

A Bibliometric Analysis of the Scientific Literature on MEDLINE Related to Clinical Dental Hygiene Practice

Problem Statement

Evidence-based decision-making [EBDM] is, in part, based on the availability of high-quality clinical trials and the use of current best evidence. With literature or outcomes continually evolving, it is difficult to know how much information is available for clinical decision-making in dental hygiene practice, how fast it changes, or where it is located. Finding information related to dental hygiene practice on MEDLINE, the largest existing electronic biomedical database, can pose a challenge because scientific studies related to clinical practice appear in various journals, including those of other dental and health related areas, e.g., general dentistry, dental specialties, public health and allied health. Much of what dental hygienists do in providing oral health services is indexed under Dentistry and its subheadings, or under the diseases that are treated/prevented, and yet the terms 'dental hygiene' or 'dental hygienist' do not appear as a provider of these services.

'Dental Hygiene' is not included in the Medical Subject Heading (MeSH) Vocabulary as a key indexing term, nor is it listed as a separate Health or Allied Health Occupation, such as occupational therapy or physical therapy. The term 'dental hygienist' is a MeSH term indexed under the subheading of Dental Auxiliary, found under the broader category of Allied Health Personnel. 'Dental hygienist' is not indexed, or cross-referenced, under the heading of Dentistry, or subheading of dental staff. Consequently, the scientific literature that can be helpful to clinical decision-making in dental hygiene practice may not be indexed or related to a 'dental hygiene' term and requires identifying the applicable MeSH vocabulary and search strategies.

Hypothesis/Research Question

Through use of sensitivity and specificity search strategies, a substantial body of scientific literature on MEDLINE will be identified that supports evidence-based decision-making for clinical dental hygiene practice in the areas from which most questions are derived: therapy/prevention, diagnosis, etiology, and prognosis.

Specific Aims/Relevance to the ADHA National Research Agenda

The four aims of this study are to: 1) identify and quantify the availability of scientific literature on MEDLINE for decision-making related to clinical dental hygiene practice, 2) identify the level of