

Simplified complete dentures

Abstracted from

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Simplified Complete Denture: A Systematic Review of the Literature. *J Prosthodont* 2017; **26**: 267-274.

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Question: Is a simplified approach to dentures construction effective?

Data sources Medline and Embase.

Study selection Clinical reports, randomised controlled trials, controlled clinical trials and reviews about the simplified fabrication of complete dentures published in English were considered.

Data extraction and synthesis A narrative summary is presented.

Results Eleven studies were included, seven of which were randomised controlled trials. Comparisons of time and cost, patient satisfaction, clinical effects, masticatory performance, masticatory ability and professional evaluation were undertaken. Patients' ratings for general satisfaction, OHIP-edentulous scale, denture quality or masticatory ability were no different between simplified and traditional approaches. The traditional approach was more expensive and time consuming.

Conclusions Current scientific evidence suggests that a simplified fabrication method can replace or partly replace the conventional method to produce dentures.

Commentary

The topic of this review is a very interesting one and relates to many clinicians who provide treatment to patients in areas or settings where using 'full' complete denture procedures is not affordable for any reason.

As the review (and the name) indicated, the simplified complete denture (SCD), which is a modification of the conventional approach, is a treatment modality that simplifies or reduces the steps conventionally followed in the clinic or the laboratory to construct complete dentures. There is a variation, however, in the number of the clinical visits necessary to construct a complete denture using the SCD. This number of visits ranges from one to four.¹⁻³ Because this technique requires less clinic and laboratory time, it seems to offer a more economically affordable option to patients.

After a couple of screening steps, eight articles were included in the review. The review eloquently discussed areas of general patient satisfaction, quality of life, denture quality, mastication ability and time and cost. The review concluded that 'The simplified method is cheaper and more efficient and guarantees quality.' It suggested that the use of SCD should increase based on the presented evidence. It also recommended that rules should be devised to control the use of SCD.

The title of the review indicated that it is a systematic review. However, the methodology reported is more of a narrative review with a little touch of the methods used in systematic reviews. Since 2009, the PRISMA method⁴ has become the standard for reporting systematic reviews and meta-analyses that evaluate healthcare interventions. Evaluating the review in hand against the PRISMA checklist reveals that there are essential points that went missing throughout the various sections of the review. Below are some of the essential points that are not reported according to PRISMA, hence rendering this review less than qualified as a systematic review:

1. The title didn't indicate what type of systematic review (SR) it was (eg SR of randomised controlled trials). Although this might not always be mandated, indicating the type of SR in the title shows transparency and makes it easier for consumers during a search
2. The review did not include a focused question (eg PICO or PICOS). Hence it is not clear to the reader what the SR was trying to achieve and what were the points of comparison between SCD and the traditional dentures
3. The inclusion and exclusion criteria were general. Follow-

up periods were not specified and neither were the clinical profiles of included patients. Many study types were included, which creates confusion unless each study type is separately analysed and individually accounted for

4. The review mentioned what databases were used for search (Medline and Embase) and indicated that MeSH, keywords and reference lists were searched. However, the search terms (including the MeSH terms) and strategy used were not reported. In addition, the search was only limited to articles published in English. This lack of clarity about search affects the reproducibility of the review
5. There was not any reporting on the validity and quality of included studies. Hence the reader did not get information on the sample size, setting, methodology or outcome of the included studies. Consequently, there was not any assessment of risk of bias
6. There was not any information on data extraction or processes for obtaining and confirming data from investigators. It is not known how many investigators were involved in this step, if they did that independently or jointly and whether there was any disagreement among them in the various decisions and how this was resolved
7. No information was presented about the background of patients included in the studies, which makes it difficult to

assess the applicability of the studies', and hence the review's, findings to other patients

8. Finally, there was no mention of any methods used to summarise data.

Based on the above it is difficult to agree with the authors that it is a systematic review.

Nonetheless, as I mentioned in the opening statement, this review provides important information about the usefulness of SCD. Every clinician should weigh the benefits of using such a treatment modality keeping in mind his/her expertise, the available equipment and, most importantly, patient preferences.

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