Psychosis in Children: What is our present state of knowledge

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Psychotic disorders are severe devastating illnesses that can seriously compromise the quality of life of many patients. Special considerations are needed for special patient populations such as, children and adolescents, as the developmental stage may greatly influence the clinical presentation and outcome. The vast bulk of research on psychosis has excluded children with psychotic disorders.

The existence of childhood psychoses was discussed and denied for many years especially due to distinct definitions and different classifications that kept changing over time. Today, childhood psychosis is a well known entity (Tengan & Maia, 2004).

Schizophrenic disorders in childhood comprise between 0.1 and 1% of all schizophrenic disorders before he age of 10, and 4 % before he age of 15 (Remschmidt, H., 2000). The term childhood schizophrenia was previously used to refer to all forms of childhood psychoses. This practice was an impediment to the advancement of knowledge, because marked differences exist between the types of psychosis seen in children. By lumping together of different subgroups of childhood psychoses, findings pertaining to childhood schizophrenia were obscured.

All three major classificatory systems (ICD-9, ICD-10 and DSM-III-R) have no special criteria for children and recommend the use of adult criteria in children (Reddy et al, 1993). This approach assumes similarity of schizophrenia in adults and children, which is not supported by clinical and research data. Although similar forms of schizophrenia may exist in childhood and adulthood, other differences such as in the etiology, course and prognosis, may exist and should not be overlooked (Beitchman, 1985).

It is recommended that where possible, every attempt should be made to make a diagnosis within one of the standard diagnostic systems, ICD-10 or DSM IV. In most cases the diagnostic criteria in adolescence are a little different from those in adulthood (Clark, 2001). According to the fourth edition of DSM (DSM IV), the criteria for childhood-onset schizophrenia and adult schizophrenia are synonymous except for one potential modification for children (i.e. in childhood-onset schizophrenia, the failure to meet expected social or academic milestones may be present rather than a deterioration in functioning) (Dunn, 2003).

The majority of episodes of psychotic disorder in adolescence would be the first such episodes of illness and there is likely to be considerable diagnostic uncertainty, as the natural history of the disorder has yet to unfold (McClellan et al, 1993). It may be the first episode of a lifelong disorder such as one of the schizophrenias, or a bipolar affective disorder; it may be a psychotic disorder secondary to other organic disorder (particularly substance misuse); or it may be a brief psychotic episode to be followed by full recovery with no further episodes of illness. The possibility of a third or even fourth psychosis needs investigation. There is no data on many adolescents suffer from brief / ultra brief benign psychosis due unknown etiology (? viral etiology)?

Multifactor issues are commonly encountered in childhood psychotic disorders – genetic influences, organic influences, environmental factors, family influences. In addition, there is often a history of prenatal, postnatal and perinatal hypoxia (Tolbert, 1996). 3 ways of research have revealed new and fascinating results augmenting the knowledge on etiology: long-term follow-up studies, neurobiological-neuropsychological experiments and research in psychoanalysis and developmental psychology of the child (Eggers, 1982).

The clinical picture of psychosis in childhood and adolescence has not always been clear-cut or classical, leading to diagnostic confusion. Their clinical presentation in children differs from that observed in adults (Tengan & Maia, 2004). Although the major studies have identified symptoms closely resembling those found in adults, the clinical picture of childhood psychoses differs in several aspects. It may include high levels of anxiety, incoherent speech, loss of concentration, preoccupation with inner thoughts, bizarre actions and poor emotional control. Symptoms such as delusions and hallucinations may be more difficult to assess in a child than in an adult.

Symptoms frequently seen in children with psychosis are: speech disturbances, inability to distinguish dreams from reality, visual and auditory hallucinations, vivid and bizarre thoughts and ideas, diminished interest, confused thinking, extreme moodiness, odd behaviour, stereotypy, disinheriting, ideas that others are 'out to get them', confusion of television with reality, severe problems making and keeping friends (Tolbert, 1996).

It was believed, although no entirely so, that children are unable to have delusions because they do not have a totally developed egoic structure, Moreover, there are difficulties in distinguishing psychotic symptoms in children from their 'fantasy world', which is a part of the child's normal development?

Besides, non-specific auditory hallucinations, coupled with a mistrust of others, may occur in a number of non-psychotic conditions (e.g. conduct and emotional disorders, dissociative states, borderline personality disorders and post-traumatic stress disorder), and it is necessary to be clear about the nature of the phenomenology leading to a diagnosis of a psychotic disorder.

Psychotic disorder secondary to an underlying physical illness is extremely rare but needs to be considered in every child. A formal physical examination, including a comprehensive neurological assessment, is therefore essential. The differential diagnosis is wide and encompasses many general medical conditions in addition to primary psychiatric disorders [e.g. epilepsies (particularly those with a temporal lobe focus), cerebral tumour or other space occupying lesion and neurodegenerative disorders]. Organic psychotic disorder secondary to substance misuse is frequently suspected in teenage age group, and urine or hair analysis for illicit drugs should be undertaken (Clark, 2001).

Because of the rarity of childhood psychosis many professionals are frequently unfamiliar with some aspects of presentation or management and appropriate service provision (admission directly into an inpatient bed in an age-appropriate environment) is not readily available. A lack of age appropriate provision may also mean that adult psychiatrists are called on to manage and treat a child presenting with a psychotic disorder. Treatment planning should address biological, psychological and social factors within a framework that also takes note of a young person's developmental stage. This would necessitate a multi-modal approach to treatment that includes pharmacotherapy, individual psychotherapy, family therapy and educational or vocational strategies.

The advent of the atypical antipsychotics may improve prognosis through better early compliance and thereby an overall reduced period of active illness.

Outcome studies of childhood psychoses are limited and selective in nature. All studies demonstrated that the majority of cases had a poor prognosis, which was poorer in the childhood-onset than in adolescent-onset one, with recurrent illness and markedly impaired social functioning. Premorbid characteristics such as being shy, introverted, withdrawn and having cognitive decline have been linked with poor prognosis in early-onset schizophrenia (Remschmidt, 2000).

Psychotic disorders in children cause anxiety and pose a challenge and to sufferers, their families and professionals involved in their assessment and treatment. Accurate early diagnosis, coupled with appropriate treatment, is essential to minimize secondary handicaps. One possible solution is the development of regional early psychosis centers. These centers could provide a regional focus for research, education and clinical services.

Several longitudinal studies that have been mounted on high risk children are underway and hold great promise. They would throw light on the early indicators of psychosis and on specific protective / facilitating factors for childhood psychosis. They would also provide a platform for the development of specific intervention strategies that could delay, or even prevent, the onset of the psychotic process.

References

Beitchman, J.M. (1985) Childhood Schizophrenia : 'A review and comparison with Adult-onset Schizophrenia'. Psychiatric Clinics of North America, 8, 793-814.

Clark, A.F. (2001) Proposed treatment for adolescent psychosis. 1: Schizophrenia and Schizophrenia-like psychoses. Advances in Psychiatric Treatment, 7, 16-23.

Dunn, D.W. (2003) Schizophrenia and other Psychoses. e-medicine, P., Angelo, Giardino, Robert Konop, Pataki Caroly et al) Eds., pp. 1-11.

Eggers, C (1982) Psychosis in childhood and adolescence. Acta paedopsychia, 48, 81-98.

Mc Clellan, J.M., Werry, J.S. & Ham, M. (1993) A follow-up study of early onset psychosis. Comparison between outcome diagnoses of schizophrenia, mood disorders and personality disorders. Journal Autism Dev Disord., 23, 243.

Parker, P.M. (2004) Speciality Definition : Psychosis. http:/www. Webster-on-line dictionary.org/definition/english ps/pyschosis.html

Reddy, Y.C., Girimaji, S.r. & Srinath, S. (1993) Comparative study of Classification of Psychosis of Childhood and Adolescent onset. Acta Psychiatrica Scandinavica, 87(3), 188-191.

Remschmidt, H. (2000) Early-onset schizophrenia: History of he concept and recent studies. Indian Journal of Behavioural Sciences, 10 (2) & 11 (1), 11-22.

Tengan, S.K. & Maia, A.K. (2004) Functional psychosis in Childhood and Adolescence. J. Pediatr. (Rio de J.), Vol. 80, No. 2, Suppl. O.

Tolbert, H.A. (1996) Psychoses in Children and Adolescents: A Review. Journal of Clinical Psychiatry, 57 (Suppl. 3).

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