

UNDERSTANDING SCHIZOPHRENIA

Schizophrenias are:

- A group of biologically and genetic based brain illness causing permanent handicaps in thinking, learning, and social functioning
- Environmental factors do not cause the illness, but play a strong role in promoting recovery or relapse once the illness strikes
- Exists in approximately 1-2% of population worldwide
- Average Onset → Age 15 -30
- There is no cure... but there is recovery with treatment that can improve quality of life

Symptoms of Schizophrenia can be understood by looking into the brain...

Schizophrenia is characterized by disordered thinking – persons have difficulty distinguishing between the real and unreal, making decisions, thinking logically, managing emotional responses, behaving appropriately in social situations. The hallmark symptoms of the illness are auditory hallucinations – “the voices” – which are very real experiences to the person.

The impairments of schizophrenia can be traced to particular areas of the brain. It is a pattern of impairments which leads to the diagnosis of schizophrenia – no one symptom, not even voices, determines if schizophrenia is the accurate diagnosis. Looking into four major regions of the brain that are implicated in schizophrenia and the problems which occur when those regions are impaired gives us insight into understanding the illness:

Brain Region	Primary Role	Problems which occur when brain region is impaired
Frontal Lobe	“The Executive”	Planning, Problem solving, Insight, Empathy, Judgment, Abstraction, Cognitive flexibility, Social awareness, Working memory
Temporal Lobe	“The Reality Checker”	Perception, Reality orientation, Memory
Basal Ganglia	“The Filter”	Attention, Concentration, Arousal, Filter out unwanted sensory input
Limbic System	“The Switchboard Operator”	Understand emotional events, Link present perception to past memories, Learn from experience