Cognition in Serious Mental Illness

Developed by:
Daryl Fujii, Ph.D., VISN 21 Pacific Island Health Care Services
Anjana Muralidharan, Ph.D., VISN 5 MIRECC

Version date: 7/17/17

Cognitive Deficits in SMI

- Serious mental illnesses (SMI) like schizophrenia, bipolar disorder, and severe and persistent depression are brain diseases.
- Many individuals with SMI exhibit cognitive impairment.
- Cognitive deficits in SMI typically occur prior to, and at onset of illness and are generally stable thereafter in most patients
  - Can fluctuate depending on severity of psychiatric symptoms
  - This is unlike cognitive deficits in dementia, which continue to deteriorate as the disease progresses
- A small subset of people with SMI experience accelerated cognitive decline with aging.

Cognitive Deficits in SMI

- Severity of cognitive deficits varies amongst individuals with SMI.
  - Cognitive impairment is strongly associated with severity of negative symptoms (i.e., diminished emotional expression, avolition, alogia, anhedonia, asociality).
  - Cognitive deficits are not correlated with positive symptoms (e.g., delusions, hallucinations).
  - Cognition tends to be less impaired in patients who have an affective component to their psychotic illness (e.g. schizoaffective and bipolar disorders).

Cognitive Deficits in SMI

- Cognitive functioning is predictive of day-to-day functioning, including the ability to:
  - comprehend and plan recreational activities
  - manage finances
  - communicate effectively
  - use public transportation
  - manage household chores

- Most individuals with SMI have decision-making capacity
  - Depends on the severity of cognitive deficits
  - Can fluctuate depending on severity of psychiatric symptoms

Cognitive Deficits in SMI

- Global cognitive deficits are often present, but deficits are generally more pronounced in:
  - Attention
  - Memory
  - Executive functioning

Attention

- Attention is the ability to concentrate on something for sustained periods of time
- People with SMI may have difficulties with:
  - Taking in and processing information, especially if the information is long or complex
  - Blocking out irrelevant stimuli
  - Understanding information communicated to them
  - Manipulating information for optimal problem-solving

When working with someone with SMI, make sure the individual is attending, communicate in short simple statements, and repeat information.

Memory

- Memory is the ability to acquire knowledge and recall life events
- Memory impairment in SMI is typically not as severe as memory impairment in dementia
- People with SMI are more able to recall important events and learn new facts, especially with prompting and repetition
- People with SMI particularly have difficulty with prospective memory, which is the ability to remember to perform a planned action at a future point in time

Individuals with SMI need reminders to help them attend appointments, take medications, or engage in activities at specific times.

Executive Functioning

- Executive functioning refers to a set of cognitive skills which together allow an individual to process information, make decisions, and attain goals. People with SMI exhibit significant deficits across these components of executive functioning:
  - **Problem-solving:** the ability to form a goal, develop plans to achieve the goal, implement the plans, and revise those plans if unsuccessful
  - **Theory of mind**: the ability to understand what others are thinking, important for developing empathy
  - **Abstract thinking**: the ability to understand and appreciate ideas or concepts that go beyond what is readily apparent to the senses

Because of deficits in executive functioning, individuals with SMI benefit from external supports to help with decision-making and problem-solving.

Executive Functioning

- **Cognitive flexibility**: the ability change one's thinking or behaviors, particularly when faced with contradictory information or negative consequences. Cognitive rigidity is thought to underlie delusional thinking

Given that individuals with SMI often exhibit cognitive rigidity, arguing with these individuals about their beliefs or behaviors is often ineffective.

Setting clear limits with consistent positive and negative consequences is more useful.

Summary

- Individuals with SMI exhibit cognitive impairment
- Severity of cognitive impairment varies widely
- Impairments in cognition are generally stable across the lifespan, with worsening during psychiatric episodes
- You can help individuals with SMI function and thrive by:
    - Communicating clearly in simple statements
    - Using repetition
    - Providing reminders
    - Setting clear limits
    - Sticking to set routines