

## First Episode Psychosis in Children: Precursors of Psychotic Disorders and Gaps in Research

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### Abstract

Although first episode psychosis in adults has been the subject of extensive exploration, the precursors, treatment, and outcome of children and adolescents with a first episode of psychosis are less frequently investigated. Psychotic symptoms are relatively common in youth who experience marked trauma or severe mood disturbance, but questions also remain about the relationships between early adversity, cognitive and psychosocial impairments, and the stability of psychotic disorders in childhood through adolescence and adulthood. This editorial emphasizes the need for studies of the diagnosis, treatment, psychosocial course and outcome of children and adolescents who experience first episode psychosis.

**Keywords:** First episode psychosis; Childhood psychosis; Precursors of psychosis; Psychotic disorders

### Introduction

Acute reactions to trauma and severe mood disorders in children and adolescents are fairly frequently accompanied by psychotic symptoms [1]. Investigations of the developmental precursors of psychotic disorders in high risk populations, such as severely traumatized youth and the children of adults with psychotic disorders, are consistent with multidimensional models of the etiology of psychosis [2,3]. In spite of the plethora of longitudinal studies on severe psychiatric disorders, there have been relatively few long-term outcome studies of individuals who experience first episode psychosis during childhood or early adolescence [4]. Early intervention programs with children and youth at risk for psychosis and those with psychotic episodes could benefit from additional investigations in a number of areas, namely (a) diagnosis, early intervention and first episode psychosis, (b) childhood trauma and first episode psychosis, (c) neuropsychological deficits and first episode psychosis, and (c) follow-up studies of first episode psychosis.

### Diagnosis, early intervention and first episode psychosis

While psychotic symptoms can accompany exacerbations of severe childhood or adolescent onset mood disorders, such as major depressive disorder, the overall stability of psychotic diagnoses in children has been insufficiently examined. Results of first episode psychosis research with adults indicate that schizophrenia and bipolar I disorder have the highest rates of stability [5], but there are few similar investigations that include children. The very early identification of psychosis in adults has made it possible to compare the effectiveness of antipsychotic medications with psychosocial interventions without medication and to expand efforts to prevent conversion to psychosis in individuals with very brief and subthreshold symptoms of psychosis [6]. Even though a few early intervention

initiatives have been developed for children and youth with psychosis [7], concerns remain about the long term impact of the use of antipsychotic medication with children and adolescents and the psychosocial consequences of their deficits in functioning [8].

### Childhood trauma and first episode psychosis

Childhood trauma has been clearly identified as a significant risk factor for psychotic symptoms and psychotic disorders in adolescence and adulthood, including schizophrenia [9]. Children who have been abused have a greater likelihood of an earlier onset of psychotic symptoms, and the continuance of early adversity is associated with the persistence of psychotic symptoms [10,11]. In addition, among the offspring of adults with psychotic disorders, those who have experienced abuse and neglect have lower IQ scores, worse visual memory, and a greater likelihood of later developing psychotic disorders [12]. While some studies have noted a relationship between early trauma and later personality disturbance, much is unknown about the interrelationships between trauma, first episode psychosis and the persistence of dysfunctional personality traits; studies that will investigate the associations between first episode psychosis in childhood, trauma and the emergence of personality disorders in adolescence and adulthood are thus needed [13].

### Neuropsychological deficits and first episode psychosis

General deterioration in cognitive functioning may be associated with the overall number of psychotic features in children and adolescents regardless of the type of psychotic disorder [14]. There is some evidence to suggest that mood disorder related psychotic features are specifically associated with impairments in working memory and low IQ scores [15]. Additional studies are needed to examine the interrelationships between different types of trauma and adversity, psychotic symptoms, and possible neuropsychological precursors of mood related and non-affective psychotic disorders.

## Follow-up studies of first episode psychosis

Strategies for the treatment of children and adolescents at high risk for psychosis and those with first episode psychosis will require extensive empirical investigation [16]. In order to ensure a greater likelihood of positive outcomes for children and adolescents who experience early-onset psychotic disorders, treatment research should include studies of combinations of individual and family psychotherapy with the addition of psychosocial supports [17]. In the longitudinal North American Prodrome Study, the onset of psychosis correlated with positive and negative symptoms, sleep disturbance, and poor functioning among other variables [18]. In another longitudinal study of very high risk 15- to 30-year olds, conversion to psychosis was associated with negative symptoms, thought disorder and poor functioning and took place for a period of up to ten years after the initial assessment [19]. Even though similar follow up studies of high risk populations have assessed prodromal and psychotic symptoms [20], few of these investigations have included children and young adolescents with first episode psychosis.

## Summary

Studies of first episode psychosis in children and adolescents need to be expanded in order to answer a number of essential questions. How persistent are psychotic symptoms and psychotic disorders that arise in high risk children and adolescents? To what extent do adversity, functioning deficits, neuropsychological impairments, and other variables influence the persistence of psychotic symptoms and the re-occurrence of episodes of childhood psychosis? Finally, what early intervention protocols are most likely to be effective in lowering the risk that first episode psychosis in children will lead to compromised developmental outcomes? As biological markers and stress-related vulnerabilities for psychosis are steadily uncovered, answers to these questions will illuminate treatment planning initiatives with psychotic children and adolescents.

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