Ageing: Its Impact On Oral Health


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Abstract

The proportion of older people is growing faster than any other age group. The Indian aged population is currently the second largest in the world. In a country like India where poverty is a major issue, people cannot afford even basic health facilities. Therefore it is very important to take certain measures to improve health facilities. Recommendations include dental health education and treatment programs on geriatric oral care, special courses can be introduced in geriatric dentistry, regular dental camps should be held in order to provide preventive and curative treatment to elderly people with oral health problems. This issue needs to be handled with sensitivity and serious actions need to be implemented in order to improve the geriatric oral health conditions. The main purpose of writing this article is to highlight the incidence of geriatric oral health problems faced in our country today.

Keywords: ageing, geriatric, elderly, oral health, edentulism

Introduction

Ageing is an inevitable process and this process demands complete health care. Approximately 600 million people are aged 60 years and over, and this number will double by 2025. By 2050, it will be 2 billion, 80% living in developing countries. The absolute number of the over-60 population in
India will increase from 76 million in 2001 to 137 million by 2021. There are many factors that contribute to 'good' or 'bad' general health of an individual. The general and oral health of an individual depends on the quality of life they live. Chronic disease and most oral diseases share common risk factors. Globally, poor oral health amongst older people has been particularly evident in high levels of tooth loss, dental caries experience, and the prevalence rates of periodontal disease, xerostomia and oral precancer and cancer. With increasing age, the cumulative effects of oral disease frequently result in tooth loss to a level that affects the function, diet and quality of life for older people. Conversely, good oral health can have a positive impact on general well being and quality of life in ways which are almost unique to the mouth, including the enjoyment of food and social interaction. Institutionalized and homebound elderly people have poorer oral health than the active elderly. Ageing is associated with multi-system degenerative diseases resulting in impaired mobility leading to aggravation of loneliness, feelings of despair and agony. Furthermore, impaired mobility directly leads to non-access to health care facilities and resources by the elderly. Strategies to manage and improve the oral health of older people require both immediate and long-term components. Community models for outreach services and multi-disciplinary provision of essential dental health care must be implemented urgently to improve oral health status in elderly population.

Health issues in geriatric patients
As a person grows old, many physical changes take place within the body. Immune system is most commonly affected in elderly individuals. This is the major cause of almost every systemic problem that a geriatric patient suffers from. It is also followed by various physical changes such as loosening of skin, which leads to delayed healing of wounds. Diminished sense of taste and smell is also seen in patients, which is further followed by dehydration. Furthermore, with a weakened immune system it becomes very difficult for the body to fight off bacterial and viral diseases as well. It is very important to focus on the social, nutritional, psychological and physical activity components of an old person's health. These components have a tremendous influence on the health of senior citizens. Therefore it is very important to consider the above mentioned points before going in for the treatment of a geriatric patient.

Dental health problems
Globally, poor oral health among older people has particularly been seen with a high level of tooth loss, dental caries experience, high prevalence rates of periodontal disease, xerostomia, and oral precancer/cancer. The negative impact of poor oral conditions on daily life is particularly significant among edentulous people. Extensive tooth loss reduces chewing performance and affects food choice; for example, edentulous people tend to avoid dietary fibres and prefer foods rich in saturated fats and cholesterol. Edentulousness is also shown to be an independent risk factor for weight loss and, in addition to the problem with chewing, old-age people may have social handicaps related to communication. Moreover, poor oral health and
poor general health are interrelated, primarily because of common risk factors; for example, severe periodontal disease is associated with diabetes mellitus[^10] ischemic heart disease[^11] and chronic respiratory disease.[^12] Tooth loss has also been linked with increased risk of ischemic stroke[^13] and poor mental health.[^6] Old age comes with a package of health problems and dental health problems are one of them. They can be taken care of easily if people are willing to take good care of themselves. Oral health is often taken for granted, but we must not forget that it is an essential part of our life. Therefore, by taking proper care and following certain measures, most of the oral diseases can be easily prevented.

**Dental caries**

Most common among oral diseases is dental caries. Dental caries is a multi-factorial disease of the teeth that results in localized dissolution and destruction of the calcified tissue. Dissolution progresses to cavitation and if untreated, to bacterial invasion of the dental pulp, whereby oral bacteria access the bloodstream.[^14] Mostly elderly patients are prone to root caries due to receding gums leading to exposure of root surface. Use of medication decreases salivary flow and leads to dry mouth. Systemic health conditions hinders them from maintaining a proper oral hygiene. It is likely that older adults are at greater risk of oral diseases because their possible disability might affect their ability to maintain good oral hygiene and restrict their access to necessary dental care. It has been suggested in several studies that the aged population could benefit from caries prevention programmes.[^15] Dental caries can be prevented by maintenance of good oral hygiene, stimulating the salivary flow and by using fluoridated toothpastes or by periodic application of fluorides.

**Periodontal disease**

Periodontal disease is among the most prevalent chronic conditions in dentate older population. Poor oral hygiene or high levels of dental plaque are associated with high prevalence rates and severity of periodontal disease. Poor health education, lack of motivation, no dental check-ups, and regular smoking have an independent affect on progression of periodontal disease in older adults. The use of tobacco accounts for more than half of the periodontitis cases in adults and if not taken into consideration may lead to cancerous conditions.

**Edentulism**

Edentulism is prevalent among older people all over the world and is strongly associated with socio-economic status. Epidemiological studies show that persons of low social class or income and individuals with little or no education are more likely to be edentulous than persons of high social class and high levels of income and education.[^2] Dental caries and periodontal disease are major reasons for tooth loss. Tobacco is also a risk factor for tooth loss, particularly with high consumption over many years. In addition it is apparent that satisfactory appearance and functioning teeth and dentures are important in maintaining the well-being and mental health of the elderly.

**Denture related conditions**

Denture stomatitis is a common oral mucosal lesion of clinical importance in old age population. In many cases of denture stomatitis, colonization of yeast on the fitting surface of the
prosthesis is observed. Other factors of stomatitis include allergic reaction to the denture base material or manifestations of systemic disease.[4] Most authors seem to agree that a significant correlation exists between poor denture cleanliness and denture stomatitis whereas a disagreement or uncertainty exists on the question of etiology and even more, on treatment of denture stomatitis.[5]

**Dry mouth**

This condition, also known as 'xerostomia', is characterised by decreased salivary secretion in the oral cavity. It can be due to many factors including ageing, medications and other diseases. The use of drugs for hypertension, diabetes and depression, mainly cause this condition. Chemotherapy following the treatment of oral cancer also causes decrease in saliva secretion. Both objective and subjective dry mouth conditions are determinants for oral health related quality of life in frail old people with medical conditions and those on medication.[16] Treatments for salivary problems are based upon establishing a diagnosis, protecting oral and pharyngeal health, stimulating remaining glands and replacing lost salivary fluids.[17]

**Barriers in access to oral health care**

The frail health condition of a senior citizen does not allow them to take care of themselves completely. Therefore it is necessary for somebody else to take care of them. In case this condition is not fulfilled, it may lead to obstruction in getting proper oral health care. Various factors that lead to incomplete access to health care are systemic health conditions, low socio economic status, doctor/patient ratio at a particular place and lack of attention of the care giver. Additional barriers include the functional and medical status of the individual, lack of education and fear. In a country like India, where more than half of the population lives in rural areas, it is very difficult to achieve quality healthcare facilities with limited doctors around. This difference in doctor/patient ratio needs to be taken seriously and necessary actions should be taken to help solve this problem.

**CONCLUSION**

In order to tackle this issue, serious efforts need to be made. In India most of the rural population are below poverty line, they cannot afford even a basic dental procedure. In order to help them get good health care, special rural health programs should be incorporated by the government. Regular dental check up camps should be conducted and patient education should be given so that people are aware of their health condition. The hospitals and dispensaries in rural areas should provide free treatment to senior citizens and should be given preference during treatment. Consideration needs to be given to a range of factors when developing and planning services for mentally or physically disabled adults. An understanding of the impact of physical disability and its impact on oral health and access to services is essential. Dental services should be appropriate and sensitive to individual needs. Services need to take account of the views, needs and demands of clients,
family and caregivers. Standard of care should accord with the principles of positive choice, enhanced quality of life, retention of dignity and, wherever possible, self care. Oral health and quality oral health care contribute to holistic health. It should be a right rather than a privilege.

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