Reviewer's report

Title: Adherence to Brain Trauma Foundation guidelines for management of traumatic brain injury patients: study protocol for a systematic review and meta-analysis

Version: 2  Date: 17 June 2015

Reviewer: Elie Akl

Reviewer's report:

Brief summary

This a protocol for a systematic review that aims to identify all published studies about adherence to brain trauma foundation guidelines. It also aims to explore the predictors of adherence and the effect of these guidelines on mortality and morbidity outcomes.

Importance of research question

The findings of the systematic review would help in improving to adherence guidelines.

Originality

This appears to be the first systematic review to evaluate the effectiveness of and adherence to the BTF guidelines.

Interpretation of the results

1. Will the study design adequately test the hypothesis?
   • Yes

2. Are sufficient details provided to allow replication of the work or comparison with related analyses: if not, what is missing?
   • Detailed search strategy of each database is missing

3. Is the planned statistical analysis appropriate?
   • Yes

4. Do the figures appear to be genuine, i.e. without evidence of manipulation?
   • Not applicable, since it is a protocol

5. Is the writing acceptable?
   • Average

General comments
This protocol displays a comprehensive search of several databases. A proper systematic review methodology is presented. The manuscript would benefit from making sentences more concise and using the active voice more frequently. Also, there are many instances of repetition and redundancy (see below). Some of the sections need to be reorganized (see below).

Specific comments

Major comments and suggestions

Background
The background could improved by adding a statement on why it is important to do this review. For example, clarify whether this is the first systematic review providing evidence regarding adherence to brain trauma injury guidelines. If not, clarify what this systematic review would add.

Objective
I suggest you specify which outcome in particular you are interested in studying when you state “Third objective is to study the outcome of guideline-based management in comparison to non-guideline based management to resolve some uncertainty about the effect of these guidelines”

Methods
Selection criteria: the comparator(s) need to be specified.

Search strategy: consider searching grey literature, reviewing reference lists, contacting experts, etc.

Quality assessment: consider using the Cochrane Acrobat risk of bias tool for non-randomized studies www.riskofbias.info/ instead of NOS

Why assess reporting instead of (in addition to) methodological quality and risk of bias?

Discussion section is very brief. It would benefit from discussing strengths and limitations of the systematic review.

Minor suggestions

Please proof edit the manuscript as there are spaces missing from between words.

Abstract
In the methods section, define RCTs for the first time.

In the methods section, I suggest adding “from eligible paper” to the following statement “These investigators will also independently extract data and assess the risk of bias”
In the discussion section, I suggest breaking up the long statements into shorter sentences.

Background

In the first paragraph, I suggest adding the reference of the following statement “Traumatic brain injury (TBI) is a leading cause of death and disability around the world”.

In the third paragraph, I suggest adding the source of reference of the following statement “Internationally, BTF guidelines are widely disseminated. They have been translated into over 15 different languages and applied in Europe, South America, and parts of China”.

Methods

Under protocol and study overview, the definition of PRISMA and MOOSE are mistakenly located, please consider inserting the correct definition for each term.

Under protocol and study overview, you have redundantly restated the goal of the study which you had just elaborated on under objective section under the background section. “The goal of this study will be to comprehensively and critically analyze the world’s relevant literature in order to evaluate the utilization of BTF guidelines in clinical practice, study the factors influence the utilization as well as the impact of BTF recommendation on the outcome”.

Consider bringing all inclusion and exclusion criteria to one section instead of listing them redundantly under different sections like selection criteria and study selection.

Under data abstraction, for the sake of being consistent, consider capitalizing the first letter of each numbered point.

Under quality assessment, consider bringing all details about the quality assessment of the observational studies together and those of the randomized studies separately. You might need to move the statement which elaborates the checklist of the quality assessment of observation studies to directly after you mention about using the NOS.

Under data synthesis, second paragraph, (a) is listed without a (b).

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

No to all of the above