# Chapter 6 First Episode Psychosis and Cognition

#### Gilberto Sousa Alves

https://orcid.org/0000-0002-0463-6183 Federal University of Rio de Janeiro, Brazil

### Romulo Kunrath Pinto Silva

Nina Rodrigues Hospital, Brazil

### Marielia Barbosa Freitas Leal

Federal University of Ceará, Brazil

#### Bianca de Melo Ferro

Federal University of Maranhao, Brazil

#### Leandro de Oliveira Trovão

Nina Rodrigues Hospital, Brazil

#### **ABSTRACT**

The experience of the psychosis can open a critical window into primary psychiatric conditions, particularly schizophrenia or bipolar disorder. More recently, the role of environment in early adolescence or late childhood, including psychological abuse or physical violence, has been associated with a greater likelihood of developing psychosis years later. Evidence has also shown, even in symptomatic remission, the occurrence of cognitive symptoms, particularly in complex attention, executive functioning, episodic memory, and verbal and procedural IQ. The current chapter discusses the epidemiology of first episode psychosis, neurobiological characteristics, and main risk factors, including early exposure to the trauma situation and early interventions.

DOI: 10.4018/979-8-3693-0851-6.ch006

#### INTRODUCTION

Psychosis can be conceptualized as a combination of symptoms resulting in a disconnection of reality and a severe impact on an individual's functionality and quality of life. The experience of the psychotic phenomenon can open a critical window into primary psychiatric conditions, particularly schizophrenia, schizoaffective disorder, or bipolar disorder. The use of psychoactive substances, such as marijuana, cocaine, and synthetic drugs (LSD, MDMA), as well as a variety of infectious, autoimmune, and vascular medical conditions, among others, may be related to psychotic episodes as etiological or predisposing factors. More recently, the role of environmental experiences in early adolescence or late childhood, including psychological abuse or physical violence, has been associated with a greater likelihood of developing psychosis years later. The emergence of first-episode psychosis (FEP) varies widely, usually occurring at the end of adolescence and the beginning of adult life. The operational concept of first-episode psychosis usually encompasses a wide range of categories: first treatment contact, duration of antipsychotic medication, and duration of psychotic episode (Breitborde et al., 2009). A determining factor for progression to severe symptoms is the intensity of psychotic symptoms, such as delusions and hallucinations. In addition to behavioral symptoms, psychotic conditions are often accompanied by negative symptoms (reduced emotional expression, sociability, avolition, and anhedonia). Furthermore, evidence has shown, even in individuals with symptomatic remission, the occurrence of cognitive symptoms, particularly in complex attention, executive functioning, episodic memory, and verbal and procedural IQ, among others. The current chapter discusses factors such as the epidemiology of FEP, neurobiological characteristics, and main risk factors, including early exposure to the trauma situation and early interventions.

### 1. Prevalence of Psychosis in Adolescents and Early Adulthood

Psychosis, from a broader perspective, affects approximately 3% of the global population, with schizophrenia representing its most severe and prevalent form, affecting approximately 1% of individuals throughout their lives (McCleery & Nuechterlein, 2019). Adolescence represents a significant sociocultural phenomenon associated with psychological reshaping regarding how individuals perceive themselves and the world. During this period, certain aspects of personality, such as self-concept and self-esteem, develop, influencing preferences and the quest for acceptance within peer groups (Lepre & De Oliveira, 2022).

The neurobiology of FEP may involve the disruption of crucial brain functions, notably affecting fronto-striatal and temporal circuits. Furthermore, its clinical

## 18 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

global.com/chapter/first-episode-psychosis-andcognition/342885

#### Related Content

### Amyotrophic Lateral Sclerosis: A Predominant Form of Degenerative Disease of the Motor Neuron System

Newman Osafo, David Darko Obiri, Oduro Kofi Yeboahand Prince Amankwah Baffour Minkah (2019). *Handbook of Research on Critical Examinations of Neurodegenerative Disorders (pp. 322-346).* 

www.irma-international.org/chapter/amyotrophic-lateral-sclerosis/209103

### Support of Gamification, Virtual, and Assistive Technologies in Intervening in Social and Behavioral Impairment

Hiten Rajpurohitand Arun Khosla (2020). *Interdisciplinary Approaches to Altering Neurodevelopmental Disorders (pp. 131-142).* 

www.irma-international.org/chapter/support-of-gamification-virtual-and-assistive-technologies-in-intervening-in-social-and-behavioral-impairment/254673

### Pharmacological Treatments of Parkinson's Disease: Preventing and Curing Approaches

Lahcen Tamegart, Mjid Oukhrib, Dia Eddine Oudghiri, Bilal El-Mansoury, Chakir Ibtissam, Ahmed Draoui, Hafida El Ghachi, Abdelali Ben Maloui, Abdelaati El Khiatand Halima Gamrani (2023). *Experimental and Clinical Evidence of the Neuropathology of Parkinson's Disease (pp. 220-232).* 

www.irma-international.org/chapter/pharmacological-treatments-of-parkinsons-disease/327977

### Application of Advanced Hearing Aid Technology in Pediatric Hearing Aid Fitting

Prashanth Prabhu (2019). Emerging Trends in the Diagnosis and Intervention of Neurodevelopmental Disorders (pp. 76-84).

www.irma-international.org/chapter/application-of-advanced-hearing-aid-technology-in-pediatric-hearing-aid-fitting/215164

### The Adult Transition Challenge of Autistic Individuals and the Way Ahead: A Sibling's Perspective

Piyush Mishra (2020). *Interdisciplinary Approaches to Altering Neurodevelopmental Disorders (pp. 25-40).* 

 $\frac{\text{www.irma-international.org/chapter/the-adult-transition-challenge-of-autistic-individuals-and-the-way-ahead/254668}$