



Mental deficiency is a condition peculiar to man for it prevents the individual from fully participating in his human heritage. To assess precisely the general incidence of mental deficiency is a difficult task, but its importance can be measured by the following figures. Including all disabilities, roughly 10% of the world population is affected by a physical, sensory or mental affliction. Nearly 3% of the world population, in a conservative estimate, i.e. more than a hundred million persons, are suffering from permanent mental ailment reducing their intelligence to an extent not compatible with independent ordinary everyday life. Hence among the other scourges of humanity like malnutrition, extreme poverty and deprivation, mental deficiency is the most important obstacle to fulfillment of human potential.

Causes

Mental deficiency is a symptom of diseases which can affect a person at any age or stage of life. At conception genetic errors, mutations or chromosomal aberrations are probably the most important factors. Very early in fetal life infection such as rubella or toxoplasmosis, toxic agents such as drugs, alcohol and methyl mercury and exogenous factors such as radiations are the greatest danger.

Later, complications of pregnancy, delivery and the early neonatal period may damage the brain of the previously healthy baby and these problems may be aggravated by inadequate care of mother and child. Failure of parental and especially maternal attachment to the child may add deprivation to disability and rejection of breast feeding can cause childhood malnutrition to exert earlier its sinister effects. During childhood, infections and trauma may play a great role and later in life a wide array of accidents and diseases can also profoundly reduce mental efficiency.

From an etiological viewpoint one could classify severe mental deficiency into four categories, with the approximate frequencies: genetic diseases (30%), chromosomal abnormalities (20%),

exogenous causes including adverse effects in utero and early life (30%). The remaining causes (20%) are still not identified. Mental deficiency from any of these causes may be aggravated by social deprivation and malnutrition.

As a general impression we are not aware that a diminution of these causes is foreseeable. Some of them may well be increasing in future years, especially those of environmental origin, both physical and social.

Health Measures

a) *Prevention*: When relevant action is possible before definitive lesions are produced, prevention is the best protection. Many examples are available: vaccination of the future mother against infection – treatment of the fetus allowing for relief of haemolytic anaemia due to Rh incompatibility – improved care during pregnancy and labour – or, postnatally, special diets to prevent the dangerous effects of genetic factors such as phenylketonuria and galactosaemia – and generally any measures preventing brain injury are of great importance; this includes all surgical procedures as in craniostenosis and hydrocephaly.

In cases in which a high risk is predicted, counselling and advice for the families is necessary. General public information is also indispensable.

b) *Medical treatment*: When lesions are already established, medical treatment is generally limited but there are many reasons to believe that the situation will improve in many cases. Medication can stop the progress of the disease, can alleviate some of the symptoms and stimulate the compensatory functions of the brain.

c) *Dangers to the mentally deficient*: Although a number of chromosomal and genetic causes of mental deficiency can be diagnosed in the young fetus, at present no effective treatment can be offered. This lack of treatment has led to the proposal and to the use of termination of pregnancy or more accurately to the extermination of the fetus. This behaviour is very disturbing because it represents a policy which would be regarded as antihuman if applied to any other age group or disorder. Similarly, the deliberate neglect, the calculated starvation or even the poisoning of the handicapped newborn, recommended and practised by some doctors, defies not only traditional medical ethics but the most elementary rules of human conduct: our duty of care and protection is greater, the weaker and more helpless the victim.

On the contrary we believe that early diagnosis will and must be pursued to increase the efficiency of therapy. For instance, amniocentesis already quoted, could be used successfully against inborn diseases as it has been used in the case of haemolytic disease of the newborn.

As scientists we consider also that early detection by various means, such as fetoscopy, will greatly improve our ability to cure many others.