CHILD MALNUTRITION IN UTTAR PRADESH: INTER DISTRICT ANALYSIS

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ABSTRACT

This paper is an attempt to explore the status of child malnutrition in Uttar Pradesh as well as determinants of malnutrition. In this paper malnutrition has analyzed in children in reference of the three indicator of malnutrition such; Underweight (Weight-for-Age (WAZ)), Wasting (Weight-for- Height (WHZ)) and Stunting (Height- for- Age (HAZ). With the help of secondary data this paper is exploring condition of child Malnutrition in 19 major districts Uttar Pradesh. Poor nutrition keeps the state's children stunted and vulnerable to infections. After analyzing the secondary data, nutritional status of children below age 5 years has not found well. Many factors are responsible for child malnutrition as; inadequacies in food, health and care for infants and young children, especially in the first two and three years of life. As well as at the households and community level, women's literacy rate, households' food security, socio- economic conditions further contribute to children's nutrition outcomes. Formulation of a nutrition policy and overall long term planning to improve production and supplies of food, ensure its equitable distribution and programs to increase the purchasing power of people is pre requisite to combat to malnutrition in children.

Keywords: Child Malnutrition, HAZ, WAZ, WHZ

INTRODUCTION:

An economy that is going from strength to strength can be benefiting from the demographic dividend of a young and growing workforce. India is the largest democracy of the world and also home to the largest number of children in the world, significantly larger than the number in China.[1] India has 20 per cent of the 0-4 years' child population of the world. The number of live births in the country is estimated to be 27 million[2], which again constitutes 20 per cent of the total number of live births in the world. The recent census 2011 represents the total number of children in the age group 0-6 years as per the population totals are 158.8 million[3] while in Uttar Pradesh

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[1] According to the *World Population Prospects: 2008 Revision* population database, the child population in the age-group

0-4 for India in 2010 is estimated to be (medium variant) 126 million against 88 million in China. The population of

children in the age group 0-14 for the same year for India is estimated as 374 million as compared to 269 million in China
[2] State of the World's Children' Report 2010: UNICEF
[3] Census India 2011.

total number of children in the age group 0-6 years are 29.73 million[4] which constitutes 18.7% of total number of child population age group 0-6 years. Children undoubtedly are the most crucial segment of our population, due to not only to their absolute numbers, but also because these determining years foundations are laid for adult life. Therefore, sound knowledge of needs and healthy nutrients for children are essential for guiding and developing them properly. But this most important segment of the population is neglected from today's economic shine. Many children are dying due to malnutrition and lack of medicines.

Malnutrition, a critical health problem of childhood in developing countries, is widely accepted as main cause of mortality and morbidity among children. Malnutrition is simply defined as imperfect or faulty nutrition. Malnutrition is one of the major killers of children in India as well as in Uttar Pradesh.

OBJECTIVES AND METHODOLOGY:

This paper is an attempt to explore the status of child malnutrition in Eastern Uttar Pradesh as well as determinants of malnutrition. In this paper malnutrition has analysed in children in reference of the three indicator of malnutrition such; Underweight (Weight-for-Age (WAZ)), Wasting (Weight-for- Height (WHZ)) and Stunting (Height- for- Age (HAZ). With the help of secondary data this paper is exploring condition of Malnutrition in 19 major districts of Uttar Pradesh.

RESULTS :

(a) Status of Child Malnutrition

Poor nutrition keeps the state's children stunted and vulnerable to infections. After analyzing the secondary data, nutritional status of children below age 5 years has not found well. Out of 19 major districts of Uttar Pradesh only Ballia (39.6%) and Basti (39.6%) district is near to national level (38.4%) stunted children. In case of wasting only four districts; Pratapgarh (23.8%), Jaunpur (27.3), Varanasi (25.3) and Sonbhadra (22.5) has more percentage of wasting children than national level (21%). In terms of Underweight 10 districts out of 19 major districts are in worst condition in comparison to national level.

Table 1 also represents the status of child malnutrition below 5 years in respect of stunting, wasting and underweight in 19 major districts of Uttar Pradesh. Siddharth nagar district has highest percentage of child malnutrition in respect to stunting while Ballia has lowest child percentage. In case of wasting Jaunpur district has highest percentage of child malnutrition and Ballia has lowest. Also Jaunpur has highest percentage of children in terms of underweight compared to other districts and Sant Kabir Nagar has lowest percentage of underweight children.

Table 2 shows top five and low five district in reference to stunting in children among 19 major districts. Siddharth nagar, Maharajganj, Sant Ravidas nagar, Sant Kabir Nagar and Mirzapur districts have highest

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[4] Census India 2011.

percentage of child malnutrition in reference to stunting; it means these districts shows worst condition in terms of stunting with comparison to other districts. Ballia, Azamgarh, Mau, Deoria and Pratapgarh have lowest percentage. That is, it represents the better position.

Table 3 shows top five and low five district in reference to wasting in children among 19 major districts. Jaunpur, Varanasi, Pratapgarh, Sonbhadra and Sant Ravidas Nagar are top five districts have highest percentage of child malnutrition in reference to wasting; it means these districts shows worst condition in terms of wasting with comparison to other districts. Ballia, Deoria, Gazipur, Azamgarh, and Basti districts have lowest percentage. That is, it represents the better position.

Table 4 represents top five and low five district in reference to underweight in children among 19 major districts. Jaunpur, Sant Ravidas Nagar, Mirzapur, Sonbhadra and Varanasi are top five districts have highest percentage of child malnutrition in reference to underweight; it means these districts shows worst condition in terms of underweight with comparison to other districts.. Ballia, Deoria, Gazipur, Azamgarh, and Basti are distrcts have lowest percentage. That is, it represents the better position.

Table 1
The state of malnutrition in children (Below 5 years) in districts of Eastern Uttar Pradesh

S.No.	Name of District	% of Stunting Height-for-age (HAZ)	% of Wasting Weight-for-height (WHZ)	% of Underweight Weight-for-age (WAZ)
1.	Gorakhpur	42.1	19.9	35.2
2.	Varanasi	44.7	25.3	45.4
3.	Allahabad	43.8	20	43.4
4.	Sant Ravidas Nagar	51.4	21.5	49.1
5.	Pratapgarh	41.3	23.8	42.6
6.	Mirzapur	49.1	20.8	46.5
7.	Jaunpur	48	27.3	52.7
8.	Chandauli	43.3	17.8	34.8
9.	Ghazipur	41.4	17.7	31.7
10.	Kushinagar	45	14.6	35.1
11.	Deoria	41.2	14.1	31.6
12.	Azamgarh	40	16.9	33.3
13.	Mau	40.9	19.7	35.1
14.	Maharajganj	53.3	12.5	37.1
15.	Basti	48.9	14.1	33.3
16.	Sant Kabir nagar	50.5	10.9	36.5
17.	Siddharth nagar	57.9	13.7	43.5
18.	Ballia	39.6	14.1	31.1
19.	Sonbhadra	45.9	22.5	46.4

Source: International Institute for Population Studies. 2015-2016. *National Family Health Survey (NFHS-4); Key Findings from NFHS-4. Uttar Pradesh.*

Table 2

Top five and Low five districts in reference of stunting in children (Below 5 years) of Eastern Uttar Pradesh

S.No.	Top five		Low five	
1.	Siddharth nagar	57.9%	Ballia	39.6%
2.	Maharajganj	53.3%	Azamgarh	40%
3.	Sant Ravidas nagar	51.4%	Mau	40.9%
4.	Sant Kabir Nagar	50.4%	Deoria	41.2%
5.	Mirzapur	49.1%	Pratapgarh	41.3%

Source: 2015-2016. *National Family Health Survey (NFHS-4)*

Table 3

Top five and Low five districts in reference of wasting in children (Below 5 years) of Eastern Uttar Pradesh

S.No.	Top five		Low five	
1.	Jaunpur	27.3%	Ballia	31.1%
2.	Varanasi	25.3%	Deoria	31.6%
3.	Pratapgarh	23.8%	Gazipur	31.7%
4.	Sonbhadra	22.5%	Azamgarh	33.3%
5.	Sant Ravidas Nagar	21.5%	Basti	33.3%

Source: 2015-2016. *National Family Health Survey (NFHS-4)*

Table 4

Top five and Low five districts in reference of underweight in children (Below 5 years) of Eastern Uttar Pradesh

S.No.	Top five		Low five	
1.	Jaunpur	52.7%	Sant Kabir Nagar	10.9%
2.	Sant Ravidas Nagar	49.1%	Maharajganj	12.5%
3.	Mirzapur	46.4%	Siddharthnagar	13.7%
4.	Sonbhadra	46.4%	Deoria	14.1%
5.	Varanasi	45.4%	Basti	14.1%

Source: 2015-2016. *National Family Health Survey (NFHS-4)*

(b) Selected Determinants of Child Malnutrition

Selected Determinant can be explore with the help of analysis of table 5 which represent relationship between some selected influencing factors or determinants of malnutrition and three indices of child malnutrition. After analyzing the table 5, it is very clear that child malnutrition is caused by inadequacies in food, health and care for infants and young children, especially in the first two and three years of life. As well as at the households and community level, women's literacy rate, households' food security, socio- economic conditions further contribute to children's nutrition outcomes.

Table 5
SELECTED DETERMINANTS OF MALNUTRITION IN DISTRICTS

Districts	Dependent Variable(Malnutrition in Children)			Independent Variables (Determinant factors of Malnutrition)						
	Stunting (%)	Wasting (%)	Under weight (%)	Early initiation of Breastfeeding[5] (%)	Adequate Diet[6] (%)	Women who are literate (%)	Households with an improved drinking-water source (%)	Households involved in agriculture(%)	Households living in a pucca house (%)	Households below poverty line (%)
SN	57.9	13.7	43.5	19	1.9	47.1	99.7	64.2	75.9	32.4
MH	53.3	12.5	37.1	35	6.3	47.1	99.3	64.4	70.4	39.4
SRN	51.4	21.5	49.1	20.5	9.7	63.4	86.4	23.6	62.5	48.8
SKN	50.5	10.9	36.5	29.2	7	56	99.7	37.5	71.3	40.6
MZ	49.1	20.8	46.5	28.7	8	60.7	88.1	38.6	49.5	35.1
BL	39.6	14.1	31.1	25.1	10.7	65	98.5	57.9	66.7	31.3
AMH	40	16.9	33.3	26.2	6.4	70.7	99.5	29.1	66.4	39.7
MAU	40.9	19.7	35.1	22.5	10.1	67.6	99.5	37.7	68.9	19.9
DA	41.2	14.1	31.6	20.1	1.6	64.4	99.5	51.6	80.1	39.6
PRH	41.3	23.8	42.6	26.4	1.9	64.1	92.5	64.6	50.7	47.4
JNU	48	27.3	52.7	25.1	6.1	67.4	95.4	43.2	62.9	24.3
VNS	44.7	25.3	45.4	18.3	4	70.5	96	10.2	77	20.7
SDR	45.9	22.5	46.4	36.9	4.9	56.6	87.5	40.1	22.9	38.3
BT	39.6	14.1	31.1	23.7	2.7	58.4	99.8	71.1	71.9	59.4
GP	41.4	17.7	31.7	27.4	2.7	64.4	99.1	46	61.9	27.9
GKP	42.1	19.9	35.2	37.9	3.8	66.4	99.2	38	75.5	24.2
ALD	43.8	20	43.4	35	6.3	66.3	92.2	36	57.4	27.2
KN	45	14.6	35.1	27.4	8.6	56.4	97.6	59.8	62.1	44.4
CHD	43.3	17.8	34.8	26.6	3	65.1	88.9	47.5	56.4	22.3

Source: 2015-2016. *National Family Health Survey (NFHS-4) &*
http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132118

(SN= Sidhharth Nagar, MH= Maharajganj, SRN= Sant Ravidas Nagar, SKN= Sant Kabir Nagar, MZ= Mirzapur, BL=Ballia, AMH= Azamgarh, MAU, DA=Deoria, PRH= Pratapgarh, JNU= Jaunpur, VNS= Varanasi, SDR= Sonbhadra, BT= Basti, GP= Gazipur, GKP= Gorakhpur, ALD=Allahabad, KN=Kushinagar, CHD=Chanduali)

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[5] Children under age 3 years breastfed within one hour of birth9
[6] Total children age 6-23 months receiving an adequate diet.(%) .

CONCLUSION AND SUGGESTIONS:

With the help of analysis it can be conclude that there is much differences between status of child malnutrition among 19 major districts of Uttar Pradesh. Major determinant factors of Malnutrition are inadequacies in food, health and care for infants and young children as well as women's literacy rate, households' food security, socio-economic conditions further contribute to children's nutrition outcomes. To combat with child malnutrition nutritional planning should be very effective on ground level. As well as formulation of a nutrition policy and overall long term planning to improve production and supplies of food, ensure its equitable distribution and programs to increase the purchasing power of people is pre requisite to combat to malnutrition in children. To help increasing the capacity of people to buy nutritious food in adequate quantity, income generating activities for the weaker sections of the community, making available good quality food in affordable prices through proper public distribution system, etc are some of the plans for the government to implement. On the other hand government should approach towards improved health care system, Nutrition education, early detection of malnutrition and intervention and Nutrition supplementation.

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