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Research Article

ORAL HEALTH CARE DELIVERY SYSTEMS IN INDIA: AN OVERVIEW

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ABSTRACT
Health system should be organized to meet needs of entire population. Primary health care is best way to provide health services to the community. Health administration system in India works at three different levels with the objective to provide health care to all. In 1977 the Rural Health Scheme was launched with the principle of placing people's health in people's hands. Efforts have been taken by the government to improve the health for all. Various health insurance schemes were launched with the objective to improve health of common people. Oral health care is a neglected sector. There is a need to integrate oral health care with general health. Opportunities exists to integrate oral health care with general health care, but weak political will, less patient awareness and economic factors restricts this noble idea. Attempts should be made to improve the quality of life of the population through research, education, provision of services, and through the promotion of healthy policies. In order to improve a system within a country, it is important to gain knowledge from systems internationally.

INTRODUCTION
As we all know that social, political, economic, environmental & prevalent morbidity & mortality factors have impact on the health care delivery system of any country as it influences development and establishment of health care system. From the Alma Ata Conference in 1978, Health has been declared as a fundamental human right. This implies that the state has the direct responsibility for the health of its entire population in equal measure. Based on the assumption that health is a human right and state has the responsibility to provide it, two major themes have evolved in recent years. Health system should be organized to meet needs of entire population. Primary health care is best way to provide health services to the community.

Objectives of Oral Health Systems (Park, 2012):

- To treat existing oral diseases and preventing future oral diseases.
- To manage and eliminate emergencies, pain and trauma and finding new methods of preventing and treating oral diseases.
- Improving use of new and existing preventive and treatment approaches and treating existing diseases and eliminating the progression of diseases through the use of existing therapies.

Health Administration System in India (Park, 2012)

- At the state level
- At the state level
- At the district level

Health Administration at the Centre

- Ministry of health and family welfare
- Directorate general of health services
- Central council of health and family welfare

Health Administration at the State Level

- State Ministry of Health
- Ministry of Health & family welfare

- Deputy ministry of Health & family welfare
- State Health Directorate

Health Administration at the District Level

Consists of six administrative areas:

1. Sub – divisions
2. Tehsils (Talukas)
3. Community development blocks
4. Municipalities & corporations
5. Villages
6. Panchayats

Health Care Systems in India (Park, 2012):

In India it is represented by 5 major sectors which differ from each other by the Health technology applied and source of funds for the operation.

(A) Public Health Sector

a) Primary Health Care

Village level, Sub-centers, Primary health centers

b) Hospital/Health Centers

Community health centers, rural hospitals, District hospital/health center, Specialist hospitals, Teaching hospitals.

c) Health Insurance Schemes

Employee's state insurance scheme, Central government health scheme

d) Other Agencies

Defense services, Railways.

B) Private Sector

Private hospitals, Polyclinics, Nursing homes and dispensaries, General practitioners and clinics.

C) Indegenous Systems of Medicine

Ayurveda and Siddha, Unani and Tibbi, Homeopathy, Unregistered practitioners

D) Voluntary Health Agencies

E) National Health Programs

Primary Health Care in India: In 1977 the Rural Health Scheme launched.

Principle

"Placing people's health in people's hands" 3 tier system in rural areas based on recommendations of the Shrivastav committee in 1975. The government of India evolved a National Health Policy based on primary health care approach.

Health Care Systems in India (Gupta and Mahajan, 2003):

Village Level

The health care must penetrate into the far reaches of the rural areas, and everyone should have access to it. Implemented by the following schemes; Village Health Guides, training of local Dais, ICDS scheme for Anganwadi workers

Sub-Center Level

Peripheral outpost of the existing health delivery system in rural areas. One for every **5000** population in general and 1 in **3000** in tribal, backward and hilly areas.

Functions

Medical care, MCH including family planning, safe water supply and basic sanitation, prevention and control of locally endemic diseases and collection and reporting of vital statistics

Community Health Centers

Established on 30th June 1996. It covers 80,000 to 1.2 lakh population with 30 beds. It consists of specialists in surgery, medicine, obstetrics and gynecology.

Health Insurance Scheme (Pine and Harris, 1997)

Employees State Insurance Scheme

Introduced by Act of parliament in 1948. Act provides for medical care in cash and kind, benefits in the contingency if sickness, maternity, employment injury, and pension for dependents on the death of the worker because of employment injury. The act covers employees drawing wages not exceeding Rs 10,000/- per month.

Central Government Health Scheme (Contributory Health Scheme)

Introduced first in New Delhi for the central govt employees in 1954 is comprehensive medical care. It provides medical services along with supply of optical and dental aids at reasonable rates.

Private Sector: Private hospitals, Polyclinics, Nursing homes, Dispensaries.

Indigenous Systems of Medicine: Unani, Ayurveda, Siddha, Naturopathy, Homoeopathy

Voluntary Health Agencies in India: Indian red crosses society, Hind Kusht Nirvan Sangh, Indian council for child welfare, Tuberculosis association of India, Bharat Sevak Samaj, Central social Welfare board.

National Health Programmes

National vector borne disease control programme, National tuberculosis programme, National AIDS control programme, National programme for the control of blindness.

Indian Oral Health Care Delivery System (Pine and Harris, 1997): The oral health care delivery system in India can be explained under the different components that deliver system.

Components Include:

1) Personnel

Education and Training: Education & training of oral health care personnel set stage for the organization of oral health care delivery system. Impacts of changing patterns of oral diseases, biomedical knowledge and demographic profiles of the country have resulted in serious questions, recommendations in strategic planning & policy changes reflecting the alterations of training programme. Education of the dentists and the dental hygienists should not be in isolation but with the coordination with the other health professionals and there should be interaction between the oral health care provider, medical professionals and the social service professionals in order to prevent and control the oral diseases more effectively.

Types of Personnel: In all the countries Dentist is the responsible individual, directly or indirectly overseeing or coordinating contributions from related personnel. Dental therapists, school dental nurse, expanded duty auxiliaries and dental assistant exist in over 50 countries and work under the supervision of the dentist which allow them to provide specific services. Incorporation of auxiliaries increases the number of patients to whom dentist can provide dental treatment.

***Dental Laboratories Technicians*:** They are critical to the field of restorative dentistry, preparing prosthesis based on the prescription from the dentist. They are also helpful in cutting the costs of the dental treatment when fabricating dentures without the prescription but the quality may be compromised.

Other Types of Personnel: Includes oral health community workers, general community health workers, and school teachers.

1) Personnel in Indian Scenerio (Daly and Watt, 2002)

Dentist: Misguided dentist to population ratio. The overall Dentist: Population ratio was 1:68,400 and the total number of dentists was 8,750 in 1978. As of 2000 overall Dentist: Population ratio was 1:36,000 the total number of registered dentists was 31,694. As in 2004 in urban areas the Dentist: Population ratio was 1:10000 and in rural areas the Dentist: Population ratio was 1:2.5 lakh.

Dental Auxiliaries: In 1990 there were 3,000 registered hygienists and 5,000 lab technicians. i.e. 1 hygienist for 7 dentists where as the ratio should be 1:1. There were no registered dental nurses or chair side assistants and denturists.

Community Oral Health Care Providers: In 1986, there were a total of 1,043 dentists posted at the PHC level in different rural areas. Thus not even 20% of the existing PHC's in India have dental services available for the population.

2) System/Location (Daly and Watt, 2002)

Dental care is mainly obtained in government, private, or government aided private dental institutions and hospitals, private clinics and some primary health centers.

Mal-distribution of Dental Workforce: There is geographic imbalance in the distribution of these colleges. There are a few private colleges with mobile dental units used for service of the rural population. Availability and distribution of the dentists represents the extensiveness of the oral health care system. Planning for adequate & appropriate distribution of dental manpower has become a significant activity in recent years.

Patient Entry to the System: Patient enters the system by meeting requirements and overcoming barriers such as transportation or cost. Providers and facilities influence the patient in terms of transactions between the patient, oral health care professionals, third parties and social processes. Oral Health promotion activities like diet or nutrition counseling can be given based on the cultural practices. The organization of services influences individual care seeking behavior. Cost of oral health care, hours of operation & distribution of oral health care facilities in system level can lead to alterations of health policies, organizational structure & financing mechanism.

3) Financing and Reimbursement (Daly and Watt, 2002)

Oral health care systems exist in societies with different social and economic systems that influence the structure and process of care. Financing reflects how the money gets into the system, the most common approaches being 1.General government revenues, 2.Specific taxation, 3.Insurance or pre-payment premiums and 4.Out of pocket direct payment by the individual. In India the payment mechanism is mainly through direct payment from private services.

3) Financing and Reimbursement Interaction with Other Parts of the Health Care System: Financing and the reimbursement system influence the other parts of oral health care system. The growing awareness of oral health as a part of general health is also reflected in strategic planning for financing dental organization.

Evidence suggests that Dental insurance, number of Dentists, increasing the number of people with teeth and income have positive impacts on dental expenditures, and conversely with 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: This type of plan covers the expenses related to general dental problems, such as periodontitis and extraction of permanent teeth due to ailments such as caries. Amount of expense to be reimbursed as well as the period of such cover is fixed. Generally provided by the popular dental care product companies in association with one of insurance companies.

Dental Insurance Cover as Part of General Health Insurance Plan: Dental insurance here is provided by general insurance companies as part of their own general health insurance schemes, such as health advantage policy or student medical policy.

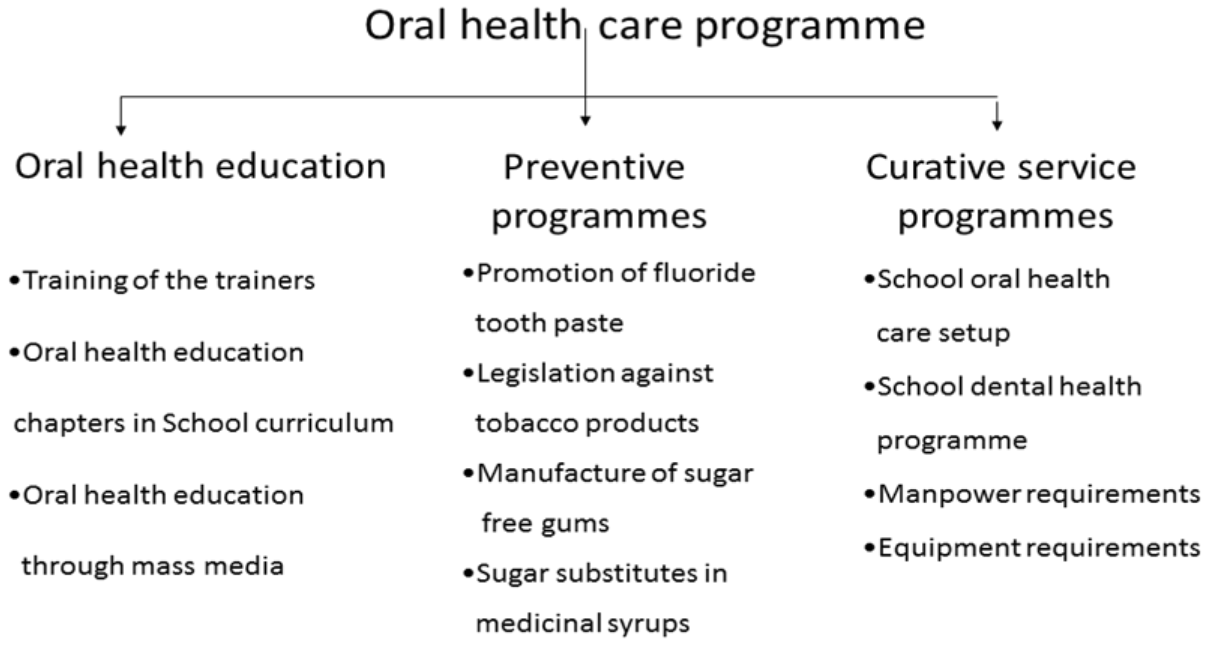
Indian Health Service Dental Program: IHS and tribally managed dental programs operate in over 230 hospitals and clinics in different states.

IHS dental programs strive to prevent as much dental disease as possible through organized prevention programs and to limit existing disease through active clinical programs. Unfortunately Indian dental insurance sector is in its nascent stages and currently only a handful of dental insurance plans are available on a standalone basis.

4) Functions:

Policy Developments: The ministry of Health and Family Welfare, government of India accepted the principle '**The National Oral Health Policy'** in the year **1995.** Plan of extending minimum oral health to the entire Indian population.

Proposed Plan for Oral Health Care in India (Ministry of Health and Family Welfare, 1999-2005)



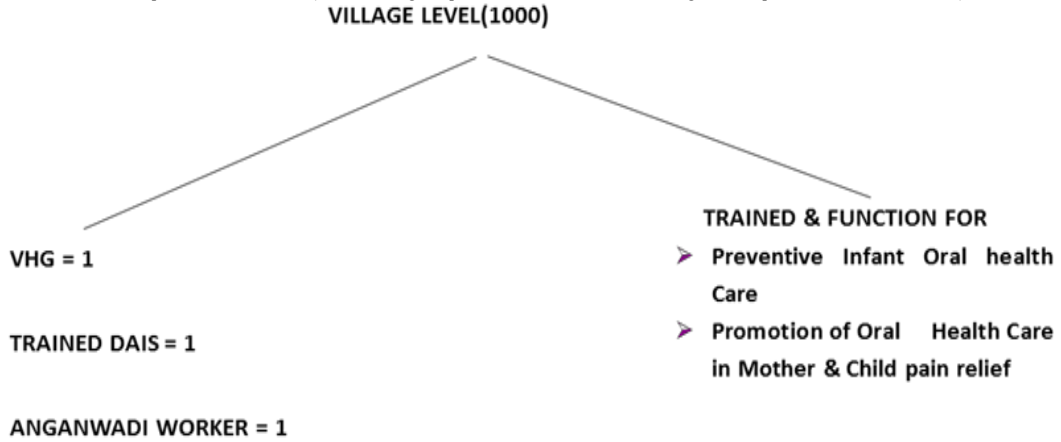
Two plans were introduced: 1) For rural India, 2) For urban India

For Rural India: Phase 1

A) Preventive Package

1. Oral health education: Plaque control, use of appropriate chemico-prophylactic and therapeutic agents, dietary counseling
2. Instituting Primary Prevention in rural areas
3. Training of Trainer

Recommendations from NOHP (Ministry of Health and Family Welfare, 1999-2005)



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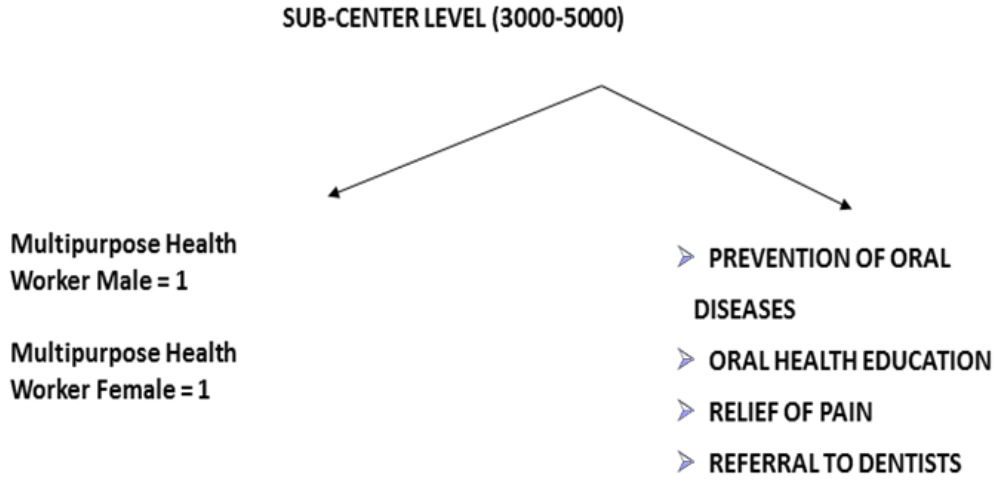

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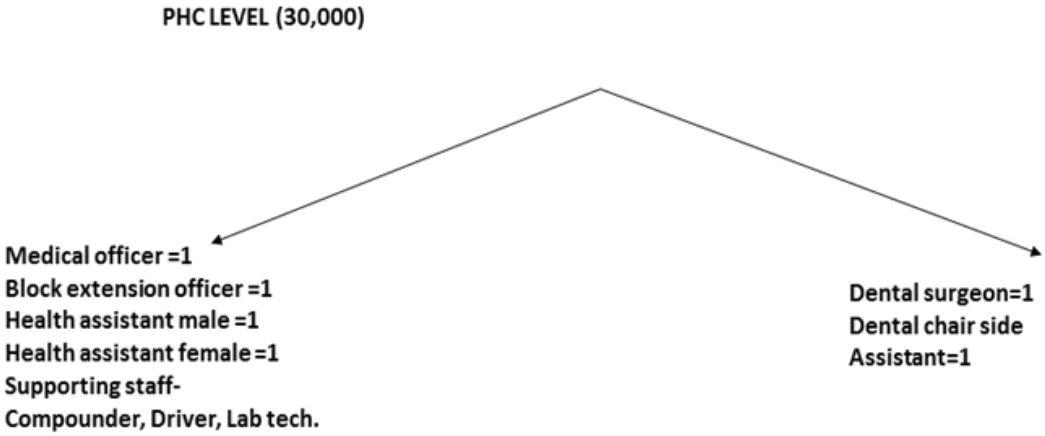

District and Sub-divisional level dental clinics should be strengthened in respect of dental manpower and dental equipment. As per Internship Programme laid down by the DCI, every Dental College / Institution should adopt one District/ Rural Centres / Slums. Intensive Dental Health Care Programme for the school children should be implemented. Schoolteachers, medical and para-medical personnel, anganwadi workers and opinion leaders of the community, should be trained in giving Oral Health Education. Postgraduate students of Community Dentistry should provide leadership to community health workers in initiating and implementing oral health care activities at the grass-root level.

4) Functions:

Phase II: Provision of at least 1 dentist at PHC (30,000 population) with efficient equipment **Mobile dental clinics** to provide curative and restorative along with primary prevention of dental diseases.

Involvement of Dental Colleges: Each dental college should be given the responsibility to adopt an entire district so as to take care of the preventive oral health services to the rural and urban communities by posting interns compulsorily for 6 months in the community.

Strategies for Oral Health Care in Urban Areas:

Involvement and Reorientation of the Dentists Working in the Urban Areas: with the concept & implementation of primary protection for oral diseases.

Implementation of Primary Preventive Package through the school health schemes in different urban areas.

4) Functions:

Involvement, education and motivation of teachers for delivery of primary preventive package to school, college students and young adults.

Exploration and Involvement of Voluntary Agencies

5) Target/Populations in Indian Scenario

Targeting the target population is always sensible because the resources will reach to those who are at the risk for development of disease or in the dire need of those resources. National Oral Health Policy gave special emphasis to pre-school children, primary and secondary school children, expected and nursing mothers and for the increasing geriatric population. To achieve optimum health for the target group no specific plans were stated in the National Oral Health Policy, but stressed on use of auxiliaries, community participation and dental health education.

Status of Oral Health Care System in India (Burt and Eklund, 2005): Oral Health Care has not received due importance in India. During the past 60 years of independence, medical sciences have made tremendous progress in combating most of the communicable &non-communicable diseases. Despite that it has been proved, that oral health has a direct effect on the general health, still the Oral Health Care has been neglected. This is evident from the increased prevalence of dental diseases in recent years and from the meager funds being allotted for Oral Health Care. In the past, oral health did not find its appropriate place in National & State Health Planning due to following reasons: lack of awareness in the masses about the prevalence and severity of dental diseases. Oral diseases are not life threatening or severely debilitating. The fact that oral diseases are almost preventable by simple and low cost effective means is not in the knowledge of the authorities responsible for formulating the National Health Policies.

Bottlenecks to the Effective Delivery of Healthcare Services (Burt and Eklund, 2005):

- Number of ANMs per PHC is the same throughout the country despite the fact that some states have twice the fertility level of others.
- Irrational distribution of PHCs and sub-centers.
- No formal feedback mechanism and incentive to treat citizens.
- Lack of accountability leads to absentee doctors.

CONCLUSION

Even though India has created one of the largest health care delivery systems in the world, people of country still suffer from a multitude of preventable and treatable general and oral health problems. Opportunities exists to integrate oral health care with general health care, but weak political will, less patient awareness and economic factors restricts this noble idea. Attempts should be made to improve the quality of life of the population through research, education, provision of services, and through the promotion of healthy policies.

In nutshell oral health care systems includes 1.Health policies to promote Oral Health, 2. Resources including personnel and facilities, 3.Strategies that organizes those resources to provide services. Even though India has created one of the largest health care delivery systems in the world, people of country still suffer from a multitude of preventable and treatable general and oral health problems. Opportunities exists to integrate oral health care with general health care, but weak political will, less patient awareness and economic factors restricts this noble idea. Attempts should be made to improve the quality of life of the population through research, education, provision of services, and through the promotion of healthy policies. In order to improve a system within a country, it is important to gain knowledge from systems internationally.

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