

*Review Article*

## Management of Geriatric Patients in Dental Practice

Pradhan D, Saxena A, Pruthi N, Sharma L, Singh D

**Abstract:** Aging is a natural process. According to World Health Organization, old age is considered as a period of life where there is an impairment of the physical conditions frequently. Due to various demographic shifts of the Indian population, has led to serious health implications. There is an increase in the longevity which means the community will have great burden of the disease, with a gradual transition towards the elderly diseases and associated disabilities with aging. In the near future, the dental professionals will have to treat the elderly population in an efficient manner in their dental office with proper requirements and advancements in their professional skills. Over the years, with the increasing awareness about the oral health and treatment needs of the society, there is higher demand for geriatric specialists. However, the geriatric education is still in its juvenile stage as it has not received appropriate importance till now. Most of the elderly people have low expectations regarding oral health and therefore, this perspective must be changed and should be dealt by the dentist's treatment planning for elderly, must focus on preventive and curative procedures rather than extractions and dentures. While delivering oral health care it must be ensured that the patient is comfortable and painless. Continuing education and motivation can help improving the oral health care of the elderly. Thus, this review paper focusses on the various methods that can be incorporated in the dental practice for treating the elderly population.

**Keywords:** Aging; Disability; Education; Elderly; Oral health; Management.

### INTRODUCTION

Aging is a natural process. According to World Health Organization, old age is considered to be a period of life where there is impairment of the physical conditions frequently. However, old age is a biological and a normal phenomenon. The scientific study of the process and phenomenon of aging is known as 'Gerontology'.<sup>1</sup>The word 'Geriatrics' was coined by Ignatz L. Nascher in the year 1909. He was also known as the 'father of geriatric dentistry'.<sup>2</sup> Geriatrics is the branch of medicine that deals with all the peculiar problems related to aging, including the clinical problems of senescence and senility.

Dealing with the elderly is very important and it is the duty of the dentist to make them feel comfortable and relaxed at the dental practice. Thus, this review paper focusses on the various methods that can be incorporated in the dental practice for treating the elderly population

### DISCUSSION

The World Health Organisation states that the annual rate of increase in the global population is 1.7% whilst the population of those over 65 years is increasing at the rate of 2.5%. However, in both the developed

and lesser developed nations, it is expected that there would be a significant change in the distribution of age in the population by 2050. In a population of over 1 billion people in India, 7.6% of the total population is older than 60 years which actually amounts to about 76 million. Also, there is the highest incidence found amongst the elderly for oral cancer in India.<sup>2</sup>

### The elderly population

1. **65- 74 years-** New or young elderly who are considered to be healthy and active.
2. **75-84 years-**Old or mid old and they vary from being active or healthy
3. **85 years or older-** Oldest and tend to be physically frail and considered as fastest growing segment of the older adult population.

Because of the uncertain shifts in the demography of the Indian population has predisposed to various health issues which tends to be very serious. It is essential for the dentists in the near future to treat the elderly patients efficiently with proper requirements and maintain professionalism.

The management of elderly patients is very much different than the general patients as

there are special considerations for the elderly that are as follows-

- Age related physiological changes.
- Complications of chronic conditions and then implications on oral health.
- Effects of any medications on the oral mucosa.
- Any incidence of mental or physical disability.
- Nutrition status.
- Socio- economic status.
- Psychology of elderly in proper treatment planning and rendering those oral health services is required.

Over the years, with the increasing awareness about the oral health and treatment needs of the society, there is higher demand for geriatric specialists. However, the geriatric education is still in its juvenile stage, as it has not received appropriate importance till now. Most of the elderly people have low expectations regarding oral health and therefore, this perspective must be changed and dealt by the dentist treatment planning for elderly, must focus on preventive and curative procedures rather than extractions and dentures.

While delivering oral health care it must be ensured that the patient is comfortable and painless. Training in this field helps to understand and empathise with the psychosocial behaviour of the elderly, especially those suffering from isolation, deep recession, Parkinsonism and Alzheimer's. Thus, proper geriatric related education can help the dentist to improve the skills and change their attitudes in treating the elderly population.<sup>3</sup>

#### **Goals of geriatric dentistry<sup>3</sup>**

- 1) Maintenance of oral health of elderly
- 2) Maintenance of oral and general health in diseased elderly patients.
- 3) Maintaining ideal health and functioning of the masticatory system by taking adequate preventive measures.

#### **Objectives of geriatric dentistry**

- 1) To relieve the problems of the elderly patients.

- 2) Preserving and restoring the quality of life of elderly people.

#### **Dental changes in elderly patients<sup>4</sup>**

The elderly patients are prone to wasting diseases of teeth such as abfraction, attrition, erosion and abrasion. This is because of the reason that the teeth are functional for a longer period of time. In addition, there are some age related changes that occur in the elderly which are as follows:

- Loss of attachment
- Missing teeth
- Edentulism
- Periodontal inflammation
- Ill-fitting dentures
- Oral ulcerations
- Xerostomias
- Oral carcinomas

Further, root caries is other most common disease found in the elderly population.

#### **Types of treatment for elderly population<sup>5</sup>**

Due to the rapid advancements in dentistry, geriatric dentistry has been able to help elderly for their oral health related problems. As the individual grows older, the dental needs progresses, showing signs of attrition, discolouration and difficulty in mastication etc. The treatment modalities for the elderly are broadly classified into two categories:

- A) Preventive measures, Restorative measures.

*Preventive Measures:* The various preventive measures for the elderly are as follows:

- 1) Active preventive measures:  
These measures include some recommended oral self-care that comprises of tooth brushing twice daily, use of fluoride containing toothpaste, avoiding sugary diet, interdental cleaning and regular visits to the dentist after every 6 months.
- 2) Active professional prevention:  
This prevention modality includes the following:
  - Provision of professional guidance
  - Motivating the patient

- Individualizing the need of the patient
  - Providing feedback to the patient regarding their oral health
- 3) Passive professional prevention:  
This prevention modality includes the following:
- Scaling and cleaning of plaque, debris and calculus.
  - Providing prevention for dental caries and periodontal diseases.

*Restorative Measures:* These measures include the following in restoring:

- Gingival margins
- Discoloured teeth
- Structures of jaw
- Teeth that are missing
- Various cosmetic and health related issues

#### **Current scenario of geriatric dentistry**

Basically, geriatric patients are broadly divided into 3 categories depending upon their living functional ability as follows: 1. Functionally independent, 2. Frail, 3. Functionally dependent.

However, there are various barriers to dental care to all of the three groups. The current scenario for geriatric patients is not very encouraging all over the world. Some of the barriers are:

1. Lack of experience and awareness amongst the dental professionals in treating the elderly.
2. Financial constraints
3. Lack of support from family
4. Transportation
5. Negative attitudes of the elderly and their low perceptions towards oral health care
6. Problems in dealing with debilitating diseases and life-threatening illness.

#### **Strategies to overcome the barriers associated with geriatric dentistry<sup>6</sup>**

Many strategies can be incorporated in order to reach effectively to the elderly people. However, the dentist must provide some professional service that is caring and

sensitive. The strategies for the elderly includes: Education, Facilities, Media, Equipment.

*Education:* The dental professionals must be involved in educational programs in order to treat the elderly patients effectively and efficiently. It is very essential for the dentist to be compassionate and well trained in order to meet the special needs of the geriatric patients. Education in elderly patients must be supplemented with practicality in various locations by using different and appropriate dental equipment. It is very essential to educate the care givers, family members and other health care professionals regarding daily preventive dental care.

*Tell-Show-Do:* One of the ways to provide education to the elderly population is tell-show-do. The steps of this method are as follows:

1. Tell or explain the procedure
2. Show or demonstrate
3. Finally the learner can practice the procedure or the technique until it is mastered

*Facilities:* It is essential that the dental facilities are made accessible to the elderly people. Some of the important factors that must be considered are:

- Careful selection and placement of the signs in order to support the communicative independence of the patient
- Using firm and desirable, standard heighted chairs with arms for proper support
- Provision of adequate lighting in order to reduce the disorientation or mental confusion
- Setting of furniture of the dental practice in order to promote easy access and to facilitate efficient communication.

*Media:* Some educational material and newsletters must be circulated. In addition, appointment cards or brochures must be printed in extra-large type which is easy for the elderly to read should be kept in the reception in the dental practice. Information

and facts regarding geriatric oral health care must be given to the community in order to promote better oral health for the elderly. Other sources like internet, television and radio plays a vital role in improving the oral health care of the elderly.

*Equipment:* Portable dental equipment must be used for functionally dependent elderly at home or sometimes in nursing homes.

To ensure ease of access:
<ul style="list-style-type: none"> <li>• No stairs (ramp or elevator)</li> <li>• Adequate, safe parking</li> </ul>
For ease of being seated and standing again, reception furniture should be:
<ul style="list-style-type: none"> <li>• Not low to the floor</li> <li>• Firm</li> <li>• With arms</li> </ul>
To reduce risk of falls, flooring should be:
<ul style="list-style-type: none"> <li>• Consistent throughout the office</li> <li>• No deep pile carpeting</li> <li>• No throw rugs or clutter on the floor (watch hoses and cords)</li> <li>• No slippery areas/surfaces</li> </ul>
Lighting to reduce age-related vision
<ul style="list-style-type: none"> <li>• Adequate lighting without glare</li> <li>• Consistent level of lighting throughout the office</li> <li>• Avoid small print</li> <li>• Use contrasting paper and ink colors for written materials</li> </ul>
To adjust to age-related hearing loss:
<ul style="list-style-type: none"> <li>• Stand closer to the patient</li> <li>• Enhance visual and auditory clues</li> <li>• Remove mask</li> <li>• Maintain face-to-face, eye level, eye contact</li> <li>• Touch appropriately</li> <li>• Drop pitch, speak distinctly</li> <li>• May increase volume but do not yell</li> <li>• Minimize background noise</li> <li>• Use quiet locations for interaction</li> <li>• Turn off any music</li> <li>• Turn off dental equipment whenever possible</li> </ul>
Other communication enhancements:
<ul style="list-style-type: none"> <li>• Use titles and surnames unless asked specifically to use first name</li> <li>• Provide written instructions to reinforce verbal</li> <li>• Communicate with caregivers as appropriate</li> <li>• Do not communicate with caregivers at the expense of speaking with the patient</li> </ul>

Figure 1: Shows an elderly friendly dental office<sup>7</sup>

**CONCLUSION:** The major problem in the oral health care of the elderly is the underestimation of the needs by them. Continuing education and motivation can help in improving the oral health care of the elderly.

**Author affiliations:** 1. Dr. Devina Pradhan, PG student, 2. Dr Antima Saxena, PG student, 3. Dr.Nidhi Pruthi, MDS, Reader, Department of Public Health Dentistry, Rama Dental College Hospital and Research Center, 4. Dr.Lokesh Sharma- PG student, Department of Public Health Dentistry, Sardar Patel Institute of Medical & Dental Sciences, 5. Dr. Deepika Singh, PG student, Department of Public Health Dentistry, Rama Dental College Hospital and Research Center, Lakhanpur, Kanpur-208024, U.P. India.

#### REFERENCES

1. World Health Organization. *Definition of an older or elderly person*. [Online] Available from: [http://www.who.int/healthinfo/survey/a\\_geingdefnolder/en/](http://www.who.int/healthinfo/survey/a_geingdefnolder/en/) [Accessed 20<sup>th</sup> September 2016].
2. Morley J. A Brief History of Geriatrics. *The Journals of Gerontology Series A: Biol Sci Med Sci*. 2004; 59(11):1132-1152.
3. Registrar General, India. *Population Projections for India and States 2002-2006: Report of the Technical Group on Population Projection Constituted by the National Commission on Population*. New Delhi; 2006.
4. Directorate General of Health Services Ministry of Health & Family Welfare Government of India. *National Programme for the Health Care of the Elderly (NPHCE)*.
5. Pradhan M, Sonarkar S, Shenoi P, Uttarwar V, Mokhade V. Geriatric Dentistry-an Overview. *Int J Oral Health Dent*. 2016; 2(1):26-28.
6. Issrani R, Ammanagi R, Keluskar V. Geriatric dentistry - meet the need. *Gerodontology*. 2012; 29(2):e1-e5.
7. Helgeson M, Smith B, Johnsen M, Ebert C. Dental Considerations for the Frail Elderly. *Spec Care Dentist*. 2002; 22(3):40s-55s.

#### Corresponding Author:

Dr. Devina Pradhan  
Department of Public Health Dentistry  
3/99, Vishnupuri, Kanpur- 208002  
Contact no:8173914009  
Email: meetdrdevina@gmail.com

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