



The Current Aspects of Oral Health Promotion: A Narrative Overview

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Abstract

BACKGROUND: Various models have been described in the literature on how health can be promoted. Most relate to health in general, but the basic principles apply to the same degree to oral health. Oral diseases are largely preventable; but today, there is a limited implementation of the ideas of health promotion in dentistry, due to a philosophy of dentistry focused on a curative and individualized approach to oral diseases.

AIM: The present study aims to outline the current aspects of oral health promotion in dental practice.

MATERIALS AND METHODS: A comprehensive literature search was conducted, mainly using PubMed and Embase from 1986 through October 2021, results reviewed, prioritized, and findings compiled. The following search terms were used: "Oral health;" "oral health or oral condition;" "oral health related quality of life;" "health promotion;" and "dental practice." Thirty-one studies were evaluated for the review.

RESULTS AND DISCUSSION: Oral health promotion is based on the need to change the cognition, motivation, and behavior of the individual aimed at the improvement of oral health and prevention of diseases. This is a challenging goal to achieve. It has been established that the acquisition of knowledge does not necessarily lead to a change in behavior. The current concept of oral health promotion recognizes the importance of the surrounding physical and social environment, lifestyle, individual behavior, and accessibility of health services. The so-called "Approach to the common risk factor" was introduced and established itself. It is based on the fact that many diseases have common predisposing risk factors. The approach to the general risk factor justifies dental professionals for the development of multidisciplinary partnerships. This makes it possible to prevent various illnesses more efficiently and cost-effectively than by just focusing on one specific disease.

CONCLUSIONS: The concept of health promotion needs to be popularized and established as an effective practice for improving public health, both among the general public and among the medical community. The imposition of a promotional approach in dental practice requires interdisciplinary cooperation with other health professionals and the limitation of the curative one.

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Keywords: Oral health; Oral health or oral condition; Oral health related quality of life; Health promotion; Dental practice

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Introduction

Good oral health is essential for general health and well-being and the impact of oral disease places a considerable impact on individuals, families, and the community. Health promotion is any planned combination of educational, political, regulatory, and organizational support for actions contributing to the health of individuals, groups, or communities. Various models have been described in the literature on how health can be promoted. Most relate to health in general, but the basic principles apply to the same degree to oral health. Oral diseases are largely preventable; but today, there is a limited implementation of the ideas of health promotion in dentistry, due to a philosophy of dentistry focused on a curative and individualized approach to oral diseases.

Objective

The present study aims to outline the current aspects of oral health promotion in dental practice.

Materials and Methods

A comprehensive literature search was conducted, mainly using PubMed and Embase from 1986 through October 2021, results reviewed, prioritized, and findings compiled. The following search terms were used: "Oral health;" "oral health or oral condition;" "oral health related quality of life;" "health promotion;" and "dental practice." Two independent reviewers read the abstract and included studies according to their content. In case of disagreement, a third reviewer made the decision after reading the title and abstract. Thirty-two studies were evaluated for the review.

Results and Discussion

Good health is a key resource for social, economic, and personal development, serving as a

measure of the quality of life. Political, economic, social, cultural, all environmental, behavioral, and biological factors can have both a beneficial effect on the health of each person and be hazardous to them. Health promotion aims to make these conditions favorable, for them to be beneficial to the well-being of the person [1]. Receiving such support requires the involvement of political and economic circles. Such support should be received from various social, cultural, and environmental organizations.

Health promotion focuses on achieving equity in healthcare. It aims to reduce disparities in health status and ensure equal access to reaching their fullest health potential. This includes security and support in their environment, access to the necessary information, and the opportunity for health-conscious choices. People would not be able to achieve full health if they were not able to control the factors that determine it [1].

The health-care sector could not independently provide the preconditions leading to better health. Coordinated actions are required from all of the participating parties – government, social and economic sector, NGOs and voluntary organizations, local authorities, media, people from all walks of life – such as individuals, families, and communities. Occupational and social groups, as well as health-care providers, have a huge responsibility to mediate between the various interests of society, to achieve better health [1].

Oral health promotion is based on the need to change the cognition, motivation, and behavior of the individual aimed at the improvement of oral health and prevention of diseases [2]. This is a challenging goal to achieve. Childhood [the earlier the better] is the time when it is possible. Organized kindergartens are the appropriate place. All of this must be supported by a set of means and with the participation of numerous organizations. For the promotion of oral health to be exhaustive, it is necessary to take several factors into account on which its realization depends. The main conditions on which health depends are peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice, and equality [1]. Peacefulness and security, the living environment, and the supply of basic human needs are the most important prerequisites for health improvement in society. Only after satisfying all these basic conditions of existence would it be possible to build the value of “oral health” [1].

It has been established that the acquisition of knowledge does not necessarily lead to a change in behavior. The current concept of oral health promotion recognizes the importance of the surrounding physical and social environment, lifestyle, individual behavior, and accessibility of health services. The so-called “Approach to the common risk factor” was introduced and established itself. It is based on the fact that many diseases have common predisposing risk factors. Sugar-rich diets and smoking are examples of behaviors that harm oral health and therefore overall health [3]. The quantity and quality of evidence in the field of oral

health promotion are scarce. The main investigations are conducted on the most appropriate evaluation methodology. It is suggested that a randomized trial is not the most appropriate measure to determine the effectiveness of oral health promotion. The combination of qualitative and quantitative methodologies may be more appropriate for evaluating oral health promotion activities [4], [5]. The promotion of health laid out in the Ottawa Charter refers to the process of increasing control over health determinants [6], [7], [8]. Health promotion evaluation is important as a means of developing effective interventions, sharing, and distributing examples of good practices, making optimal use of limited resources, and providing feedback to the staff and participants [6]. Implementing this definition requires that promotion initiatives be comprehensive and sustainable in many ways. It is emphasized that in addition to the combination of optimal biological, social, and behavioral factors, those of the environment are also important [7], [8]. Therefore, the promotion of oral health can be defined as a planned effort to create a favorable environment, strengthen community action, develop personal skills, and reorient health services in ways that will influence these factors [8]. Good health is a key resource for social, economic, and personal development. Various political, economic, social, cultural, environmental, behavioral, and biological factors can improve or negatively impact health. We are witnessing how the goals and priorities of healthcare systems are changing. From individual care for physical survival, health is becoming a major social goal of governments and the global medical community; in a means that makes the economic and social engagement of the people and the development of society possible. At the same time, the approaches and means to achieve them are changing. Taking into account the current trends of morbidity and the limited resources of the health-care system, in public healthcare, it is convincingly concluded that prevention of illnesses and promotion of health will contribute much more to preserving life and improving its quality than traditional medical interventions. There is an awareness of the need to overcome medical determinism and replace it with an integrated approach to protecting and strengthening health.

A review of the literature shows an abundance of similar evidence in a wide range of areas that highlights the limitations when the WHO definition of health is defined as a state of complete physical, mental, or social well-being of an individual and not merely the absence of disease or infirmity [9]. A definition of oral health is given in the Oral Health report, according to which it is defined as freedom from orofacial chronic pain, oral and pharyngeal cancer, soft-tissue lesions, congenital defects of the lips and palate, and other diseases affecting the craniofacial complex [10]. There is another definition of oral health – comfort and functionality of the dentition, which allows the individual to continue to perform their desired social role [11]. Therefore, oral health should be considered a part of

the overall health and has an impact on people's health, well-being, and quality of life. The question of the extent to which health programs perform their function of achieving the desired oral health and habits and the duration of their strength remains in the scientific community [12]. Several scientific studies have shown that oral pathology is the cause of problems in various organs and systems or that the oral cavity mirrors a person's general health [12], [13]. A healthy person is free from pain and suffering and can integrate into his social environment [14].

The approach to the general risk factor justifies dental professionals for the development of multidisciplinary partnerships [14], [15]. This makes it possible to prevent various illnesses more efficiently and cost-effectively than by just focusing on one specific disease [14], [15]. For this reason, health promotion involves active work with various interested parties, including non-professionals in the field [1], [14], [15]. Bastos *et al.* [16] and Bhamrah *et al.* [17] only observed a temporary improvement in the level of oral hygiene in the target group of children. Therefore, the evaluation of programs should be done at certain intervals after their completion to establish the longevity of the effect [16], [17]. Although widely recognized as important, evaluation is an often overlooked part of the practice. There are many reasons for the lack of progress in this regard, such as the lack of knowledge, confidence, and skills of practitioners, inadequate provision of resources, time, and support for the conduction of the evaluation, uncertainty in determining the appropriate framework for this. The quality of the assessment has in many cases been reported as poor [2], [18], [19]. The evaluation of the performed activity should be a key element in the planning of each subsequent one. Throughout the training process in the medical universities, there are elements of the behavioral sciences included in the disciplines, such as "Public dental health" and "Prevention of oral diseases" in pediatric dentistry. It is appropriate to develop postgraduate courses in which the impact over the lifestyle is seen as Health promotion – a discipline focused on strengthening the ability of the individual and society to increase control over the determinants of health [19]. This approach has been used by many dental professionals and is different from the Ottawa Charter's definition of health promotion [20]. The conventional approach for improving oral health proves to be restrictive and ineffective in its ability to create better long-term health [14], [21], [22], [23]. Typically traditional health education strategies do not take into consideration the leading causes for poor oral health – the so-called "health determinants" [14], [23]. Dental education should be included in the training to help reach the realization that everyone is responsible for their oral health [21], [22], [23]. The rationale is that if people possessed just the knowledge necessary to maintain good oral hygiene, proper nutrition, and on the suggested frequency of dental visits, a behavior change can occur

and good oral health can be achieved [21], [23]. Oral hygiene, nutrition, and the frequency of visits to the dentist are influenced by factors such as education, social assistance, and income [14], [22], [23]. Watt points out that improvements to oral health depend on the implementation of public health strategies focused on the main factors of oral diseases [23]. Personal attitude toward health has an impact on general health, but growing evidence suggests that social determinants have a greater impact [24], [25]. The WHO identifies poverty, economic inequality, social status, stress, early childhood education, and care, social exclusion, employment, and job security, social support, and food security as the most important social determinants of health [26], [27], [28]. As a result, public health is increasingly more focused on factors that recognize the limited effectiveness of educational strategies used to improve the health of the population [26]. Health promotion as a discipline emphasizes the importance of developing the public policy on health education and building strong partnerships [26]. Downie *et al.* opinion is that efforts to promote oral health are often aimed only at health education initiatives [29]. Arguments in favor of shifting the focus from health education or enlightenment to health promotion take into account the main social factors influencing oral health by adopting an approach toward the main risk factor [30]. Isolated interventions that focus on changing the attitude toward oral health will not lead to its sustainable improvement [30]. Despite the advances in clinical operative techniques that have made dental treatment more effective, by themselves, they cannot prevent oral disease [31], [32].

Conclusions

A basic understanding of the concept of health promotion is that health is a shared responsibility and good results would be obtained only if individuals, the community, the state, non-governmental organizations work together to achieve common health goals. The concept of health promotion needs to be popularized and established as an effective practice for improving public health, both among the general public and among the medical community. The imposition of a promotional approach in dental practice requires interdisciplinary cooperation with other health professionals and the limitation of the curative one.

References

1. Albert C, Davia MA. Education is a key determinant of health in Europe: a comparative analysis of 11 countries. *Health Promot*

- Int. 2011 Jun;26(2):163-70. doi: 10.1093/heapro/daq059. PMID:20935091
2. McGrath C. Behavioral sciences in the promotion of oral health. *J Dent Res.* 2019;98(13):1418-24. <https://doi.org/10.1177/0022034519873842> PMID:31746683
 3. Sheiham A, Watt RG. The common risk factor approach: A rational basis for promoting oral health. *Community Dent Oral Epidemiol.* 2000;28(6):399-406. <https://doi.org/10.1034/j.1600-0528.2000.028006399.x> PMID:11106011
 4. Watt RG, Harnett R, Daly B, Fuller SS, Kay E, Morgan A, *et al.* Evaluating oral health promotion: Need for quality outcome measures. *Community Dent Oral Epidemiol.* 2006;34(1):11-7. <https://doi.org/10.1111/j.1600-0528.2006.00257.x> PMID:16423026
 5. Watt RG, Marinho VC. Does oral health promotion improve oral hygiene and gingival health? *Periodontology 2000.* 2005;37:35-47. <https://doi.org/10.1111/j.1600-0757.2004.03796.x> PMID:15655024
 6. Petersen PE, Kwan S. The 7th WHO global conference on health promotion-towards integration of oral health (Nairobi, Kenya 2009). *Community Dent Health.* 2010;27(5 Suppl 1):129-36. https://doi.org/10.1922/CDH_2643Petersen08
 7. Watt RG. Strategies and approaches in oral disease prevention and health promotion. *Bull World Health Organ.* 2005;83(9):711-8. PMID:16211164
 8. Jürgensen N, Petersen PE. Promoting oral health of children through schools--results from a WHO global survey 2012. *Community Dental Health.* 2013;30(4):204-18. PMID:24575523
 9. Al-Tamimi, Petersen PE. Oral health situation of schoolchildren, mothers and schoolteachers in Saudi Arabia. *Int Dent J.* 1998;48(3):180-6. <https://doi.org/10.1111/j.1875-595x.1998.tb00475.x> PMID:9779097
 10. American Academy of Pediatric Dentistry. Clinical Affairs Committee--Infant Oral Health Subcommittee. Guideline on infant oral health care. *Pediatr Dent.* 2012;34(5):e148-52. PMID:23211901
 11. Antonio AG, Maia LC, de Carvalho Vianna RB, Quintanilha LE. Preventive strategies in oral health promotion. *Ciênc Saúde Coletiva.* 2005;10:279-86.
 12. Glick M, Williams D, Kleinman DV, Vujicic M, Watt RG, Weyant RJ. A new definition for oral health developed by the FDI world dental federation opens the door to a universal definition of oral health. *J Am Dent Assoc.* 2016;147(12):915-17. <https://doi.org/10.1016/j.adaj.2016.10.001> PMID:27886668
 13. Antonovsky A. The salutogenic model as a theory to guide health promotion. *Health Promot Int.* 1996;11(1):11-18. <https://doi.org/10.1093/heapro/11.1.11>
 14. Baiju RM, Peter E, Varghese NO, Sivaram R. Oral health and quality of life: Current concepts. *J Clin Diagn Res.* 2017;11(6):ZE21-6. <https://doi.org/10.7860/JCDR/2017/25866.10110> PMID:28764312
 15. Bandura A. *The Social Foundations of Thought and Action.* New Jersey: Englewood Cliffs, Prentice Hall; 1986.
 16. Bastos JR, Peres SH, Ramires I. Educascope para a saúde. In: Pereira AC, editor. *Odontologia Em Saúde Coletiva: Planejando Ações e Promovendo Saúde.* Porto Alegre: Artmed; 2003. p. 117-39.
 17. Bhamrah G, Ahmad S, NiMhurchadha S. Internet discussion forums an information and support resource for dental patients. *Am J Orthod Dentofacial Orthop.* 2015;147(1):89-96. <https://doi.org/10.1016/j.ajodo.2014.08.020> PMID:25533076
 18. Binnie V, Bain M, Chestnutt I, Craig N, Curnow M, McCall D, *et al.* Scottish Needs Assessment Programme. Oral Health Network. *Oral Health Promotion.* 1999: 15-24.
 19. Brown LF. Research in dental health education and health promotion: A review of the literature. *Health Educ Q.* 1994;21(1):83-102. <https://doi.org/10.1177/109019819402100109> PMID:8188495
 20. Campos J, Zuanon Â. Educação em saúde: aspectos relevantes apontados por adolescentes. *Brazilian Dental Science.* 2004; 7(2): 55-60.
 21. Guidelines for school health programs to prevent tobacco use and addiction. Centres for Disease Control and Prevention. *MMWR Recomm Rep.* 1994;43(RR-2):1-18. PMID:8145711
 22. Chen M, Andersen RM, Barmes DE, Leclercq MH, Lyttle SC. Comparing Oral Health Systems: A Second International Collaborative Study. Geneva, Switzerland: World Health Organization; 1997.
 23. Currie C, Hurrelmann K, Settertobulte W, Smith R, Todd J. Health and Health Behaviour among Young People. WHO Policy Series: Health Policy for Children and Adolescents Issue 1, International Report. Copenhagen: World Health Organization Regional Office for Europe; 2000.
 24. Dahlgren G, Whitehead M. Policies and Strategies to Promote Social Equity in Health. Stockholm: Institute of Futures Studies; 1991.
 25. Davies GN. Early childhood caries--a synopsis. *Community Dent Oral Epidemiol.* 1998;26(1 Suppl):106-16. <https://doi.org/10.1111/j.1600-0528.1998.tb02102.x> PMID:9671208
 26. Dental Health Foundation, Ireland. Oral Health in Disadvantaged Schools in the Eastern Region. Dublin: Dental Health Foundation, Ireland; 2001.
 27. Rokaya D, Suttagul K, Kakri S, Rokaya N, Seriwatanachai D, Humagain M. A survey on oral health and practice of Nepalese in areas affected by earthquake in 2015. *Kathmandu Univ Med J.* 2017;15(57):45-50. <https://doi.org/10.3126/kumj.v13i3.16816> PMID:29446362
 28. Manoj H, Rokaya D, Manjil SS, Bajracharya M, Tamrakar M, Upadhyaya S. Relationship between the age and salivary pH following sugar based and non-sugar based chewing gum usage among Nepalese school children. *Int J Dent Clin.* 2013;5(3):6-8.
 29. Downie R, Fyfe C, Tannahill A. *Health Promotion: Models and Values.* Oxford: Oxford University Press; 1991.
 30. Buck D, Godfrey C, Morgan A. The contribution of health promotion to meeting health targets: Questions of measurement, attribution and responsibility. *Health Promot Int.* 1997;12(3):239-50. <https://doi.org/10.1093/heapro/12.3.239>
 31. Bracksley-O'Grady S, Anderson K, Masood M. Oral health academics' conceptualisation of health promotion and perceived barriers and opportunities in dental practice: A qualitative study. *BMC Oral Health.* 2021;21(1):165. <https://doi.org/10.1186/s12903-021-01508-0> PMID:33771160
 32. Cronin J, Moore S, Harding M, Whelton H, Woods N. A cost-effectiveness analysis of community water fluoridation for schoolchildren. *BMC Oral Health.* 2021;21(1):158. <https://doi.org/10.1186/s12903-021-01490-7> PMID:33765985