

GENDER SENSITIZATION IN NUTRITIONAL PROFILE OF CHILDREN (0-5 YEARS) IN NAWARGAON DIST- CHANDRAPUR

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Abstract : India has largest child population in the world. About 157.86 million children, constituting 15.42 percent of India's population are below the age of 5 years. More than 60 percent of children are malnourished living in South Asia. In this study, socio economic children in seven *Anganwadi* correlated with health and nutritional status is focused in the view of gender sensitization.

The sample frame consists of 255 children. A self-structured interview schedule was used to collect the data. Interview method was chosen for collecting data from the *Anganwadi* Teacher. The general objective of the study has to prepare nutritional profile of children in the age group of (0-5 years) in villages of Nawargaon.

Out of 255 children 55.29 percent boys than girls population constituted 44.70 percent. Almost all the Children were in the stage of underweight and risk of malnutrition, especially female children had severe malnutrition. It is also seen that the nutrition including iron, calcium and minerals by the selected children were below the RDA. Although government provides nutritional packed food for children below five years in rural areas but the nutritional status is yet not to be improved as one out of ten children are malnutrition. This condition needs to be changed by the better implementation of maternal awareness, education and child health programmes.

Index Term: 0-5 year's children's, Anganwadi, Nutritional status.

Introduction

India with a population of 1.25 billion population stand at the second position as the most populous country in the world after China. India comprises almost 13.1 % of child population aged 0-6 years in 2011 census. According to the World Health Organisation (WHO) globally, 30% of children under five are estimated to be stunted and 18% have low weight-for-height, India alone represents 34 percent of the world's stunted children. (Bryce. J. et al, 2008). Children of today are tomorrow's citizens; hence it is very necessary to provide better health care facilities to them. Millions of children are at risk of becoming malnourished. Every third child in India is malnourished. Infant and child mortality rates still remain very high. Child mortality is very sensitive indicator for the socio-economic development of the country.

Nutrition and health care both are very prominent factor in the early stages of life. It is the basic element of their overall mental, the growth and physical development of children. Nutrition acts both as an essential element to develop the body and increase the rate of child survival on the other. Lack of adequate nutrition increased the risk of mortality. Malnutrition among the children reduced significantly over the time, but still the number of malnourished children is very high in the country which makes an international issue of children.

According to UNICEF over two million children die every year from preventable diseases in India. IMR reports pointed accordingly 63 deaths behind every 1000 live births. In the record 47% of the deaths occur within the first week after birth. According to 2011 census, the total number of children aged 0-6 years is 158.79 million which is reduced by 3.1 percent compared to the child population in 2001 census.

The general objective of the study has to prepare nutritional profile of children in the age group of (0-5 years) in view of gender sensitization with their weight and height in village of Nawargaon.

Material and Method

Collection of Data - The sample frame consists of 255 children. A self-structured interview schedule was used to collect the data. Interview method was chosen for collecting data from the *Anganwadi* Teacher. All the mothers were interviewed in their home itself. Properly arranged oral questionnaire method can be given reliable result on diet survey. (Park.2011) The health condition of children were observed at the time of data collection. The data gathered were cross checked with the information available in the *Anganwadi*. A total of 255 children were examined infield practice area during January-March 2019.

An attempt was also made to take the history of any major illness in last 6 months.

Anthropometry - All children were divided in small groups and anthropometric measurements were taken using standardised equipments. Length of children up to the age of two years was measured with the child on horizontal measuring scale. Height of children above 2 year of age was measured by the child standing on a horizontal surface against a vertical measuring scale. Standing height was measured up to nearest of 0.1 cm. The child was made to stand against the scale without shoes, heels together and shoulder, buttocks and heels touching the vertical surface. Height was recorded with a head piece touching the top of the head when child was looking straight and arms hanging by the sides in a natural manner. Weight was recorded on a salter type of portable weighting machine up to nearest 0.1kg for children less than two years with minimal clothes. Children more than two year were weighed with minimal clothes and bare feet with a weighing machine pretested for accuracy. The WHO standards data were used for comparing the present data.

Observation

In this study, the data consist of 255 children, Out of 255 children 55.29 percent boys than girls population constituted 44.70 percent. Almost all the Children were in the stage of underweight and risk of malnutrition, especially female children had severe malnutrition. It is also seen that the nutrition including iron, calcium and minerals by the selected children were below then standard value. It was observed that children belonging to separated families are more likely to be malnourished as compared to children from joint and nuclear families. With increasing years of schooling in mothers the nutritional status of children improves except for the category of height for age where there was a marginal increase in cases of severe malnutrition. But this was not statistically significantly.

Table 1. Age and Sex wise Height and Weight Distribution of the Children

Sr. No.	Age (in years)	No. of Male	Weight (Kg)	Height (in cm)	No. of Female	Weight (Kg)	Height (in cm)
1	0 - 1	37	1.5-6.0	50-58	28	1.5-5.7	47-63
2	1 - 2	29	5.8-10.6	57-74	18	5.4-9.7	60-70
3	2 - 3	30	7.5-13.5	71-88	25	6.2-13	68-82
4	3 - 4	24	9-14.9	72-90	25	8.3-14.7	82-94
5	4 - 5	21	11.8-18.2	79-97	18	12.4-16.2	86-97

Table 2: Comparison of the Mean Weight (Kg.) and height (cm) of Male Children with Standard

Sr. No.	Age (in years)	No. of Male	Weight Average(Kg)	Weight Average(Kg) Standard	Height Average (in cm)	Height Average (in cm) Standard
1	0 – 1	37	3.75	7.3	54	65.48
2	1 – 2	29	8.2	12.3	65.5	85.6
3	2 – 3	30	10.5	14.6	79.5	94.9
4	3 – 4	24	11.95	16.7	81	102.9
5	4 – 5	21	15	18.7	88	109.9

Table 3: Comparison of the Mean Weight (Kg.) and height (cm) of Female Children with Standard

Sr. No.	Age (in years)	No. of Female	Weight Average(Kg)	Weight Average(Kg) Standard	Height Average (in cm)	Height Average (in cm) Standard
1	0 – 1	28	3.6	6.78	55	64.56
2	1 – 2	18	7.55	11.8	65	84.5
3	2 – 3	25	9.6	14.1	75	93.9
4	3 – 4	25	11.5	16.0	88	101.6
5	4 – 5	18	14.3	17.7	91.5	108.4

(Source: *Nutrient Requirements and Recommended Dietary Allowances for Indians, I.C.M.R. 1990.*)

Result and Discussion

Among 255 children, 114 (44.70%) girls, and 141 (55.29%) boys were studied. The proposed population consisted of lower socio-economic class have 14.50% boys and 10.98% girls from 0-1 years old were weak and underweight. The nutritional status of these children was not satisfactory, even some were at risk of malnutrition. The results were statistically significant. Paternal literacy level is indirectly associated with child nutritional status. Educated family may be important because they play more active role in certain health-seeking decisions & devote some earnings on it. Literacy rate among poor class mother was low. Only 35% women were literate and 67% were aware about nutrition. There were only few mothers who were educated below graduation and another were below under higher secondary school. The results also showed that nutritional status of 50.9% children of illiterate fathers' were malnourished as compare to 19.5% children of literate fathers. Similar work carried out by Badami SV *et al*,2012, and Mamulwar M *et al*,2014.

Under nutrition is here being measured in terms of thinness, that is, low body mass index (BMI) adjusted for age (Cole et al. 2007). In 0-2 year age group, the mean weight of male children was lower than the National Center for Health Statistics (NCHS) standard. All children showed stunted growth. The mean weight of male children of 2-5 years was lower than the NCHS Standard as well as the mean weight of female children in the age group of 0-2 years was lower than the NCHS standard. (K.S.Pushpa and D.Jancy Rani, 2015)

Despite the high overall under nutrition figures, the global and national discourse on malnutrition in India mostly focuses on children under five years. According to IFPRI, 15.2 per cent of the total population is undernourished, 15.1 of children under five are wasted, 38.7 children under five are stunted and the under-five mortality rate was 4.8 per cent in 2016 (IFPRI, 2016). The World Bank estimates that India is one of the world's highest ranking countries in terms of the sheer number of malnourished children, with the prevalence of underweight children nearly double that of Sub-Saharan Africa (World Bank 2009). India adopted the World Health Organization's child growth measures in 2008. Before these measures were adopted in 2006, almost half of India's under 5 children were stunted, or too short for their age; 20% were wasted, or too thin for height; and 43% were underweight, with some states, including Madhya Pradesh, Jharkhand, and Bihar, faring worse than others in terms of underweight children. Epidemiological data reveals that nutritional inadequacy greatly increases susceptibility to severe infections, and is an important risk factor for illness and death (Bourke et al. 2016; Franca et al. 2009), particularly affecting millions of pregnant women and young children (Black et al 2013). Indispensably malnutrition relationship with immune suppression and infection is aggravated by the profound effect of many infections on nutrition itself. For example, gastrointestinal parasites can lead to anemia and nutrient deprivation (Bourke et al. 2016). Aurino (2016) notes that gender-based gaps in dietary diversity as well as overall improvements start emerging among the older cohort adolescents, those at age 15.

While discrimination against daughters is visible, especially in the distribution of food within the household, the persistence in both sites of strong preference for a son often leads to a large family. Several girls are followed by a boy, who is then undernourished. These studies also reveal that compared to girls child parents more concentrated to boy child on nutrition because of gender sensitized due to traditional

forces. Such issues not change only to providing food packet to families but awareness program like mass media communication, mass awareness campaigns, advertisement campaign, infant and young child nutrition, exhibitions, development, production and distribution of nutrition education / training material, booklets, posters / stickers / chart and films/spots and more important to aware on gender sensitization issue.

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