Reviewer's report

Title: Epidemiology of in-hospital trauma deaths in a Brazilian university hospital

Version: 2

Date: 24 April 2014

Reviewer: Federico Coccolini

Reviewer's report:

An interesting paper in its field. It follows the aim declaration: to investigate the critical issues in trauma management in a region where trauma is managed without a centralization system in order to improve it.

As authors declare the present work is absolutely necessary to improve trauma systems and authors did a great effort to analyze the different criticalities.

Before publication however in my opinion some points need revision.

General overview:

1- The language need revisions

Abstract:

Well structured and exhaustive.

2- Acronyms must be specified

Introduction:

Ok

Material and methods:

Compulsory revisions:

3- Some parts of the materials and methods paragraph are written in results and vice versa:

- different patients transport organization (rescue service and ambulance groups)
- the last paragraph should be inserted in results section.

4- Please eliminate the "race" distinction as it's scientifically demonstrated as races don't exist.

Results:

Compulsory revisions:

7- Patient characteristic should be resumed in tables, please add tables

8- Results of the multivariate analysis showed as statistically significant different variables including emergency room (ER) and operating room (OR). Patients
admitted to OR are the more critical so it can be understandable that the OR admission plays a role in mortality risk. As a counterpart should, in my opinion, be specified why patients in ER. The risk is to mix the gravity of the patient, showed from the other variables, and the place where the patient is firstly admitted with a statistical significance that would not be applicable to the clinical field. Please reconsider the statistical analysis or clearly explain and motivate the results.

9- The duration of hospital stay seems to not have a normal distribution, it would be better to describe it also with the median value.

10- The transport duration for ambulance group should be inserted in results section and not in discussion, together with transport duration of rescue service groups.

Discussion:

Compulsory revision

11- In the fifth paragraph line 27 discussing the cause of death, is not clear which patients group it refers to, please explain better.

Discretionary revision

12- In the 6th paragraph the part about TRISS sounds too scholastic, consider if leave or remove.

Level of interest: An article of importance in its field

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

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I've no competing interest to declare