International Journal Dental and Medical Sciences Research
Volume 5, Issue 1, Jan-Feb 2023 pp 442-446 www.ijdmsrjournal.com ISSN: 2582-6018

Oral Health & Oral Health Behaviour in Young Adults with Caries Disease

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Submitted: 01-02-2023 Accepted: 10-02-2023

ABSTRACT
This review presents the most recent studies and evidence oral health & oral health behavior in young adults. Oral health is affected by many determinants such as oral health behavioural pattern , lifestyle, social impacts such as health care availability and society in which the person resides. Current understanding of these interconnections have prompted the development of a new approach for oral health promotion, which recognizes the forementioned determinants. These conditions will only be controlled by the promotion of initiatives that prioritize the improvement in the social determinants of health as a backbone structure for the development of
healthy enabling environments.
Keywords : dental caries, oral health, behavior, young adult

I. INTRODUCTION

Dental caries in permanent dentition is one of the world's most common diseases, affecting individuals throughout their lifetime. It may cause pain, discomfort, and anxiety and, if left untreated, lead to the spread of infection and tooth loss. This condition may not only affect an individual's ability to eat and speak properly but may also result in lost work and school hours and affect the individual's overall wellbeing. Dental caries is a multifactorial disease caused by both biological and behavioral factors, some of which (e.g., diet) are shared with other non communicable diseases (diabetes, heart disease, cancer).[1]

Several studies have been published concerning the associations between the effects of different risk factors (such as dental anxiety, oral health care habits, attitudes, socioeconomic status), over and above well-known etiological factors such as sugars and different types of bacteria with cariogenic properties, for the occurrence and distribution of oral diseases (i.e., dental caries).[1]

These diseases can lead to nutritional compromise and negative impacts upon self-esteem and quality of life. As complex chronic diseases, they share common risk factors, such as a requirement for a pathogenic plaque biofilm, yet they exhibit distinct patho-physiologies. Multiple exposures contribute to their causal pathways, and susceptibility involves risk factors that are inherited (e.g. genetic variants), and those that are acquired (e.g. socio-economic factors, biofilm load or composition, smoking, carbohydrate intake). Identification of these factors is crucial in the prevention of both diseases as well as in their management.[1]

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.[2]

The health of all peoples is fundamental to the attainment of peace and security and is dependent on the fullest co-operation of individuals and States.[2]

Oral health is a state of being free from mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual's capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing.[2]

Dental caries is an irreversible microbial disease of the calcified tissues of the teeth, characterized by demineralization of the inorganic part and destruction of the organic substance of the tooth, which often leads to cavitation of the tooth.[7]

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Etiology and behavioural effects on oral health

Around the globe, nearly 60-90% of children and almost 100% of adults suffer from tooth decay ,pain and discomfort being the most common symptom among the others according to World Oral Health Report 2003.The circumstances that contribute to the formation of caries comprises of unhealthy diet, tobacco use and use of harmful levels of alcohol. Poor oral hygiene may also lead to the four main chronic disorders such as cancer, diabetes ,chronic respiratory diseases and cardiovascular diseases. The ubiquity of dental caries differs by geographical location ,availability and accessibility of oral health services. The incidence of dental caries prevalence is increasing its endurance among poor and disadvantaged population groups. For children 5 to 19 years of age, children from poor and racial or ethnic minority families have higher rates of untreated dental caries than do their peers from non-poor and non-minority families.[4]

In the upcoming generations, teenagers are emerging to be increasingly afflicted by this disorder. Due to present case scenarios of inflating consumption of saturated and unsaturated sugars, the incidence of caries at a very early age is on the rise. Preventive schemes for this multi-factorial chronic disease needs an encyclopaedic and a multi-index outlook on caries risk- assessment and discovering the impacts of dental caries in the affected person. There is no solitary test to assess the risk factors and receptiveness of the patient. However, an eminent risk assessment can be performed for caries by paediatricians by highlighting the key risk components of caries attack namely diet, bacteria, saliva and status of teeth. Dietary counselling and introduction of the person to measures of producing the required outcomes of oral hygiene, are essential key factors to promote the elimination of a predicted caries attack. There is now a rising recreation in how caries influences the affected person. To date, the most popular line of enquiry into caries-related impacts has been through the use of oral health-related quality-of-life (OHRQoL) measures. These are formatted in the form of questionnaires to answer queries related to function limitations, oral manifestations, physical and emotional well-being.[4]

Good oral health and quality, accessible dental care are not possible without additional investment in preventive care and treatment services. However, value for money requires investment in the areas of greatest overall benefit. This supports an investment in oral health promotion, early diagnosis, specific preventive and treatment services for young adults. Identification of risk indicators can facilitate the targeting of such measures. Given the significance of public sector use as a risk indicator such oral health promotion and specific preventive services should be targeted through the public sector as well as the private sector as an investment in lifelong oral health gains. Affordable dental programmes targeted at young adults providing basic preventive and restorative care should be developed, either through the public system or through low cost insurance packages. Such programmes would provide timely interventions to improve oral health. Young adulthood is a time of many changes including changes from dependence to independence, from living with parents to living with partners, from education to the workforce. Good health habits may be at risk during this period and special attention by those in dentistry is required. Dental professionals could work with those in general health and other support programmes to target young adults with patterns of at risk behaviour. At a clinical level a broader health approach including smoking cessation and counselling about other unhealthy lifestyle factors may also assist in addressing risk factors for oral ill-health.[3]

Importance of oral health in adults

The teenage years (12-17) are a crucial time for a person's physical and mental development. Most teens understand that and the benefits of having a health-focused attitude towards their changing minds and bodies. Even though adolescence can be a challenging and confusing time for teens, most recognise the importance of good nutrition, exercise and skin health care (i.e., no pimples). Oral health care is also an important health concern for teens, yet it often gets overlooked. Teens can develop a false sense about their oral health.[8]

Most serious oral health conditions experienced by older adults, such as gum disease, recessed gums and tooth loss, are degenerative oral conditions that start with humble beginnings during adolescence. Consider tooth plaque. Plaque – that fuzzy white stuff that can build up on your teeth – might seem harmless enough. It can be scrapped off with your fingernail. But if you allow plaque to remain on your teeth along the gum line for another 10 to 20 years – especially in hard to reach places – it will slowly penetrate the gum line, and move along your tooth roots into your gums.[8]

By then you have a high risk of experiencing periodontal disease – a serious oral health condition that can lead to tooth loss and

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other health issues. It's a gradual process that can take decades.[8]

Relationship With Oral Health And Lifestyle

"Lifestyle is associated closely with particular ways of living promoted through advertising and branding form ". Lifestyle generally means a pattern of individual practices and personal behavioural choices that are related to elevated or reduced health risks.

Lifestyle forms an important part of our lives that influences the overall health of an individual along with the oral health. Various lifestyle factors, such as smoking, alcohol, stress, education status, diet and nutrition, have an immense influence on the health.

Lifestyle is a way of living that reflects the attitudes and values of a person or a group. It is a diffuse concept that is often used to denote the way people live, reflecting whole range of social values, attitude and activities, and it is composed of cultural and behavioral patterns and lifelong personal habits that have developed through the process of socialization and are learnt through social interactions from parents, peer groups, friends an d siblings or through school and mass media.

It also affects the health, where some of the present-day health problems, e.g. coronary heart disease, cancers and drug addiction, and social disparities in the adolescents' oral health behavior have been demonstrated in the developing countries and elsewhere, with oral health detrimental behaviors being the most common in the subject of lower socio demographic status.

They determine the occurrence and susceptibility of disease in an individual. It is worldwide strengthening of public health programmes through the implementation of effective procedures for t h e prevention of oral disease and promotion of oral health is urgently needed. The challenges of improving oral health are particularly great the developing countries. The entire burden for improved health must not be placed on an individual alone. The responsibility must be shared between individuals and their families; between families and their communities; and between communities and their state, provincial and national governments.

Each level of organizational influence on the behaviour must assume some responsibility for setting the economic and environ mental conditions that will support healthy lifestyles. In short, the achievement of optimum health demands adoption of healthy lifestyles. Thus it's important for us to know the influence of lifestyle and oral health.

Social Impact On Oral Health

In a time of health system transformation, greater attention is now being paid to access, utilization, and quality of health care and its effects on population health. Similarly, research and case studies highlighting the importance of poverty, the physical environment, and educational attainment among others on health outcomes provide a better understanding of the complex social and structural determinants of health.

The landmark 2008 report of the World Health Organization's (WHO) Commission on Social Determinants of Health and the "The Marmot report" for the UK in 2010 clearly showed evidence for a social gradient in health, which is closely related to the social and economic factors that determine the conditions of daily life. The place in

the social hierarchy that individuals and groups occupy, in addition to the environment, then determines exposure to health- enhancing or health-damaging conditions in daily life.

Oral diseases share the same determinants and risk factors as the main NCDs comprising heart disease, cancer, chronic obstructive pulmonary disease, diabetes, dementia, and stroke. We know many oral diseases is associated with socioeconomic status, which links to family income, educational attainment, employment status, housing, physical health, and mental health.

Children and young people in poorer areas have worse general and oral health than those in the more affluent neighborhoods. Current understanding of these associations have prompted the development of a new approach for oral health promotion, which recognizes that the behaviors accounting for the most important NCDs contribute to oral diseases as well.

The "Common Risk Factor Approach" (CRFA) is directed to reducing risk factors common to a number of NCDs, and addresses the SDH from an integrated and comprehensive health care approach.

Most of the factors influencing health; such as experiences in the early years, education, working life, income, and environmental conditions, lie outside the immediate reach of the health system. Health professionals, however, have an important role to play in tackling health disparities amongst their own patients and more widely in the community and promoting health equity.

Current understanding of the social determinants indicates that significant

improvements in health could be achieved if medical, dental, and public health professionals address these broader influences on health out-comes while maintaining excellence in traditional disease control approaches. Oral diseases like dental caries, periodontal disease and oral cancer, issues such as poor access to dental care, and low oral health literacy levels are social, political, behavioral, and medical in nature.

These conditions will only be controlled by the promotion of initiatives that prioritize the improvement in the SDH as a backbone structure for the development of healthy enabling environments.

New models for oral health care are needed that allocate much more resources to population based promotion directed at the social determinants of risk factors common to NCDs. Unless these determinants are addressed, improving access to dental care, will only alleviate but never substantially reduce, the burden of dental diseases.

HOW SOCIETY INFLUENCES ORAL HEALTH

We know manyoral diseases is associatedwith socioeconomic status, which links to family income, educational attainment, employment status, housing, physical health, and mental health. Children and young people in poorer areas have worse general and oral health than those in the more affluent neighbourhoods.[5]

Oral diseases refer to conditions of the teeth, gums and mouth, and include dental caries, periodontal disease, and oral cancers. The impact of these conditions on quality of life is high, they are very common and their treatment is costly, therefore they are considered a major public health problem. Oral diseases are socially patterned, disproportionately affecting socially disadvantaged and marginalised populations. Because oral health and general health are inextricably linked and share common risk factors, caries and periodontal disease are useful markers of general health, and overall patterns of health inequalities. The literature on life course epidemiology applied to oral health is still limited, although there is a strong argument for studying oral diseases within a dynamic life course framework: they are chronic in nature and cumulative over time. Critical periods, as well as accumulation of risk models are applicable to oral diseases. Given that childhood diet and oral hygiene are related to socioeconomic and psychosocial factors, and that tooth loss is irreversible, adult oral health is rooted in early life conditions, while upward and downward social mobility influences oral health trajectories.[2]

Oral diseases are caused by a range of modifiable risk factors, including sugar consumption, tobacco use, alcohol use and poor hygiene, and their underlying social and commercial determinants.[2]

The World Health Organization says cultural factors that increase the risk of poor dental health include inadequate fluoride exposure, living in a poor or disadvantaged country, insufficient access to proper dental care, unhealthy diets, poor oral hygiene, tobacco use and excessive alcohol use.[2]

The environment affects oral health as without access to clean water, people living in developing and underdeveloped countries may suffer oral health deterioration well into their adulthood. This leads to tooth loss, gum disease and even oral cancer. Air pollution influences the development of oral clefts in animals.[2]

Social determinants of health are the conditions in which people are born, grow, live, work and age. They include factors like socioeconomic status, education, neighborhood and physical environment, employment, and social support networks, as well as access to health care.[2]

II. CONCLUSION

A higher burden of caries disease was associated with poorer oral health-related quality of life, more gingivitis, and higher consumption of sugar-containing sodas, and less frequent dental care attendance. It is obvious, based on these results, that despite the fact that all children in Sweden are offered full regular dental care free-of-charge up to young adulthood with a focus on prevention, young adults with severe caries disease still display a combination of different known risk factors with regard to health behaviors and perceived oral health-related quality of life. The findings may also contribute to identifying high caries-risk individuals. These individuals require special attention and care in the clinic. The dental profession may also need better tools in the clinic and collaboration with other professionals, such as dieticians and psychologists, in order to help individuals with severe caries disease.[1]

REFERENCE

[1]. Oral health and oral health behavior in young adults with caries disease Jennie Hagman , Ulla Wide , Helene Werner and Magnus Hakeberg.
[2]. World Health Organization. Oral Health. (Accessed 2018).

[3]. Risk indicators of caries experience among young adults K Roberts-Thomson, JF Stewart
[4]. The Influence of Dental Caries on Young Adults from their Perspective. A.Shreya Svitlana I B.D.S, Department Of Fundamentals Of Dentistry Saveetha Dental College, Chennai 600077
[5]. Dr. Geo Mani Department of Fundamentals Of Dentistry Saveetha Dental College Chennai 600077
[6]. Social Determinants and Oral Health: An Update Marisol Tellez & Avi Zini & Saskia Estupiñan-Day
[7]. LifestyleandOralHealth-AReview :- Khushboo Singh, Ashish Singla, BasavarajP, Shilpi Singh, SwatiJain, Hansa Kundu , Ravneet Malhi, Ritu Gupta, Taru Gupta
[8]. Shafer's Textbook of Oral Pathology, 6/e. 6th Edition
[9]. The importance of good oral health for teens by Dr Sonny Lee | Oct 7, 2017 | Oral Health Children, Oral Health Tips and Facts, Oral Hygiene Care, Prevention