

# Oral Hygiene in Children with Special Healthcare Needs: A Rapid Systematic Review

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# PICO Research Question

What are the most effective strategies for improving oral health in children with special healthcare needs?

# Sub Questions

1. Do certain disorders put the patients at a higher risk for dental caries?
2. What is the most effective strategy for children with auditory disorders?
3. What is the most effective strategy for children with physical disabilities?

# Method

- Rapid systematic review consisting of 50 articles
  - Rapid Systematic Reviews, Randomized Trials, Case-Control Studies
- A few credible search engines: PubMed, ERIC, Google Scholar, Researchgate, PubMed Central
- Articles dated from 2017-present
- Critical appraisal checklist

# Types of Disabilities

- Down Syndrome
- Cerebral Palsy
- Central Auditory Processing Disorder
- Autism Spectrum Disorder
- Blindness
- Deafness
- Muscular Dystrophy
- Amputations
- Spinal Cord Injuries

# Results

- Specialized oral hygiene routines
  - Type of toothbrush
- Hands on activities
- Oral hygiene instructions
  - Braille
  - Tooth models
  - Educational skits
  - ASL
  - Training programs for caregivers

(Doichinova, Gateva, Hristov, 2019)

## Pre-and-post interventions for plaque and gingival health in children with auditory disabilities

Group	PI		GI	
	Group A	Group B	Group A	Group B
Preintervention	1.45±0.33	1.39±0.30	0.51±0.30	0.43±0.04
Postintervention	0.12±0.22	0.07±0.22	0.03±0.12	0.04±0.12
<i>P</i>	0.000*	0.000*	0.000*	0.000*

\* $P \leq 0.001$ ; statistically highly significant. GI=Gingival index; PI=Plaque index

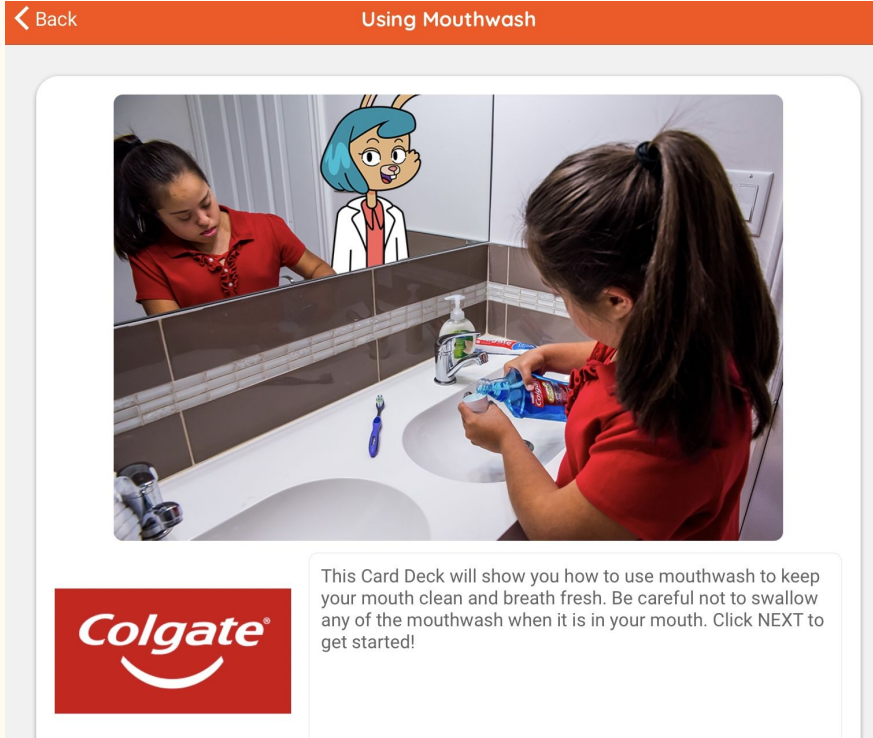
(Baliga, Deshpande, Thosar, Rathi, Bane, Deulkar, 2020)

### Tri-headed toothbrush

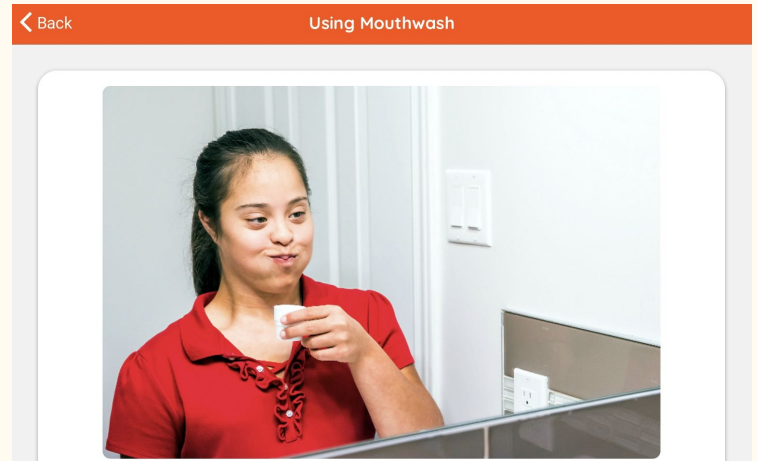
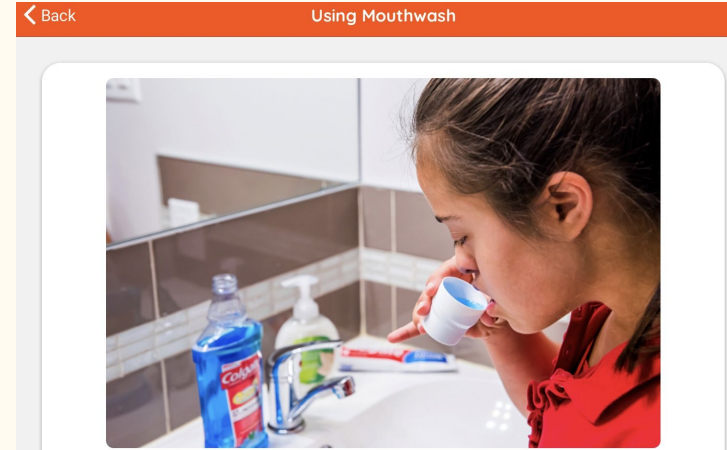


# Results Continued:

- Magnus Cards Mobile App (partnered with Colgate)



(MagnusCard™)



# Discussion:

## What can we do as Dental Hygienist?

- Overcome the language barrier
- Adapt to the patient's needs
- Train caregivers
- Gather resource materials
- Present 3D models of teeth
- Learn sign language
- Create community outreach programs

# Conclusion

- Our job is to communicate efficiently to our patients
- We are the primary source for correct oral hygiene instructions
- Conquer communication barriers and adapt to patient needs
- Bring more awareness of special needs dentistry to the community
- Expand the student hygienist's knowledge of the special attention these patients require