

Prevention of dental caries: when to start? - Systematic review of literature

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Introduction

Caries have significant repercussions at individual, family and socioeconomic level, with immediate and long-term impact^{1,2,3,4,5,6}.

Portugal, after more than 20 years of public oral health programs is still far from the World Health Organization European target for 2020, of 80% of 6 years old children caries-free⁷ (54,8% em 2008⁸). Effectively, caries remains the most frequent oral disease in all age groups in the Portuguese Population⁹ and the Organisation for Economic Co-operation and Development 2008 report has identified Portugal as one of the European countries in which there were proportionately "worse improving" of the state of population oral health¹⁰.

Aims

- Determine the ideal time to start caries prevention.

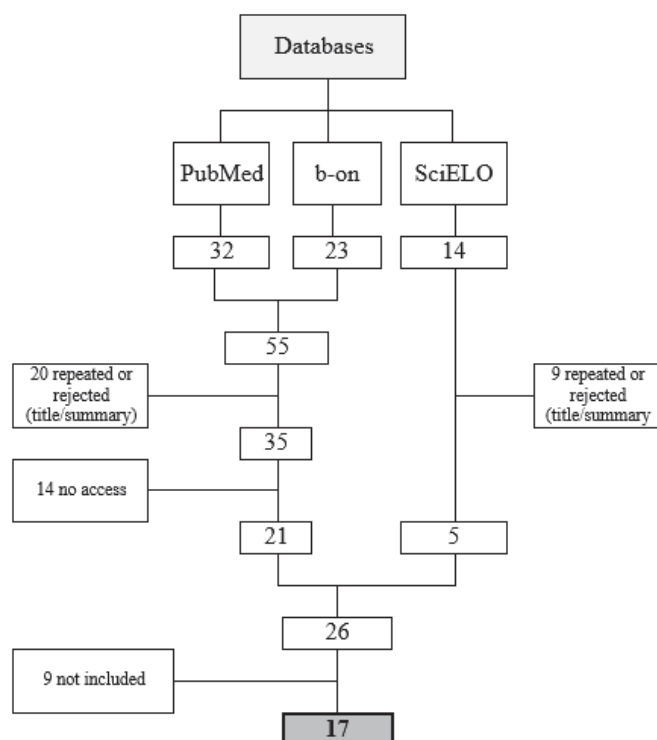
Methods

Search in PubMed, b-on and SciELO, 2000-2015, MeSH descriptors "Preventive Dentistry/education", "Preventive Dentistry/methods", "Preventive Dentistry/standards," Dental Caries/prevention and control".

Inclusion criteria:

English, Portuguese and Spanish, under the Guideline format, Meta Analysis, Patient Education Handout, Practice Guideline, Review, Scientific Integrity Review, Systematic Reviews.

Scheme 1 - Summary of the literature



Results

17 articles selected.

Caries is preventable^{1,2,3,4,5,10,11,12,113,14,15,16,17,18}. During the first year of life, the caries prevalence is close to zero and the possibility of prevention is very high⁹.

Caries prevention effectiveness



Birth ≈ 100%⁹
1 year old – 71,5%⁹
2 years old – 51,9%⁹

The priority prevention strategy is health education^{1,15,19,20,21,22,23}, which must be provided before risk factors installation (vertical transmission of cariogenic bacteria, eating habits and oral hygiene)^{2,13,24,25}. Ideally, it should be started before baby oral cavity colonization by cariogenic bacteria^{24,25}.

Ideal time for caries prevention beginning:

Pregnancy^{2,3,4,13,14,18,19,24,26} reinforced after birth

(teachable moment^{9,14,21,24,25})

- at 6 and 12 months of age^{2,27}
- tooth eruption²⁸
- until 3 years old²⁹
- until 5 years old¹³

Conclusion

The literature is unanimous that the caries prevention should start during pregnancy by health education and be periodically reinforced after the baby is born.

Clinical implications

Take an active role in the promotion of oral health and prevention of oral diseases, through community interventions to pregnant women and newly parents, to increase oral health literacy of communities.

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