

Knowledge of Parents of a Back-ward Community Regarding Malnutrition in Children

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Introduction

Protein energy malnutrition (PEM) in children has been considered as the most important problem in the field of preventive medicine particularly so in the developing countries (WHO, 1974). Various crash activities and nutrition programmes in our country could not bring an appreciable change in the over-all magnitude of the problem (ICSSR and ICMR, 1981). In order to have sustained improvement, parents education holds great promise. Information education and communication (IEC) is emerging as an important tool in the delivery of Primary Health Care (PHC) as well as nutrition related services. For proper application of this tool it is imperative to have basal knowledge of parents regarding identification, causes and preventability of important nutritional disorders. The specific objectives of the present study were to explore—

(a) The ability of parents to recognise marasmus, kwashiorkor, vitamin A and vitamin B deficiencies with photograph of these disorders and also on description.

(b) Knowledge of parents regarding causes of marasmus, kwashiorkor, vitamin A and B complex deficiencies.

(c) Knowledge of parents regarding prevention of malnutrition disorders.

The important facets and concepts of a backward community of Banda District, Uttar Pradesh as revealed by the present study may be of immense help in planning a 'Nutrition Education programme'.

Material and Methods

All the parents having underfive children in the six clusters of Manikpur Block in Banda District, Uttar Pradesh have formed the population of this study. The clusters of population were selected purposively keeping operational feasibility in mind viz travel, accessibility of the study population. Two clusters were within 5 kms, two between 5-10 kms and remaining two beyond 10 kms from Manikpur Headquarter. In the selected clusters, 171 mothers and 171 fathers belonging to

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Harijan and tribal group and having under-five child/children were enlisted by total enumeration. Nearly all the subjects belonged to families who earn their bread through daily wages. Majority of the parents of the study area were illiterate and they had considerable variation in their income potential. Only 16.3% of the adults were literate while 1.6% of them were educated upto college level.

Mothers and fathers were interviewed separately with the help of photographs of children suffering from marasmus, kwashiorkor, vitamin A and B deficiencies. Considering the fact that photographic recall will be less than that of photographic recall plus description, if parents were unable to recognise the respective photographs, features of the disease depicted on a particular photograph were described to them. However, such description were standardised beforehand (Jelliffe, 1966) Another reason of providing descriptions was the idea that picture alone may not help the undertaken community to recognise various nutritional disorders. It may so happen that the community have not seen cases recently but only heard of such diseases, so on description they could recall and identify the pictures shown.

Out of the 171 enlisted mothers and fathers, 156 each could be contacted for the present study, thus giving a coverage of 91.2% of the study subjects.

Observations and Discussion

Knowledge of Mothers : Marasmus was identified by 40 mothers (25.6%) while

seventeen mothers (10.9%) could recognise vitamin A deficiency. Recognition of Kwashiorkor and vitamin B deficiency was poor i.e. 1.3% with photographs. On describing the photographs of marasmus and vitamin A deficiency recognition of these disorders was possible in 56 (35.9%) and 73 (46.8%) cases respectively. Corresponding figures in cases of Kwashiorkor and vitamin B deficiency were 43 (27.6%) and 40 (25.6%). The differences observed in the recognition of these disorders with photograph and photograph plus description were statistically significant (Table-1).

Knowledge of Fathers : Out of the 156 fathers who could be studied with photograph 52 (33.3%) and 50 (32.0%) were able to recognise marasmus and vitamin A deficiency respectively. On description their recognition increased to 80 (51.3%) and 98 (68.8%) respectively. Kwashiorkor and vitamin A deficiency was identified in 6 (3.8%) and 21(13.5%) cases respectively. Corresponding figures after describing the photographs of these disorders were 45 (28.8%) and 50(32.0%) cases respectively. The observed differences in the identification of these disorders with photographs and by describing them were statistically significant (Table-2).

These observations clearly demonstrate that in a primitive society description of photograph contributes significantly in the recognition of important nutritional disorders. Unfortunately, relatively little research has been done into the way photographs can contribute in communicating

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with parents particularly the illiterate group (Moynihan et al 1981). In the present study higher recognition of marasmus and vitamin A deficiency with photographs as well as description is a reflection

of occurrence of these conditions in a considerable proportion. Also these conditions tend to run a chronic course and are likely to have greater impression in the mind of the parents than other conditions

Table 1 : Knowledge of mothers regarding malnutrition in children (n=156).

	With Photograph		On describing Photograph		Statistical Significance	
	No.	%	No.	%	Z	P
Marasmus	40	25.6	56	35.9	1.976	<0.05
Kwashiorkor	2	1.3	43	27.6	7.143	<0.01
Vitamin A deficiency	17	10.9	73	46.8	7.625	<0.01
Vitamin B deficiency	2	1.3	40	25.6	6.724	<0.01

Table 2 : Knowledge of fathers regarding malnutrition in children (n=156).

	With Photograph		On describing Photograph		Statistical Significance	
	No.	%	No.	%	Z	P
Marasmus	52	33.3	80	51.3	3.269	<0.01
Kwashiorkor	6	3.8	45	28.8	6.343	<0.01
Vitamin A deficiency	50	32.0	98	68.8	5.721	<0.01
Vitamin B deficiency	21	13.5	50	32.0	4.017	<0.01

Verma et. al (1986) while evaluating the increase in knowledge of women in Haryana State following a special broadcast series on mother and child care, reported a very poor initial knowledge of nutritional diseases. Only 2.6% women were knowledgeable about vitamin A deficiency which after exposure increased to 72.4%. Losses occurred between exposure and retention stage over the stipulated period of one week. In another study by Vyas (1986) gain in the knowledge about

vitamin A deficiency was 69.85% and retention score was 67.24%

(b) Knowledge of parents regarding causes of nutritional disorders :

Marasmus : As much as 131 (83.97%) mothers and 124 (79.49%) fathers were ignorant about the causes of marasmus. Fever was considered as a cause of marasmus by 12 (7.69%) mothers. Insufficient diet as cause of marasmus was considered by 6 (3.85%) mothers and 10 (6.4%) fathers.

Table 3 : Knowledge of parents regarding causes of Marasmus in underfives (n=156).

Cause	Mother		Father	
	No.	%	No.	%
Fever	12	7.69	6	3.85
Insufficient diet	6	3.85	10	6.41
God's wishes	4	2.56	2	1.28
Diarrhoea ± Fever	2	1.28	7	4.49
Food related	1	0.64	4	2.56
Not known	131	83.97	124	79.49
Contagious	0	0.0	2	1.28
Eating left over food	0	0.0	1	0.64

Kwashiorkor : 145 (92.95%) mothers and 135 (86.5 %) father were unable to state any cause for kwashiorkor. Three mothers and fathers (1.92% each) considered disease proneness as causative factor. One (0.64%) mother and 5 (3.21%) fathers considered it to be food related. Only one individual of each group considered it to be due to diarrhoea with or without fever.

Vitamin A and B deficiencies : Nearly 75% mothers and 70% fathers did not learn about the cause of vitamin A deficiency. Majority of the mothers and fathers who could assign any cause of vitamin A deficiency, considered it to be effect of sun. Only 8 (5.13%) mothers and 5(3.21%) fathers considered it to be food

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related. Out of the 156 from each group 146 (80.76%) mothers as well as fathers could not assign any cause of vitamin B deficiency in underfives. 24 (15.38%) mothers were of opinion that eating of leftover food is responsible for glossitis with or without angular stomatitis, only 1 (0.64%) mother and 3 (1.92%) fathers considered it to be food related.

Analysis of the causes of various disorders clearly reflects that majority of parents were ignorant about the causes of marasmus, kwashiorkor, vitamin A and B deficiencies. Even those subjects who could assign some cause, their response were considerably different from that has been

quoted in literature. Like dietary intake and infectious (Scrimshaw et al, 1968 and Mata et al, 1972).

(c) Knowledge of parents regarding prevention of malnutrition disorders :

Out of 156 mothers, 62 (39.74%) were of the opinion that malnutrition can be prevented. Combination of good food alongwith treatment of illness was considered as the method of its prevention by 12 (19.35%) mothers. A combination of good food, treatment of illness and magico-religious practices was considered to be the method of prevention by the 28 (45.16%) mothers. (Table 4). 80 (51.28%)

Table 4 : Knowledge of parents regarding prevention of malnutrition disorders (n=156 each).

Method of Prevention	Mother		Father	
	No.	%	No.	%
(a) Good food	5	8.06	9	11.25
(b) Treatment of illness	7	11.29	8	10.00
(c) a+b	12	19.35	25	31.25
(d) a+b+traditional Practices	2	3.22	2	2.50
(e) Magico-religious practices	5	8.06	3	3.75
(f) a+b+c	28	45.16	29	36.25
(g) God only can prevent	2	3.22	2	2.50
(h) No opinion	1	1.61	2	2.50
Total	62	39.74	80	51.28

fathers considered malnutrition as a preventable condition .25 (31.25%) fathers were of opinion that these conditions could be prevented by combination of food plus treatment of illness .29 (35.25%) fathers thought that if the above approach is combined with magico-religious practices, these disorders can be prevented (Table-4).

There is not only a need to educate the parents that malnutrition disorders are preventable but the 'Nutrition Education Programme' should also emphasise the ways of prevention of these disorders. Food intake and morbidities are the chief factors in determining a child's health. Parents should be educated to realise this aspect of child care. Studies by Vyas (1986) and Manoff (1984) have clearly reported that there was no significant difference in the gain in the nutritional knowledge in the illiterate, women with less formal education and educated women. While designing the Nutrition Education Programme local culture especially the health culture should not be ignored. (Moynihan et. al. 1981). In the field of nutrition, supply oriented programmes can not make a success unless parents attitude regarding nutritional disorders is changed. This clearly reflects the importance of demand strategy i.e. nutrition education in combating the problem of malnutrition in children

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