Reviewer's report

Title: Characteristics of martial art Injuries in a defined Canadian population: a descriptive epidemiological study

Version: 1 Date: 24 June 2010

Reviewer: Marizen Ramirez

Reviewer's report:

This manuscript serves as a foundational paper describing the epidemiology of martial arts injuries. The authors make good use of an existing surveillance system, and are commended for their efforts in calculating injury rates that include estimates of participation. The use of qualitative text from records is also quite interesting.

MAJOR COMPULSORY REVISIONS

1. Clarification is needed on how the injury rates were calculated. First, it is not clear how imputation was used. Were there missing data that required imputation, as the term imputed is used on page 5 under analysis? Or, were procedures used for sample survey data to estimate population parameters? It also would help to see the n, % and denominator estimates used to calculate the rates on table 1. And, clarification is needed to describe what the denominator was for the crude estimates. Also related to this issue is what or how the participation rates were determined (0.3% and 1.2%) – why are they different? Are they from different sources?

2. Severity of injury is listed among the “profile characteristics” under analysis. There should be a definition of severity. Is the severity variable the same as the serious variable on table 3?

3. Paragraph 3, results, includes a critical statement about report of use of protection. This is further expanded in the discussion (paragraph 2, page 7). It seems that this is an important variable but not included in the tables. If possible, please add.

4. Add more about the patterns highlighted from the qualitative review of text. This is quite interesting and added context to the paper. I'd like to know if and how qualitative analyses were actually conducted. I am familiar with qualitative findings presented within the results. Were the vignettes actual descriptions of real cases?

MINOR ESSENTIAL REVISIONS

5. Could you provide examples of self-inflicted injuries, under paragraph 2 results?

6. Tables 3 and 4. Figures do not total to 920. It makes sense that some are missing, but this needs to be added or footnoted in the table.
DISCRETIONARY REVISIONS
7. Some tables include n % while other do not. For example, tables 1 and 5 do not have both n and %. It would be valuable to see both throughout all tables.

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

Quality of written English: Acceptable

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

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