Indian Journal of Psychiatry, October 1986, 28(4), pp. 349-350

INTER-RATER RELIABILITY OF THE SCALE FOR ASSESSMENT OF NEGATIVE SYMPTOMS IN SCHIZOPHRENIA

S. K. KOTA[1]
P. KULHARA[2]
S. JOSEPH[3]
R. S. NAGPAL[4]

The Scale for the Assessment of Negative Symptoms-SANS, developed by Andreasen (1981) has been shown to have high inter-rater reliability and good internal consistency. From our country only Mathai et al (1984) have reported about the inter-rater reliability of SANS.

The study of Andreasen (1982) as Mathai et al (1984) utilised schizophrenics hospitalized in psychiatric hospitals and employed DSM-III (APA 1980) criteria for the diagnosis of schizophrenia. Therefore, it was felt that the investigation of inter-rater reliability of SANS in ambulatory schizophrenics attending a psychiatric unit of a general hospital diagnosed so according to criteria different from DSM-III (APA 1980) will enhance the credibility of this scale further.

Material and Methods

Schizophrenics attending the psychiatric unit of a general hospital were screened. Patients between 18-50 years of age fulfilling Research Diagnostic Criteria of Spitzer et al (1978) for the diagnosis of definite schizophrenia form the study sample. Two of us (SKK and PK) independently arrived at the diagnosis according to RDC.

The Scale for Assessment of Negative Symptoms – SANS was employed to assess the patients. This scale has 30 ratable items which are grouped in 5 major complexes. Scoring is done on a 6 point scale. Considerable emphasis is placed on using observable behavioural components. Additional information was gathered by interviewing close relatives of the patients.

Two of the investigators (SKK and SJ) were trained by one of the investigators (PK) in the use of SANS. Patients included in the study were independently rated by these two on SANS. Inter-rater reliability was assessed by Product Moment Co-efficient of Correlation method.

Results

Forty patients satisfying for the diagnosis of definite schizophrenia comprise the study sample. There were 21 males and 19 females. The mean age of patient sample was 29.36 years (SD-6.85). 20 patients were between 20-29 years of age, 15 were between 30-39 years and 5 were aged 40 years or more. According to RDC subtyping there were 9 acute, 10 sub-acute, 6 subchronic and 15 chronic patients. According to same RDC, there were 25 paranoid, 9 disorganised, 2 undifferentiated and 4 residual schizophrenics in the sample. 13 had past history of treatment with neuroleptics whereas there was no such history in 17 patients. 18 patients were hospitalized at the time of the study and the rest were treated on outpatient basis only.

1,3 Formerly Junior Residents.
2 Associate Processor.
4 Junior Resident.

Department of Psychiatry, Post-graduate Institute of Medical Education & Research, Chandigarh – 160 012, India.

The inter-rater reliability for all items of SANS (excluding subjective and global ratings) was found to be significantly high ranging from 0.96 to 0.59. Unchanging facial expression had the best inter-rater reliability (r = 0.96) and sexual interest and activity the lowest (r = 0.59).

The inter-rater reliability for subjective ratings, global ratings, summary scores and total score was also significantly high ranging from 0.98 to 0.76. Global rating for attentional impairment had lowest r value (0.76). Complete score and subscale scores of affective flattening and avolition-apathy had highest r value (0.98).

Discussion

In the study, the reliability of SANS (Andreasen 1981) was assessed using an inter-rater reliability design. Inter-rater reliability for all items of the scale was found to be significant. This is in agreement with earlier reports (Andreasen 1982, Mathai et al 1984). On 3 items i.e., blocking, subjective rating of alogia and ability to feel intimacy, absolute inter-rater reliability has been reported by Mathai et al (1984). This study is unable to replicate these observations. Curiously enough, Andreasen (1982) herself has not reported absolute inter-rater reliability for any items of SANS.

Inter-rater reliability of total score on all 30 items has been found to be higher than inter-rater reliability for individual items. Our study demonstrates good inter-rater reliability for summary scores or global ratings for all 5 major negative symptom complexes. This is consistent with the finding of Andreasen (1982) but not with Mathai et al (1984) who had noted comparatively poor inter-rater reliability for global ratings which led them to suggest deletion of these from the scale. On the basis of our observation, we would argue that SANS can be used without any modification in Indian setting.

On all 5 negative symptom complexes, high inter-rater reliability for subjective ratings by patients have been noted. This is somewhat surprising as Andreasen (1982) the originator of the scale, has expressed reservations about the adequacy of reliability of assessment of subjective complaints. We have no explanation for this observation.

The present study shows that SANS has a high inter-rater reliability. As this is a cross-sectional study we are not in a position to evaluate either the stability or predictive validity of these negative symptoms. However, we suggest that SANS may be used without any modification in our country.

References

AMERICAN PSYCHIATRIC ASSOCIATION, (1980), Committee on Nomenclature and Statistics, Diagnostic and Statistical Manual of Mental Disorders, 3rd Ed. Washington, D.C., APA.

ANDREASEN, N. C. (1981), Scale for the Assessment of Negative Symptoms (SANS), Iowa City, The University of Iowa.

ANDREASEN, N. C. (1982), Negative symptoms in Schizophrenia, definition and reliability, *Archives of General Psychiatry*, 39, 784-788.

MATHAI, P. J., CHATURVEDI, S. K., MICHAEL, A. & GOPINATH, P. S. (1984), Evaluation of the reliability of the Scale for the Assessment of Negative Symptoms (SANS), *Indian Journal of Psychological Medicine* 7, 26-30.

SPITZER, R. L., ENDICOTT, J. & ROBINS, E. (1978), Research Diagnostic Criteria (RDC) for a selected group of functional disorders, 3rd Ed., New York, Biometric Research, New York State Psychiaatric Institute.