

PROSPERO International prospective register of systematic reviews

Review title and timescale

- 1 **Review title**
Give the working title of the review. This must be in English. Ideally it should state succinctly the interventions or exposures being reviewed and the associated health or social problem being addressed in the review.
Patient satisfaction after orthodontic treatment: a systematic review
- 2 **Original language title**
For reviews in languages other than English, this field should be used to enter the title in the language of the review. This will be displayed together with the English language title.
- 3 **Anticipated or actual start date**
Give the date when the systematic review commenced, or is expected to commence.
06/11/2012
- 4 **Anticipated completion date**
Give the date by which the review is expected to be completed.
29/11/2013
- 5 **Stage of review at time of this submission**
Indicate the stage of progress of the review by ticking the relevant boxes. Reviews that have progressed beyond the point of completing data extraction at the time of initial registration are not eligible for inclusion in PROSPERO. This field should be updated when any amendments are made to a published record.

The review has not yet started **x**

Review stage	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	Yes
Formal screening of search results against eligibility criteria	Yes	Yes
Data extraction	Yes	No
Risk of bias (quality) assessment	Yes	No
Data analysis	Yes	No

Provide any other relevant information about the stage of the review here.

Review team details

- 6 **Named contact**
The named contact acts as the guarantor for the accuracy of the information presented in the register record.
Raquel Sano Suga Terada
- 7 **Named contact email**
Enter the electronic mail address of the named contact.
rssterada@uem.br
- 8 **Named contact address**
Enter the full postal address for the named contact.
Rua Pioneiro Jose Tel 964, Jardim Guapore, Maringa/PR, 87060-240
- 9 **Named contact phone number**
Enter the telephone number for the named contact, including international dialing code.
554432622223
- 10 **Organisational affiliation of the review**
Full title of the organisational affiliations for this review, and website address if available. This field may be completed as 'None' if the review is not affiliated to any organisation.
State University of Maringa

Website address:
www.uem.br

11 Review team members and their organisational affiliations

Give the title, first name and last name of all members of the team working directly on the review. Give the organisational affiliations of each member of the review team.

Title	First name	Last name	Affiliation
Dr	Leticia	Kawanichi	State University of Maringa
Dr	Uhana	Suga	State University of Maringa
Dr	Mitsue	Fujimaki	State University of Maringa

12 Funding sources/sponsors

Give details of the individuals, organizations, groups or other legal entities who take responsibility for initiating, managing, sponsoring and/or financing the review. Any unique identification numbers assigned to the review by the individuals or bodies listed should be included.

Dr Uhana Suga - MsS. - State University of Maringa
Dr Leticia Kawanichi - Graduation Student - State University of Maringa
Dr Mitsue Fujimaki - PhD - State University of Maringa
Dr Raquel Sano Suga Terada - PhD - State University of Maringa

13 Conflicts of interest

List any conditions that could lead to actual or perceived undue influence on judgements concerning the main topic investigated in the review.

Are there any actual or potential conflicts of interest?

None known

14 Collaborators

Give the name, affiliation and role of any individuals or organisations who are working on the review but who are not listed as review team members.

Title	First name	Last name	Organisation details
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Review methods

15 Review question(s)

State the question(s) to be addressed / review objectives. Please complete a separate box for each question.

What factors lead to patient satisfaction regarding the outcome of orthodontic treatment?

16 Searches

Give details of the sources to be searched, and any restrictions (e.g. language or publication period). The full search strategy is not required, but may be supplied as a link or attachment.

We will search the following electronic databases: MEDLINE (accessed by PubMed), Web of Science, Scopus and Lilacs.

17 URL to search strategy

If you have one, give the link to your search strategy here. Alternatively you can e-mail this to PROSPERO and we will store and link to it.

I give permission for this file to be made publicly available

Yes

18 Condition or domain being studied

Give a short description of the disease, condition or healthcare domain being studied. This could include health and wellbeing outcomes.

Orthodontics, along with prosthesis and implantology have been areas of dentistry with the highest number of court cases, for reasons such as high cost, treatment time, the involvement of the concept of aesthetics that is subjective, and because there is a large number of poorly trained professionals.

19 Participants/population

Give summary criteria for the participants or populations being studied by the review. The preferred format includes details of both inclusion and exclusion criteria.

Patients aged more than 18 years who completed orthodontic treatment.

20 Intervention(s), exposure(s)

Give full and clear descriptions of the nature of the interventions or the exposures to be reviewed

(1) articles that present the experimental method qualitative study or survey, (2) report the factors related to satisfaction after orthodontic treatment, (3) studies that showed patients as subjects aged over 19 years who completed orthodontic treatment, and (4) patients with facial pattern I, II or III. In addition, the following exclusion criteria were considered: (1) studies whose research subjects were on oral health technicians, doctors, nurses or dental students, or (2) technical oral health, medical and dental students and/or other health areas.

21 Comparator(s)/control

Where relevant, give details of the alternatives against which the main subject/topic of the review will be compared (e.g. another intervention or a non-exposed control group).

Does not apply..

22 Types of study to be included initially

Give details of the study designs to be included in the review. If there are no restrictions on the types of study design eligible for inclusion, this should be stated.

Surveys and qualitative studies.

23 Context

Give summary details of the setting and other relevant characteristics which help define the inclusion or exclusion criteria.

24 Primary outcome(s)

Give the most important outcomes.

The main factors that contribute to the satisfaction of the patients undergoing orthodontic treatment are: dental alignment, facial aesthetics and appearance.

Give information on timing and effect measures, as appropriate.

25 Secondary outcomes

List any additional outcomes that will be addressed. If there are no secondary outcomes enter None.

None.

Give information on timing and effect measures, as appropriate.

26 Data extraction, (selection and coding)

Give the procedure for selecting studies for the review and extracting data, including the number of researchers involved and how discrepancies will be resolved. List the data to be extracted.

27 Risk of bias (quality) assessment

State whether and how risk of bias will be assessed, how the quality of individual studies will be assessed, and whether and how this will influence the planned synthesis.

Risk of bias will be evaluated by ranking each study according to items adapted from Bennett (2011) for surveys and the Joanna Briggs Institute-Qualitative Assessment tool and Review for qualitative studies.

28 Strategy for data synthesis

Give the planned general approach to be used, for example whether the data to be used will be aggregate or at the level of individual participants, and whether a quantitative or narrative (descriptive) synthesis is planned. Where appropriate a brief outline of analytic approach should be given.

Qualitative metasummary is a quantitatively oriented aggregation approach to research synthesis of both qualitative and survey studies. We will synthesize the accumulated data in two formats: topical survey and thematic survey. In our topical survey, we will determine themes or patterned responses from the results sections of the collected studies. Next, we will define topics and when possible extract examples of quotations from patients. (Sandelowski, Barroso, and Voils 2007). For qualitative studies, any theme which was reported by a patient will be considered present. The number of studies including each theme will be tabulated and summarized. Next, intensity scores will be calculated. For each study, the number of themes extracted from it will be tabulated. Then, the number of themes which had also

been included by more than 25% of the included studies will be tabulated and then divided by the total number of themes extracted from the study (Sandelowski, Barroso, and Voils 2007).

29 Analysis of subgroups or subsets

Give any planned exploration of subgroups or subsets within the review. 'None planned' is a valid response if no subgroup analyses are planned.

None planned.

Review general information

30 Type of review

Select the type of review from the drop down list.

Diagnostic

31 Language

Select the language(s) in which the review is being written and will be made available, from the drop down list. Use the control key to select more than one language.

English

Will a summary/abstract be made available in English?

Yes

32 Country

Select the country in which the review is being carried out from the drop down list. For multi-national collaborations select all the countries involved. Use the control key to select more than one country.

Brazil

33 Other registration details

Give the name of any organisation where the systematic review title or protocol is registered together with any unique identification number assigned. If extracted data will be stored and made available through a repository such as the Systematic Review Data Repository (SRDR), details and a link should be included here.

34 Reference and/or URL for published protocol

Give the citation for the published protocol, if there is one.

Give the link to the published protocol, if there is one. This may be to an external site or to a protocol deposited with CRD in pdf format.

I give permission for this file to be made publicly available

Yes

35 Dissemination plans

Give brief details of plans for communicating essential messages from the review to the appropriate audiences.

Do you intend to publish the review on completion?

Yes

36 Keywords

Give words or phrases that best describe the review. (One word per box, create a new box for each term)

37 Details of any existing review of the same topic by the same authors

Give details of earlier versions of the systematic review if an update of an existing review is being registered, including full bibliographic reference if possible.

38 Current review status

Review status should be updated when the review is completed and when it is published.

Ongoing

- 39 Any additional information
Provide any further information the review team consider relevant to the registration of the review.
- 40 Details of final report/publication(s)
This field should be left empty until details of the completed review are available.
Give the full citation for the final report or publication of the systematic review.
Give the URL where available.