Abstract

Objectives: The primary aim is to determine whether there is an association between caregiver oral health literacy and the oral health status of children.

Methods: All bibliographic databases with salient information on the proposed question were evaluated and included biomedical research literature (MEDLINE via PubMed and Embase), allied health, nursing and dental literature (CINAHL Complete), and social sciences/scientific literature (SCOPUS). We have also undertaken a grey literature search to be screened for additional articles or abstracts. The subject terms and keywords assessed for the main concept domains included: oral health literacy, oral health, parents or caregivers, and children. A comprehensive list of search terms was iteratively developed by the team, and peer reviewed by a second librarian. After removing duplicate works, 4,705 studies were screened at the title and abstract level by at least two independent reviewers. Five hundred twenty-six studies were identified for the full text screening. Preliminarily, at least two independent teams members completed 40 full text reviews, with 10 articles meeting the specified inclusion criteria.

Preliminary Results: For articles that were excluded within the full text review, the most common reason articles were excluded is that they did not specifically address both caregiver oral health literacy and children oral health status together. Of full text articles meeting the established inclusion criteria (37.5%), the majority indicate a connection between caregiver oral health literacy and the oral health status of children.

Preliminary Conclusions: Based on the articles reviewed thus far, there appears to be a positive association between caregiver oral health literacy and children oral health status across diverse countries and cultures.

Introduction

Oral health literacy (OHL) is defined as how individuals obtain and understand “basic oral health information and services needed to make appropriate health decisions and act on them” [1]. Oral health status (OHS) is the measure of one’s current state of oral health, based upon clinical examination, evaluation of dental, medical and social histories, and patient/staff interaction and stability of previous treatment. Measures for OHS include metrics such as decayed teeth, missing teeth due to dental caries, and filled tooth surfaces (dmft in children), periodontal status, and others. Dental caries can lead to deleterious consequences such as pain, loss of productivity and possibly severe limitations in activities due to dental caries, and filled tooth surfaces (dmft in children), periodontal status, and others. Dental caries can lead to deleterious consequences such as pain, loss of productivity and possibly severe limitations in activities due to dental caries.

Methods

Systematic Search

- Developed strategy to review literature regarding correlation between caregiver OHL and children OHS, adhering to Preferred Reporting Items for Systematic Reviews and Meta- Analyses (PRISMA).
- Created comprehensive list of established search terms and search string in PubMed, peer reviewed by a second research librarian using Peer Review of Electronic Search Strategies, or PRESS checklist.
- PubMed, Cumulative Index to Nursing and Allied Health (CINAHL) Complete, Scopus, and EMBASE were searched for relevant studies.
- No other filters or limits were applied.

Selection Criteria

- Inclusion: Children through 11 years of age (caregiver age not limited)
- Exclusion: Duplicates and studies with only self-reported OHS data.

Screening and Eligibility

- Using EndNote Citation Manager and Covidence Systematic Review software (covidence.org), duplicates were removed.
- Study titles and abstracts were screened against the eligibility criteria.
- Qualified studies were screened for full-text review, recording reasons for which studies were subsequently excluded.
- The screening process was independently performed by five reviewers following reviewer calibration. Any incongruent findings were resolved by third reviewer.

Results

Preliminary Results: For articles excluded within the full text review, the most common reason for exclusion was not specifically addressing both caregiver oral health literacy and children oral health status together. Of full text articles meeting the established inclusion criteria (37.5%), the majority indicate a connection between caregiver oral health literacy and the oral health status of children.

Table 1 summarizes the country in which the research was conducted, the number of participants, the study’s OHL instrument (including mean score) and the utilized OHS metric (including mean score).

Discussion

The average number of participant dyads was 332.8 for the 15 selected studies. Approximately 86.7% of these indicated an association between caregiver OHL and children OHS. Among those studies affirming correlation, 92% measured OHL beyond solely word recognition. Thus, instruments capturing greater OHL complexity tended to show an association, whereas the opposite was true for measures in number.

Selected References