Oral Health Information System in India: An Imperative for Integrative Health Promotion

Public health has always been an information resource-intensive field. The public health practice is possible only if there is a timely accurate and credible information. Oral health has been consistently overlooked as a health priority in the health policies in India. Although there are multiple other factors such as communicable diseases, demography, and political commitment for oral health priority, an often neglected, yet most crucial is the absence of credible data on the prevalence of oral disease. The evidence gap on oral diseases and their risk factors is a major barrier to advocate oral health issues to the policy community in India. This has led to a lack of political priority of oral health in India and violate the individual rights for seeking equitable healthcare.

The last oral health survey was conducted in India in 2002, and the extent of oral diseases burden in India is unclear. Thus, the State’s failure to recognize acknowledge oral health problems across the population is an equity issue. Oral health is consistently neglected in India by providers due to the lack of an exclusive budget. This is primarily due to lack of credible data on oral diseases and risk factors, oral healthcare coverage, and services.

World Health Organization recommends the countries to conduct the annual or 5 year interval of oral health survey to monitor the oral disease level in the community. The National Health and Nutrition Examination Survey is a program designed to assess the health and nutritional status of adults and children in the United States, which is conducted once in 2 years. This includes oral diseases covering 20,000 representative samples of the US population. Such a survey of oral diseases at regular intervals is not feasible in India due to economic reasons, resource-intensive processes, and chronic nature of oral diseases. Hence, the need for risk factor/risk indicator surveillance to combat these factors would be an appropriate measure rather than the oral disease outcomes since many risk factors are modifiable.

To address the growing global oral diseases, burden, the WHO with an objective to compare oral diseases data between the countries, has developed the epidemiological survey methodology of data collection for oral diseases. This systematic and uniform data collection strategy has championed the establishment of the WHO Global Oral Data Bank. However, oral disease data are very complex to record, analyze, and interpret. Typically, oral disease is monitored by disease characteristics rather than its risk factors or indicators.

The conventional public health practice using epidemiology, biostatistics, and social sciences has resulted in a public health lag in the acquisition, processing, and analysis of large amounts of data. Available evidence emphasizes that the common risk factor approach is the rational basis for the prevention of oral diseases and the promotion of oral health. For this reason, the focal point of chronic disease surveillance which includes oral disease involves modifiable risk factors.

Achieving success with the integration of oral disease prevention into the broader noncommunicable diseases (NCDs) prevention framework of activities at the global level would be facilitated if surveillance of oral disease would follow the WHO’s STEPwise approach to surveillance (STEPS), which is designed as a basic, standardized method for collecting and analyzing data. The WHO is promoting STEPS for NCDs risk factor surveillance as process to strengthen the Common Risk Factors Approach (CRFA) to reduce disease, improve health, and promote well-being. Incorporation of oral health surveillance into the NCD risk factor surveillance will ensure a holistic improvement in the healthcare dissemination since a clustering of risk factors (oral diseases) has been observed especially in relation to the NCDs.

A comprehensive approach to health promotion by addressing the risk factors shared by systemic and oral diseases is an imperative. To achieve this, risk factors/indicators should be considered for developing oral health information systems. Consequently, risk indicators of oral diseases outnumber its risk factors. Such broad coverage of risk indicators is an imminent need for consistent monitoring of oral diseases and continuous update of oral healthcare system in India. This coordinated network through oral health information system will optimize the
data availability for policy development, thereby leading to desirable impacts at individual and community levels.

Moreover, oral healthcare in India which is predominantly tertiary in nature needs a paradigm shift to a preventive oral health approach. This transition requires consistent surveillance, appropriate resource allocation, evaluation and revision of existing programs, and intersectoral coordination. These can be visioned by the establishment of the oral health information system in India. The goal of oral health information system is to provide real-time data for formulating the integrated policies and programs which is more appropriate to Indian settings than traditional oral health surveys.

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