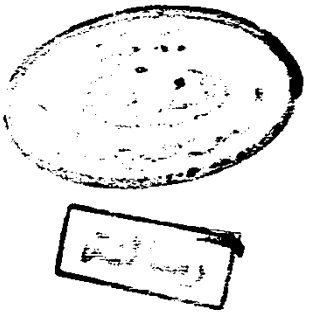
ESSAY
ON MENTAL RETARDATION

Submitted for the Partial Fulfilment of

Master Degree in Pediatrics



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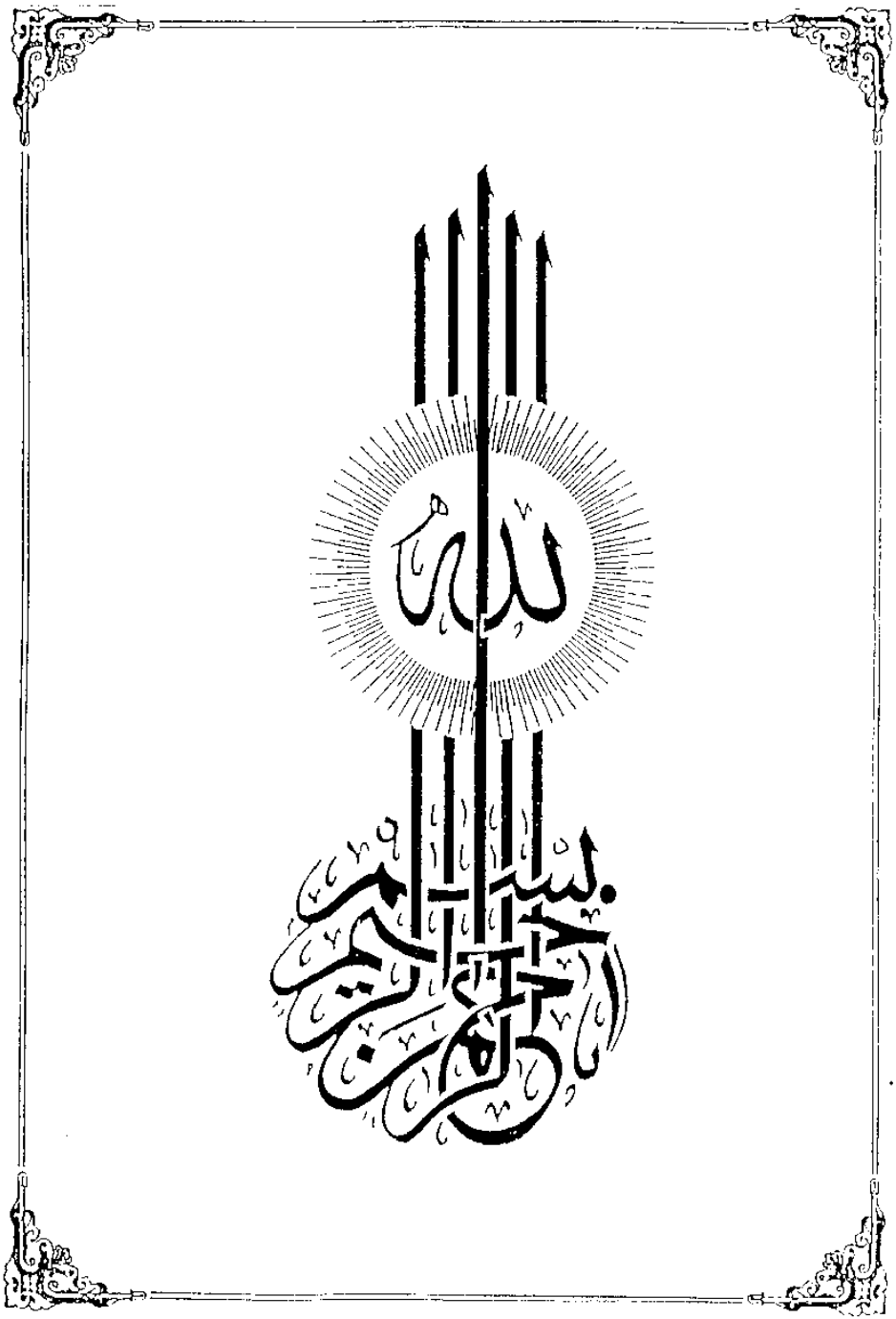

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INTRODUCTION

Study of mental retardation is undoubtedly one of the modern pediatricians priorities. At one time the mentally retarded child was hidden by his family away from the public and even from the medical profession, but at present he recieves more care and attention (Sattler, 1982).

The latest definition as given by The American Association of Mental Deficiency (A.A.M.D) is subaverage general intellectual functioning concurrently with deficits in adaptive behaviour manifested during the developmental period (before the age of 18 years). The term subaverage intellectual function implies a level of two or more standard deviations below the mean on standardized intelligence tests, with intelligence quotiont (I.Q) below 70 (Grossman, 1977).

Patients are classified according to their I.Q. into border line with I.Q. between 69-55, mild and moderate

or moron with I.Q. between 54-40, severely retarded or Imbecile with I.Q. between 39-25 and profoundly retarded or Idiot with I.Q. below 25 (Rossa, 1980).

Mental retardation is mainly due to environmental factors. The genetic factors are inborn errors of metabolism and chromosomal abberations. Other factors are developmental morphological anomalies of the brain and heridodegenerative disorders. Acquired causes that lead to mental retardation as prenatal, perinatal, and postnatal (Adams and Lyon, 1982).

Clinical assessment should include detailed history, full examination and prompt investigations to reach an early diagnosis. This will help in sorting out treatable cases, minimizing and preventing the occurrence of mental retardation. Management and continuous care of mental retardation are of atmost need.

Every one agrees that the incidence of mental retardation must be lowered by intensive preventive measures and genetic counselling.

AIM OF THE ESSAY

The aim of the essay is to study mental retardation as regards, the latest definition, incidence and classification.

Also to collect the etiological factors and causes, pointing out their diagnostic features, investigations and treatment.

Prevention and management of mental retardation and their importance to reduce its incidence will be also discussed.

II- DEFINITION

DEFINITION

Mental retardation is the most common cause of developmental delay. It is probably the most handicapping of all chronic childhood disorders. It is a condition and not a single disease.

Several major efforts to define mental retardation have been made in the twentieth century.

Tredgold (1937) defined mental retardation as a state of incomplete mental development of such a kind and degree that the individual is incapable of adapting himself to the normal environment of his fellows in such a way as to maintain independent supervision, control or external support.

Doll (1941) suggested five criteria for definition of mental retardation:

1- The individual is socially incompetent.

2- The individual is mentally subnormal.

3- The individual is developmentally arrested.

4- The deficiency is of constitutional origin.

5- The deficiency is essentialy incurable.

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Intelligence

WeChsler (1950) involves multiple dimensions beside more pure notions of intelligence, such as the ability to think abstractly or the ability to possess perceptual organization or visual-motor coordination. Also intelligence consists of variables such as motivations, alertness, anxiety and impulsivity.

Cronbach (1975) defines intelligence as the ability to learn, the amount of acquired knowledge, and the ability to adapt to the environment.

Adaptive Behaviour

Adaptive behaviour is the manner in which an individual meets the standards of personal independence and social responsibility expected of his or her age and cultural group (Grossman 1973).

Deficits in adaptive behaviour will vary at different ages. These deficits may be reflected in the following areas (Grossman 1973).

During infancy and early childhood:

1- Sensory-Motor skills development including tasks such as grasping objects, sitting alone, crawling, standing, walking, feeding, toileting skills are of greatest importance.

2- Communication skills including speech and language.

3- Self-help skills.

4- Socialization (development of ability to interact with others).

5- Application of basic academic skills in daily life activities.

6- Application of appropriate reasoning and judgment in mastery of the environment.

7- Social skills (participation in group activities and interpersonal relationships).

And during late adolescence and adult life in:-

8- Vocational and social responsibilities and performance.

III- INCIDENCE

INCIDENCE RATE

The incidence of metnal retardation ranges from 3-5 percent of the population in U.S.A. (Birnbrauer, 1976), to as high as 6-9 percent of children requiring special education because of impaired intellectual functioning (Kolb, 1973).

There have been many community studies of mental retardation by Grossman (1973). He reported that 2.5-3 percent of the children are diagnosed as mentally retarded in terms of itelligence quotion (I.Q) less than 70.

The incidence of mental retardation in Egypt, in the age group (6-9 years) in the primary schools, ranged between 2.6-12.7 percent (Soltan et al, 1983). This ratio is apparently less than the true one, because as it is expected a large percentage of the mentally retarded donot go to school.

The consanguinity rate in Egypt is high (29 percent)