Oral Care for Successful Aging in Long-term Care

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Abstract

The oral health of frail elders residing in long-term care facilities is very poor, probably because access to dental services is limited and help with daily mouth care is almost nonexistent. Recent concerns and interest have been raised through the cooperation of administrators, nursing staff, and dental personnel to address this apparent neglect. Moreover, evidence shows that caries and periodontal disorders can be managed successfully in geriatric populations. Consequently, there is a basis on which to develop a practical strategy for mouth care that should reduce the morbidity and early mortality in long-term care and to assist an increasingly frail and dependent population to age successfully. [J Public Health Dent 2000;60(4):326-29]

Key Words: oral health, dentistry, long-term care, oral hygiene, geriatrics, quality of life.

Frail and disabled elders are challenging the health community to focus attention on quality of life as part of an overall strategy for successful aging. The concept of need in relation to health care in any age group, but more particularly in old age, ranges widely from a relatively simple estimate of dysfunction to a more comprehensive psychosocial perspective (1). Application of this broader perspective helps to explain why dental treatment of elders is more likely to succeed if it addresses oral problems that disturb self-image and social interactions, rather than those related solely to function (2). In addition, it can reduce by more than half the very high estimate of oral dysfunction among disabled residents of long-term care facilities (1,3).

Nonetheless, mounting evidence suggests that elderly recipients of long-term care receive little assistance with mouth care despite the limitations imposed by their disabilities—the result being that oral hygiene is poor, caries continues as the major cause of tooth loss, and the need for dental treatment is very challenging (4,5). The primary objective of oral care in this setting is to support the physiological and social activities of the residents as they grow frail and more dependent on others. In this paper, I will review the major oral health-related concerns of administrators, nursing staff, and dental personnel who care for the disabled residents, and I will describe how mouth care can be an integral part of a geriatric service focusing on quality of life and successful aging.

Oral Care Concerns in Long-term Care

Oral care, like other health services, is influenced by a variety of factors. Recipients of care, for example, are motivated by their personal concerns, by their peers, and by family members, whereas providers of care are guided by their educational background and experiences, and also by their peers (6). Recently, my colleagues and I interviewed administrators, nursing staff, dental personnel, and residents in long-term care—a total of 109 individuals—to explore the strategies they employed routinely when caring for the mouth (7). We used a "qualitative" interviewing and analytical technique to reveal the complexities of their concerns and beliefs because it was effective in an earlier exploration of the significance of the mouth among more independent elders (8). The results of our exchange with the 109 participants highlighted a chronic anxiety about oral care for the residents, and it exposed clearly the three dominant themes of their concern: a need for a regular diagnostic assessment of all residents, access to dental treatment, and regular management of oral hygiene (Figure 1).

Diagnostic Assessments

The administrators and nursing staff were anxious to obtain professional assurance that the residents were free of obvious oral disease. This anxiety was heard loudly from one nurse, who asked, "Wouldn't it be nicer and more comfortable for everybody if, at least once a year, some [dentist or dental hygienist] came in and looked?" The question of who would pay for the assessments was raised, usually with an awareness that the residents are of the older generation who goes to "a doctor or a dentist as an absolute last resort." We did find that the reluctance to ask for care was due, in part at least, to the social dynamics of an unfamiliar setting because, as one resident explained, "It's not ... easy to ask for things ... it's demeaning." This response may reflect an insecure but tenacious grip on independence that causes some elders to mask their problems rather than admit to a long-term dependence on others.

Access to dentists or dental hygienists did not resolve the problem for some facilities. We heard from several of the staff and residents that they did not know about dentists or dental hygienists who were available to the residents. We heard also about facilities where the staff accepted no responsibility for the oral care of the residents because they felt that dental professionals were available. Apparently, the most satisfactory arrangement involved the dental personnel as integral players on the health care team,

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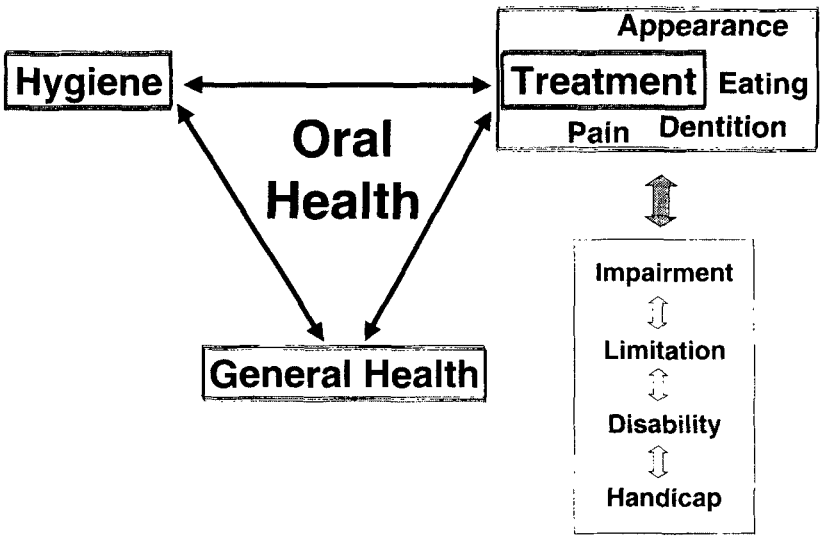
FIGURE 1
Oral Health-related Concerns in Long-term Care
[Adapted from MacEntee et al. (7)]



and particularly as full participants in the care conferences convened regularly to assess each resident.

Dental Treatment. Access to dental treatment provided relatively little concern to the staff or to the residents, although treatment within facilities rarely went much beyond emergency care. On the other hand, we had learned previously that most dentists prefer to have the residents transported for treatment in a dental office whenever possible (9). This preference contrasted with at least one director of care, who complained that, "To take [residents] out, especially if they're demented, is really very very difficult ... taking them to somebody they don't know ... compounds their anxiety and their dementia." Of course some of the residents and their families welcomed the opportunity to continue attending a family dentist despite the inconvenience of transportation.

Access to treatment was associated also with concerns about eating, dental appearance, and overall oral comfort—all issues that influence quality of life and successful aging (8). Older adults with only a few occluding posterior teeth experience little psychological or physical distress simply because of tooth loss (10); yet, despite a healthy ability to adapt and cope with chronic disorders, the threshold of oral dysfunction from tooth loss or from loose and unstable dentures is crossed usually when the pleasure of eating or the natural appearance of the teeth is disturbed (11). Replacement of missing or damaged teeth can be achieved by several means, each with biological or psychological costs that can add to the burden of disability and ill health (12,13). A concern for appearance, both personally and socially, is a dominant component of comfort in all age groups, and no less so in old age. It is central to everyone's personality, or, as one elderly lady explained to us during an interview, "[It is] the mainstay of your whole tree ... you can't go around with your head cut off, everybody sees your face, and your ... appearance" (8).

Oral Hygiene. The significance of oral hygiene has both a personal and a social perspective to older adults (8). The personal perspective is associated with health and comfort. Discomfort from an unclean mouth was equated by one woman to "not having your hair done, you just feel awful, awful" and by another to not having "self-worth when your mouth is unclean" (8). The social perspective, in contrast, revolves largely around the responsibility of having clean breath—a responsibility that most people seem to learn at an early age.

An additional concern among dental personnel is that the impact of poor oral hygiene might not be confined to the mouth. Microbes found frequently in and around teeth have been associated with pulmonary infections, while there have been suggestions recently of a causal relationship between poor oral hygiene and bronchopulmonary infections (14-16). A strong association has been reported also between xerostomia and bronchopneumonia (17), along with empirical evidence that dental plaque harbors large quantities of respiratory pathogens among patients in intensive care (18). Recent reports of associations among severe periodontal diseases, oral hygiene, and coronary heart disease raise an equally alarming concern (19-22). Although the causal relationship between oral hygiene and mortality has yet to be established, these concerns provide compelling support for good oral hygiene, especially when systemic health and resistance are frail.

Mouth Care as an Integral Part of Long-term Care

Dental and nondental personnel alike who attend the residents of long-term care facilities either are overwhelmed by the difficulty of rendering appropriate mouth care (5,23) or are simply disinterested in the service (9). However, several recent initiatives have been implemented by hospital administrators, dentists, and dental hygienists who recognize the possibility of reducing the risk of caries, gingival disease, and tooth loss through interdisciplinary cooperation (24-26).

Controlling Caries. Fluoridated toothpaste in addition to good oral hygiene can remineralize teeth damaged by caries (27). Application of a chlorhexidine gel supplemented by a fluoride gel can reduce the incidence of caries in young adults at high risk to the infection (28), while chlorhexidine alone when used as a preventive regimen by adults at high risk for caries can also reduce caries infection (29). Concerns raised about toxicity from the long-term use of chlorhexidine intraorally seem to be unfounded, although it can deposit an annoying extrinsic stain on teeth and dentures (30). Overall, clinical evidence supports the possibility that a chlorhexidine mouthwash used regularly with or without a fluoride supplement might be a very effective agent also against caries in a geriatric population (31).

We live in a culture in which sugar addiction is endemic, yet there has been little or no effort to recognize this addiction even among long-term care recipients with defective salivary

function and sugar-laden diets. Educational strategies to reduce the threat of caries in this population are focused almost exclusively on oral hygiene, with almost no attention paid to the control of sugar abuse. Consequently, until the dietary selection in long-term care facilities is modified to reduce the ingestion of refined carbohydrates, it is likely that caries will continue aggressively to destroy the natural teeth of many residents.

Managing Gingival and Periodontal Disorders. Most of the "periodontal" problems encountered in geriatric populations of European descent are relatively minor and disturb the gingiva much more than the periodontium (3). It is likely that anyone with this background who retains natural teeth into old age is at low risk to periodontitis, probably because of a low genetic predisposition to the disease. Therefore, the benefits of oral hygiene relate mostly to the control of gingivitis and halitosis. The risks in other racial groups might be quite different because significant periodontal bone loss has been noted in almost half (46%) of an elderly population of African-Americans in contrast to only 16 percent of elderly white Americans living in the same region (32).

In any event, no consensus exists on how to maintain adequate oral hygiene for an elderly institutionalized population (33-36). Educational programs delivered by dentist or dental hygienists to the nursing staff of long-term care facilities offer little benefit to the oral health or hygiene of the residents (37-40). On the other hand, improvements have been reported from facilities and other communities where care aides received training and encouragement from other members of the nursing team, rather than from external dental experts (41-44). Apparently, the familiarity and encouragement of colleagues offer a more productive educational environment capable of changing the behavior of care aides—a strategy that warrants further investigation to determine its long-term impact on oral health.

Conclusions

Longstanding and unequivocal evidence shows very poor oral health among disabled elders in residential care. Quite recently, interest seems to be evolving in some facilities through the cooperation of administrators, nursing staff, and dental personnel to develop and implement strategies for oral care that are compatible with the other priorities of health care. There is widespread agreement, for example, on the need to control caries and to address the daily oral hygiene needs of the residents. Consequently, by offering an accessible monitoring, diagnostic, and treatment service directly to frail elders, and by assisting the nursing staff through educational initiatives to offer daily mouth care as an integral component of their personal hygiene care for all of the residents, it is likely that dental professionals will reduce the risk of morbidity and mortality in long-term care facilities and contribute to the successful aging of the residents by improving the quality of their lives.

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