Validation of the Arabic Version of the Positive and Negative Syndrome Scale (PANSS)

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Abstract : Introduction: The Positive and Negative Syndrome Scale (PANSS) is a valid instrument developed by Kay and colleagues6 to assess symptoms of patients with schizophrenia. It consists of 30 items that factor the symptoms into three subscales: positive, negative and general psychopathology. This scale has been translated and validated in several languages. Objective: This study aims to determine the validity and psychometric properties of the Arabic version of the PANSS. Methods: A standardized translation and cultural adaptation method was adopted. Patients diagnosed with schizophrenia (n=98), according to psychiatrist's diagnosis based on DSM-IV criteria, were recruited from the Psychiatry Department at Rumailah Hospital, Qatar. A first rater confirmed the diagnosis using the Arabic version of Mini International Neuropsychiatric Interview (MINI 6). A second and independent rater-administered the Arabic version of PANSS. Also, a control group (n=101), with no history of psychiatric disorder was recruited from the family and friends of the patients and from primary health care centers in Qatar. Results: There were more males than females in our sample of patients with schizophrenia (68.9% and 31.6%, respectively). On the other hand, in the control group the number of females outweighed that of males (58.4% and 41.6% respectively). The scale had a good internal consistency with Cronbach's alpha 0.91. There was a significant difference between the scores on the three subscales of the PANSS. Patients with schizophrenia scored significantly higher (p<.0001) than the control subjects on subscales for positive symptoms 20.01(SD=7.21) and 7.30(SD=1.38), negative symptoms 18.89(SD=8.88) and 7.37(SD=2.38) and general psychopathology 34.41 (SD=11.56) and 16.93 (SD=3.93), respectively. Factor analysis and ROC curve were carried out to further test the psychometrics of the scale. Conclusions: The Arabic version of PANSS is a reliable and valid tool to assess both positive and negative symptoms of patients with schizophrenia in a balanced manner. In addition to providing the Arab population with a standardized tool to monitor symptoms of schizophrenia, this version provides a gateway to compare the prevalence of positive and negative symptoms in the Arab world which can be compared to others done elsewhere.

Keywords : Arabic version, assessment, diagnosis, schizophrenia, validation