionnaire, and anthropometric measurement. Before data gathering, experts validate and get ethical approval. Inclusion criteria-based data collecting among 1-5-year-olds in Kale. Questionnaire based on scio-demographic characteristics including age, sex, job status, present children in the household, anthropometric measurement, and systemic exam. Research was cross-sectional. Scio demographic factors are used to choose 120 Anaganwadi youngsters. maximum children's 50(41.66%) Five people in family, maximum children from nuclear family 64(53.33%), maximum children in family 67(58.33%). Maximum kids are 4yrs 46(38.33%). As per birth order, 61 children (50.83%) have equal gender. 60(50%). mother's age below 30 70(58.33%) 60(50%) mothers have primary education. 43(35.83%) mothers farm. 3,000-4,000 family income 53.5% of mothers are vegetarian, or 43.8%. 70% of Indian children are severe, according to the growth chart. As per height and weight correlation $r=0.62$ at $p<0.01$ positive reflected, $r=0.51$ at $p<0.01$ positive reflected, mid arm circumference increases are normal. Positive reflected means, $r=0.48$ at $p<0.01$ Increasing weight would normalise mid-arm circumferences. **Conclusion:** Mothers' education helped them manage and prevent malnutrition and identify growth variables.

Keywords: malnutrition, Body mass index, Nutritional status

Introduction -

The prevalence of underweight is 15%, stunted is 22.9%, wasting is 7.7%, severe wasting is 2.5%, and overweight is 6% among under 5 year olds, which demonstrates that malnutrition is a major cause for concern on a global scale. The joint child malnutrition estimates 2017 were conducted by UNICEF, WHO, and the World Bank. According to the World Bank (2014), over sixty million children in India are underweight, and child malnutrition is responsible for twenty-two percent of the burden of disease in the country. The Anganwadi centres are the focal point of the nation's overall plan to improve nutrition. As a result, the findings of this study may constitute a call to action for the development of new programmes and tactics to combat malnutrition. [1]

The majority of children in the state of Maharashtra are undernourished, and this problem may be found in both rural and urban areas. The child's nutrition is influenced by a wide variety of factors, including the mother's level of education, the birth order of the children, the gender of the children, the breastfeeding practises of the family, and the economic position of the family. [2] In India, malnutrition was a major health problem in India; to prevent this, some strategic planning was important. To educate community members about preventive measures, with proper planning and implementation of planning strategies to prevent malnutrition, we need to educate community people about preventive measures. [3]

According to UNICEF, India's national nutrition policy was developed to prevent malnutrition in children. Since so many factors are responsible for malnutrition, a community awareness programme is necessary to promote early initiation breast feeding, explanation of timely provision of breast feeding, provision of clean and hygienic food to prevent diarrheal and upper respiratory food, and provision of clean imitation breast feeding.[4,5]

Communities are facing so many burdens on malnutrition of children's, and to prevent them, so many factors are responsible, such as the education of the mother, the economic status of the family, the birth order of the child, proper antenatal care, and immunisation of the child [6]

.Method & Materials:

Research Approach: A Descriptive Approach Was Used To Carry Out The Research Study • Research Design: A Non-Experimental One Group Post-Test Only Research Design Was Utilized For The Research Study

- Research Design: non-experimental one group post-test only research design was used.
- The location of the investigation: the Anganwadi of the village of Kale served as the site for the current investigation.
- Participants in the sample were children who attended anganwadi at Kale, which was the location of the research.
- Number of children in the sample: the research used data from a total of 120 children who were enrolled in anganwadi programmes in Kale. The multiphase stratified sampling technique was selected as the appropriate sample approach to take.
- Method and instrument for collecting data, including: o Section 1 demographic data of research participants; o Section 2 anthropometric assessment of children
- Ethical Clearance: ethical clearance was received by the KIMSUDU, Karad. Participant agreement, both verbal and written, was obtained from each person involved in the study.

Results -

Table No-1 Scio-demographic Performa of the samples

n=120

Members in family	Frequency	%
3	5	4.17
4	29	24.17
5	50	41.66
>5	36	30
Total	120	100
Type of family	Frequency	%
Joint	56	46.67
Nuclear	64	53.33
Total	120	100
Children's in family	Frequency	%
1	21	17.5
2	67	58.83
>=3	32	26.67
Total	1200	100
Age of children (in years)	Frequency	%
<2	11	9.17
3	44	36.67
4	46	38.33
5	19	15.83
Total	120	100
Birth of order of child	Frequency	%
First child	61	50.83
Second child	45	37.5
Third child	14	11.67
Total	120	100
Sex of the child	Frequency	%
Male	60	50
Female	60	50
Total	120	100
Age of the mother	Frequency	%
<30	70	58.33
>30	50	41.67
Total	120	100
Education of mother	Frequency	%
No formal	13	10.83
Primary school	60	50
High school	19	15.84
Graduation	28	23.33
Total	120	100
Occupation of the mother	Frequency	%
Farmer	43	35.83
Business	34	28.33
Job	29	24.17

Daily wages	14	11.67
Total	120	100
Monthly income of family	Frequency	%
2000	30	25
2000-3000	33	27.5
3000-4000	43	35.83
>4000	14	11.67
Total	120	100
Diet	Frequency	%
Vegetarian	63	52.5
Non- Vegetarian	57	47.5
Total	120	100

The findings of the above table indicate that the greatest number of family members is five (41.66%), the majority of families are nuclear families (53.33%), the majority of families have children (58.83%), the greatest number of children are four years old or younger (46.38.33), the greatest number of children are born first (61.50.83%), the greatest number of children are of equal gender (60.50%), the greatest number of children are under the age of thirty (70.58.33%), in occupation, the majority of moms are farmers, accounting for 35.83% of the total, and the monthly income of the family ranges from 3,000 to 4,000. There were determined to be 43 moms (35.83%). 63 out of 100 mothers are vegetarian, which is 52.3% of the population.

Table No-2 Nutritional status score among anganwadi children as per standard growth charts in India.

Sr. No.	Category	Score	%
As per	Mild	20	16.67
Standard	Moderate	16	13.333
Growth chart	Severe	84	70

According to the findings shown above, the majority of anganwadi children fall into the mild category, which accounts for 16.67% of the total. And 16 children, or 13.33 percent, fall into the intermediate range.

Table No-3-mean and standard deviation of nutrition status among Aganwadi Children

Nutritional status variables	Mean	Standard deviations
Height	98.8	10.57
Weight	14.25	3.22
Mid- circumference	15.33	1.72
BMI	14.93	2.93

The mean and standard deviation of the findings are displayed in the table above, and they are related to nutritional status.

Positive reflected values are exhibited when both height and weight continue to increase, and the correlation between height and weight is $r=0.62$ at $p0.01$.

Positive reflected values show as height grows and the mid arm circumferences would be normal if the correlation coefficient value were equal to 0.51 at a significance level of less than 0.01.

$R = 0.48$ indicates a correlation between height and the circumference at the middle of the arm.

The value of the correlation coefficient is $r = 0.48$ at a significance level of less than 0.01, which indicates that positive reflected values indicate a growth in weight, and that the mid arm circumferences would be normal.

Discussion:

According to the conclusions of the study. Based on the Socio demographic characteristics, a sample of 120 children from Anaganwadi was chosen. There are a total of five people in the family, and the majority of the children come from nuclear families. The total number of children is 50 (41.66%). 64 out of every 100 families have exactly 53.33 children, whereas 67 out of every 100 families have exactly 58.33 kids. The majority of the children are in the age bracket of 4 years. 46(38.33%) The largest number of children is 61 (50.83%), and the gender distribution is even across the board. 60(50%). According to the age of the mother, they are younger than 30 years. 70(58.33%) In terms of schooling Sixty percent of moms, or fifty percent, have completed primary school. Farmers make up 43 (35.83%) of all mothers. Earnings of a family ranging between \$3,000 and \$4,000 According to diet, 43 (35.83%) mothers and 63 (52.5% of all mothers) are vegetarian.

According to the Indian growth chart, seventy percent of children fall into the severe category. According to the connection between height and weight, which was found to be $r=0.62$ at $p<0.01$ positive reflected, and $r=0.51$ at $p<0.01$ positive reflected, the results show that height increases in the middle of the arm would be considered typical. Positive reflected signifies weight increases, and if this correlation holds true ($r = 0.48$, $p 0.01$), then mid-arm circumferences should be considered typical.

Yadav A. and A. Dixit have completed a descriptive research (2017).

An investigation into the prevalence of malnutrition in children under the age of five according to the WHO growth chart.

100 youngsters taken from Jaipur Anganwadi .

A technique called enumeration sampling was performed, and the findings revealed that 42% of children are moderately malnourished and 9% are severely malnourished. The lack of information on the part of parents regarding the nutritional state of their children contributed to the overall prevalence rate of 51% [7].

Ashish W. K. and Rajendra G. Yadav have completed a descriptive study (2020) Research conducted with input from one hundred Anganwadi employees A total of 354 children between the ages of 0 and 6 years old were chosen for the study using a method known as simple random selection. The findings indicate that 35% of children are affected by stunting. Children who are underweight make up 15.8% of the population, whereas children who are wasted make up 6.4% of the population. The risk of malnutrition was found to be directly proportional to the mother's level of education, as well as her breastfeeding habits [8].

Sawan K. Y., Mubashir A., and Kiran C., along with other researchers, carried out a descriptive study in Belgavi (2015) There were 385 youngsters included in the study, with 196 (51%) belonging to the male gender and 189 (49%) to the female gender. The frequency of moderate and severe stunting was reported among 51% of children, whereas wasting accounted for 26% of children. 32% of children are considered to be underweight, while 22.3% of youngsters are suffering from severe wasting. [9]

Study in the form of a cross-section that was carried out by Carolin A., Balakrishnan S., and Senthil R. (2022).

Research was done on the prevalence of disease as well as the nutritional status. According to the findings, thirty-two percent (32.8%) of children suffer from anaemia, and twenty-four point eight percent (20.48%) of children have an upper respiratory tract infection. Among children, the overall prevalences of wasting are as follows: 79 (20.7%) of children are underweight, 243 (63.8%) of children are stunted, and 172 (45.2%) of children are undersized [10].

A community-based cross-sectional study was carried out in Mysuru by Preetha Susan G, M R Narayana M, and others (2021).

54.7% of the children in the age range of 3-6 years old, out of 365 total children, are male, while 45.3% of children are female. 60.8% of them come from families composed entirely of nuclear members, and 50% of them come from upper- or middle-class backgrounds. 25.4% of people are underweight, 23.5% are stunted, and 10.2% are withering away. These statistics represent the prevalence of malnutrition. People were living in poor socioeconomic conditions, which prevented them from being able to afford a food rich in nutrients [11].

Conclusion:

Education of mothers was essential for managing and preventing malnutrition, and it also made it easier for mothers to recognise elements that affect growth.

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