Reviewer's report

Title: Mental health: A cause or consequence of injury? A population-based matched cohort study

Version: 1 Date: 26 February 2006

Reviewer: Anthony Jorm

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General
This study has some important strengths, including the large population-based dataset, the longitudinal perspective, and the coverage of physician claims as well as hospital records. It is an advance on previous work in the area.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. My major concern is that the ICD injury codes appear to have included those for suicide and self-inflicted injury, in which case the associations are not surprising. If this is indeed the case, I suggest the authors carry out an additional analysis excluding the relevant codes to see if associations are present with non-suicidal injuries.
2. The authors are puzzled that injury could be a risk factor for personality disorders. However, deliberate self-harm is a major feature of borderline personality disorder. Although this diagnosis was not present in ICD-9, this group of patients may be found distributed in other personality disorder categories. It is possible that someone who self-harms will be later given a diagnosis of personality disorder.
3. I think there could be more discussion about factors that could lie behind mental disorders being a risk factor for injury, including alcohol misuse (which is common in a wide range of mental disorders), cognitive impairments associated with some disorders (e.g. depression, schizophrenia) and use of psychotropic medication (e.g. benzodiazepines are a known risk factor for falls in the elderly).

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. The use of the term “mental health” rather than “mental disorder” at times gives the impression that good mental health is associated with injury. For example, p. 2 says “mental health is a risk factor for injury”. There are several examples like this throughout the paper.
2. I thought the phrasing about confounding on p. 2, p. 3 and p. 11 was unclear. Confounding is all about drawing incorrect causal inferences, whereas the statements in the paper suggest it is simply about relationships between variables. I would suggest something like “is a potential confounder when investigating injury as a risk factor for mental disorders”.
3. The Charlston Comorbidity Index needs a sentence or two of explanation for readers like me who are unfamiliar with it (p. 5).
4. “LOS” does not appear to have been defined.
5. I found the section on residual confounding (p. 10) and the associated tables rather hard to follow. I wonder whether this is needed at all, or could be reduced to a sentence or two.

Discretionary Revisions (which the author can choose to ignore)
1. I found that the abbreviation “MHSU” diminished readability. It would not take much additional
space to use the full term.
2. The reference to “the mental health profession” on p. 2 and p. 13 reads as though there is a single profession.
3. On p. 3, “prevalence of mental disorders” would be better than “prevalence of mental health”, since mental health is usually considered as dimensional. Because there is so much inconsistency of terminology in this area, I suggest the authors use the ICD term “mental disorder” rather than “mental health disorder” (as on p. 7).

Discretionary Revisions (which the author can choose to ignore)
None.

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 importance in its field

Quality of written English: Acceptable

Statistical review: No

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