State of the art in childhood shizophrenia

Essay Submitted for Partial Fulfillment of M.D. Degree in Neuropsychiatry

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Introduction

Until only very recently, the occurrence of schizophrenia in childhood and early adolescence had been largely neglected. Improved diagnostic formulations have resulted in clarification of the boundaries between childhood schizophrenia, other psychotic disorders and pervasive developmental disorder **(*Schaeffer and Ross, 2002).***

The developmental perspective as reflected by investigations of childhood and early-onset schizophrenia has become a major research area during recent years and contributed much to the understanding of schizophrenia at all ages.

Schizophrenia can be understood as progressive-deteriorating developmental disorder childhood-onset schizophrenia is a rare disorder with a prevalence of one child in 10,000 before the age of 12 and a remarkable increase around puberty and early adolescence**. *(Resmchmidt, 2002)***

Extensive experience with the diagnosis of childhood-onset schizophrenia indicates a high rate of false positives. Most mislabeled patients have chronic disabling, affective, or behavioral disorder ***(Stayer et al, 2004).***

Early diagnosis of childhood-onset schizophrenia is met with caution in the psychological and medical community. (***Minzenberg et al, 2009)***These children received many diagnoses before schizophrenia or schizoaffective disorder was diagnosed. A diagnosis of schizophrenia or schizoaffective disorder and utilization of effective atypical neuroleptic treatment was

delayed until evaluation by a child and adolescent_psychiatrist ***(Ross and Schaeffer, 2002)***.

At present it is virtually impossible to speak about primary and individual prophylaxis of childhood schizophrenia as an endogenic disease. Prospects of secondary (therapeutic) prophylaxis of childhood schizophrenia are steadily improving due to the breakthroughs of modern therapy ***(Korsakov, 1986).***

Aim of the work

- To clarify how to differentiate between childhood schizophrenia and other disorders.
- To search is there a method for prophylaxis of childhood schizophrenia.
- To review different methods of treatment of childhood schizophrenia.

Child's mental needs:

It is easy for parents to identify their child's physical needs. However, a child's mental and emotional needs may not be very obvious. The basics for a child's good mental health include:

- Unconditional love from a family.
- Self-confidence and high self-esteem.
- An opportunity to play with other children.
- Encouraging teachers and supportive caretakers.
- Safe and secure surroundings.
- Appropriate guidance and discipline ***(Wagner and Pliszka, 2009).***

Between 10 and 20% of children and young people have a mental health problem, and a small percentage will have a severe mental illness. The key to ideally handling these childhood disorders is for parents and caretakers to recognize the problem and seek appropriate treatment ***(Rakel, 2005).***

Mental disorder:

Mental disorder or mental illness are terms used to refer to a psychological or physiological pattern, that occurs in

an individual ,and is usually associated with distress, or disability that is not expected as part of normal development, or culture. The recognition and understanding of mental disorders has changed over time ***(Wagner and Pliszka, 2009).***

Definitions, assessments, and classifications of mental disorders can vary, but guideline criterion listed in the ICD, DSM and other manuals are widely accepted by mental health professionals **.**

The Most Common Mental Illnesses in Children:

Children can suffer from the following mental illnesses:

- **Anxiety disorders:** Children with anxiety disorders respond to certain things or situations with fear and dread, as well as with physical signs of anxiety (nervousness), such as a rapid heartbeat and sweating ***(Altman et al, 1997).***
- **Disruptive behavior disorders:** Children with these disorders tend to defy rules and often are disruptive in structured environments, such as school ***(McClellan and McCurry 1999).***

- **Pervasive development disorders:** Children with these disorders are confused in their thinking and generally have problems understanding the world around them ***(Rutter and Schopler, 1987).***
- **Eating disorders:** Eating disorders involve intense emotions and attitudes, as well as unusual behavior, associated with weight and/or food.
- **Elimination disorders:** These disorders affect behavior related to the elimination of body wastes.
- **Learning and communication disorders:** Children with these disorders have problems storing and processing information, as well as relating their thoughts and ideas.
- **Affective (mood) disorders:** These disorders involve persistent feelings of sadness and/or rapidly changing moods ***(Calderoni et al, 2001).***
- **Schizophrenia:** This is a serious disorder that involves distorted perceptions and thoughts.
- **Tic disorders:** These disorders cause a person to perform repeated, sudden, involuntary and often meaningless movements and sounds, called tics.

Some of these illnesses, such as anxiety disorders, eating disorders, mood disorders and schizophrenia, can

occur in adults as well as children. Others, such as behavior and development disorders, elimination disorders, and learning and communication disorders, begin in childhood only, although they can continue into adulthood. In rare cases, tic disorders can develop in adults. It is not unusual for a child to have more than one disorder ***(Wagner and Pliszka, 2009).***

Causes of Mental Illness:

The exact cause of most mental disorders is not known, but research suggests that a combination of factors, including heredity, biology, psychological trauma and environmental stress, may be involved ***(Minzenberg et al, 2009).***

- **Heredity (genetics):** Mental illness tends to run in families, which means the ***likelihood*** to develop a mental disorder may be passed on from parents to their children. ***(Mazet, 1990).***
- **Biology:** Some mental disorders have been linked to special chemicals in the brain called neurotransmitters. Neurotransmitters help nerve cells in the brain communicate with each other. If these chemicals are out of balance or not working properly, messages may not make it through the brain correctly, leading to symptoms.

In addition, defects in or injury to certain areas of the brain also have been linked to some mental illnesses**.** ***(Chardavoigne et al, 2003).***

- **Psychological trauma:** Some mental illnesses may be triggered by psychological trauma, such as severe emotional, physical or sexual abuse; an important early loss, such as the loss of a parent; and neglect.
- **Environmental stress:** Stressful or traumatic events can trigger a mental illness in a person with a vulnerability to a mental disorder ***(Frith, 1994).***

The Symptoms of Mental Illness in Children:

Symptoms vary depending on the type of mental illness, but some of the general symptoms include:

- Abuse of drugs and/or alcohol
- Inability to cope with daily problems and activities
- Changes in sleeping and/or eating habits
- Excessive complaints of physical ailments
- Defying authority, skipping school, stealing or damaging property

- Intense fear of gaining weight
- Long-lasting negative moods, often accompanied by poor appetite and thoughts of death
- Frequent outbursts of anger
- Changes in school performance, such as poor grades despite good efforts
- Loss of interest in friends and activities they usually enjoy
- Significant increase in time spent alone
- Excessive worrying or anxiety
- Hyperactivity
- Persistent nightmares or night terrors
- Persistent disobedience or aggressive behavior
- Frequent temper tantrums
- Hearing voices or seeing things that are not there (hallucinations)

(Wagner and Pliszka, 2009).

A child's stage of development must be taken into account when considering a diagnosis of mental illness. Behaviors that are normal at one age may not be at another. Rarely, a normal young child may report strange experiences—such as hearing voices—that would be

considered abnormal at a later age. Clinicians look for a more persistent pattern of such behaviors ***(Rakel, 2005).***

Childhood psychosis:

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. ***(Ajuriaguerra and Marcelli, 1991)***

Definition:

Historically, the definition of psychosis in children and adolescents has been particularly vague because of confusion regarding the developmentally appropriate role of imagination and fantasy in children and adolescents with and without psychiatric disorders ***(Minzenberg et al, 2009).*** Formulations of "childhood psychosis" and psychosis were originally conceptualized as part of the spectrum of the pervasive developmental disorders, but currently, symptoms of psychosis and definitions of psychotic disorders do not differ for children, adolescents, or adults in the ***Diagnostic and Statistical Manual of Mental Disorders,4th edition,Text Revision (DSM-IV-TR).***

The remote possibility of delusions was questioned: as children do not have a totally developed ego structure, it was believed that they were unable to have delusions. Moreover, how could it be possible to distinguish psychotic symptoms from the "fantasy world" that is part of a child's normal development? ***(Minzenberg et al, 2009).***

As the necessity of diagnostic accuracy informs treatment as well as prognosis, an important question is whether the various psychoses of childhood are contiguous with the adult forms, or whether the symptoms labeled as psychotic in youth, particularly in prepubertal children, are exactly the same as those seen in adults.

Today, childhood psychosis is a well-known entity; but its clinical presentation in childhood differs from that observed in adults, even though we are talking about the same disease ***(Rethink, 2006)***.

The psychotic symptoms

The psychotic symptoms described in ***DSM-IV-TR*** include:

Disorganization or gross disturbance of thought form speech, thought content, or behavior, or extreme negativism.

A psychotic symptom, or symptom cluster, is associated with a specific disorder as defined by a certain number of symptoms occurring over a circumscribed duration of time with demonstrated impairment (***Wagner and Pliszka ,2009).*** Hallucinations and delusions are usually thought to establish the diagnosis of psychosis. However, neither of these symptoms are pathonomonic of psychosis, as they can occur in other organic medical or neurological conditions, such as dementias or complications of seizure disorders. Normal children with active fantasy lives can often misperceive their thoughts as actual events and can insist in a firm way that a thought or a dream actually occurred, which would seem to meet the definition of hallucination and delusion***(Minzenberg et al, 2009).***

Psychotic disorders in children :

Schizophrenia is perhaps the best studied of the adult psychiatric disorders. However, in the younger age group, the issues of developing language and cognition interfere with the dependability of diagnostic