First-of-its-kind study finds oral hygiene training can significantly reduce pneumonia in nursing homes

22 June 2020

The Cecil G. Sheps Center for Health Services Research, a leading health services research group based at the University of North Carolina at Chapel Hill, has published a paper in The Journal of the American Medical Association (JAMA) Network Open evaluating the effectiveness of its Mouth Care Without a Battle staff training program. After participating in the study for one year, nursing homes that implemented the care program saw a statistically significant 31 percent reduction of pneumonia cases compared to nursing homes that did not use the program.

"We're building a compelling case to show that mouth care is health care, that poor oral hygiene can lead to more serious health concerns, and that nursing home staff can play a key role to interrupt that cycle," said Sheryl Zimmerman, Ph.D., Sheps Center program co-director and the Mary Lily Kenan Flagler Bingham Distinguished Professor of Social Work. "By implementing an evidence-based, compassionate approach like Mouth Care Without a Battle, nursing homes can take a meaningful step to evolve care practices. This program has incredible potential to help individuals in a variety of supportive care settings, including those living at home or in assisted living communities."

Nearly two-thirds of nursing home residents have Alzheimer’s disease or a related dementia. When these residents resist care, their caregivers often lack the knowledge or skills to properly clean their teeth. As a result, 84% of dependent long-term care residents do not receive mouth care.

Building on its growing body of evidence-based trainings, including the nationally-adopted Bathing Without a Battle program, the Sheps Center Program on Aging, Disability and Long-Term Care designed Mouth Care Without a Battle to remove common barriers to mouth care. In addition to learning about new products and techniques, staff learn individualized care practices that improve their confidence and the care they provide.

"Many nursing home communities may not connect the dots between mouth care and pneumonia, but the results from the program speak for themselves," said Michelle Strickland, licensed nursing home...
administrator at Brian Center Health & Rehabilitation in Wilson. "We saw a noticeable reduction of residents being hospitalized with pneumonia, and the program continues to empower our staff and residents."

A lack of significant results in the second year of the study raises important questions about the sustainability of interventions in long-term care.

"It's one thing to train your staff on a new procedure, and another to establish a new best practice in the long-term," said Philip Sloane, MD, MPH, Sheps Center program co-director and Distinguished Professor of Family Medicine at the UNC School of Medicine. "We recommend putting safeguards in place, such as hiring an oral care aide, to help sustain a high level of oral health care."

The paper, Effectiveness of a Mouth Care Program Provided by Nursing Home Staff vs. Standard Care on Reducing Pneumonia Incidence, was led by Zimmerman and Sloane and is available on the JAMA Network Open website. The training program is available at http://www.mouthcarewithoutabattle.org.

"This study is an exciting step forward in translating evidence into daily care practice," said Robyn Stone, Ph.D., senior vice president of research at LeadingAge. "While most frontline caregivers intuitively know that oral health is important, these findings bring the issue into focus in a way that's practical, actionable and patient-centric."


Provided by University of North Carolina at Chapel Hill School of Medicine