Is it Functional Levels, Obesity, or Something Else?  
Making the Case for Additional Research Focused on Obesity in Nursing Homes

Obesity is increasing in prevalence in U.S. nursing homes (NHs), with one of four residents having a body mass index (BMI) ≥ 35 (Felix, Bradway, Chisholm, Pradhan, & Weech-Maldonado, 2015). Obesity increases risk of disability and functional impairment among community-dwelling adults (Anton, Karabetian, Naugle, & Buford, 2013); and, according to preliminary data, NH residents classified as obese have functional limitations performing self-care activities compared to peers classified as non-obese (Felix, 2008). The impact of functional impairment and obesity on NH residents’ daily care and NH staff time and facility resources is not well-studied. Individual reports on two residents highlight this topic. Both residents required maximum assistance with activities of daily living (ADLs); however, the first was classified as non-obese (BMI < 30) and the second as severely obese (BMI > 40). Suggestions for future research and clinical scholarship are outlined as essential components in moving forward.

INDIVIDUAL EXAMPLES

After obtaining regulatory approval and consent, morning care was observed for two NH residents, one who was and one who was not obese. Documentation included a description of care activities, time taken to provide care, and number and type (i.e., certified nursing assistants [CNAs] or licensed nurses) of nursing staff necessary to assist and shower residents.

Example 1

An 86-year-old female resident who was not obese (BMI = 29) with maximum functional dependence (score = 15) was observed during a shower. The resident’s history included dementia, peripheral vascular disease, generalized muscle weakness, and a right leg above-knee amputation. First, two CNAs transferred the resident from her bed to a shower chair (1 minute, 35 seconds); then, one CNA assisted in moving the resident to the shower room and completing the shower process (16 minutes, 23 seconds). After showering, the resident was assisted back to her room where two CNAs helped her into bed (1 minute, 30 seconds). One licensed nurse came to provide wound care (4 minutes, 25 seconds), and while there, helped the two CNAs dress the resident and assist her into her motorized wheelchair (5 minutes, 15 seconds). The total time and staff needed to complete these activities were 29 minutes, 8 seconds, and one licensed nurse and two CNAs.

Example 2

A 71-year-old female resident who was severely obese (BMI = 49) with maximum functional dependence (score = 16) was observed during a shower. In addition to severe obesity, the resident’s history included chronic respiratory failure, chronic obstructive pulmonary disease, obstructive sleep apnea (with ventilator dependence and tracheostomy), diverticulitis, bipolar depression, and osteoarthritis. First, one CNA and one licensed nurse prepared the resident for a shower by checking her vital signs, suctioning her tracheostomy tube, obtaining and connecting portable oxygen and tubing, and locating a cart to wheel supplies to the shower room (9 minutes, 22 seconds). Next, the CNA obtained a bariatric shower stretcher and gathered towels (for the shower) and linens (to change the bed) (6 minutes). After supplies were gathered, two CNAs prepared the resident to move out of bed, onto a Hoyer lift, and onto the shower stretcher. The bed was lowered to flat position, nightclothes were removed, the resident’s back and buttocks were cleaned, and the resident was placed in the Hoyer lift and on the shower stretcher. Two CNAs were needed to clean the resident’s back and buttocks; the resident was cleaned in bed because the bariatric shower stretcher was not large enough to al-
Before the resident could safely travel to the shower room, additional adjusting on the stretcher was required (8 minutes, 21 seconds). After the resident was in the shower room, one CNA bathed the resident, transported her back to her room, and changed the bed linens before assisting the resident into bed (15 minutes, 45 seconds). Finally, the licensed nurse and one CNA took 9 minutes, 36 seconds to move the resident from the Hoyer lift to a comfortable position in bed. The total time and staff needed to complete these activities were 49 minutes, 4 seconds, and one licensed nurse and two CNAs.

**NEXT STEPS**

These individual examples provide insight into challenges NH staff encounter when providing daily care. Residents with functional impairments require maximum care and amounts of nursing staff time and effort. In addition, when documented degree of functional dependence and need for ADLs was similar for two residents, time needed to provide care was approximately twice as long for the resident who was severely obese (49 minutes) compared to the resident who was not obese (29 minutes). Twenty minutes of additional nursing staff time to provide ADL care for each resident who is obese is likely to impact overall facility resource needs. Systematic research with representative samples and control for potentially confounding variables is needed to more accurately determine the nursing staff time required to provide ADL care for obese NH residents. If the time required to provide ADL care is even close to 20 minutes longer for obese residents (as demonstrated in Example 2), caregiving resources will be impacted and strained. To account for increased needs of residents who are obese, facilities should make informed decisions about residents admitted, follow staffing models that address increased needs when ADL care is likely to be highest, and be aware of requirements for specialized bariatric equipment.

Thorough examination of need for increased care for residents who are obese has not been conducted. Evidence-based clinical scholarship and research focused on resident safety during care activities (e.g., bathing, dressing, toileting) and financial and emotional costs associated with adequate care (Bradway, Miller, Heivly, & Fleshner, 2010; Yang & Zhang, 2014) is extremely limited. Descriptions of individual examples provide a basis for examination of time and nursing staff required to provide daily care to NH residents classified as obese and non-obese. However, additional exploration and intervention studies with more participants are needed. Additional research is necessary to fully understand how factors such as functional levels, multimorbidity, age, obesity, and system-related factors unique to the NH environment impact daily nursing care and resident independence.

**REFERENCES**


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