Smoking in the Nursing Home: A Case Report and Literature Review

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We report a case of second- and third-degree burns in an elderly nursing home resident with dementia who was smoking in her room. This case highlights the risks of smoking by residents in long-term care settings. It also raises awareness to the issues involving smoking cessation and restriction of smoking privileges in the long-term care setting. (J Am Med Dir Assoc 2008; 9: 201–203)

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CASE PRESENTATION

Ms. D is a 70-year-old female nursing home resident with a diagnosis of Alzheimer’s disease and a 40-pack per year cigarette-smoking history. She has resided in a skilled nursing facility since January 2007 because of frequent falls and dementia. She is married and lived with her husband before admission. She is ambulatory with a rolling walker and is verbal and able to express her needs. She is independent in all basic activities of daily living except she has assistance with bathing because of arthritis. At admission, her mini-mental status exam was 19/30.

Before admission to the nursing home, she had several unsuccessful attempts at smoking cessation. In the facility, she attends the 4 scheduled supervised outdoor smoking sessions each day and smokes a total of 8 cigarettes daily. The facility policy is that all cigarettes and matches are maintained in a locked box in the nursing station to be accessed by authorized staff for resident use during specific smoking times.

In May 2007, Ms. D was found smoking a cigarette in the hallway using cigarettes and matches her husband had given her. Ms. D’s husband was reminded of the smoking policies of the institution and he assured staff that he would not give his wife smoking supplies again. The facility smoking policy was reinforced with the resident and she declined any smoking cessation interventions.

In June 2007, a nurse’s aide making night rounds saw that Ms. D was lying in a fetal position and her nightgown was discolored black and had been on fire. The resident was alert but reported intense pain. She suffered burns to her chest, abdomen, thighs, and both hands. The nursing staff immediately called emergency medical services. Ms. D said that she attempted to smoke in her room and her nightgown caught on fire. She extinguished the fire by curling her body into a fetal position. She said that her husband had provided her with cigarettes and matches earlier that day.

Ms. D was transferred to a burn unit and was diagnosed with second-degree burns on her hands and thighs and third-degree burns on her chest and abdomen. Treatment in the hospital included debridement, skin grafts, and antibiotics. In July, Ms. D returned to the skilled nursing facility for long-term care with continued antibiotic treatment, pain management, and wound care. Her ambulation skills declined with no other change in activities of daily living. Ms. D said that she would never smoke cigarettes again. The facility responded by initiating room checks for smoking paraphernalia and by requiring visits by the spouse to be supervised.

SMOKING IN THE NURSING HOME

Prevalence and Dangers of Smoking

Among those 65 years and older in the United States, it is estimated that 9.1% are chronic smokers.1 There are limited data about the prevalence of smokers in the nursing home care setting. One study of Veterans Affairs (VA) nursing homes reported smoking rates ranging from 5% to 80%, with an average of 22%. However, the authors caution that the prevalence of smokers in non-VA long-term care facilities is probably lower than in VA facilities.2 In a 1998 study of San Francisco nursing home administrators, two thirds reported
that between 2% and 10% of their residents smoked. A MEDLINE search (terms: dementia and smoking) revealed no known data on the prevalence of cigarette use in patients with dementia. However, cigarette smoking increases the risk of developing Alzheimer’s disease and increases the decline in cognitive abilities.

Most elderly tobacco users began smoking cigarettes before its harmful effects were well known. Although smoking is currently regarded as harmful by the medical community, the long-term care population is generally not aware of the grave consequences of smoking. A survey in a long-term care facility revealed that both smoking and nonsmoking residents minimized the adverse health consequences of smoking and demonstrated a limited understanding of the range of organ systems affected by smoking. Only 10% of those surveyed believed that smoking could have severe health consequences or cause death. Cigarette smoking has been described by staff as the “last remaining pleasure” available to long-term care residents and “pleasure” is the most common reason cited by residents for continued smoking.

Smoking cessation at any age has health benefits. Long-term benefits include slowed progression of chronic obstructive pulmonary disease, an increase in life span, and a decreased risk of cancer. However, as nursing home residents have a median life expectancy of 18 to 24 months, individuals who stop smoking once admitted to a long-term care facility may not attain the health benefits of smoking cessation.

The harmful effects of smoking are not limited to the individual smoker. The safety of other residents in a long-term care facility is an important concern, especially as it relates to exposure to second-hand smoke and fire safety. Residents with cognitive impairment and various physical disabilities may be unsafe smokers and present safety risks. Physical challenges such as tremor, reduced movement, or paresis, as well as cognitive and visual-spatial deficits, make the smoking nursing home resident 2 to 3 times more likely to be severely burned than community-based counterparts. Additionally, sensory losses, respiratory conditions, and medication use render the elderly vulnerable to fire and highly susceptible to its consequences. Smoking materials account for 72% of fire-related deaths and 43% of fire-related injuries in long-term care facilities. Of the 3600 reported fires in nursing homes between 1987 and 1991, 15% started because of residents smoking in bed.

Nursing home regulations

Unlike most health care facilities, nursing homes are often not smoke free. The nursing home was defined as a residence in the Omnibus Budget Reconciliation Act of 1987. This designation supported the right for nursing home residents to be permitted to smoke in their home as well as for “accommodations of individual needs and preferences.” As such, nursing homes have to balance issues of personal autonomy while addressing the health and medical needs of all their residents. Capacity of the resident to make decisions about cigarette smoking is also a factor to be considered.

The hazards of smoking in the nursing home have led to greater regulation. Since the early 1970s, Medicaid and Medicare regulations have required that smoking by long-term care residents be supervised and controlled. The requirements mandate that residents may not smoke in their sleeping room unless directly observed by staff. The 1994 Joint Commission on Accreditation of Healthcare Organizations standards for long-term care mandated that “the organization disseminate and enforce an organization wide policy that discourages the use of smoking materials by patients/residents.” However, when smoking is permitted, policies must “minimize to the greatest extent possible the use of smoking materials, and confine allowed smoking to a designated location(s) that is separated from nonsmoking patients/residents.” Additional consideration is required for residents with dementia. The Health Care Financing Administration (HCFA) requires compliance with the National Fire Protection Association’s Life Safety Code to restrict smoking by dementia residents because of their increased fire risk.

Many facilities have responded to the regulations by designating smoking areas inside and outside the facility for smoking residents. The indoor areas must have adequate ventilation to ensure that no smoke escapes into the rest of the building. Other policies include supervision of smoking and control of smoking opportunities and paraphernalia, especially for smokers deemed “unsafe.” Fire-retardant aprons, bedding, or pajamas are available; however, there are reports of reluctance to use fire-retardant aprons to avoid stigmatizing the resident as incompetent. Assistance with smoking can be provided by staff directly or with a “smoking robot” which is a hookah-like device that enables smoking without holding a lit cigarette. Additionally, physician’s orders can be used to either restrict or permit smoking for individual long-term care residents.

In response to resident safety issues and health concerns, another option for nursing home facilities is to declare themselves smoke free and stop admitting new residents who use tobacco. Existing residents are protected by HCFA’s interpretation of the federal long-term care guidelines whereby facilities cannot require them to stop smoking, as doing so would render the facility ineligible for Medicare or Medicaid funding.

Smoking Cessation Interventions

While long-term care facilities cannot force current residents to stop smoking, they can offer interventions to aide with smoking cessation. Older smokers are less likely than younger smokers to attempt quitting, but older patients are more likely to be successful. Useful interventions in the nursing home setting can include providing education about the benefits of smoking cessation, identifying a quit date, and providing emotional support including group support and stress management. Facilities can offer programs to increase activities unrelated to smoking and enlist the support of staff and family members.

In addition, clinicians in the long-term care setting have several pharmacologic options to aid residents with smoking cessation. Pharmacotherapy with as nicotine replacement therapy of all types (transdermal patch, nasal spray, gum, lozenges, and nicotine inhalers) have proven to be effective in
comparison with placebo. Buproprion SR is an antidepressant that is thought to reduce smoking through noradrenergic/dopaminergic mechanisms. A clinical trial showed the highest success rate in smokers aged 50 and over, and at the 150-mg daily dosing. Varenicline was recently approved by the Food and Drug Administration (FDA) as an acetylcholine nicotinic receptor partial agonist with specificity for the receptor subtype responsible for the reinforcing effects of nicotine. In 2 studies including 18- to 75-year-olds, varenicline had statistically better smoking abstinence rates than placebo, with comparable side effects. A newer agent, rimonabant, is a cannabinoid receptor type 1 blocker that is being studied for smoking cessation. It is not yet available in the United States. In a recent trial, rimonabant led to significantly higher abstinence rates with significantly less weight gain than placebo. However, as biographic data such as age and comorbidities were not published, efficacy and safety for use in geriatric patients may require further study.

Clinicians can have an important role in smoking by nursing home residents. Some facilities require a clinician’s order to permit or restrict smoking. Additionally, through counseling and prescribing medication, health care providers can aid with smoking cessation. However, many clinicians fail to counsel older adults about the benefits of smoking cessation or to offer education and interventions. In the primary care outpatient setting, a study of patients 60 years and older revealed the rate of smoking cessation was significantly higher in those who received counseling by their physician and advice on smoking cessation when compared to routine primary care. One nursing home study revealed that since admission to the nursing home, only 40% of smokers surveyed were “ever advised . . . to quit smoking” by a doctor.

CONCLUSION

Cigarette smoking in the long-term care setting raises complex ethical, medical-legal, and policy concerns. Clinicians and administrators are often challenged with smoking issues in the long-term care setting. Facilities need to balance the personal autonomy of individual smokers and the potentially injurious effects of smoking on other residents, as well as the need for safety. In addition, clinicians should be more aware of this issue and be aggressive in offering and implementing smoking cessation interventions. Further research is needed to determine which interventions and policies are most effective in the long-term care setting.

REFERENCES