Uncovering the evidence: Systematic review of interventions to reduce oral health disparities between adults with Intellectual Disability and the general population

Christine J. Clifford  
*University of Massachusetts Medical School, ChristineJ.Clifford@umassmed.edu*

Alexandra Bonardi  
*University of Massachusetts Medical School, Alexandra.Bonardi@umassmed.edu*

Nancy E. Harger  
*University of Massachusetts Medical School, nancy.harger@umassmed.edu*

*See next page for additional authors*

Follow this and additional works at: [http://escholarship.umassmed.edu/shriver_pp](http://escholarship.umassmed.edu/shriver_pp)

Part of the [Community Health and Preventive Medicine Commons](http://escholarship.umassmed.edu/shriver_pp), [Dental Public Health and Education Commons](http://escholarship.umassmed.edu/shriver_pp), [Health Services Administration Commons](http://escholarship.umassmed.edu/shriver_pp), [Mental Disorders Commons](http://escholarship.umassmed.edu/shriver_pp), and the [Nervous System Diseases Commons](http://escholarship.umassmed.edu/shriver_pp)

Repository Citation  
Clifford, Christine J.; Bonardi, Alexandra; Harger, Nancy E.; and Holder, Matthew; "Uncovering the evidence: Systematic review of interventions to reduce oral health disparities between adults with Intellectual Disability and the general population" (2013). *Shriver Center Publications and Presentations*. Paper 49.  
[http://escholarship.umassmed.edu/shriver_pp/49](http://escholarship.umassmed.edu/shriver_pp/49)

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in Shriver Center Publications and Presentations by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.
Uncovering the evidence: Systematic review of interventions to reduce oral health disparities between adults with Intellectual Disability and the general population

Authors
Christine J. Clifford, Alexandra Bonardi, Nancy E. Harger, and Matthew Holder

Keywords
Evidence Based Practice, Oral Health, Intellectual Disabilities, Developmental Disabilities

Comments
Presented at the American Public Health Association Annual Meeting on November 4, 2013, Boston, Mass.
Uncovering the evidence: Systematic review of interventions to reduce oral health disparities between adults with Intellectual Disability and the general population

Christine J. Clifford², MHP; Alexandra Bonardi², MHA, OTR/L; Nancy Harger³, MS LIS, RN; Matthew Holder⁴, MD, MBA

²Center for Developmental Disabilities Evaluation and Research, University of Massachusetts Medical School
³Lamar Soutter Library, University of Massachusetts Medical School, ⁴American Academy of Developmental Medicine & Dentistry

Background

Research consistently shows that the population with I/DD experiences poorer oral hygiene, higher prevalence and severity of periodontal disease, and higher incidence of untreated caries when compared to the general population. Poor oral health can cause chronic pain, affect the ability to eat and communicate, and adversely affect physical health and quality of life. Intervention strategies include enhanced prevention, increased routine care, expanded insurance coverage, and training for individuals, caregivers, dentists and hygienists.

A standard systematic literature review for evidence-based practices is not adequate for identifying and evaluating the evidence in areas such as health policy and individual health behaviors. We developed a structured process to uncover evidence where there is limited published literature that includes the I/DD population, and traditional scientific reviews of interventions addressing their oral health.

We developed a structured process to uncover evidence where there is limited published literature that includes the I/DD population, and traditional scientific reviews of interventions addressing their oral health.

Key Question 1: What effect do interventions that support good oral health and I/DD experiences poorer oral hygiene, higher prevalence and severity of periodontal disease, and higher incidence of untreated caries when compared to the general population.

Key Question 2: What effect do interventions that support good oral health and I/DD experiences poorer oral hygiene, higher prevalence and severity of periodontal disease, and higher incidence of untreated caries when compared to the general population.

References

Background

Methods

Adapting a trans-disciplinary conceptual model, which could be applied to a multitude of disciplines, we identified the best available literature collected through a conventional systematic review process, addressing the key questions of access and behavior, which allows for additional emphasis on the personal, social and environmental factors that affect the I/DD population.


Framework

First Level Review: 10 Reviewers

Second Level Review: Research Team

Using the framework, developed by the project team with input from our oral health and I/DD expert Advisory Panel, the medical librarian formulated a search strategy to include the population domain as well as access to care and health behaviors terminology. Both Medical Subject Heading (MeSH) terms (or equivalent) and free text were utilized dependent on database. The search was limited to 1980-June 1, 2013, English language only. Databases searched: PubMed, Cochrane, CINAHL, PsycInfo, Global Health, BioMed Central, PubMed Central, ERIC, TRIP, EMBASE, Scopus, Google Scholar; Grey Literature: health agencies (AHRQ, CDC), dental associations, meeting abstracts, dissertations, clinical trials, Scirus, OAIster (OCLC), New York Academy of Medicine, and Networked Digital Library of Theses and Dissertations (NDLTD).

Collected abstracts were uploaded to Abstrackr, a web-based citation screening tool. The review team consisted of ten reviewers: 2 dentists, 4 dental students, 2 researchers, a librarian, and a medical student. Reviewers were trained on the tool as well as the inclusion/exclusion criteria prior to the start of the review and after two weeks a check-in was conducted. To reduce bias, each abstract was reviewed twice and assigned an inclusion/exclusion tag.

Results

Total Abstracts: 4,854

First Level Review: 10 Reviewers

Include 374

Exclude* 1,028

Maybes 109

Conflicts 4,252

Include 458

Maybes 144

Exclude* 1,028

Full-Text Review: 602

Notes

*Exclusion Criterionalabstracts not relevant to the research question; did not contain an intervention or did not identify the I/DD population.