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REVIEW ARTICLE

Dental Education: Challenges and Changes

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ABSTRACT

The aim of dental health education is to impart knowledge on the causes of oral diseases and providing the ways and possibilities of their prevention and adequate treatment. Health education would highlight the necessity of proper nutrition, maintenance of oral hygiene with the use of fluoride products, and other regimen as well as drive attention toward the significance of regular check-ups with a dentist. Public health dentistry in India has become the only key toward future dental workforce and strategies. There have been numerous challenges which exist for expanding oral health care in India, in which the biggest challenge is the need for dental health planners with relevant qualifications and training in public health dentistry. There is a serious lack of authentic and valid data for assessment of community demands, as well as the lack of an organized system for monitoring oral health care services to guide planners. Based on the aim for sustained development, human resource planning and utilization should be used along with a system of monitoring and evaluation. Hence, both demand and supply influence the ability of the dental workforce to adequately and efficiently provide dental care to an Indian population which is growing in size and diversity.

Keywords: Challenges, Changing concepts, Dental education, Future dental workforce, Promotion of oral health.

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INTRODUCTION AND BACKGROUND

Dental diseases are among the most common and widespread diseases around the globe.[1] There is an old saying about the eyes being windows to the soul. But the latest medical and dental research shows that the mouth truly is a window into one's overall health. Not only does the mouth tattle on the rest of the body, oral health can actually affect overall health.

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Poor oral health and untreated dental conditions can have a significant impact on the quality of life leading to overall deterioration of health.[1] Dental education has arrived at a crossroads. During the last 150 years, it has evolved from a prelude to apprenticeship into a comprehensive program of professional education.[2] As there is advancement in science, technology, and public health programs, there have been great reduction in tooth decay and tooth loss. Due to these reasons, dentists are treated as respected professionals, and dental schools are part of many of the nation's leading public and private universities.[2]

Henceforth, the future of dental education will be shaped, in part, by scientific, technological, political, and economic factors that are largely beyond the profession's control.[2]

ORAL HEALTH EDUCATION AND HEALTH PROMOTION

The World Health Organization (WHO) states that "the extension to all people of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health."

The Dental Council of India (DCI) is a statutory body which was constituted by an Act of Parliament through the Dentists Act (1948). The main objectives of DCI are to promote dental education, dental profession, and ethics in India and to start new dental colleges or higher courses and increase the number of seats which can be done through recommendations to the Government of India.[3-5]

The WHO defines health promotion as being a "process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behavior towards a wide range of social and environmental interventions."[3,6] Creation of healthy public policies and environments, development of personal skills, and reorientation of the oral health services are various criteria which help in promotion of oral health. This last definition is different from oral health education as it is mostly aimed at improving oral health through the steps of acquisition of knowledge, eventually leading to motivation and, finally to behavioral changes according to the health belief model.[3,7,8] The remarkable improvements in oral health in the last years reflect the strong scientific basis for prevention of oral diseases that have been developed and applied in the community, in clinical practice, and at home.[3,5,9]

CHALLENGES

Majority of the programs failed to achieve their aims due to the lack of attention mostly resulting from the inadequate and insufficient relationship patient–health professional in its educational aspect.[3,10] Various studies demonstrate that socioeconomic and cultural aspects may influence the oral hygiene habits. The higher risk of oral diseases and lower socioeconomic status were well explained by the lack of information and knowledge about oral health behaviors and limited access to dental health care.[3,11-15] The degree of association between a number of social, economic, and behavioral risk factors and the prevalence data for adverse oral conditions have been determined in various studies. These associations should be interpreted with caution as they suggest the need to take them into consideration when developing health-promoting oral health policies.[3,16-18]

Various studies have confirmed that low social class had increased the risk of developing high levels of dental caries.[3,19] Parent's low educational level and professional situation (employed/unemployed) also played an important role in the child/adolescent's oral health status.[3,20,21] Oral health education is an important issue that should be developed among the population with a view to decreasing the prevalence of oral illnesses.[3,22]

"Patient access to a selected panel of dentists" such Health plans are moving beyond their historically small base. However, because more than half the population is not insured for dental services compared with less than one-fifth with no health insurance, the impact of health care restructuring has, so far, been relatively limited for many practitioners and patients. Even though only about 6% of all expenditures for personal health services are accounted for by dental services, majority of this expense is not covered by insurance.[2] Dental education faces serious financial problems that, in many respects, constrain its ability to respond to the changes identified above.

CHANGING CONCEPTS

Scientific and technological advances are reinforcing the medical aspects of dental practice, as new or improved preventive, diagnostic, and pharmacological interventions challenge procedure-oriented dental education.[2]

Currently, there are 301 dental colleges offering dentistry in India and on an average approximately 25,000 graduate students and 4,500 postgraduate students are passing out every year from various dental colleges in the country. This is a positive indication for the availability of the dental workforce.[4] Mobile dental units are made available to the primary health centers (PHCs) so as to provide dental services at remote and hilly areas of the country as Pradhan Mantri Gram Sadak Yojana Scheme is looking to eliminate the barriers of transportation to remote villages.[4]

School dental health education programs have produced positive results which are evident from different studies. Different studies have different impacts and this may be attributed to different study populations and different methods of dental health education presentation and other environmental factors, such as barriers of communication, efficiency of educators, etc. This could have a modifying effect on the effectiveness of the educational intervention.[1]

Policy Developments: The principle of "The National Oral Health Policy" was accepted by the Ministry of Health and Family Welfare, Government of India, in the year 1995 with plan of extending minimum oral health to the entire Indian population.

Financing and Reimbursement: Oral health care systems exist in societies with different social and economic systems that influence the structure and process of care.

Direct payment from private services is the main payment mechanism in India. Financing and reimbursement system influence the other parts of oral health care system. In the strategic planning for financing dental organization the growing awareness of oral health as a part of general health has been reflected highly. Evidence suggests that dental insurance, number of dentists, and increasing the number of people with teeth and income have positive impacts on dental expenditures and when there is restriction in any of these conditions, there would be a reduction in dental expenditures.

Indian Scenario for Dental Finance (Ministry of Health and Family Welfare: Government of India, 2005), Stand Alone Dental Insurance Plan: Dental problems, such as periodontitis and extraction of permanent teeth due to ailments, such as caries, cover the expenses needed for this. Amount to be reimbursed for the expense as well as the period of such cover is fixed beforehand. The type of oral health care delivery system that suits our country is the next issue of concern as far as the implementation of the policy. Out of four well-known models of oral health care delivery systems currently existing in the world, there is a strong recommendation for adoption of Beveridge model for developing countries like India. In Beveridge model, the government is responsible for providing and financing of oral health care for its countrymen and funding for dental care is achieved through the taxes collected by the government, which is currently adopted in UK.[4]

RECOMMENDATIONS

The governments (central and state) should provide dental services to those people who are below the poverty

line on priority basis. A separate budget by both the central and state governments toward oral health is a major challenge and a key issue for policy implementation and it should be allocated by the dentistry regulating bodies in the country.[4] There should be the creation of a general dentist posts at all the PHCs and dental specialist posts at all community health centers in the country. The public health dentistry departments in various dental colleges should be made active and responsible to teach prevention-based dental education and to implement preventive dental programs as it is cost-effective, which in turn will suit well to the developing countries like India by not overburdening the government.[4]

To support effective and efficient oral health services that would improve individual and community health, it is recommended that dental educators work with public and private organizations to maintain a standardized process to regularly assess the oral health status of the population and identify changing disease patterns at the community and national levels; develop and implement a systematic research agenda to evaluate the outcomes of alternative methods of preventing, diagnosing, and treating oral health problems; and make use of scientific evidence, outcomes research, and formal consensus processes in devising practice guidelines.

CONCLUSION

People of India suffer from a multitude of preventable and treatable general and oral health problems even though India has created one of the largest health care delivery systems in the world. Weak political will, less patient awareness, and economic factors restrict the noble idea of integrating oral health care with general health care. To improve the quality of life of the population, attempts are to be made through research, education, provision of services, and by the promotion of healthy policies. Concisely, oral health care systems includes

- Health policies which promote oral health
- Resources including personnel and general facilities
- Strategies which organize those resources to provide needed services.

It is important to gain knowledge from systems which act internationally as it improves the system within the country.

At the end, it can be concluded by saying that it is the commitment of the government and the dental health regulating bodies in the country which will pave the path for the implementation of the National Oral Health Policy, thereby brightening the employment opportunities for the budding dentists as well as bringing smiles on millions of Indians.[4]

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