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Oral Health Care of Elderly in India: Present Scenario and Future Concerns

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ABSTRACT

India has a rapidly growing elderly (60 +) population of 77 million which is likely to rise up to 300 million by 2050. For the most of this rapidly growing geriatric population there are no specialized oral health services. The elderly suffer from multiple oral health problems. The Indian population in the 21st century requires an in-depth understanding of the co-relation between oral health and general well being.[1] Viewing these issues through the lens of oral health care provider allows an analysis of current oral health care status of the elderly in India; understand the cause of their poor oral health, their attitudes and treatment needs. The unique combination of growing age, physical disability, personal habits, socio-economic status and our oral healthcare system presents challenges for appropriate oral health care.[2] The present article highlights on the need to understand the shortfalls in its current oral heath status in elderly and formulate strategies to improve its oral healthcare structure as well as education policy in geriatric dentistry to help resolve problems of oral health care for the elderly in India.

Key words: elderly, oral healthcare, dental treatment needs, geriatric dentistry

INTRODUCTION

Demographic ageing is a global phenomenon. India's booming population of above one billion people and improved life expectancy (63 for males and 65 for females) [1,3] has led to rapidly increasing number of elderly people (>60 years age group). This includes both healthy adults and adults who are cognitively and physically challenged and/or medically compromised.

The 20.2 million population of elderly was 5.60% (4) (5.6%) in 1951 which climbed to 7.63% in 2001 and is likely to climb to 14% in 2025 [2]. In absolute numbers there are 77 million and 177 million elderly in the year 2001 and 2025 respectively, which will rise to 300 million in 2050 [3]. Special features of the elderly in India are: 52% of elderly in the country are women. 71% of the elderly reside in rural areas. Nearly 75% of the elderly are economically dependent. 30% of the elderly are below the poverty line. 73% of the elderly are illiterate. It is estimated that 90% of the old people belong to unorganized sector (i.e. without gratuity, pension etc.) [4]. With such large population estimates of the elderly, out of which most of them are underserved, considerable efforts are required to support the geriatric oral health.

EXTENT OF POOR ORAL HEALTH

As per the National Oral Health Survey (2004), poor oral health among elderly has resulted in a high level of tooth loss (29.3%), dental caries status (84.7%), periodontal

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disease (79.4%), mucosal lesions (10%) and oral cancer (0.5%) [5].

A LINK TO SYSTEMIC HEALTH

The ill effects of poor oral conditions are particularly significant among older people in the form of caries, periodontitis and edentulousness. Direct ill effects cause a state of partial or complete edentulousness. Extensive tooth loss/ Ill-fitting prostheses reduces chewing performance and affects food choice; edentulous people tend to avoid dietary fiber and prefer refined foods leading to poor nutrition [6], weight loss [7] and problems in communication besides low esteem [8].

Poor oral health is a common risk factor for many systemic diseases; severe periodontal disease is associated with diabetes mellitus [9], ischemic heart disease [10, 11], chronic respiratory disease [12] and osteoporosis [13]. The challenge of maintaining oral health for the nursing elderly holds additional danger of aspiration pneumonia [14, 15].

As more epidemiological evidence links dental infections and systemic complications, it should be clear that dental and health benefits should not be compartmentalized rather it should be replaced with a new paradigm—that of including dental care in comprehensive medical care improve our geriatric patients' quality of life and outlook.[16]

CHALLENGES OF ORAL HEALTH CARE IN ELDERLY

As they age, older people are more likely to live alone, may be socially isolated and some are unable to manage walking without assistance, have failing eyesight and other physical infirmities.

The maintenance of oral health becomes more difficult if the elderly person is also suffering from other systemic illness e.g. arthritis, diabetes, cardiovascular disease, osteoporosis, neurological diseases associated with age such as stroke, Alzheimer's disease and Parkinson's disease. [17]. Many systemic drugs prescribed for these chronic diseases can cause adverse effects to the oral mucosa, lichenoid reactions, hypersensitivity and xerostomia [18, 19].

Elderly are especially at risk for caries and periodontal diseases if they suffer from xerostomia. It may be caused by illness, radiation therapy and chemotherapy apart from medication.

Dental professionals must understand that the elderly must be considered under the category of "special needs and care" for treatment due to their social, psychological, physical and medical conditions [20]. Thus, at times it may necessitate alterations in the treatment objectives, deviating from the standard norms with the prime objective to "compress morbidity and chewing disability" and keeping oro-dental apparatus in a state of reasonable function.

CURRENT SHORTFALLS IN ORAL HEALTH CARE OF THE ELDERLY

To have and maintain oral health, there are three basics tenets that must be in place. For older adults, one or more of these tenets may be absent. As a result, the prevalence and severity of oral diseases and conditions in older adults are a significant public health concern.

1. Knowledge of the importance of oral health and its value to overall health.

There are compounding factors such as deficiencies in knowledge, attitudes, practices and socioeconomic status which predispose the elderly to oral health problems. Fear of surgical nature of work may make them apprehensive of dental care, and may deter them from seeking it. Many may not realize the benefits of good oral health as the effects at times may not be evident instantly.

The high prevalence of oral cancer in India is related to behavioral risk factors such as poor oral hygiene, improper diet, alcohol and tobacco abuse.

2. Physical ability to maintain oral health through oral hygiene practices.

Most elderly due to poor manual dexterity have difficulty in performing routine oral hygiene procedures, which increases the prevalence of dental decay, periodontal disease and edentulism in this population [21].

3. Ability to access professional oral health services.

In India, primary health centres do not have the provision for dental care. This has left oral health far behind other health services. It appears that oral health is not a priority in our health care system. Except those in organized sectors like in government jobs, railways, defense services and public sector, majority of the elderly have no oral health security.

Most services for geriatric patients are on a "fee-for-service" basis in the private clinics which is expensive and not within the reach of most of the elderly with reduced retirement income. With the paucity of government dental colleges/ dental departments of government hospitals in the country; most of the elderly patients do not get comprehensive treatment either due to lack of facilities or long waiting period [22]. There are no health insurance plans which cover dental treatment except in an emergency (trauma).

Improper distribution of dental manpower in India has created a void in the desired healthcare status in the elderly. Older adults are often at risk of limited access to oral health care because of transportation, economics, medical illness, social and personal reasons.

RESPONDING TO GERIATRIC ORAL HEALTH NEEDS

INCREASING THE AWARENESS AND KNOWLEDGE AT COMMUNITY LEVEL

About 70% of the rural population does not have access to dental facilities [23]. Currently, only 2% [24] of the specialists are being trained in public health dentistry, whereas in a country like India, there is a greater need for these specialists to emphasize on the importance of oral health among elderly. Primary prevention, imparting dental health education and promotion of oral healthcare of elderly in underserved communities needs to be implemented by outreach activities of public health professionals.

There is need of setting up of mobile oral health care services involving multidisciplinary teams to provide domiciliary services to the elderly in the rural areas. Regular preventive dental care with portable dental equipment can be used to serve the functionally dependent elderly at home/nursing homes to reduce the development of harmful oral health conditions.

Use mass media (particularly TV) to raise the public awareness and understand the importance and benefits of good oral hygiene.

Educate the public about the harmful effects of tobacco and alcohol abuse on the oral health as it predisposes them to a high risk of periodontal disease and precancerous oral lesions. Oral cancer is more common after age sixty and early detection is among a major approach to prevention of the disease.

TRAINING IN GERIATRIC DENTISTRY

With an increasing awareness in the society about oral health and treatment needs, there has been a greater demand for geriatric specialists in dentistry. To serve them better, it is important to understand the physical, mental and socioeconomic background of the elderly, their illnesses, medication and age-related disabilities. Thus, special training in geriatric dentistry is required [22]. However, there is no institute to provide it in India. Till the time we have geriatric dentists there will remain an urgent need of specialists in endodontics, periodontics, prosthodontics and public health to club together as a part of rehabilitative team to minimize the oral disability and restore the oral health of elderly.

In the current scenario, the dental education needs to be reframed with the rising need of preparing students to care for the increasing numbers of medically complex, dentate elderly. It is time for a new model of dental education to be implemented at undergraduate level so that it is more

integrative with a variety of elderly patients, health care providers and individuals who are involved in health care management of older population.

Apart from people involved in dentistry other health professionals must be provided oral health training and information on the specific needs of older adults.

Lastly, there is an urgent need to educate caregivers in families, assisted living, supportive housing and nursing homes on how they can effectively assist older adults for oral hygiene practices.

NEED TO IMPROVE ORAL HEALTH SERVICES

To fill up the desired level of oral health amongst elderly in India, National Oral Health Policy needs to be implemented. The negative impact of poor oral health on the quality of life of elderly is an important public health issue which must be addressed by policy-makers. The need of dentists and dental auxiliaries in National Health Program was suggested for providing oral health care at primary health care (PHC) and community health care (CHC) as per the Bajaj Committee Report [25] . This was further recommended by National Oral Health Care Program, but unfortunately still the implementation part is missing at PHC and CHC level [26]. Till the time any positive step is taken by the government it is incumbent on us, as oral health professionals, to deal with this need and provide access to care for elderly patients.

The major cause of poor oral health due to the absence of primary health care approach in dentistry is the prime area of focus where oral health professionals (dentists and dental auxiliaries) should be increased. In 1990 there were 3,000 registered hygienists and 5,000 laboratory technicians in India. There are no registered dental nurses, chair side assistants and denturists [24].

To improve the shortage of dental professionals, permission to open new dental colleges was granted. Despite increased number of dental colleges (291) in the country [27], there is acute shortage of dental manpower in the rural areas due to significant geographic imbalance in the distribution of dental colleges. This has resulted in two unfavorable outcomes.

(1) Though it improved the overall dentist to population ratio, there has been a great variation in the dentist to population ratio in rural and urban areas. The dentist: population ratio is 1:13,000 in the urban areas [23] and 1:250,000 in rural areas [28].

(2) It left a big void in the geriatric oral health care services in rural areas. Since, most of the dental colleges provide free dental treatment to people in nearby periurban and rural areas.

To cover up the shortage of dentists to serve the underserved populations in rural area there is an urgent need of expanding the use of dental auxiliaries in the provision of dental services. Dental auxiliaries can provide services to rural patients without much financial impact on the health agencies. When hygienists are utilized to the full scope of preventive practice, they can free time for restorative procedures by dentists. Denturists can be utilized for directly providing removable prostheses to the elderly.

Lastly, we need support other than dentists' to help us to lobby government for geriatric dental care. It is time for us to look after the generation which brought us to this level and let them feel proud of themselves for raising us.

CONCLUSION

There is a growing demand for oral health care among elderly in India. India needs a comprehensive gerontological oral health care program with the following objectives. First, there is deficient data about the current oral health status and disease trends. Second, we need to learn more about the efficacy of the current treatment modalities. Third, the future dental needs and demands of the elderly needs to be explored. Fourth, the organization of the dental health care delivery system to catch and address the changing and probably new oral health problems of the elderly needs to be expanded. Fifth, to meet these challenges,

geriatric dentistry needs to be developed to create a trained and dedicated workforce which can effectively plan and administer geriatric oral healthcare delivery, education and research in India. Finally, the relationship between oral health and general health must be understood, if oral health care is to have a reasonable chance of success.

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