



Dental Man Power and Its Current Trend

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[Review Article](#)

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ABSTRACT

India is the seventh largest country in the world with a population of 1.2 billion. Dental health care is not integrated with general health care in most of the public health care setups and it is not provided at the primary health care level; it is provided to some extent at the secondary level but mostly at the tertiary care centers. Dental diseases are a significant public health burden in India, with dental caries affecting 60-65% of the general population. The availability of skilled human resources is critical for efficient healthcare system. Currently, the dentist population ratio has significantly improved for the past five years. An organized national human resource planning system is required to ensure consistent manpower allocation and to provide policymakers with future directions.

Keywords: Dentist, Manpower, Rural-urban Disparity.

Introduction

India is the seventh largest country in the world with a population of 1.2 billion.¹ The urban population constitutes 31% and the rural population constitutes 69% and is also the second largest producer of dental graduates. Currently, India's dentist-to-population ratio is 1:10,271.¹ Dental health care is not integrated with general health care in most of the public health care setups and it is not provided at the primary health care level; it is provided to some extent at the secondary level but mostly at the tertiary care centers.² Most of the public dental healthcare setups are poorly equipped and understaffed, and dental care is not a priority in budgetary allocations.²

Dental diseases are a significant public health burden in India, with dental caries affecting 60-65% of the general population, periodontal diseases affecting 50-90%, and malocclusion affecting 12.5% to 33.3%.³ The efficient use of dental personnel, including dental auxiliary personnel, is critical for facilitating the delivery of dental services. The availability of skilled human resources is critical to the healthcare system.³

Need of Dental Manpower Planning

Workforce planning is a critical component of future healthcare provision planning.⁴ Factors affecting both supply and demand for dental services are changing, making workforce planning even more critical in order to avoid future projected shortages or surpluses. Many developed

countries have recently adopted a large-scale, targeted international recruitment strategy to address domestic shortages.⁵ Unemployment, colonial ties, financial incentives, material benefits, the pursuit of higher education, improvement of working conditions and facilities, and avoidance of excessive bureaucratic procedures are all factors that encourage migration.

Health professional migration has a direct impact on health system performance, population health outcomes, and the health workers who remain in the country.⁶ Migration can cause significant delays in providing emergency care as well as long wait times for scheduled services. Rural health care can suffer from a lack of expertise and trained professionals.⁷

Furthermore, excessive workloads and long work hours for the remaining staff can result in demoralization, burnout, and a decline in care quality.⁸ As a result, the challenge is to provide adequate, respectable, and appealing job opportunities to the workforce while maintaining a balanced geographic distribution.⁹

Current Scenario

There are 313 dental colleges in India at present. Only 49 are run by the government and 264 are privately owned. Currently, 84.34% of dental colleges in India are private. The growth of government-aided colleges has far outpaced that of private dental schools. Poor allocation of dentist population ratio is seen in the country. The dentist population ratio in rural areas -is 1:2, 50,000 and the Dentist population ratio in urban areas – is 1:10,000.¹⁰

The dentist population ratio is 1:10,271.9, according to the NHP Profile 2018. The ratio, however, indicates that there are still not enough dentists in India; however, this is not the only explanation; there is another factor that cannot be overlooked in the distribution of dentists: inequality in distribution.¹¹ The dental population ratio in rural areas is much lower than in urban

areas. In rural areas, the dentist-to-population ratio ranges from 1:30,000 to 1:100,000; in the majority of developed urban areas, the average ratio is 1:4,000.¹²

Integration of dentists into primary healthcare systems may be one method of balancing rural-urban disparities. Over the next ten years, there will be a massive oversupply of dentists in the country, with a surplus of over 100,000 dentists. Furthermore, the rate of increase in the number of dentists in India is more than three times that of population growth. Oversupply will continue to affect more than 50,000 dentists. Poor manpower planning, reliance on inaccurate figures, the proliferation of dental colleges, and insufficient regulatory bodies are the reasons for such an excess supply of dentists.¹³

Challenges to the Workforce

With an increase in the number of dental colleges, there has also been a significant improvement in the dentist-to-population ratio in India. However, due to a significant geographic imbalance among dental colleges, the dentist-to-population ratio in rural and urban areas varies greatly.¹⁴

Manpower and equipment are in short supply at Community Health Centres (CHCs) and even district-level hospitals. Not even 20% of India's existing primary healthcare centers provide dental services to the population. The private sector provides the vast majority of oral healthcare services in the country. Oral health services are provided at the District Hospital, District Hospital, and Community Health Center levels under the current Indian Public Health Standard norms.¹⁴

The National Oral Health Program and the new NHSRC norms accepted by the Government of India, on the other hand, extended dental health care through primary health centers and health and wellness centers being established across the country.

Future Projection

For developing countries, the WHO recommends a dentist-to-population ratio of 1:7,500. The number of dentists registered each year has been steadily increasing. During the fiscal year 2015-2016, there was a significant increase. The number of registered dentists increased by 41,343, nearly fivefold when compared to previous years. With a 40,000-50,000 increase in dentists previously, the number has now reached 20,000. Currently, there is a steady increase in the number of registered dentists. The dental population ratio has significantly improved.¹⁵

Public Health Significance

Adequate administration and guidance in, a balanced ratio of healthcare providers, facilities, equipment, and supplies are required for any healthcare system to function effectively. A thorough understanding of historical and current economic, political, social, and health data, including disease trends, prevalence, and severity, is required for designing the types of health interventions.¹⁴ Adequate guidance is required for proper planning of the oral health care system. To reduce oral health disparities, the large gap in the oral health care delivery system between rural and urban areas should be bridged.

Recommendation

Dental colleges should be established in areas identified as disadvantaged in the future to improve access to oral health care for all populations. The availability of PHC dentists to meet the oral health needs of the rural population is critical. The government can provide incentives to those establishing practices in rural areas by providing subsidized space for the establishment of dental clinics. Furthermore, the availability of dental materials and equipment at the PHC level should be improved in order to provide efficient healthcare.

To keep young dentists in their home country, they should be provided with an intellectually stimulating environment for professional

enrichment, profitable working conditions, and career advancement opportunities. An organized national human resource planning system is required to ensure consistent manpower allocation and to provide policymakers with future directions.

Conclusion

Integration and collaboration with mainstream health professionals have emerged as the key issues, but the solutions will be diverse and dependent on country or context-specific scenarios. There is a need to broaden the scope of dentistry and make it more practical. The goal of the workforce should be based on a commitment to prevention. Proper orientation is required for the development of an effective health care system with proper communication and a well-organized workforce are must for a developing country.

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