

Care home staff can use a range of strategies to enable and motivate residents to perform their own mouth care **and** prevent or overcome mouth care responsive behaviours in residents

Small changes to the environment (for example, sitting in front of a mirror, placing toothbrush and toothpaste in reach) are important: they promote and enable mouth care.

Step-by-step cues and commands help residents engage with selfcare and be more independent:

- Encouraging comments and demonstrating an action improves mouth care for residents with moderate dementia.
- Guiding a resident through each step (for example letting them know when to use water or to use a towel) improves mouth care for residents with severe dementia.

Giving full assistance to residents *reduces* opportunities for successfully providing mouth care for residents with severe dementia.

Any future studies need to focus on practical strategies for supporting care staff with this important aspect of care.

We have produced a list of strategies to help care home staff.





Staff at Pennington Court asked: *"What strategies are effective for promoting oral health among residents who resist mouth care?"*

Background

Oral care is important for healthy mouth, teeth, and gums. Nursing home residents often can't or won't carry out proper oral care and may require assistance from staff. However, nursing home staff may not be prepared to provide adequate oral care, particularly when a resident resists care.

Description of the evidence

A systematic review (Hoben et al., 2017) evaluated the effectiveness of strategies that nursing home staff can apply to either prevent/overcome residents' responsive behaviours to oral care, or enable/motivate residents to perform their own oral care. The review includes four studies [Box 1: 1-7]; one study was reported in four papers [Box 1: 2, 4-6]. The studies were conducted in nursing homes in the United States (n=3) and Canada (n=1). Two studies [Box 1: 1, 2, 4-6] assessed strategies to manage responsive behaviours related to oral care. The other two studies {Box 1: 3, 7] excluded residents with a history of responsive behaviours to oral care, but focused on strategies to enable and motivate nursing home residents to perform their own oral care. No randomised trials (generally the least biased research) were included: three studies conducted measurements before and after implementation of the strategies (pre-test post-test study, less strong design) and the other study conducted measurements at one point in time (cross sectional study, a weaker study design still). These are not the best design for studying whether strategies reliably produce the desired result. The studies were of low to moderate quality.

What strategies work

Making changes to the environment (for example, sitting in front of a mirror, placing toothbrush and toothpaste in reach) and instructing staff of how to give cues to the resident when carrying out their oral care reduces dental and denture plaque [Box 1: 2, 3, 4-6] and gum disease (gingivitis) [Box 1: 2, 4-6]. These strategies also reduce resident resistant behaviours [Box 1: 1] and improves care staff oral practices with residents, particularly brushing the inner surfaces of resident's teeth [Box 1: 2, 4-6]. When staff use encouraging comments and demonstrate an action then this improves oral care for residents with moderate dementia, whilst redirection activities (for example letting the resident know when to use water or to use a towel) improve care for residents with severe dementia [Box 1: 7]. Trying to give full assistance to residents with severe dementia {Box 1: 7].

Limitations of the review

The evidence is limited: studies include small numbers of participants (5-97 residents and 1-15 care staff in 1-3 nursing homes) and the study designs are weak. It is difficult to attribute effects (or lack of effects) to components of the strategies being evaluated. The studies used different measures to assess the impact of the strategies and so it is not possible to combine the results of the individual studies. It was not possible to assess 'reporting bias' in the studies, i.e. whether there is any selective reporting of the results.

Conclusions

There are promising strategies that care staff can apply to either prevent/overcome residents' responsive behaviours to oral care, or enable/motivate residents to perform their own oral care. The quality of these studies is weak but care staff should apply them and assess on an individual basis whether different strategies support the residents they care for.

Box 1: Studies included in the systematic review

[1] Jablonski RA, Therrien B, Mahoney EK, Kolanowski A, Gabello M, Brock A. An intervention to reduce care-resistant behavior in persons with dementia during oral hygiene: a pilot study. Spec Care Dentist. 2011; 31(3):77±87.

https://doi.org/10.1111/j.1754-4505.2011.00190.x PMID: 21592161

[2] Sloane PD, Zimmerman S, Chen X, Barrick AL, Poole P, Reed D, et al. Effect of a person-centered mouth care intervention on care processes and outcomes in three nursing homes. J Am Geriatr Soc. 2013; 61(7):1158±63. https://doi.org/10.1111/jgs.12317 PMID: 23772769
[3] Connell BR, McConnell ES, Francis TG. Tailoring the environment of oral health care to the needs and abilities of nursing home residents with dementia. Alzheimer's Care Quarterly. 2002; 3(1):19-25

[4] Sloane P, Chen X, Cohen L, Barrick AL, Poole P, Zimmerman S. Oral health outcomes of person-centered mouth care for persons with cognitive or physical impairment: Mouth care without a battle. Alzheimer's & Dementia: The Journal of the Alzheimer's Association. 2012; 8(4):P251-P2.

[5] Zimmerman S, Cohen L, Barrick AL, Sloane P. Implementation of personalized, evidence-based mouth care for persons with cognitive or physical impairment: Mouth care without a battle. Alzheimer's & Dementia: The Journal of the Alzheimer's Association. 2012; 8(4):P384.
[6] Zimmerman S, Sloane PD, Cohen LW, Barrick AL. Changing the culture of mouth care: mouth care without a battle. Gerontologist. 2014; 54(Suppl1):S25±34.

[7] Wilson R, Rochon E, Mihailidis A, Leonard C. Quantitative analysis of formal caregivers' use of communication strategies while assisting individuals with moderate and severe Alzheimer's disease during oral care. J Commun Disord. 2013; 46(3):249±63. https://doi.org/10.1016/j.jcomdis.2013.01.004 PMID: 23523100

References

Hoben M., Kent A., Kobagi N., Tu Huynh K., Clark A. & Yoon M.N. (2017) Effective strategies to motivate nursing home residents in oral care and to prevent or reduce responsive behaviors to oral care: A systematic review. *PLOS ONE*: DOI: <u>https://doi.org/10.1371/journal.pone.0178913</u>

Practical strategies for care staff when promoting mouth care for residents¹

General

- Know the person
- Approach from the front
- Smile
- Ask permission before starting
- Focus on the person rather than the task
- Explain each step
- Be patient, repeat yourself as appropriate
- Give positive feedback and encouragement
- Establish a routine

Person refuses mouth care

- Figure out why (e.g., bad time, pain, fear) and change approach accordingly
- Develop a routine (e.g., every day at the same time where possible with the same caregiver)
- Provide a reason (e.g., let me get the food out of your teeth so you'll be more comfortable)
- Phase in mouth care (e.g., do front of teeth one day, back the next, and interdental brush once the person is comfortable)

Person resists care by grabbing

- Hand the person the toothbrush and invite to brush
- Reassure and rub shoulder/arm to help relax
- Distract or redirect by pausing, singing, talking
- Hand the person an object to hold and keep hands busy

Person bites toothbrush

- Gently wiggle the toothbrush and ask to open mouth
- Insert a smaller brush to work around the toothbrush
- Gently rub cheek to relax jaw muscle
- Slide finger along the inside of the cheek and massage jaw



Person won't open their mouth

- Tell-show-do techniques to promote understanding
- Touch the mouth, cheek, or jaw with the toothbrush to prompt to open
- Gently insert toothbrush to cleanse front surfaces of teeth
- Sing with the person
- Be patient, try small talk, provide a reason for mouth care
- Come back at another time when the person might be more responsive



¹ Adapted from Hoben et al. (2017), Table 2, page 9-10



Person has trouble swallowing, or cannot spit

- Use a small amount of antimicrobial rinse
- Use only a pea-sized drop of toothpaste
- Provide care sitting up
- Have person tilt head forward and put a cup under the mouth to encourage spitting
- Avoid asking the resident to 'swish' water around in their mouth

Trouble removing or reinserting dentures

- Ask to open mouth so you can remove/put in their dentures
- Gently touch the mouth or cheek to prompt to open mouth

Person tries to hit or fight caregiver

- Distract the person (e.g., singing, watching TV)
- Pick another time of day when the person is calmer (e.g., early morning while sleepy)
- Stop and come back later
- Try another caregiver with whom the person is comfortable
- Check for broken teeth, sore spots, or infection



