

changes in thickness and area both contributed to the volume differences across groups in these gyri, even if the thickness and area results did not themselves reach statistical significance after rigorously controlling for overall brain changes.

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Risk factors for suicide

The article by Manoranjitham *et al*¹ provides a great deal of insight into the risk factors for suicide in rural India. The study was conducted with the best possible methodology, using the surveillance system method carried out by a community health worker who is part of the same community. The authors employed verbal autopsy, pair matched the suicide case and control groups, used more than one informant to obtain the information, used the Structured Clinical Interview for DSM–III–R (SCID) to establish the psychiatric diagnosis and their study was adequately powered to investigate the desired outcome. The authors were very humble in acknowledging the limitations of the study which cannot be avoided in any set up. However, some of the issues need to be addressed before accepting the fact that it is not the psychiatric diagnosis but ongoing stress and chronic pain that are the most important predictors of suicide.

The results showed that 37% of the suicide group had a psychiatric diagnosis. However, the authors did not mention whether it was the current diagnosis or lifetime diagnosis. It is possible that the surveillance system which has been operational for so many years is also helpful in picking up psychiatric diagnosis early and arranging treatment, leading to lower rates of current psychiatric diagnosis in the suicide cases. The authors also did not provide any information about the relatives, as the information obtained about the person who completed suicide was collected by the health team and their accuracy can vary depending on the relationship, closeness and duration of stay of the informant with the person who died.

Further, although there was significant difference in some of the variables (living alone, break in steady relationship) between the two groups in the bivariate analysis, data presented in Table 3 suggest that these variables have not been included in the multivariate analysis. The arbitrary definition of ‘ongoing stress’ and ‘chronic pain’ is also not very clear. Studies in the past have reported that many physical illnesses are also risk factors for suicide,² but the authors did not provide any information with respect to this, nor did they use the same data in the analysis. Another important issue which needs to be considered is that the authors subsumed pain symptoms of 1 year duration under the risk factor of ‘chronic pain’. It is well known that individuals with depression in primary care manifest their depression with somatic symptoms, especially painful symptoms.^{3,4} This underlying depression was not picked up by SCID, resulting in such low prevalence of affective disorders in both groups. Previous studies⁵ have used life events as a single variable while trying to find the association of risk factors with suicide. Here, the authors have possibly analysed them as individual risk factors and therefore acute stress has not emerged as an important predictor. Similarly, the issue of comorbidity (presence of more than one psychiatric diagnosis or presence of psychiatric and physical illness together) has not been addressed.

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Authors’ reply: We would like to clarify the points raised by Holikatti & Grover. We presented the current psychiatric diagnoses within the past month as assessed by the interview. The therapeutic effects of the surveillance system and the variance due to interviewing first-degree relatives are in common to both cases and controls, and hence we believe that these factors did not affect the results of our study. We could not include the variables ‘living alone’ and ‘break in steady relationship’, which were significant in the bivariate analyses, in the multivariate procedure as these variables were absent among the controls and hence it is not possible to calculate odds ratios and to include them in logistic regression.

Our study had *a priori* definitions for ‘chronic pain’ and ‘ongoing stress’ described in the paper, which also provides the details of psychiatric diagnoses. Holikatti & Grover suggest that chronic pain symptoms can be attributed to underlying depressive disorders. However, the contemporary classificatory systems in psychiatry have not approved the concept of ‘masked depression’ and they have not included pain symptoms in their diagnostic criteria for depression. Pain is a subjective experience, which has a psychological component. Psychiatrists tend to attribute human