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Resident Smoking in Long-Term Care Facilities-Policies and Ethics

SYNOPSIS

Objective: To characterize smoking behavior, facility policies related smoking, and administrators' views of smoking-related problems in Veterans Affairs nursing home care units nationwide.

Methods: An anonymous mail survey of long-term care facilities was administered to 106 nursing home supervisors at VA Medical Centers with nursing home care units. The response rate was 82%.

Results: Administrators from 106 VA nursing home units reported smoking rates ranging from 5% to 80% of long-term care residents, with an average of 22%. Half of the nursing homes had indoor smoking areas. Frequent complaints from nonsmokers about passive smoke exposure were reported in 23% of the nursing homes. The nursing administrators reported that patient safety was their greatest concern. Seventy-eight percent ranked health effects to the smokers themselves a "major concern," while 70% put health effects to exposed nonsmokers in that category. Smoking in the nursing home was described as a "right" by 59% of respondents and a "privilege" by 67%. Some individuals reported that smoking was both a right and a privilege.

Conclusion: Smoking is relatively common among VA long-term care patients. The promotion of personal autonomy and individual resident rights stressed in the Omnibus Budget Reconciliation Act of 1987 may conflict with administrative concerns about the safety of nursing home smokers and those around them.

oncerns about the quality of care for the 1.5 million nursing home residents in this country led to the nursing home reform measures contained in the Omnibus Budget Reconciliation Act of 1987. Promotion of nursing home residents' rights, including "accommodations of individual needs and preferences," was an integral part of that legislation1. Nursing homes are no different from society as a whole in balancing issues of personal autonomy and the rights of others as they relate to cigarette smoking. In fact, the close living proximity and restricted mobility of most nursing home residents accentuate these conflicts. When smoking is permitted, nonsmoking staff and residents are exposed to secondhand smoke. Also, residents with cognitive impairment and various physical disabilities are often unsafe smokers and present safety risks to themselves and others.

The Medline and PsychINFO bibliographic data bases for the past decade contain no references to studies examining smoking behavior in nursing homes. A single paper addressed smoking bans in state long-term psychiatric hospitals². We, therefore, conducted a national survey of Department of Veterans Affairs (VA) Nursing Home Care Units to collect information on the number of smokers

among long-term care residents and the problems arising from allowing patients to smoke. Although the VA subsidizes long-term care in certain community facilities, we limited our study to VA hospitalbased nursing homes. Past surveys of inpatient veteran populations have shown smoking prevalence ranging from 46% to 69%^{3,4}. Given the well-established link between smoking and lower socioeconomic status⁵ the prevalence of smokers among residents in non-VA longterm care facilities is probably lower

than in VA facilities. However, the issues and conflicts surrounding smoking in long-term care settings, including personal safety and the rights of nonsmokers, are similar. Results of this study should, therefore, have implications for both VA and non-VA nursing homes.

Methods

Sample. Of the 172 Department of Veterans Affairs medical centers in the United States, 129 (75%) have designated nursing home units. At our request, the Office of Geriatrics

and Extended Care in the VA Central Office in Washington DC, provided a mailing list of the VA nursing homes and the names of either the Associate Chief of Nursing Service (ACNS) for extended care or the Nursing Home Unit Supervisor at each facility. We mailed surveys directly to these contact people with letters of introduction explaining that, in an attempt to address concerns raised by residents and staff at our facility regarding indoor smoking, we wanted to collect information about how smoking is handled in VA nursing homes nationwide. Results of the survey were promised to all participating facilities.

Survey Instrument. We developed the survey with input from clinical geriatric staff credentialed in medicine, nursing, and psychology. It first requested background information on current census,

bed capacity, and number of smokers. Respondents were asked to estimate the number of smoking residents who were interested in quitting and whether or not smoking cessation programs existed in their facilities. Several questions probed respondents' attitudes and personal behavior, the extent to which, for example, they saw smoking as a right or privilege whether residents were permitted to smoke in their

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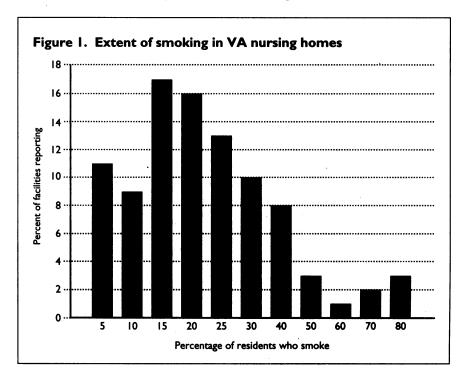
others.

rooms, and whether or not they themselves were smokers. We asked respondents to indicate their degree of concern, using a three-point scale (not a concern, moderate concern, major concern) about (a) health effects for residents of smoking, b) fire safety risk to residents, c) exposure of nonsmokers to smoke, and d) damage to property (burns in rugs and furniture, stained walls).

We asked respondents

whether a designated smoking area existed within their nursing home facility separate from the main hospital smoking area. If so we asked about the designated area's location (inside the nursing home or outside/separate structure), the presence and effectiveness of an exhaust fan vented directly outdoors, use of the smoking area by staff and nonsmoking residents, and the extent of complaints from non-smokers about smoke exposure.

Personnel from 82% (N=106) of the facilities eligible to participate completed and returned the survey after the first mailing. These facilities averaged in bed size from 26 to 314,



with reported occupancy rates of 38% to 100%.

Data Analysis. Codes from returned surveys were double entered and analyzed using SAS software. Because these data were intended to describe, for the first time, smoking behavior in VA long-term care facilities, the results are summarized with descriptive statistics, including means and percentages. We used Chi-square tests to examine group differences for categorical data.

Results

As shown in Figure 1, in the facilities for which we received reports, approximately one-quarter (22%) of the residents were reported to be smokers. All responding facilities accommodated smokers. Seventy-six percent had a designated smoking area connected with the nursing home; smokers in the remaining facilities utilized areas designated for smoking for the entire medical center population. Over half (61%) of the nursing home smoking areas were indoors, and the remainder were reported as being separate structures outside the nursing home, for example, a patio. Most administrators (91%) reported that residents were never allowed to smoke in their rooms, with 9% of the facilities "seldom or occasionally" allowing this practice.

Most nursing home supervisors ranked patient safety (the risk of fire) as a "major concern." Seventy-eight percent of respondents ranked health effects to the smokers themselves a "major concern," while 70% put health effects of smoking to exposed nonsmokers in that category. Less than half (46%) considered damage to the smoking area (burns in rugs and furniture) of major concern. To a follow-up question, "Should nursing homes provide a designated indoor smoking area?" 43.7% of respondents answered yes.

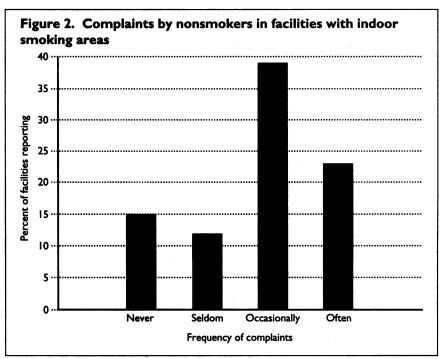
What interventions would address these safety and health concerns? Although 85% of the respondents reported having a smoking cessation program available to their residents, all (N=106) reported that few if any of the smokers in their facilities were interested in quitting. The exposure of nonsmokers to passive or "secondhand" smoke led to at least occasional complaints in 62% of facilities. Frequent complaints were reported in 23% of responding facilities (Figure 2). Smoking areas in nursing homes are often situated so that it is logistically impossible to protect nonsmokers from smoke exposure. Fiftythree percent of respondents reported that nonsmokers as well as smokers use smoking areas in their facilities. Of the 47 facilities with indoor smoking areas, 38 (76%) used exhaust fans to vent smoke directly to the outside. Most

nursing homes with such an arrangement (95%) reported these fans to be somewhat effective (62% noting them to be moderately or very effective), but the differences between the number of complaints in facilities with and without ventilation fans were not statistically significant ($x^2 = .190$, p=.66).

The majority (91%) of the chief nurses or unit supervisors responding to the survey did not smoke themselves. However, there were differences between these smokers and non-smokers in the concerns they expressed about smoking behavior. For example, a greater proportion of the nonsmokers (95%) than smokers (78%) expressed concern about exposure of nonsmokers to smoke ($x^2=5.8$, p=.05). VA policy continues to allow smoking in nursing homes "except when patients are a danger to themselves⁶." Interestingly, the majority (67%) of the respondents reported seeing smoking as a "privilege," while 59% felt that smoking was a "right" for their patients. Some respondents reported that smoking is both a right and a privilege. Several explained this apparent contradiction by noting that administrative and personal views were at odds on this matter.

Discussion

Smoking in the long-term care setting will likely remain a controversial issue as long as tobacco products are commercially available. Our survey demonstrated a wide range of prevalence estimates of smoking in VA nursing homes (5 to 80%). This may reflect differences in casemix (facilities with more psychiatric patients may have a greater prevalence of smokers). It may also reflect a tendency of some respondents to exclude "occasional" smokers from prevalence estimates. To date, the prevalence of smoking in community nursing homes has not been studied.



The creation of a homelike atmosphere in nursing care facilities encourages residents to engage in activities that are idiosyncratic and not necessarily enjoyed by everyone. Smoking may be condoned in long-term care facilities because, as one of the respondents put it, "for some it is their only remaining pleasure." Yet, in a substantial percentage of the facilities, smoking areas (46%) were never utilized by nonsmokers—which suggests that residents who avoid smoke exposure are denied access to potential areas of activity and social gathering.

The deleterious health effects of smoking are well established and, accordingly, were identified by respondents as a major concern in this survey. Although the results of this survey suggest concern for the health of the smoker, they also suggest substantial nihilism regarding the usefulness of smoking cessation programs for this group. Similarly, a recent survey of 339 noninstitutionalized elderly smokers showed that although 51% of current elderly smokers wanted to quit, only 39% reported being advised by their physicians to do so 7 .

Smoking cessation at any

age has been demonstrated to have health benefits, but the length of time between cessation of smoking and disease risk reduction is variable, possibly attenuating the benefits for the nursing home resident. For coronary artery disease, there is an initial dramatic drop in risk during the first year of smoking cessation followed by a more gradual decline over the next two decades^{8,9}. Interestingly, the one study that has examined risk factors for CAD in the nursing home identified cigarette smoking as a risk factor only for male residents only. This case-control study examined 138 men and 380 women with a mean age of 82 years¹⁰. For stroke risk, reduction to "never smoked" levels takes 10 to 15 years in males, and in females three to five years¹¹. Cerebral perfusion, however, increased within six months in a group of older cigarette smokers who were able to quit12. For lung and head and neck cancers, both strongly associated with smoking, measurable risk reduction for those who stop smoking probably takes several years, and reduction to risk levels experienced by nonsmokers may take one to two decades or even longer¹¹. Canadian researchers examining community-dwelling elderly smokers noted that negative quality of life measures improved in those who had not smoked for several years to levels observed in elderly who never smoked. However, short-term benefits to quality of life were less clear¹³. These short-term benefits are probably most applicable to the nursing home population. Given a

median life expectancy of 18 to 24 months for nursing home residents, individuals who stop smoking after being admitted have a good chance of never realizing the potential health benefits of their actions.

If the harmful effects of smoking were limited to smokers, our sensitivity to the rights of nursing home residents and need to respect personal autonomy would probably override health concerns. But as our survey makes clear, nursing home administrators are sensitive to other poten-

> tially injurious effects of smoking. In fact, the risk of fire was the respondents' major concern regarding residents' smoking. Nursing home fires in the past have had tragic consequences and smoking patients have been responsible for many of these disasters14,15. The cognitively impaired smoker presents particular risk when apraxia and visual-spatial deficits combine with poor judgment to place the individual and those around him or her in danger. Efforts to limit risk in these situations range from one-on-one supervision of smoking to use of "smoking robots" (hookah-like devices that allow one to smoke without holding a lit cigarette)

and welders' aprons worn to prevent burns. Drinka has suggested providing an involuntary "assisted" trial of smoking cessation, agreed to by the resident's surrogate decisionmaker, incorporating nicotine patches and removal from smoking areas¹⁶. He acknowledges the ethical complexity of this approach.

The adverse effects of exposure to passive smoke have received increasing attention and have been the impetus behind indoor smoking bans in many public facilities and healthcare institutions¹⁷⁻¹⁹. VA policy, which established smoke-free hospitals in 1991, has recently been made less stringent by controversial federal legislation²⁰. Smoking bans on hospitalized patients may be viewed as paternalistic acts, but it is believed that the resulting inconvenience is temporary and offset by improved health for deprived smokers and those around them. Clearly, a smoking ban on long-term care residents would be more difficult to impose. The hospitalized smoker, denied his or her cigarettes, will return home in a week or two, free to exercise self determination which may include a resumption of smoking. The nursing home resident is rarely discharged to another "home," making the smoking ban a lifelong imposition.

Despite these concerns there does appear to be some movement toward greater regulation of nursing home smoking. The 1994 JCAHO standards for long-term care require that "the organization disseminate[s] and enforce[s]

an organization-wide smoking policy that discourages the use of smoking materials by patients/residents." When smoking is permitted, policies must be in place that "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/residents²¹." HCFA, which regulates the majority of non-VA nursing home care, appears to give tacit approval to the prohibition of smoking while still respecting the rights of smokers already in residence: current HCFA guidelines for facility surveys include the statement: "If a facility changes its policy and prohibits smoking, it must allow current residents who smoke to continue smoking in an area that maintains the quality of life for these residents. Residents admitted after the facility changes its policy must be informed of this policy at admission²."

In the absence of state or federal regulations prohibiting all nursing home smoking, facilities confronting this dilemma must choose between promoting individual resident autonomy and accommodating smoking behavior, or paternalistically maximizing the welfare of all patients and staff. Banning all indoor smoking has been examined to a limited degree in state psychiatric long-term care facilities. A recent telephone survey of 41 of these facilities revealed that smoking bans did not lead to increases in "behavioral problems," and according to administrators did lead to an improvement in the milieu—cleaner and better-smelling air and fewer cigarette burns, which may or may not have been viewed as improvements by the patients²².

Short of an outright ban on indoor smoking, several measures can be taken that allow residents some freedom to smoke while avoiding risk to nonsmokers. Some of our responding facilities had set smoking times during which supervision was available. Others allowed smoking in indoor nursing home smoking areas for certain hours of the day and required residents to go to outdoor areas to smoke during other times. Although outdoor smoking areas minimize secondhand smoke exposure and fire risk for residents, smoking is typically unsupervised, and demented smokers need continuous monitoring. Fans that ventilate a smoking area directly to the outside are reportedly effective, and battery powered portable smoke detectors can augment the facility's existing fire detection equipment to monitor unauthorized smoking in patient rooms or bathrooms.

OBRA '87 has attempted to alter nursing home care by improving resident assessment, enhancing residents' rights, and encourages free choice in various aspects of their care. Although smoking was not specifically mentioned in the legislation or included in the resultant Minimum Data Set resident assessment instrument which identifies other "customary routines" residents engage in, HCFA recognized the importance of smoking to certain residents in its Interpretive Guidelines for facility inspections. The specific reference to freedom of choice in OBRA states that nursing home residents "have the right to reasonable accommodations of individual needs and preferences, except where the

health or safety of the individual or other residents would be endangered." This balance between individual rights and the rights of others will continue to spark controversy in nursing homes and society as a whole for years to come.

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References

- Omnibus Budget Reconciliation Act of 1987. Public Law 100-203, Sections 4201(a), 4211(a).
- Self-determination and Participation. HCFA State Operations Manual 1992 Apr; 42 U.S.C. 483.15(b)(3):86.
- Gritz E, Stapelton J. Prevalence of cigarette smoking in VA medical and psychiatric hospitals. Bull Soc Psych Addictive Behaviours 1985;4:151-165.
- Luck T, Prochazka A. Lifting the smoke screen: A look at VA patients and Cigarettes. VA Practitioner 1990 Jan:71-77.
- Evans RG, Barer ML, Marmor TR, editors. Why are Some People Healthy and Others Not? New York: Aldine De Gruyter, Inc., 1994.
- US Dept of Veterans Affairs. Smoke-Free Environments and Smoking Policies for Patients in VA Health Care Facilities. Washington, DC: US Dept of Veterans Affairs; January 31, 1992:suppl 1. VHA Directive 10-92-002.
- Rimer B, Orleans T, Keintz M. The Older Smoker, Status, Challenges and Opportunities for Intervention. Chest 1990; 97:547–553.
- Omenn G, Anderson K. The temporal pattern of reduction of mortality risk after smoking cessation. Am J Prev Med 1990; 6:251-5.
- Dobson A, Alexander H, Heller LR. How soon after quitting smoking does risk of heart attack decline? J Clin Epi 1991; 44:1247–53.
- Aronow W, Starling L, Etienne F. Risk factors for coronary artery disease in persons older than 62 years in a long-term health care facility. Am J Cardiol 1986;57:518-20.
- 11. US Department of Health and Human Services: The health benefits of smoking cessation. US Department of Health and Human Services. Public Health Service, Centers for Disease Control, Center or Chronic Disease Prevention and Health Promotion, office on Smoking and Health, 1990, DHHS Pub No. (CDC) 90-8416.
- Rogers R, Meyer J, Judd B, Mortel K. Abstention from cigarette smoking improves cerebral perfusion among elderly chronic smokers. JAMA 1985;253:2970-4.
- Hirdes J, Maxwell C. Smoking cessation and quality of life outcomes among older adults in the Campbell's survey on Well-being. Can J Public Health 1994;85:99-102.
- 14. Fahy R, Tremblay K. The catastrophic fires of 1090. Fire Journal 1990;84:60-79.
- 15. Demers D. 25 die in nursing home. Fire Journal 1981;75:30-5.
- Drinka P. Nursing Home Residents Who Are Unsafe Smokers and Require Supervision While Smoking (letter). J Am Geriatr Soc 1994;42:689.
- Brownson R, Alavanja M, Hock E. Passive smoking and lung cancer in nonsmoking women. AJPH 1992;82:1525-30.
- Greer J, Abbey D. Asthma related to occupational and ambient air pollution in nonsmokers. J Occup Med 1993; 35:909–15.
- Discomfort from environmental tobacco smoke among employees at worksites with minimal smoking restrictions—United States, 1988. MMWR 1992;41:351-4.
- Joseph A. Is Congress Blowing Smoke at the VA? JAMA 1994;
 272:1215-1216.
- Accreditation Manual for Long Term Care; The Joint Commission for the Accreditation of Healthcare Organizations, 1994.
- Parks J, Devine D. The effects of smoking bans on extended care units at state psychiatric hospitals. Hosp & Comm Psych 1993;44:885–6.