

Dental Health Care Needs for Elderly Population

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Abstract

The mouth is considered as the mirror of general health of every individual and concerning this in mind, poor dental health can be a menace aspect for general health trouble in the elderly population. Due to increase in their chronic diseases in elderly patients, they are more vulnerable to oral diseases. Thus, the geriatric population forms a distinctive group in provisions of implementation of health care. This review article discuss about the significance of dental health care needs in geriatric population.

Keywords: Dental health, Geriatric population, Preventive measures.

Introduction

Dentistry focusing on geriatric population deals with the service of dental care to old age people which involves diagnosis, prevention as well as management as well as dealing of all dental related problems related with age related diseases. In certain decades, there is an unexpected increase of the 65 plus residents globally where India is also not left behind from this blast growth. Due to advance technology and progressing development in the medical ground, it has raised the lifespan of the senior citizens. This rapid altering in the longevity of life has challenged the dental health professionals to provide and make advanced treatment for the geriatric population.¹ The mouth is considered as the mirror of general health of every individual and concerning this in mind, poor dental health can be a menace aspect for general health trouble in the elderly population. Due to increase in their chronic diseases in elderly patients, they are more vulnerable to oral diseases. Thus, the geriatric

population forms a distinctive group in provisions of implementation of health care. This review article discuss about the significance of dental health care needs in geriatric population.

Demographic profile of geriatric population:

According to reports and based on the advanced therapeutic modalities in treatment part of medical research, the life expectation has improved to 67.9 years and is setting a distressing increase in the health conditions of geriatric population globally.² In developing countries, reports suggested that by the end of the year 2020, the proposed inhabitants of all individual people aging 65 years as well as above will be approximately 470 million globally. And by the year 2050 where one third of the world inhabitants will be over 60 years. If we look into the data of our country India, then the geriatric population was 20 million in the year 1951 and 57 million in 1991 which was followed by very rapid increase in the year 2001. According to the observed growth rate of population by age during this period, the growth of 65 years and above people groups was much added extra than that of the existing total population. Therefore, it is likely to rise with a proposed population of 324 million by the year 2050.³

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There is a total number of 2 lakhs and above centenarians in India and among them 5.2% of the elderly population which consists of 28 lakhs or more male and 31 lakhs female. The two most important prominent characteristics concerning the old age of India are as

follows: a) the growth of geriatric people is very much quicker than the development of the overall population and b) the female dominance in the gender wise increase in the total population.⁴

Health conditions of Geriatric Population:

During the old age, the intake of multiple medications can be seen by the elderly people. Because of this multiple medications consumptions due to diseases results in decreased salivary flow and this will lead to compromised conditions of the oral mucosa. Normal flow of saliva in any human being has an important role to play as it helps in neutralizing the manufacture of several acids done by micro organisms which in addition helps in teeth mineralisation. Saliva gives several defending reimbursement for the oral cavity because of its content of immunoglobulin A as well as lactoferrin. If there is a lack of salivary reduction then there will be increase in number of oral microorganisms as well as their metabolic by products in the oral cavity.⁵ All these things will ultimately leads to an augment in dental diseases like caries and periodontal diseases leading to tooth loss. Maintenance of oral hygiene can be hampered due to alteration in physical as well as mental status that will result in worsening of co-ordination and motor skills. Improper maintenance of oral hygiene will contribute to prolific growth of oral microflora. Total amount of food intake sometimes reduces in nearly everyone of the elderly because of the alteration in diet as well as altered taste. Therefore it is very difficult to meet the nutritious need of the elderly people. With rise in requirement for certain vital nutrients and higher catabolic rates, it is difficult to store pace on with the overall age alterations in the elderly body.⁶ Therefore, there is a need of keeping a record of the whole dietary status as well as the manifestation of signs along with symptoms of the elderly people in regular intervals.

Residual Ridge Resorption: Residual ridge resorption (RRR) is usually meant for the alteration that will stress the alveolar ridge followed by any kind of tooth extractions that will carry on long subsequent to healing of the extraction socket. The majority important characteristic is the remaining bony architecture of the maxilla-mandible jaws which undergoes a long catabolic remodelling mechanism during this healing process.⁷ The elderly people goes through decrease in residual ridge resorption frequently. The missing teeth are need to be reimplanted or replaced by prosthesis. Sometimes long chronic health issues and economic measures also makes a considerable difference in the selection of action

as the substance costs are in general prohibitively high. In the elderly patients bone resorption activity keep on continuing throughout life which ultimately results in failure of altering amount of jaw structure, that make the patient to condition called dental cripple.⁸

Prosthetic rehabilitation in the elderly: In the elderly people many of them undergoes through the condition called tooth loss due to extraction of teeth or may be due to some other reasons. Eventually this all will lead to edentulous or partial edentulous jaw. There will be poor retention as well as steadiness of complete dentures which is the most common dental health linked complaints in edentulous patients. Poor retention generally leads to loss of bony alveolar in the jaw structure.⁹ There may be multiple reasons for resorption and the reasons may differ among every person. This happens after loss of teeth and the process of resorption process at an altering speed for the rest of the life. Sometimes systemic conditions as well as local conditions of the patient affects the resorption rate of the alveolar bone.¹⁰

Many times the missing teeth in the elderly people doesn't always mean that it needs to be replaced with dental prosthesis in edentulous person till they are satisfy socially as well as functionally.¹¹ That is why they hold-up in covering dental treatments and this decision promote complicates for their chances for absolute rehabilitations.

Due to ever growing number of elderly patient cases who are in need of oral physiotherapy necessitates new treatment strategies. Sometimes financial measures also play a major role in the preference of treatment because the materials to be used for prosthesis and other dental treatments are usually prohibitively very high.^{12,13}

Dental sanitation in addition to dental mucosal lesions: Due to missing teeth in the elderly person and also difficulty in chewing and other physiologic functional conditions, they prefer dentures for their jaws. Prolonged use of dentures leads to various oral mucosal lesions like denture stomatitis, flabby ridge as well as irritation hyperplasia, angular cheilitis and traumatic ulcers as well as even cancer can also be linked with long duration utilization of unhealthy or grossly damaged out not fixed dentures. Many oral mucosal lesions are found out to be provocative as characteristics feature in may studies.¹⁴

Candida albicans is one of the widespread microorganisms that is related to denture tiring. Patients wearing dentures at night as well as smoking as a habit has been correlated in various studies.¹⁵ There has been a significant effect of denture cleanliness, age of the patient and drugs utilization as linked with wearing of denture that had been reported in studies. Moreover sometimes due to less salivary flow rate in elderly patients, there may be predisposition of oral mucosa to the alteration of pathology for the reason that of its related linkage with the presence of yeasts within the oral cavity.¹⁶

Ill fitting dentures induce trauma to the oral cavity which ultimately believed as the major cause for denture sore mouth as well as hyperplasia of tissue. Sometimes new dentures also develop ulcers within a small number of days after fitting of denture. Therefore, patients should be advised to follow up regularly every four to six weeks for new dentures in addition to every six months after that. Immediate and proper intervention should be made to avoid trauma due to age changes of the mucosal changes inside oral cavity.¹⁷

Protocols for Oral health care for old age people:

Everybody has to deal with ageing which is to be anticipated, irreversible and also a reality. As people starts getting to their old age, the objectives of their oral health planning need to be refocused with regard to the common health as well as financial conditions of the aged people. That is why it is imperative that people could necessitate to do with to have right of entry to oral health care that is generally based on concepts of preventive method along with which can be actively involved in making actions about oral health from their early 50's or 60's. This timely oral health planning will help them maintain into their old age dental needs.¹⁸

There has to be sustainable oral health care need in any dental treatment scenario specially in case of elderly people. Oral health intervention should always be based on evidence based practice containing existing information on the occurrence, division as well as determinants of oral diseases based on its cost effectiveness of any type of intervention. Therefore, there should be oral health surveys which can supply latest as well as genuine information about all the aspects of dental health status, disease as well as their determinants. Also, there will be gradual decrease in immunity which will stimulate in increasing the menace of transmittable disease. Infections like pneumococcal influenza or tetanus as well as zoster are very common

among the elderly population.¹⁹

Mechanism of Dental health services: Expansion in the medicinal field have encouraged the disable older generation to exist longer. According to the reports, there has been a rapid increase in the rate of longevity in the old age population, therefore, there has been a speedy demand in the requirement of residential dental care services. Old age people find difficulties in approaching the dentist and also it is cumbersome to bring them to the dentist.²⁰ Therefore, the best decision could be if any dentist could reach the elderly people. There should be some provisions and services to be made out to reach them who are in need of dental care. While planning out the comprehensive dental treatment plan for the elderly patient, care has to be taken out for their medical condition.

According to the researchers, Macentee and Waytt, developed an index known as Clinical Oral disorders in elders (CODE) for disabled geriatric people. CODE guide is based ahead of clinical measures of 27 disorders that covers 5 major areas: Jaw movement, dentures, mucosal health, teeth and periodontium. But all these things are united with a psychosocial index which forms a very brief indicator of oral dysfunction in the elderly.²¹

Kenneth Shay, a researcher has provided a five point Geriatric Dental Assessment tool called OSCAR:²²

O- Oral – Teeth, restoration, prostheses, periodontium, pulpal status, oral mucosa, saliva

S- Systemic – Normative age changes, medical diagnosis, pharmacologic agents

C-Capability – Functional ability, self care, oral hygiene, transportation to appointments

A-Autonomy – decision-making ability, dependence on alternative

R-Reality – Prioritization of oral health, financial ability or limitations.

Dental health researchers should try to deliberate on OSCAR assessment tool as it influence the treatment plan that requests the meticulous integration of dental as well as non dental measures.

Challenges regarding dental health care services to geriatric population: With improved and rising

long life span in elderly patient, the dental disease pattern as well as treatment requirements are varying according to the advanced dental technologies, the old age persons are retaining more natural teeth into old age than before. Therefore, there is an increase in the need of numerous dental treatments including restorations, prosthesis as well as esthetics as well as even implants all of which require special care. The challenges arise in elderly people when their unwillingness towards treatment as well as suboptimal perception of treatment requirement, and the limitations on operational time could be harassing to health care professionals. Many have restricted mouth opening or they will be unable to keep it open for long time. Therefore, there is a need of modifying the approach towards these patients.²³

Conclusion

Oral health is important in every phases of life assume superior value at extreme old age also. The negative impact on the oral well being of the elderly persons affects the general health also. Therefore, there is a need to take special care for the dental treatment needs of the geriatric people.

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