

Oral Health and Stroke Rehabilitation

Overview of Teaching Strategy

Poor oral care after a stroke can have serious physical, psychological, and social consequences and adversely affect quality of life. Up to 78 percent of stroke patients have dysphagia and loss of sensation, which can cause stasis of saliva and collection of food in the oral cavity. This provides an environment that increases risk for oral infection and tooth decay. Up to 75 percent of patients may be unable to brush their teeth or maintain their oral health due to impaired cognitive and physical abilities.

Stroke significantly impacts a person's ability to maintain self-care and increases reliance on others to support activities of daily living, including oral hygiene. Normal daily activities that affect oral hygiene such as eating, drinking, and tooth brushing can be severely disrupted. Motor dysfunction, a typical feature of stroke, can contribute to dysphagia, which increases risk for aspiration of food and development of pneumonia, which can be fatal.

While good oral hygiene is critical to health and quality of life following stroke, stroke-related impairments, including fatigue, apraxia, and unilateral weakness, can severely restrict survivors' ability to regularly carry out adequate oral hygiene activities. Oral care requires multiple self-care skills that stroke survivors may struggle with on a long-term basis. Thus, they may experience deterioration in their oral health. Caregivers are often not prepared to assist with oral care and need coaching on oral hygiene techniques.

Download all files for this teaching strategy

Oral Health and Stroke Rehabilitation Activity

Learning Objectives

Students will:

- 1. Describe oral health needs of a patient with stroke.
- 2. Demonstrate three technologies to assist a patient with stroke in oral care.
- 3. Describe oral health needs of a patient who is post-stroke.
- 4. Demonstrate two oral health interventions for a patient who is post-stroke.
- 5. Demonstrate strategies for oral hygiene anticipatory guidance.

Learner Prework



The following readings and online courses provide background information on oral health in patients with stroke.

Reading:

Gurgel-Juarez, N., Egan, M., Wiseman, M., Finestone, H., & Flowers, H.L. (2020).
 Technology for maintaining oral care after stroke: Considerations for patient-centered practice. *Disability and Rehabilitation: Assistive Technology*. doi: 10.1080/17483107.2020.1822450

Online course:

Smiles for Life: The Relationship of Oral and Systemic Health.
 https://www.smilesforlifeoralhealth.org/courses/the-relationship-of-oral-and-systemic-health/

Suggested Learning Activities

- 1. Using the <u>Oral Health and Stroke Rehabilitation Activity</u> document, have students demonstrate one technology for post-stroke rehabilitation from the table.
- 2. Using the <u>Oral Health Care After Stroke fact sheet</u>, have students identify three ways caregivers can promote oral health for stroke patients.

Suggested Reading

Gurgel-Juarez, N., Egan, M., Wiseman, M., Finestone, H., & Flowers, H.L. (2020). Technology for maintaining oral care after stroke: Considerations for patient-centered practice. *Disability and Rehabilitation: Assistive Technology*. doi: 10.1080/17483107.2020.1822450

Haber, J., & Hartnett, E. (2019). The interprofessional role in dental caries management: Impact of the nursing profession in early childhood caries. *Dental Clinics*, 63(4), 653-661. doi: 10.1016/j.cden.2019.05.002

Haber, J., Hartnett, E., Hille, A., & Cipollina, J. (2020). Promoting oral health for mothers and children: A nurse home visitor education program. *Pediatric Nursing*, *46*(2), 70-76.

Hartnett, E., Haber, J., Krainovich-Miller, B., Bella, A., Vasilyeva, A., & Kessler, J. L. (2016). Oral health in pregnancy. *Journal of Obstetric, Gynecologic & Neonatal Nursing, 45*(4), 565-573. doi: 10.1016/j.jogn.2016.04.005



Lyons, M., Smith. C., Boaden. E., et al. (2018). Oral care after stroke: Where are we now? *European Stroke Journal*, *3*(4), 347-354. doi: 10.1177/2396987318775206

Author Information

Judith Haber, PhD, APRN, FAAN
Oral Health Nursing Education and Practice Program (OHNEP)
NYU Rory Meyers College of Nursing
New York, NY

Jessamin Cipollina, MA
Oral Health Nursing Education and Practice Program (OHNEP)
NYU Rory Meyers College of Nursing
New York, NY

Erin Hartnett, DNP, PPCNP-BC
Oral Health Nursing Education and Practice Program (OHNEP)
NYU Rory Meyers College of Nursing
New York, NY