INTRODUCTION

There were 390 million people in USA aged over 65 years recorded in the 1998 World Health Report and this figure is estimated to double in 2025. The post-war baby boom generation will reach 65 years of age in 2011, significantly augmenting the number of older people. In many developing countries, particularly in Latin America and Asia, increases of up to 300% of the elderly population are expected by 2025. By 2050, there will be 2 billion people over the age of 60, 80% living in developing countries. The growth in this population is staggering, posing tremendous challenges in caring for this ageing population. The WHO published a classification of the consequences of disease over 20 years ago, which has recently been revised as the International Classification of Functioning, Disability and Health. This retains three fundamental levels of assessment—the body level (anatomical or physiological problems; impairments), person level (activity limitations), and the person in context level (participation restrictions). Elderly Multi-level assessment across physical, psychological, and social domains is therefore particularly necessary, and forms the basis for ‘comprehensive geriatric assessment.’

Geriatric dentistry or Gerodontology is a branch of dentistry that addresses the oral health needs of older adults and at one time, this branch was synonymous with complete dentures. The clinical iceberg between felt and normative need in elderly people was highlighted by Holtzman et al. More than 70% of Americans aged 65 or over, had a normative need for dental treatment but only 42% felt they needed treatment. This low perception of need may be explained by an acceptance that dental problems are an inevitable consequence of age. Population ageing is the most significant result of the process known as demographic transition. The UN defines a country as ‘ageing’ where the proportion of people over 60 reaches 7 per cent. By 2000 India will have exceeded that proportion (7.7%) and is expected to reach 12.6% in 2025. The Indian aged population is currently the second largest in the world. The absolute number of the over 60 population in India will increase from 76 million in 2001 to 137 million by 2021. From 5.4 percent in 1951, the proportion of 60+ people grew to 6.4 per cent in 1981 and was projected to be close to 8.1 per cent in 2001. In India, the rate of growth of the elderly population is much faster than the growth of the total population and there is increasing feminization of the elderly population; women constituting 52% of the elderly population. The feminization of the elderly population has its accompanying problems. As per the 2001 census of India, there are approximately 11–12 million widows, of whom 76% can be designated as economically dependent. The other important characteristics of the elderly population of India are: (i) 80% of the elderly population reside in rural India; (ii) 9% of the elderly live alone or with persons other than their immediate family members; (iii) nearly 75% of the elderly are economically dependent, with little difference between urban and rural elderly; (iv) three-quarters of the dependant elderly population is supported by their own family members but the remaining one-quarter could face destitution; (v) 30% of the elderly are below the poverty line; and (vi) only 28% of elderly population is literate. At present there are 995 old age homes in the country. Some of these are free and meant for poor and destitute elderly, some are exclusively for women, and a few are religion-based. However, they are distributed unevenly. In addition, day care centers provide recreational facilities and social support; a few centers also provide basic medical care and/or opportunities for financially gainful activities for the elderly. In modern India, retirement age is fixed at 58 in most Government jobs, and 60 years in the Universities. There is a move to increase the retirement age by another two to five years. For all practical purposes people above 60 are considered to be ‘senior citizens’. In academic research, retirement age is often taken as an index of aged status. Chronological age of 58 or 60 is considered as the beginning of old age. As people age, their susceptibility to chronic and life-threatening diseases as well as acute infections increases, exacerbated by compromised immune systems. Cancer, cardiovascular diseases, diabetes, infections and poor oral health, most notably tooth loss and severe periodontal conditions, are more prevalent in this age group. The consequences of these diseases and conditions are significant, leading to disabilities and reduced quality of life.

Changes in population structure will have several implications for health, economic security, family life and well-being of people

Oral diseases are usually progressive and cumulative. The process of ageing may directly or indirectly increase the risk of oral diseases and tooth loss, compounded by poor general health, illnesses or chronic diseases. Among the elderly, high prevalence of co-morbidities and barriers to care are observed, together with oral health care challenges in relation to:

- Changing dentition status
- Caries prevalence with unmet need for care
- Periodontal pocketing/loss of attachment and poor oral hygiene
- Edentulousness and limited oral functioning
- Denture related conditions, ill fitting removable dentures
- Oral cancer
- Xerostomia
- Craniofacial pain and discomfort

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The interrelationship between oral health and general health is particularly pronounced among older people. Poor oral health can increase the risks to general health and, with compromised chewing and eating abilities, affect nutritional intake. Similarly, systemic diseases and/or the adverse side effects of their treatments can lead to an increased risk of oral diseases, reduced salivary flow, altered senses of taste and smell, oro-facial pain, gingival overgrowth, alveolar bone resorption and mobility of teeth. The high prevalence of multi-medication therapies in this age group may further complicate the impact on oral health. Other relevant issues include high sugar content diets, inadequate oral hygiene due to poor dexterity, and alcohol and tobacco use, risk factors that are detrimental to oral health. Barriers to oral health care among the elderly are considerable. Impaired mobility impedes access to oral health care, particularly for those who reside in rural areas with poor public transport. The situation is worsened in developing countries when oral health services and domiciliary care are not available. Given that some older people may experience financial hardship following retirement, the cost or perceived cost of dental treatment, together with poor attitudes to oral health, may deter them from visiting a dentist.

The greatest limitation of traditional epidemiological indicators is their inability to reflect the “capacity of an individual to perform tasks and activities”. Self-perceived measures convey more information about the way a certain disease is affecting the individual’s daily routine and the population in general than the measurements collected from a clinical environment. Over the past three decades, a variety of quality of life instruments have been introduced for use in the healthcare industry. In 1996 a conference entitled “Assessing oral health outcomes - measuring health status and quality of life” was held in Chapel Hill and 11 oral-health-related quality of life measures were reviewed. All those instruments were either self-completed or interviewer-administered. The number of items included in those instruments ranged from 3 to 73. Geriatric Oral Health Assessment Index (GOHAI), which was originally developed for assessing the self-reported oral health status in elderly, was among one of those reviewed measures. GOHAI is a 12-item instrument intended to evaluate three different aspects of oral health-related quality of life: (1) physical functioning, including eating, speech, and swallowing; (2) psychosocial functioning, including worry or concern about oral health, dissatisfaction with appearance, self-consciousness about oral health, and avoidance of social contacts because of oral problems; and (3) pain or discomfort, including the use of medication to relieve pain or discomfort from the mouth. A GOHAI score is computed from the subject’s responses to the 12 questions, a higher score indicating a better perceived oral health status and quality of life. Prevention is better than cure

Oral impairment and disability are inevitable features of old age, but they do not necessarily have a negative impact on one’s quality of life. Aging usually proceeds as an unpredictable series of fluctuating experiences, some for the worse and some for the better. Promotion of dental health in the elderly is the responsibility of the all medical professionals and administrators. The presence of 20 teeth is an oral health goal of the W.H.O. The large gap between the dentist’s assessment and the elderly patients perceived needs for dental care has to be bridged by planning innovative geriatric dental health education and preventive as well as curative services. Many older adults have difficulty achieving effective daily plaque control. In response to this need, manufactures have developed and marketed a variety of toothbrushes. Various bristle and handle designs are available in either manual or powered (electric or sonic) brushes. Powered brushes have heads that clean groups of teeth (traditional brush head) or one tooth surface at a time. For patients with difficulty holding a toothbrush because of arthritis or stroke, devices are available to facilitate brushing.

Older adults at high risk for caries can be placed on a course of chlorhexidine as an adjunct to therapy once every 3 to 6 months. Older adults often increase their intake of refined carbohydrates so assessment should include a review of any possible hidden sugars, including those found in over the counter medications. Patients are often unaware that many of these compounds such as antidac tablets contain higher sugar content and the contact with teeth is prolonged by allowing them to dissolve in the mouth. Sugar-based substances should be avoided whenever possible. When it is not possible or practical to eliminate these sources, less cariogenic alternatives should be substituted. Dehydration may be a result of poor intake of water. Older adults should be encouraged to drink water or liquids containing water throughout the day as increased hydration has multiple health benefits, including decreased caries risk. Care of home-bound patients or those in institutions and nursing homes requires interdisciplinary and coordinated efforts of medical, dental, nursing staff, social workers, occupational therapists and paramedical staff with use of mobile and portable dental care units. As more and more physicians and other professionals understand the links between oral and systemic health and quality of life, they will be prepared to refer patients and to work with dental professionals during treatment planning to identify and clarify issues that may affect the delivery of treatment. The dental treatment plan for the elderly should be designed to establish and maintain optimum oral health. A full range of dental services should be offered to the patient regardless of their chronological age. Cosmetic and esthetic dental services offer older adults the opportunity to improve their older smile and enhance their self-esteem. Some of the elderly become frail and limited in their capacity for self-care, so the dental professionals should educate patients, caregivers and other health professionals about the value of maintaining good oral health throughout life.

The ultimate goal of adult day care is to maximize the quality of life and promote successful living for participants

Reference


[12]. Adult Day Care Act Title 63 of the Oklahoma Statutes Section 1-870 et seq.


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