Motivation/pleasure deficits, not expression impairments, contribute to social dysfunction in schizophrenia patients

May 11 2022, by Zhang Nannan

Schizophrenia is a complex neurodevelopmental and brain disorder associated with a wide range of psychopathology affecting cognition,
emotion and thinking processes. Although diagnosis of schizophrenia is mainly based on positive symptoms like hallucination and delusion, the ultimate functional outcome of patients with schizophrenia is mainly determined by negative symptoms such as anhedonia, amotivation and expressive dysfunctions. However, the underlying relationship between negative symptoms and social functioning is not fully known.

Previous studies investigating the relationship between negative symptoms and social functioning adopted a unitary construct of negative symptoms. Recent findings support a two-factor model comprising amotivation/anhedonia and expression dysfunctions in schizophrenia. The unique impact of amotivation, anhedonia and expression upon social functioning needs further clarification.

In order to address this unclear issue, Dr. Raymond Chan and his team from the Institute of Psychology of the Chinese Academy of Sciences have adopted network analysis to specifically examine the network structure and interrelationship between negative symptoms (at both the "symptom-dimension" and "symptom-item" levels), other psychopathology and social functioning in 269 schizophrenia patients.

They assessed negative symptoms using the Clinical Assessment Interview for Negative Symptoms and the Positive and Negative Syndrome Scale, and social functioning using the Social and Occupational Functioning Assessment Scale.

According to the researchers, factor capturing anhedonia and amotivation was closely related to social functioning in schizophrenia patients, after controlling for medication side-effects, illness duration and other psychopathology. Consistent patterns of the network structure were shown at both "symptom-dimension" and "symptom-item" levels.

Subsequent analysis further showed that amotivation and anhedonia
factor accounted for the largest proportion of variance of social functioning.

Taken together, these findings support that amotivation and anhedonia rather than expressive dysfunctions play a pivotal role in determining schizophrenia patients' social functioning. This study highlights the amotivation and anhedonia as a potential intervention target for improving functional outcomes of schizophrenia patients.

Dr. Chan's team is now investigating whether this pattern of relationship is unique to schizophrenia patients or shared by other psychiatric disorders exhibiting similar anhedonia, amotivation and expressive dysfunctions such as major depressive disorder and bipolar disorder.

This study, titled "The Important Role of Motivation and Pleasure Deficits on Social Functioning in Patients With Schizophrenia: A Network Analysis," was published in Schizophrenia Bulletin on May 7.


Provided by Chinese Academy of Sciences
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