

# Healthcare and Dental Industry in India



Indian Dental Association





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## Foreword

India is now among the top countries in most parameters: GDP, size of economy, IT, pool of scientific manpower, space, eco-protection measures, power generation, among the largest exporters, emerging, fast growing economies, global manufacturing and trading hub, infrastructure, tourism, agricultural and dairy production, highest % of young population in the world, the list is quite long!

India has the second highest number of the English language speakers in the world, next only to USA. There are more than twice as many English speakers in India as in the UK, where the English language originated.....

Healthcare is one of the top priority sectors for India.

India is now the much sought after destination for medical tourism, owing to its high quality medical treatment available here from world class competent medical professionals in a very humane and courteous way at a very reasonable cost. Latest medical technology and equipment are being used. State-of-the-art hospitals, clinics and nursing homes are coming up and are managed in a very professional and disciplined manner, foremost priority being accorded to patient-care and patient-comfort. These healthcare establishments give excellent facilities, while observing the highest standards in cleanliness, sanitation and hygiene.

The Union Government of India and the State Governments have been zealously and successfully implementing immunisation programmes. Child health, women's health and healthcare for the aged – all are seeing quantum leaps of improvement.

Healthcare is now accessible alike for the underprivileged, rural masses and urban elite.

Good sums of money are being invested to promote R&D in healthcare.

Dentistry too has kept pace with these developments.

Awareness on oral health has scaled great heights among the Indian population. Proper daily dental care and regular visits to the dentist are now part of the lifestyle practices.

Abundant natural resources, world-class manufacturing facilities, ample land space for setting up factories, skilled, favourable Government policies for foreign collaborations, quality-conscious and reasonably priced manpower and worker-force - all these together make India THE IDEAL choice for outsourcing manufacturing activities.

Our theme, "Connecting Minds, Creating the Future", is globally applicable today. India is beckoning you with open arms!!

We are sure your business will see huge gains by tapping the Indian market.

Once again, Welcome to incredible India!

**Thank You**

**Dr. Ashok Dhoble,  
Honorary Secretary General, IDA**

# An Overview

## Indian Population

For a population of over 1.2 billion, there are currently over 1,80,000 dentists, which include 35,000 specialists practising in different disciplines in the country. The dentist population ratio is reported to be 1:9,000 dentists in metros / urban and semi urban areas and 1:2,00,000 dentists in the rural area. There are more than 35,000 dental specialists in different disciplines. The number of dentists is expected to grow to 300,000 by 2018 and the dental specialists to 50,000. Every year more than 24500 dental graduates are added to the list.



## Shri. Pranab Mukherjee, President of India

### Views on Oral Health



“What we need today in India is an Oral Health Revolution similar to the Green Revolution and White Revolution. I am happy to note that IDA has been in the forefront of this campaign to bring about an Oral Health Revolution in the country along with FDI and its partners.”

“India, with her population base, offers a great opportunity for business in the area of oral healthcare.

Providing quality and affordable healthcare to the population is a formidable task. Government over the years has increased the allocation for health sector. The central government outlay for the health sector in the Twelfth Plan has been increased by 200% to Rs. 300,018 crore over the actual outlay of Rs. 99,491 crore in the Eleventh Plan. The process of rolling out universal health coverage has also been set in motion. This emphasis offers a huge business opportunity in India. “

“India’s biggest strength in the coming years is going to be her demographic dividend. More than fifty percent of our population is under 25 and soon one fifth of the world’s working population will be in India. We have set the target of skilling 500 million people by 2022. IDA must work out that how the demographic dividend can be utilized by skilling more number of people in the oral healthcare sector with a twin purpose of generating the employment as well as creating access of quality oral healthcare to over 1.2 billion population of this country.”

Taking clue from the above vision of Shri. Pranab Mukherjee President of India IDA decided to to organize World Oral Health Summit & Exhibition the world’s First International exhibition on Oral Health, in Mumbai during 21st to 25th October 2015, which will be an ideal platform to promote oral health education

Extracted from the Speech given at opening ceremony of Annual World Dental Congress September 2014

## CONNECTING MINDS, CREATING THE FUTURE

## Shri. Dr. Abdul Kalam, Former President of India

## Views on Oral Health



“A window into the health of our body.”

“The IDA( Indian Dental Association) , DCI (Dental Council of India) and the Dept. of health , govt of India must be committed to:

- Promotion of effective efforts in disease prevention especially caries and oral cancer, health promotion and service delivery;
- Education of the public, health professionals and decision-makers regarding the importance of oral health to total well-being; and
- Expansion of the knowledge base of dental public health and fostering competency in its practice.

“A call to create Oral Health India Mission to ensure one annual oral clinical examination for every Indian citizen starting with school children.”

“Oral Health India would afford oral disease prevention and oral health promotion for Indians of all ages through funding, technical assistance, donated dental product, and by facilitating public-private partnerships. Oral Health India would message to the Indian public center around self care, regular dental visits, tobacco avoidance and cessation, and healthy food choices, and routinely generate over 1 billion audience impressions.”

Extracted from the Speech given at National Oral Healthcare Sushruta Awards January 2015



## General Health Sector

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## General Health Sector

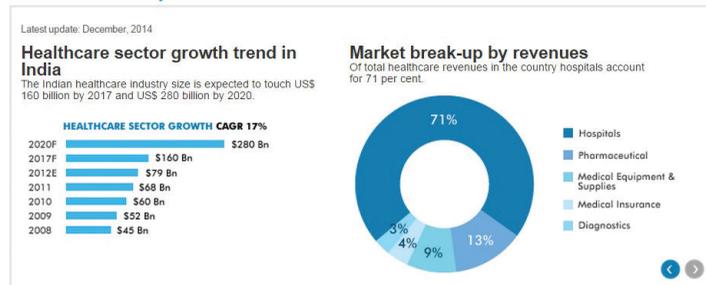
Healthcare as an industry in India has grown to become one of the most promising and progressive sectors poised for rapid growth. It is expected to reach US\$ 160 billion by 2017 and is projected to reach USD 280 billion by 2020.



India's one billion plus population and the sustained rapid economic growth the country has been experiencing continues to create tremendous demand for better healthcare. A major thrust on medical tourism, government initiatives and focus on public private partnership has added stimulus to this growth.

Apart from the presence of corporate hospitals, the availability of highly qualified doctors and scientists, their expertise and state-of-the-art technology have enabled India become an attractive destination globally for medical tourism, clinical studies and research and development.

### Healthcare Industry in India



source [ihf.org](http://ihf.org)



## General Health Sector

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## Dental Health Sub-Sector

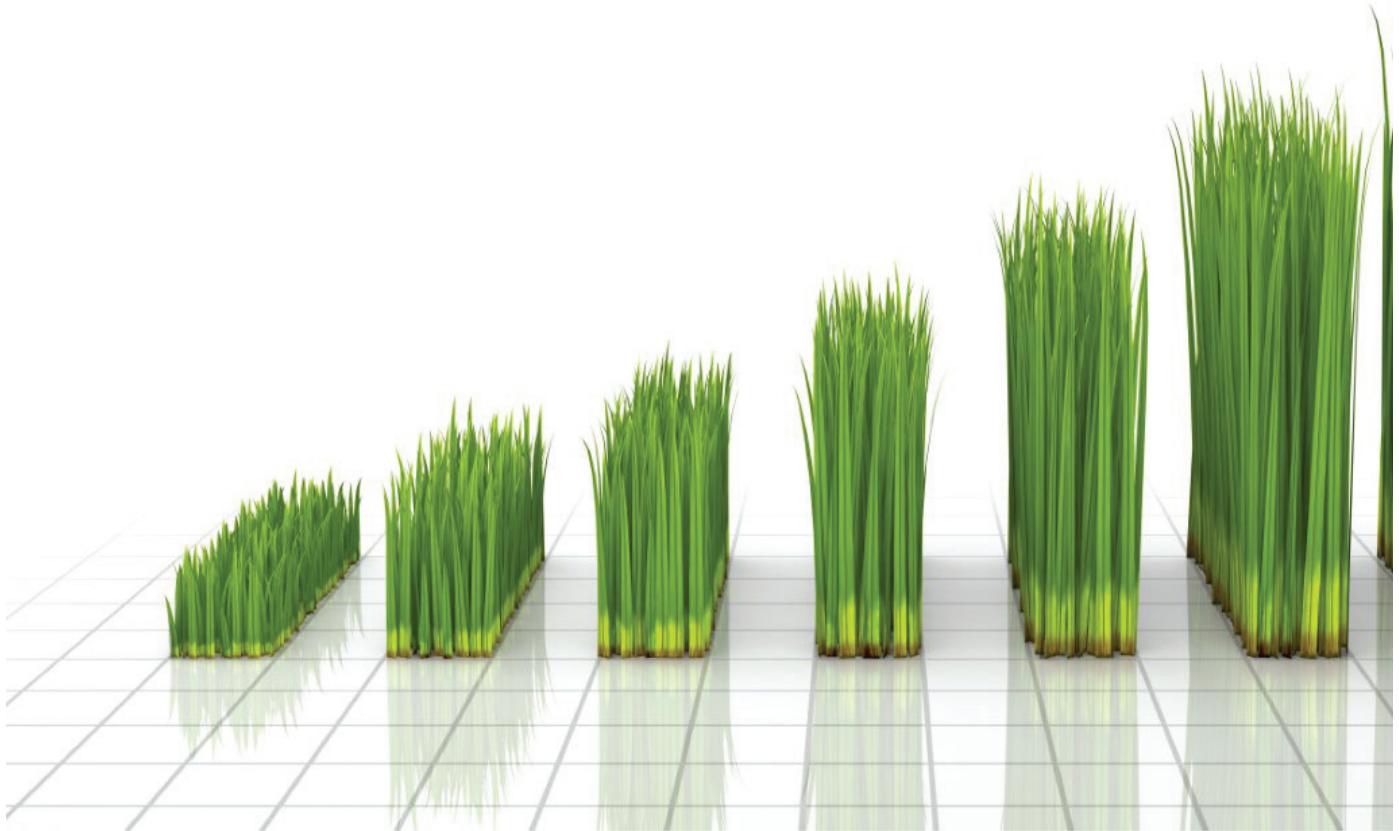
The potential size of India's dental market is vast and is expected to become one of the largest single country markets for overseas dental products and materials. The total market for the dental equipments and materials is estimated to be around US\$ 90 million annually.



The Indian market presents lucrative and diverse opportunities for exporters with the right products, services and commitment. There are more than 1,80,000 dental professionals in India, 303 dental institutes and over 5,000 dental laboratories.

According to various reports, growth rates 20 to 30 per cent are forecast for the dental product market in the coming years. Some financial investment groups are also building hospitals with dental specialisations, offering general dental care, and speciality treatment.





## Factors Driving Growth

## Factors Driving Growth

*In the last decade the dental services scenario in India has vastly improved due to:*

### Growing Healthcare Awareness

***The outlook for Indian healthcare industry looks positive owing to high growth rate in almost all its segments, whether its primary healthcare, secondary and tertiary healthcare, medical equipment, diagnostics, health insurance or medical tourism.***

Growing awareness and patient empowerment have led to demand for better healthcare facilities at affordable prices.

- Extensive economic reforms in the last decade have made it possible for Indians to have access to better jobs and a higher

- purchasing power.

Many Indians are now choosing to take health insurance, clearly showing that growing segments of the population can afford high quality treatments.

The GDP growth of India in 2013-14 at 4.3% and is expected to grow in 2014\*-15 at 5.5%



### Healthcare Expenditure

- India's healthcare expenditure is significantly low when compared to the global, developed and other similar emerging economies.

- However, healthcare sector has progressed at an impressive pace over the past few years. During 2011-2017 it is expected to record at CAGR 15.0%

- Total expenditure (public and private) on health in India was nearly 4.05% of GDP in 2010 as compared to 2 % in the year 2004 according to World Bank report published in 2012.

- Government spending on health is less than 20% against the average spending of 30 - 40% in other developing countries. Private spending constitutes 80%.

- The Central budget for 2013-14 provides Rs.3,73,300 million (US\$6816 million) for the health sector.

- The Planning Commission has allotted US\$ 83 billion under the 12th Five Year Plan for healthcare spending; this is about US\$ 60 billion more as compared to the 11th Plan allocation. The increased allocation is expected to raise government (public) expenditure on health to 2.5% of GDP from the current rate of 1.37% of GDP.

### Government Policies

The Government has taken several steps to promote investment in healthcare and to develop healthcare sector infrastructure within a short span of time. Some of the initiatives taken up by the Government are:

- 100 per cent FDI is permitted for health and medical services under the automatic route.

- Reduction of customs duty on all medical, surgical and dental equipments etc from 7.5% to 5%.

- Full exemption from excise duty/Countervailing Duty to six specified lifesaving drugs/vaccines.

- Liberal policies of Government has created opportunities for international dental manufacturers to establish joint ventures and outsourcing facilities.

- Lower tariffs and higher depreciation on medical equipment & income tax exemption for 5 years to hospitals in rural areas, and Mini Metros.

### National Rural and Urban Health Missions

The government seeks to provide effective healthcare by fusing the National Rural and Urban Health Missions into National Health Mission and providing higher allocations. It is considered as the single-most largest programme in the world to improve primary healthcare delivery in India.

- The Mission is an expression of the government's commitment to raise public spending from less than 1% to 2-3% of GDP .

- Allocation of Rs. 21,200 million (US \$3926 million) has been made for National Health Mission (NHM) in 2013-14.





# Dental Market Potential

## Dental Market Potential

### Market Size

By 2014 the Indian dental healthcare industry is expected to reach US\$ 116.43 million growing 6 percent annually, the dental care services market US\$ 1.16 billion and oral care market US\$ 1.8 billion. Indian dental care services market, constituted by dentists and dental ancillary services, was estimated at US\$ 660 million in 2009, dental equipments & appliances market at US\$ 87million and dental oral care market was estimated at US\$ 1 billion. The potential size of India's dental market is vast and is expected to become one of the largest single country markets for overseas dental device and materials exporters.

- Global dental care market estimated to be about US\$16 billion in 2005 has been growing at an average annual growth rate of 4.5%.
- The market has grown at a CAGR of 5% in the last 5 years.
- Asian market has witnessed the highest growth rate of 10%, followed by the US at 5.5%.

- The Indian healthcare market is one of the largest services sectors contributing 2 percent to the country's GDP.

- India's market for dental products is extremely dynamic, with a current estimated growth rate of between 25 to 30%.

- The healthcare segment offers an attractive growth opportunity for the information technology (IT) and business processing outsourcing (BPO) industry.

- The market for outsourced services to healthcare providers is expected to increase from US\$ 9 billion in 2011 to US\$ 15 billion in 2016.

In addition, the Indian pharmaceutical market is also expected to grow at a compound annual growth rate of 15.3 per cent during the period 2011-12 to 2013-14, as per Barclays Capital Equity Research report on India Healthcare & Pharmaceuticals.

In 2009 the dental equipments & appliances market was estimated at US\$ 90 million, the dental care services market, constituted by dentists and dental ancillary services, at US\$ 660 million and dental oral care market at US\$ 1.8 billion. By 2014, the Indian dental equipments industry is expected to reach US\$ 116.43 million, growing at 10% annually, the dental care services market US\$ 1.16 billion and oral care market US\$ 1.8 billion. Overall, the dental market is expected to grow by 20 percent.



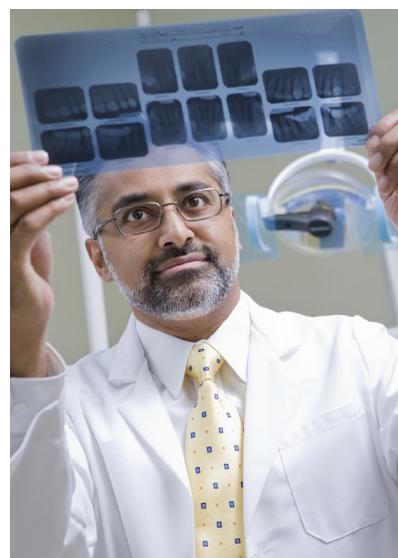
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### Oral Care Infrastructure

In India, the oral care infrastructure had 1,80,000 dentists as of 2012, serving over one billion population through their clinics numbering over 1,25,000. As far as the overall ratio of dentist to population is concerned, there was a marked improvement. There are around 297 dental schools with 25,000 students graduating each year; about 140 of such schools have post graduate courses in various fields of dentistry.

More than 90 % of the practitioners work in and around the major cities and play an extremely influential role in the purchase of dental devices and materials for hospitals, clinics and other healthcare facilities.

- The great majority of dentists prefer to work in private clinics which are thus experiencing an impressive growth.
- Job opportunities are less in government and private sector; so most dental professionals have to start private dental offices.
- Every year approx. 12,000 to 15,000 new practices start in the country.
- Currently 99 % of the patients visit private practices as government facility is very less compared to the private practices.
- Most practices are Solo with Multi Operatories.
- Recent trends are for group practices. Vasan group, Manipal group, and some other groups have started a chain of dental clinics
- Many other companies are in the process of starting a chain of dental clinics.



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**General Hospitals**

According to the Confederation for Indian Industries (CII), there are more than 15,000 private hospitals and nursing homes in India, and a majority of them are located in the major cities.

Many of these hospitals and nursing homes (especially private) provide dental services and tend to invest in sophisticated foreign medical / dental devices.

Many private organisations like Apollo group, Wockhardt, Fortis Healthcare, Max Health, Piramal Healthcare have invested large amounts

of money in starting a chain of hospitals in the country. They have exclusive dental departments to serve the patients.

**Dental Laboratory/Dental Technician**

There are more than 5,000 dental laboratories in India and currently only 32 colleges offer diploma courses in Dental Technician. The low percentage of students currently passing out is not able to meet the rapidly growing requirement. Lately, this number has been showing an increasing trend to meet the growing demand. Multinational Presence

Looking at India's rapidly growing dental market many multinationals like KAVO G C, Ivoclar – Vivadent, Dentsply, 3M, Nobel Biocare, Mecktron, Sirona, Aceton, Ultradent, Coltene, Voco, S S White, Shofu, and others have set up offices in India. In order to Promote " Make In India" , IDA is going to organize World Dental show from 16th- 18th October 2015 at Mumbai . This exhibition will not only spread dental care education but also going to invite leading international companies & delegates from all over the world.

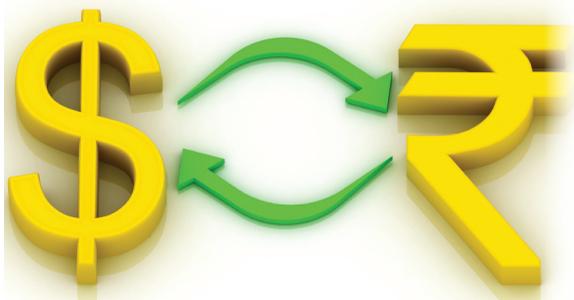
Further, the healthcare segment offers an attractive growth opportunity for the information technology (IT) and business processing outsourcing (BPO) industry. The market for outsourced services to healthcare payers is expected to increase from US\$ 9 billion in 2011 to US\$ 15 billion in 2016.





# Investment Opportunities

## Investment Opportunities



### The Challenge

As the demand for healthcare services in India tends to increase, provision of affordable healthcare services to India's billion-plus population presents enormous challenges and offers enormous investment opportunities.

People are becoming more health conscious day-by-day and spending much more on health and importance of dental care & cosmetics.

### The Manufacturing Hub

The Indian dental equipment and appliances market is around \$ 90 million, with a yearly growth rate of 10 per cent per annum. There are forecasts of possibilities of doubling the growth rate up to 20 per cent for the dental technology market in the coming years. Further,

several foreign companies are already investing in the Indian dental equipment market by establishing their production units. India is, therefore, becoming a manufacturing hub, supplying dental equipment and material to less developed countries such as Sri Lanka, Pakistan, African continent and the Middle East.

### Dental Products Manufactured in India

Quite a few Indian dental product manufacturers are currently supplying quality dental equipment and materials. However a larger proportion is imported.

### Foreign Direct Investment

The healthcare and life sciences sector has received the maximum investment from private equity (PE) and venture

capital (VC) players, attracting US\$ 817 million across 29 investments till August 2012, according to data from Venture Intelligence. Last year, 38 deals were recorded in the sector worth US\$ 421 million.

The hospital and diagnostic centre in India has attracted foreign direct investment (FDI) worth US\$ 1.48 billion, while drugs & pharmaceutical and medical & surgical appliances industry registered FDI worth US\$ 9.78 billion and US\$ 571.91 million, respectively during April 2000 to October 2012, according to data provided by Department of Industrial Policy and Promotion (DIPP).

The private sector has emerged as a vibrant force in India's healthcare industry.

### Sectoral Growth

Tele medicine services in India are also expected to grow, which in turn should create demand for diagnostic equipment such as X- rays, CT scanners.

### Outsourcing

Healthcare BPO: insurance billing, disease coding, forms processing and claims adjudication and telemedicine.



## Multiple segmentation



## Dental Imports

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## Dental Imports

*Indian dental industry depends on substantial imports. The proportion of imports is the highest in the Indian dental equipment and implants segments.*

### **Countries & Category of Import**

About 85% of India's annual requirement of dental equipment, instruments and materials demand is met mainly by imports primarily from Germany, USA, Italy, Japan and recently from China, as India has less number of manufacturers and is largely dependent on imports.

As regards the possibility of importing dental equipment and materials to India, the leading categories constitute consumable items, implants, X-Rays, dental units and imaging systems, with a major increase in dental laboratory equipment and materials, dental drills, scalars and hand pieces.

The growing awareness about cross-infections and government controls has brought dental professionals to invest more in sterilization equipment/devices.



## Knowledge Enhancement

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## Knowledge Enhancement

### Educational training

There is excellent scope to set up teaching institute imparting dental education, especially for post graduation and research institution and large opportunity for training doctors, and dental technicians. Workshops, Hands on Courses, Continuing Dental Education, and Dental Practice Accreditation are some of the areas where collaborative ventures offer scope.

### Contract Research

India has been playing the role of a contract research organization providing support to the pharmaceutical, biotechnology, and medical device industries in the form of research services outsourced on a contract basis.





## Health Infrastructure

## CONNECTING MINDS, CREATING THE FUTURE

## Health Infrastructure

*Various funding agencies have been providing financial assistance to develop healthcare infrastructure facilities.*

### World Bank Aid

- India needs to invest an additional 3-4% of GDP on infrastructure to sustain its current levels of growth and to spread the benefits of growth more widely.

- The World Bank will lend India \$14 billion for development of health infrastructure.

### Oral Cancer Detection Centre

Government of India initiated the National Cancer Control Programme with grant of financial support for primary prevention, early detection and treatment of cancer. A grant of US \$ 1 million is provided cancer detection centre.

## Future Prospects

### Dental tourism

There has been a paradigm shift in the quality of

technology and infrastructure in Indian dental services. Providers are now focused on the latest treatment methods to provide quality dental care in India to international patients. Dental Tourism forms 10 percent of the total medical tourism industry and is projected to grow at 30 percent per annum by 2015 to Rs.95000 million (US\$ 179,500).

### Health / Dental Insurance

After liberalization of economic policy, a large number of private players have been offering various plans. Less than 10% of the population is covered by health insurance. Health insurance plans also include dental care benefits.

## The Road Ahead

There is a huge opportunity in India for any country to maximise the investment potential that exists in India within the healthcare environment. IDA will explore all possibilities to promote greater investment in the healthcare sector, particularly in the dental health sub-sector, to sustain the momentum of growth in the country.



## Need For Action

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## Why take action?

***We are aware that the Indian democracy is committed to the care and wellbeing of its citizens. The government's long-term investment in science and technology has paid off by adding years to the average life span and enhancing the quality of life. But not all Indian have benefitted equally from improvements in oral health and health care.***

India's continued growth in diversity has resulted in a society with broad, educational, cultural, language and economic differences which hinder some individuals and groups from realizing the gains in oral health. National Oral Health Survey conducted in 2005 by IDA highlighted dental disparities revealed silent epidemic of oral diseases affecting rural Indians --- our most vulnerable citizens. The survey found Dentist : Population ratio in the rural areas to be dismally low with less than 2% dentists being available for 72% of rural population. The grim reality in India is, that 95% of the population suffers from gum disease, only 50% use



a toothbrush and just 2% of the population visit the dentist.

The survey sounded an alarm and the need to affirm once again that ---- oral health is very vital to general health and well-being.

The Indian Dental Association's (IDA) immediate response was to address the 'silent epidemic of oral diseases affecting the most vulnerable citizens of lowest strata young and old and under-privileged groups' by initiating National Oral Health Programme which aims at optimal oral health by 2020.

## Oral diseases are preventable

Good oral health is vital to good overall health. Poor oral health negatively affects growth, development, learning, nutrition, and communication, self-esteem for all sections of society, young and old.

India exposes disparities in oral health, with lower income groups having higher disease rates, limited or no access to care. IDA call-for-action accurately assesses needs, monitors outcomes, decreases disparities, improves access to care and ultimately improves oral health.

IDA affirms that oral health is essential to general health and well-being and thus the need to take action. IDA aims that

- No body suffers from oral diseases which can be prevented and treated.
- Young children do not from suffer caries.
- Rural populations do not experience poor oral health due to barriers to access to care, shortage of resources and professional.



These actions crystallize IDA's aim for optimal oral health for the nation. The association is confident that rewards in health and well-being can accrue for all Indians. However, a number of barriers hinder the ability of Indians from attaining optimal oral health calling for action-framework , a national oral health plan to improve quality of life and eliminate oral health disparities.

IDA wants to create awareness about:

- Oral health just being more than healthy teeth.
- Oral diseases and disorders affect health and well-being throughout life.
- The mouth reflects general health and well-being. Oral diseases and conditions are associated with other health problems. Lifestyle behaviours that affect general health (tobacco use, excessive alcohol use and poor dietary choices) affect oral and craniofacial health.

- Safe and effective measures exist to prevent the most common dental diseases— dental caries and periodontal diseases.
- There are profound and consequential oral health disparities in India.
- Information is needed to improve India's oral health and eliminate health disparities.
- Scientific research is key to reduction in the burden of diseases and disorders that affect the face, mouth and teeth.



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**Reason for Action**

Knowledge and tools of the 21st century provide a new window into the complex link between oral health and general health. Science is advancing rapidly and breakthroughs in oral, dental and craniofacial research proves that oral diseases, such as caries, periodontal disease, oral cancers and sports-related injuries of the craniofacial complex are all preventable.

We now have the perspective to understand health and disease. This deep insight enhances our ability to predict and more effectively manage many oral and dental diseases by improving community outreach, education and behavioural modification. We conclude that the morbidity, mortality and economic burden associated with these conditions can be considerably reduced by programmes and interventions aimed at prevention and health promotion.

**The Burden of Oral Diseases**

Oral diseases are progressive, cumulative and become more complex over time. They can affect our ability to eat, the foods we choose, how we look and the way we communicate. These diseases can affect economic productivity and compromise our ability to work at home, at school or on the job.

Healthy teeth help a child eat properly, speak clearly and guide adult teeth into place. Yet tooth decay is the most common chronic disease of childhood. Good oral health helps seniors get proper nutrition, maintain good overall health and enjoy a better quality of life. Many factors put older adults at risk for poor oral health, including medications and health conditions that cause “dry mouth” which can quickly lead to cavities and severe gum disease, a condition linked to other serious

chronic health disorders, including diabetes, heart disease and stroke. Because older adults are more likely to experience a chronic health condition, maintaining good oral health becomes even more important with age.

The following are highlights of oral health data for children, adults, and the elderly.

**Children**

***(India has population of 440 million and 26 million children added annually )***

- Cleft lip/palate, one of the most common birth defects.
- Other birth defects such as hereditary ectodermal dysplasias, where all or most teeth are missing or misshapen, cause lifetime problems that can be devastating to children and adults.



## CONNECTING MINDS, CREATING THE FUTURE

- Dental caries (tooth decay) is the most common chronic childhood disease – 5 times more common than asthma and 7 times more common than hay fever.
- Over 80% under 15-year-olds have caries and 40% suffer from malocclusion.
- There are striking disparities in dental disease by income. Poor children suffer twice as much dental caries as their more affluent peers and their disease is more likely to be untreated. These poor-non poor differences continue into adolescence.
- Tobacco-related oral lesions are prevalent in adolescents who currently use smokeless (spit) tobacco.
- Unintentional injuries, many of which include head, mouth, and neck injuries, are common in children.
- Intentional injuries commonly affect the craniofacial tissues.
- Professional care is necessary for maintaining oral health, yet just 2% of children see a dentist.
- The social impact of oral diseases in children is

substantial. More than 51 million school hours are lost each year to dental-related illness.

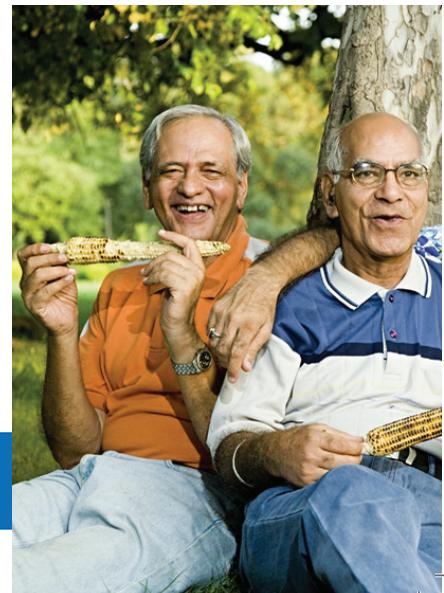
- Pain and suffering due to untreated diseases can lead to problems in eating, speaking, and attending to learning.

### Adults

- Most adults show signs of periodontal or gingival diseases. Severe periodontal disease affects about 14 percent of adults aged 45-54.
- Clinical symptoms of viral infections, such as herpes labialis (cold sores), and oral ulcers (canker sores) are common in adulthood affecting about 19 percent of adults 22 to 44 years of age.
- Chronic disabling diseases such as temporomandibular disorders, Sjögren's syndrome, diabetes, and osteoporosis affects the oral health of Indians.
- Pain is a common symptom of craniofacial disorders and is accompanied by interference with vital functions such as eating, swallowing, and speech.
- Population growth as well as diagnostics that are enabling earlier detection of cancer

means that more patients than ever before are undergoing cancer treatments.

- Immunocompromised patients, such as those with HIV infection and those undergoing organ transplantation, are at higher risk for oral problems such as candidiasis.
- Employed adults lose more than 164 million hours of work each year due to dental disease or dental visits
- Those with income at or above the poverty level are twice as likely to report a dental visit in the past 12 months as those who are below the poverty line.
- Tobacco-related cancer is the most prevalent of cancers being 4 in 10. Annually 1,30,000 people succumb to oral cancer, this translates into approx 14 deaths per hour in India.



## CONNECTING MINDS, CREATING THE FUTURE

### Elderly

- 23 % of 65- to 74-year-olds have severe periodontal disease. (Also, at all ages men are more likely than women to have more severe diseases and at all ages people at the lowest socioeconomic levels have more severe periodontal disease.)
- About 30 % of adults 65 years and older are edentulous, compared to 46 percent 20 years ago. These figures are higher for those living in poverty.
- Oral and pharyngeal cancers are primarily diagnosed in the elderly. Prognosis is poor.
- Both prescription and over-the-counter drugs results in oral side effect – usually dry mouth. The inhibition of salivary flow increases the risk for oral disease because saliva contains antimicrobial components as well as minerals that can help



rebuild tooth enamel after attack by acid-producing, decay-causing bacteria.

promote oral health and prevent disease.

The inspiration behind this is to build a stronger, more effective and efficient oral health care system that would contribute to the health and well-being of all Indians. Initiatives by IDA enhance oral health and enlist the expertise of dental professions, individuals, health care providers, communities and policymakers at all levels of society.

### The Goals

of the Call To Action is to

- promote oral health.
- improve quality of life.
- eliminate oral health disparities.

As a force for change to enhance the nation's overall health and well-being, IDA urges that oral health promotion, disease prevention and oral health care have a presence in all health policy agendas set at local, state and national levels. For this to happen, the public, dental health professionals and government must understand that oral health is essential to general health and well-being at every stage of life. In addition, IDA seeks to act in efforts to address the nation's overall health agenda.

## Vision and Goals

### The Vision

of the Wake-up Call To Action is

- for optimal oral health, acknowledging oral health is a fundamental part of general health and well-being.
- engage in programmes to





## The Actions

## CONNECTING MINDS, CREATING THE FUTURE

## Action 1: Change Perceptions of Oral Health

Indians generally perceive oral health as less important and separate from general health. Hence, activities to overcome this attitude and belief are taken up at grassroot level to advocate and increase oral health literacy, understand basic oral and craniofacial information and services essential to make appropriate health decisions. This allows prevention, early detection and management of diseases of the dental, oral, and craniofacial tissues to be integrated in health care. Formation of community-based programmes and social services will promote the general health and well-being of all Indians.

### Change Public Minset

- Advocate and improve oral health literacy.
- Develop culturally sensitive and linguistically relevant messages.
- Improve knowledge of the value of regular, professional oral health care.
- Creating awareness about how the signs and symptoms of oral infections reflect general health status and act as an indicator for other diseases.

### Change Policymakers' Mindset

- Providing updated information to the government of the results of oral health research and programmes and of the oral health status.
- Develop concise and relevant messages for the government.
- Documenting the results of quality-of-life and health including and/or excluding oral health services in programmes and reimbursement schedules.

### Change Dentists' Mindset

- To include content on oral health and the association on oral health and general health to review and update dentists through continuing education courses.
- Training dental professionals to conduct oral screenings as part of routine physical exams and make appropriate referrals.
- Promote interdisciplinary training of dental personnel in counseling patients about how to reduce risk factors common to oral and general health.
- Encourage dentists' to refer patients to other health specialists as warranted by examinations and history.

## Action 2: Initiate Effective Programmes

### Weaken disease and disability

– To inform the public and dental professionals on ways to prevent and eliminate oral disease through education, early diagnosis, behavioural change, risk reduction and disease prevention management. To set benchmark and strong foundations for assessing the scientific proof and promoting effective actions.

### Improve oral health care access

- Health disparities are common with populations that have limited or poor access to health care services mainly due to poverty, limited education or language constraints, geographic isolation, age, gender, disability, or an existing medical condition. Close working relationships are encouraged to create strategies that cater to the varying and continuing health needs of the people.

### Enhance health promotion and health literacy

- To encourage healthier lifestyles and increase interventions for prevention or early detection of disease by changing the environment (the places where people work, play, learn or live).

A better way to integrate and promote oral health along with general health and well-being is to introduce policies and programmes related to tobacco cessation, dietary choices, wearing protective gear for sports and other lifestyle related efforts.

Generally, Indians disregard the importance of oral health and other preventive measures that can be taken before a situation becomes worse affecting their oral health. Many a times symptoms are not taken into account and treatment to overcome gets neglected thus oral health care programmes aim to:

### Identify and reduce disease and disability

- To take science-based actions appropriate for individuals and communities.
- Improve and update oral health-related content in health profession related school curriculum, residencies and continuing education programmes, by adding new research and discoveries based on diagnosis, treatment and prevention of oral diseases and disorders.

- To identify patterns of disease and population at risk by building support for epidemiologic and surveillance databases at national, state, and local levels.
- To generate data on oral health status, disease and health services utilization and expenditures and sort it by demographic variables for various populations. Documenting, monitoring the progress and measuring health outcomes is important for every survey.
- To decide oral health care needs, system requirements along with right imbursement for services, facility and personnel needs and referrals at community or national level.
- To boost amalgamation between research, provider, and educational communities in activities, like organizing workshops and conferences, to develop education standards, research, and service needs of patients who need special care and their families.

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Enhance Access to Oral Health Care

- To advocate and apply programmes that have shown effective improvement in access to care.
- Create an updated database of these oral health care programmes.
- To make policy changes to improve provider participation in public health insurance programmes and provide patients with better care facilities.
- To eliminate hurdles to improve the use of services by simplifying forms and informing individuals about when and how to obtain services and offering transportation and child care as needed.
- To help low-income patients in arranging and keeping oral health appointments.
- To aid health insurance benefits for diseases and disorders affecting craniofacial, oral, and dental tissues. This includes various genetic diseases such as ectodermal dysplasias, autoimmune disease such as Sjögren’s syndrome,



congenital anomalies such as clefting syndromes and chronic orofacial pain conditions such as temporomandibular disorders.

- To maintain good amount of culturally competent providers to meet the needs of individuals and groups, particularly in areas that have health-care shortages.

- To make the best use of oral health and other health care providers in improving access to oral health care.
- To empower the public to use solutions to meet their oral health care needs.
- Developing integrated and comprehensive care programmes that offer oral health care as well as boost the number of settings in which oral health services are provided.

## Action 3: Building the Science Base and Accelerate Science- Research Transfer

Improvements in health depend on behavioral and biomedical research focused at understanding the causes and pathological processes of diseases. This can boost actions that will improve disease diagnosis, prevention and treatment. Large number of people beyond the oral health community are misguided, lack knowledge about or are simply not interested in oral health. This indifference clearly indicate why community programmes fall short of full implementation, even when the scientific proof for their effectiveness has been known for some time.

In the 21st century, biomedical and behavioral research will provide the knowledgebase for a range of ever-evolving health care practice. This scientific groundwork requires the support of the full range of research from basic studies to large-scale clinical trials. In order to achieve a balanced science portfolio, it is essential to boost clinical studies, particularly the study of complex oral diseases that are based on genetic, behavioural, and environmental factors.

Oral health research must also include research on chronic oral

infections associated with heart and lung disease, diabetes, and premature low birth-weight babies. Such research must be supported by prevention and behavioural science research (including community-based approaches and ways to transform risk behaviour), health services research to analyze how the structure and function of health care services affect health outcomes and by population health and epidemiology research to understand potential connection between diseases and possible risk factors. It is hard to predict the results from genetic studies in the years ahead, but without question these improvements will largely affect health, even indicating an individual's susceptibility to major diseases and disorders.

Hybrid science of importance to oral health is also gaining importance. For instance, bio-engineering studies are establishing the foundation for repair and regeneration of the body's tissues and organs—including teeth, bones, and joints-- and ultimately full restoration of function. Oral diagnostics, using saliva or oral tissue samples will contribute to overall health monitoring and surveillance.

For public and private care providers to benefit from research, efforts are needed to transfer new oral knowledge into efficient means of diagnosis, treatment, and prevention. The public needs to be informed, precisely and frequently, of findings that affect their health. They need clear descriptions of the results from research and demonstration projects concerning lifestyle behaviours and various disease prevention practices. Furthermore, research is needed to conclude the effect of oral health literacy and awareness on oral health.

Communities and organizations must also be able to reap the rewards of scientific improvements, which may contribute to changes in the reimbursement and delivery of services, as well as improve knowledge of risk factors. Developments in science and technology also indicate life-long learning process for practitioners which include laboratory scientists, clinicians and the academic faculties that design syllabus, write textbooks, and lecture to prepare the next generation of professional health care providers.

## CONNECTING MINDS, CREATING THE FUTURE

Implementation strategies to build a balanced science base and accelerate science transfer should benefit all consumers, especially those who have poor or limited access to oral health care or are at a greater risk.

### Specifically there is a need to:

- To upgrade applied research (clinical and population-based studies, demonstration projects, health services research) to enhance oral health and prevent disease.
- Boost intervention studies to prevent and manage oral infections and complex diseases, including improved ways to prevent dental caries and periodontal diseases.
- Speed up population-based studies aimed at the prevention of oral cancer and oral-facial trauma.
- Conduct studies to explain potential fundamental structure and to determine any connections between oral infections and general health conditions. If associations are demonstrated, test interventions to prevent or lower risk of complications.
- Develop diagnostic markers for disease susceptibility and development of oral diseases.
- Develop and examine diagnostic codes for oral diseases that can be used in research and in practice.
- Examine risk assessment approaches for individuals and communities, and translate them into optimal prevention, diagnosis, and treatment options.
- Developing biologic measures of disease and health to use as outcome variables and that can be applied in epidemiologic studies and clinical trials.
- To develop reliable and appropriate measures of patients' oral health results that can be used in practice and health programmes.
- Support research on the effectiveness of community- based and clinical interventions.
- To aid healthy partnership among state health programs, health professional schools, patient groups, private practitioners, professional associations, industries, and communities to help the conduct of clinical and community-based research as well as accelerate science transfer.

### Accelerate the Effective Transfer of Science into Public Health and Private Practice

- To advocate effective disease prevention measures that are under-utilized.
- Routinely transfer oral health research results and finding to health professional school syllabus and continuing education programmes. Additionally, to incorporate right educational module from other health professions- medical, nursing, pharmacy and social work into dental education.
- To bring forward research results and findings to the public, clearly describing behaviours and actions that aid good health and well-being.
- To find methods to quickly transfer research findings into delivery systems, including appropriate changes in reimbursement for care.
- To regularly evaluate the scientific proof and update care recommendations.

## Action 4: Increase Oral Health Workforce's Capacity and Flexibility

The total number of patients handled by any health care provider mirrors its own racial and ethnic background. Health care providers can play a catalytic role as a community spokesperson, concentrating on key health problems and service requirements. While the number of women engaged in the health professions is increasing, the number of underrepresented racial and ethnic minorities is dwindling and remains limited. Certain racial and ethnic groups are marginalized in the active dental profession compared to their representation in the general population:

To eliminate this full community participation, mentorship and creative outreach is important. It is also equally crucial to enhance oral health workforce capacity. The limitations in supplying dental health professionals to shortage areas that need professional personnel highlights the urgent attention to the distribution of care providers, as well as the overall capacity of the collective workforce to meet the anticipated demand for oral health care as public understanding of its importance increases.

Dental school recruitment programmes offer incentives to students who may want to practice in rural areas and inner cities. With the help of such programmes dental schools can increase the diversity of the oral health workforce. Additionally, oral health workforce also requires better training and management. The lack of personnel with oral health expertise at all levels in public health programmes remains a serious concern, along with the limitations to oral health faculty and researchers needs.

Currently, there is an acknowledged vacuum in the ability to recruit faculty to dental schools and to attract clinicians into research careers. Dental school faculty and oral health researchers are needed to address the various scientific hurdles and opportunities oral health presents, and to help transfer emerging knowledge to the next generation of health care providers. The lack of trained oral care professionals eventually leads to loss in the public's health. Efforts are taken to address these needs, but the rate of hiring and retention is slow.

Further, all health care professionals, whether trained at privately or publicly supported medical, dental, or allied health professional schools, need to participate in local efforts to eliminate health differences. These activities could include participating in part-time service in community clinics or in health care shortage areas, assisting in community-health assessment activities, participating in school-based disease prevention efforts and volunteering in health-promotion and disease-prevention efforts such as tobacco cessation programmes.

### Efforts are needed to:

- To modify racial and ethnic composition of the workforce to meet patient and community needs
- To note down the results of existing efforts to diversify the workforce in practice, education, and research.
- Develop ways to expand and build upon successful recruitment and retention programmes.
- Create and aid programs that inform and encourage individuals to pursue health and science career options in high school and during graduate years.

## CONNECTING MINDS, CREATING THE FUTURE



**Ensure a sufficient workforce pool to meet health care needs by:**

- Boost scholarships and loan repayment efforts at all levels.
- Specify and track resources for handling outreach and recruitment.
- Develop mentoring programmes to ensure retention of individuals who have been successfully recruited into oral health careers.
- To aid partnership among professionals, government, academic, industry, community organizations and other institutions focusing on the needs of the oral health workforce.

- To offer appropriate training in communication skills and cultural competence to health care providers and students.

**Secure an adequate and flexible workforce by:**

- Assess the existing capacity and distribution of the oral health workforce.
- Study how to develop and boost workforce capacity and productivity to address oral health in health care shortage areas.
- Ensuring oral health expertise is available to health departments and to government programmes.

## Action 5: Increase Collaborations

Both, the private and the public sector each have individual characteristics and strengths. Hence, connecting the two together can result in a creative synergy making the best use of the talent and resources of each partner. In addition, efforts are needed within each sector to increase the capacity for programme development, for forging collaborations, and for leveraging programmes.

A sustained effort is needed right now to build the nation's oral health infrastructure to ensure that all sectors of society--the public, private practitioners, and government personnel have enough information, expertise, and resources to design, implement and monitor oral health programmes. Leadership for successfully directing and guiding public agency oral health units is essential. Further, incentives must be offered for collaborations to form and flourish. These collaborations can help various disease prevention and health promotion campaigns and programmes that affect oral and general health. Programmes such as tobacco control, diet counseling, and health education

aimed at pregnant women and new mothers and support for use of oral facial protection for sport can benefit from mutual tie-ups among public health and health care practicing communities.

Collaborations can also support programmes that require combined efforts of social service, education and health care services at state and local levels. Most importantly, the public in the form of voluntary organizations, community groups, or as individuals, must be included in any partnership that addresses oral and general health.

Successful partnering at all levels of society will require efforts to:

- To boost the networking capacity of individuals and communities to address their oral health needs.
- Create and support broad-based coalitions that incorporate views and expertise of all stakeholders and that are tailored to specific populations, conditions or programmes.

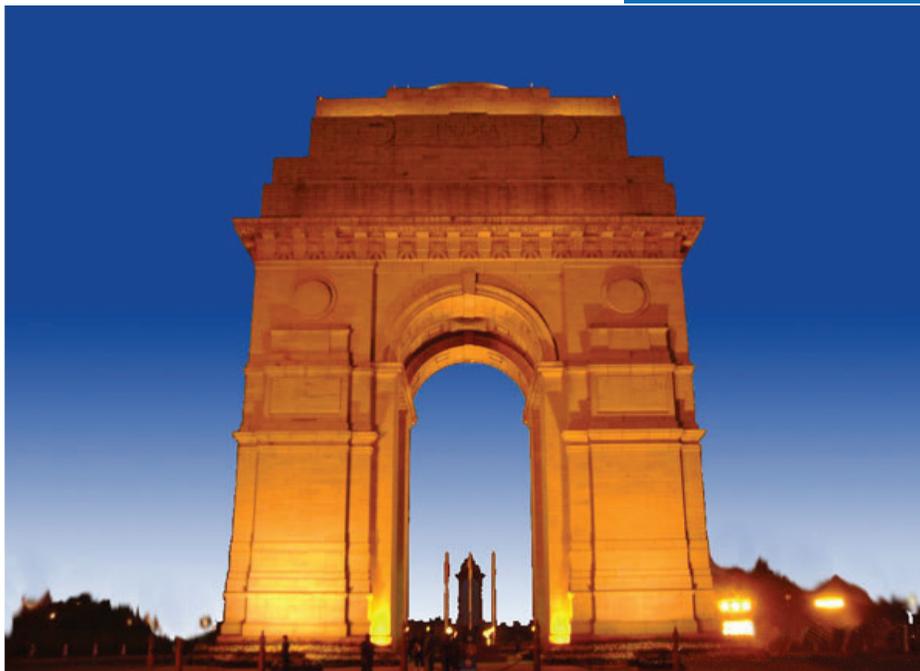
- Strengthen partnerships among dental, medical, and public health communities for research, education, care delivery, and policy development.
- To aid partnerships that are community-based, cross-disciplinary, and culturally sensitive.
- To provide support and work with the Partnership Network and other coalitions to address the four actions previously described: change perceptions, overcome barriers, build a balanced science base, and increase oral health workforce diversity, capacity, and flexibility.

This action plan will serve as a foundation, one that can be a tool for enlisting collaborators and partners. Building this plan into current health programmes will optimize the integration of

## National Oral Health Policy- IDA's Suggestions

- IDA should be associated with oral healthcare planning and implementation
- The software management system developed by IDA for uniform online registration of dental personnel must be utilised for oral health policy planning
- A national oral health survey must be organised using WHO survey formats to establish the bench mark data for policy planning
- Unregulated expansion of dental colleges that causes geographical distortion must be checked and ensured that
  - their expansion is directed to the rural areas, including unexplored regions like the northeast.
- Revisions in dental course contents and curricula to be taken up every three years to keep the students abreast of global changes.
- Uniform academic calendar across all institutions should be implemented vigorously in a time bound manner
- The Government must incorporate oral health planning as a part of national health policy and create adequate infrastructure for dental clinics at Civil Hospitals, Primary Health Centres, Sub-centres as well as at referral Hospitals in rural areas, and ensure enhanced remuneration for contractual dental surgeons.
- It must also be ensured that the oral healthcare service providers are adequately compensated with better remuneration and incentives for rural posting
- Government must declare oral cancer a notifiable disease to facilitate proper policy planning as also announce a DAY to observe it as 'Oral Cancer Day'.
- IDA's trained manpower should be drawn upon by the public healthcare system with adequate financial compensation by the government
- Government should collaborate with IDA in jointly setting up SPOT and TII Centres in the true spirit of public private partnership.
- To improve the oral health of children, teeth and their care must be made a part of the syllabus at schools
- Compulsory dental checkup programmes for school children must form a part of oral health policy planning
- Government must consider dental research as an important area of emphasis.
- Oral cancer and other oral diseases research centres must be set up in established dental colleges, ensuring at the same time, adequacy of funds.
- Insurance cover must be extended to dental diseases as well and the requirement of hospitalization stressed by insurance companies waived.

This report is a compilation of studies done by various agencies



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