

Undernutrition among Children in Andhra Pradesh and Strategies for Control

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Abstract

India continues to have serious levels of widespread hunger and under nutrition prevailing among under five children in India. India has performing very vulnerable on the global hunger index 2022; India ranked a very low 107th out of the 121 countries. The Indian Institute of Population Sciences (IIPS) published national family health survey NFHS 1-NFHS 5 fact sheets provides selected information on 3 indicators like underweight, stunting, wasting which are related under nutrition, health and nutrition for Andhra Pradesh's under five children. This paper explores to the major indicators related to nutritional status of under five children in last one decade is making a comparative analysis of all the NFHS 1-5 fact sheets data. This paper is divided in 3 sections and each of them focus on the important indicators of nutritional status of under five children such as underweight, stunting, wasting of urban and rural area's children. Identify the inconsistencies existing among the good and poor performing levels of urban and rural areas of Andhra Pradesh since 2005 to 2020.

Keywords: Under nutrition; Underweight; Stunting; Wasting; NFHS fact sheets

Introduction

Nutrition is the focal point for health and well-being. Nutrition is a basic right but it remains unmet for many young children below five years. Nutritional status is influenced by food, health, care, education, social, political factors and economic status [1]. Good nutritional status results when children have affordable, diverse, nutrition rich food, appropriate maternal and child care practices, adequate health services and a healthy environment including safe water, sanitation and good hygiene. Importance of these factors differ from country to country. Understanding the immediate and underlying causes of under nutrition in a given context is critical to deliver appropriate, effective and sustainable solutions and meeting the needs of the most vulnerable people [2].

Malnutrition is a common problem in children below 5 years of age, especially chronic malnutrition. Malnutrition can be described by variety of health problems, including stunted growth, weight loss and impairment of intellect and weakened infection [3]. Severe cases of malnutrition can lead to death. Malnutrition in India has been called as a "the silent emergency". Three types of malnutrition are Severe Acute Malnutrition (SAM), Moderate Acute Malnutrition (MAM) and chronic malnutrition. Protein energy malnutrition generally manifests early, in children between age group 6 months and 2 years and associated with early weaning and delayed complementary foods, a low protein diet and severe infections.

Literature Review

Prompting concern that the COVID-19 pandemic could exacerbate the health and nutrition crisis among the poorest of the poor, the women and child development ministry estimates that there are 17,76,902 (17.76 lakh/1.7 million) Severely Acute Malnourished children (SAM) and 15,46,420 (15.46 lakh/1.5 million) Moderately Acute Malnourished (MAM) children as of October 14, 2021. The total 33, 23,322 (33.23 lakh/3.3 million) is a compilation of data from 34 states and union territories.

Prevalence of undernourishment in India for the triennium periods 2015-17, 2016-18, 2017-19 are 14.8%, 14.5% and 14.0% respectively. The global hunger index which is calculated on the basis of total undernourishment of the population, child stunting, wasting and child mortality places India at the 107 spot among 121 countries. Government conducts National Family Health Survey (NFHS) at regular intervals. As per recently released NFHS report, child stunting in the country has decreased from 38.4% (NFHS-4, 2015-16) to 35.5% (NFHS-5, 2019-21) and child wasting has decreased from 21.0% (NFHS-4, 2015-16) to 19.3% (NFHS-5, 2019-21). Further, percentage of underweight children has gone down from 35.8% (NFHS-4, 2015-16) to 32.1% (NFHS-5, 2019-21). Child wasting at 17.3% and child stunting at 34.7%, have remained unchanged in 2021 as compared to 2020.

As the district Andhra Pradesh indicated that there were 80,229 stunted children, 32,885 wasted children, 9,795 severely wasted children, 62,271 underweight children, 513 overweight/obesity children and 1,26,961 anaemia children.

Results and Discussion

The NFHS fact sheets of 2005-2006, 2015-2016 and 2019-2020 were analysed. The data was segregated in the rural and urban categories across indicators of malnutrition like underweight, stunting and wasting. The observations are shown in Table 1 and Figure 1.

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NFHS	Age group	Under weight		Stunted		Wasted	
		Urban	Rural	Urban	Rural	Urban	Rural
NFHS-3* (2005-06)	<5 years	23.9	33.0	33.2	41.1	14.6	15.1
NFHS-4** (2015-16)	<5 years	28.4	33.1	28.3	32.5	15.5	17.8
NFHS-5*** (2019-20)	<5 years	25.1	31.4	23.1	34.2	17.6	15.5

Note: National family health surveys (2005-2020) in Andhra Pradesh.

Table 1: This table shows nutritional status of under five children in Andhra Pradesh.

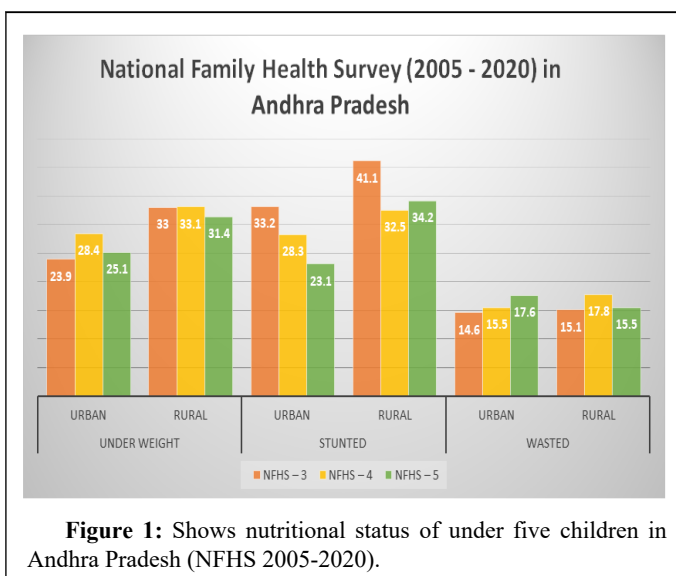


Figure 1: Shows nutritional status of under five children in Andhra Pradesh (NFHS 2005-2020).

Observations

From the data of national family health survey 2005 to 2020 following observations were made: There are various factors like that (underweight, stunted, wasted) showed an association with under nutrition among under five children. Rural areas are significantly higher proportion of under nutrition in Andhra Pradesh.

The data of National Family Health Survey (NFHS) from 2005-2020 with regards to children below five years shows that comparatively the underweight percentage is more in rural areas than in urban areas. According to NFHS 3, 4 and 5 the underweight percentage among rural areas was 33.0%, 33.1% and 31.4% respectively. Whereas the same data in urban areas was repeated as 23.9%, 28.4% and 25.1%.

When the data related to stunted children below five years is observed same trend as underweight was seen. The percentage of stunted children in urban areas during NFHS-3 was 33.2, during NFHS-4 was 28.3 and during NFHS-5 was 23.1 and the same in rural areas were found to be 41.1, 32.5 and 34.2 respectively [4].

The data about wasted children also showed that comparatively the percentages are more in rural areas (15.1, 17.8 and 15.5 during NFHS-3, NFHS-4 and NFHS-5 respectively) than in urban areas expect during NFHS-5 (2019-2020) when the percentage of wasted children was 2.1 more than rural areas.

The determinants of underweight, stunted and wasting among children were found to be socio economic status, mother’s education, child feeding practices, birth weight and birth order, ARI (Acute Respiratory Infections), diarrhoea, health of child and mother’s nutritional status.

Though, the government is taking care of your children through different programmes like ICDS, MMS (Mid-day Meals Scheme), POSHAN Abhiyaan and PMMVY (Pradhan Mantri Matru Vandana Yojana) and in Andhra Pradesh (Govt.). YSR Sampoorna Poshana and YSR Sampoorna Poshana plus. Still the prevalence seems to be still prevailing. After the COVID pandemic it might have worsened future. So there is a need to take necessary action in rural areas in their regard [5].

Implications

As the prevalence of undernutrition among under five children in rural areas is increasing, there is a need to address multidisciplinary issues such as food insecurity, low wealth index, home environment, feeding practices and nutrition education for mothers or care givers, prices of staple foods and introduction of food assistant programme.

As mother’s education seems to be one of the determinants of undernutrition among children, mother can be educated in these aspects [6].

Conclusion

Prevalence of undernutrition among under five children is relatively high and varied widely depending on the assessment methodology adopted and there are limited studies on assessment of over nutrition. The distribution of risk factors and its influence on malnutrition among children in a given set up should be analyzed in planning diverse control measures. Strengthening public health interventions for mild malnutrition cases among the vulnerable groups with a focus on socioeconomic development and research on overweight, obesity and its etiological factors in the country are the prerequisites required to tackle malnutrition among under five children in India.

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