Reviewer’s report

Title: Sports participation related to injuries and illnesses among ambulatory youth with chronic diseases: results of the Health in Adapted Youth Sports study

Version: 2 Date: 27 Jul 2019

Reviewer: Zoe Louise Saynor

Reviewer's report:

Summary
The manuscript entitled, "Sports participation related to injuries and illnesses among youth with chronic diseases: results of the Health in Adapted Youth Sports Study" provides interesting and novel information concerning the injury risk associated with sports participation in youth with chronic disease or disability. This is topical and of importance, given that most young people fail to meet the minimum physical activity for health recommendations, with participation often being poorer in individuals who have an underlying health condition and/or altered physical function. There are some sections that require proof reading and some writing improvements to bring this up to the standard for publication. I feel that the manuscript could be improved by making more of the different disease subgroups. I have some minor comments, outlined below, which may help to improve the quality of the manuscript.

More detailed comments / suggestions are provided below:
Title:
The title needs to include that all individuals including in this study were ambulatory.

Abstract:
In the single statement of summarising the clinical relevance, the final statements are not particularly related to the present data. These should be amended to focus on the messages that can be taken from the present findings, rather than wider contextual information.

Introduction:
Lines 37-45: Can you really pool together and discuss all different types of chronic health conditions together, particularly when there is evidence of different disease-specific barriers to physical activity participation? Such as pain in musculoskeletal conditions, versus fear of hypoxaemia in respiratory disease.
You need to proof read the document and ensure that you are writing in the past tense throughout, for example the study aims.

Methods:
How happy are you with the accuracy of the recall data over a two week period? Do you have any data to support this?
The different chronic disease subgroups have all been pooled together within this study. It would be of interest to separate out and make more of the differences between the different subgroups. Surely one would expect a large disparity in injury type etc. between individuals with different underlying disease pathologies?

You need to proofread the document and ensure that you are writing in the past tense throughout, several cases of this not being the case throughout the methods.

Page 5 line 52: 'form a' should read 'from a'

Given that all participants were required to be ambulatory, this needs to be clearly articulated in the title and other manuscript sections, since the consequence of this is that the study cohort only represents a subgroup of the populations included.

Page 6 line 4: outline better within the main body of the text how many individuals were in each disease group.

Page 6 lines 23 and 34: You state that young adults were included, however the title and elsewhere in the article it is stated that the study is focused on youth. Young adults are not youth and this should be outlined clearly and reflected throughout the article. On this note, was there any data to provide data concerning the pubertal maturation of the participants who were included in this study?

Page 6 lines 38-40: Repetition from above, remove statement about using the ACSM classification information.

Page 7 Line 24: Are you able to confirm whether a PA / wear time diary was also used? Furthermore, were wear time cut-offs utilised in the present PA data analysis?

Results:

Page 9 Line 52: 'did not wanted' should read 'did not want'

Page 9 Line 54: Please provide further details regarding why the additional 10% of participants dropped out.

Page 9 Line 58: 'was random' should read 'was randomly'

Page 10 Line 8: also include the n in the other disease subgroups

Page 11 Lines 9-12: Is it possible to also conduct analyses per disease subgroup, to compare e.g. MSK with neuro for example?

Discussion:

Further discussion should be added to compare the injury risk between different disease subgroups.

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.

Unable to assess

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

Yes
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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