Reviewer's report

Title: COULD CURRENT FACTORS BE ASSOCIATED WITH RETROSPECTIVE SPORTS INJURIES IN BRAZILIAN JIU-JITSU? A CROSS-SECTIONAL STUDY

Version: 1 Date: 03 Apr 2017

Reviewer: Leonardo Vidal Andreato

Reviewer's report:

Dear Editor

The study has a very interesting goal and should be used in future studies. In addition, the results appear to be novel and should be of interest to readers of the BMC Sports Science, Medicine & Rehabilitation. However, some corrections are necessary, as well as the authors should consider other possibilities for analysis of the data.

Background


Methods

Please, add a topic to describe the design (e.g. "Design" or "Experimental Approach to the Problem") on page 5, line 56: change "genders" to "sexes". Page 5, line 56: "aged over 12 years old..." However, 12 years old is not considered as juvenile (as described in abstract) in Brazilian jiu-jitsu. Please, see (page 34) http://ibjjf.com/wp-content/uploads/2015/04/RulesIBJJF_v4_en-US.pdf. Page 5, line 58. Please, add a topic to describe the assessment of body mass, height and questionnaires.

Subjects

Page 6, line 6. "Subjects constituted different levels and categories". How many at each level? How many in each category? How many athletes in each belt ranks? How many men? How many women? Page 7 line 7 to 12. This information should be included in "design". Page 8, line 5. How many attempts were performed in sit and reach test? What interval between the attempts? Page 8, line 26. Change "Maximal isometric handgrip force" to "Maximal isometric handgrip strength". The same for all paper. Page 8, line 27. How many attempts were performed in maximal isometric handgrip test? What interval between the attempts? Page 8, line 49. Please, clarify: was it used the Friedman test followed by Dunn's or only Dunn's test?

Results

The sample was consisted by practitioners or athletes? Adjust this information. Data from men and women were analyzed together. However, did you have the same proportion of men/women in the three groups? In tables 3, 4 and 5: absolute or relative results were analyzed? The authors performed a comparison between three groups according their age (junior to juvenile, adult and master). However, the groups had different time of practice and different exposure time. Thus, would not it be important to perform analysis considering the time of practice and the exposure time (and not just age)? This aspect should be considered. I suggest insert a new table - with a binary regression of injury risk factors in Brazilian jiu-jitsu including all athletes.

Discussion

Start this topic showing the main results. Page 17, line 50: "According to our initial hypothesis, master athletes present more accentuated clinical disorders and increased occurrence of musculoskeletal injuries, when compared to younger participants". However, the master group had a higher time of practice than other groups. Could not this factor have interfered in this result? For this reason, I believe that is necessary to evaluate if there are association between age and injuries in a new analyze including all subjects.

Page 18, line 34. Was
evaluated if there are an association between time of practice and strength levels? It is more plausible that the higher values of strength from master group was resulted by time of practice and not by age

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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