Research paper

Review of the Comprehensive Public Health Dentistry Approach towards Total Oral Health

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ABSTRACT

The dental conscience of the country is public health dentistry (PHD). Since its establishment in 1969, PHD speciality in India has contributed to the improvement of oral health conditions; nonetheless, there hasn't been much said about reaching universal oral health. With the goal of obtaining total oral health, the current review study was conducted to comprehend and analyse the existing situation of PHD. The various comprehensive approaches in PHD can be implemented effectively, including: the promotion of oral health should be done in a more creative and effective manner with various areas, such as dental health advocacy and literacy campaigns, national integrated health navigation systems, school-based dental clinics and oral health education in school curricula, dental health emergency helpline and response system, etc.; Also, the public-private partnership for the various comprehensive approaches in PHD can be effectively implemented. As well as the expansion of the health care delivery system's ability to reach people at the grassroots level, reaching rural areas through regular rural dental health care programmes, and creating specialised dental health care wings for those who require particular treatment. Therefore, a full approach to oral health care will depend more on having a thorough understanding of the fundamentals and implementing all relevant comprehensive techniques, or PHD.

Keywords: Community dentistry, Dental public health, Public health dentistry, Public health programme.

1. INTRODUCTION

A condition of total physical, mental, and social well-being rather than just the absence of illness or disability, health is multidimensional [1][2]. The health of the population needs to be significantly improved in emerging nations like India, and public health issues also need to be given greater attention. [3] Over the past few decades, health has become less important, and oral health has received the least attention. [4] Additionally, there is a relatively high frequency of oral disorders, with periodontal disease and dental caries being the most prevalent in all communities. [5] Accordingly, periodontal disease and dental caries have been the main issues in public health dentistry (PHD) study and practise. [6] The majority of oral diseases are avoidable and can be decreased by taking a holistic approach that includes various health promotion, education, and preventative strategies. [7] Understanding the prevalence and contributing factors of oral illnesses is essential to



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promoting oral health among various populations. [8] A public health dentist who is knowledgeable about dental issues and skilled in solving other social issues can have a significant impact on the creation of health initiatives. [9] As a result, the current review study was conducted with the goal of understanding and analysing the current situation of PHD while keeping in mind the all-inclusive strategy for attaining whole oral health.

2. METHODS AND MATERIALS

Both an automated and manual search of the literature was done for the current review. Initially, relevant publications from peer-reviewed journals were found by conducting an electronic literature search using various databases, including 'PubMed,' "MEDLINE," and "EBSCOhost." Furthermore, relevant papers were found utilising a variety of keywords and other phrase combinations using web-based search engines like "Google" and "Google Scholar." The terms "Dental public health (DPH)," "PHD," "public health," and "public health programmes" were pertinent. Additionally, these keywords were added to the MeSH-controlled lexicon or Medical Subject Headings. The MeSH phrases were merged with terms like public, comprehensive care, health, dental, India, and community before being entered into all of the aforementioned databases and search engines. The dentistry college library also yielded further pertinent data on the subject. Finally, the reference file was updated with information about the collected literary works, which included various original articles, reviews, brief messages, short reports, editorials, letters to editors, and interviews.

Additionally, some material was retrieved by double-checking the papers' reference lists. Only the literary works that were published in languages other than English were omitted from the study for reading and comprehending purposes. Thus, 30 pieces of literature were discovered throughout the literature search, all of which had been published recently. Only 25 of the total number of literary works were found to be pertinent, though, and these were used in the study's final reading, evaluation, and analysis.

Public Health

Public health is described as the science and art of avoiding diseases, extending life, and enhancing physical and mental efficiency through coordinated community activities for environmental sanitization, the management of communicable diseases, and other healthrelated issues. The development of the social machinery to ensure everyone a standard of living adequate for the maintenance of health, the education of people in personal hygiene, the organisation of medical and nursing services for the early diagnosis and preventive treatment of disease, and so on. By organising these benefits, every citizen will be able to realise his or her birthright of health and longevity. [11-13] Over time, public health focused on a variety of various issues; behavioural therapies, extensive health services, and health promotion are crucial public health instruments. As a result, around the turn of the century, public health's reach had significantly expanded. [14] Public health focuses on defending and enhancing the health of communities by taking a variety of measures, such as halting the spread of infectious diseases like cholera or communicable illnesses like tuberculosis as well as injuries caused by violent acts, falls, and/or traffic accidents. Promoting a healthy and active lifestyle also involves teaching the public on the value of exercise, the harmful effects of smoking, a balanced diet, and oral hygiene in daily life. [11-15] Epidemiology, biostatistics, sociology, public health legislation and regulations, health behaviour and education, public health research, health economics, and public health engineering are all included in the multidisciplinary field of public health. [16]



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Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homeopathy are six systems of alternative medicine that have been practised in India since the beginning of the western medical movement there. Between 600 BC and 600 AD, Ayurveda was taught at the historic universities of Taxila and Nalanda in India. The National Rural Health Mission, or NRHM, in 2005, provided support for these complementary and alternative therapies. [17-20] Additionally, archaeological evidence from Mohenjodaro, Harappa, and other towns that are now in Pakistan, which dates to about 4500 and 3000 BC, reveals remnants of planned cities with baked brick public baths, houses, and drainage systems. [21] These thereby offer the first evidence of environmental sanitation awareness in India. The history of public health, however, can be divided into four separate periods: the illness control phase (1880–1920), the health promotion phase (1920–1960), the phase of social engineering, and the phase of universal health (1981–2000). [22]

The number of people in the community who are confident in the dental practitioner's abilities directly affects the overall success of clinical practise. This confidence extends beyond just technical dental services to include advice on community proposals for health improvement, dental outreach programmes, community health programmes, etc. [24] Dental professionals who work alone must be knowledgeable about public health in order to properly carry out their civic duties. Therefore, the only option to meet everyone's dental needs is through a partnership of public and private resources. [23]

DPH

The DPH (DPH), also known as the PHD, is a relatively new specialty subject, and its experts have extensive knowledge and expertise in public health administration, research methods, the prevention and control of oral diseases, the provision and financing of oral health care, as well as the study and development of resources. [1] The term "dental public health" (DPH) refers to the science and art of preventing and controlling dental diseases and promoting dental health through coordinated community efforts. It also refers to the type of dental practise that treats the community as a whole rather than treating individual patients. It is concerned with the public's dental education, with applied dental research, with the management of group dental care programmes, and with the community-based prevention and control of dental diseases. [16]

The Dental Council of India (DCI) created India's national oral health strategy in 1985. Public health dentists should be assigned to primary health centres and community health centres, according to the national oral health policy. Master of Dental Surgery (MDS) is a postgraduate programme provided by dental colleges and hospitals in India. To be eligible for the programme, applicants must hold a Bachelor of Dental Surgery (BDS), which requires five years of dental schooling and includes a necessary internship year. The DCI, however, is the organisation in charge of overseeing BDS and MDS degree programmes in India. [17] Since its founding in 1969, PHD speciality has contributed to improving oral health conditions; yet, there hasn't been much said about reaching universal oral health. [4,18]

Comprehensive Dental Care

The definition of comprehensive dental care is the meeting of accumulated dental needs at the time a population group is enrolled in the programmes and for the semi-annual or other periodic identification and correction of new increments of dental disorders. [19] Thus, in comprehensive care, we consider not only the elimination of pain and infection but also the restoration of functionally sound teeth, the replacement of missing teeth, maintenance care for the control of early dental disease lesions, as well as preventive and educational measures



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in order to reduce the prevalence of disease in the population. [1] Today, complete oral health is thought to be best achieved through comprehensive dental care.

Comprehensive approach in PHD

The ultimate aim of total oral health for both individuals and the community can be accomplished by implementing certain measures of the comprehensive approach in PHD. the expansion of high-quality "dental research" for population-based primary prevention, as well as the approval of new research facilities, national centres, divisions of research within institutions, etc., as well as upgrades to those already in place. "Oral health promotion" should be carried out in a more creative and effective way, using a variety of strategies such as dental health advocacy and literacy campaigns, a national integrated health navigation system, school-based dental clinics, curriculum-integrated oral health education, and a dental health emergency helpline and response system. "Public-private partnership" for various health initiatives and extensive cooperation on oral health. Enhancing the "Health-care delivery system" to reach the most vulnerable populations more thoroughly and to reach rural areas through regular rural dental programmes and specialised dental health care wings for persons who need special care. programmes for periodic dental outreach using mobile dental vans. The government should create low-cost, comprehensive "dental health insurance" in the upcoming years.Public health dentists should take an active and significant part in various government health programmes and/or policies, such as the national oral health mission. Through the integrated national disease monitoring programme, dental disease is prevented and controlled via strategies and methods.

Despite the fact that dental research is increasing at an even faster rate around the world and that India has more dental colleges than any other developing nation in terms of sheer number, dental research in India is still in its infancy.On the international stage, India's contribution to DPH research is, however, minuscule. [21] Because the experience of community varies from context to setting, participatory programmes and research cannot be conducted using a cookie-cutter method. Instead, every research partnership and degree of cooperation—from local to national to international—must balance the variations and parallels among the involved populations.

PHD workforce is the subject of growing concern in the professional workforce, and there is a bigger demand for these specialists in a nation like India where the majority of the population lives in rural areas. However, there is currently no policy requiring skilled public health dentists to only provide care to rural residents. [8]

In many nations around the world, especially in developing nations like India, there is still a severe lack of primary oral health care. [22] Mobile dental clinics were first employed in dental public health in 1924 and have since been effectively used to treat children, people with disabilities, people living in rural areas, members of the military forces, and other patients in need of dental care. Mobile dental clinics or vans are now used for community education and rural posting for dental undergraduates and postgraduates of the department of PHD all over India. They may try to make a viable effort to address the issues of oral health care delivery for a large underserved population with insufficient resources. Therefore, in order to improve performance, these programmes running in postgraduate institutions must address issues with the infrastructure and labour force.

All DPH programmes, including water fluoridation and oral health education, are built on population methods. These programmes target the entire population, regardless of individual risk, and their effectiveness is best assessed at the population level. The spatial targeting, however, that enables schools, school districts, or even entire nations to be identified as being



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at high risk, is what unites these strategies. Therefore, there are no administrative expenditures for identifying the targeted areas if this can be done with readily available data. The communities of schoolchildren, the elderly, the socially vulnerable, the rural populace, etc. require dental care, which if offered at the dental camp or in other settings will reduce disparities in oral health care between deprived and non-deprived communities and, ultimately, reform the community's overall oral health. [23]

Public health and dental tourism-related care are currently the dominant methods for obtaining the necessary dental care. When someone travels outside of their hometown to receive dental care, they are said to be engaging in dental tourism. Furthermore, there is a steadily growing trend toward dental tourism in the Indian dental market or inclination. Dental tourism has the potential both benefit and harm public health initiatives, although it may make procedures more affordable for individuals who cannot afford them or who reside in areas without access to them. On the other side, dental tourism might be reducing the number of practitioners because they can perform operations more profitably for out-of-town clients who can pay more. [24]

3. CONCLUSION

PHD serves as the country's dental conscience. The primary responsibility of a public health dentist is frequently viewed as "taking care of the poor." This is only a portion of the role that public health dentists play; they also need to ensure that the necessary dental services are provided to meet the oral health care needs of the underserved population and that they are the deciding factor in the assessment, policy development, and assurance regarding dental care processes. Unknowingly, the dental safety falls short of meeting the needs of individuals who depend on it for basic dental care. This is the profession's most obvious expectation. However, the "public" has given the profession the responsibility and right to provide oral health services to everyone, and if we as a profession fail to uphold that responsibility, we risk losing the public's trust and creating a space where others with less expertise and interest can make decisions that will have an impact on the profession and the general public. As a result, having a thorough understanding of the fundamentals and putting those concepts into practise will be more important for providing comprehensive oral health care. Professionals can only advance their field by making sincere and helpful efforts.

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