Reviewer's report

Title: Impaired psychological recovery in the elderly after the Niigata-Chuetsu Earthquake in Japan: a population-based study

Version: 1 Date: 19 July 2006

Reviewer: Ruth Parslow

Reviewer's report:

General

This paper uses the General Health Questionnaire (GHQ) as a basis for factorially analyzing the components of psychological impairment reported by over 2000 individuals displaced after a major earthquake in Japan. The authors identified a two factor model of psychological distress, social dysfunction and dysphoria, best fitted participants’ self-assessments of their state at three time points: prior to the earthquake, when their distress was at its highest, and at the time of interview.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

This study has some limitations which the authors have not noted in their discussion. Potential participants for this study have all undergone a major disruption and continued to live in temporary housing when interviewed five months after the disaster. There has been no effort made to measure changes in self-assessed distress in individuals less affected or unaffected by the disaster.

Self-perceptions of well-being before a trauma, collected after that trauma has occurred, are likely to be affected by how individuals are currently feeling. If participants are currently feeling very stressed, they might view their life before the trauma as trouble-free and enjoyable simply because issues that concerned them before the earthquake are now seen as relatively minor.

On a related matter, in the regression analyses (Table 4) the authors have included trauma and post-trauma items in the analysis of factors associated with pre-trauma GHQ. The authors need to explain why these factors, (eg severity of house damage) can be expected to be associated with pre-trauma well-being.

The comparison of various measures of the GHQ was potentially one of the most useful components of this paper. However, the authors appear to have identified the best fitting measures simply by eyeballing scores. I suspect that a statistical analysis of these different measures, for example, the chi-squared scores given in Table 3, might find there is no statistically significant difference between them. These analyses should be undertaken and reported to justify selecting particular measures of the GHQ.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Given the relatively low response rate to the survey, this rate and the final number of respondents should be noted in the abstract, either as well as, or instead of, the description that ‘psychological distress was measured in 3,026 subjects’.

Dysphoria is misspelt on page 9.

Discretionary Revisions (which the author can choose to ignore)

Given that older age is significantly associated with higher GHQ scores reported 5 months after the trauma, it might be worth undertaking an additional analysis in which age X type of exposure (eg severity of house damage) are included to see if particular aspects of the trauma explain this age groups’ vulnerability.
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests