

EDITORIAL*

Child Health in Developed and Developing Countries

Over the past 50 years, infant mortality has decreased in varying degrees in all countries. The relatively low rates in highly developed countries, however, do not exclude the fact that they still contain children who are unable to benefit from the affluence of their society. For example, the infant mortality rate in the United Kingdom was 27 per 1,000 live births in 1953, the risk of a laborer's child's dying under the age of one year being about twice that of a professional man's child.

In developing countries, half the population, and more than half the children, are affected by undernutrition and malnutrition. The highest death rates prevail among the youngest groups of children: about one third of them die before reaching the age of five. The infant mortality rate is regarded as a reliable indication of the status of a society's child health. In Turkey, for instance, the rate is still as high as 150 per 1,000 live births and in some parts of the country much higher. Available data show that it reaches 400 per 1,000 in some African and Asian communities, but, since reliable and comparable statistics are unfortunately not always obtainable in developing countries, it may reasonably be assumed that the actual rate is above that which the figures imply. In advanced countries, the infant death rate ranges from 15 per 1,000 during the first year to, at worst, 50.

* On the occasion of the tenth anniversary of *The Turkish Journal of Pediatrics*

Deaths under the age of one year are usually subdivided into the neonatal period (under 28 days) and the post-neonatal period (28 days to one year). Neonatal deaths are believed to be caused mainly by prenatal or natal factors, and post-natal deaths are attributed to various environmental factors. In countries where the infant mortality rate has dropped to 20 per 1,000 live births, the time in which these relatively few deaths occur is gradually being narrowed down to the early neonatal period. The major obstacle encountered by such countries is the slow and difficult search for the cause of death; however, they are fortunate in having both the facilities and the will to carry out the necessary research.

In the less fortunate areas of the world, however, where infant mortality rates are still high, the pattern is quite different. That neonatal death rates are much higher than in developed countries is hardly surprising, since pregnancy often occurs in a permanently undernourished mother, whose exposure to numerous infections and infestations has weakened her general health and whose culture may impose further limitations of diet and activity on her during pregnancy and the neonatal period.

There is also a dramatic difference between the post-neonatal mortality rates of developed countries and those of developing ones, and this difference is found to be closely related to socio-economic levels, such as environment control and existing health services. The causes of post-neonatal deaths, which were once widespread in the developed areas, still prevail in the developing ones. Incomplete as they are, the available data indicate that infections and parasitic diseases are important causes, and, in addition to these, the special hazards of a tropical or sub-tropical climate further affect the mortality rate.

In countries where high health standards have been achieved, death among the toddler and the pre-school group has declined radically, and now runs to about 1 per 1,000 per year, or less. On the other hand, in countries where such standards have not yet been reached, mortality at this age may be as much as 40 times greater, as a result of exposure to common childhood diseases, parasitic infestations and infections. Children in developing areas can easily succumb to these illnesses, because they are undernourished or malnourished at a stage when their nutritional needs are necessarily at a high level to sustain rapid growth. Furthermore, they are exposed to these dangers while still largely dependent for

protection and care upon parents who may be ill-prepared to provide these because of poverty, overwork, lack of knowledge of the child's needs, and childrearing practices peculiar to their culture.

Protein-calorie malnutrition, in particular, affects an estimated 70 per cent of pre-schoolage children in developing regions of the world today, impairing their growth and development, sometimes irrevocably. The problem of providing proper nutrition for them is alone enormous, and becomes even greater with increased population and as a result of internal migration and industrial development.

Another major handicap for school-age children is the lack of educational facilities. Of the children who do manage to survive the early years, only half receives an elementary education, and a much smaller proportion proceeds to more advanced schooling. Thus they do not receive the guidance they need to participate effectively in the rapidly changing world they will eventually inherit. For many different reasons—lack of facilities, lack of teachers, lack of motivation, lack of economic means—the great reservoir of potential trainees is reduced to a tiny pool. Because there is often no school to attend, or because of the pressure of economic conditions, children may join the labor force at the age of 12 years or less. Life expectancy, as well as that which one expects from life, depends not only on what happens to the individual as an adult, but also on the way he has been nurtured as a child.

The World Health Organization recommends that health services for children be developed as an integral part of each nation's or community's general health services. The needs of mothers and children must be provided for and supervised by some kind of central organization responsible for maternal and child health. Owing to insufficient financial resources and the shortage of doctors and nurses, it is sometimes necessary to develop certain branches of the medical services before others. These might include national action programs against specific diseases, which could be carried out by auxiliary personnel using relatively simple techniques. Midwifery services are usually developed prior to the broader aspects of health service projects, because it is possible to use midwives to deliver babies in the home and to train indigenous birth attendants to deal with normal births. It is also sometimes practical to develop maternal and child health services in selected areas, and these have indeed proved to be one of the best

ways of arousing the interest of rural populations in better health care and of convincing them that they should provide facilities and voluntary support. Any or all of these services may be used to prepare the way for permanent health services to meet the needs of the entire population.

Most countries plan to combine preventive and curative medical services and to extend them into rural areas, which means strengthening the infrastructure and establishing a network of health centers and subcenters.

Of all the needs of developing areas, that for personnel is the most pressing. In Turkey, for example, there is one nurse to every four medical doctors. This ratio has to be reversed by training more nurses and other auxiliary personnel than are being trained at present. It was for this reason that the Hacettepe teaching institutions were started by establishing two schools of nursing, a school of physical therapy and rehabilitation and one of medical technology, which served as the nucleus of the Medical Center and Hacettepe University.

The training of nurses and midwives, at both the fully qualified and the auxiliary levels, also needs to be reoriented in many countries. All too often at present, their training remains under the influence of Western nursing patterns, sometimes those already discarded by the West. Modern curricula in the developing countries today need more emphasis on public health, maternal and child health, and pediatrics, including growth, development and nutrition.

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