PERVASIVE DEVELOPMENTAL DISORDERS

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NEUROPSYCHIATRY

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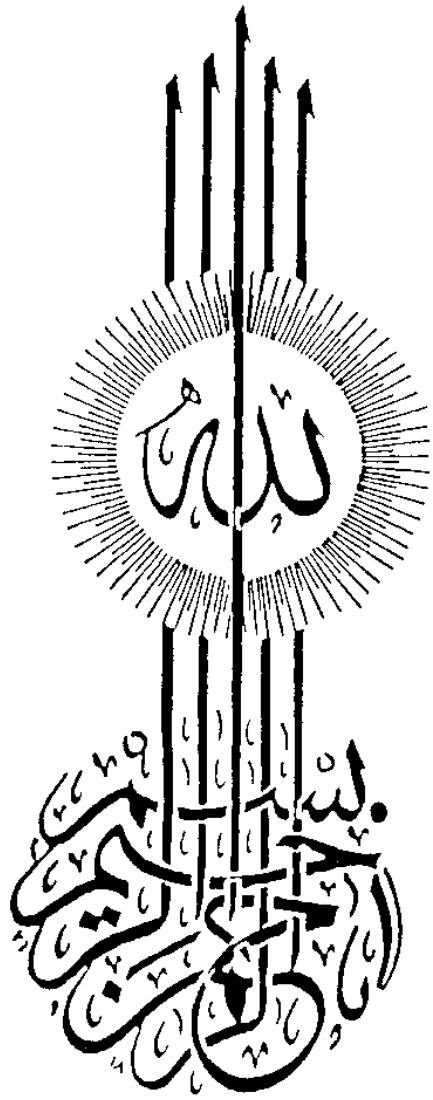

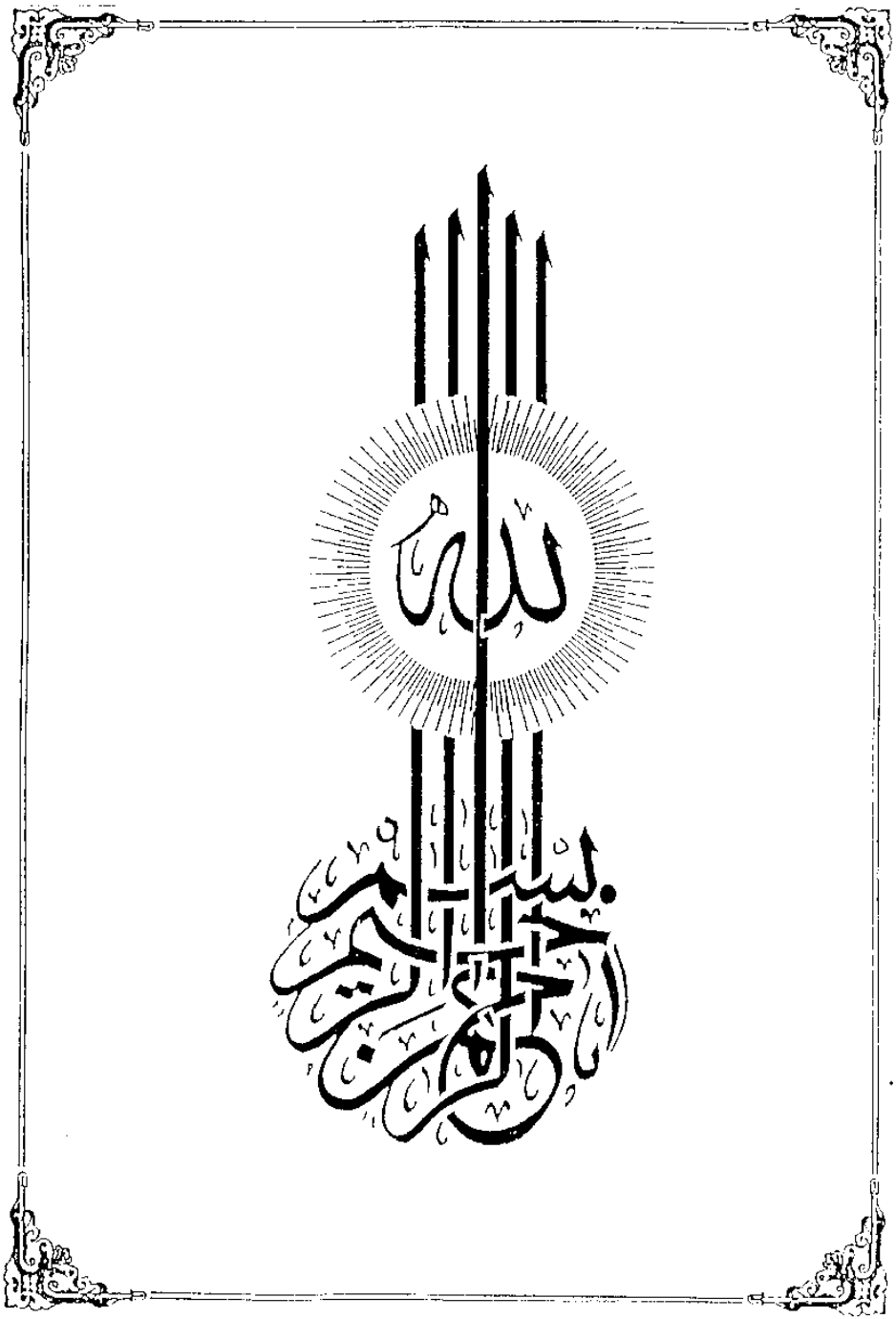

TO MY FAMILY

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INTRODUCTION & AIM OF THE WORK

Pervasive developmental disorders (PDDs) are a group of disorders that are characterized by qualitative impairments in reciprocal social interactions, and in patterns of communication, and by restricted, stereotyped, repetitive repertoire of interests and activities. These qualitative abnormalities are a pervasive feature of the individuals functioning in all situations, although they may vary in degree (*ICD-10, 1992*).

The current field of research indicates that this group of disorders (PDDs) are a spectrum of serious biologically determined disorders with multiple etiologies from more to less severe. The autistic spectrum of disorders is part of a quatrian of major brain damage also comprising epilepsy, cerebral palsy and mental retardation which may co-exist (*Prior and Tonge, 1990*).

At first, these disorders were officially recognized in the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III) as a distinct childhood psychiatric disorder known as pervasive developmental disorders (PDDs) with three subgroups: Infantile autism, childhood onset PDD, and atypical PDD. The later Diagnostic and Statistical Manual of Mental Disorders, Third Edition, revised (DSM-III-R)

classification recognized only one specific subgroup of the general group PDDs namely autistic disorder and Kanner's syndrome with a broader and different definition than the DSM-III. Apart from autistic disorder all cases that do not meet these criteria were coded as pervasive developmental disorders not otherwise specified (PDDNOS) (*Kaplan and Sadock, 1988*).

In an effort to provide increased specificity, the International Classification of Diseases, Tenth Edition (ICD-10) has introduced five additional specific PDDS: Childhood autism, atypical autsim, childhood disintegrative disorder, Rett's syndrome, and Asperger's syndrome (*DSM-IV, 1991*).

Out of the point of view that on the international level, there is a need for a unique language for all psychiatrists, investigators and research workers to communicate with, field trials were conducted to compare the various systems as an attempt to foster the convergence between the Diagnostic And Statistical Manual Of Mental Disorders, Fourth Edition and the ICD-10 criteria sets for autistic disorder, and as an intention to provide greater simplicity and compatibility with ICD-10 and clinicians judgment (*DSM-IV, 1991*).

The aim of this work is

to review different definitions, diagnoses, and classifications of PDDs, to present a paradigm for the etiology, and consequent methods of intervention.

HISTORICAL OVERVIEW

The pervasive developmental group of disorders were first noticed in the very young children with severe mental disorders involving a marked deviation, delay and distortion in the developmental processes. These disorders were categorized initially as psychoses (*Kaplan and Sadock, 1988*). In 1943 Kanner described a group of 11 children with a previously unrecognized disorder. He noted a number of characteristic features in those children, such as inability to develop relationships with people, extreme aloofness, a delay in speech development, non communicative use of speech repeated simple patterns of play activities and islets of ability. He described these children as having "come" into the world with innate inability to form the usual biologically provided affective contact with people. Despite all the variety of individual differences that appeared in the case descriptions, *Kanner (1943)* believed that only two features were of diagnostic significance: autistic aloofness and obsessive insistance on sameness. He adopted the term "early infantile autism" to describe this disorder and called attention to the fact that its symptoms were already evident in infancy.

During the next decade, clinicians in the United States of America (U.S.A.) and in Europe reported cases with similar features (*Asperger, 1944; Vankrevelen, 1952*). However, controversy continued over the disorder

because the name autism was ill chosen. It led to confusion with *Bleuler's (1911)* use of the same term to describe schizophrenia in adults. This confusion led many clinicians to use terms such as "childhood schizophrenia, Borderline psychosis, symbiotic psychosis and infantile psychosis" as interchangeable diagnoses. Each label had its definition and roots in a particular view of the nature and causation of autism.

In an attempt to clarify the confusion, *(Eisenberg and Kanner, 1956)* reduced the essential symptoms to two: extreme self-isolation and preoccupation with the preservation of sameness. The peculiar abnormality of language was considered to be secondary to the disturbance of human relatedness and hence not essential. They also expanded the age of onset to the first two years of life. Their efforts, however, were sometimes taken as a licence to ignore age of onset as a necessary diagnostic criterion or to change the criteria all together. For example, *Schain and Yannet* (1960) omitted preservation of sameness (resistance to change) from their criteria; *Creak et al.*, (1961) used nine diagnostic points to encompass all forms of childhood psychoses, including *Kanner's* (1943) infantile autism within a single diagnosis (Schizophrenic syndrome of childhood); and *Ornitz and Ritvo* (1968) emphasized disturbances of

perception as a primary symptom that was not included by Kanner.

Rutter (1968) critically analyzed the existing empirical evidence and proposed that four essential characteristics of infantile autism stand out: (1) lack of social interest and responsiveness; (2) impaired language, ranging from absence of speech to peculiar speech patterns; (3) bizarre motor behavior, ranging from limited and rigid play patterns to more complex ritualistic and compulsive behavior; and (4) early onset, before 30 months of age. These features presented in nearly all autistic children. There were many other specific features, but they were unevenly distributed.
In 1978 the Professional Advisory Board of the National Society for Children and Adults with Autism further formulated a definition of the syndrome of autism. Autism was defined as a behavioral syndrome that manifested itself before 30 months of age and had the following essential features: **(1)** disturbances of developmental rates and sequences;.**(2)** disturbances of speech, Language, cognition and non verbal communication; **(3)** disturbances of responses to any sensory stimuli; and **(4)** disturbances of the capacity to relate appropriately to people, events, and objects. This definition and the definition of *Kanner* (1943) and *Rutter* (1968) paved the way for two sets of criteria that are now widely used by

clinicians all over the world: The International Classification of Diseases, 9th revision, Clinical Modification (ICD-9-CM) (U.S. Department of Health and Human Services 1980) and the Diagnostic and Statistical Manual of Mental Disorders 3rd edition (DSM-III) (American Psychiatric Association 1980).

Although ICD-9-CM and DSM-III have similar definitions and diagnostic criteria for infantile autism, there are apparent differences in the concept of autism. In ICD-9-CM, infantile autism is classified as a subtype of "psychoses with origin specific to childhood", whereas in the DSM-III and DSM-III-R (American Psychiatric Association 1987) systems, infantile autism is viewed as a type of pervasive developmental disorders characterized by delays and distortions in the development of social skills, cognition and communication (*Tsai, and Ghaziuddin, 1991*).