

**ASSESSING THE DIETARY PRACTICES AND REASONS BEHIND
MALNOURISHMENT AMONG CHILDREN AGED 6 MONTHS-3 YEARS OF
NAND GHAR BENEFICIARIES OF URBAN JAIPUR, RAJASTHAN**

Dissertation Submitted to



The IIHMR University, Jaipur

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in

Development Management

By

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Under the Supervision and Guidance of

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2024



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Certificate of Completion

This is to certify that **Ms. Pragya Gupta** in partial fulfillment of the requirements for the award of the degree of MBA Development Management from the IIHMR University, Jaipur, has successfully completed her internship at **MAMTA Health Institute for Mother and Child, Rajasthan** during March 15 - June 15, 2024.

During this period, she was respectful, inquisitive and a good team player. We wish her every success in life.

Place: Jaipur

Date: 15.06.2024

Dr Shachi Adesh

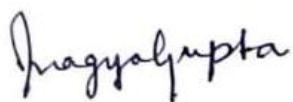
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DECLARATION BY STUDENT

I hereby declare that this dissertation titled “Assessing the dietary practices and reasons behind malnourishment among children aged 6 months - 3 years of Nand Ghar beneficiaries of urban Jaipur, Rajasthan” is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.



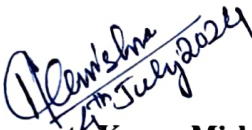
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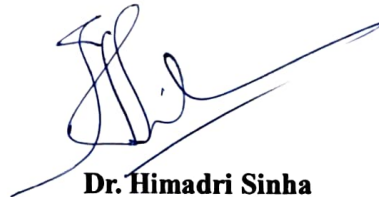
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CERTIFICATE

This is to certify that dissertation titled “Assessing the dietary practices and reasons behind malnourishment among children aged 6 months - 3 years of Nand Ghar beneficiaries of urban Jaipur”, is a record of original research work undertaken by **Pragya Gupta** in partial fulfillment of the requirements for the award of the degree of MBA Development Management from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical.

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Date: 4th July 2024

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Pragya Gupta

MBA Development Management

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LIST OF ABBREVIATIONS

NFHS	National Family Health Survey
POSHAN	Prime Minister's Overarching Scheme for Holistic Nutrition
GoI	Government of India
GoR	Government of Rajasthan
ICDS	Integrated Child Development Services
MoWCD	Ministry of Women & Child Development
NHM	National Health Mission
THR	Take Home Ration
CSR	Corporate Social Responsibility
HCM	Hot Cooked Meal
AWCs	Anganwadi centers

ABSTRACT

The prevalence of child undernutrition in India is among the highest in the world, nearly double that of Sub-Saharan Africa, with dire consequences for morbidity, mortality, productivity and economic growth¹. Malnutrition in India has been called as the Silent Emergency². Globally in 2022, 149 million children under 5 were estimated to be stunted (too short for age), 45 million were estimated to be wasted (too thin for height), and nearly half of deaths among children under 5 years of age are linked to undernutrition³. According to the literature, 27.6 % of the children below 5 years of age are underweight, 16.8 % of the children below 5 years of age are wasted, 31.8 % of the children under the age of 5 years are stunted in the state of Rajasthan⁴. The present study was carried out by the author to address the issue of malnutrition among the 0-6 years children in the Jaipur city by providing evidence based information which could be of use to the government, policy makers as well as to the development partners working towards the enhanced nutritional status of the children. The broad objectives of the study were to assess the dietary practices and reasons behind malnourishment among children age (6 months -3 years) of Nand Ghar beneficiaries undertaken by Mamta HIMC, Jaipur. An analytical and cross-sectional study was undertaken by adopting a mixed methodology. Cluster Sampling was executed to address the objectives where in stage first, Nand Ghar falling under Jaipur was divided into four zones and from them southwest and southeast zones were selected, based on the total number of Nand Ghar allocated to the Mamta organization. In the second stage, Nandghar where Mamta Institute operates were listed from the rest of Nandghar. Followed to this, in the third stage, from each selected cluster, 10 Nand Ghar were randomly selected, and from each Nand Ghar, 10 beneficiaries were selected randomly and were interviewed. Besides, in each cluster one Focus Group discussion (FGD) was organized with a homogeneous group. In all together, 200 samples were collected out of which 3 sample were not considered for the analysis due to outlier data. Hence, altogether, the total sample size for the study was 197. Socio-demographic indicators of the respondent including age, religion, caste, occupation, income was elicited through pre-tested semi-structured interview schedule. Further, a total of 197 children aged 3 months to 6 years were also screened using anthropometric measurements such as height, weight and Mid upper arm circumference (MUAC). Consent was taken from the parents of the children to measure the anthropometric indicators on the body.

The result shows, overall predominance of underweight, normal and overweight was 87.82%, 9.64% and 2.54% respectively in the Jaipur district of Rajasthan. Malnutrition was found to be associated with socio-demographic factors such as age, gender, religion, category, educational status, occupation, type of family, monthly family income, number of children, BMI of child, MUAC, Immunization status, dietary practices, hand washing practices. Utilization of THR services was found to be poor, which further reflects on the nutritional status of children.

EXECUTIVE SUMMARY

Background and Objectives: Children are the foundation of any nation. Malnutrition in children is very important public health problem of developing countries like India. Malnutrition in children is an important risk factor for child mortality. Nutritional status is the sensitive indicator of a child's health, and they constitute the most vulnerable segment of any community. Emotional, mental, and physical suffering are greatly caused by undernutrition. Poor feeding practices can cause irreversible and lifelong devastation, but there is a critical window of opportunity during the first 1000 days of life to stop it. Nand Ghar is modernized Anganwadi established by Vedanta in partnership with the government, providing early childhood education, nutrition, and healthcare, and empower women through skill development initiatives. With the transition from Anganwadi's to NandGhar, initiated by Vedanta, there is an opportunity to assess the impact of this transition on nutritional outcomes. This study was undertaken to assess the dietary practices and reasons behind malnourishment among children aged 6 months – 3 years of NandGhar beneficiaries of urban Jaipur, Rajasthan.

Materials and methods: This was an analytical and cross-sectional study in nature which was executed with mixed methodology. It was conducted in semi-urban areas of Jaipur, Rajasthan with a total sample of 197 children aged 6 months to 3 years. cluster sampling was selected where in the stage first, Jaipur district was divided into four zones and among them, two zones i.e., southwest and southeast zones were selected. In the second stage, Nand Ghar where Mamta Institute operates were separated from the rest of Nandghar. Followed to this, in the third stage, from each selected cluster, 10 Nand Ghar were selected, and 10 respondents from each selected zone were interviewed. Besides, in each cluster one FGD was

organized with a homogeneous group and were screened using anthropometric measurements such as height, weight and mid upper arm circumference (MUAC). A semi-Structured interview schedule was used to assess the socio-demographic profiles, dietary practices, and utilization patterns of Take-Home-Ration (THR) of children aged 6 month - 3 years from the Nandghar beneficiaries.

Results: The present study assessed the nutritional status of children aged 6 months to 3 years in Jaipur district, Rajasthan, using WHO growth standards. The findings revealed an alarming predominance of underweight children at 87.82%, with only 9.64% classified as normal and 2.54% as overweight. This prevalence of underweight children is significantly higher compared to the NFHS-5 data for India (36%), Rajasthan (36.7%), and Jaipur city (25.2%). Malnutrition was most severe among children aged 0.5 -1.5 years (41.62%), with a gender disparity showing more underweight girls and more overweight boys. Hindu children were more malnourished compared to those from other religious communities, though the association between religion and nutritional status was not significant. Caste was significantly associated with malnutrition, with the highest prevalence among children from other backward classes, followed by scheduled castes. The number of children of a mother in a household was also a significant factor for malnutrition, however contrast to this, the current study shows that HHs with single-child showing higher rates of underweight children. In this case more research is require to be done to understand the reason of malnutrition.

Parental education played a crucial role, as children of higher-educated parents, especially graduates, were more likely to have a normal BMI. Conversely, underweight children were more common among those with parents having lower educational levels. Household income status directly impacted children's nutritional status, with undernutrition more prevalent in lower-income families, while higher income families had children with more normal BMIs. The occupation status of parents further influenced malnutrition, with children from households where the primary occupation was homemaking, followed by self-employment and unskilled work, being more affected. Poor hand hygiene practices before cooking and feeding were strongly linked to higher malnutrition rates.

A notable relationship was observed between the consumption of Take-Home Ration (THR) and child malnutrition, with many undernourished children not consuming THR or it being

misused, such as being fed to livestock or mixed into family meals. This indicated inadequate and ineffective counselling by Nand Ghar workers or ASHA Sahayogini. FGDs highlighted preferences for traditional foods like dal, daliya, and rice in THR, and resistance to newer premix products. A prevalent myth regarding the unsuitability of ragi for young children was also noted, discouraging its inclusion in their diets despite its nutritional benefits. There is an urgent need for targeted nutritional interventions, proper utilization of THR, and effective counselling to combat child malnutrition in this region.

Conclusion: The present study showed that the nutritional status of children of Nand Ghar beneficiaries aged 6 months to 3 years residing in urban area of Jaipur city was not found satisfactory and the prevalence of underweight was higher than National, Rajasthan as Jaipur city data (NFHS-5). The determinant of malnutrition includes age, gender, religion, category, educational status, occupation, type of family, monthly family income, number of children, BMI of child, MUAC, Immunization status, dietary practices, hand washing practices. Utilization of THR services was found to be poor, which further reflects on the nutritional status of children. There is a need to improve the delivery of Nand Ghar services, strengthening the nutrition education session and counselling the Nand Ghar beneficiaries for proper utilization of THR to prevent underweight and overweight.

INTRODUCTION

Malnutrition in India has been called The Silent Emergency¹. Malnutrition, in all its forms, includes undernutrition (wasting, stunting, underweight), inadequate vitamins or minerals, overweight, obesity, and resulting diet-related noncommunicable diseases². Globally in 2022, 149 million children under 5 were estimated to be stunted (too short for age), 45 million were estimated to be wasted (too thin for height), and nearly half of deaths among children under 5 years of age are linked to undernutrition³. According to the literature, 27.6 % of the children below 5 years of age are underweight, 16.8 % of the children below 5 years of age are wasted, 31.8 % of the children under the age of 5 years are stunted in the state of Rajasthan⁴. Nearly half of deaths among children under 5 years of age are linked to undernutrition³. Malnutrition poses a danger to human resources, and it needs to be reduced and ultimately eradicated. Primary focus should be on improving nutrition supply. Improved nutrition is essential for achieving the ambitions of the 2030 Agenda for Sustainable Development and ensuring that no-one is left behind⁵. Malnutrition, in its various forms, represents a barrier to equitable and sustainable social and economic development. Disparities in nutritional status is the outcome of inequality. In addition to all these above factors adequate nutrition plays a crucial role in the proper development of the immune system. The data NFHS-5 (2020-21) Rajasthan factsheet, 8.3 % total children aged 6-23 months receiving an adequate diet compared to NFHS-4 (2015-16) it was 3.4 % and this indicates a noticeable increase⁴. Data on malnutrition is available but malnutrition rates vary from state to state, district to district, region to region and from rural to urban areas. Early years of life are crucial and vulnerable as growth is rapid nutritional needs are high. Adequate nutrition primarily through breast feeding and complementary feeding is important during this phase of life. Improper feeding practices whether in terms of timing, quality or quantity can lead to inadequate nutrition and finally malnutrition which can affect child malnutrition. Additionally living in unhygienic conditions can increase the risk of infection, which contributes to malnutrition. The objective of the study was to assess the dietary practices and reasons behind Malnourishment among children age (6 months -3 years) of Nand Ghar beneficiaries of urban Jaipur, Rajasthan.

LITERATURE REVIEW & PROBLEM STATEMENT

Literature shows that half of the world's wasted children - 25.5 million out of 50.5 million children, live in India⁶. Out of these, malnutrition is the underlying cause of 68% of India's child deaths, despite India's economic growth & progress in recent years, according to a study⁷. **In context to Rajasthan**, malnutrition indicators among children under 5 years Children under 5 years who are stunted (height-for age): 31.8 % Children under 5 years who are wasted (weight-for height): 16.8 % Children under 5 years who are underweight (weight-for-age): 27.6 %. And 8.3 % of children aged 6-23 months receive an adequate diet⁴. Thus, it is crucial that nutrition in the formative ages of life be kept as a top public health priority. Jaipur is the capital city of Rajasthan and home to many children. The malnutrition condition of the city is also not good as reported in literature. It shows that Children under 5 years who are stunted (height-for age): 25%, Children under 5 years who are wasted (weight-for height): 14.6 %, Children under 5 years who are underweight (weight-for-age): 20.8 %, 5.8% children aged 6-23 months receiving an adequate diet⁸. According to Data Note of State Nutritional Profile: Rajasthan, POSHAN 2022, **Jaipur has the highest number of stunted, wasted, and underweight children that is 183716, 107143 and 152485 respectively**⁹. Thus, Jaipur District has the highest rate of malnutrition in comparison to other districts of Rajasthan and it is crucial that nutrition in the formative ages of life be kept as a top public health priority.

Keeping this continuous problem in mind, Government of India (GOI) and Government of Rajasthan (GoR) has in place different nutrition and health programs through Integrated Child Development Scheme (ICDS) implemented by the Ministry of Women and Child Development (MOWCD), along with the National Health Mission (NHM), which includes nutrition-based interventions. Besides, subsequent schemes were also implemented to nurture women's and child's health, such as the POSHAN Abhiyaan. Despite all these interventions the issue of malnourishment is not being eliminated completely. A study shows that during the previous ten years, there has been little coverage of these interventions in Rajasthan. Less than 55% of mothers and children receive essential health and nutrition inputs like the THR or RUTF, which results in high rates of malnutrition¹⁰. Not only this

literature also shows that There are also local variations in dietary habits that influence the intake of this supplementation, which has an impact on the nutritional indicators of that region. The consequences of poor nutrition manifest in terms of growth failure of the child, reduced learning capacity, and increased rate of morbidity and mortality.

RATIONALE

There are 62,020 Anganwadi centers in Rajasthan, which provide varying levels of healthcare & services such as supplementary nutrition, immunization, health education, health check-ups, and referrals to higher centers. These centers also provide Take-Home-Rations or “PoshAhaar” to their beneficiaries, which consist of items such as Dalia, khichadi, pulses such as moong dal, & additional packages for children between the age group of 3 to 6 years called “BalHaar” premix & Food supplements to children in the age group of 6 months to 3 Years. Conversely, Nand Ghar, a more recent endeavor launched by the Vedanta Group in collaboration with the Indian government, operates under the corporate social responsibility (CSR) banner. Nand Ghar provides a holistic approach, incorporating modern infrastructure, digital learning tools, and skill development programs for children and women. While both initiatives share the objective of uplifting rural children, NandGhar stands out for its comprehensive approach, integrating technology and vocational training to empower communities further. With the transition from Anganwadi to Nand Ghar, initiated by Vedanta, there is an opportunity to assess the impact of this transition on nutritional outcomes. According to (2000 Nand Ghar Milestone Report) Vedanta has also collaborated with the Government of Rajasthan to upgrade 25,000 Anganwadi to Nand Ghar over the next 3 years¹¹. Among other objectives, the Nand Ghar initiative, through its core services viz. Early Childhood Education, Nutrition, Maternal and Child Health, and Women’s Economic Empowerment through Skill Development, aims:

- To provide quality education to children between the ages of 3-6 years.
- To have no malnourished children at Nand Ghar through the provision of nutritious hot-cooked meals served to children, breakfast, and Take-Home Ration (THR)
- To provide primary healthcare at the doorstep for children and women of Nand Ghar
- To develop skills through trade-based and entrepreneurship training for women who are above 18 years of age.

However, preliminary findings during the field revealed that the THR provided by the government under ICDS at the AWCs was underutilized due to various reasons. e.g., The THR was treated as cattle fodder by a few members of the farming community, instead of consumption by children¹². There are also common traditional practices prevalent among certain sections in the rural communities that prevent from consumption of nutritious food

items such as not allowing pregnant & lactating women from consuming banana, papaya, jackfruit, coconut, this can result in a lack of the required intake of fibers, fats, etc., creating imbalanced diets & eventually leading to malnourished mothers & children¹³. Thus, there are several factors behind the prevalence of malnutrition. These local practices have not been taken into consideration during the adoption & implementation of nutritional interventions – both at the national & local levels. Thus, this study will identify & highlight such gaps in malnourishment measures in Jaipur, Rajasthan.

RESEARCH QUESTION

Based on the above literature review, the research questions identified are as below:

1. What is the status of malnourishment among the 6 months to 3 years children in Jaipur city.
2. What are the current dietary practices among the 6 months to 3 years children and what are the reasons behind malnourishment among children age (6 months-3 years) of Nand Ghar beneficiaries of urban Jaipur, Rajasthan?
3. What are the factors contributing to malnutrition among the above-said target group in the city and how it could be reduced?

OBJECTIVES

The objectives of the study were to: -

1. Study the socio-demographic profiles & dietary practices of Nand Ghar beneficiaries in urban Jaipur.
2. Analyze the utilization patterns of Take-Home-Ration (THR) provided by the Nand Ghar to Nand Ghar beneficiaries and identify the underlying reasons behind malnourishment of Nand Ghar beneficiaries, and
3. Develop suggestions for improving nutritional outcomes within Nand Ghar beneficiaries.

METHODOLOGY

STUDY DESIGN:

The researcher proposed to conduct the study with analytical and cross-sectional in nature and will follow a mixed methodology. Data was collected from beneficiaries who had young children in the age group of 6 months to 3 years pertaining to their socio demographic profile, information regarding their dietary practices and utilization patterns of THR.

STUDY AREA:

The research was conducted in Nand Ghar, situated in the semi-urban areas of Jaipur city, Rajasthan.

STUDY POPULATION: The study participants were the beneficiaries of the Nand Ghar having children aged 6 month – 3 years in the urban area of Jaipur city, Rajasthan.

INCLUSION CRITERIA: Beneficiaries utilizing services provided by Nand Ghar having children in the age group of 6 months – 3 years.

EXCLUSION CRITERIA: Non-Nand Ghar Beneficiaries are not interviewed.

DURATION OF STUDY:

The study was conducted from 15th March 2024 to 15th June 2024.

The timelines of activities are as follows:

- 15th March 2024 – 31st March 2024: Finalized synopsis and prepared semi-structured interview schedule.
- 1st April 2024 – 15th April 2024: Conducted pilot study.

- 16th April 2024 – 30th May 2024: Collected data.
- 1st June 2024 – 15th June 2024: Analyzed data and wrote the report.

STUDY UNIT:

Children aged 6 months to 3 years.

Children aged 6 months to 3 years were chosen because this is a crucial period for growth and development. Proper nutrition during these early years is essential for healthy development, preventing malnutrition, and supporting cognitive and physical growth. Studying their dietary practices and how they use Take-Home Ration (THR) from Nand Ghar can provide valuable insights into improving child health outcomes.

SAMPLE SIZE:

A sample size Of 197 Nand Ghar beneficiaries having children aged 6 months-36 months was taken for the study.

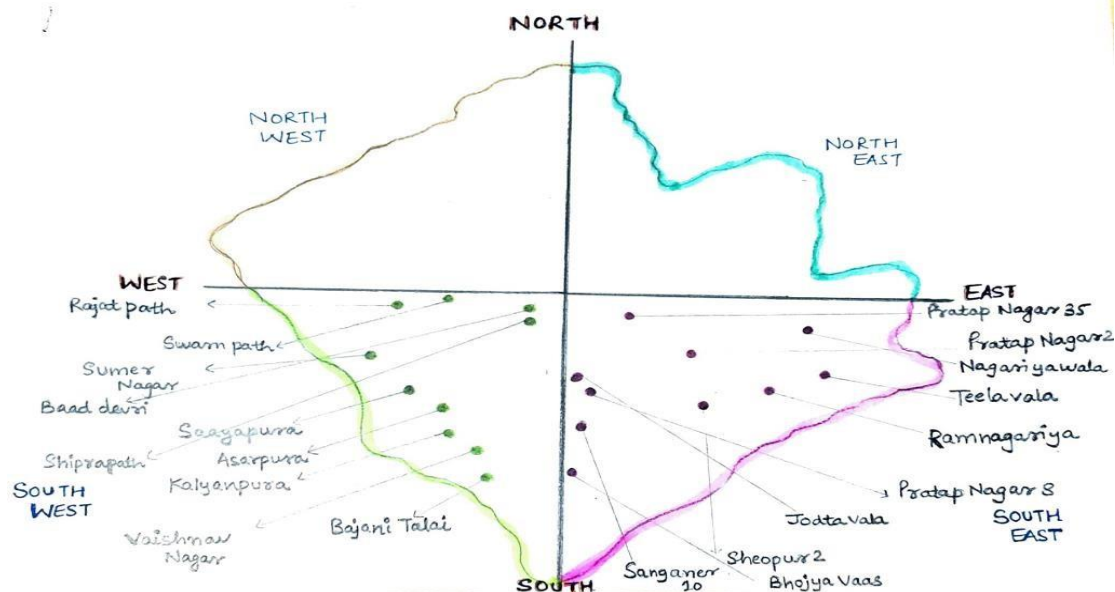
SAMPLING TECHNIQUE:

To meet the objective of the study, researchers proposed to follow Cluster Sampling.

1st Stage: Firstly, Jaipur district was divided into different zones, from which two zones named southwest zone and southeast zone were selected to form clusters.

2nd Stage: Secondly, segregation of Nand Ghar were done in which Mamta institute is working from the rest of the Nand Ghar.

3rd Stage: Finally, from each cluster around 10 Nand Ghar altogether were be selected by random Sampling method and from each selected Nand Ghar, 10 respondents were be selected to get interviewed.



Jaipur district map divided into two zones i.e. southwest zone and southeast zone to form a cluster.

DATA COLLECTION TOOL:

A semi-Structured interview schedule was used to assess the socio-demographic profiles, dietary practices, and utilization patterns of Take-Home-Ration (THR) of children aged 6 month - 3 years from the Nand Ghar beneficiaries.

DATA COLLECTION PROCEDURE:

A semi-structured interview schedule was used as the primary tool for data collection. A self-developed, pretested semi-structured interview schedule consisting of both open ended and close ended questions was used. A briefing was given about the nature of the study, and the procedure of completing the questionnaire was explained. Consent was also taken. The collected questionnaire was scored, and the data obtained from them was analyzed to answer the Research question.

DATA COLLECTION TECHNIQUE:

Age assessment was done by using Nand Ghar records. Anthropometric parameters such as weight, height and MUAC were recorded using standard tools and techniques.

DATA ANALYSIS:

The Data collected was checked for any incompleteness or partial filling, data cleaning. The data obtained from the completed semi structured interview scheduled was analyzed. Analysis was done in MS Excel. A 2 x 2 bivariate analysis was conducted to assess the description between the various sociodemographic factors, dietary practices and utilization pattern of THR.

ETHICAL CONCERNS:

Verbal ethical consent was taken from each the participant prior to the interview. Ethical consent will assure them the privacy of their responses. Names and personal information were not taken. Confidentiality of the subjects was maintained for the social good, will be clubbed in all the collected responses and used for research purposes. If anyone was not willing to be a part of the study, they were not forced by any means. All the participants were explained about how their data would be collected, stored, and used, and they were assured of the confidentiality of their data. Storage of the data was done on a secured server with password protection and restricted access.

LIMITATION OF THE STUDY:

- The self-administered questionnaire was used, so there was a possibility of reporting biased information by the respondents. However, every effort was made to motivate respondents to provide true information.
- Only children registered with Nand Ghar were considered, children who were not registered were missed out.

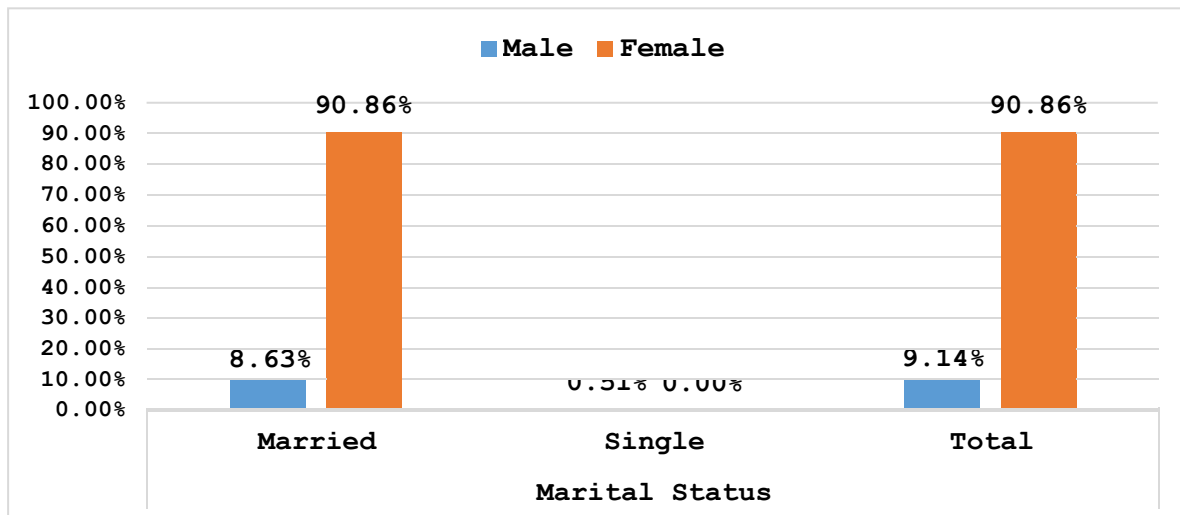
RESULTS:

Objective 1: The Socio-Demographic Profiles & Dietary Practices of Nand Ghar Beneficiaries in Urban Jaipur

A bivariate analysis was performed using different variables to explore the relationship between two categorical variables to determine the relationship of various factors:

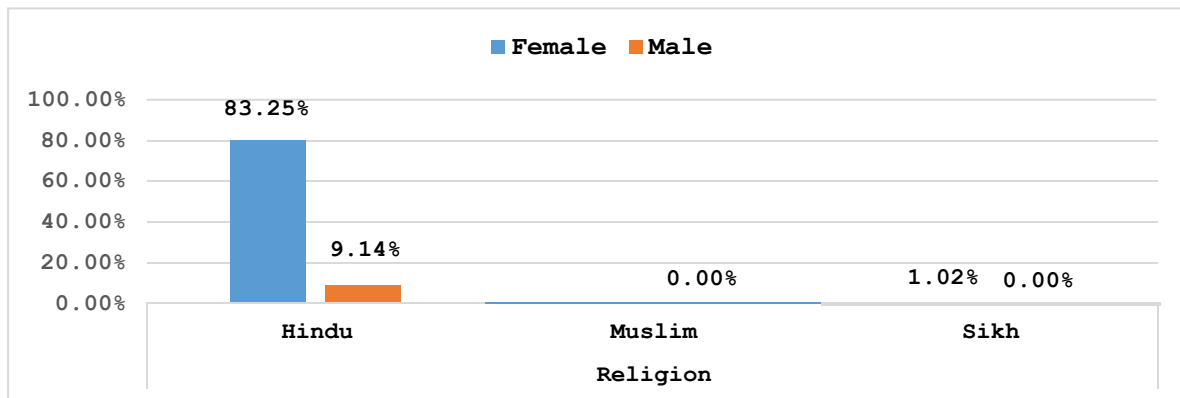
To understand the study Universe, it is necessary to understand the respondent's profile as many socio-economic factors play significant roles in addressing the issue of malnutrition. In context to this study, we tried to understand the distribution of marital status by gender, which is presented in figure 1 below. The figure shows that among the 197 respondents, females being married making up the majority at 179 (90.86%). This Highlights a higher marriage rate for females.

Figure 1: Distribution of Marital Status of respondents by gender (n=197).



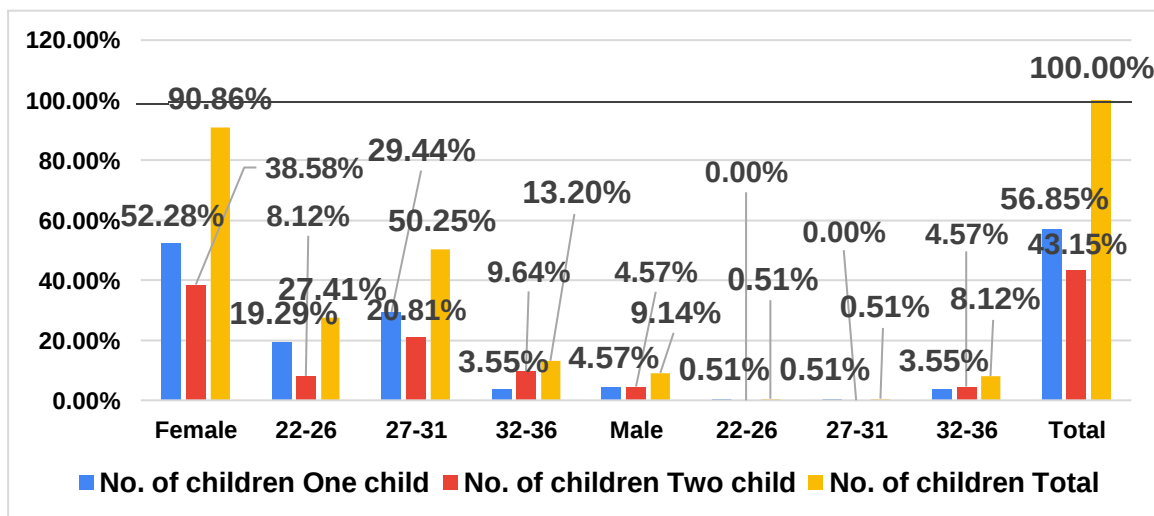
In the study, among the 179 female respondents, 164 (83.25%) are Hindu. Additionally, 13 (6.60%) are Muslim, and 2 (1.02%) are Sikh. All 18 male respondents are Hindu. as shown in figure 2 below. This Highlights most of the female respondents were Hindu.

Figure 2: Distribution of respondent's religion by gender (n=197).



The study encompassed that the most respondents are female 179 (90.86%) compared to male 18 (9.14%). Among females, those aged 27-31 are the largest group, with 58 having one child (29.44%) and 41 having two children (20.81%). In contrast, most males are aged 32-36, with 7 having one child (3.55%) and 9 having two children (4.57%). Overall, 112 respondents have one child (56.85%), and 85 have two children (43.15%), indicating a higher prevalence of one-child families which is presented in figure 3 below.

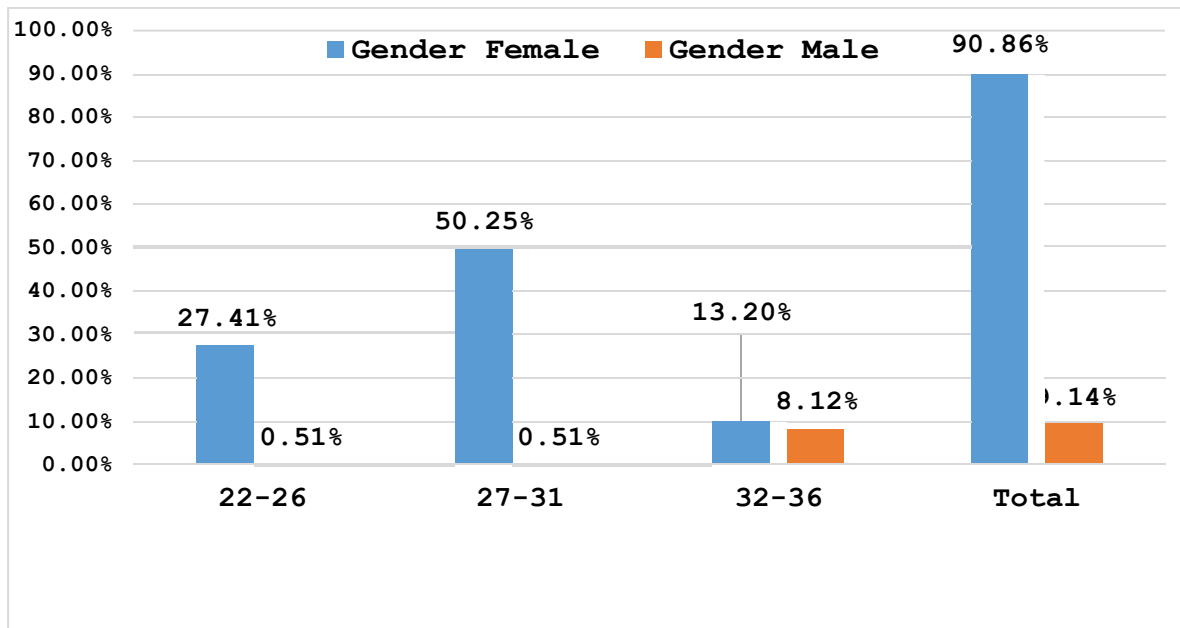
Figure 3: Distribution of Number of children among respondents, categorized by age group and gender (n=197).



The distribution of respondent by age and gender highlights notable trends, distribution of respondents by age and gender as shown in the figure 4 that most respondents are aged 27-31 (n=100, 50.76%), with nearly all being female (n=99, 50.25%). Females make up 90.86% (n=179) of the total respondents, while males are most present in the 32-36 age group (n=16,

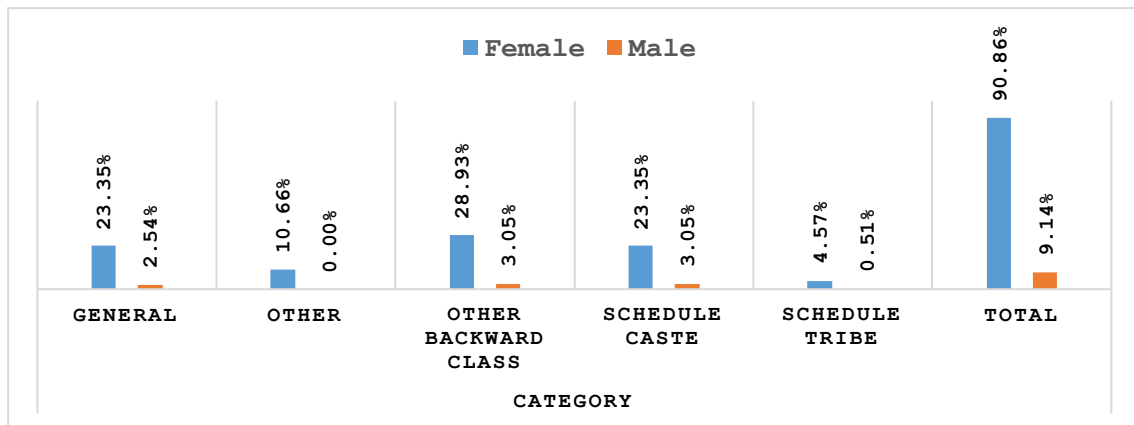
8.12%). This distribution indicates a significant predominance of females, particularly in the 27-31 age group, and males mainly in the 32-36 age group.

Figure 4: Distribution of respondents by age and gender



The distribution of respondents by gender and category as shown in figure 5, Among the total 197 respondents, 179 (90.86%) are female, while males account for 18 (9.14%). Notably, the largest category is Other Backward Class with 63(31.98%) respondents, followed by General with 51 (25.89%). Schedule Tribe has the smallest representation, comprising only 10 (5.08%) of the total sample. There's a significant gender disparity across categories, with females outnumbering males in all groups.

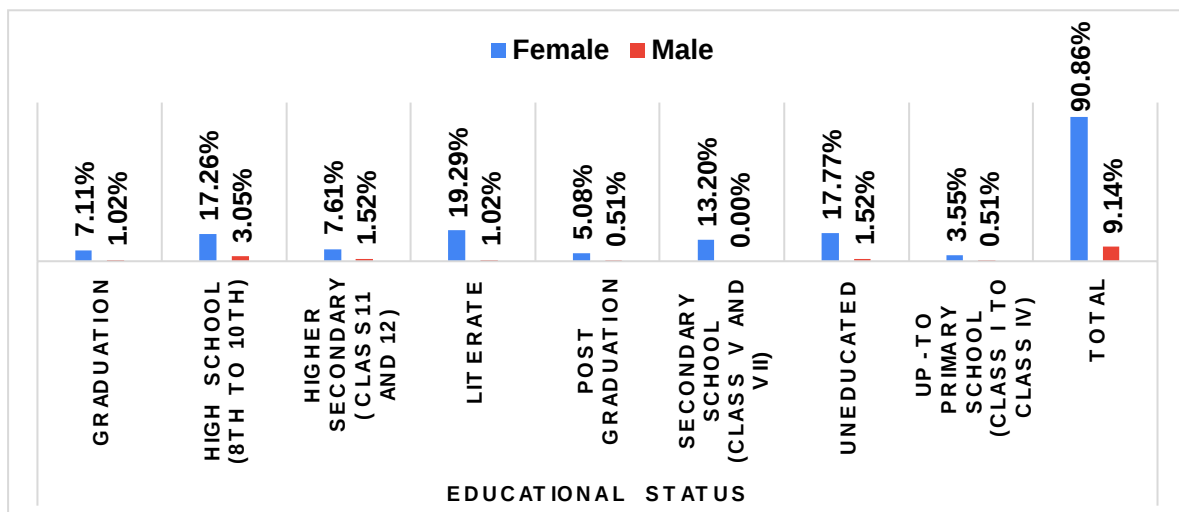
Figure 5: Distribution of respondents by gender and category (n=197).



The

highlighted figure 6 represents the educational status distribution by gender. For females, the highest percentage is in the literate category (19.29%, n = 38) followed by uneducated 17.77%. For males, the highest percentage is in the higher secondary (1.52%, n = 3) and uneducated (1.52%, n = 3). Overall, females have a significantly higher representation across all educational categories compared to males.

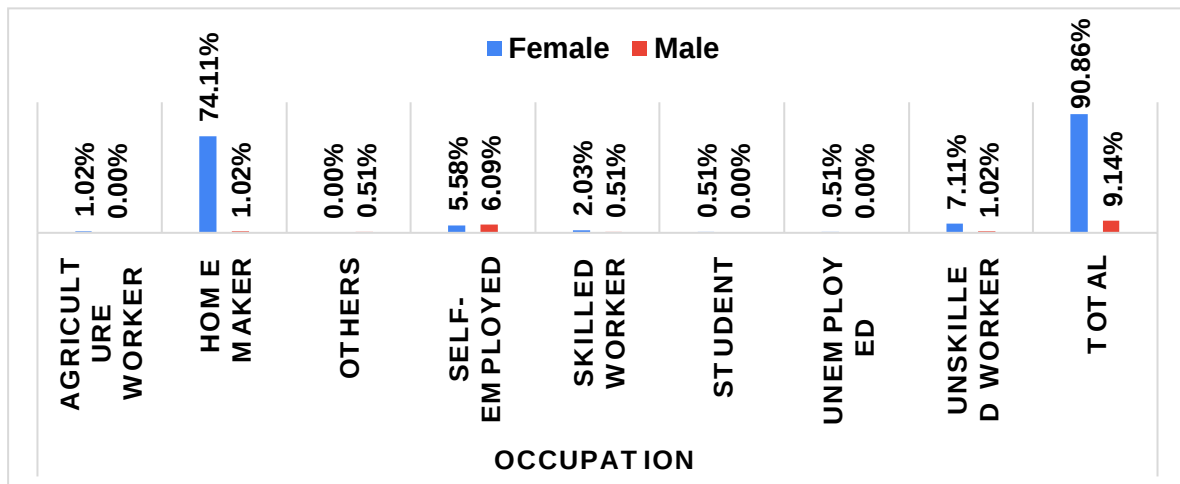
Figure 6: Distribution of Educational status of respondents by gender (n=197).



In examining the occupational distribution by gender, notable differences emerge between females and males across various categories. The highlighted data in table 7 presents the occupational distribution by gender. Among females, the highest percentage is in the category of homemakers (74.11%, n = 146), followed by self-employed (5.58%, n = 11) and unskilled

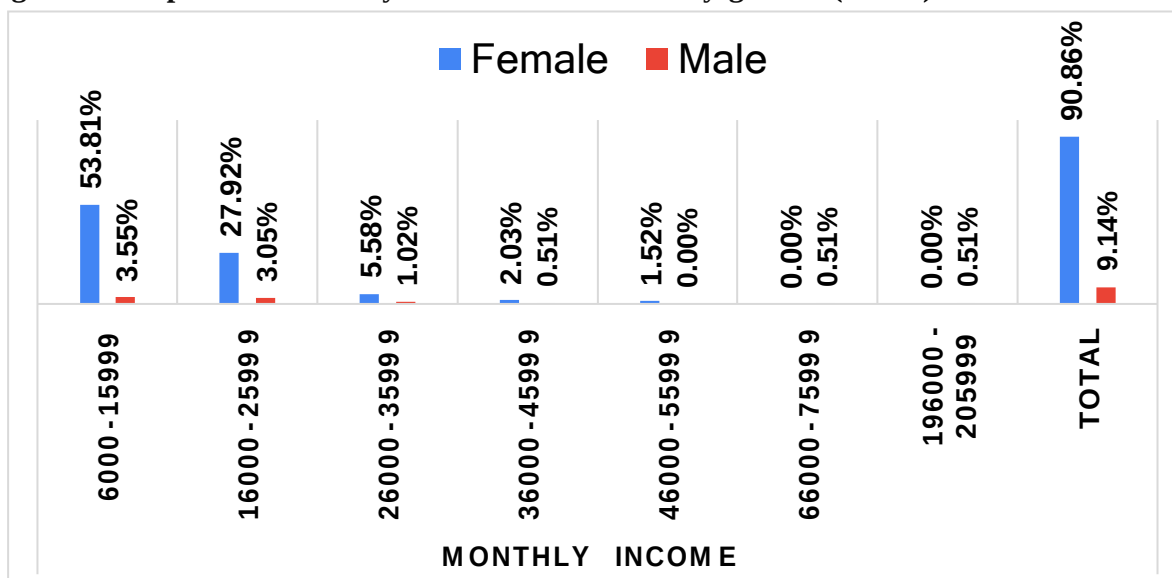
workers (7.11%, n = 14). For males, the largest percentage is in self-employment (6.09%, n = 12), followed by homemakers (1.02%, n = 2). Overall, most females are homemakers, significantly outnumbering males in this category, indicating traditional gender roles.

Figure 7: Occupation distribution of respondents by gender (n=197).



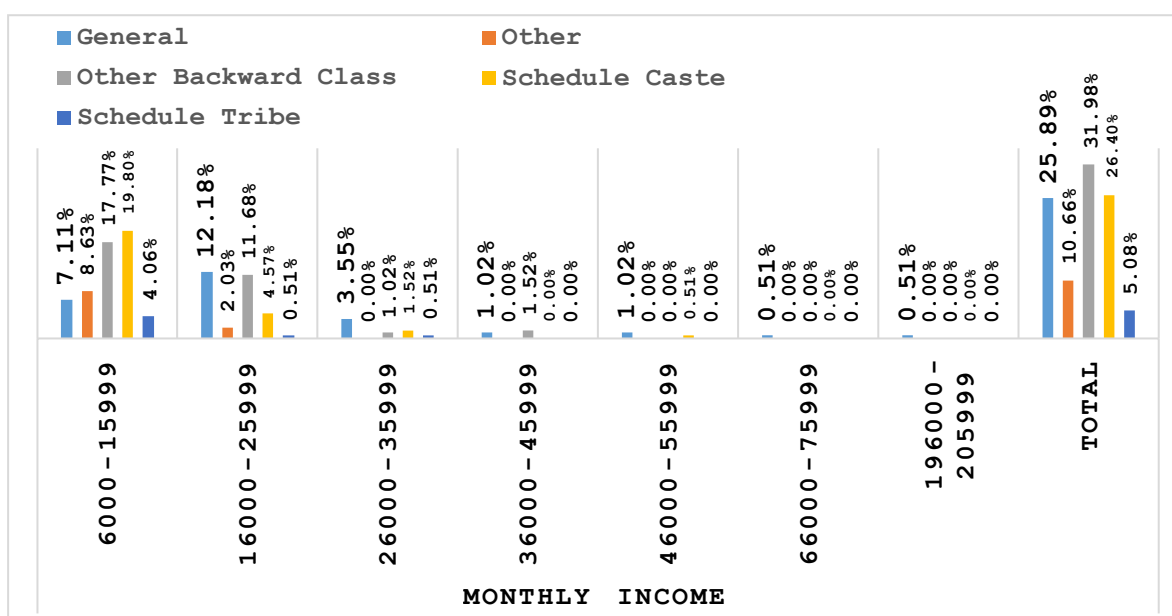
When analyzing respondents' monthly income distribution by gender as shown in Figure 8. Among females, the largest group is in the 6000-15999 range with 106 (53.81%), followed by 55 (27.92%) in the 16000-25999 range. Males are primarily in the 6000-15999 range with 7 (3.55%) and the 16000-25999 range with 6 (3.05%). Overall, 197 respondents are distributed across income ranges: 113 (57.36%) in 6000-15999, 61 (30.96%) in 16000-25999, 13 (6.60%) in 26000-35999, and fewer in higher ranges. Females make up 90.86% of the respondents, and males 9.14%. The data highlights substantial gender-based disparities in income distribution, with females predominantly clustered in lower income brackets compared to their male counterparts.

Figure 8: Respondent Monthly Income distribution by gender (n=197).



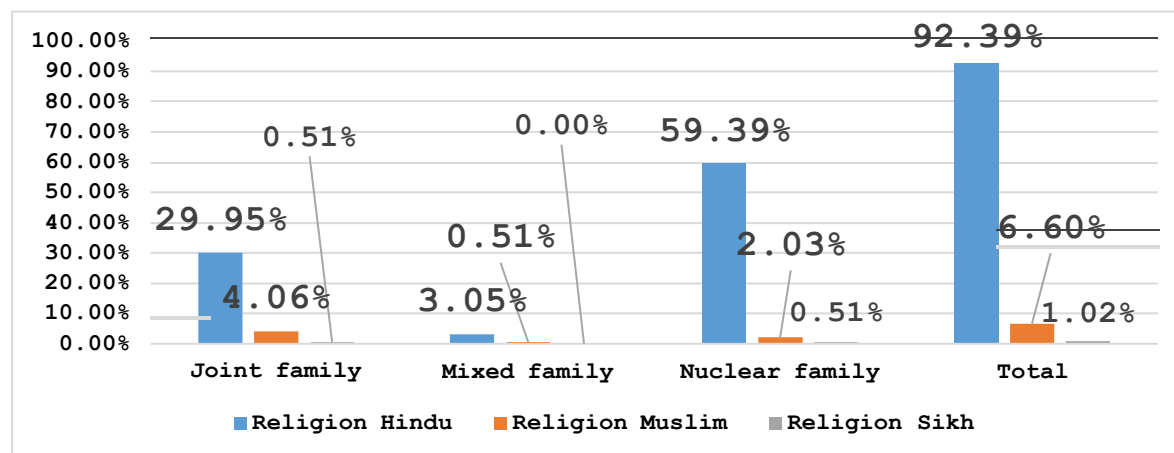
In examining the distribution of respondents by monthly income and category, Figure 9 reveals several significant insights. Key points include that 57.36% of respondents have a monthly income between 6000-15999, and 30.96% have a monthly income between 16000-25999. Additionally, 26.40% of respondents are from the Schedule Caste, and 31.98% are from the Other Backward Class.

Figure 9: Monthly income distribution of respondents by Category.



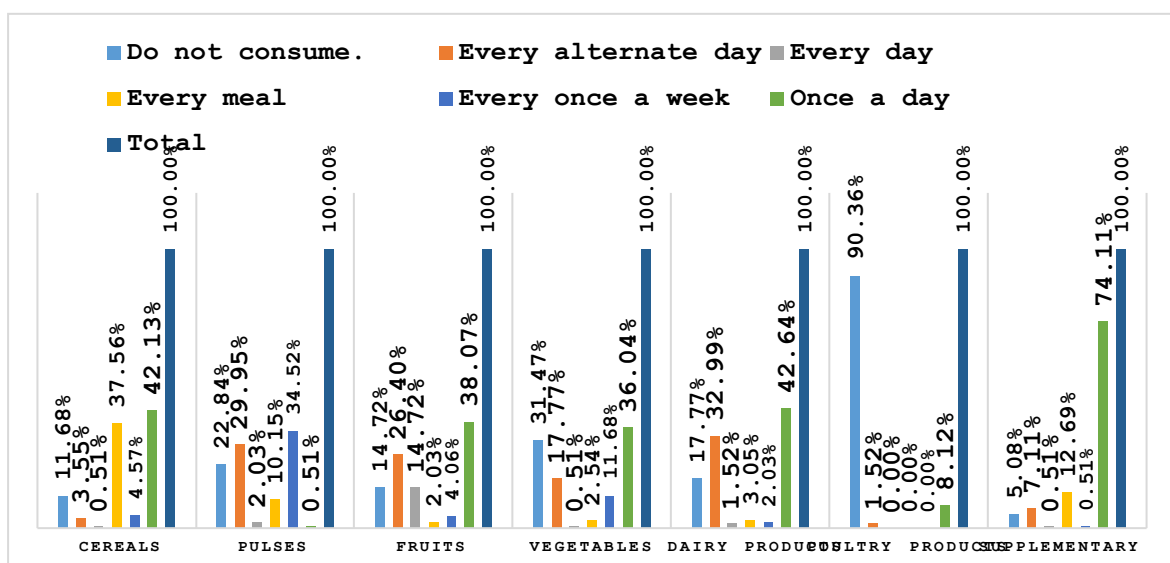
While analyzing the distribution of respondents by type of family and religion in figure 10. 182 (92.39%) of respondents are Hindu, with 117 (59.39%) being from nuclear families. Additionally, 13 (6.60%) are Muslim, with 2.03% being from nuclear families, and 2 (1.02%) are Sikh, with 1 (0.51%) being from nuclear families. Notably, 68 (34.52%) of respondents are from joint families, mostly Hindu, and 7 (3.55%) are from mixed families, mostly Hindu and Muslim. The data from Figure 19 highlights the varied family types and religious affiliations among respondents, with Hindus predominating in nuclear and joint family structures.

Figure 10: Distribution of Type of family by religion (n=197).



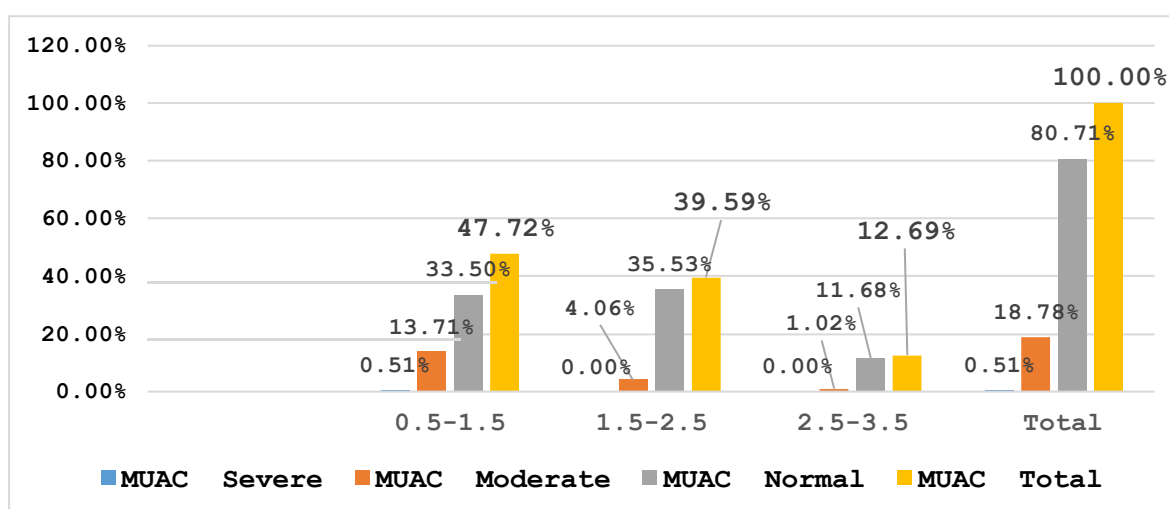
The consumption patterns of various food categories among 197 respondents, as depicted in Figure 11, reveal intriguing insights into dietary habits. Poultry products are notably the least consumed, with 90.36% of respondents abstaining from them entirely, while dairy products emerge as the most frequently consumed, integrated into every meal by 90.36% of participants. Furthermore, fruits are enjoyed daily by 38.07% of respondents, vegetables are a daily staple for 31.47%, cereals are predominantly consumed once a day (42.13%), and pulses are typically consumed once a week (34.52%). These findings underscore diverse dietary preferences and frequencies within the surveyed population.

Figure 11: Consumption frequency of various food categories among respondents (n=197).



The distribution of children by age and MUAC status reveals significant insights into their nutritional health within the surveyed population. Figure 12 shows that 94 (47.72%) of children are aged 0.5-1.5 years, with 27 (13.71%) having moderate malnutrition, and 78 (39.59%) are aged 1.5-2.5 years, with 8 (4.06%) having moderate malnutrition. Additionally, 1 (0.51%) of children have severe malnutrition, all aged 0.5-1.5 years, and 159 (80.71%) have a normal MUAC.

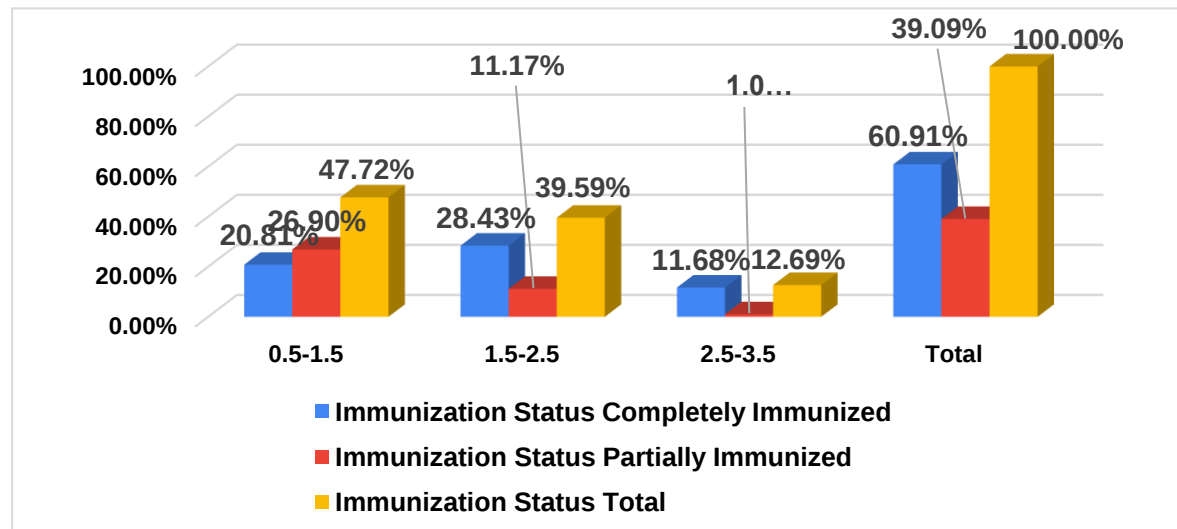
Figure 12: MUAC distribution among children across different age groups (n=197)



The analysis reveals varying levels of immunization among different age groups of children the figure 13 below reveals varying levels of immunization among different age groups of

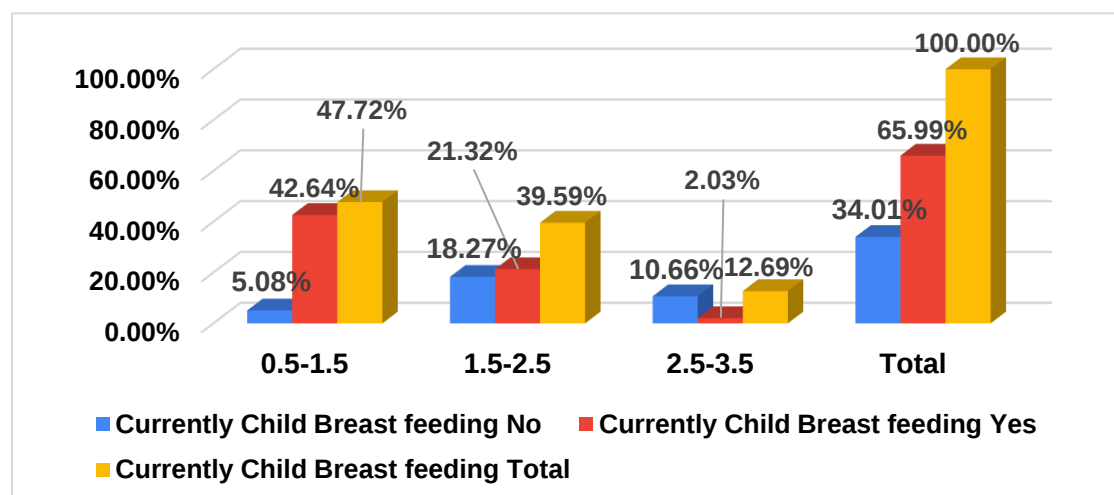
children. Most notably, nearly half of those aged 0.5 -1.5 years are partially or completely immunized, while the proportion decreases in older age groups. Overall, 60.91% of children are fully immunized, but there's still a significant 39.09% who are not fully covered, indicating a need for broader vaccination efforts across all age groups.

Figure 13: Distribution of Immunization status of children across different age groups (n=197).



The distribution in Figure 14 shows among children aged 0.5-1.5 years, 42.64% are currently being breastfed, while only 5.08% are not. In the 1.5-2.5 years age group, 21.32% of children are currently breastfed, and 18.27% are not. Among children aged 2.5 -3.5 years, only 2.03% are still being breastfed, with the majority (84%) not being breastfed. Overall, 65.99% of children are currently being breastfed, while 34.01% are not. These statistics highlight the decreasing trend in breastfeeding as children grow older.

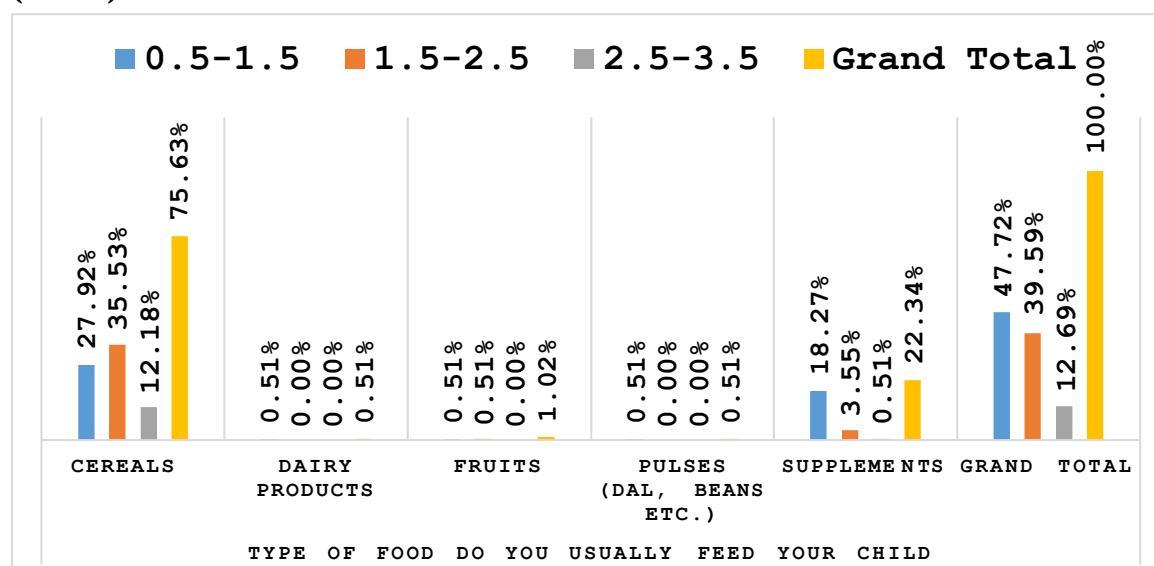
Figure 14: Distribution of Age of children by child breastfeeding (n=197).



The data

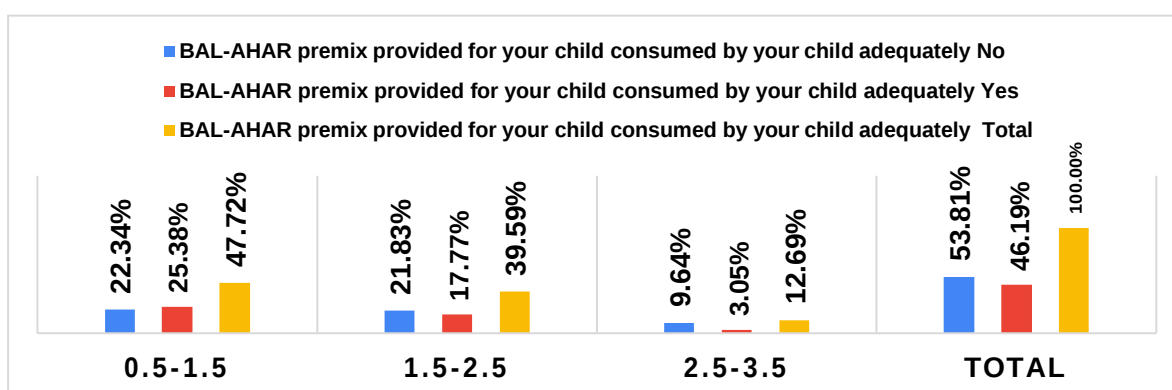
provided in Figure 15 outlines the types of food typically fed to children across various age groups, revealing distinct dietary preferences within the surveyed population. For children aged 0.5-1.5 years, cereals are the most common food type (27.92%), followed by supplements (18.27%). For children aged 1.5-2.5 years, cereals remain the dominant food type (35.53%), with no dairy products reported. In the 2.5-3.5-year age group, cereals are still the primary food type (12.18%). Overall, cereals are the most frequently fed food across all age groups, with pulses and fruits also being common.

Figure 15: Distribution of Types of food fed to children across different age groups (n=197).



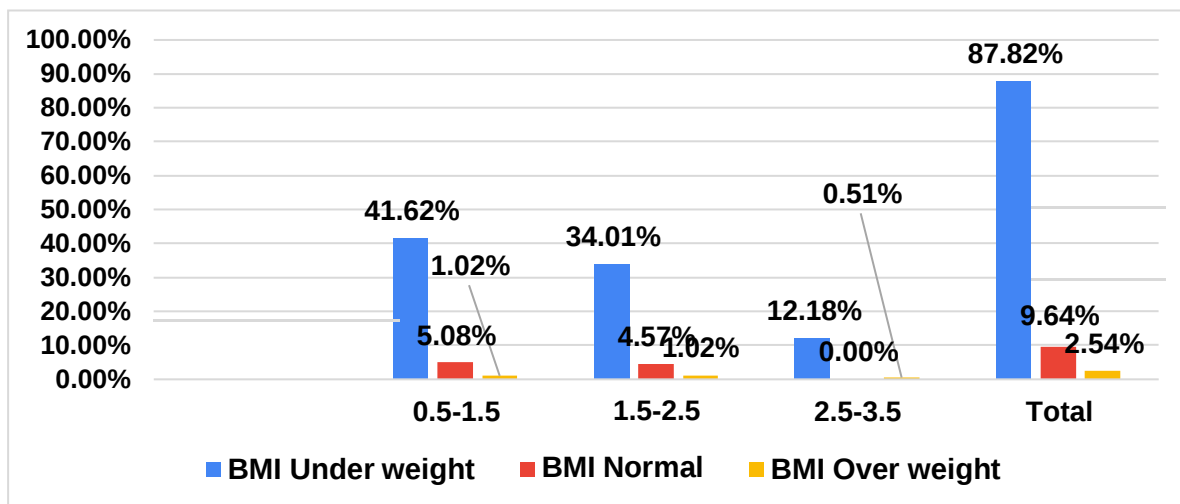
The data from Figure 16 reveals varying levels of consumption of BAL-AHAR premix among children across different age groups, highlighting age-specific patterns in nutritional supplementation within the surveyed population, the consumption of BAL-AHAR premix by children in different age groups. Overall, 46.19% of children consumed the premix adequately. In the 0.5-1.5 years age group, 25.38% consumed it adequately. In the 1.5-2.5 years age group, 17.77% consumed it adequately. In the 2.5-3.5 years age group, only 3.05% consumed it adequately. This Highlights that as the age increases consumption of supplementation also decreases.

Figure 16: Distribution of Age of child by BAL-AHAR premix consumed by your child adequately (n=197)



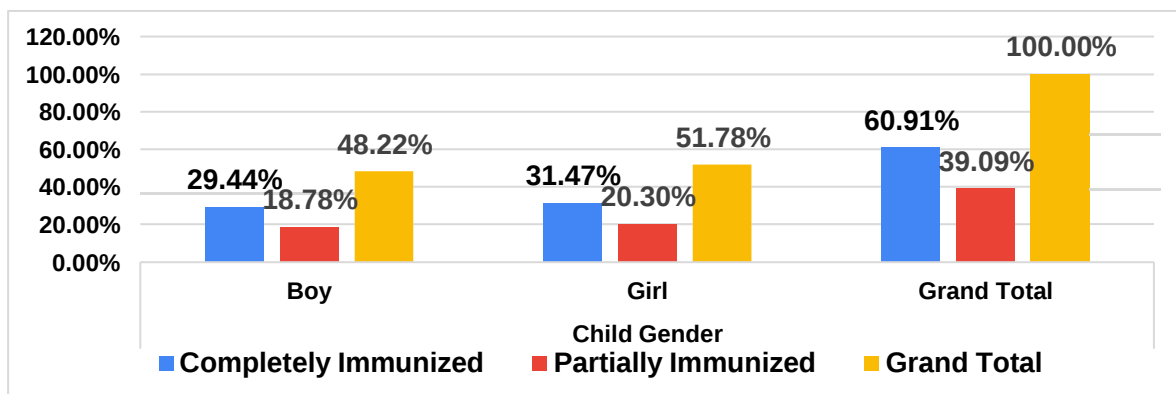
The data from Figure 17 highlights striking trends in children's BMI across different age groups, with a notable 87.82% found to be underweight across different age groups, with the highest percentage (41.62%) in the 0.5-1.5-year age group. Only 9.64% of children are in the normal BMI range, and a very low percentage (2.54%) are overweight. The data suggests a high prevalence of underweight children, particularly in the younger age groups, which is a significant public health concern

Figure 17: Distribution of BMI by Age of child (n=197)



The data presented in Figure 18 highlights significant gender disparities in childhood immunization status, with notable differences observed between girls and boys. The figure shows that there are gender disparities in immunization status. While 31.47% of girls were completely immunized, only 29.44% of boys were completely immunized. Conversely, 20.30% of girls were partially immunized compared to 18.78% of boys. Overall, a higher percentage of girls (51.78%) were represented in the sample compared to boys (48.22%). These findings suggest that gender discrimination may play a role in determining access to and utilization of childhood immunization services, with girls potentially facing greater barriers.

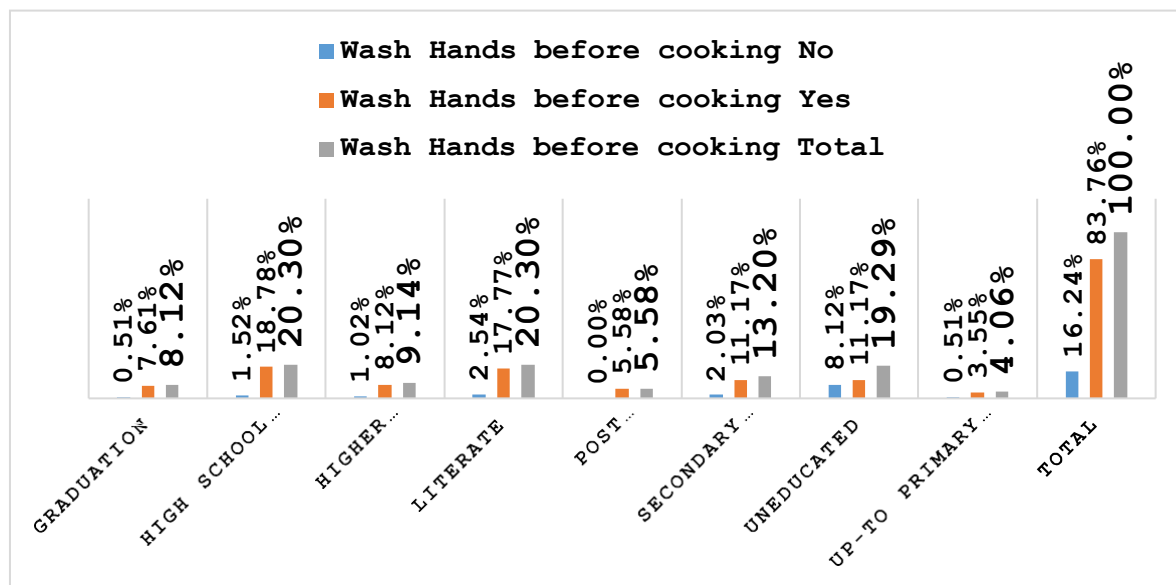
Figure 18: Distribution of Immunization status by child gender (n=197).



While examine the figure 19 shows that most respondents (83.76%) wash their hands before cooking, with higher educational levels associated with better hand washing practices. The highest percentages of hand washing are among those who have completed high school

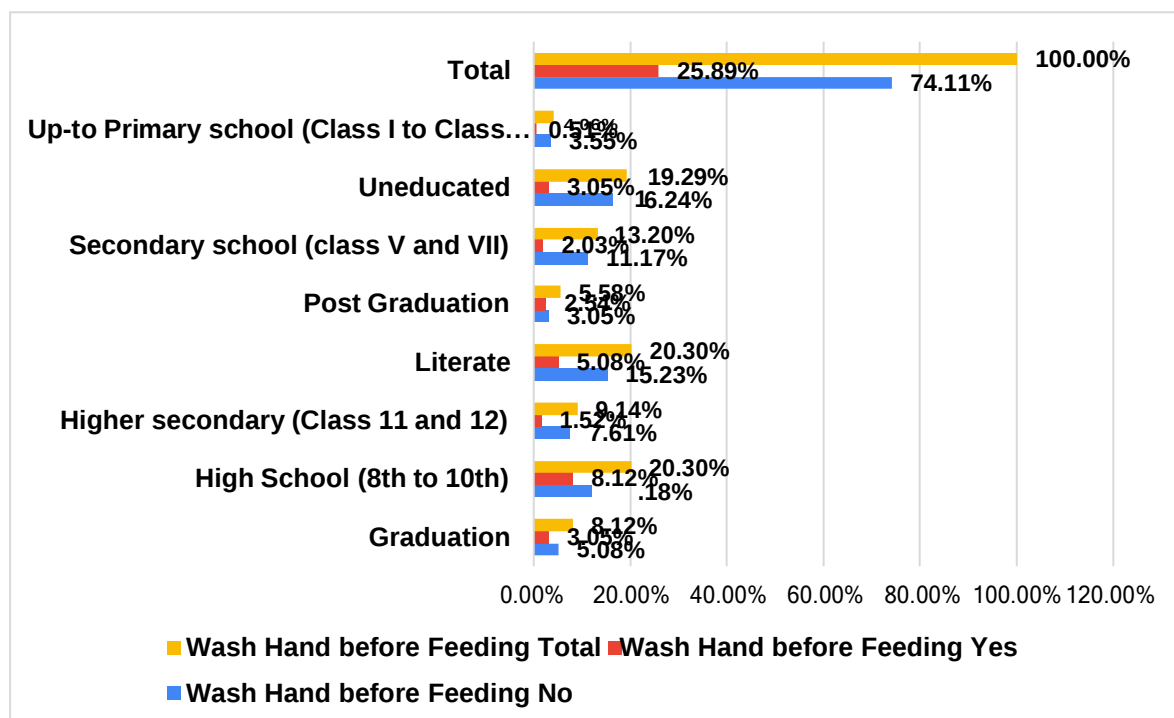
(18.78%), are literate (17.77%), or have a graduation degree (7.61%). These findings underscore the positive association between education level and hand hygiene practices among the surveyed population.

Figure 19: Distribution of Educational status of respondents by their handwashing habits before cooking (n=197).



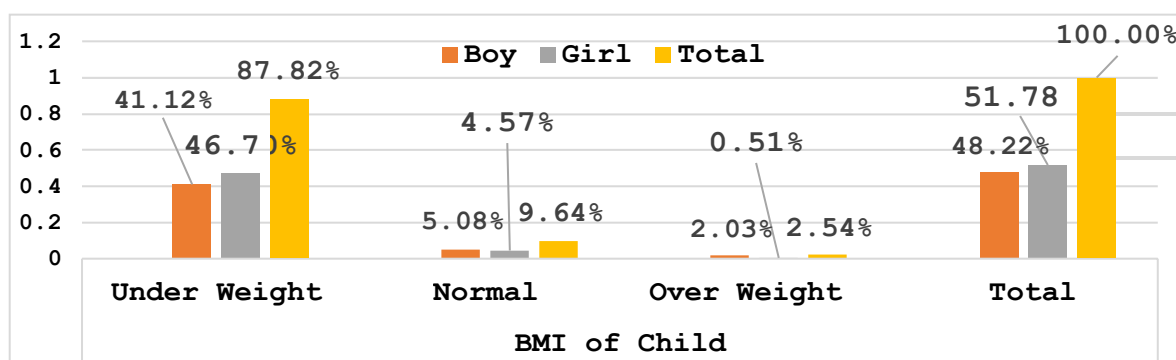
The study shows the description of the educational status of respondents and their hand washing practices before feeding in figure 20, Most respondents (74.11%) do not wash their hands before feeding, with the highest percentages among those who are literate (15.23%) or have completed high school (12.18%). The lowest percentages of hand washing are among those who are uneducated (16.24%) or have completed up-to primary school (3.55%).

Figure 20: Distribution of Respondents ‘handwashing habits before feeding vary across different educational levels (n=197).



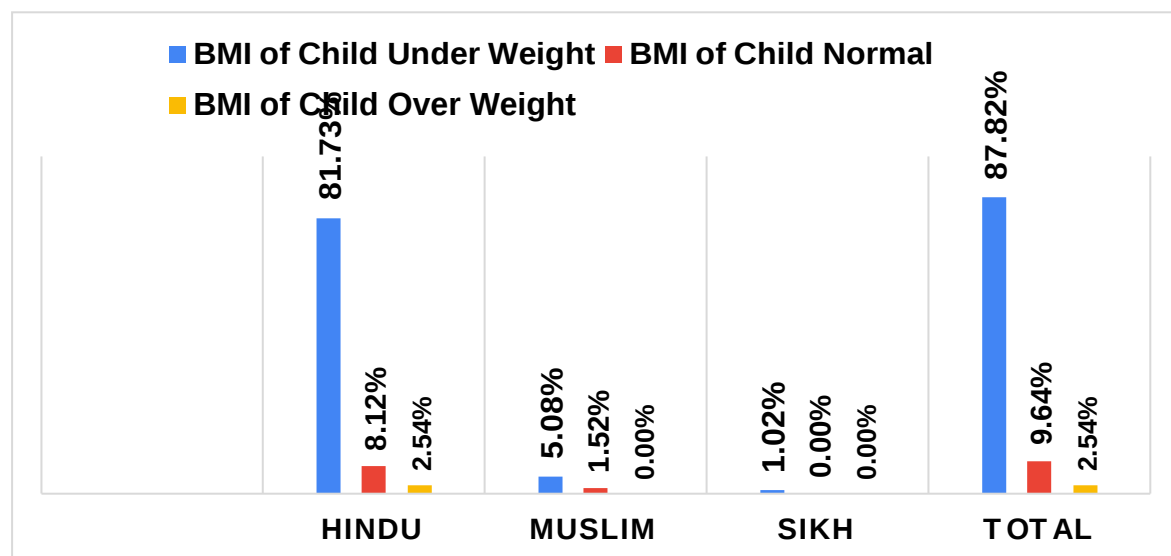
The data reveals a concerning prevalence of underweight children, with boys making up 41.12% and girls 46.70%. In contrast, only 9.64% of children are of normal weight, and an even smaller percentage, 2.54%, are overweight. Overall, most children, 87.82%, are underweight. Urgent and comprehensive interventions are necessary to address these alarming trends and ensure better health outcomes for vulnerable children. The prevalence of underweight children is alarmingly high, especially among girls as shown in figure 21.

Figure 21: Distribution of BMI Categories Among Boys and Girls (n=197).



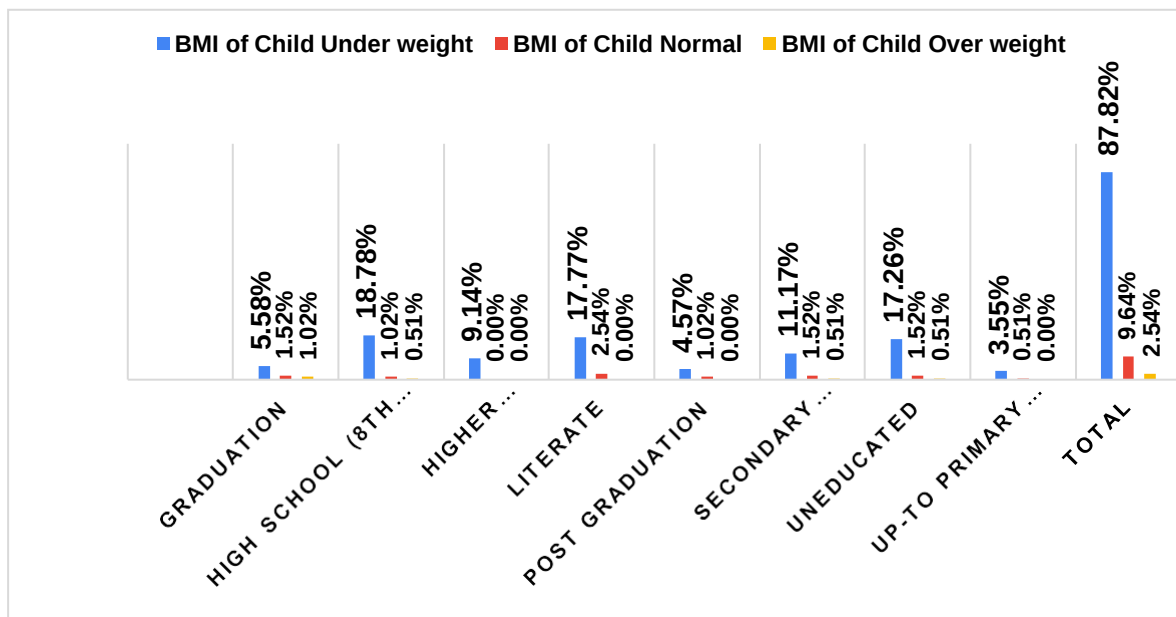
The study reveals a widespread prevalence of underweight children across various religious groups. The figure 22 shows the most children are Hindu, with 81.73% underweight, 8.12% normal weight, and 2.54% overweight. Muslim children make up 6.60% of the total, with 5.08% underweight and 1.52% normal weight. Sikh children, all underweight, account for 1.02%. Overall, 87.82% of children are underweight, indicating a significant issue across all religious groups, emphasizing the urgent need for comprehensive nutritional interventions and healthcare initiatives tailored to address these disparities effectively across religious communities.

Table 22: Distribution of BMI Among Religion (n=197).



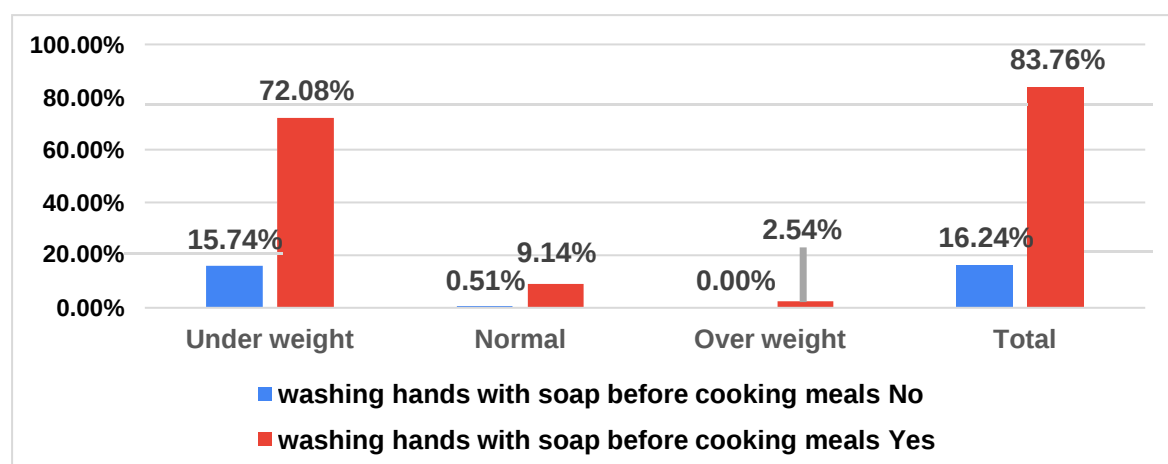
The study revealed children's BMI in relation to parental education levels. Notably, children with literate parents have the highest percentage of normal BMI (2.54%). Underweight children are more common among parents with lower education, such as high school (18.78%) and literate (17.77%). Overweight children are relatively few across all educational levels. Higher parental education is linked to a higher incidence of normal BMI in children as shown in figure 23 below.

Figure 23: Distribution of BMI Among Educational Status (n=197).



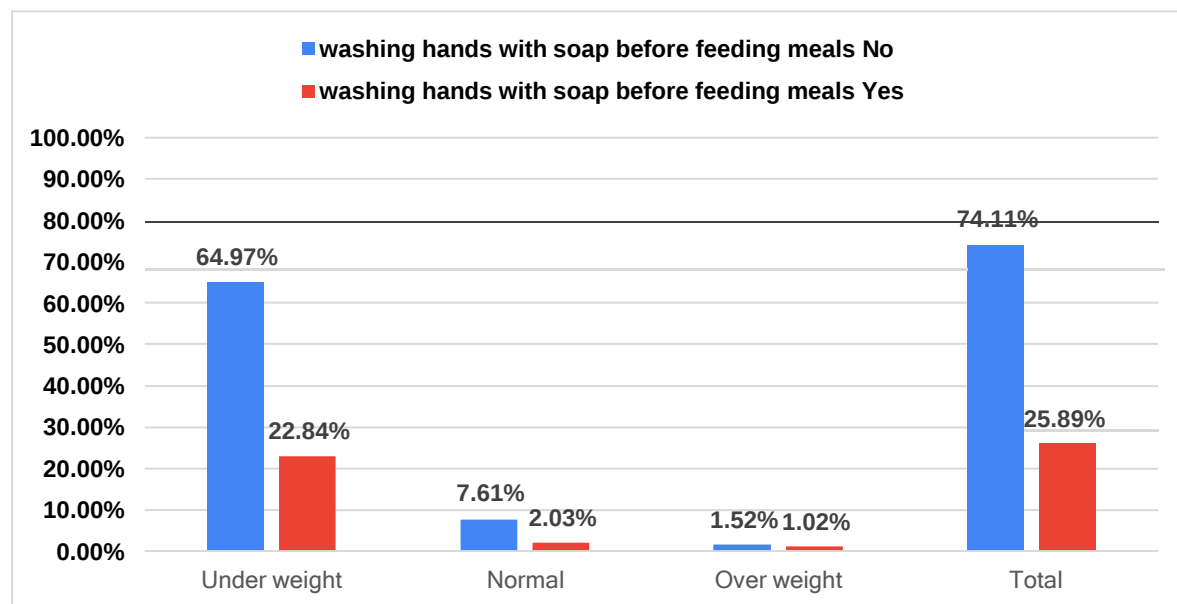
The study revealed the link between children's BMI and hand washing habits with soap before cooking meals as shown in figure 24. Notably, 72.08% of children who wash their hands before cooking fall within the normal BMI range, compared to only 0.51% of those who don't. Additionally, a significant percentage of non-hand washers are underweight (15.74%), indicating a potential correlation between hand hygiene practices and healthier BMI status in children.

Figure 24: Distribution of BMI Among Hand washing before cooking (n=197).



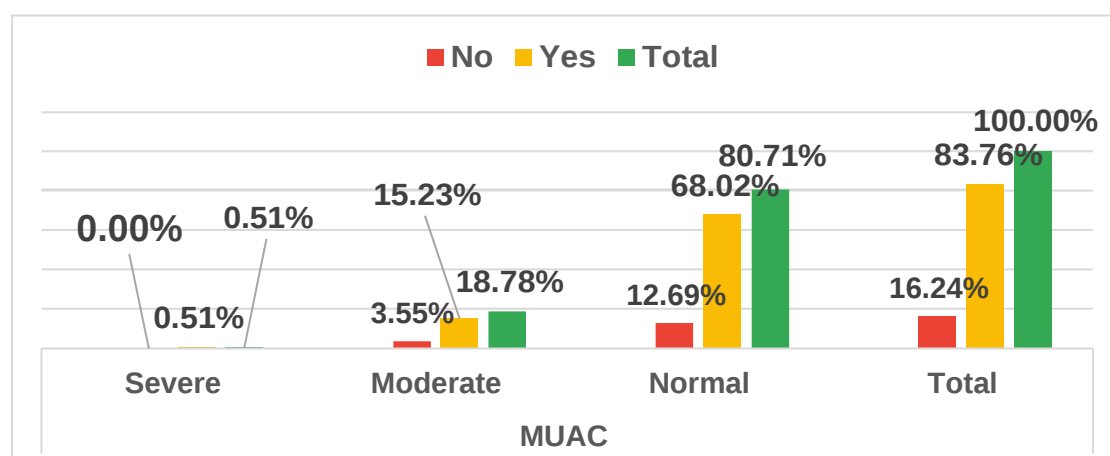
The study also highlights that most children (64.97%) not washed with soap before meals are underweight, contrasting with only (2.03%) in the normal BMI range. In comparison, among those washed with soap before meals, a lower percentage (22.84%) are underweight, while a slightly higher proportion (1.02%) are overweight as shown in figure 25. This highlights the importance of hygiene practices like hand washing with soap in potentially contributing to better nutritional outcomes and BMI status among children.

Figure 25: Distribution of BMI Among Hand washing before feeding (n=197).



Among individuals who wash their hands before cooking, a significant majority (68.02%) have a normal MUAC status, while none exhibit severe MUAC status. In contrast, among those who don't wash their hands before cooking, only 12.69% fall within the normal MUAC range. This underscores a potential link between hand washing before cooking and healthier MUAC status, emphasizing the importance of hygiene practices, as shown in figure 26.

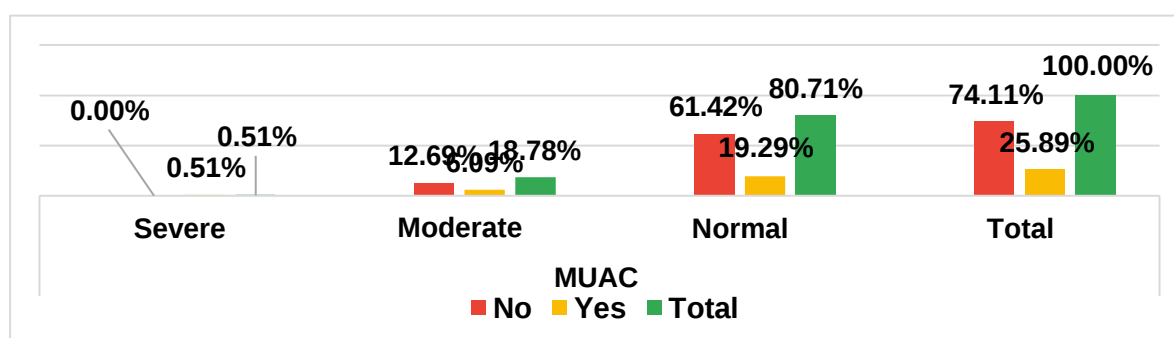
Figure 26: Distribution of Washing hands before cooking and MUAC (n=197).



In

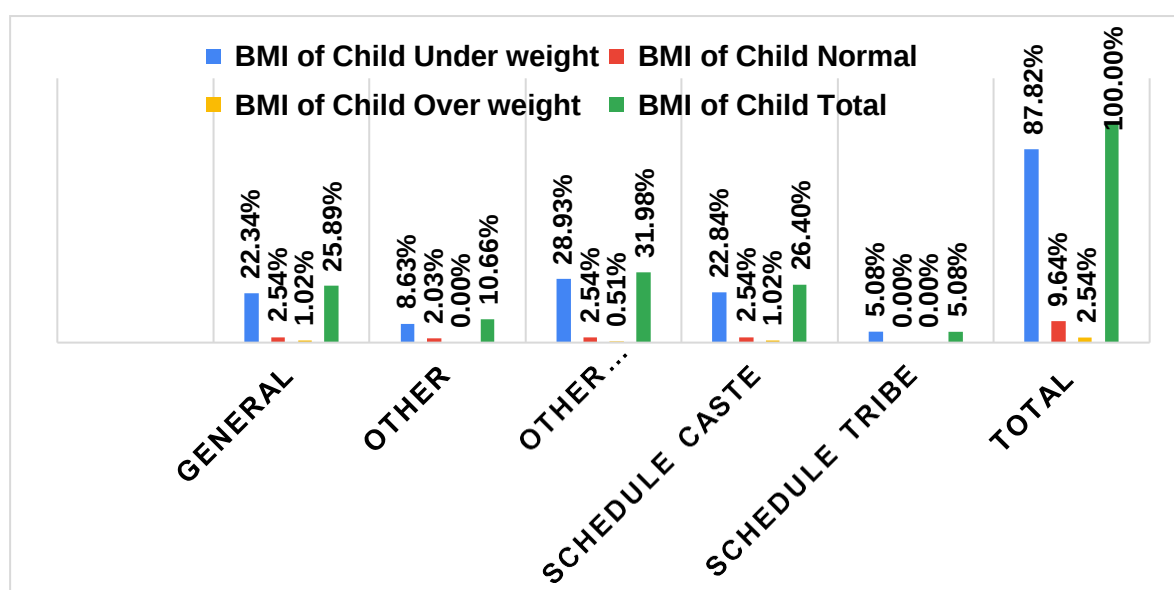
individuals who wash hands with soap before feeding shown in figure 27, 19.29% fall within the normal MUAC range, whereas among those who don't, this percentage increases to 61.42%. Additionally, no individuals in the "No" category exhibit severe MUAC status, compared to only 0.51% in the "Yes" category. This suggests a potential association between washing hands with soap before feeding and a healthier MUAC status, emphasizing the importance of hygiene practices.

Figure 27: Distribution of Washing hands before feeding and MUAC (n=197).



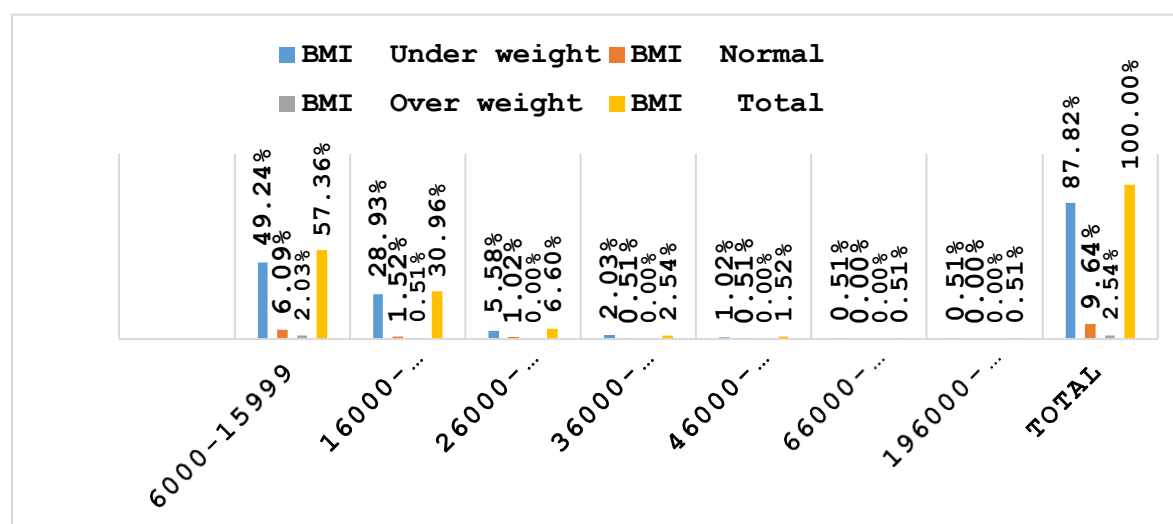
The study shows a notable relation between caste categories and child malnutrition in figure 28 below. Among these groups, the Other Backward Class (OBC) exhibits the highest percentage of underweight children at 28.93%, followed by the General category at 22.34% and the Scheduled Caste category at 22.84%. In contrast, the Scheduled Tribe category has the lowest percentage of underweight children at 5.08%.

Figure 28: Distribution of BMI Among categories (n=197)



The study also illustrates a notable relation between monthly income and child BMI status as shown in figure 29. Families with monthly incomes ranging from 6000 to 15999 have the highest percentage of underweight children at 49.24%, followed by the income of 16000 to 25999 at 28.93%. As income increases, the percentage of underweight children decreases, with lower proportions observed in higher income brackets.

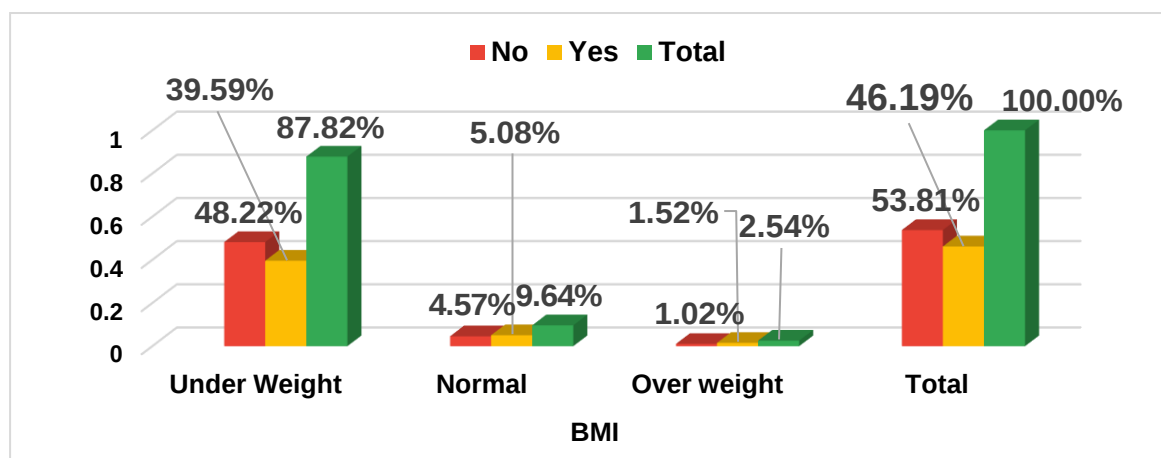
Figure 29: Distribution of BMI Among Monthly Income (n=197).



Objective 2: Utilization Patterns of Take-Home Ration (THR) Provided by the Nand Ghar to Nand Ghar Beneficiaries.

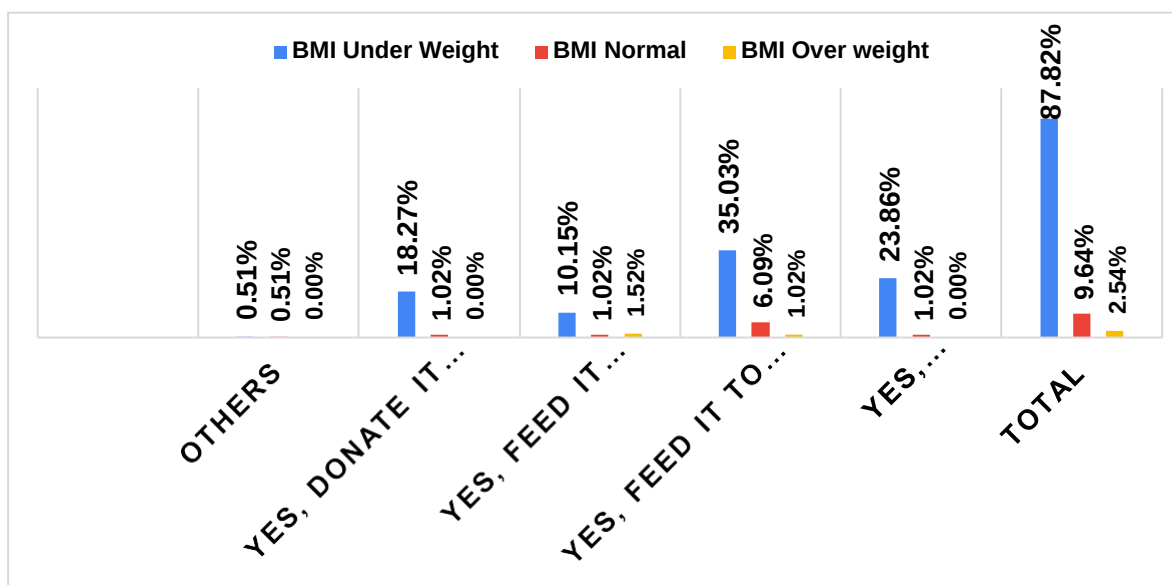
The study resulted that most individuals (87.82%) are underweight as shown in figure 30 below, with a roughly even split between those who consume THR (39.59%) and those who do not (48.22%). Only a small percentage (9.64%) have a normal BMI, and an even smaller proportion (2.54%) are overweight.

Table 30: Distribution of THR Consumption by BMI (n=197)



The Take-Home Ration (THR) provided by Nand Ghar is utilized in various ways by beneficiaries, often not as intended. Figure 31 shows the utilization of THR (Take Home Ration) for various purposes, categorized by BMI status. Most individuals (87.82%) are underweight, with most of them using THR for feeding it to cattle or livestock (35.03%) or incorporating it into family meals (23.86%). A significant proportion of underweight individuals also donate THR to someone (18.27%) or feed it directly to the child (10.15%), there is a clear gap in ensuring optimal nutritional intake among those most in need.

Figure 31: Distribution of utilization of THR for various purposes by BMI (n=197).



Objective 3: Suggestions for improving nutritional outcomes within Nand Ghar beneficiaries.

To improve nutritional outcomes for Nand Ghar beneficiaries, it is essential to implement a comprehensive approach. This includes enhanced training for Anganwadi workers, ensuring they are well-versed in nutrition and health practices through regular training sessions. Nutritional education for beneficiaries is crucial, with awareness programs, interactive sessions, and informational materials helping to impart the importance of balanced diets. Diversifying the food supply by incorporating local foods and establishing kitchen gardens can significantly enhance the nutritional quality of meals. Regular monitoring and evaluation through growth tracking and health check-ups will help tailor interventions to specific needs. Improved infrastructure, including safe cooking facilities and clean water access, is fundamental. Additionally, promoting breastfeeding, complementary feeding and implementing supplementary feeding programs can address specific nutritional deficiencies. By adopting these comprehensive strategies, Nand Ghar can significantly enhance the health and well-being of its beneficiaries.

DISCUSSION:

Poor feeding practices can cause irreversible and lifelong devastation, but there is a critical window of opportunity during the first 1000 days of life to stop it. The present study was done to assess the prevalence of malnourishment and their relationship with socio-demographic factors, dietary practices and utilization patterns of THR.

In the present study, nutritional status of children aged 6 months to 3 years was assessed using WHO growth standards. Result of the present study revealed that, the overall predominance of underweight, normal and overweight was 87.82%, 9.64% and 2.54% respectively in the Jaipur district of Rajasthan. One composite measure of general malnutrition is the prevalence of underweight. It is the result of acute as well as chronic malnutrition. Present study reported higher prevalence of underweight children. Percentage of underweight reported in the present study was higher than NFHS-5 data of India (32.1%), for Rajasthan (27.6%) and for Jaipur city (20.8%)^{4,8}. While other studies reported lower prevalence of underweight as compared to present study findings^{14,15,16}.

Age was found to be related to malnutrition. Malnutrition was highest among the 0.5-1.5-year age group (41.62%). It was found that several girls are more underweight than boys. Similarly to the findings of the present study¹⁷.

More Hindu children were malnourished as compared to children belonging to other religious communities. The percentage of malnourished children was calculated from their own total numbers. But the relation of religion between the underweight and overweight was not found related.

Caste was also related to malnutrition as prevalence of underweight and overweight was found highest in children belonging to other backward class followed by scheduled caste. Similar to the findings of present study¹⁸.

Underweight was linked with the number of children, with most children being underweight, more pronounced in single child household compared to two-child households. Whereas study reported that as underweight was found to be more in the 3 -plus birth order children¹⁹. Only a few children have a normal BMI, and the incidence of overweight children is minimal. This highlights the urgent need for targeted nutritional interventions.

The study indicates a strong relation between parental education levels and children's nutritional status. Children of parents with higher education, particularly graduated, are more likely to have a normal BMI, while underweight children are more common among those with lower educational backgrounds like high school educated and uneducated. This highlights the critical role of parental education in combating child malnutrition, As also stated in many of the studies^{16,20,21,22,23}.

Household monthly family income status affects the purchasing power. Undernutrition is more prevalent in lower-income households, while normal BMI is more commonly found among children from higher income families. This states the clear link between monthly income and children's being underweight, As also supported by other studies^{15,22,23,24}.

The data reveals a troubling association between occupation status and malnutrition among children. Predominantly, children from households where the primary occupation is home making, followed by self-employment and unskilled work, suffer from malnutrition. This indicates that economic challenges tied to these occupations may exacerbate the risk of malnutrition.

It was observed that there was a strong link between hand hygiene practices before cooking meals and child malnutrition. A significant number of malnourished children belong to households where proper handwashing with soap is not practiced, indicating that poor hygiene may be a contributing factor to malnutrition; supported by other study^{25,26}. The information shows a strong relation between child malnutrition and handwashing with soap before feeding meals. Most undernourished children originate from homes where handwashing is not practiced, indicating that poor cleanliness prior to feeding could be a factor in the increased incidence of malnutrition²⁶.

The data shows a notable relationship between Take-Home Ration (THR) consumption and child malnutrition. A considerable number of malnourished children do not consume THR, indicating that lack of access to or utilization of THR may be linked to higher rates of malnutrition.

A significant number of undernourished children come from homes where THR is either fed to livestock or mixed into family meals rather than being provided directly to the child, indicating that inappropriate usage of THR may be a factor in the higher incidence of malnutrition, supported by other study¹². This indicates that the counselling to mothers regarding availing of THR was not adequately provided by Nand Ghar worker or Asha Sahayogini. The mothers are not counseled properly to give THR to children daily. That is why the facility is not being utilized properly. There is a need of prompt counselling by ASHA Sahayogini and Anganwadi worker along with the proper supply of THR to more children.

During the focus group discussion with women several key points emerged regarding their preferences for traditional foods such as dal, daliya, and rice in the THR. They mentioned that these foods are well accepted by the children, the recently introduced premix product are not favored by the children, leading to decrease in acceptance and consumption. One of the participants highlighted a prevalent myth regarding ragi. There is a belief that ragi is not suitable for young children, which discourages mothers from including it in their children's diets despite its nutritional benefit. Additionally, some Bengalis participants mentioned that the premix contains wheat, which is not their staple diet, making it difficult for them to digest.

CONCLUSION:

The nutritional status of children of Nand Ghar beneficiaries aged 6 months to 3 years residing in urban area of Jaipur city was not found satisfactory and the prevalence of underweight was higher than National, Rajasthan as Jaipur city data (NFHS-5). The determinant of malnutrition includes age, gender, religion, category, educational status, occupation, type of family, monthly family income, number of children, BMI of child, MUAC, Immunization status, dietary practices, hand washing practices. Utilization of THR services was found to be poor, which

further reflects on the nutritional status of children. There is a need to improve the delivery of Nand Ghar services, strengthening the nutrition education session and counselling the Nand Ghar beneficiaries for proper utilization of THR to prevent underweight and overweight.

RECOMMENDATIONS:

FOR THE COMMUNITY:

1. Child age specific attention should be given while feeding practices.
2. Give equal attention for both male and female while feeding the child.
3. Having enough food is not enough to ensure children are well-nourished. They also need someone to feed them, provide guidance, and take them to healthcare services.
4. After six months, breastfeeding should be combined with appropriate complementary foods and supplementary foods.
5. Encourage the regular consumption of dairy products, fruits, vegetables, cereals, and pulses.
6. Proper attention should be given to Immunization, ensure all children receive timely immunizations.
7. Promote hand hygiene to reduce disease transmission and improve nutritional outcomes.
8. Encourage and support greater access to educational opportunities, to enhance overall community development and individual well-being.

FOR THE GOVERNMENT, ICDS AND OTHER COLLABORATIVES:

1. Enhance Knowledge about Child Nutrition: The present survey indicates that there is a need to make efforts to impart knowledge about the food to be given to children, this may be done through Education and communication activities.
2. Enhance Maternal Education: Counselling mothers on using Take Home Ration from ICDS via Anganwadi for preparing nutritious supplementary feeds through awareness and training sessions.

3. Implement comprehensive training programs targeting mothers, focusing on the importance of optimal complementary and supplementary feeding practices.
4. Encourage regular and effective communication between healthcare providers and mothers to address their concerns and provide ongoing support.
5. Distribution of simplified pamphlets to the mothers having babies 6 months to 3 years age group depicting the food diversity and frequency of feeds that should be given printed in their native languages.
6. Strengthen Healthcare Provider Guidance: Enhance the training of healthcare professionals, including doctors, nurses, and community health workers especially ASHAs and Anganwadi workers, to provide accurate and consistent guidance on complementary and Supplementary feeding.
7. Regularly monitoring supplementary food distribution programs and interventions to assess their effectiveness and identify areas for improvement.

FOR NAND GHAR OFFICIALS:

1. Training: Regularly train Anganwadi workers in nutrition and health practices.
2. Education: Conduct awareness programs and provide educational materials for beneficiaries.
3. Technology: Use mobile apps and online platforms for tracking growth and health of children.
4. Health Services: Strengthen links with local health centers and involve nutritionists.

Annexure:

Table 1: Distribution of Marital Status of respondents by gender and age.

Age of the respondent	Marital Status		
	Married	Single	Total
Male	17 (8.63%)	1 (0.51%)	18 (9.14%)
22-26	1 (0.51%)	(0.00%)	1 (0.51%)
27-31	1 (0.51%)	(0.00%)	1 (0.51%)
32-36	15 (7.61%)	1 (0.51%)	16 (8.12%)
Female	179 (90.86%)	(0.00%)	179 (90.86%)
22-26	54 (27.41%)	(0.00%)	54 (27.41%)
27-31	99 (50.25%)	(0.00%)	99 (50.25%)
32-36	26 (13.20%)	(0.00%)	26 (13.20%)
Total	196 (99.49%)	1 (0.51%)	197 (100.00%)

Table 2: Distribution of respondents by age and religion, categorized by gender.

Age of Respondent	Religion			
	Hindu	Muslim	Sikh	Total
Female	164 (83.25%)	13 (6.60%)	2 (1.02%)	179 (90.86%)
22-26	46 (23.35%)	8 (4.06%)	(0.00%)	54 (27.41%)
27-31	94 (47.72%)	4 (2.03%)	1 (0.51%)	99 (50.25%)
32-36	24 (12.18%)	1 (0.51%)	1 (0.51%)	26 (13.20%)
Male	18 (9.14%)	(0.00%)	(0.00%)	18 (9.14%)
22-26	1 (0.51%)	(0.00%)	(0.00%)	1 (0.51%)
27-31	1 (0.51%)	(0.00%)	(0.00%)	1 (0.51%)
32-36	16 (8.12%)	(0.00%)	(0.00%)	16 (8.12%)
Total	182 (92.39%)	13 (6.60%)	2 (1.02%)	197 (100.00%)

Table 3: Distribution of children among respondents, categorized by age group and gender.

Age of Respondent	No. of children		
	One child	Two children	Total
Female	103 (52.28%)	76 (38.58%)	179 (90.86%)
22-26	38 (19.29%)	16 (8.12%)	54 (27.41%)

Age of Respondent	No. of children		
	One child	Two children	Total
27-31	58 (29.44%)	41 (20.81%)	99 (50.25%)
32-36	7 (3.55%)	19 (9.64%)	26 (13.20%)
Male	9 (4.57%)	9 (4.57%)	18 (9.14%)
22-26	1 (0.51%)	(0.00%)	1 (0.51%)
27-31	1 (0.51%)	(0.00%)	1 (0.51%)
32-36	7 (3.55%)	9 (4.57%)	16 (8.12%)
Total	112 (56.85%)	85 (43.15%)	197 (100.00%)

Table 4: Distribution of respondents by age and gender

Age of Respondent	Gender		
	Female	Male	Total
22-26	54 (27.41%)	1 (0.51%)	55 (27.92%)
27-31	99 (50.25%)	1 (0.51%)	100 (50.76%)
32-36	26 (13.20%)	16 (8.12%)	42 (21.32%)
Total	179 (90.86%)	18 (9.14%)	197 (100.00%)

Table 5: Distribution of respondents by gender and category.

Gender of Respondent	Category					
	General	Other	OBC	SC	ST	Total
Female	46 (23.35%)	21 (10.66%)	57 (28.93%)	46 (23.35%)	9 (4.57%)	179 (90.86%)
Male	5 (2.54%)	(0.00%)	6 (3.05%)	6 (3.05%)	1 (0.51%)	18 (9.14%)
Total	51 (25.89%)	21 (10.66%)	63 (31.98%)	52 (26.40%)	10 (5.08%)	197 (100.00%)

Table 6: Distribution of educational status of respondents by gender.

Gender of Respondent	Educational Status								
	Graduation	High School (8th to 10th)	Higher secondary (Class 11 and 12)	Literate	Post Graduation	Secondary school (class V and VII)	Uneducated	Up-to Primary school (Class I to Class IV)	Total

Female	14 (7.11%)	34 (17.26%)	15 (7.61%)	38 (19.29%)	10 (5.08%)	26 (13.20%)	35 (17.77%)	7 (3.55%)	179 (90.86%)
Male	2 (1.02%)	6 (3.05%)	3 (1.52%)	2 (1.02%)	1 (0.51%)	(0.00%)	3 (1.52%)	1 (0.51%)	18 (9.14%)
Total	16 (8.12%)	40 (20.30%)	18 (9.14%)	40 (20.30%)	11 (5.58%)	26 (13.20%)	38 (19.29%)	8 (4.06%)	197 (100.00%)

Table 7: occupation distribution of respondents by gender.

Gender of Respondent	Occupation								Total
	Agriculture worker	Home Maker	others	Self-employed	Skilled Worker	Student	Unemployed	Unskilled Worker	
Female	2 (1.02%)	146 (74.11%)	(0.00%)	11 (5.58%)	4 (2.03%)	1 (0.51%)	1 (0.51%)	14 (7.11%)	179 (90.86%)
Male	(0.00%)	2 (1.02%)	1 (0.51%)	12 (6.09%)	1 (0.51%)	(0.00%)	(0.00%)	2 (1.02%)	18 (9.14%)
Total	2 (1.02%)	148 (75.13%)	1 (0.51%)	23 (11.68%)	5 (2.54%)	1 (0.51%)	1 (0.51%)	16 (8.12%)	197 (100.00%)

Table 8: Respondent Monthly Income distribution by gender.

Gender of Respondent	Monthly Income							Total
	6000-15999	16000-25999	26000-35999	36000-45999	46000-55999	66000-75999	196000-205999	
Female	106 (53.81%)	55 (27.92%)	11 (5.58%)	4 (2.03%)	3 (1.52%)	(0.00%)	(0.00%)	179 (90.86%)
Male	7 (3.55%)	6 (3.05%)	2 (1.02%)	1 (0.51%)	(0.00%)	1 (0.51%)	1 (0.51%)	18 (9.14%)

	113 (57.36 %)	61 (30.96 %)	13 (6.60 %)	5 (2.54 %)	3 (1.52 %)	1 (0.51 %)	1 (0.51%)	197 (100.00 %)
Total								

Table 9: Monthly income distribution of respondents by Category.

category of Respondent	Monthly Income							Total
	6000-15999	16000-25999	26000-35999	36000-45999	46000-55999	66000-75999	196000-205999	
General	14 (7.11%)	24 (12.18 %)	7 (3.55 %)	2 (1.02 %)	2 (1.02 %)	1 (0.51 %)	1 (0.51%)	51 (25.89 %)
Other	17 (8.63%)	4 (2.03 %)	(0.00 %)	(0.00 %)	(0.00 %)	(0.00 %)	(0.00%)	21 (10.66 %)
Other Backward Class	35 (17.77 %)	23 (11.68 %)	2 (1.02 %)	3 (1.52 %)	(0.00 %)	(0.00 %)	(0.00%)	63 (31.98 %)
Schedule Caste	39 (19.80 %)	9 (4.57 %)	3 (1.52 %)	(0.00 %)	1 (0.51 %)	(0.00 %)	(0.00%)	52 (26.40 %)
Schedule Tribe	8 (4.06%)	1 (0.51 %)	1 (0.51 %)	(0.00 %)	(0.00 %)	(0.00 %)	(0.00%)	10 (5.08%)
Total	113 (57.36 %)	61 (30.96 %)	13 (6.60 %)	5 (2.54 %)	3 (1.52 %)	1 (0.51 %)	1 (0.51%)	197 (100.00 %)

Table 10: Distribution of Type of family by religion.

Type of Family	Religion			
	Hindu	Muslim	Sikh	Total
Joint family	59 (29.95%)	8 (4.06%)	1 (0.51%)	68 (34.52%)
Mixed family	6 (3.05%)	1 (0.51%)	(0.00%)	7 (3.55%)
Nuclear family	117 (59.39%)	4 (2.03%)	1 (0.51%)	122 (61.93%)
Total	182 (92.39%)	13 (6.60%)	2 (1.02%)	197 (100.00%)

Table 11: Consumption frequency of various food categories among respondents.

Consumption	cereals	Pulses	fruits	vegetables	dairy products	poultry products	Supplementary
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Do not consume.	23 (11.68%)	45 (22.84%)	29 (14.72%)	62 (31.47%)	35 (17.77%)	178 (90.36%)	10 (5.08%)
Every alternate day	7 (3.55%)	59 (29.95%)	52 (26.40%)	35 (17.77%)	65 (32.99%)	3 (1.52%)	14 (7.11%)
Every day	1 (0.51%)	4 (2.03%)	29 (14.72%)	1 (0.51%)	3 (1.52%)	(0.00%)	1 (0.51%)
Every meal	74 (37.56%)	20 (10.15%)	4 (2.03%)	5 (2.54%)	6 (3.05%)	(0.00%)	25 (12.69%)
Every once a week	9 (4.57%)	68 (34.52%)	8 (4.06%)	23 (11.68%)	4 (2.03%)	(0.00%)	1 (0.51%)
Once a day	83 (42.13%)	1 (0.51%)	75 (38.07%)	71 (36.04%)	84 (42.64%)	16 (8.12%)	146 (74.11%)
Total	197 (100.00 %)	197 (100.00%)	197 (100.00 %)	197 (100.00 %)	197 (100.00%)	197 (100.00%)	197 (100.00%)

Table 12: MUAC distribution among children across different age groups.

Age of Child	MUAC			
	Severe	Moderate	Normal	Total
0.5-1.5	1 (0.51%)	27 (13.71%)	66 (33.50%)	94 (47.72%)
1.5-2.5	(0.00%)	8 (4.06%)	70 (35.53%)	78 (39.59%)
2.5-3.5	(0.00%)	2 (1.02%)	23 (11.68%)	25 (12.69%)
Total	1 (0.51%)	37 (18.78%)	159 (80.71%)	197 (100.00%)

Table 13: Immunization status of children across different age groups.

Count of Current age of your child	Immunization Status		
	Completely Immunized	Partially Immunized	Total
0.5-1.5	41 (20.81%)	53 (26.90%)	94 (47.72%)
1.5-2.5	56 (28.43%)	22 (11.17%)	78 (39.59%)
2.5-3.5	23 (11.68%)	2 (1.02%)	25 (12.69%)
Total	120 (60.91%)	77 (39.09%)	197 (100.00%)

Table 14: Age of children and child breastfeeding.

Age of child	Currently Child Breast feeding		
	No	Yes	Total
0.5-1.5	10 (5.08%)	84 (42.64%)	94 (47.72%)
1.5-2.5	36 (18.27%)	42 (21.32%)	78 (39.59%)
2.5-3.5	21 (10.66%)	4 (2.03%)	25 (12.69%)
Total	67 (34.01%)	130 (65.99%)	197(100.00%)

Table 15: Types of food fed to children across different age groups.

Age of Child	Type of food do You usually feed your child					
	Cereals	Dairy Products	Fruits	Pulses (dal, beans etc.)	Supplements	Grand Total
0.5-1.5	55 (27.92%)	1 (0.51%)	1 (0.51%)	1 (0.51%)	36 (18.27%)	94 (47.72%)
1.5-2.5	70 (35.53%)	(0.00%)	1 (0.51%)	(0.00%)	7 (3.55%)	78 (39.59%)
2.5-3.5	24 (12.18%)	(0.00%)	(0.00%)	(0.00%)	1 (0.51%)	25 (12.69%)
Grand Total	149 (75.63%)	1 (0.51%)	2 (1.02%)	1 (0.51%)	44 (22.34%)	197 (100.00%)

Table 16: Age of child and BAL-AHAR premix consumed by your child adequately

Age of child	BAL-AHAR premix provided for your child consumed by your child adequately		
	No	Yes	Total
0.5-1.5	44 (22.34%)	50 (25.38%)	94 (47.72%)
1.5-2.5	43 (21.83%)	35 (17.77%)	78 (39.59%)
2.5-3.5	19 (9.64%)	6 (3.05%)	25 (12.69%)
Total	106 (53.81%)	91 (46.19%)	197 (100.00%)

Table 17: BMI and Age of child

Age of child	BMI			
	Under weight	Normal	Overweight	Total
0.5-1.5	82 (41.62%)	10 (5.08%)	2 (1.02%)	94 (47.72%)
1.5-2.5	67 (34.01%)	9 (4.57%)	2 (1.02%)	78 (39.59%)
2.5-3.5	24 (12.18%)	(0.00%)	1 (0.51%)	25 (12.69%)
Total	173 (87.82%)	19 (9.64%)	5 (2.54%)	197 (100.00%)

Table 18: Immunization status and child gender.

Immunization Status	Child Gender		
	Boy	Girl	Grand Total
Completely Immunized	58 (29.44%)	62 (31.47%)	120 (60.91%)
Partially Immunized	37 (18.78%)	40 (20.30%)	77 (39.09%)
Grand Total	95 (48.22%)	102 (51.78%)	197 (100.00%)

Table 19: Educational status of respondents and their handwashing habits before cooking.

Educational Status of Respondent	Wash Hands before cooking		
	No	Yes	Total
Graduation	1 (0.51%)	15 (7.61%)	16 (8.12%)
High School (8th to 10th)	3 (1.52%)	37 (18.78%)	40 (20.30%)
Higher secondary (Class 11 and 12)	2 (1.02%)	16 (8.12%)	18 (9.14%)
Literate	5 (2.54%)	35 (17.77%)	40 (20.30%)
Post Graduation	(0.00%)	11 (5.58%)	11 (5.58%)
Secondary school (class V and VII)	4 (2.03%)	22 (11.17%)	26 (13.20%)
Uneducated	16 (8.12%)	22 (11.17%)	38 (19.29%)
Up-to Primary school (Class I to Class IV)	1 (0.51%)	7 (3.55%)	8 (4.06%)
Total	32 (16.24%)	165 (83.76%)	197 (100.00%)

Table 20: Respondents 'handwashing habits before feeding vary across different educational levels.

Educational Status of Respondent	Wash Hand before Feeding		
	No	Yes	Total
Graduation	10 (5.08%)	6 (3.05%)	16 (8.12%)
High School (8th to 10th)	24 (12.18%)	16 (8.12%)	40 (20.30%)
Higher secondary (Class 11 and 12)	15 (7.61%)	3 (1.52%)	18 (9.14%)
Literate	30 (15.23%)	10 (5.08%)	40 (20.30%)
Post Graduation	6 (3.05%)	5 (2.54%)	11 (5.58%)
Secondary school (class V and VII)	22 (11.17%)	4 (2.03%)	26 (13.20%)
Uneducated	32 (16.24%)	6 (3.05%)	38 (19.29%)
Up-to Primary school (Class I to Class IV)	7 (3.55%)	1 (0.51%)	8 (4.06%)
Total	146 (74.11%)	51 (25.89%)	197 (100.00%)

Table 21: Distribution of BMI Categories Among Boys and Girls.

Gender of Child	BMI of Child			
	Under Weight	Normal	Overweight	Total
Boy	81 (41.12%)	10 (5.08%)	4 (2.03%)	95 (48.22%)
Girl	92 (46.70%)	9 (4.57%)	1 (0.51%)	102 (51.78%)
Total	173 (87.82%)	19 (9.64%)	5 (2.54%)	197 (100.00%)

Table 22: Distribution of BMI Among Religion.

Gender	BMI of Child			
	Under Weight	Normal	Overweight	Total
Hindu	161 (81.73%)	16 (8.12%)	5 (2.54%)	182 (92.39%)
Muslim	10 (5.08%)	3 (1.52%)	(0.00%)	13 (6.60%)
Sikh	2 (1.02%)	(0.00%)	(0.00%)	2 (1.02%)
Total	173 (87.82%)	19 (9.64%)	5 (2.54%)	197 (100.00%)

Table 23: Distribution of BMI Among Educational Status.

Educational Status	BMI of Child			
	Under weight	Normal	Overweight	Total
Graduation	11 (5.58%)	3 (1.52%)	2 (1.02%)	16 (8.12%)
High School (8th to 10th)	37 (18.78%)	2 (1.02%)	1 (0.51%)	40 (20.30%)
Higher secondary (Class 11 and 12)	18 (9.14%)	(0.00%)	(0.00%)	18 (9.14%)
Literate	35 (17.77%)	5 (2.54%)	(0.00%)	40 (20.30%)
Post Graduation	9 (4.57%)	2 (1.02%)	(0.00%)	11 (5.58%)
Secondary school (class V and VII)	22 (11.17%)	3 (1.52%)	1 (0.51%)	26 (13.20%)
Uneducated	34 (17.26%)	3 (1.52%)	1 (0.51%)	38 (19.29%)
Up-to Primary school (Class I to Class IV)	7 (3.55%)	1 (0.51%)	(0.00%)	8 (4.06%)
Total	173 (87.82%)	19 (9.64%)	5 (2.54%)	197 (100.00%)

Table 24: Distribution of BMI Among Hand washing before cooking.

BMI of Child	washing hands with soap before cooking meals		
	No	Yes	Total
Under weight	31 (15.74%)	142 (72.08%)	173 (87.82%)
Normal	1 (0.51%)	18 (9.14%)	19 (9.64%)
Overweight	(0.00%)	5 (2.54%)	5 (2.54%)
Total	32 (16.24%)	165 (83.76%)	197 (100.00%)

Table 25: Distribution of BMI Among Hand washing before feeding.

BMI of Child	washing hands with soap before feeding meals		
	No	Yes	Total
Under weight	128 (64.97%)	45 (22.84%)	173 (87.82%)
Normal	15 (7.61%)	4 (2.03%)	19 (9.64%)
Overweight	3 (1.52%)	2 (1.02%)	5 (2.54%)

Total	146 (74.11%)	51 (25.89%)	197 (100.00%)
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Table 26: Distribution of Washing hands before cooking and MUAC.

Washing hands before cooking	MUAC			
	Severe	Moderate	Normal	Total
No	(0.00%)	7 (3.55%)	25 (12.69%)	32 (16.24%)
Yes	1 (0.51%)	30 (15.23%)	134 (68.02%)	165 (83.76%)
Total	1 (0.51%)	37 (18.78%)	159 (80.71%)	197 (100.00%)

Table 27: Distribution of Washing hands before feeding and MUAC.

Washing hands with soap before feeding	MUAC			
	Severe	Moderate	Normal	Total
No	(0.00%)	25 (12.69%)	121 (61.42%)	146 (74.11%)
Yes	1 (0.51%)	12 (6.09%)	38 (19.29%)	51 (25.89%)
Total	1 (0.51%)	37 (18.78%)	159 (80.71%)	197 (100.00%)

Table 28: Distribution of BMI Among categories

Category	BMI of Child			
	Under weight	Normal	Overweight	Total
General	44 (22.34%)	5 (2.54%)	2 (1.02%)	51 (25.89%)
Other	17 (8.63%)	4 (2.03%)	(0.00%)	21 (10.66%)
Other Backward Class	57 (28.93%)	5 (2.54%)	1 (0.51%)	63 (31.98%)
Schedule Caste	45 (22.84%)	5 (2.54%)	2 (1.02%)	52 (26.40%)
Schedule Tribe	10 (5.08%)	(0.00%)	(0.00%)	10 (5.08%)
Total	173 (87.82%)	19 (9.64%)	5 (2.54%)	197 (100.00%)

Table 29: Distribution of BMI Among Monthly Income

Monthly Income	BMI			
	Under weight	Normal	Overweight	Total
6000-15999	97 (49.24%)	12 (6.09%)	4 (2.03%)	113 (57.36%)
16000-25999	57 (28.93%)	3 (1.52%)	1 (0.51%)	61 (30.96%)
26000-35999	11 (5.58%)	2 (1.02%)	(0.00%)	13 (6.60%)
36000-45999	4 (2.03%)	1 (0.51%)	(0.00%)	5 (2.54%)
46000-55999	2 (1.02%)	1 (0.51%)	(0.00%)	3 (1.52%)
66000-75999	1 (0.51%)	(0.00%)	(0.00%)	1 (0.51%)
196000-205999	1 (0.51%)	(0.00%)	(0.00%)	1 (0.51%)
Total	173 (87.82%)	19 (9.64%)	5 (2.54%)	197 (100.00%)

Table 30: THR Consumption and BMI of children.

THR Consumption	BMI			
	Under Weight	Normal	Overweight	Total
No	95 (48.22%)	9 (4.57%)	2 (1.02%)	106 (53.81%)
Yes	78 (39.59%)	10 (5.08%)	3 (1.52%)	91 (46.19%)
Total	173 (87.82%)	19 (9.64%)	5 (2.54%)	197 (100.00%)

Table 31: Utilization of THR for various purposes, categorized by BMI status.

Utilization of THR for other purpose	BMI			
	Under Weight	Normal	Overweight	Total
Others	1 (0.51%)	1 (0.51%)	(0.00%)	2 (1.02%)
Yes, Donate it to someone.	36 (18.27%)	2 (1.02%)	(0.00%)	38 (19.29%)
Yes, Feed it directly to the child.	20 (10.15%)	2 (1.02%)	3 (1.52%)	25 (12.69%)
Yes, Feed it to cattle or livestock.	69 (35.03%)	12 (6.09%)	2 (1.02%)	83 (42.13%)
Yes, Incorporate it into family meals.	47 (23.86%)	2 (1.02%)	(0.00%)	49 (24.87%)
Total	173 (87.82%)	19 (9.64%)	5 (2.54%)	197 (100.00%)

QUESTIONNAIRE

Assessing the dietary practices and reasons behind Malnourishment among children age (6 months -3 years) of Nand Ghar beneficiaries of urban Jaipur, Rajasthan.

DATA COLLECTION TOOL

PARTICIPANT INFORMATION SHEET & CONSENT FORM:

I am Pragya Gupta, a student of MBA-Development Management from IIHMR University, Jaipur. I am working on my Dissertation along with an NGO called Mamta – Health Institute of Mother & child, on a study titled “Assessing the dietary practices and reasons behind Malnourishment among children age (6 months -3 years) of Nand Ghar beneficiaries of urban Jaipur, Rajasthan.” for academic purposes, as a part of my degree curriculum.

Malnourishment has a complex history of contextual reasons that are localized to different castes, regions & has geographic variations. Dietary practices differ in different population groups, & this has resulted in certain sections showing a rising trend of poor health indicators for children. Despite the various government policies, India is still lacking behind when it comes to adequate access to safe food & nutrition for all. My study aims to analyze trends of malnourishment among children age (6 months -3 years) of Nand Ghar beneficiaries, & the various challenges surrounding it. This study involves conducting data collection with the help of questionnaires of Nand Ghar beneficiaries & receive THR. This study will also assess the utilization patterns of these rations, along with dietary practices. The study is done under the guidance of Dr. Hemanta Kumar Mishra of IIHMR University, Jaipur along with support from Dr. Shachi Adesh of Mamta Health Institute of Mother & Child.

Your voluntary participation will be very valuable in completing the study. However, your decision to participate, or not, is entirely voluntary and will not in any way influence your work or life. I would like to assure you that the information shared by you will be kept confidential and will be available only to people conducting the study, purely for academic purposes. You will have the right to refuse to answer any question or to withdraw from the study at any point in time, should you wish to. Participation in the study will mean answering all the questions given in the questionnaire or spending about 20 - 30 minutes giving an interview. Please know that your answers to our questions will not be considered “right” or “wrong”. They will be treated as information you provide based on your real-life experiences, observations, or feelings. Participation in the study will not bring any direct benefits to you. There is no financial liability for you to participate in this study. All the information shared by you will be used purely for academic purposes only, & complete confidentiality will be maintained.

If you have fully understood the purpose and context of the study and have no further

query, and agree to take part in this study, kindly give your acknowledgment in this consent form can be in the form of a signature, thumb impression or verbal consent to participate in the study.

Thank you for your valuable time!

Date:

Signature of the Respondent

Form no:

Date:

Starting Time:

S no	Question	Options	Code
Socio-demographic characteristics			
1.	Name of the Anganwadi Cener/Nandghar		
2.	Name of the Respondent?		
3.	What is your gender	1. Male 2. Female 3. Transgender	
4.	How old are you? (In completed years)		
5.	What is your current Marital status?	1. Single (Unmarried) 2. Married 3. Divorced 4. Widow 5. Separated 6. Married but Gauna not performed?	
6.	What is your religion?	1. Hindu 2. Muslim 3. Sikh 4. Christian 5. Atheist 6. Others (Specify)_____	
7.	What is your category?	1. General 2. Other Backward Class 3. Schedule Caste 4. Schedule Tribe 5. Others (Specify) _____	
8.	What is your Educational Status?	1. Uneducated/illiterate 2. Literate 3. Up-to Primary school (Class I to Class IV) 4. Secondary school (class V and VII) 5. High School 8 th to 10 th) 6. Higher secondary (Class 11 and 12) 7. Graduation 8. Post Graduation 9. Professional Course	

S no	Question	Options	Code
		10. Others (Specify)	
9.	What is your Occupation?	1. Home Maker 2. Agriculture worker 3. Self-employed 4. Unskilled worker 5. Skilled worker 6. Student 7. Unemployed 8. Others (specify)	
10.	What kind of family do you have?	1. Nuclear family 2. Joint family 3. Mixed Family	
11.	What is your total Monthly family income?		
Health profile of the mother and Child			
12.	How many Child/children do you have?	1. One child 2. Two children 3. Three children 4. Four or more children	
13.	What is the current age of your child? (In complete days, month, and year) Collect the date of Birth from delivery register and calculate.		
14.	Now, I would like to measure the weight of your smallest child. Weight of the child (In Kilogram and gram.)	_____ (In Kilogram and Gram)	
15.	Now, I would like to measure the height of your smallest child. Weight of the child (In centimeter)	_____ (In centimeters)	
16.	Calculate Body Mass Index of the Child and circle the response. Refer WHO site for calculation.	1. Less than 5th percentile - Underweight 2. 5th to 84th percentile- Healthy weight 3. 85th to 94th percentile – Overweight 4. At or above 95% percentile - Obese	
17.	What is your child's Mid Upper Arm Circumference? (in Centimeters)	_____ (In Centimeters)	

S no	Question	Options	Code
	Take the measurement with the help of measuring Tape.		
18.	Is your child immunized?	1. Completely Immunized 2. Partially Immunized 3. Not Immunized at all	
Dietary practices of the Child and Mother			
19.	Did you ever breastfeed your child?	1. Yes 2. No (If answer is No Skip to Q 23)	
20.	Currently, is your smallest child breastfeeding?	1. Yes 2. No (If answer is No Skip to Q 23)	
21.	How often do you feed your child in a day now or (earlier)?	1. Less than 3 times 2. 3 times 3. More than 3 times 4. Does not feed, currently as She/He grown up. 5. Others (Specify)	
22.	For how many periods did you continue breastfeed your child?	1. Up-to 6 months 2. Up-to one year 3. One year to two years 4. More than two years 5. Others (Specify)	
23.	Did you face any challenges while breastfeeding to your child?	1. No challenge 2. Insufficient milk production 3. Pain or discomfort 4. Other_____	
24.	Did you give any outside milk to your child?	1. Yes 2. No	
25.	Did your child get any supplementary food from any source?	1. Yes 2. No (Skip to Q29)	
26.	Form where did you get supplementary food for your child?	1. Anganwadi Center 2. Nandghar 3. School 4. Others (Specify) 3. Do not receive anything	
27.	What did you get in supplementary food?		
28.	Did you get any complementary food from any source?	1. Yes 2. No (Skip to Q 31)	

S no	Question	Options	Code
29.	What did you get in complimentary food?		
30.	Form where did you get complimentary food for your child?	1. Anganwadi Center 2. Nandghar 3. School 4. Others (Specify) 5. Do not receive anything	
31.	What type of food do you usually feed your child? (Multiple answer may be possible)	1. Cereals (rice, wheat etc.) 2. Pulses (dal, beans etc.) 3. Fruits 4. Vegetables 5. Dairy Products 6. Poultry products (eggs, Meat etc.) 7. Supplements 8. Others (specify)_____	
32.	How often does your child consumes cereals ?	1. Every meal 2. Once a day 3. Every day 4. Every alternate day 5. Every once a week 6. Do not consume. 7. Others_____	
33.	How often does your child consumes Pulses ?	1. Every meal 2. Once a day 3. Every day 4. Every alternate day 5. Every once a week 6. Do not consume. 7. Others_____	
34.	How often does your child consumes fruits ?	1. Every meal 2. Once a day 3. Every day 4. Every alternate day 5. Every once a week 6. Do not consume. 7. Others_____	

S no	Question	Options	Code
35.	How often does your child consumes vegetables ?	1. Every meal 2. Once a day 3. Every day 4. Every alternate day 5. Every once a week 6. Do not consume. 7. Others_____	
36.	How often does your child consume dairy products ?	1. Every meal 2. Once a day 3. Every day 4. Every alternate day 5. Every once a week 6. Do not consume. 7. Others_____	
37.	How often does your child consume poultry products ?	1. Every meal 2. Once a day 3. Every day 4. Every alternate day 5. Every once a week 6. Do not consume. Others_____	
38.	How often does your child consume Supplementary or complimentary food given by Aanganwadi or Nandghar? Check Q 26 and Q 29, if answer is Yes, then ask otherwise to skip to Q 39)	1. Every meal 2. Once a day 3. Every day 4. Every alternate day 5. Every once a week 6. Do not consume. 7. Others_____	
39.	Are there any myths in your community about what foods are suitable or Harmful for children health?	1. Yes 2. No	
40.	What are those? Can you briefly talk about those?		
41.	Do you wash your hands with soap before cooking meals for your child/children?	1. Yes 2. No	
42.	Do you wash your hands with soap before feeding your child?	3. Yes 4. No	

S no	Question	Options	Code
43.	How do you wash your utensils after cooking meals for your child?	1. With Soap and water 2. With Ash and water 3. Others (please specify) —	
Utilization patterns of rations & reasons for malnutrition			
44.	Are you aware of THR (Take Home Rations) provided by Nand Ghar?	1. Yes 2. No (End here)	
45.	Have you received THR in a timely manner?	1. Yes 2. No	
46.	Is the BAL-AHAR premix provided for your child consumed by your child adequately?	1. Yes 2. No	
47.	How would you rate the quality of THR provided by Nand Ghar?	1. Excellent 2. Good 3. Fair 4. Poor	
48.	Do you utilize the THR provided for other purpose?	1. Yes, Feed it directly to the child. 2. Yes, Incorporate it into family meals. 3. Yes, Donate it to someone. 4. Yes, sell it to someone. 5. Yes, Feed it to cattle or livestock. 6. Others (Specify) —	
49.	Are there any specific reasons why you may not always use THR for your child's meals?	1. Lack of awareness about its benefits 2. Insufficient quantity provided. 3. Preference for other foods 4. Cultural or religious dietary restrictions 5. Did not like the taste. 6. Other (please specify) — —	
50.	Have you received any guidance or training on how to prepare and use THR for your child's meals?	1. Yes 2. No	
51.	What suggestions would you give to Nandghar officials to improve it.		

Dear Sir/Madam, thank you for giving me your valuable time, responses, and suggestions. We shall analyze it and try to identify the reasons for malnutrition at Jaipur city.

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