



Assessment of oral health status of elderly population living in residential care facilities

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Abstract

Oral health is an integral part of overall health. It includes the ability to taste, chew, swallow, speak, and smile. Barriers exist which prevent achieving good oral health in vulnerable populations. The nation's poor, medically compromised and persons with physical and intellectual disabilities, minority groups and the elderly are part of this vulnerable, 'special needs' group. Recent studies show that the oral health status of these patients is poor and they have limited access to dental services. Impaired mobility impedes access to care, particularly for those who reside in nursing home facilities or other assisted home facilities. As our society experiences a phenomenal growth in our oldest members, the principles of dental health are becoming increasingly relevant for members of the dental team, medical team, health educators, social workers and others. More than one million nursing home residents face the greatest barriers to accessing dental care of any population group. The need for oral health care and treatment for nursing home residents is well-documented. Poor oral health is widespread among nursing home residents due to a lack of care and concern to help this special group. The aging population living in nursing homes creates the need for delivery of oral healthcare in this environment. Dental professionals today, have a significant impact on the well-being of older and disabled adults. This report focuses on the elderly population living in nursing homes and their oral health. It addresses the need to expand dental services, increase and improve oral health awareness through education to residential care and nursing home residents and their caregivers.

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Introduction

Oral health literacy and competency are barriers to prevention, diagnosis and treatment of oral disease. In the United States, literacy skills have proven to be a strong predictor of an individual's health status [1]. It is well documented that oral care practice and guidance available to the elderly population living in nursing homes, assisted care or other home care facilities is lacking and many of these elderly adults have difficulty

understanding health care information [2]. The degree to which these individuals receive, process and utilize basic oral health services and information is also limited. Studies documenting healthcare concerns for elderly patients living in home care facilities is sparse and current results indicate poor oral health status due to limited access to dental services [3]. Daily oral care requires knowledge and self-skill from the individual or assis-



tance from those providing care. The American Dental Association promotes communication to patients and other health care providers in the achievement of optimal oral health. To reach this goal an environment where all patients are offered assistance to better understand and realize the need for oral health prevention and care needs to be achieved. Educating this special population and their providers on the importance of oral health care was identified as a way to meet this need. Not only is access to adequate oral health care and treatment affected by social determinants of health but also by accessibility, disability, and the ability to pay. This report discusses the findings of an initial visit to a nursing home by assessing the oral health of the resident population. The objective was to gather information with the intent to create a best practice oral care program for home care facilities tailored to the population at risk, including educating and training this special group and their care givers on prevention and the importance of oral health.

Disparities in oral health care can result in inequities of treatment. Collaborative efforts between medicine and dentistry to promote preventive models for oral health care and delivery is dependent on the integration of health care professionals and dentists. The approach and delivery of oral health is becoming more significant for the dental and medical team, health educators, and other allied health professionals as the number of older adults continues to rise. As a result, dental professionals are becoming more relevant in the role they play in the well-being and quality of life of older people [4]. Nursing home residents in the United States experience barriers to access health care. Barriers to appropriate oral care in long term care facilities include poorly organized processes and policies, a low priority, and care provider's lack of personal knowledge and attitudes regarding oral health [5,6]. Residents are also less likely to have access to comprehensive dental care [7]. Impaired mobility, lack of ability or motivation to perform oral care are identified as additional barriers [2,8]. Consequently, dental care was found to be the greatest unmet need [9]. Of the more than 270 million people in the United States, approximately 13 percent are aged 65 years and over [3]. This number will likely double in 2025 and by 2050, it will be 2 billion including those living in developing countries [10]. Individuals 85 years and older are one of the fastest growing population groups in the United States and in 30 years, will make up 4.5% of the population compared to 2% today [2]. It is estimated that the number of individuals using long term care services in nursing facilities and alternative care residences will likely increase from 15 million in 2000 to 27 million in 2050, with more women than men using this service [2,11]. Studies by Axelsson and Lind he reported an increased prevalence of dental caries and gum disease due to infrequent dental visits, poor and lack of oral hygiene practice [12,13].

The change in demographics will affect challenges in social policy and health resources [14]. Cardiovascular disease, hypertension, cancer, respiratory disease and diabetes are prevalent in old age and are fast becoming the leading causes of disability and death [14]. Common risk factors are shared by most oral and chronic medical diseases [15].

Background

The impact of oral health on quality of life and general health is more notably observed as one ages. This is poorly understood by long term care residents. Poor oral health can increase the risks to general health with compromised chewing and eating abilities affecting nutritional intake. The existence and treatment of chronic diseases can lead to an increased presence of

oral diseases characterized by xerostomia, dental caries, periodontal disease and advanced tooth loss [16]. The high prevalence of multi-medication therapies in advanced age may further complicate the impact on oral health and oral health care [17]. Older Americans continue to experience coronal and cervical caries. Consequently, it was reported that older adults may have new tooth decay at higher rates than children [18]. Oral cancer is also a common finding in elderly individuals [15].

A study by Berkey and Berg implied that the dental profession must improve awareness among the general public and health care professionals of the inter relationship between oral health and general health [3]. Numerous studies have shown that severe periodontal disease in aging is associated with diabetes mellitus, ischemic heart disease, and other chronic diseases [16,17].

This project was undertaken to assess the dental needs of residents living in XX nursing home. The intent of this study was to develop an educational oral care program aimed at reducing oral disease and improving the oral health of the institutionalized elderly.

Procedure

A senior care residence facility was identified and visited. Residents were diagnosed with dementia or Alzheimer's disease along with other medical conditions including diabetes and high blood pressure. An initial assessment of the oral cavity was completed on 29 individuals. This assessment included observation of their level of cooperation, speech and ambulation. Oral evaluation was limited to a visual examination with flashlight illumination and tongue depressor. Oral hygiene performed by patient, nurses and/or caregivers was infrequent and was not documented. Following the assessment, caregivers were instructed on how to improve the residents' oral health. Recommended treatment for each individual examined was given to the Wellness Director.

Results

Twenty-nine residents were examined. The individuals were 65 years of age and older and more than half were women. It was interesting to note that many of the women when asked, were reluctant to share their age. Close to 50 percent of the residents displayed responsive behavior [6] resulting in a limited assessment.

It was clear from observation and the resultant data that residents received limited oral hygiene assistance and guidance. Caregivers were reluctant or did not have time to assist with daily oral hygiene and many of them were not knowledgeable on how to provide this care. Many of the residents had not visited a dentist since they were admitted to the facility and only three of the residents had seen a dentist on a regular basis. Transportation for these individuals was provided by family members to the dental office. One resident stated that his teeth were fine. He gave up taking care of his teeth 3 years ago and that he doesn't brush anymore, "there's no need".

Oral instruction and demonstration on oral hygiene techniques including how to remove and clean dentures and assisting with tooth brushing and flossing were given to the patients and care givers. The importance of good oral hygiene was emphasized and repeated to encourage daily care of their mouths and teeth. An education oral care training program for the care providers and residents tailored for the long-term care facility is

recommended. Follow up evaluation of the residents' condition of oral hygiene and effectiveness of the program is planned. Developing collaboration with the staff, caregivers and care providers to maintain and continue oral health services is important for program success.

Discussion

Poor oral health among older-aged individuals is an important public health issue and a growing concern in the United States and countries abroad. Results of recent studies indicate that the oral health condition of institutionalized and homebound elderly are compromised due to accessibility, mobility, desire, and lack of knowledge of oral care. Patients with severe cognitive impairment, including dementia, are at risk for caries, periodontal disease and oral infection because of decreased ability to engage in self-care [19]. Education of the caregiver, as well as the patient is an important and integral part of the prevention and management of dental disease [19,20]. Risk factors including adequate oral hygiene practice, diet and social behavior contribute significantly to oral health care disparities. Studies show that these behavioral patterns are modifiable and that positive experiences from intervention programs are attainable.

The UN population studies show that the number of older people is growing faster than any other age group worldwide [21]. The over 80 year old group is on the rise [21,22]. Men and women will likely require more long term care due to their longer life expectancy (Figure 1).

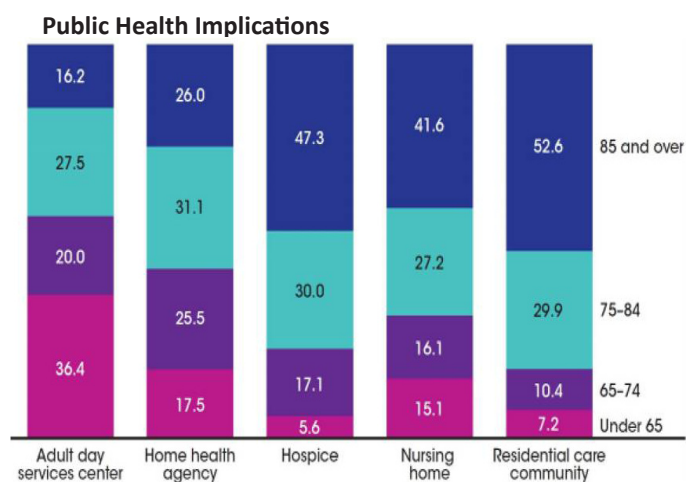


Figure 1: Percent distribution of long-term care services users by sector and age group: United States 2013 and 2014.

Note: Denominators used to calculate percentages for adult day services centers, nursing homes, and residential care facilities were the number of participants. Source: Population Projections. US. Census Bureau 2012. 2012-2050

This report hopes to encourage health planners to strengthen the implementation of oral health programs oriented towards better oral health and quality of life for older people especially those living in care facilities. As our society continues to experience a staggering growth in our oldest members, the principles of dental health are becoming increasingly relevant for members of the healthcare team. Dental caries and periodontal disease are public health problems. Tooth brushing which is the most common oral hygiene practice is neglected in older people.

An awareness to the oral health of institutionalized elderly

will impact healthcare strategists to consider the implementation of programs designed to improve oral health care and quality of life for these individuals. Legislation should be considered to mandate minimum oral health competencies with the objective to improve the dental health of the elderly living in home care facilities. Oral disease is preventable and inequities in oral health is avoidable.

Conclusion

The importance of improving the oral health to residents of long term care facilities cannot be over emphasized. The level of oral care knowledge and education along with responsive behaviors from residents are reported as major barriers to providing adequate oral health care in They also lacked experience on how to care for dentures.

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