

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Violent injury predicts poor psychological outcomes after traumatic injury in a hard to reach population: an observational cohort study
AUTHORS	Rahtz, Emmylou; bhui, kamaldeep; Smuk, Melanie; Hutchison, Iain; Korszun, Ania

VERSION 1 - REVIEW

REVIEWER	Ashley Craig Sydney Medical School-Northern, The University of Sydney, NSW, Sydney Australia
REVIEW RETURNED	28-Nov-2016

GENERAL COMMENTS	<p>The area is indeed an under-researched area, and I imagine participants difficult to recruit. However the topic is an important one in the area of rehabilitation and trauma medicine. Reference to a recent meta analysis published in BMJ Open in 2016 on psychological distress following physical injury sustained in a MVC would strengthen the Introduction of the paper.</p> <p>Method and results What measures were used to exclude eg. reading level, and cognitive capacity? More detail on how threshold scores for outcome measures were selected. There is really not sufficient detail provided for me to replicate this research. More detail on the power analysis would also help.</p> <p>Results More detail on recruitment would help, confirming that 829 were admitted over the 2 years, and that 48.2% were recruited into the study.</p> <p>Figures should state that 95%CI are provided. Table 1 is somewhat confusing and needs to be made easier to interpret.</p> <p>Discussion Persistence of psychological distress over time may also be due to ongoing experience of violence in the violently injured sub-group. More thought about limitations would strengthen the paper.</p>
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REVIEWER	Peter W Schofield University of Newcastle Newcastle, Australia
REVIEW RETURNED	05-Dec-2016

GENERAL COMMENTS	This is a study of an important and interesting issue. The study design is straightforward. No data are presented on severity of injury which in theory could represent a confound. I think it would be appropriate to identify that as a study limitation while making
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	<p>reference to the findings from other studies that indicate the lack of an association between injury severity and PTSD (i.e. it is not an important limitation for this study).</p> <p>Tables 2 and 3 have inverted the data entries for 'Mechanism'. Please check that other lines in these tables do not also have errors.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer 1, Ashley Craig

The area is indeed an under-researched area, and I imagine participants difficult to recruit. However the topic is an important one in the area of rehabilitation and trauma medicine. Reference to a recent meta analysis published in BMJ Open in 2016 on psychological distress following physical injury sustained in a MVC would strengthen the Introduction of the paper.

- A useful reference, thank you: we have added it in the second paragraph of the Introduction (reference number 13)

Method and results

What measures were used to exclude eg. reading level, and cognitive capacity? More detail on how threshold scores for outcome measures were selected. There is really not sufficient detail provided for me to replicate this research. More detail on the power analysis would also help.

- We have added more detail to this section, specifically:
- Cognitive capacity - further info added in Participants
- Further details and references on thresholds added in Measures
- Further information on power calculations added in Statistical analyses

Results

More detail on recruitment would help, confirming that 829 were admitted over the 2 years, and that 48.2% were recruited into the study.

- We have clarified the numbers at each stage, in the Description of the data

Figures should state that 95%CI are provided. Table 1 is somewhat confusing and needs to be made easier to interpret.

- We have added 95% CI note to labels
- We have amended Table 1 and its label. The table now focusses on the proportion injured through violence; the data on demographics are still included but are not emphasised in the same way, as this was indeed confusing. We can also provide a separate table of demographic information if desired, however this seemed repetitive.

Discussion

Persistence of psychological distress over time may also be due to ongoing experience of violence in the violently injured sub-group. More thought about limitations would strengthen the paper.

- This is a good point and we have added a comment on potential ongoing experiences of violence to Principal findings, and further limitations including the potential limitation suggested by Reviewer 2.

Reviewer 2, Peter W Schofield

This is a study of an important and interesting issue. The study design is straightforward. No data are presented on severity of injury which in theory could represent a confound. I think it would be appropriate to identify that as a study limitation while making reference to the findings from other studies that indicate the lack of an association between injury severity and PTSD (i.e. it is not an important limitation for this study).

- We agree and have added this point, including a reference to back up the claim.

Tables 2 and 3 have inverted the data entries for 'Mechanism'. Please check that other lines in these tables do not also have errors.

- Thank you for highlighting this error – we have corrected it, and the rest of the tables have been double-checked and confirmed to be accurate

We hope that we have been able to answer all the points made by the reviewers and are grateful for their input, which has strengthened the paper. We hope that you will consider it for publication in this revised form.

The revisions included adding several references, taking the total number of references to 45, which we trust will be acceptable. We did not wish to weaken the rest of the paper by removing necessary references.

Thank you for your kind consideration.

VERSION 2 – REVIEW

REVIEWER	Ashley Craig The University of Sydney, Australia
REVIEW RETURNED	30-Jan-2017

GENERAL COMMENTS	The authors have addressed all my concerns. Well done.
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REVIEWER	Peter W Schofield University of Newcastle Newcastle NSW Australia
REVIEW RETURNED	26-Feb-2017

GENERAL COMMENTS	The investigators have addressed my concerns.
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