Correspondence

Depression in schizophrenia

Sir,

I read with interest the article ‘Characterization of depression in patients with schizophrenia’ by Heald et al. While the article is important, the conclusions drawn need to be seen in light of the following methodological issues.

1. The authors included three groups of patients in the study. However, it is not clear as to how they were chosen. Were the patients dually diagnosed as suffering from schizophrenia and depression or were patients with schizophrenia specifically screened for presence of depression and then included in the study? This is important considering only 13 and 22 per cent patients in the DepASch and DepChrSch groups respectively were on antidepressant medication as compared to 76 per cent in the Dep group given in Table I. If these patients had been diagnosed before they were included in the study, a higher percentage would be expected to be on treatment. The difference in scores on depression rating scales of patients who were on treatment and those who were not would make the interpretation of the results more difficult.

2. There is no mention as to how DepASch and DepChrSch groups were defined. It is important to have mentioned as to whether the distinction was made on basis of the severity of symptoms or duration or both.

3. The choice of the rating scales for depression in schizophrenia, namely Beck Depression Inventory (BDI) and Hamilton Rating Scale for Depression (HDS) needs to be clarified. Non-specific scales for depression are often not advisable in evaluating depression in schizophrenia populations because of the overlap of negative and extrapyramidal symptoms of schizophrenia and depressive symptoms. BDI (items 14-21) as well as HDS have components (which make up a significant number of items in the entire scale) that are reflective of physical rather than the affective-cognitive components of depression and these may be difficult to disentangle from the symptoms of schizophrenia and the effects of neuroleptic medications. Therefore, the results should have been presented with a caveat as to the validity of BDI or HDS in evaluating depression in schizophrenia.

4. The authors have claimed that BDI is more sensitive in picking up depression in chronic schizophrenia than HDS and is a valid instrument for picking up depressive symptoms in such a population. I believe the fact that the mean BDI score in the DepChrSch group was closer to that of the other groups as compared to HDS is not necessarily indicative of an increased sensitivity. A closer look at Table II reveals that the BDI scores were significantly smaller in the DepChrSch group than the other two groups (non-overlap of the 95% CI with that of the DepASch and the Dep groups, both of whom would be relatively homogenous in a post-hoc analysis of ANOVA) as is the case with the HDS scores. Therefore, on objective and subjective ratings of depression, the patients in the DepChrSch group scored significantly less than the other two groups. The fact that the BDI scores in the DepChrSch groups were closer to the other groups as compared to the HDS scores (which are not as close) does not necessarily mean that this conclusion can be drawn as these are scores from two different scales and are not necessarily directly comparable even though these are both used for evaluation of depression. BDI is a valid instrument for depression and indeed is valid for depression.
in schizophrenia as well. Therefore, the claim of identifying BDI as a valid instrument for picking up depressive symptoms in chronic schizophrenia needs to be qualified. If the implication is that it is more valid than HDS, then this paper does not answer such a question. As mentioned above, different scores on two different scales do not imply greater or lesser validity. The authors base this claim on the assumption that BDI and HDS pick up different kind of phenomena. It should be emphasized that the difference in BDI and HDS is not so much in the phenomena (both pick up affective, cognitive and somatic components of depression) but in the way it is administered.

5. The possibility of the study being underpowered has not been alluded to. For instance in a study with three groups at the significance criteria (α) of 0.5, and a medium effect size (which seems reasonable), a sample size of 52 patients per group would be required. While this may not be possible given the constraints of the study design, I believe that the conclusions drawn should have acknowledged this limitation.

Authors’ response

Following is our response to the queries raised by Dr Singh:

1. The participants were consecutive attendees at our Community Mental Health Centre in Salford, UK. The criteria for inclusion in the Depression in Acute Schizophrenia (DepASch) and Depression in Chronic Schizophrenia (DepChrSch) groups were based on screening of individuals with known schizophrenia. The Depression (Dep) group was a control group who had previously been diagnosed to have clinical depression on the basis of DSM-IV criteria, American Psychiatric Association, 1994. In each group depressive symptoms had been present for at least 14 days prior to assessment. The threshold for inclusion from each group was a score greater than 16 on the Hamilton Depression Scale (HDS).

2. In each group depressive symptoms had been present for at least 14 days prior to assessment. The threshold for inclusion from each group was a score greater than 16 on the HDS.

3. We accept the point made by Dr Singh. However we respectfully point out that the BDI and HDS are commonly used in the everyday clinical setting for evaluating and following depression in people with schizophrenia. Hence we feel that their use in this study is justified.

4. We were not trying to make any position statement concerning the sensitivity of the Beck vs. Hamilton scales, rather to make the point that the nature of depressive symptoms in stable chronic schizophrenia is predominantly subjective whereas in acute schizophrenia the symptom profile includes the classical biological symptoms of depression as rated by the Hamilton Depression Scale. In reality, both rating scales should be administered. We just wanted readers to be aware that the Beck scale sometimes detects depression in chronic long-term schizophrenia when this would be missed by the Hamilton scale.

5. We accept this limitation. However, we feel that our conclusion that the BDI be used to identify depressive symptoms in chronic schizophrenia so that early intervention can be targeted appropriately is a valid one, given the...
robustness of the statistical analysis performed by Soni.

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References