



PLAY THERAPY WITH BALL, SPONTANEOUS COMMUNICATION AND DRAWING LESSON AT NEW YORK'S KENNEDY CENTER
 Welcome progress in the long search for antidotes to poverty's poisonous effects on the mind.

ly of those called moderately and mildly retarded, with IQs of between 30 and 75. They are for the most part medical mysteries, like the Leonard brothers, who appear to have no physical defects. Some have suffered birth injuries that produce slight brain damage, the effects of which appear years later. Most seem to be casualties of their environment, starting with the womb, their disabilities the result of a congeries of medical, cultural and economic causes.

Cat's Cry. Science at present understands the more serious forms of retardation better than the less serious ones. Chromosomal problems like mongolism or *cri-du-chat* (cat's cry) syndrome, which leaves an infant with a partially developed head and brain and a peculiar mewing voice, can be spotted almost immediately after birth.

None of these severe conditions can yet be cured. But as a result of recent scientific developments, many can be prevented. German measles, responsible for the birth of many retarded infants, has been nearly eliminated thanks to a nationwide immunization campaign. PKU's effects can be checked by a special diet if the defect is immediately identified; 43 states now require a PKU test at birth. Doctors can recognize the chromosomal flaw that causes mongolism and 27 of the genetic quirks known to cause retardation. More important, they can diagnose these in the fetus by amniocentesis. A needle is inserted into the uterus to draw off a sample of the fluid in which the fetus floats. The material is analyzed for extra or missing chromosomes or absent enzymes.

The procedure has been performed on thousands of women so far and is regarded as safe and effective. If it reveals a flaw early enough in pregnancy, the parents then have the option of abortion. Amniocentesis is elaborate and expensive. However, it should be considered whenever there is an unusu-

ally high risk of retardation or other disability. For instance, women over 35 are four times as likely to have mongoloid children as younger mothers. If all older pregnant women were tested and would agree to abortion where warranted the incidence of mongolism could be cut in half. If genetic counseling becomes a widespread practice and related medical services become generally available, retardation resulting from other known, hereditary causes could be sharply reduced.

That kind of defect, however, accounts for only about 20% of the retarded in the U.S. For the other 80%, who are functionally rather than physically retarded, physicians can rarely find precise causes. A growing number of experts believe that this nonspecific, generally milder form of retardation, the primary symptom of which is poor intellectual performance, is a socioeconomic disease. While genetic, chromosomal and hereditary causes occur with about the same frequency in all racial and economic groups, retardation of unknown origin is nearly ten times more likely to occur among the poor, black and Spanish-speaking in the U.S. than among the white and affluent.

The reasons are not racial, according to Dr. Robert Cooke, chief of pediatrics at Johns Hopkins Medical Center in Baltimore. Says Cooke: "Intelligence is controlled by so many genes that it would be biologically impossible to allocate an aggregation of these by race. Since the genetic pattern is essentially the same for all races, we must assume that any differences in intelligence are environmental."

The poor tend to be less healthy and get less prenatal care. An estimated 30% of America's expectant mothers get no medical attention at all, and these are nearly all daughters of poverty. Their children are more likely to be born prematurely, to contract serious

diseases during infancy and to suffer from malnutrition during the first three years of life, when 80% of all brain growth takes place. Doctors and educators agree that language, words as a key to handling ideas, is the *sine qua non* of intelligence. Yet the children of the poor, white or black, are less likely than middle-class youngsters to get the intellectual stimulation essential to their mental development. Some parents in urban and rural ghettos still follow what Mrs. Mary Robinson, director of Baltimore's Martin Luther King Center for Parents and Children, calls a "slave tradition" in child rearing, which inhibits the development of language ability. "We teach our kids to be quiet and not to bother us and not to bother everyone else," says Mrs. Robinson. "We had to do this in order to survive, but we don't have to do it any more. It's killing us."

Bedlam Approach. Because most environmentally retarded children develop physically at a normal rate, parents often fail to realize that the youngsters' minds are not keeping pace. Compensatory programs must be started early if they are to be effective. But most children of this type are not diagnosed until they have entered school, and many schools are inadequately equipped to deal with them. As a result, the child not only fails to catch up, but is likely to fall further and further behind those of his age. If he becomes mentally disturbed as well, he may be put in an institution. More likely, he will simply drop out of school to enter a labor market that has fewer and fewer jobs for the unskilled.

Whatever the cause and whenever it is made, a diagnosis of retardation can be a preface to tragedy. Nervous breakdowns, divorce, suicide and even homicidal tendencies are believed to be more common among the parents of the retarded than in families without the