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The Premature Baby Starts Life in Precarious Condition

THE DEGREE OF risk of dying within the first year of life is the most obvious way to assess the public health significance of immature births.

We have a certain amount of scientific information on which to base intelligent programs of prenatal care, but these are still far from being widely enough available to mothers who need them most.

We also have much to learn about the causes of premature delivery and of retarded fetal development. For example, the most common disease of pregnancy, which leads to prematurity, maternal toxemia or eclampsia, is still a medical enigma.

The care of immature babies is one of our major health problems. More of such children are being saved by the painfully slow progress in techniques of care. The risk of dying is then gradually replaced by a risk of survival—with the possibility of lifelong impairments.

"Are these babies worth saving?" some have asked. Apart from the moral imperatives that relate to our responsibilities for human life, is this an area that warrants a high priority for investment of our material and intellectual resources? Whether we perceive it clearly or not, we do ultimately make choices, and cannot completely evade making some comparative judgments about values of human lives.

THERE IS NO doubt about the statistical association of low birthweight and a range of physical abnormalities, of which the most important reflect damage to the brain: blindness, deafness, cerebral palsy with impairment of limb movements and of speech to varying degress.

Our health statistics are too disorganized to give very good quantitative data of much use for predictive purposes. They are even less useful for scientific analysis, and we are still puzzled how much brain damage is the result of premature delivery and how much accompanies growth retardation caused by something else.

For several years, the National Institute of Neurological Diseases and Blindness has been sponsoring a comprehensive prospective study, involving the collaboration of about 15 hospitals throughout the United States.

More than 50,000 randomly selected births will be followed up in hopes of obtaining the first sound statistics on the prevalence of congenital diseases and the pre- and post-natal factors associated with them. This study is probably only barely large enough to give a few hints about our most urgent questions, and it will be some years before the data are fully assembled and analyzed.

Dr. Alison McDonald of Guy's Hospital, London, recently published a survey of 1128 children born at four pounds or less. About a quarter of a million births would have to be scanned to identify this number of low-birthweight children. They were from 6 to 8 years old at the time of the followup, and therefore old enough so that their school performance as well as their physical health could be assessed.

Researchers located 1066 of the children for the followup. Of these, 111 were diagnosed as severely blind, deaf or palsied. German measles may have been involved in prenatal damage to some of these children.

The brain-damaged children often had associated difficulties in their intellectual development. Even so, more specialized training might have helped them.

Perhaps the most optimistic finding was the virtually normal average I.Q. of the remainng 90 per cent of the children. This suggests that the main manifestations of immaturity will be revealed by careful neurological examinations of the infant, and that later intellectual development is unlikely to be impaired without obvious early signs.

The importance of careful early examination, for defects in hearing and sight is underscored by these studies of immature infants, but obviously applies just as strongly for every young child.