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REVIEW ARTICLE

Impact of Oral Health on Quality of Life

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ABSTRACT

Oral health and quality of life is an integral part of overall health and well-being. Oral health can affect people physically and psychologically and can influence many aspects as to how they enjoy life, socialize, and maintain their social well-being. The psychosocial impact of these diseases on quality of life is significant. General and specific aspects of oral health have an influence on quality of life. The present study aims to study the influence of oral health on quality of life.

Keywords: Dental caries, Health education, Oral disease, Oral health, Oral health-related quality of life, Periodontal disease.

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INTRODUCTION

Oral health-related quality of life is defined as a "self-report specifically pertaining to oral health-capturing both the functional, social and psychological impacts of oral disease." It reflects people's comfort when eating, sleeping, and engaging in social interaction, their self-esteem, and their satisfaction with respect to their oral health.[1]

Oral Health: An Integral Part of Overall Health

The oral cavity teems with bacteria. Normally, the body's natural defense mechanisms and good oral hygiene care keeps these bacteria under control.[2] However, without proper oral care, bacteria can reach levels that might lead to oral infections. In addition, reduction in salivary flow caused by certain medications, such as decongestants, antihistamines, analgesics, diuretics, and antidepressants causes overgrowth of bacteria.[3] Oral health might contribute to various systemic diseases and conditions. Bacteria from the mouth spreads through the bloodstream infecting the inner lining of the heart causing endocarditis. Inflammation and infections caused by oral bacteria cause stroke and other cardiac diseases. Periodontitis secondary to pregnancy has been associated with premature birth and low birth weight babies. In addition, systemic diseases like diabetes, human immunodeficiency virus/acquired immunodeficiency syndrome (AIDS), osteoporosis, and Alzheimer's disease are manifested orally.[4]

Oral Health and Quality of Life

Oral health and quality of life is an integral part of overall health and well-being. The World Health Organization has described oral health-related quality of life (OHRQoL) as an important element of Global Oral Health Program. Presently, the aim of dental research is not only rehabilitating oral disease but also enhancing the relation between oral health and quality of life.

Oral health can affect people physically and psychologically and can influence many aspects as to how they enjoy life, socialize, and maintain their social well-being.[5] The psychosocial impact of these diseases on quality of life is significant. General and specific aspects of oral health, as the use of prostheses, surgical treatments, parafunctional habits, dental pain have an influence on quality of life.[6] Millions of productive workhours are lost each year as a result of oral diseases.

Oral Conditions impacting Quality of Life

Tooth loss is one of the worst types of damage to oral health, causing esthetic and functional problems. In addition to the microbiological causes of tooth loss like dental caries and periodontal disease, socioeconomic factors also contribute to oral health associated with tooth loss. Studies indicate that extensive tooth loss impairs chewing efficiency. Persons with partial or complete edentulousness are more likely to substitute softer food alternatives, such as those rich in cholesterol and saturated fats for foods rich in fibers, carotenes, and vitamin C. The reduction in essential nutrients leads to poor oral health.[7] Among older persons, tooth loss has been shown to be associated with both weight loss and obesity. Partial or complete edentulousness affects physical appearance, thereby lowering person's self-esteem, and altered speech reduces social interactions. Dental caries affects 50 to 60% of the population. Among toddlers

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and preschool children, nursing bottle caries is one of the most common health problem.[1] Children experience pain, discomfort, and higher risk of hospitalization, high treatment costs, and loss of school days with the consequential diminished ability to learn. A chronic toothache causes poor food intake causing altered dietary intake and metabolic processes resulting in loss of weight in children less than 3 years.[8] Dentofacial abnormalities and malocclusion are highly prevalent and can influence the overall functioning, thus playing an important role in social acceptance and interactions. It has adverse effects on self-image, social interaction, and daily behavior of the individual.[9,10] Improvement in esthetic satisfaction after treatment of severe malocclusion improves self-confidence, thereby improving OHRQoL.[11] Study results showed that hypodontia caused oral symptoms in 100% children, functional disability in 88%, and emotional and social limitations in 88% of the children. However, the level of impact depends on the number of missing teeth. Difficulty in chewing was observed among the elderly.[12] Females reported a greater impact on OHRQoL than males. Differences in perception of beauty and esthetic standards as imposed by prevailing social demands and personal needs could be the cause of this difference.[13] Untreated oral diseases does not resolve if left untreated and can profoundly impact the quality of life. Pain secondary to untreated oral diseases can restrict day-to-day activities and disturb sleep. In advanced states, pulpal involvement of the tooth destroys tooth structure leaving only root fragments that can lead to abscess. Periodontitis can destroy the supporting tissues of the teeth and also lead to abscesses that result in swelling bleeding and pain. Untreated caries and periodontitis ultimately leads to tooth loss.[14] Failure to prevent or control the progression of oral disease may increase the risk of adverse health outcomes. A recent Cochrane systematic review found evidence that the treatment of periodontal disease improved metabolic control among persons with type II diabetes. Another recent study found that invasive dental procedures (periodontal therapy and tooth extraction), likely avoidable with early treatment and prevention, increased the incidence of ischemic stroke and myocardial infarctions.[15] Studies have demonstrated a similar association between oral hygiene and positive health outcomes. Two systematic reviews found that enhanced oral hygiene care can prevent respiratory infections and death from pneumonia in elderly people in hospitals and nursing homes.[14] Oral complications of many systemic diseases also compromise the quality of life. Problems with speaking, chewing, taste, smell, and swallowing are common in neurodegenerative conditions, such as Parkinson's disease; oral complications of AIDS include pain, dry mouth, mucosal infections, and Kaposi's sarcoma; cancer therapy can result in painful ulcers, mucositis, and rampant dental caries; periodontal disease is a complication of diabetes and osteoporosis. Some drugs have side effect of dry mouth. Patients with xerostomia complain of problems with mastication, speech, swallowing, and wearing dentures. Xerostomia can also have a major impact on a patient's oral health and quality of life.[16]

RECOMMENDATIONS

Oral diseases are not perceived as life threatening or serious by a majority of Indians and hence oral health is generally given a low priority.[17] In spite of continuous efforts for health promotion, health has remained to be a neglected entity. India is the second highest populated country with more than 1030 million people,[18] out of which approximately 72% live in rural areas and remaining 28% in urban areas. There are several challenges being faced in delivery of oral health care to the rural population, such as lack of manpower and poor accessibility, which is compounded by poverty and illiteracy. National public health initiatives for the control and prevention of oral disease need to include oral health promotion and integrated disease prevention strategies based on common risk factor approaches.[19] Health policies and health education play an important role to help individuals make healthy informed choices for preventing oral diseases.[17] Oral disease burden mandates the need for specialized oral health promotion program targeting the geriatric population, particularly the institutionalized and home bound, in order to improve their oral health. Finally, dependent elderly with low socioeconomic status should be provided with low-cost dental treatment at public and private oral health care centers.[20] India has demonstrated a marked increase in sugar consumption in recent years. This shows that an increasing consumption of low nutritional value foods or junk foods and refined sugars in the form of chocolates and other sticky sugar-rich foods, especially in younger generations, may be contributing to an increase in dental caries and periodontal diseases.[21] It is recommended to implement nutritional counseling, covering not only the general health aspects of good nutritional behavior but also emphasizing the aspects directly linked to oral health, increasing awareness among the people regarding the use of fluoride toothpaste or fluoride containing tooth powders. Fluoride supplementation and primary care screening is an area for possible intervention. Preventive program, like fluoride supplementation program, is being recommended because it has been demonstrated to be cost-effective and beneficial.[8] Increasing access to oral health care for the general public by increasing dentist to population ratio can be done. In developing countries, such as India, there has been very little investment in oral

health care, which needs to be improved. Oral health through primary prevention and strengthening existing oral health care setup is highly recommended. School-based oral health promotion program is the primary component of this intervention. There is a great need for health education programs to create awareness, educate, and motivate people toward oral health. Training camps for the Anganwadi workers, health workers, and school teachers who in turn will help screening and referral of the population requiring treatment. Creating awareness about the health hazards of tobacco and alcohol should be promoted. Mass oral screening programs can be taken up for the high-risk groups to identify and treat premalignant lesions and conditions.[8]

CONCLUSION

The OHRQoL can provide the basis for any oral health care program, and it has to be considered as one of the important elements of the global oral health care program. Unhealthy dietary habits, smoking and tobacco-related habits, alcohol consumption, and stress are some of the common risk factors that affect quality of life of people in India. Oral health is integral to general health and a basic human right. Concerted and collaborative action needs to be mobilized, maintained, and strengthened to address the high burden of oral disease and the vast inequalities in access to oral health care existing within and between countries. Oral diseases, such as dental caries and periodontal disease are highly prevalent. Oral problems impair quality of life in a large number of individuals by compromising oral function, appearance, and interpersonal relationship. The consequences of oral problems are physical, economic, social, and psychological. Dental education has to make a contribution if this situation is to change. Cultural values influence oral and craniofacial health and well-being, and can play an important role in utilization of oral health care facilities and in perpetuating acceptable oral health and facial norms. Finally, with rapidly changing knowledge base and technology in all health care fields, interdisciplinary considerations and collaborations become increasingly important. By including oral health into general health and by assessing social aspects of oral health, health planners can greatly enhance both general and oral health.

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