Nutrition and Child Health

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Children who develop severe malnutrition die, unless proper treatment is available in time—which is seldom. Many others, not recognized as malnourished, easily die of measles, diarrhoea, respiratory infections and other common diseases of childhood which are not serious in well-nourished children. Others who survive are often retarded in their growth and development, physical and mental, and become the small chronically malnourished and uneducated parents of another generation with the same fate.

DURING the past several years, newspapers and television have often carried dramatic pictures of miserable, emaciated children in the third world suffering from starvation. These are examples of a situation that is intolerable in the face of today's sophisticated technology and advances in medical science, and in an age when the main nutritional problem of young children in affluent societies is obesity. It must be realized, however, that with all their tragic drama, these starving children represent only the tip of the iceberg ; they are acute exacerbations of a hideous, much larger and not sufficiently recognized problem of hidden hunger which affects the majority of the children of the third world.

For instance, it has been observed for a long time that babies at birth are much smaller in the developing countries than in the industrialized ones. The difference was once thought to be an ethnic characteristic. But we now have evidence that this is in fact a manifestation of malnutrition, starting in the very critical period of intrauterine life. In some parts of the developing world, up to half the children are born weighing less than 2500 grams. In industrialized countries low birth weight is observed only in babies born prematurely. However, premature, birth is not the main factor in the case of babies born underweight in developing countries ; the majority of them are born at term, from small, chronically undernourished mothers. They start life with a great handicap. Many of them will die during their first week or months of life, and those who survive will be retarded in their physical and mental development.

Importance of breastfeeding

In most parts of the developing countries infants after brith are still breastfed. This practice has great health significance and contributes much to the survival of those children in the very poor conditions in which they live. For at least their first three to four months life they receive from mother's nourishment and, in addition, protection against the common infectious diseases, particularly from the deadly diarrhoeal diseases to which they are heavily exposed. In general, in spite of the usually poor nutritional status of their mothers, most do well during this period. Unfortunately, the practice of breastfeeding is rapidly declining, particularly in the poor urban areas, but also in rural populations. This is a result of changes in the structure of societies and of the influence of the culture and values of the industralized world. The consequences are disastrous.

Under any circumstances breastfeeding is the ideal type of feeding for children during their first months of life. In industrialized societies it has been possible, in the past few decades, to replace mother's milk with artificial formulae for feeding young children. This has proved to be relatively safe when the family can afford it, is sufficiently educated, has the necessary facilities and lives in a clean environment. It is now known, however, that even under these conditions formulae-fed children are subject to health risks during their infancy and later life which could be avoided by breastfeeding. But for populations which are not economically and culturally prepared, who do not have at home the necessary facilities and resources and who live in unsanitary environment, bottle-feeding of children with milk formulae is extremely dangerous, exposing them to severe malnutrition and deadly infections at a very early age.

Weaning : a critical period

After the age of four to six months, breast milk is not sufficient to satisfy the nutritional requirements of the child, and other foods must be added. The period of weaning is critical in the child's life. For economic, cultural and other reasons, children are very often deprived of the additional foods they need. The result is that their growth starts to slow down, they become apathetic, react less to social and psychological stimuli, and are more susceptible to infectious diseases—all manifestations of chronic malnutrition. Even though the amount of breast milk may not be sufficient to satisfy all

the child's needs after this period, it is still of great value, and breast-feeding must continue along with the weaning foods. If the child is completely weaned before it is prepared to share the family diet, the consequences can be disastrous.

The weaning period—from the age of four to six months until about two to three years—coincides with a time in the baby's life when the immunity to common infections inherited from the mother and complemented by the anti-infectious properties of breast milk, diminishes and finally disappears. As a result of the introduction of other foods and the children's greater mobility they become much more exposed to the environment, usually heavily contaminated. Thus frequent infections are compounded with chronic malnutrition Some of the children will develop severe malnutrition and die if not properly treated in time. Many more, although not recognized as malnourished, will easily die of measles, diarrhoea, respiratory infections and other common diseases of childhood which are not serious in well-nourished children. Those who survive will be retarded in their growth and development, physical and mental, and will eventually become the small, chronically malnourished and uneducated parents of another generation with the same fate. This is how malnutrition contributes to the perpetuation of poverty and misery.

Handicaps of donated food

Efforts to correct this tragic situation have been proved ineffective, either because they were not given the requisite priority, or because the measures taken were of a palliative nature or, in many cases, misconceived. Supplementary feeding programmes relying on donated foods provide a case in point. For logistic reasons, mainly related to easier distribution, it is children over three years and those at school who receive these foods. The children do perhaps benefit from this extra food, but the population at greater risk is missed, since it is now recognized that the need of supplementary feeding is greater for younger children and for pregnant and lactating mothers. In some programmes that include these mothers among recipients of supplementary food, it has been noticed that instead of consuming, it themselves, they share it with the whole family. This may seem natural, but the supplementary value is almost completely lost.

When the food is donated from foreign resources and not locally available, a supplementary food programme cannot possibly serve to improve dietary habits of the people. In fact, it may produce unfavourable results by making the families and countries dependent on foreign foods. More importantly, despite the good intentions, such programmes tend to use up the manpower and other resources that the country could otherwise devote to more fundamental effective nutrition-oriented activities, and create the false impression that the problem is being solved while in fact it is being perpetuated.

Nutrition education is another measure commonly taken against malnutrition. Frequently, however, even when an adequate methodology is used, the messages are based on principles which are not applicable under the specific circumstances in which the people live. For instance, foods are recommended which are not only impracticable for economic, cultural or other reasons, but sometimes not even strictly necessary. It is no wonder that most of these efforts have been unsuccessful in improving dietary practices, and sometimes have been helped in making them worse.

The problem of malnutrition is indeed complex, with many more social than strictly medical aspects. In the long run, only a rational socioeconomic development will correct it—one that will eliminate the basic causes of malnutrition: poverty, ignorance and poor environmental conditions in which large sectors of the populations in the developing countries now live.

It is important to emphasize that chronic malnutrition as commonly seen in most countries will not be solved merely by producing more food or increasing resources at the national level, unless a more rational and equitable distribution is introduced and the resources are used primarily to improve the living conditions of all the people. This must be kept in mind in initiating any efforts for socio-economic development.

Much can be done now

However, young children cannot wait for long-term plans. They are affected now. The continued suffering of children contributes to the perpetuation of unacceptable standards of living. Furthermore, it is known now that lack of money is not always the main hurdle in improving the diet of young children. Very significant improvements can be made with a better utilization of locally available and acceptable foods that are commonly eaten by the family, but not given to young children at the right time or in adequate amounts and proportions. Efforts to promote the maintenance of breast-feeding and counteract the factors responsible for its decline, and to improve weaning practices in the local context while respecting traditional values can go a long way towards providing a better diet for young children—even under the circumstances that now prevail in most developing countries. But improved diet must go together with basic sanitation and health care of mothers and children. This will only be possible within the primary health care approach, with active participation of the communities themselves.

In the words of Dr. Halfdan Mahler, WHO Director-General, "poor malnourished parents produce malnourished children who in turn will become poor and malnourished parents". This "vicious spiral" must be broken by improving child health and nutrition levels. This is a challenge to the government of the world and the international community in the International Year of the Child and in the years to come. The wellbeing of the majority of the world's population is at stake.