



Acta Odontologica Scandinavica >

Volume 73, 2015 - [Issue 7](#)

432 | 19

Views | CrossRef citations to date | 5 | Altmetric

Review Article

Is dental caries experience increased in HIV-infected children and adolescents? A meta-analysis

Cristiana Aroeira Guimarães Rosa Oliveira, Patricia Nivoloni Tannure, Ivete Pomarico Ribeiro de Souza, Lucianne Cople Maia, Maristela Barbosa Portela & Gloria Fernanda B. de A. Castro

Pages 481-487 | Received 26 Apr 2014, Accepted 08 Aug 2014, Published online: 12 Mar 2015

Cite this article

<https://doi.org/10.3109/00016357.2014.958874>



Sample our
Medicine, Dentistry, Nursing
& Allied Health Journals
>> **Sign in here** to start your access
to the latest two volumes for 14 days

Full Article

Figures & data

References

Citations

Metrics

Reprints & Permissions

Read this article

Share

Abstract

Objective. To undertake a systematic review to assess if HIV-infected children and adolescents have an increased dental caries experience. **Methods.** A search of MEDLINE, BIREME, EMBASE, GOOGLE SCHOLAR, SIGLE (Grey Literature) and reference lists of included studies was carried out. To be eligible the studies had to present HIV-infected and non-infected children/adolescents between 0–18 years old. To assess the methodological quality, the studies were categorized in scores from 'A' to 'C'. To perform a meta-analysis a random effect model was used with 95% confidence intervals and two distinct sub-group analyses were carried out in terms of caries progression: data for cavitated and non-cavitated lesions (sub-group 1) and data only for cavitated lesions (sub-group 2). **Results.** Five studies fulfilled the selection criteria.

Four studies (two ranked A and two B in the quality assessment) revealed higher caries scores in primary teeth in the HIV-infected patients with mean dmft/dmfs scores of 3.8–4.1/7.8–11.0 compared to the control group 1.5–2.4/3.4–5.1. No differences in caries index were found for permanent dentition. The meta-analysis excluded caries data of permanent teeth and showed a significant association between caries experience in primary dentition and HIV infection considering cavitated and non-cavitated lesions (OR = 2.33, 95% CI = 1.48–3.68) or only cavitated lesions (OR = 2.98, 95% CI = 1.59–5.59). Conclusion. Evidence exists that suggests HIV-infected children/adolescents have an increased caries experience in primary dentition.

Key Words:

child

dental caries

HIV infections

Acknowledgments

This work was supported by CNPq (Comissão Nacional de Desenvolvimento Científico e Tecnológico) and FAPERJ (Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro).

Declaration of interest: The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

Related research

People also read

Recommended articles

Cited by
19

[Factors associated with dental caries, periodontitis and intra-oral lesions in individuals with HIV / AIDS* >](#)

Anderson Jambeiro de Souza et al.

AIDS Care

Published online: 10 Nov 2017

Information for

[Authors](#)

[R&D professionals](#)

[Editors](#)

[Librarians](#)

[Societies](#)

Opportunities

[Reprints and e-prints](#)

[Advertising solutions](#)

[Accelerated publication](#)

[Corporate access solutions](#)

Open access

[Overview](#)

[Open journals](#)

[Open Select](#)

[Dove Medical Press](#)

[F1000Research](#)

Help and information

[Help and contact](#)

[Newsroom](#)

[All journals](#)

[Books](#)

Keep up to date

Register to receive personalised research and resources by email



Sign me up



Copyright © 2026 Informa UK Limited [Privacy policy](#)

[Cookies](#) [Terms & conditions](#) [Accessibility](#)

Registered in England & Wales No. 01072954
5 Howick Place | London | SW1P 1WG



Taylor & Francis
by informa