Original Article

Oral care needs, barriers and challenges among elderly in India

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Abstract

Objective: This paper presents an approach to the assessment of oral health needs of elderly and barriers to receive oral care in the life course.

Background: The dental needs of the elderly are changing and growing day by day. The management of older patients requires not only an understanding of the medical and dental aspects of ageing but also provide them good oral health service. In the life course of elderly there are many hurdles to receive proper oral care. The use of an assessment of oral health need will be essential in the development of care pathways to the elderly.

Methods: The proportion of older people is growing faster than that of any other age group. There is no sound database regarding the oral disease burden and treatment needs of the elderly in India. Physical and biological barriers with age can also affect oral health care either directly or indirectly.

Conclusion: Oral care guidelines designed to assist elderly should consider not only prevention and treatment modalities but also the means of implementing such therapies in varying settings and utilizing the whole dental team.

Key Words: Barrier in care of elderly, elderly patients, geriatric patients, oral health needs

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INTRODUCTION

India occupies 2.4% of the world's land area and supports over 17.5% of the world's population. The demographics of India are inclusive of the second most populous country in the world, with over 1.21 billion people (2011 census), more than a sixth of the world's population.[1]

With the population growth rate at 1.58%, India is predicted to have >1.53 billion people by the end of 2030. India has around 100 million elderly at present, and the number is expected to increase to 323 million, constituting 20% of the total population, by 2050.[2]

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The rapid greying of the population comes with a number of difficulties in terms of general and oral health.[3,4] A continuing progress in the medical field has raised the longevity of life. This changing face of population offers the oral professionals to observe unique challenges to treat the rapidly growing segment of the elderly and the dependent overage population – the homebound residents and the nursing homebound residents. The old age of the residents is compounded with chronic medical problems they are suffering from and the medications they are taking.[5]

The dental needs of the elderly are 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, socialization, and sensory function.[6]

Recent surveys[7] indicate that older dentate people utilize dental services less than any other dentate age group. Patient utilization of dental services is predominantly a consequence of patient-perceived need for such treatment and therefore perceived need has been considered to be an accurate predictor of utilization of dental services.[8-10]

Although there is evidence to suggest that attitudes toward and perception of dental care are influenced by former dental experiences,[11] this factor is unlikely to be the sole cause for the large difference between perceived and normative needs for dental care.[12,13]

Age

Ettinger and Beck undertook an impressive study of 2000 subjects, who were living independently and identified four age groups; 18–60 years, 60–64 years (the new elderly), 65–74 (the transition group) and >75 age group (the old elderly). It was reported that the two younger groups had similar attitudes toward dentistry and that the new elderly had significantly more favorable attitudes toward dental care than the old elderly.[11]

Socioeconomic status

Townsend *et al.*[14] demonstrated that utilization of preventive health care is highest among higher social classes. A facile explanation might be that more affluent patients are able to overcome any financial barrier to dental care.[15] Kiyak[16] has suggested that the higher social classes tend to be better educated and are potentially more likely to be familiar with and to adopt favorable attitudes toward the maintenance of oral health.

OTHER BARRIERS TO RECEIPT OF CARE

Patient related barriers

Cost has been stated to be a barrier in some studies of the receipt of care by older people who were functionally disabled or attended with a functionally-disabled partner. Most of these elderly people, it was reported, existed on lowly pensions. Studies have identified variability between different groups with some researchers reporting only 1.5–3% of subjects in the community identifying cost as a barrier. In contrast Hoad-Reddick *et al.* reported cost as a barrier in 29% of those elderly living alone in the community, and approximately 10% for those living in the community (but with assistance) or those in residential homes.[13]

Access to dental services may present a barrier as a result of physical incapacity or disability, travel problems, lack of knowledge of dental services or lack of dental services in given area.[17] Anzack and Branch[18] reported that among older Americans who would have liked to visit a dentist during the previous year, almost 50% gave their age as a reason but the inference was that decreased mobility was a factor influencing many although only 20% identified transport problems as a barrier to receipt of care. Similar values were reported by Kail and Silver.[19]

Fear

According to Todd and Ladder[7] most people experience some apprehension at the prospect of a dental visit, and others have identified fear as a real barrier to the receipt of care in older people.[13,20] Further, Locker *et al.*[21] stated that the greater the level of anxiety, the lower the rate of utilization of services. The basis of such fear is difficult to quantify and a qualitative study of adults between 16 and 59 years demonstrated that some had an indefinable generalized fear of things, some had specific fear to, for example "the drill" or "needles" or fear of a repeat of a painful visit or of reprimand from the dentist. Locker *et al.*[21] demonstrated that significantly more edentulous patients identified fear as a barrier than did their dentate counterparts. This may have been the consequence of considerably more exposure to exodontias and its inherent implications, or it may point to an underlying fear of dentistry which precluded regular (restorative) dental care.

CARER RELATED BARRIERS

If holistic care of older patients is to be practiced, then awareness of dental care must be present among careers of our elderly population. The onus of providing dental education for careers is they medical practitioners, registered nurses or well-meaning relatives rests on the dental profession. Studies in England have highlighted deficiencies in knowledge of basic oral hygiene among all of these careers.[22]

DENTIST RELATED BARRIERS

Age

Patient age has been demonstrated to affect treatment planning in that although missing teeth were scheduled to be restored, 42% of younger age groups were prescribed fixed prosthesis, while only 17% of older age groups were prescribed this option, the majority being recommended removable prosthesis.[23]

The determinant toward treatment is the attitude of a dentist;[16] some dentists who hold a negative stereotype of the elderly are more likely to provide rudimentary treatment options than dentists with positive stereotypes, although the nature of stereotype is complex.[24] Previous dental attendance patterns have been reported to influence treatment options[25,26] although it is uncertain if objectivity is possible or desirable for many irregularly-attending patients who wish merely to be relieved of pain.

Poor confidence - Several studies have demonstrated that a significant number of dentists feel some diffidence in the treatment of older patients, for a variety of reasons including lack of knowledge about gerontology, including drug interactions.[27-29]

Access and venues - Are also perceived to be determinants toward provision of care for elderly. Patients with problems of mobility, for example, are less likely to visit dental clinics where stairs have to be climbed.

Financial - An additional dental-related factor relates to remuneration and the consensus view of several studies suggests that fees for treatment on a domiciliary basis are insufficient to encourage dentists to perform more domiciliary treatment.[20,27,30]

The World Health Organization discussion paper on health and aging indicated, "we can afford to get old if countries, regions and international organizations enact "active ageing" policies and programmers that enhance the health, independence, and productivity of older women and men." The time to plan and to act is now.[31-33]

COMMON ORAL PROBLEMS IN THE ELDERLY

Preventive dentistry must be concerned with the three levels of prevention in the adults, which are not fully edentulous:

- Prevent the initiation of disease
- Prevent progression and recurrence[34]
- Prevent loss of function and loss of life.[35]

Recommended oral self-care consists of tooth-brushing twice daily, use of fluoride toothpaste, daily interdental cleaning, and avoidance of sugar.[6] Regardless of dentate status, it is recommended that the elderly make dental visits at least every 6 months for clinical reevaluation, depending upon their ability to perform oral hygiene.[36]

Many older adults have difficulty achieving effective daily plaque control. Various bristle and handle designs are available in either manual or powered (electric or sonic) brushes for such patients. For patients with difficulty holding a toothbrush because of arthritis or stroke, devices are available to facilitate brushing. Wider floss, Teflon-coated floss, floss holders, proximal brushes and even electric flosses are available.

Those with reduced ability to perform oral self-care should be seen more frequently for prophylaxis. Since denture-related and other oral mucosa lesions are common in the elderly, edentulous patients should be periodically evaluated by dental professionals.[37]

In addition to self-care and professional care, environmental factors also have an impact on the prevention of oral disease in elders. Recent studies have shown that root caries and coronal caries rates are lower for life-long residents of fluoridated communities as compared with nonfluoridated communities; there is also benefit for older adults who began exposure to fluoridated water in adulthood.[38,39]

RESTORATIVE MANAGEMENT FOR ELDERLY

The selection of restorative techniques in older adults is more or less similar to that in younger population. However, permissible direct plastic restorative materials are preferred in the former as these restorations can be readily and inexpensively repaired or replaced. Owing to the presence of several risk factors, caries activity is quite high and, therefore, requires frequent maintenance which might not be easily done in an indirect restoration.[40,41]

"Smile has no age bar." Most of the elderly lead an independent social life and are, therefore, conscious about their appearance. The esthetic treatment for elderly could range from simple recontouring procedures to bleaching, laminates and crowns. Any major esthetic rehabilitation should be undertaken only after proper occlusal and esthetic analysis to achieve predictable results.

Successful endodontic can be achieved for the elderly, if proper attention is given to the diagnosis, good quality radiographs and adapting techniques that overcome the challenges posed by calcification of the root canal system. As long as the tooth has a strategically important role to play, endodontic therapy is indicated and justified in any patient.

PERIODONTAL TREATMENT FOR ELDERLY

Conservative, nonsurgical treatment may be the best therapeutic option for the major portion of older adults who require periodontal therapy.

In those individuals for whom initial therapy alone is inadequate to resolve the periodontal problem, surgical intervention is indicated. This decision should be made only after considering the many circumstances that may override the decision to intervene surgically. Surgical treatment may consist of simple gingivectomy where there is ample attached gingiva or may involve a flap procedure such as modified Widman or apical repositioning.[42]

Surgical techniques are also performed to achieve crown lengthening, which may be necessary in the elderly patient who is prone to root caries and fractured teeth at or below the

gingiva. Dental implants may be a viable option for restoring the debilitated dentition in certain elderly individuals.

PROSTHODONTIC MANAGEMENT OF ELDERLY PATIENTS

The main aim of success of prosthodontic treatment is to maintain the teeth. If the remaining teeth have a poor prognosis, then they can be planned for overdenture abutment. Where complete dentures are provided, these can be retained using dental implants to overcome many of the problems associated with conventional replacement dentures.

HOW CAN WE EFFECTIVELY APPROACH GERIATRIC POPULATION?

Enhancing the dental office environment for the elderly

Delivery of health care services to the elderly in a community setting requires accessible buildings and an environment that can be negotiated with safety. Dental office reception room is intended to be comfortable and inviting space for geriatric patients. In order to allow individuals with walkers or canes to negotiate in safety, there must be a clear path of at least 28 inches wide in the room and through doorways. Tiles or wood floors should have a nonskid surface and be free of scatter rugs.[43] Firm, standard height chairs with arms should be used for support. Adequate lighting should be provided in each room to minimize any visual disorientation or mental confusion.[44] A portable audio amplifier with headset can help the dental professional communicate with the very hard of hearing patients. Large type magazines, newspapers, health education brochures and patient information sheets will be appreciated by the older patients.[43]

Geriatric dental education

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. Kress and Vidmar surveyed 50 experts in geriatric dentistry to determine the 30 major areas of competence for a geriatric dentist. The top five categories in each domain were listed.[45]

Knowledge

- Psychology and sociology of aging
- Disease of aging
- Pharmacology and drug interaction
- Biology and physiology of aging
- General medicine/systemic diseases.

Skills

- Ability to communicate with elderly patients and other providers
- Ability to adapt treatment plans for the elderly
- Ability to diagnose treatment needs of aging patients
- Ability to perform specialized procedures (especially prosthodontic treatment)
- Management of the elderly.

Attitudes

- Empathy/understanding
- Caring/compassion
- Positive attitude toward, and enjoyment of, older patients
- Respect for the elderly patient
- Flexibility in treatment planning (keeping planning realistic).

Geriatric dental education programs must address each of these categories and must be made available to all professionals and paraprofessionals providing oral health services directly or indirectly. Programs developed to prepare dental professionals to treat the geriatric patient must address the entire spectrum of "health and well-being."

MEDIA

Educational newsletters and material should be circulated. 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 seniors' magazines and newspapers, and informative talks given to community groups to demonstrate a willingness and ability to treat medically compromised clients.[46]

COMMUNICATION

An important element in effectively developing an awareness of oral prevention is communication skills. Communication with the older adult can be a rewarding, enriching experience especially when certain principles of adult learning are used. Communication is a two-way process. Many times questions of a patient's history, family, or likes/dislikes are appreciated. Being a patient listener is a critical skill to develop for communicating with any individual regardless of age-and can be particularly important in dealing with the oral adult.

Remember the patient is a person first and a patient second. Individuality should be explored and nurtured. In that way, treatment can be more easily customized. Inquiring about past hobbies or areas of interest can open the door for the older adult to share part of his or her life. Though difficult to always remember, effort must be made to realize-especially with the frail-they have not always been as they appear now.[34]

EQUIPMENT

Portable dental equipment can be used to service the functionally dependent elderly at home or in nursing homes. This equipment varies from a domiciliary valise to a portable dental office, neither housed in a van nor set up in an available room in a nursing home.[46]

GOVERNMENT POLICIES

It is obvious that oral health care is not a priority in our health care system. Governments are struggling to keep up with spiraling health costs and growing demand.[47] Public policy options to support geriatric oral health care, and research are limited by the government's preoccupation with cost containment and the lack of visibility for dental programs.[48]

It is, therefore, incumbent on us, as dental health care professionals, to deal with this need and provide access to care for elderly patients.[47]

The dental management of geriatric population is an increasingly important aspect of dental practice because these patients have high incidence of medical problem, the dentist must be capable of detecting these diseases and understanding their relationship to dental treatment.

Risk factors for oral diseases in the elderly can be reduced by personal home-care regimens, professionally provided preventive, diagnostic, and therapeutic care, changes in high-risk behavior, and a supportive environment.[48]

Apart from a good oral physician, this age group requires a good human being and a trustworthy friend, and we should play the dual role of both a doctor and a friend. The easiest and the most effective way of treating the geriatric population is when we can mix professional treatment with the human touch.[37]

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