

must take time to demonstrate the correct technique of massage of the nasolacrimal system to parents of affected infants and make sure they are doing it the right way during follow-up visits.

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Maternal Beliefs and Practices Regarding the Diet and Use of Herbal Medicines During Measles and Diarrhea in Rural Areas

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Restriction of diets during illness is one of the multiple factors resulting in malnutrition besides poverty and lack of education in the society(1). Some mothers feed while others avoid feeding during illnesses due to cultural beliefs. Deep seated wrong

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beliefs and the ignorance about the nutritional needs of children regarding feeding of sick children are important causes of malnutrition among children(2-4). In rural areas the use of herbal medicines during common childhood diseases is also practised. Some studies have been conducted on these aspects in different parts of the country. However, Rajasthan, in general, and semiarid areas in particular (Jaipur) are devoid of such investigations. Moreover, the use of herbal medicines by rural mothers in this region is totally an unexplored field. Keeping in view the above facts, the present investigations were conducted to determine the dietary practices regarding preferences and restrictions of food and herbal medicines used by rural mothers during two common childhood illnesses (measles and diarrhea), so that the information thus collected can be utilized in formulating nutrition education programmes.

Material and Methods

The present study was conducted in 21 villages of Jaipur District (Rajasthan). The

information regarding food and herbal medicines was collected from 208 households, selected following probability proportional to size (PPS) sampling method. In each households, elderly mothers were interviewed on a predesigned, pretested, open-ended questionnaire schedules regarding the special foods taken and avoided and herbal medicines used by them during measles and diarrhea in under-five children.

Results

Out of 208 mothers, 83.2% were illiterate. Very few mothers had got education upto higher secondary. Regarding their socio-economic status, 80.0% mothers belonged to low and middle socio-economic groups. Occupation-wise 66.4% of mothers were engaged either in agriculture or in

animal keeping and labor as well.

During diarrhea, khitchri, thuli (daliya), chhach/curd and banana were preferred by 52.4, 48.5, 21.6 and 37.9% respectively. Foods restricted were roti, vegetables, milk, chillies and 'hot foods' like mango, apple, jaggery, and all dais except moong dal. Majority of the mothers had avoided roti (69.7%) and milk (47.1%).

Regarding herbal medicines for curing the children from diarrhea, majority of mothers (31.3%) used isabgol ke bhusi mixed with curd and 14.4% gave kada (extracts) of tea leaves, ajwain, peepla mul, sonth, black pepper and tulsi leaves (Table 1).

The foods preferred during the episode of measles were kishmish/munakka

TABLE I—Maternal Beliefs Regarding Herbal Medicines Used During Diarrhea and Measles

Herbal Medicines	No	(%)
Diarrhea		
1. Kada* of tea leaves, ajwain, sonth, peepla mul, black pepper and tulsi leaves.	30	14.4
2. Isabgol ki bhusi mixed with curd	65	31.3
3. Jawa harra (myrobalan). black salt rubbed hard on pastry board with water	25	12.0
4. Podin hara	23	11.1
5. Jayfal (nutmeg), kesar, javetri (mace) mixed with small quantity of water and is given	15	7.2
6. Janam ghutti in cold water	10	4.8
7. Sonth, ghee, bura, milk and salt - taken with water	10	4.8
Measles		
1. Jayfal (nutmeg), javetri (mace), laung (clove), tulsi leaves, kishmish - powder them and boil in water and then given	56	26.9
2. Jayfal, javetri, laung, tulsi leaves and brahmi - powder them and boil in water and then given	53	25.5
3. Tulsi leaves, laung and sonth - powder them and boil in water	14	6.7
4. Kesar - mix with small quantity of milk and given	14	6.7

* Kada—Extracts of ingredients after boiling in water.

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(38.5%), khitchri/rabdi of bajra (35.6%), daliya (25.0%) and cow's milk (23.1%). Foods avoided were roti (62.5%), all dais except moong dal (59.1%) and vegetables (42.8%).

Regarding herbal medicines during measles, 26.9% mothers gave a combination of jayfal, javetri, laung, kishmish and tulsi leaves, whereas 6.7% gave tulsi leaves, laung and sonth, in the form of 'Kada' (*Table I*). In their opinion, these herbal medicines act as 'Sanjivani Buti' for saving the lives of their children.

Discussion

Restriction of general food-additives is found among majority of mothers, which is no longer a part of the modern system of treatment(2,3). From the medical point of view, the human body requires more nutrients during an illness due to the increased metabolic demands of the body. However, restriction of foods due to various prevalent beliefs in the rural population further reduces the nutrient intake and may lead to protein calorie malnutrition.

In diarrhea, mothers gave daliya and khitchri as they were" of the opinion that intestine becomes weak and was unable to digest heavy foods. They believe that tea water and banana help in reducing the frequency of diarrhea. Roti and milk were avoided due to the impression that these were too heavy for the child. Some mothers did not give 'hot foods' like apple, mango, jaggery, all dais except moong from the diet of their children with the concept that these would enhance the frequency of diarrhea.

Kapil *et al.* (5) in Haryana found khitchri and banana preferable diets, while roti and milk were restricted during diarrhea. In another study conducted by Kumar *et al.* (6), the safe foods during diarrhea were consi-

dered khitchri, curd, milk, daliya and fruits like banana and restricted ones were chapati and dais. Kapoor and Rajput(7) observed in Rewa that pulses, rice gruel and diluted cow milk were also given frequently during diarrhea.

Measles locally known as 'Ore' is believed to be due to unhappiness of 'Godess Mata'. In this ailment, the mothers are very particular about diet and have full faith in worship. In this study, generally mothers preferred to give kishmish/munakka, khitchri/rabdi of bajra and light foods like cow's milk, tea, daliya and roasted chana, as they consider these things easily digestible. In the present study, majority of the mothers restricted the normal diet whereas, in earlier studies the restricted foods were roti, milk, curd and butter milk and the preferred, food was kishmish and tea in measles(5,6,8).

Mothers in rural areas were very superstitious and believed in giving traditional herbal medicines during common ailments before seeking medical advice. In this study, mothers gave 'kada' of tea leaves, ajwain, peepla mul, sonth, black pepper, tulsi leaves and 'isabgol ki bhusi', mixed with curd during diarrhea. Different combinations of ingredients used by mothers as herbal medicines have been recorded during studies. In Haryana, half of all rural and urban mothers believed in trying home remedies as first step in treatment of diarrhea and considered herbal tea, mint water and lemon juice useful during the illness(6). In Rewa, a wide range of mothers were giving herbal concoctions, myrobalan, parsley, herb and rock salt for the management of diarrhea(7).

This study shows that mothers in rural areas are very particular about their cultural beliefs and practices. It can be conclud-

ed that while planning a Nutritional and Health Education Programme, beliefs regarding culturally accepted and restricted foods in the particular area should be given due consideration.

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Transplacentally Acquired Carbamate Insecticide (Baygon) Poisoning in a Neonate

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Human beings can be exposed to cholinesterase inhibitor pesticides (organophosphates and carbamates) by different ways(1) but probably one of the most indirect ways of exposure to pesticides concerns the

mother and the developing fetus. Only reports of fetal death with malformation of the limbs in which the mothers had organophosphorus insecticide poisoning(2) are available, but no newborn was reported to have overt symptoms of poisoning. Here we report the potential of carbamates to induce acute clinical toxicity in a newborn

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