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

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

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

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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.

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.

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.

Key Words:

- Oral Health, dental/dentistry
- And I/DD mental retardation
- Physical disability
- Learning disability
- Autism
- Cerebral palsy
- Down syndrome
- Neurodevelopmental disorder

Access to Care:

- Access, treatment, dental services
- Health education
- Outcomes (long-term & short-term)
- Providers, dentists, hygienists
- Payment/costs
- Models (service delivery)
- Mobile clinics
- Special needs dentistry

Health Behaviors:

- Dental/fear
- Oral hygiene
- Tooth brushing
- Flossing
- Fluoride
- Adaptive tools/equipment

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

First Level Review: 10 Reviewers

Total Abstracts: 4,854

Exclude*: 3,343

Conflicts: 1,028

Maybes: 109

Include: 374

Second Level Review: Research Team

Body Text: 4,252

Maybes: 144

Include: 458

Full-Text Review: 602

*Exclusion Criteria: abstracts not relevant to the research question; did not contain an intervention or the I/DD population.