# An Overview of Oral Health in India: Current Scenario and Challenges

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### **ABSTRACT**

India is the largest democracy and the second most populated country in the world. However, more than 70% of the people of India are residing in the villages. As far as dentists and their availability are concerned, to this huge population, the demand and supply ratio is far inadequate and insufficient. The dentists/ population ratio of India, on date, is 1:10,000. However, the reality is that in rural India, 1 dentist is serving over a population of 250,000. Thus, the real picture is not that simple as it seems. As we are about to step into the next decade, there lies an urgent need to analyze the dental work force of the country and to study the scope and future of dentistry in the coming years. Oral public health issues are grossly neglected in a developing country like India, the primary reason to which is the nonlife-threatening nature of oral health problems. Indian state governments are already financially overburdened to acknowledge the burden of orodental problems and its connection with the systemic health. State governments lack the capability to provide oral health services to all. So this review is mainly focusing on the current issues and strategies on dental workforce.

**Keywords:** Dental education, Dental homes, Dental manpower, Oral health, Teledentistry.

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### **INTRODUCTION**

Health care systems are responsible for addressing the needs of respective populations without any discrimination. Estimates from Global Burden of Disease demonstrate that oral diseases affect 3.9 billion people and

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untreated dental caries (tooth decay) is the most prevalent morbid condition among all diseases. Furthermore, oral diseases significantly affect quality of life and its associated health care has a catastrophic effect on the public health budgets. Linkages between many oral diseases and chronic noncommunicable diseases are well documented and tooth loss has been reported of being associated with premature mortality. Oral diseases may also impact social and psychological wellbeing, consequently leading to social isolation.<sup>1</sup>

As India strives to achieve universal health coverage, improvement in oral Health care delivery through the availability of skilled and motivated dental health workers is essential. A clear understanding of the dental health-workforce situation is critical to the development of effective policies to develop and manage a responsive workforce. Human resource shortages hinder scale up of health services and limit the capacity to absorb additional financial resources.<sup>2</sup>

Inequalities and their relation to living conditions are now in the mainstream of public health thinking. The extent of contemporary social inequalities led farmer to define this problem as a plague of our era. Gwatkin reported the ethnic and gender dimensions of inequality, as well as the economic standing, as those that matter most for the assessment of health conditions in developing countries. In Latin America, the Pan American Health Organization stated the growing impact on health and overall wellbeing of disparities associated with socioeconomic, gender, and ethnic macro determinants.<sup>3</sup>

India accommodates 17.5% of the world's population; 44% of its population being in the productive age. India has a robust economy and is recording a speedy growth. In recent times, economists at the World Bank and the International Monetary Fund have tentatively suggested that within a year or two, India's economy might be growing more quickly than that of China. In spite of its tremendous, potential manpower resource and growing economy, India stands behind in terms of education, standard of living, and, in particular, health. Over decades, health in India is gaining less importance and oral health, the least. Oral diseases remained still a public health problem for developed countries and a burden for developing countries like India, especially among the rural population. India is predominantly rural



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covering about 69% of the population. Prevalence of oral diseases is very high in India with dental caries (50, 52.5, 61.4, 79.2, and 84.7% in 5, 12, 15, 35–44, and 65–74-year-old respectively) and periodontal diseases (55.4, 89.2, and 79.4% in 12, 35–44, and 65–74-year-old respectively) as the two most common oral diseases.

As evident from previous literature,<sup>3</sup> governments of many developing countries have given considerable importance to oral health. Nairobi declaration on oral health in Kenya has laid down policies for oral health promotion and integration into primary Health care programs. National Committee for Oral Health in China is taking care of oral health education and promotion and primary Health care. South-east Asian countries developed various oral health plans to integrate primary oral Health care into National Health Policy (NHP). Policy sets priorities and guides resource allocation. Health policies play a crucial role in successfully implementing comprehensive health programs. In general, every country develops its own health policy aimed at defined goals. Government of India (GoI) put a step forward to enhance the Health care system by introducing NHP (1983), which was reformed to lay down a new policy structure for the speedy achievement of the public health goals in 2002 and recently in 2015. However, to reduce the morbidity of the oral-related diseases, no much work has been done till date. 4 So this review is mainly focusing on the current issues and strategies on dental workforce.

# CURRENT ISSUES OF THE DENTAL WORKFORCE IN INDIA

- Lack of job opportunities in public sector
- · Low salaries
- Job insecurities
- Migration of dentists to foreign country.<sup>2</sup>

### Lack of Job Opportunities in Public Sector

Currently, there are 310 dental colleges in the country, out of which 292 are privately owned and only 40 are run by the government. As a result, thousands of dentists are coming out every year with very low prospectus of job. In 1970, there were only 8,000 dental students graduated from Indian Dental Institutions, whereas the figure was 30,570 in year 2010.

The main reason for this unemployment is an imbalance in demand and supply of dental professionals. According to the WHO, ideal dentist/population ratio is 7,500. In 2004, dentist/population ratio in India was 1:30,000. According to World Health Statistics – 2014, the ratio is 1:10,000. However, the ratio suggests that there is still not enough number of dentists in India, but it is

not the sole factor, there is one more factor which cannot be ignored is inequality in distribution of dentists. In rural areas, the dentist/population ratio is very less as compared with urban areas. In year 2004, India had one dentist per 10,000 people in urban areas and one dentist per 2.5 lakh people in the rural areas.<sup>5</sup>

The vacancies for dental professionals in Government sectors are also very less in number. Records show that only 5% graduated dentists are working in the government sector. Besides, the salaries in these Government hospitals vary a lot among various parts of the country. Also, the selection procedure for such posts may also be overshadowed by the growing corruption and malpractices.<sup>6</sup>

### **Low Salaries**

During the initial stage, a dentist cannot expect high salary. If the choice of sector is government, then a fresher may not get a huge pay package. But as one gains experience and develops skills, they can surely ask for more pay and the salary will automatically increase. There are department exams which they can appear in the government sector and bring up their grade in the service itself. This will also help to increase the salary.<sup>7</sup>

### **Job Insecurities**

The present scenario is very gloomy because of the greater number of dental graduates added each year (approximately 30,000) to the already existing workforce without many career prospects. Presently, 310 dental colleges exist in India and the majority has an intake of 100 students per year. The bulk of the fresh dental graduates pursue the dream of a clinic, the next majority opts for postgraduate study, and a few aspire to clear the board requirements of a foreign country and become certified dentists.

A fledgling dentist in India has very limited scope to survive on his own immediately after graduation. The cut-throat competition among fellow dentists has escalated to unprecedented levels and a sense of insecurity seeps into fresh graduates. The recent threat to private practice is the rapid surge of corporate dentistry and the blistering pace at which they grow and multiply, making it almost impossible for a recent graduate to make an independent living.<sup>8</sup>

## Migration of Dentists to Foreign Country

Many migrant dentists, primarily those from low- and middle-income countries (LMIC), exhibited a desire to work with the latest technology, as they were disappointed by the lack of such opportunities in their home countries.

# STRATEGIES TO IMPROVE ACCESS TO DENTAL CARE SERVICES

Understanding the hindrances that people face in accessing health care services, it is essential to find ways to improve the timely access to dental care.

### **Proper Referrals from Medical Professionals**

It is the common instinct of people to neglect dental problems as dental problems are not life-threatening. This ignorance toward dental care can, however, be overcome by increasing referrals from medicos, by conducting informative sessions for medical personnel, counseling parents regarding infant's oral health problems, and explaining health and financial benefits of treating dental caries in the formative years rather than delaying it.

# Compulsory Rural Postings or Internships for the Dental Students

Compulsory posting of 3 months in rural areas has been a top agenda and this initiative has been backed by Ministry of Health and Family Affairs to address the dearth of medical workforce in rural areas. Providing extra incentives to dentists willing to work in rural areas can attract young professionals, thereby balancing the biased urban/rural skew. Moreover, colleges should coordinate with primary health centers (PHCs) for catering to underprivileged patients.<sup>9</sup>

### **Tele-dentistry**

Tele-dentistry is defined as "The practice of using videoconferencing technologies to diagnose and provide advice about treatment over a distance." This new clinical dimension can be used to increase the rural penetration of oral health care services. Tele-consultation could be direct (between the patient and the expert) or indirect (between the patient's medical doctor general practitioner and the expert). <sup>10</sup>

### **Dental Homes**

Dental home is a platform where a patient/doctor relationship is nurtured in a family-centered way. It serves as a place for preventive oral health supervision and emergency care and can also serve as a repository for records. In order to make the concept as successful as it is in western countries, a three pronged strategy should be followed, consisting of utilizing existing networks Health care delivery systems in India, such as the Integrated Child Development Services Scheme and National Rural Health Mission and may include screening, information regarding basics of dental disease developmental processes, and their early active intervention. <sup>11</sup>

#### **Dental Insurance**

Dental insurance which is still in its nascent stage in India would help an individual to go through minimal essential dental treatments at affordable prices. This benefit would drive people to pay the insurance premiums. The plans usually cover basic dental treatments for the patients. However, Indian Dental Association is trying to bring about a dental health care policy which covers all types of dental treatments. Dental insurance companies could join hands with the multinational companies to improve the access to dental care of their employees. <sup>12</sup>

### **BARRIERS IN ORAL HEALTH PROMOTION**

Implementation of the National Oral Health Care Program in the pilot phase brought about the perception that most of the times the policymakers give oral health the last priority. Primary oral health care, without any barriers, is still missing in several countries across the globe, particularly in LMIC like India. Not even 20% of the rural PHCs around the country have a dentist. The proposed plan of placing no less than a single dental graduate per PHC to cover 30,000 populations is a practicable goal.

### CHALLENGES FOR THE FUTURE

Educating all including those in most deprived areas with "facts of oral health" remained a challenge even today. <sup>13</sup> Production of eligible dental health care planners with necessary training is one of the challenges for expanding oral Health care. Other challenges include absence of surveillance of oral health care services, which is helpful to direct planners, lack of dentists in the government decision-making bodies, inability to generate manpower of good quality according to the changing needs of the society. <sup>14</sup> It is very much essential to provide the new dentists with adequate, reputable, and good salaried job opportunities devoid of rural/urban inequality, which appear to be the root of all issues the dental profession is facing today in India.

### NEED FOR ORAL HEALTH POLICY<sup>4</sup>

- For oral health promotion through prevention, considering the fact that oral diseases are almost preventable by simple and cost-effective means
- To decrease the burden of oral diseases
- Taboos, myths, or misconceptions need to be eradicated
- Water fluoridation, one of the preventive measures for dental caries, was recommended in the 12th 5-year plan without any proposed strategies for its implementation
- As there is inaccessibility, nonaffordability of oral health care services and deficiency of dental manpower in PHCs



- To narrow the rural/urban gap in oral health care
- As there is lack of proper public oral health care infrastructure
- There is no organized data recording system
- For quality dental education
- Definite budget allocation for oral health seen in developed countries is lacking in India.

### CONCLUSION

The immediate challenge is to address the skewed distribution of dentists between urban and rural areas. Programs should be conducted to enhance oral health literacy and lessen social inequalities. Auxiliary staffs should be appointed in rural areas to provide primary oral care services. The responsibility of oral health care of citizens is to be in the hands of governments. For discharging their obligation of assuring healthy smiles to their public, governments require a policy. All the queries in attaining oral health for all can be answered by oral health policy.

#### RECOMMENDATIONS

- Emphasis on prevention to reduce the quantum of treatment requirements by improving and increasing the public dental health care system which will include health education, counseling, and health promotion. Prevention is always cheaper, less timeconsuming than treatment, and does not require skilled labor.
- Increase the employment of dentists in public sector.
- There are only 11,000 sanctioned government jobs in India. The irony is only 5,500 jobs are filled on date and the remaining are lying vacant. To begin with, remaining vacancies should be filled by the concerned authorities.

- Increase public awareness by dental health camps and use of mass media.
- Control the dentists/population ratio by encouraging dentists to establish practice in rural areas.

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