## WOMEN'S BELIEFS REGARDING FOOD RESTRICTIONS DURING COMMON CHILDHOOD ILLNESSES: A HOSPITAL BASED STUDY

Niloufer Sultan Ali, Syed Iqbal Azam, Rahat Noor

#### Department of Community Health Sciences, The Aga Khan University, Karachi

**Background:** Malnutrition continues to be a major problem in Pakistan. Inadequate nutrition contributes substantially to childhood death and disease. Restriction of diet during common childhood illnesses further compromises the nutritional status of the child. The present study aims to determine the beliefs and practices regarding food restrictions during common childhood illnesses. **Methods:** A cross-sectional survey was conducted at Community Health Centre (CHC), of The Aga Khan University Hospital, Karachi to understand the beliefs and practices regarding food restrictions in common childhood illnesses. Four hundred adult females were interviewed from July-September 2000. A self-administered questionnaire was filled by the respondent. **Results:** Major sources of information about restriction of various foods during different illnesses were relatives. Sixty five percent of the respondents believed that heavy food should be restricted during cold/cough and twenty three percent believed that oily food should be restricted during cold/cough and twenty three percent believed that oily food should be restricted during coldros and oily food restrictions during illnesses plays a very important role on the nutrition status. Surprisingly, medical doctors and other health care givers were also the source of information for advising food restrictions in certain childhood illnesses. Therefore there is a need for educating the physicians and other health care workers along with the mothers about food concepts and feeding practices during health and diseases. Protein energy malnutrition can be reduced to some extent if wrong dietary beliefs about child feeding practices in a community can be removed with health education programme.

Key Words: Food habits; food; cultural characteristics.

#### INTRODUCTION

Protein energy malnutrition (PEM) is one of the major underlying cause of under five morbidity and mortality in Pakistan<sup>1</sup>. This is due to multiple factors; besides poverty and lack of education, restriction of diet during illnesses is one of them. Even if availability of food is not a problem, harmful beliefs may interfere with the intake of a balanced diet<sup>2</sup>. Restriction of diet during illnesses further compromises the nutritional status of the patient.

The Pakistan National Nutrition Survey reports that 60-80% of under fives are under weight. Amongst them 50% of one year old and 10% of two-year-old children receives liquid only in their diet.<sup>3</sup> There is also a common belief that a child does not need solid food in first year and giving food will cause abdominal distension and diarrhoea<sup>3</sup>. Other workers have also reported similar findings. A two-year study of infant feeding in Mali reported that due to some traditional beliefs about food items, weaning was started at an average of 20 months, which affected the growth, and development of their children<sup>4</sup>. Similarly feeding practices studied in Western Orissa reported that weaning was started at 13–18 months in 53% of cases, which was due to mother's strong beliefs concerning hot and cold foods<sup>5</sup>. The present study was conducted to identify the respondents' views regarding food restrictions during common childhood illnesses. Our findings might help in evolving a culturally relevant educational program, which might help to increase the consumption of nutritionally adequate foods during illnesses.

# MATERIAL AND METHODS

A Cross-sectional survey was conducted at Community Health Centre of The Aga Khan University Hospital, Karachi from July 2000 to September 2000. Four hundred adult female (age 18 years or above) respondents, who came to the out patient services as a patient or as an attendant, were interviewed against a calculated sample size of 388, after taking verbal consent using 5% level of significance, a bound on error of 5% and a prevalence of 50%. A self administered pre-coded and pre-tested questionnaire (both in English and Urdu) consisting of important demographic characteristics and questions regarding restriction of food items during common childhood illnesses was filled by the respondent. Descriptive statistics like percentages, mean and range were obtained. SPSS for Windows (version 10) was used as analysis software.

## RESULTS

A total of 400 female respondents with mean age of 39.6 years (Range: 18–75 years) were interviewed. About 90% percent were married and were housewives and lived in a joint family. Majority of the respondents (86%) were literate and amongst them almost 50% were above intermediate level. The major sources of information about restriction of various foods during different illnesses were relatives. The source of information of respondents regarding food restrictions in particular conditions is described in Table-1.

Table-1: Source of information of respondents regarding food restrictions during particular conditions

Source	of	Number
Information		(%)

Mother	223 (55.8)
Grand Mother	147
Mother in law	(36.8)
Medical	37 (9.3)
Doctor/Nurse	19 (4.8)
Homeopath/Hakim	14 (3.5)
Newspaper	31 (7.8)
Friend	· · ·
Experience	5 (1.3)
	6 (1.5)

Note: Total percentage exceeds 100%, because of multiple responses.

Table-2 to Table-6 provides information regarding the major food items restricted by the respondents during few common childhood illnesses.

# Table-2: Various foods restricted by the respondents during diarrhoea

Food Item Restricted	Number
	(%)

Heavy food	261 (65%)
Bread/Roti (Local bread)	41 (10%)
Meat/Beef	35 (9%)
Normal food/diet	31 (8%)
Junk food/spicy food	23 (6%)
Milk/Yogurt	18 (4%)
Badi Food (foods which produces Flatus)	17 (4%)
Rice	15 (4%)
Hot food	14 (4%)
	14 (4%)
Oily food	10 (2%)
Fish	10 (2%)
All food items	
No food item	31 (8%)

# Table-3: Various foods restricted by the respondents during cold/cough

Food Item Restricted	Number (%)
Cold food	263 (66%)
Cold water/Ice cream	66 (16%)
Sour food	63 (16%)
Rice	52 (13%)
Oily food	21 (5%)
Milk/Yogurt	17 (4%)
Heavy food	12 (3%)
No food item	55 (14%)

Sixty five percent of the respondents believed that heavy food should be restricted during diarrhoea and only 2% in favour of all food restriction and 8% thought that no food item should be restricted.

Sixty six percent of the respondents believed that cold food should be restricted during cold/cough and only 14% thought for no restriction of food item. Twenty two percent of the respondents believed that heavy food should be restricted and 34% thought that no food item should be restricted during fever. Sixty four percent of the respondents believed that oily food should be restricted during jaundice and 12% thought that no food item should be restricted. Twenty three percent of the respondents believed that oily food should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted and 22% thought that no food item should be restricted during typhoid.

Food	Item	Number
Restricted		(%)
Heavy food	ľ	86 (22%)
Bread/Roti Bread)	(Local	64 (16%)
Cold food		55 (14%)
Rice		37 (9%)
Oily food		25 (6%)
Milk/Yogur	t	23 (6%)
Normal foo	d/diet	13 (3%)
Potato		12 (3%)
Meat/Beef		9 (2%)
Junk f	ood/spicy	8 (2%)
food	ood, opioy	6 (2%)
All food iter	ms	134
No food ite	m	(34%)

### Table-4: Various foods restricted by the respondents during fever

### Table-5: Various foods restricted by the respondents during jaundice

Food Item Restricted	Number (%)
Oily food	254
	(64%)
Junk food/spicy food	
	92 (23%)
Meat/Beef	

Hot food	64 (16%)
Milk/Yogurt	58 (14%)
Heavy food	45 (11%)
Egg	26 (6%)
Rice	22 (6%)
Fish	18 (4%)
Bread/Roti (Local Bread)	17 (4%)
Badi food (Food which produces Flatus)	10 (2%)
	9 (2%)
All food item	7 (2%)
No food item	54 (12%)

# Table-6: Various foods restricted by the respondents during typhoid

Food Restricted	ltem	Number (%)
Oily food		92 (23%)
Heavy food		88 (22%)
Bread/Roti Bread)	(Local	79 (20%)
Potato		39 (10%)
Junk fo	od/spicy	35 (9%)
food		34 (8%)
Cold food		29 (7%)
Rice		16 (4%)
Meat/Beef		16 (4%)
All food item	S	9 (2%)
Milk/Yogurt		6 (2%)
Hot food		89 (22%)

## DISCUSSION

Beliefs regarding food restrictions during illnesses were widespread amongst both the educated and uneducated respondents. Such beliefs play a very important role on the nutrition status, because these restrictions if severely imposed compromise the nutritional status of the patient, already at risk from poor appetite, enhanced needs or increased losses from the gastro-intestinal tract. Almost all the respondents in our study believed that certain food items should be avoided during particular conditions like diarrhoea, cold/cough, fever etc. More than fifty percent of respondents believed that cold food should be restricted during cold and cough.

The other food items like cold water, ice cream, rice and sour taste food items were also considered to be restricted. Majority of mothers believed that during diarrhoea heavy foods should be restricted and hence light, easy to digest foods should be given. More than half of the respondents thought that oily foods should be restricted during jaundice. Similar findings have been reported by other workers too<sup>6,7</sup>.

Scientifically, the nutrients needs are more during an illness due to increased metabolic demands in the body. Traditional beliefs regarding food restriction often conflicts with modern theories of nutrition and their practical application. Food restriction during childhood illnesses is commonly practiced in many parts of the world<sup>8-10</sup>. Therefore the common practice of food restriction needs to be modified without producing serious cultural conflicts.

The advice provided should be suitably modified so as to be acceptable in the local cultural context. For successful health education campaign, first it is essential that the foods, which culturally accepted by mothers, should be encouraged in large quantities, to combat decreased nutrient intake during illness. Mothers would readily accept the advice, if it is culturally relevant. The second step should be to give health education about detrimental practices and beliefs.

In summary, the first and foremost task is to identify the local cultural and traditional practices and beliefs regarding properties of different food items. An understanding of existing food beliefs will help to improve food intake during health and disease by strengthening useful beliefs and discontinuing harmful ones. It was surprising to see that medical doctors and other health care givers were also the source of information of the respondents for categorizing foods into hot and cold and their restrictions in certain illnesses. Therefore there is also a need for educating the physicians and other health care workers about food concepts and feeding practices during health and diseases. Protein energy malnutrition can be reduced to some extent if wrong dietary beliefs about child feeding practices in a community can be removed with health education programme.

#### REFERENCES

- 1. National Health Survey of Pakistan: Pakistan Medical Research Council /Federal Bureau of Statistics /Department of Health and Human Services; 1998.
- 2. Khan MA, J B. Nutrition and Health Care for the young child. Health Publication 1979:127.
- 3. National Nutrition Survey: National Institute of Health, Pakistan; 1988.
- 4. Dettwyler KA. Breastfeeding and weaning in Mali: cultural context and hard data. Soc Sci Med 1987;24(8):633-44.
- 5. Samal GC. Infant feeding and rearing practices in a rural community of Western Orissa. Indian Pediatr 1984;21(4):319-21.
- 6. Kapil U, Sood AK, Gaur DR. Maternal beliefs regarding diet during common childhood illnesses. Indian Pediatr 1990;27(6):595-9.
- 7. Real M, Kumar V, Nanda M, Vanaja K. Beliefs and practices of urban mothers regarding "hot" and "cold" foods in childhood illnesses. Ann Trop Paediatr 1982;2(2):93-6.
- 8. Kumar V, Clements C, Marwah K, Diwedi P. Beliefs and therapeutic preferences of mothers in management of acute diarrhoeal disease in children. J Trop Pediatr 1985;31(2):109-12.
- 9. Kumar V, Clements C, Marwah K, Diwedi P. Maternal beliefs regarding diet during acute diarrhoea. Indian J Pediatr 1981;48(394):599-603.
- 10. Kumar V, Taneja S, Real M, Nanda M, Vanaja K. Beliefs and practices of rural mothers regarding "hot" and "cold" foods during childhood illnesses. Indian Pediatr 1981;18(12):871-7

#### Address for Correspondence:

Dr. Niloufer Sultan Ali, Assistant Professor, Family Medicine Division, Department of Community Health Sciences, The Aga Khan University Hospital, Stadium Road, PO Box 3500, Karachi-74800, Pakistan. E-mail: niloufer.ali@aku.edu