

INFANT FEEDING

Nurses' Role In Educating The Mothers

By

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The nurse provides an essential service to the community and her obligation to the society is two-fold, first as a citizen and then as a nurse. She must strive hard to fulfill her obligations to the society and play her role effectively.

Take for example her role in population control. As she asks the people to limit their families she has a responsibility to help preserve child health, the wealth of a nation.

Statistics show that children constitute 50 per cent of the nation's population of which 50 per cent die under the age of 10 years, the majority of these deaths being in the first year.

This position calls for special attention of child health during infancy. Adequate nutrition and protection from disease during infancy are crucial for survival. In spite of awakened awareness about the need for immunizations, infant feeding and medical help when necessary, the poorer mothers of the society do not seem to be enlightened about infant feeding during the transition period of breast feeding and the time a child is able to accept an adult diet.

Before discussing the role of the nurse in educating the mothers about feeding in infancy, let us analyse the state of infant feeding in a community, varied in its dietary habits.

The Child Development Department of the Faculty of Home Science at the M.S. University of Baroda is currently engaged in longitudinal studies of the children from the upper strata of the society. To supplement this study, a major cross-sectional study of motor and mental growth of babies, one month to 15 months of age, belonging to the lowest socio-economic group in Baroda City was conducted in December 1966.

INTEREST

These children belonged to families living in "one room and kitchen" houses, hutments in slum areas, or chawls built from iron sheets or cement housing. The average income of these families engaged in a variety of vocations ranged between Rs. 75/- and Rs. 175/- per month.

As the work in the major project progressed, this worker became interested in the ways in which these

mothers fed their babies in the first fifteen months of life and thus the study was undertaken. The mothers of 624 children, 328 boys and 296 girls, were interviewed and the data was collected incidentally on a medical sheet by the Paediatrician.

The medical sheet contains information about the anthropometric measurements of the child being examined, history of recent illnesses, the state of dentition, size of the child's family and the number of siblings of the child. In addition to the above information the mothers were asked the following questions:—

(1) Is the child breast-fed? (2) Is the child given any supplementary food? What? Milk? How much? Solids? (3) Is the child weaned?

On the basis of these answers, the babies were listed in seven categories. This analysis is given in Table 1.

CAUSES

The amount of the supplementary milk feeding varied between 100 c.c. to 500 c.c. The milk varied from goat's milk, cow's milk, buffalo milk or pasteurised skimmed milk. Few mothers were aware of the value in nutrition and purity of the toned pasteurised milk in relation to its price.

The low educational level of the mothers, (only, 0.9% had completed their secondary education, 38.8%, were illiterate), led to the conclusion that their knowledge about the elementary hygiene necessary to safeguard the health of their infants would be deficient. Breast feeding protects these babies from inadvertant infection which may result as a possible lack of such knowledge. The other two advantages, ready availability and economy of breast feeding, were found relevant for the existence of these babies whose mothers often had to work and the feeding of their babies became secondary, of necessity. This can be true to the majority of mothers in the country.

What can the Nurse do under these circumstances?

In 1964, in Pointe Noire, Central African Republic a seminar was held on Nutrition & Health Education, under the auspices of CCTA/CIE/FAO/UNESCO/

UNICEF/WHO*. The Report of this seminar titled, *Health Education of the Tropical Mother in Feeding her Young Child** has many lessons for the Indian nurse.

Some of the important points and principles discussed in this report form the basis of the design for the Role of the Nurse in Educating the Indian mothers about infant feeding.

During the first stage, the nurse must collect background information about infant feeding as practised in the community in which she lives in the form of answers to a simple questionnaire. Information should also be collected about the local pattern of malnutrition, e.g. Kwashiorkor, nutritional marasmus and the kind of vitamin deficiencies. There is no point in advising the poor mothers to give orange juice when there is no scurvy reported in the community because of lack of vitamin C in the diet.

CURE

The Nurse must know the nutritive values of locally available foods. This information is most readily available in what is commonly known as Health Bulletin No. 23* published by the Indian Council of Medical Research.

The Nurse also needs to know the beliefs and superstitions prevalent in the community which do not allow the mothers to use some foods essential from the point of view of their nutritional value.

She needs to take into account the local methods of cooking and to keep these in mind when discussing the preparation of food for the young child.

Who should be educated directly to achieve the goal of better nutrition for the young child? A lecture to a young mother in a joint family may not help improve matters. In the joint family set up policy decisions are taken by the grandmother and the money is spent by the father. Therefore, the grandmother or the mother-in-law and the father or the "money-holder" of the family should be associated with such discussions.

In addition the nurse must also be aware of other factors like infections and parasites that make the utilisation of a balanced diet by the body difficult, if not impossible, and advise the mother accordingly.

In the second stage, the nurse would do well to give actual demonstration of the food preparation in utensils of common use by these mothers and guide the mother in her daily method of working, modifying only those methods which are detrimental to the child's health.

*Jelliffe Derrick B., Bennett, John F., *Health Education of The Tropical Mother in Feeding her Young Child*. Reproduced by the U.S. Department of Health Education & Welfare Administration Children's Bureau 1964, Reprinted 1967.

*Aykroyd, W.R., Gopalan, C., Balasubramanian, S.C., *The Nutritive Value of Indian Foods and The Planning of Satisfactory Diets*. Indian Council of Medical Research, New Delhi, 1966.

In the last stage the nurse's role would be to evaluate the effectiveness of her health teaching. This can be done by evaluating (a) the change in the methods of work of the mothers and (b) the improvement in the nutritional status of the young child. These are the principles that determine the design of the role of the nurse in educating the mother about infant feeding in our country.

BREAST FEEDING

For the first six months, breast feeding is all that is necessary. The mothers should be encouraged to ensure adequate milk supply by paying attention to their own diet which should meet the demands of lactation. The mothers should be encouraged to breast feed their babies as long as possible, or at least up to a period of two years. Prolonged lactation was believed to prevent conception but with the advent of family planning methods, mothers seem to stop this practice. The danger in this tendency can be seen from the fact that the complete protein readily available in the breast milk to the infants beyond six months of age is sometimes the only source of protein in their diet as is seen in the table.

In instances where breast feeding is impossible and the mother is compelled to give artificial feeding, she must be warned against the dangers of faulty technique of bottle-feeding. Inadequate knowledge about hygiene result in the mothers using extremely narrow-necked plain empty bottles which has no air valve arrangement. As a result, more often than not, the baby is racing against time to prevent drowning in the milk that pours from the bottle or has to suck so hard against the vacuum that is created and will not take enough milk. In addition the narrow necks prevent proper cleaning and the milk soon becomes bacteria-ridden resulting in infective diarrhoea which is the number one killer of small children in our country.

As to the suitability of the transitional diet there are four factors which must be considered. (1) it must be of a consistency that gradually changes from liquid to solid, (2) its digestibility should be such that the immature digestive tract of the infant can handle it with profit, (3) its texture should be smooth (like the milk he is used to) in the beginning and gradually become coarser so that it requires chewing by the time the deciduous dentition is completed and (4) its taste should be familiar (sweet and moist like milk) till it gradually encompasses the other tastes that the adult in the community is accustomed to.

ADVICE

The balanced transitional diet after the sixth month of life must take into account the depleted iron reserves of the infant and adequate protein-calorie requirement of the rapid period of growth of the young child. At the same time it must also meet the vitamin requirements of the age.

It is also important to remember that young

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