



Effect of Mother's Education on under five Children's Nutritional status of the Village Desu Majra of Mohali, Punjab, India

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Abstract

The study was conducted to assess the nutritional status of under five children of educated mothers. For this study 100 women and 100 children of age 0-5 years were taken from Desu Majra village of Mohali, Punjab, India. Non – probability convenient sampling were used for data collection. The split half method was used to investigate stunting, wasting and protein energy malnutrition. The result was analyzed by using, Chi-square for interpretation of the results.

Keywords: stunting, wasting, protein energy malnutrition.

Introduction

Malnutrition is a serious medical condition marked by a deficiency of energy, essential protein, fats, vitamins and minerals in a diet. Over 10 million children aged less than five years die annually from preventable and treatable diseases. Almost all these deaths are in poor countries. i. malnutrition contribute to more than 1/3 of all death of under five child ii. currently 195 million under five children are affected by malnutrition 90% of them live in an Asian country, at least 20 million children suffer from severe acute malnutrition and another 175 millions are nourished iii. malnutrition is most recognizable and perhaps most untoward consequence of poverty in children.

Malnutrition is one of the major health challenge in developing countries usually referred to as a silent emergency it has devastating effect on children society and further humankind. Some of the factors that might explain the cause of such widespread malnutrition are low birth weight, insufficient supplies of food, prevalence of infectious diseases, lack of breast feeding and improper child care. The term malnutrition refers to both under nutrition as well as over nutrition.

Protein energy malnutrition has been identified as major health and nutritional. It is not only an important cause of mortality and morbidity but also lead to physical and mental impairment in children. Protein energy malnutrition is mainly due to inadequate intake of food both in quantity and quality. It can also be due to different infectious like diarrhea respiratory infection, measles and intestinal worm¹.

Iodine deficiency is another major problem till recently iodine deficiency was equated with goiter. Now it is recognized that iodine deficiency is associated with other

disorder commencing from intra uterine life and extending through childhood to adult life. Vitamin- A deficiency is also considered as public health problem its deficiency leads to ocular and extra ocular manifestation ocular manifestation².

Health survey showed that 35.3% of under five children were stunted nationwide, 6.7% were wasted, and 16.3% were under weight. The reports suggested that the greater burden of malnutrition was in rural areas³. It is believed that educated women are mile stone of their family. In this research we are also try to be prove that educate women are really aware of nutritional values and their effects on their kids.

Methodology

The methodology adopted to assess the nutritional status of under five children and awareness of nutritional values among literate women. The sample of present study consisted 100 women and 100 under five children of Desu Majra village of Mohali, Punjab, INDIA. The study was done by interview technique using pre-tested and pre-designed questionnaire by a researcher. The sample was selected by non-probability convenient sampling technique. Data was collected on socio demographic information, awareness and other variables. For the assessment of stunting, wasting and protein energy malnutrition in child anthropometric measurement like height in cm, weight in kg, mid- arm circumference in cm, head circumference in cm and chest circumference in cm had been taken. The reliability of tool was checked by split half method. Nutritional status will be assessed in terms of mid, moderate and severe impairment on the basis of stunting, wasting, protein energy malnutrition. It is checked according to following table.

Table-1
According to stunting and wasting

Nutritional status	Stunting (% of height/age)	Wasting (% weight/height)
Normal	>95	>90
Mild impaired	87.5 – 95	80-90
Moderately impaired	80-87.5	70-80
Severely impaired	>80	>70

Table-2
According to protein energy malnutrition

Degree malnutrition (% of weight for age of protein)	Values
Normal nutritional status	90-110
1 st degree mild malnutrition	75-89
2 nd degree moderate malnutrition	60-75
3 rd degree, severe malnutrition	Under 60

Table-3
According to mid arm circumference³

Nutritional status	Mid arm circumference
Normal	>13.5cm
Mild to moderate	12.5 to 13.5cm
severe	>12.5cm

Results and Discussion

The study population comprised of 100 women of different age and 100 children of 0 to 5 years were taken. Results which we get as per statistical measurements are as under.

Table-2 depicts association of age of under five children with nutritional status; chi-square calculated was less than chi-square tabulated, hence it was found non-significant

Table-1
To association and percentage distribution between stunting, wasting, protein energy and mid arm circumference

Nutritional status	Stunting (% of height /age)	Wasting (% of height /age)	Protein Energy Malnutrition	Total Value As per degrees	Frequency Percentage(%) of mid- arm circumference
Normal	64%	46%	Normal	45%	70%
Mild	19%	28%	1 st degree	42%	---
Moderate	19%	16%	2 nd degree	12%	08%
Severe	03%	10%	3 rd degree	01%	22%

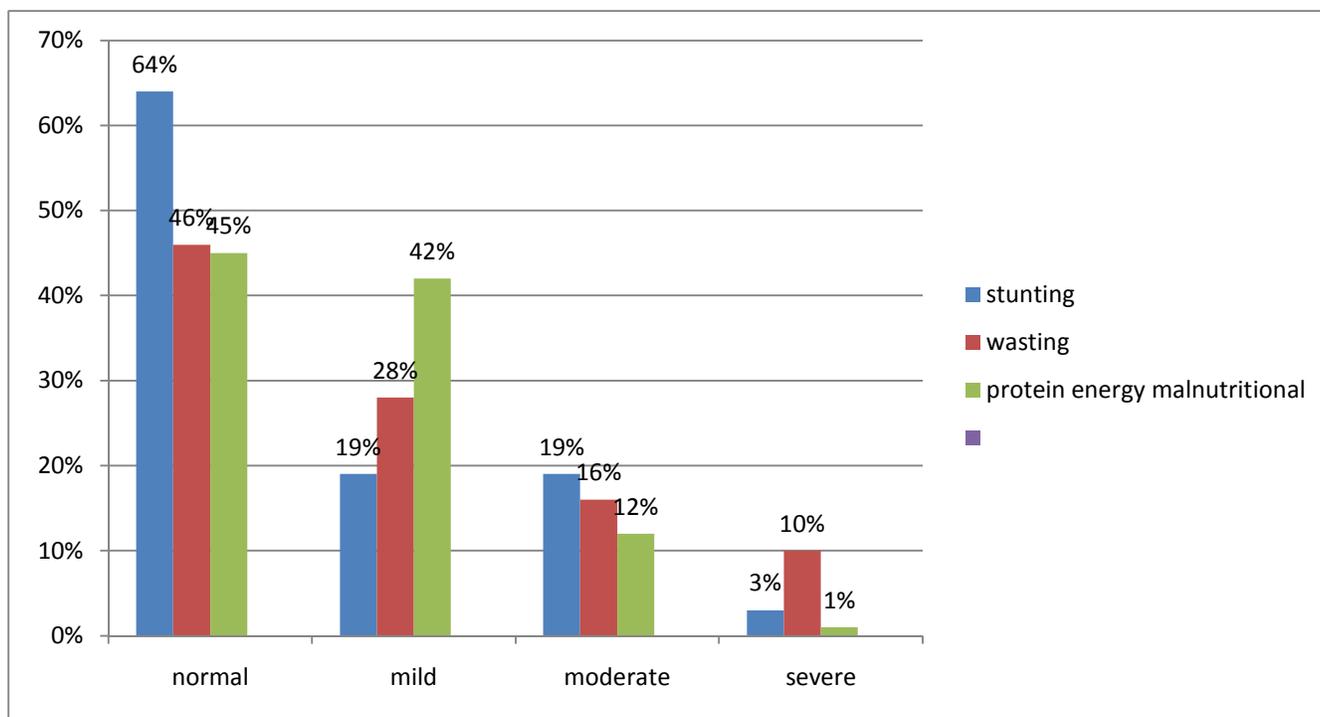


Figure-1
Percentage distributions of Stunting, wasting, protein energy and mid arm circumference of under five children.

Table-2
Association between ages of under five children with Nutrition status

Age(in year)	Stunting {n=36}	Wasting {n=53}	Normal {n=11}	Chi-square Calculated Value	Chi-Square Tabulated value
0-1	03	03	02	2.549	18.17
1-2	07	08	02		
2-3	09	14	02		
3-4	08	12	02		
4-5	09	16	03		

df =0.8, NS=Non Significant at tab 0.02, (cal<tab). N=100

Table-3
Association between educations of mother with Nutritional status

Education of Mother	Stunting {n=25}	Wasting {n=5}	Normal {n=20}	Chi-square calculated value	Chi-square Tabulated value
Non-Formal	04	16	03	11.48	15.03
Up to primary	10	17	04		
Up to Secondary	07	16	10		
Graduate	04	06	03		
Post Graduate and above	00	00	00		

df =6, NS=Non Significant at tab 0.02,(cal<tab). N=100

Table 3 depicts association of education of mother of under five children. Chi-square calculated was less than Chi- square tabulated. Hence it was found non- significant.

The present study revealed that except from dietary pattern other socio-demographic variables like age, education of mother are non-significant. They have no association with nutritional status.

Conclusion

The analysis of age showed that majority of under five children 28% were in age group of 3-4 year and least 0.6% was between the age group of 0-1% year. There were 31% of women studied up to secondary and least 0% were post graduate and above. The analysis showed that 3% of people had severe stunting, 19% had moderate and mild stunting, and 64% of subjects had normal nutritional status. 10% subjects had severe wasting 16% subjects had moderate and 28% subjects had mild wasting 46% subjects had normal nutritional in terms of wasting. 42% subjects had 1st degree protein energy malnutrition and 12% had 2nd degree and 1% had 3rd degree protein energy malnutrition.45% subjects had normal nutritional status. According to mid arm circumference 22% subjects had severe impairment in nutritional status,08% subjects had mild to moderate impairment and 70% of subjects hah normal nutritional status.

Reference

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