Author's response to reviews

Title: Burden of road traffic injuries and related risk factors in low and middle-income Pacific island countries and territories: a systematic review of the scientific literature

Authors:

  Josephine A Herman (j.herman@auckland.ac.nz)
  Shanthi N Ameratunga (s.ameratunga@auckland.ac.nz)
  Rodney T Jackson (rt.jackson@auckland.ac.nz)

Version: 4 Date: 11 April 2012

Author's response to reviews: see over
11 April 2012

Dr Lisa Keay
Associate Editor
BMC Public health
London
United Kingdom

Dear Dr Keay

Re: Burden of road traffic injuries and related risk factors in low and middle-income Pacific island countries and territories: a systematic review of the scientific literature

We are grateful to the reviewers and editor for the very helpful feedback on our paper. We are pleased to submit this revised manuscript for consideration of publication in BMC Public Health. We have considered editorial and reviewer comments provided to us on 29 March 2012, and have made the following changes below.

Sincerely

Dr Josephine Herman
Title: Burden of road traffic injuries and related risk factors in low and middle-income Pacific island countries and territories: a systematic review of the scientific literature

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<th>Location in original manuscript (V3 05 Jan 2012)</th>
<th>Comment</th>
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<tr>
<td>Reviewer #1: Jagnoor Jagnoor</td>
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<td><strong>Results</strong></td>
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<td>Useful to have a sentence on numbers of each study design included in table 1, for a quick assessment of level of evidence available.</td>
<td>We acknowledge this information is important. We included this within the Results section of the original manuscript, with the text as noted below. Fifteen studies were case series; including ten studies identifying cases from retrospective records,[23-26, 28, 29, 31, 32, 35, 37] three studies from prospective records,[27, 30, 36] and two studies from both retrospective and prospective records.[33, 34] There were three ecological studies,[38-40] and one study had features resembling a case control study but did not include an appropriate comparison group.[41]</td>
<td>Results: Page 8, paragraph 1, 2\textsuperscript{nd} sentence</td>
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<td>Paragraph titled “RTI-related fatalities in PNG”, first two sentences. The table 1 – points out that method were not very clear. However some information should be included on the denominator. The proportions of deaths due to RTI are very high, are these for all cause deaths in all ages, only trauma cases, only medico-legal cases? These sentences are misleading for the readers.</td>
<td>As suggested by the reviewer, we have revised the paragraph to make the information clearer to readers. Note the changes as indicated by the underlined in the revised version. In a study of 1,279 post mortems from all causes of deaths in all ages conducted at Port Morsey General Hospital (PMGH) for the years 1962 to 1989, RTIs (n=573) accounted for 45% of all deaths, 75% of whom were male.[29] Another post mortem study focusing only on trauma-related fatalities in all ages (n=608) at PMGH (1976 to 1985), showed that RTIs were responsible for 60% of these deaths, 83% of whom were male.[28]</td>
<td>Results: page 10 Paragraph titled “RTI-related fatalities in PNG”, first two sentences</td>
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<tr>
<td>Last sentence in paragraph titled under “RTI-related studies in PICTs other than PNG” reference 25 needs to be added.</td>
<td>Reference 25 (Now reference 37 – due to reorganizing of studies according to level of evidence) inserted</td>
<td>Results: page 11 Last sentence in paragraph titled “RTI-related studies in PICTs other than PNG” reference 25 needs to be added.</td>
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### Conclusion

The authors highlight in discussion that poor data should not delay action. The conclusion could be stronger in this respect. Also as with most LMIC around the world, resources are scarce and competing. It would be a very expensive exercise to address the issue of determining RTI burden using population based studies. Perhaps other routine data sources could be improved and surveillance systems established; reference from other LMIC

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**Abstract (conclusion)**

Greater attention to harnessing routinely collected data (e.g., hospital information systems and police crash statistics) to inform policy is also required.

**Paper (discussion)**

Reliable and sustainable injury data surveillance[52-55] including secondary data routinely collected from hospital and police records, comprises an important foundation for monitoring and evaluating road safety strategies in the Pacific context.[19, 39]

**Paper (conclusion)**

Improving the quality of secondary data sources from routinely collected hospital and police surveillance systems is essential.

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**Figures**

Results- perhaps uploading issue; Figure 1 has no title.

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**Methods**

Paragraph 2, 1st sentence

Discretionary Revisions

Could be re-written as it gives an understanding that only studies which reported injury specific data (nature, site etc) were reported and not RTI as cause.

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**Table 1**

Table 1 could also be delineated based on level of evidence rather than just chronological order.

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As quoted a few times all studies are more than 10 years old- any particular reason-changes in funding, political will etc that there are not even small studies available for last 10 years. I would think in certain settings there would be a substantial increase in RTI burden with increased motorization etc and curious to know why no research at all; even if not so good quality.

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Researchers at the School of Population Health, University of Auckland in collaboration with academics at the Fiji School of Medicine / Fiji National University are addressing this gap through the Traffic related Injury in the Pacific research project, funded by the Wellcome Trust and the Health Research Council of NZ. The current paper is one of the outputs of this endeavour, led by one of the Pacific research managers (JH) engaged in this project. RJ and SA are co-principal investigators of the project.
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<th>Reviewer #2: Tim Baker</th>
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<tr>
<td><strong>Figure</strong></td>
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<td><strong>List of abbreviations</strong></td>
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1. Location: (Island$ or Yap$ or Federated States of Micronesia$ or FSM or Micronesia$ or Nauru$ or Kiribati$ or Gilbert island$ or Papua New Guinea$ or Bismarck Archipelago$ or Solomon Island$ or Vanuatu$ or New Caledonia$ or Melanesia$ or Fiji$ or Fiji island$ or Rotuma$ or American Samoa$ or Western Samoa$ or Samoa$ or Tuvalu$ or Tokelau$ or Niue$ or Cook Island$ or Tonga$ or Tuamotu$ or Pitcairn$ or Norfolk$ or Wallis$ or Futuna$ or Rapa Nui$ or Easter island$ or French Polynesia$ or Tahiti$ or Marquesas Island$ or Society island$ or Savai$ or Polynesia$ or Pacific or Oceani$).mp.

2. Exposures: (alcohol or wine or spirit or beer or seatbelt or helmet or head protective device or helmet or sleep$ or fatigue or apnoea or shift work or snor$ or conspicuity or visibility or illumination or visual or headlight$ or light or traffic or colour or color or contrast or road or dirt or gravel or tar seal or weather or rain or wet or vehicle or car or motor or cycle or pillion or automobile or bike or moped or motorbike or motorvehicle or motorcar or walking).mp.

3. Outcome: ((road or traffic or accident or crash or collision) and (injur$ or disab$ or hospital$ or wound or morbid$ or prognos$ or mortalit$ or death$ or health status or fatal$)).mp.

4. Incidence studies
   1) exp Mortality/
   2) exp Follow-Up Studies/
   3) mortality (sh)
   4) Predict: (tw)
   5) Prognosis: (tw)
   6) course (tw)
   7) or/1-6

5. Aetiological studies:
   1) exp cohort studies/
   2) exp risk/
   3) (relative and risk) (tw)
   4) odds.mp. and ratio: (tw) [mp=protocol supplementary concept, rare disease]
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<td>case.mp. and control: (tw) [mp=protocol supplementary concept, rare disease supplementary concept, title, original title, abstract, name of substance word, subject heading word, unique identifier]</td>
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<td>6)</td>
<td>or/1-6</td>
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**Figure 1**
Updated Figure 1 to reflect the recommended PRISMA flow diagram

**PRISMA checklist**
Completed a PRISMA checklist

**Figure 1**

Additional file 2