Author’s response to reviews

Title: The complete digital workflow in fixed prosthodontics: A systematic review

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Author’s response to reviews:

Manuscript OHEA-D-17-00231 entitled “The complete digital workflow in fixed prosthodontics: A systematic review“ which we had submitted to BMC Oral Health

Dear Dr. Shibli

We would like to thank you for the valuable suggestions and corrections made by the reviewers, which we thoroughly included in our revised manuscript and highlighted via MS WORD Track Changes.

Please, find enclosed our updated manuscript.

We believe that our data are of interest to the reader of BMC Oral Health and thank you for your consideration.

Kind regards,

Tim Joda
Reviewer 1:

Murilo Feres

This is a valuable and extremely relevant SR. However, there are few points that might be addressed before publication, in this reviewer's opinion.

For instance, English professional revision is highly advisable.

Answer: An English professional revision was performed by a native speaker.

Some PRISMA statement requirements should have been followed, as follows:

- Include Background section in the Abstract, if editorial guidelines allow you to.
  Answer: A Background section was added in the Abstract.

- Include study appraisal and synthesis methods in the Abstract.
  Answer: Study appraisal and synthesis methods were added in the Abstract.

- Was your systematic review (SR) registered? If so, please include protocol number. If not, please report that.
  Answer: The SR was not registered; a statement was added in the Introduction.

One of the main concerns of this reviewer refers to the database/sources that have been searched.

Was MEDLINE the only data source searched? Please consider extending your search to other databases as well, such as Embase, Scopus, and Web of Sciences. In addition, consider including grey literature sources, such as Google Scholar or theses and dissertations databases. Finally, consider consulting RCT register bases for ongoing studies.
Answer: Thank you for this point. The sources of the systematic search were PubMed, EMBASE, plus grey literature by means of Google Scholar plus a manual search of the team of authors. Additional information was provided in M&M.

There might be a significant issue related to this SR. Since so few studies were included (3), is this SR supposed to be performed anyway? Since this is a timely topic, which requires close scientific attention, why don't you consider broadening your selection criteria so non-RCTs are included too? Even though RCTs do provide the best evidence (when it comes to treatment size effects), non-RCTs might be, somehow, useful too.

Answer: Thank you very much for your valuable comment. The SR was performed in the frame of a couple of SRs related to the Consensus Meeting of the ‘Digital Dental Society’ (DDS). The DDS defined the (overall) selection criteria using only clinical studies with an evidence level of RCTs.

In addition, the team of authors believes that it is even worth to demonstrate the lack of evidence in the field of complete digital prosthodontic workflows. The industrial progress seems to be faster than the scientific evidence. From our point of view, this is an import result as well.

Reviewer 2:

Sandra Bussadori

The methodological procedure for the selection of articles is not clear. Is the final outcome considered as a criterion? (The results are based on different outcomes.)

Answer: Based on the PICO criteria (Problem – Intervention – Control – Outcome), a search strategy was developed and executed using an electronic search. The PICO question was formulated as follows: “In patients receiving prosthodontic treatments with [A] tooth-borne or [B] implant-supported fixed reconstructions (= Problem), is a complete digital workflow with intraoral optical scanning plus virtual design plus monolithic restoration (= Intervention) comparable to conventional or mixed analog-digital workflows with conventional impression and/or lost-wax-technique and/or framework and veneering (= Control) and following possible outcomes in terms of feasibility in general or survival/success-analysis including complication assessment with a minimum follow-up of 1 year or economics or esthetics or patient-centered factors (= Outcomes)?”

Clarify the purpose of the work.
To our best knowledge, no systematic review is available today, which investigated complete digital workflows in prosthodontics. Therefore, the aim of this literature appraisal was to compare fully digitalized workflows to conventional and/or mixed analog-digital workflows for the treatment with tooth-borne and implant-supported fixed reconstructions.

Include more articles for review.

Answer: The team of authors would also include more articles for review; however, we could not identify any other publications, which met the inclusion criteria. The SR was performed in the frame of a couple of SRs related to the Consensus Meeting of the ‘Digital Dental Society’ (DDS). The DDS defined the (overall) selection criteria using only clinical studies with an evidence level of RCTs.

In addition, the team of authors believes that is even worth to demonstrate the lack of evidence in the field of complete digital prosthodontic workflows. The industrial progress seems to be faster than the scientific evidence. From our point of view, this is an import result as well.