Geriatric dentistry – meet the need

Rakhi Issrani, Renuka Ammanagi and Vaishali Keluskar
Department of Oral Medicine and Radiology, K.L.E.V.K Institute of dental Sciences, Belgaum-590010, Karnataka, India

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Geriatric dentistry – meet the need

Geriatric dentistry or gerodontics is the delivery of dental care to older adults involving the diagnosis, prevention, and treatment of problems associated with normal ageing and age-related diseases as part of an inter-disciplinary team with other health care professionals. Geriatric health is an ignored and under-explored area worldwide. Oral health reflects overall well being for the elderly population. Conversely, elderly patients are more predisposed to oral conditions due to age-related systemic diseases and functional changes. The major barriers to practising geriatric dentistry are the lack of trained faculty members, a crowded curriculum and monetary concerns. For successful treatment, the practitioner must adopt a humanitarian approach and develop a better understanding of the feelings and attitudes of the elderly. Prevention and early intervention strategies must be formulated to reduce the risk of oral diseases in this population. In future, dental professionals must have a proper understanding of the magnitude of the services to be provided to the elderly. This could only be realised through an education programme in geriatric dentistry, which should be started without further delay. This article hence sets out the objectives, needs, present scenario, strategies and types of dental treatment required by the elderly population.

Keywords: geriatrics, geriatric dentistry, general health, oral health, primary health care.

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Introduction

With improved life expectation brought about in part by improved health conditions and more accessible health programmes, the population of the older cohort is increasing, thus, the pyramid-shaped population is being transformed into a column. Oral health status in the elderly reflects the cumulative outcomes of oral health behaviour, diseases and their treatments during a lifespan. Nowadays, it is increasingly common for the elderly to retain most of their teeth, presenting a challenge for oral self- and professional care to maintain the dentition for a whole lifetime.

Today, it is a well-acknowledged fact that the dentate elderly can need extensive and complicated treatment to maintain the dentition. As a consequence, there will also be an increased demand for dental treatment, with the growing need for programmes covering not only the population in general but also the older group, as suggested by epidemiological data. Over the next few decades, the rapid growth of this segment of the population will affect dental practice and because of the variety of age-related and age-associated psychological, social, biological and pathological changes that occur, clinical decision-making will vary from one individual to another. Maintenance of the dentition in this population is important, not only for their quality of life, but also for the maintenance of general health.

The dental needs of the elderly are also changing and growing. The management of older patients requires not only an understanding of the medical and dental aspects of ageing, but also many other factors such as ambulation, independent living, socialisation, and sensory function. Many barriers may interfere with providing older patients with dental care, including heightened dental complexity, multiple medical conditions, diminished functional status, loss of independence, uniformed attitudes about dental care in old age, and limited finances. These problems can be overcome in dental profession by education, clinical programmes, research agendas, and legislative advocacy.
Diagnosis and treatment planning for the elderly must include considerations of the biological, psychological, social and economic status of the patient in addition to the obvious dental issues.

Objectives of geriatric dentistry

The major objective of geriatric dentistry is to enable professionals to recognise and relieve the difficulties of the aged. For successful treatment, the dental surgeon should adopt a humanitarian attitude, develop a better relationship and a further understanding of the feelings and attitudes of the aged, understand their special dental problems, and consider them as different from other groups.

One of the main objectives of care should be the restoration or preservation of function in order to help the patient maintain not only an independent lifestyle but also their preferred lifestyle within those limits.

Special consideration of dental care for elderly patients

This population needs special consideration for dental treatment. The reasons being as follows:

- Almost all systemic diseases have oral manifestations, the first sign of which may be seen by the dental clinician. Recent research suggests a relationship between oral disease and systemic diseases such as diabetes, cardiovascular disease, stroke, respiratory infections, Alzheimer's disease and other medical conditions.

- Most of the elderly population will be taking medications both by prescription or over-the-counter which can cause a dry mouth or xerostomia. This would affect the ability to speak, and chew, and would increase the rate of caries, periodontal disease, traumatic ulcers, fungal infections and reduces denture retention in the edentulous patient. Additionally, a dry mouth can affect many simple but important daily tasks such as speaking.

- It is usually observed that the elderly population will be on heavier regimens of drug therapy for various ailments so it is important that they visit the dental surgeon who is familiar with their drug needs. Specifically, as people age and as a result of the amount of drug use that occurs over a lifetime, drugs are metabolised differently than when the patient was younger. In geriatric dentistry, a dental surgeon will have to take into consideration the drug regimen that a patient is on and plan their use of prescription and follow up care accordingly.

- Oral infections have a significant impact on morbidity and mortality of medically compromised patients, such as those with cancer or those undergoing chemotherapy. Elimination of oral infections before initiating radiation therapy, chemotherapy or various cardiac conditions today is the standard of care in most medical institutions and needs to be practised in all dental institutions.

- Diagnosis of Sjögren's syndrome, Wegener's granulomatosis and leukaemia can be supported by oral biopsies. Future use of saliva diagnostics is highly encouraging, including testing for cancers and many other systemic conditions.

- Regulatory compliance has to be maintained especially with regard to catheters, contractures, pressure sores and psychotropic restraints.

Types of dental treatment for elderly patients

With the rapid progress in dentistry over recent years, geriatric dentistry has been able to help people who have dental problems that are age-related. As people get older, their dental needs become progressive, they show rapid signs of deterioration and wear, especially when it comes to their teeth, oral mucosa, jaws and other parts associated with oral health.

We can broadly divide the treatment modalities into:

1. preventive measures and
2. restorative measures.

Preventive measures

Active preventive measures by subjects cover oral health-maintaining behaviour. Recommended oral self-care consists of tooth-brushing twice daily, use of fluoride toothpaste, daily interdental cleaning, and avoidance of sugar. Regardless of dentate status, it is recommended that the elderly make dental visits at least every 6 months for clinical re-evaluation, depending upon their ability to perform oral hygiene.

Active professional prevention To support and maintain a patient highly motivated, professional guidance should be on a regular basis, individualised, needs-related, and provide feedback on the patient's improvement during regular dental visits.

Passive professional prevention Scaling and cleaning aim at removing supra- and subgingival plaque and...
calculus, and are important for the professional prevention of both dental caries and periodontal disease\textsuperscript{22}.

**Restorative measures**

Geriatric dentistry excels in restoring:
- jaw structures;
- gingival margins;
- discoloured teeth;
- missing teeth;
- various types of other cosmetic and health-related issues and
- it also helps people who may be taking excessive medications or may be slow to recover from or have sensitivity to dental surgery\textsuperscript{11}.

**Present scenario (barriers) of geriatric dentistry**

Geriatric patients are generally classified into three groups based on functional living ability; functionally-independent, frail, and functionally-dependent\textsuperscript{19}. Barriers to dental care occur for all the three groups residing at home or in an institution\textsuperscript{23}, and the main one is the perceived need for any kind of oral health care\textsuperscript{24,25}. The present scenario of geriatric dentistry throughout the world is not very encouraging.

The reasons for a comparatively low utilisation rate of dental care by the elderly despite the normative and perceived needs are as follows\textsuperscript{26}:
- Lack of experience and fear among dental surgeons when treating geriatric problems.
- Absence of extra financial incentives to the dental surgeons.
- Transportation and access problems to the dental surgery.
- Practical problems that exist in providing dentistry to homebound and institutionalised patients.
- Negative attitudes toward the elderly need for dental care and their low perception and motivation for oral health care.
- Difficulties dealing with debilitating and life-threatening illnesses.
- The problem of informed consent and of family members or residential facility staff members with negative attitudes.

However, studies also indicate that the attitude towards dentistry is changing. Several authors have stated that as people age, a brighter picture may emerge as they\textsuperscript{27–29}:
- will have higher expectations about maintaining and preserving their natural dentition;
- may have the financial resources to fulfil their expectations.

**Strategies to improve the situation**

A mix of strategies can be planned so as to effectively reach the geriatric population. First and foremost, the dental team should provide a professional service that is sensitive and caring. The dental team should be cognisant of the life circumstances of these patients and tailor treatment plans accordingly\textsuperscript{23}.

**Education**

By participating in educational initiatives and subscribing to related journals, the dental team will greatly enhance its ability to effectively treat and manage the elderly. It is of utmost importance for dental surgeons to be well trained, understanding and compassionate, and to be aware of the special needs of the elderly population\textsuperscript{23}.

Dental surgeons, who have been well paid to restore and maintain the teeth of these patients in the past, forget or lose track of them once they are no longer able to visit our offices. We must meet our responsibility to educate the care-givers, family, and other health care professionals about the daily preventive dental care of these patients, whose teeth are eventually lost.

**Facilities**

Dental facilities should be accessible to the elderly and private dental offices or dental departments should be designed for easy access. Some important factors to consider are\textsuperscript{30}:
- Carefully selecting and placing signs to support the independence of the elderly patient.
- Using firm, standard-height chairs with arms for support.
- Providing adequate lighting in each room, to minimise any visual disorientation or mental confusion.
- Setting up dental furniture to promote and facilitate good communication and access.

In addition, the surgery should accommodate wheelchair patients or those who use walkers. In some cases, dental surgeons might consider purchasing equipment to treat the patient in a wheelchair.
Media

Educational newsletters and materials should be circulated and a number of business and appointment cards and brochures could be printed in extra-large type. Large-print leisure and educational material should be available in the reception room. Articles on geriatric dentistry could be placed in senior’s magazines and newspapers, and informative talks given to community groups to demonstrate a willingness and ability to treat medically compromised clients23.

Broadcasting sources such as TV and radio are of increasing importance for spreading knowledge of oral self-care and broadcasting may provide preventive oral health information for the elderly subjects due to their accessibility to these media sources.

The internet offers a modern way to successfully provide oral health-related information and seems to be on the increase. This appears to be especially relevant among older subjects in better-off countries where dental surgeons remain important guides for their patients to evaluate such information31.

Equipment

Portable dental equipment can be used to service the functionally dependent elderly at home or in nursing homes23.

Government

Everyone talks about access to care. We hold symposia and conferences, have discussions with governments, and write articles about it. The inference is that we hold the key to access to care for this growing ageing segment of our population. Our choice is to either lead in the provision of that care, and do so on our terms, or wait until governments force us to provide it. It is obvious that oral health is not a priority in our health care system. Governments are struggling to keep up with spiralling health costs and growing demand. It is therefore incumbent on us, as dental health care providers, to deal with this need and provide access to care for elderly patients32.

Conclusion

Lack of motivation among the elderly population regarding maintenance of oral health can be attributed to their perceived limited need for oral health care during ageing. This level of perception among the elderly in most of the countries might be because of the low and unevenly distributed dental services during their childhood and adulthood. Hence the primary need would be to educate and motivate the elderly population regarding importance of oral health care.

Dental surgeons as a part of the health care system are often in the frontline in detecting age-related morbid conditions or diseases through routine oral examination. Specific health problem management during dental treatment remains as a real challenge for dental surgeons. Treatment of oral disease themselves is equally challenging.

Hence to improve the scenario one needs to concentrate on overcoming barriers such as socio-economic status, general health status, physical and cognitive disabilities and access to dental service among the elderly population. In addition, educating dental surgeons to play the role of oral physicians can determine the extent to which oral health care can be made accessible to the elderly population.

References


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**Correspondence to:**

Rakhi Issrani, Department of Oral Medicine and Radiology, K.L.E. V.K Institute of dental Sciences, Belgaum-590010, Karnataka, India.

E-mail: dr.rakhi.issrani00@gmail.com