Simplified Negative and Positive Symptoms Interview (SNAPSI): An Abbreviated Assessment Technique for Schizophrenia Studies

Østergaard S1,2, Correll C3,4,5, Capodilupo G6, Opler M6,7

1 Dept. of Clinical Medicine, Aarhus U., Aarhus, Denmark
2 Psychosis Research Unit, Aarhus U. Hospital, Risskov, Denmark
3 Div. of Psychiatry Research, The Zucker Hillside Hospital, Glen Oaks NY
4 Dept. of Psychiatry and Molecular Medicine, Hofstra Northwell School of Medicine, Hempstead NY
5 Dept. of Psychiatry and Behavioral Sciences, Albert Einstein College of Medicine, Bronx NY
6 MedAvante-ProPhase, Inc
7 New York U. Medical Center

Methodological question: CAN THE PANSS BE MODIFIED TO BE USEABLE IN CLINICAL SETTINGS AS WELL AS IN RESEARCH?

BACKGROUND

• There is currently a “measurement gap” between research and clinical care in schizophrenia.
• The Positive and Negative Syndrome Scale (PANSS), one of the most widely used instruments in schizophrenia, is a 30-item complex scale with different scoring rules and conventions. Due to the large number of items, the structured clinical interview for PANSS (SCI-PANSS) often takes an hour or more to administer.
• As such, the SCI-PANSS has remained a research tool, despite evidence that supports its use to help characterize, predict, and manage the course of illness.1,2
• The abbreviated, 6-item version of PANSS (PANSS-6) was derived empirically from the full PANSS-30 to reduce the original scale to a shorter and more scalable version.
• The Simplified Negative and Positive Symptoms Interview (SNAPSI), is a newly developed assessment guide that includes probes and structures modeled on both standard and semi-structured formats. The SNAPSI stand-alone interview yields information to rate the PANSS-6 (as well as other brief rating scales)3.
• The present study examined the utility of PANSS-6, guided by SNAPSI, in bridging the measurement gap between research and clinical care in schizophrenia.

METHODS

The scalability of PANSS-6 was investigated in two datasets. First, data from two large randomized controlled trials in schizophrenia were analyzed to identify PANSS-6 by means of item response analysis4,5,6.
• PANSS-6 contains the following six items that tap into the core positive and negative symptom dimensions of schizophrenia (and other psychotic disorders): Delusions, Conceptual Disorganization, Hallucinations, Blunted Affect, Passive/Athletic Social Withdrawal, and Lack of Spontaneity and Flow of Conversation.
• Secondly, since the initial study on PANSS-6 was based on data from trials in which the participants were acutely ill hospitalized patients with schizophrenia4,5, the psychometric properties of PANSS-6 in chronic schizophrenia were assessed via a reanalysis of data from the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) study7.
• Finally, the utility of SNAPSI in rating the PANSS-6 was investigated in a feasibility study. Seven clinical raters (three medical doctors, one psychologist, and three research assistants) at two hospitals in the United States and one hospital in Denmark interviewed patients with schizophrenia or schizoaffective disorder (n = 16) using the SNAPSI and tested whether they themselves and the patients understood the questions—and whether the targeted psychopathology was covered sufficiently to allow rating after the interview. The feedback from the feasibility tests led to minor revisions of the SNAPSI.

RESULTS

• Analysis results from the first study showed that PANSS-6, as opposed to the full 30-item version of PANSS, is “scalable,” meaning that each item adds unique information regarding severity and that the total score is therefore a valid measure of severity (Figure 1).
• Furthermore, this study showed that PANSS-6 is sensitive to changes in the severity of schizophrenia and can separate the effects of typical and atypical antipsychotics from that of placebo (Figure 2).
• The results of the analysis of the data from CATIE further confirmed those from our study in acutely ill patients, namely that PANSS-6 adequately measures symptom severity and antipsychotic efficacy in schizophrenia (Figures 3 and 4).8 The findings also established that PANSS-6 can identify symptom remission as defined by the Andreasen et al. expert consensus criteria9 with very high accuracy.
• Furthermore, results from the feasibility tests indicated SNAPSI has taken approximately 15 minutes to administer (by raters who are unfamiliar with the interview and involving patients hearing the questions for the first time).