Introduction

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The papers in this supplement represent the proceedings of a conference held at Charing Cross Hospital in September 1987. The stimulus to organise this meeting was the difficulty experienced in our department when trying to define and rate negative symptoms for both clinical and research purposes. A central aim of the meeting was to examine the reliability, validity and utility of the available rating scales for negative symptoms. In one of the sessions, videotaped interviews with schizophrenic patients were presented. Using selected scales, negative symptoms were rated by those attending the meeting, who then had the opportunity to discuss their ratings with clinicians familiar with the scales and, in some cases, the authors of the rating instruments.

There are particular problems with the development of rating scales for negative symptoms. Operational definitions are difficult to generate for features that represent a relative absence of function. If they are considered as a loss of normal function then, by definition, severity must be rated on a continuum from normal. This raises the question whether it is possible to determine a criterion level of severity to identify the presence of a 'pathological' symptom. Further, each item will need to cover a wide range of functioning, from normal to virtually complete absence of function. An adequate number of scale points is required to allow for rating on, for example, poverty of speech, from a normal amount of speech through to muteness. Too few scale points will artificially reduce variability while too many may overwhelm the rater.

The current scales for rating negative symptoms each cover a range of items with a core group of symptoms, primarily affective flattening and poverty of speech, common to all. Otherwise, they reveal a variety of interpretations as to which features warrant inclusion as negative symptoms. While the majority of items refer to clinical signs and symptoms, other items reflect psychosocial performance and neuropsychological impairment. The scales discussed in this supplement are the Krawiecka (or Manchester) scale (Hyde, p. 45), the Scale for Assessment of Negative Symptoms (SANS) (Andreasen, p. 49), the negative symptom scale of the Positive and Negative Symptom Scale (PANSS) (Kay et al, p. 59), the Psychological Impairments Rating Schedule (PIRS) (Biehl et al, p. 68), a revised version of the PIRS called the Behavioural Observation Schedule (BOS) (Atakan & Cooper, p. 78), and the High Royds Evaluation of Negativity (HEN) (Mortimer et al, p. 89).

When assessing negative symptoms in practice, there are a number of practical difficulties and potentially confounding factors, as discussed by Johnstone (p. 41). Thus, in patients with schizophrenia it may be difficult to distinguish negative symptoms from depressive features, and drug effects, particularly bradykinesia (Lindenmayer & Kay, p. 108; Barnes et al, p. 99; McKenna et al, p. 104). Also, negative symptoms may in some cases be a manifestation of positive symptoms (Carpenter et al, 1985). For example, a reduction in a patient's level of social interaction may result directly from psychotic disorganisation and a preoccupation with psychotic experiences or as a protective strategy to reduce the degree of external stimulation. Negative symptoms as a manifestation of drug effects or secondary to psychotic phenomena are perhaps more likely to confuse assessment during acute psychotic episodes. This may partly account for the finding that negative symptoms occurring in the acute phase of schizophrenia may differ from those present as persistent features of chronic schizophrenia in terms of their correlations with other clinical variables and prognostic value (Lindenmayer & Kay, p. 108; Pogue-Geile, p. 123; Biehl et al, p. 68).

A review of the development of the theories and concepts of negative symptoms is provided by Wing (p. 10). Three papers reflect current views on negative symptoms in Germany (Gross, p. 21; Sass, p. 26; Mundt et al, p. 32) which have evolved in the context of a psychopathological tradition somewhat divergent from that in the UK and the USA. The paper by Mundt et al also addresses the issue of the diagnostic specificity of negative symptoms. Roth (p. 37) provides a short commentary on the German papers.

Liddle *et al* (p. 119) present evidence for the classification of symptoms in chronic schizophrenia into three subsyndromes, while Crow (p. 15) reassesses the validity of a positive—negative dichotomy, particularly the Type II syndrome. Other papers present data on the clinical correlations of negative symptoms predicted by this concept, that is, the association with abnormal involuntary movements (Barnes *et al*, p. 99; McKenna *et al*, p. 104), cognitive impairment (Liddle *et al*, p. 119) and structural changes in the brain (Andreasen, p. 93).

The relevance and impact of psychological and social variables on negative symptoms are reviewed by Strauss *et al* (p. 128) and the treatment implications of a psychological perspective are discussed by Slade &

Bentall (p. 133). The evidence for a response to drug treatment is evaluated by Kane & Mayerhoff (p. 115).

Despite the evidence for a phenomenological overlap between negative symptoms and other clinical features, and the possible generation of negative symptoms secondary to positive symptoms, the studies and reviews presented in this supplement generally support the existence of a primary deficit syndrome of negative features within schizophrenia. Both the clinical assessment and treatment of negative symptoms remain uncertain areas, but the concept of a negative syndrome has highlighted the need to broaden the outcome criteria used in treatment studies and long-term follow-up studies in schizophrenia to include negative features. Previously, many such studies had restricted outcome measures to relapse of positive symptoms. In addition,

awareness of the potential value of negative symptoms in the search for both prognostic factors and clinicopathological correlations in schizophrenia has been a stimulus for much recent work, and prompted attempts to delineate more precisely the characteristic deficits and residual impairments of chronic schizophrenia. I hope this collection of papers can provide a further impetus to research efforts and clinical interest in negative symptoms, which constitute the most persistent, socially disabling and refractory element of psychopathology for many patients with schizophrenia.

Reference

Carpenter, W.T., Heinrichs, D.W. & Alphs, L.D. (1985) Treatment of negative symptoms. Schizophrenia Bulletin, 11, 441-452.

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