Reviewer’s report

Title: The impact of dental treatment and age on salivary cortisol and alpha-amylase levels of patients with varying degrees of dental anxiety

Version: 3 Date: 05 Jun 2019

Reviewer: Andre Wannemueller

Reviewer's report:

The revisions made to "The impact of dental treatment and age on salivary cortisol and alpha-amylase levels of patients with varying degrees of dental anxiety" have improved the manuscript in parts. Nonetheless, I still think the conclusions the authors draw from the results do not fit well with relevant findings on fear-related physiological responding and associated cortisol and sAA responses. Basically, the problem originates from using the Frankl scale as main measure to classify the patients in fearful and phobic. As mentioned by the authors a classification based on this measure has to be considered quite imprecise. For the authors this causes the problem that they have to interpret quite contra-intuitive findings in the discussion section. Therefore, I would highly recommend to re-run the analyses with one pooled group of fearful participants i.e., patients classified as fearful and those located as phobic and compare them to non-fearful individuals. To my point of view, a two-group comparison (non-fearful vs. fearful children) would greatly clarify the manuscript and the expected results may allow the authors to transport a main message to the reader that could much better be integrated into the existing literature. However, in awareness of the expense such transformation would make for the authors and considering that this is the third revision-round, the authors also could describe the flaws concerning the classification of patients based on the Frankl-scale in a very clear kind. Moreover they should allude that the difference between fearful (anxious) and phobic patients very likely are due to vague classification.

Moreover I still think the manuscript would benefit from a careful checking concerning the use of correct lettering, use of units such as beats per minute (bpm) and brackets.

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?
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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

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