



Health promotion

Full Project

Description and Use:

Health promotion is the process of actively engaging individuals and providers, assuring access to the necessary health information and tools, and facilitating a conducive environment to enable people and their communities to gain control over their health. As defined by the World Health Organization (WHO) ^[1] this process involves the establishment of initiatives that are “empowering, participatory, holistic, equitable, sustainable and use multistrategies.”^[2]

Oral disease and chronic systemic disease share many common risk factors, so an integration of oral disease prevention and health promotion with general health and chronic disease prevention education should be considered a primary communication strategy.^[3] Schools can be useful stage for integrated oral and general health promotion, with the benefit of reaching audiences of school children with varying levels of age and socio-economic status. Furthermore, input from health care professionals is key to ensuring quality control and the incorporation of preventive services. Health promotion aimed at intervening in common oral and systemic risk factors should take priority. The effects would be mutually beneficial to oral health and allow for oral health to be an integral part of systemic disease interventions.

Health promotion should be employed to educate individuals, health professionals, and policymakers regarding the influence of social and environmental determinants of oral disease, and access to dental services. Strong evidence exists of an association between childhood experience of socio-economic factors and adult health.^[4] Caregiver oral health literacy problems have been associated with poor oral health behaviors and dental outcomes in early childhood.^[5, 6] Moreover, stress induced biologic responses due to adverse socio-economic conditions such as increased cortisol levels may lead to alterations in dental pathology and increase poor oral health outcomes.^[7] Lead and tobacco smoke have each been independently associated with increased risk of dental caries.^[8-13] Interventions aimed at reducing socio-environmental risk factors of chronic



disease can simultaneously lead to benefits in oral health outcomes. Support for such interventions on a community level is necessary and can be achieved through including oral health in targeted general health promotion programs. A systematic review of the impact of oral health promotion on cardiovascular outcomes was inconclusive and calls for more research in the area. [14]

Poor oral health has an impact on the quality of life in the population.[15] Health promotion programs should aim to bridge the gap between the perceived need and the real need for prevention and better access to oral health services. Programs may focus on prevention of disease in developed countries while developing countries might focus on health promotion through the combined establishment of programs, services and policies. For example, many developing countries have limited access to individual oral health care and use of preventive technologies. Hence, oral health promotion is needed on a community level with increased awareness of environmental and behavioral factors. The population-based promotion of fluoridated toothpaste in Cambodia and introduction of salt fluoridation in Laos are two such examples. One example of a health promotion school program is the Brighter Smiles Africa [16] initiative undertaken jointly by several partners in Uganda and Canada. The intervention-based model included daily at-school tooth brushing, in-class health education, topical fluoride application for a subset of higher risk children, routine data collection and regular program evaluation. Using a different approach to health promotion, China has conducted “Love Teeth Day” (LTD) a yearly nationwide health promotion campaign since 1989. The campaign provides oral health services, oral health promotion through mass media, festivals and special activities to raise oral health awareness.[17]

Effectiveness and Efficacy:

Integrated health promotion programs provide the opportunity to utilize a common oral and systemic disease risk factor approach to prevention. Oral health risk behaviors of children and adolescents can be modified [3] so existing school-based programs can lead to long-term risk factor modifications. Other risk factor modification strategies such as Healthy Japan 10 have taken an integrated approach in aiming to reduce common risk factors of chronic and oral diseases by promoting healthy behaviors



and building healthy environments, over a 10-year period [3]. Rigorous program evaluation of such health promotion efforts will determine program effectiveness and efficacy and facilitate the comparison of similar programs. [18] Program evaluations from China's LTD suggest improved behaviors have led to improvements in oral disease indices over time. For example, over a ten year period, use of fluoridated toothpaste increased from 14% in 1986 to 58% in 1996, similarly brushing twice a day increased by 20% over the same 10-year period. A survey of 12-yr children in 1995 reported mean dental caries = of 0.88. However, in 2005 the mean dental caries had decreased to 0.54. These oral health indicators are consistent with improvements in oral health awareness and self-care due to LTD.[, 19, 20]

Barriers to Oral Health Promotion Efforts

Limited budgets and infrastructure for primary health care may serve as barriers to implementation of integrated health promotion programs and oral disease prevention in many countries. Sanitation, clean water and acute medical care take priority over oral health, despite the fact that oral diseases constitute a substantial burden and decrease the quality of life for the majority of the population. Furthermore, health literacy levels can also serve as a barrier to access and the appropriate use of existing dental health services. As a result, targeted health promotion can aim to increase health literacy among higher-risk populations with extensive needs.

Recommendations for Community-Based Health Promotion:

The World Health Organization has called for community programs to include oral health promotion within primary health care.[21] Support from both local and national government, in addition to adequate infrastructure is needed to sustain community-based prevention programs that include oral health promotion activities. Established school-based programs can be used to implement integrated oral health and general health promotion programs and should be included as a permanent part of the academic curriculum. Each community must evaluate what resources (policies, infrastructure, personnel, materials, health care providers and community support) are available to develop and sustain an integrated health promotion and prevention program. The responsible local health officials must then decide which avenues provide the



optimal modes of delivery in the community, whether it be a school-based program[16, 18], community-wide efforts [3], or large-scale state or national health promotion endeavors aimed at reducing common risk factors for chronic and oral diseases (Healthy Japan 21, LTD) [3, 17]. Recently a framework for implementing sustainable oral health promotion programs was proposed that included a systematic multistage model and related measures in order to more fully design and evaluate oral health promotion programs. [21]

Cost:

There is a paucity of information in the literature on costs of oral health promotion programs. A recently proposed method of economic analysis of behavioral interventions to promote oral health included four types of analyses: cost, cost-effectiveness, cost utility, and cost-benefit. [22] Although intuitively one may propose that an integrated oral health promotion and disease prevention program is more cost-effective compared to stand alone oral health programs, little information exists to support this statement with substantial evidence. Moreover, more weight may be given to oral health education when it is presented in the context of systemic and chronic disease prevention.[15] However, efficiency gains will be based on government or non-governmental organization infrastructure costs. The presence or absence of a public health system within a country, state/province or local area can determine its own ability to implement integrated oral and general health promotion community based programs. Use of ancillary providers and community health workers may provide a means of reducing costs while providing high quality and feasible community-based prevention programs. In addition, incorporation of dental, medical and other allied health care students can aide in reducing costs, expose students to community-based health promotion, and bridge the cultural gap between dentistry and medicine.[21]

Safety:

Health promotion includes few if any safety risks when education is the primary intervention. However, health programs that make environmental changes or incorporate preventive services will vary in the safety concerns specific to the intervention employed, the target community and the extent to which the program limits the behavior of the



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target population. Rather, programs should attempt to expand healthy options, as opposed to restrict unhealthy behaviors.

Summary:

Based on findings from the literature, health promotion can be effective in promoting oral health particularly when integrated in a “common risk factor” approach with chronic disease prevention. Social and environmental risk factors that play a key role in the development of oral diseases should be incorporated into oral health promotion programs in order to heighten awareness among community groups, families, individuals and caregivers. An improvement in the education of health providers on prevention technologies is needed in order to improve to community adoption of health promotion programs. The control of common risk factors will lead to mutually beneficial oral and systemic outcomes.



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