

# FDI World Dental Federation

*Leading the world to optimal oral health*

## VISION 2020



Dr Orlando Monteiro da Silva  
FDI President

# Инновации В СТОМАТОЛОГИИ

КАЗАХСТАН • АЛМАТЫ • 15-17 МАЯ 2013



**Kazakhstan, 15<sup>th</sup> May 2013**

# About FDI

- NGO based in Geneva, Switzerland;
- A centennial organization: founded 15 August 1900 by Dr Charles Godon, Dean of the Ecole Dentaire de Paris;
- In official relations with WHO and other UN agencies;
- 200 national member associations and specialist groups;
- Present in more than 130 countries;
- Principal representative body for over one million dentists worldwide.



# FDI Vision and Mission

## VISION

Leading the World to Optimal Oral Health

## MISSION

- *The Voice of Dentistry*: to be the worldwide authoritative & independent voice of the dental profession;
- *Optimal Oral Health*: to promote optimal oral & general health for all peoples;
- *Member's Support*: to promote the interests of the Member Associations & their members
- *Information Transfer*: to advance and promote the ethics, art, science and practice of dentistry.

# FDI: Vision 2020 – a roadmap

## Aims:

- Imagine the possible look of oral healthcare by the year 2020 if we tackle upcoming challenges;
- Map the future of dental medicine over the next decade;
- Address different facets of the profession

## Principles:

- Oral health as a fundamental right;
- Oral health in all policies.



# Vision 2020

- Designed through an inclusive process;
- Focused on emerging issues with a legislative, regulatory or advocacy component, which will impact the profession in the future and which, if not dealt with by dentists themselves, might be decided upon by other professions or bodies;
- Aspirational rather than operational. Refrains from providing specific strategies as those will depend largely on local needs.

# Vision 2020: Five areas of priority

- Meet the increasing need and demand for oral health care
- Expand the role of oral health care professionals (link between oral health and general health / NCDs)
- Shape a responsive educational model
- Mitigate the impacts of socio-economic dynamics
- Foster fundamental and translational research and technology

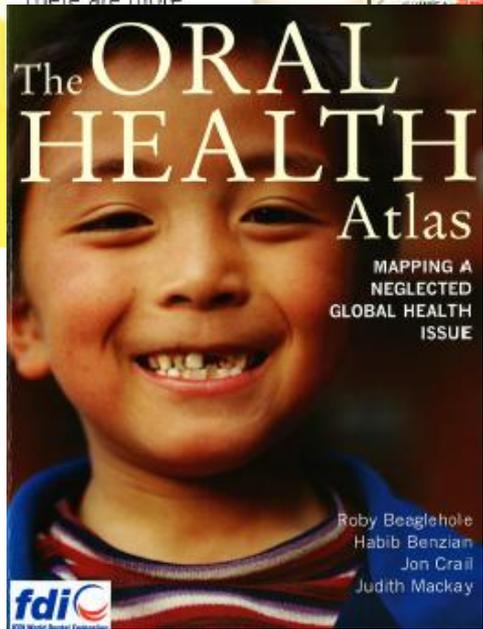
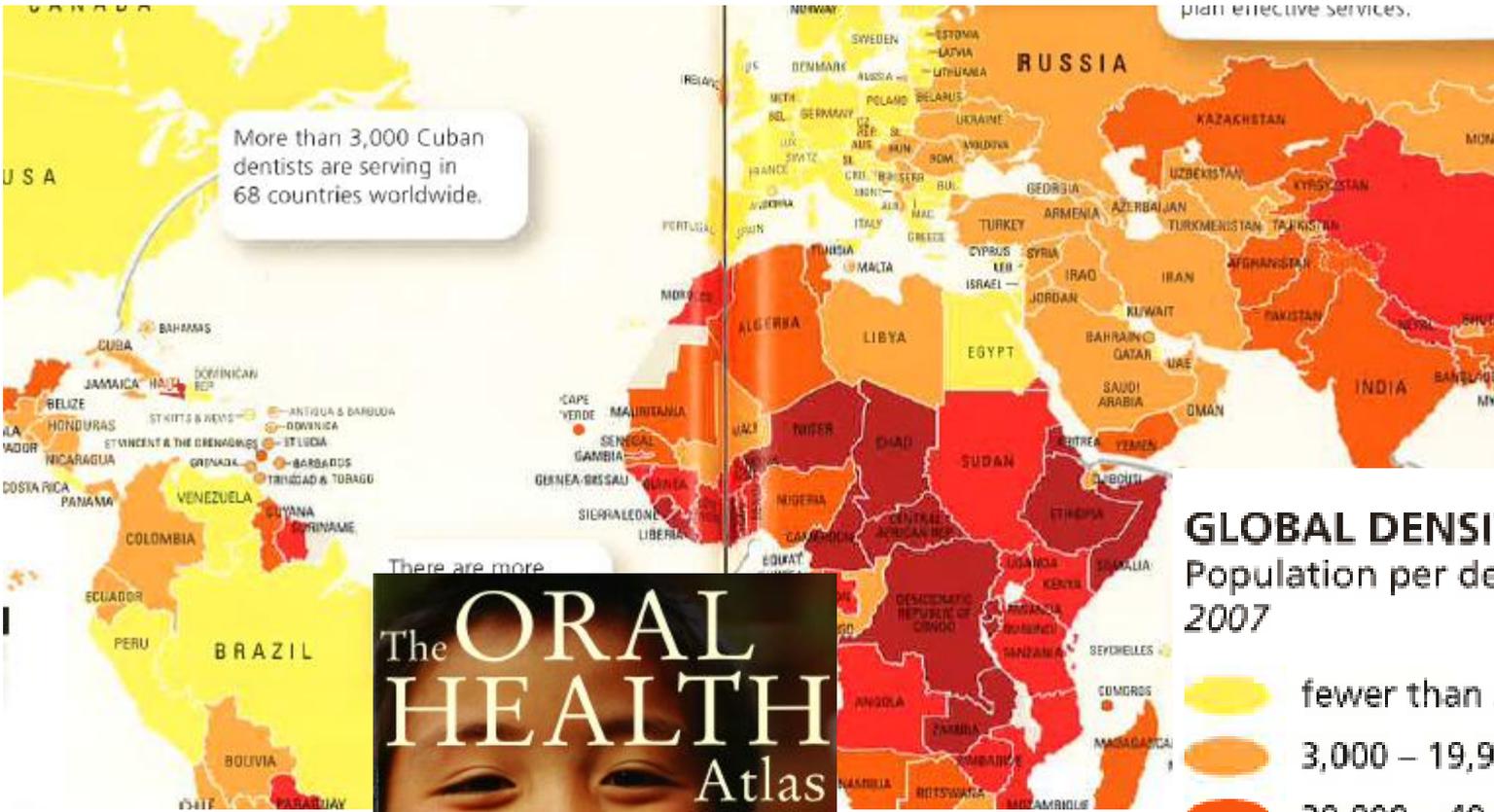
**Meet the increasing need and  
demand for oral healthcare**

## From Sierra Leone:

*...only two Dental Surgeons working for the Public sector, and four Dental Surgeons working in the private sector. We lost one through a battle with cancer. Our greatest challenge right now, is to get personnel to serve the six million people living in this part of the globe.*

More than 3,000 Cuban dentists are serving in 68 countries worldwide.

plan effective services.



**GLOBAL DENSITY OF DENTISTS**  
Population per dentist  
2007

-  fewer than 3,000
-  3,000 – 19,999
-  20,000 – 49,999
-  50,000 – 199,999
-  200,000 or more
-  no data

**World country average:**  
5,875 people per dentist  
**Highest density:**  
Croatia 568 people per dentist  
**Lowest density:**  
Ethiopia 1,278,446 people per dentist

- 22% of dentists in UK are foreign-born
- 66% of dentists trained in Philippines are working in USA

# Opportunities

- Play a leading role and generate constructive solutions;
- Raise awareness based on social determinants, equity in oral health;
- Increased resources for the education and training of dentists;
- Collaborative practice & Multiple stakeholders approach.

# Expand the role of oral healthcare professionals

# Dental team

## Dental Assistant

Dental assistants support the dentist in the surgery and help with administration; they normally work under the supervision of a dentist.



Training: 1-3 years



## Dental Hygienist

Dental hygienists focus on oral hygiene and education, application of preventive agents to teeth and gums, and procedures aiming at preventing tooth decay and periodontal diseases. In some countries they practise independently without the supervision of a dentist.



Training: 1-3 years



Training: 1-4 years



## Dental Therapist

Dental therapists provide basic dental treatment such as extractions and simple fillings, as well as undertaking the tasks of hygienists. In some countries they practise independently without the supervision of a dentist.

## Dental (Laboratory) Technician

Dental technicians are responsible for manufacturing crowns, bridges, dentures, and other dental prosthetics following a prescription from a dentist. In some countries they are allowed to manufacture and fit dentures independently, without involving a dentist (then called a "denturist").



Training: 1-3 years  
(+ postgraduate if specialised)

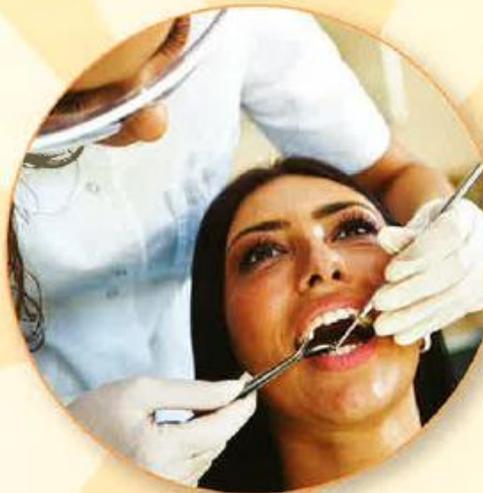


## Dentist

Dentists lead the oral health team and are responsible for diagnosis, giving advice, provision of oral health care and writing prescriptions.



Training: 4-6 years (+ postgraduate if specialised)

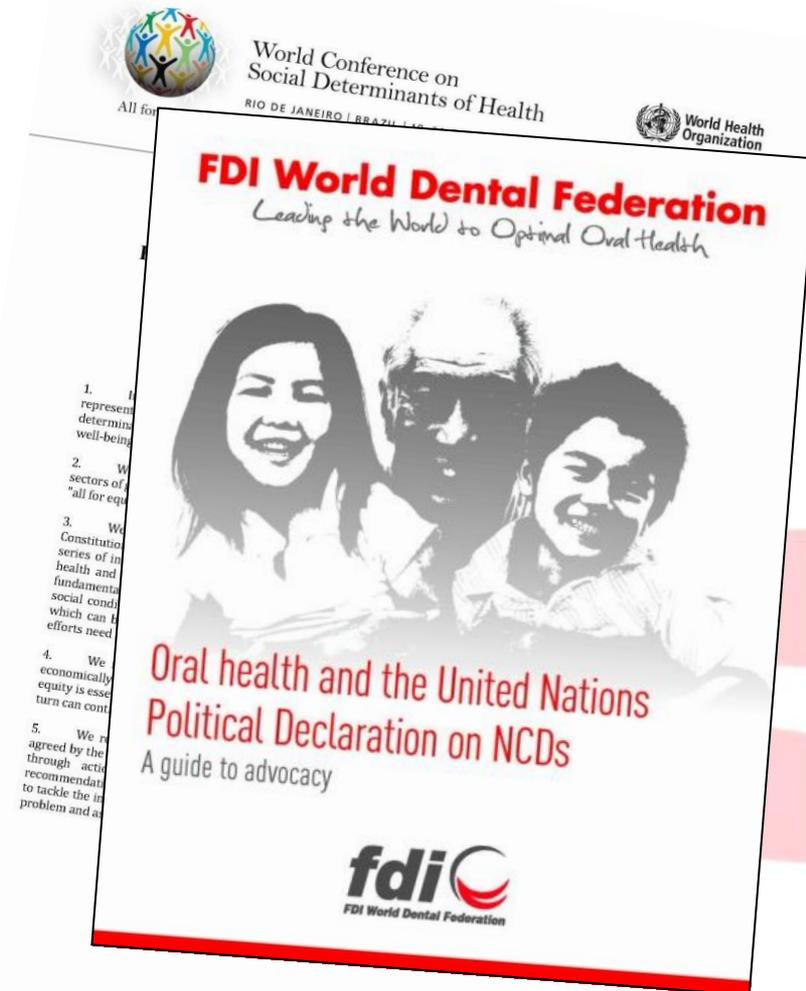


# NCDs share common Risks Factors

Noncommunicable diseases 4 Modifiable Shared Risk Factors 5 Diseases				
	Tobacco use	Unhealthy diet	Physical Inactivity	Harmful Use of Alcohol
Cardio-vascular				
Diabetes				
Cancer				
Chronic Respiratory				
Oral Diseases				

# Fighting for oral health

*“... Recognize that renal, ORAL and eye diseases pose a major health burden for many countries and that these diseases share common risk factors and can benefit from common responses to NCDs.”*



# Opportunities

- Become team leader and lead a team of healthcare workers;
- Recall effectiveness;
- Lead effort in prevention and patient education;
- New tasks on screening and early diagnosis; oral fluid based diagnostics.

# Shape a responsive educational model

“The separation of dentistry from medicine is  
a historical accident”

Prof. Titus Schleyer - University of  
Pittsburgh

# A new focus on...

Patient-centred-care  
Continuing-education  
transformative-learning  
management Evidence-based-practice  
enlightened-change-agents  
Common-generic-competences  
Interdisciplinary-team  
leadership

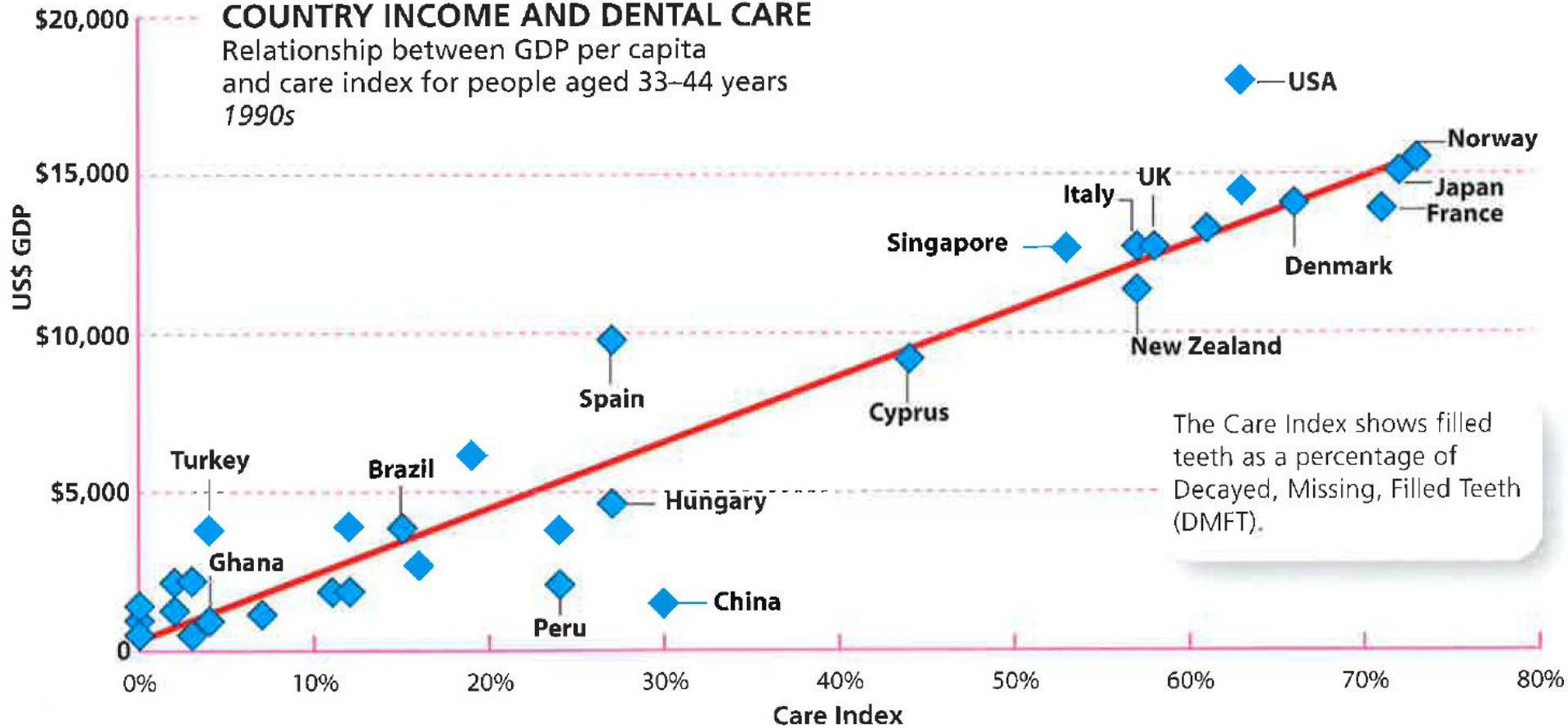
# Opportunities

- Educational model focusing on public health issues and disparities;
- Critical thinking, interprofessional communication;
- New technologies in education, prevention and treatment.

# Mitigate the impacts of socio-economic dynamics

## COUNTRY INCOME AND DENTAL CARE

Relationship between GDP per capita and care index for people aged 33–44 years  
1990s



## THE PRICE OF NEGLECT

The average cost of dental care per person in California in US\$ 2009



routine dental care



visits to the hospital  
Emergency Department  
due to dental causes



regular  
check-up



comprehensive  
check-up



without  
hospitalisation



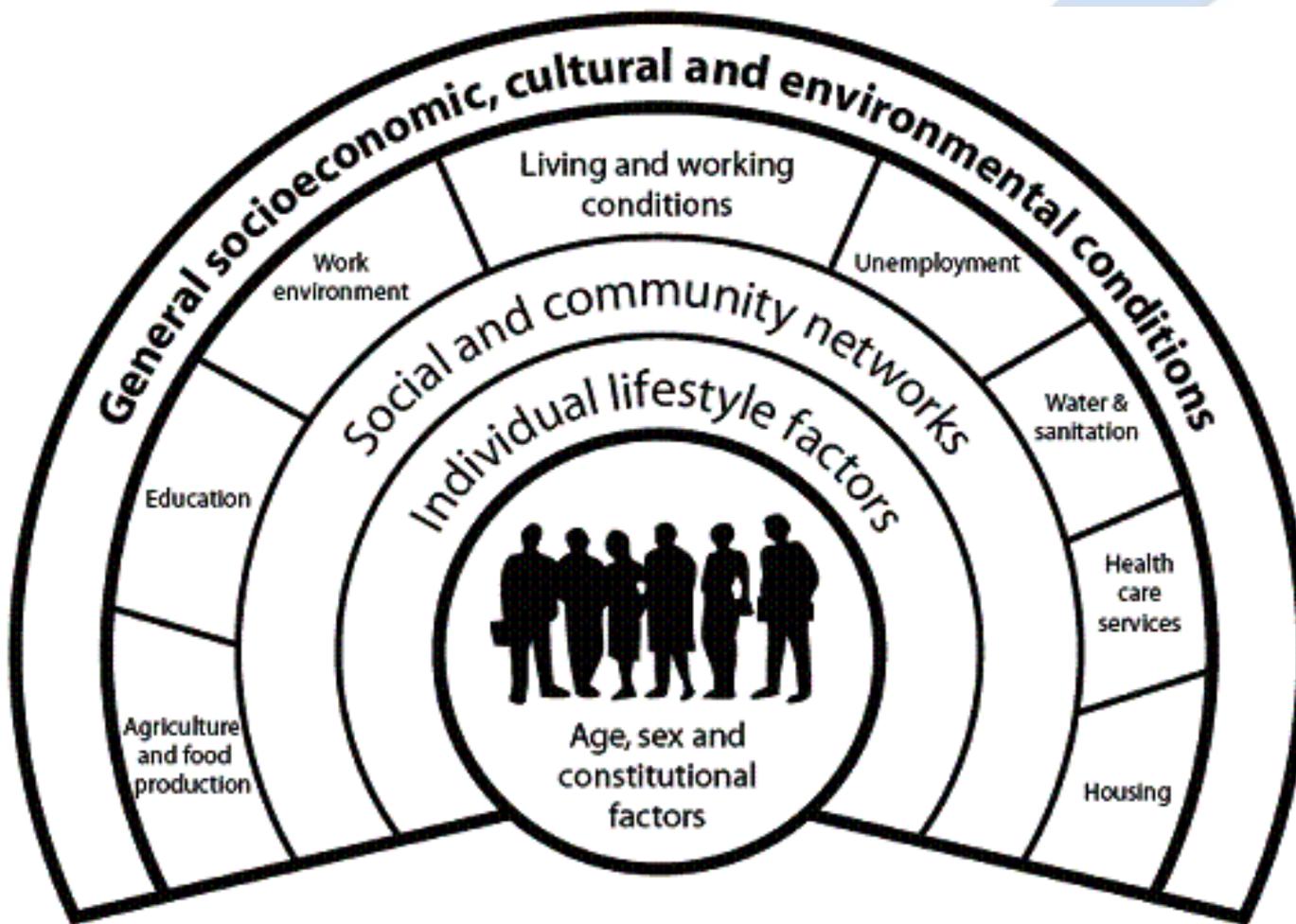
with  
hospitalisation

\$5,044

# Opportunities

- Oral health in all policies;
- Support a community driven demand to governments; literacy;
- Evidence based model bringing fairness in remuneration for oral health promotion, risk factor approach in prevention, and treatment; insurances;
- Private – public partnerships;

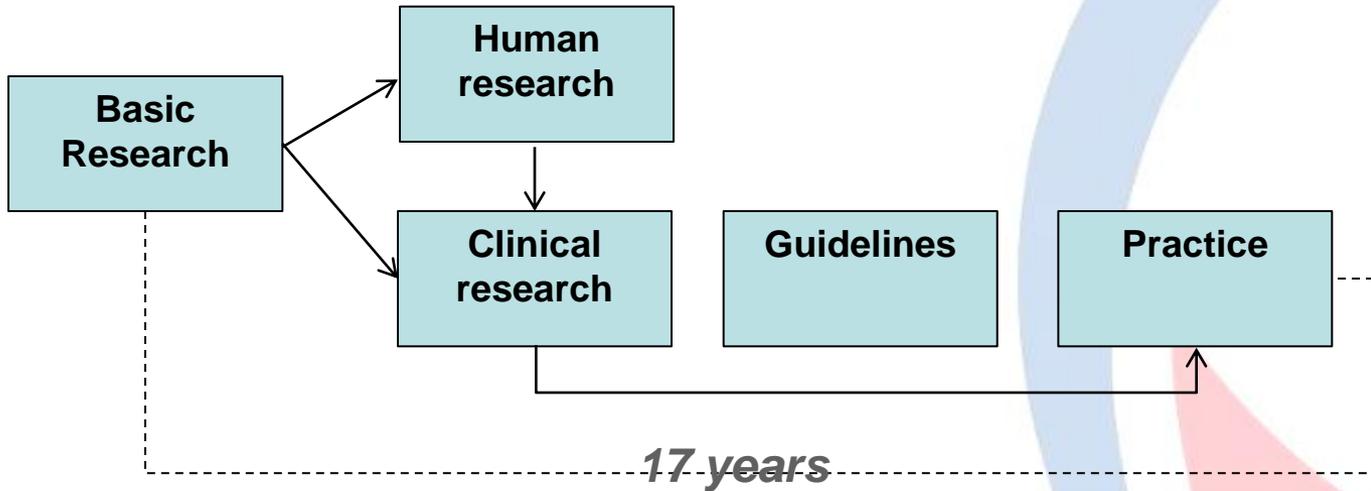
# Foster fundamental and translational research and technology



**Social determinants of health and disease:  
the Dahlgren Rainbow Model**

*A conceptual model of the journey of biomedical research from research into practice, adapted from Morris et al 2011*

<http://www.jrsm.rsmjournals.com/content/104/12/510/F1.expansion.html>



*“To him who devotes his life to science, nothing can give more happiness than increasing the number of discoveries, but his cup of joy is full when the results of his studies immediately find practical applications.” —Louis Pasteur*

**e-dentistry**  
**e-patients**  
**e-health**  
**telediagnosis**  
**teledentistry**  
**m-health**  
**simulation**  
**dental-apps**  
**e-learning**  
**oral-health-apps**



## Harmful Substances

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Introduction

Actors

**Mercury**

Lead & Cadmium

Science

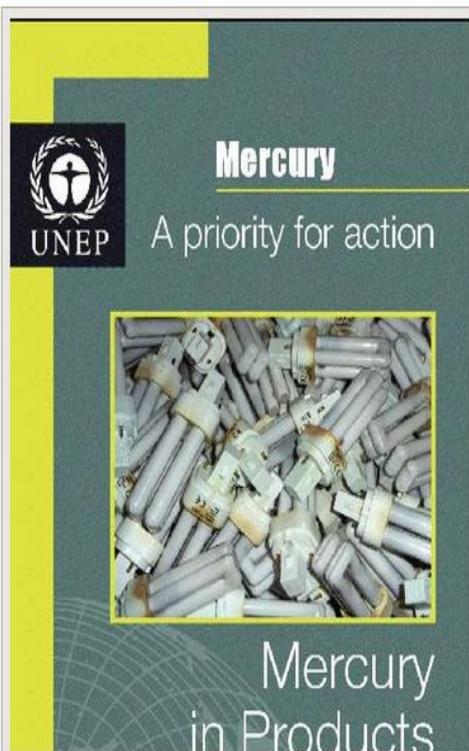
Policy

Methodology

UNEP's Work

[Mercury > Priorities for Action > Products ]

## Mercury in Products



Transition success has been demonstrated in thermometers, switches and relays, batteries other than button cells, thermostats, HID auto discharge lamps, and sphygmomanometers.

Affordable alternatives to mercury are available for most products, but commercially cost effective alternatives for mercury in batteries and lamps are needed. Good practices in dental care can also reduce mercury releases.

Reducing mercury in products may be the most effective means to control mercury in waste. Sound management should consider all stages of the product's life-cycle. Clear regulation can prompt manufacturers to produce mercury-free products.

## Further Resources

### Hg in products



### Issue

[Partnership Business Plan](#)

[Activities & Projects](#)

[Partners](#)

[Reports & Publications](#)

[Meetings & Meeting Documents](#)

# The way forward

- Shape oral health research priorities;
- Foster timely implementation of research into practice;
- Support a sustainable approach to dentistry;
- Promote state-of-the-art use of ICT.

# Shape research priorities

- Develop a science-based approach to oral healthcare;
- Define a consensus research agenda;
- Foster multi-, inter-, and transdisciplinary research;
- Promote the integration of oral health into general health;
- Focus research efforts not only on dental treatment and technology but also on:
  - Effective prevention

# Foster timely implementation of research into practice

- Foster quick dissemination of research findings through concerted educational and communication efforts;
- Ensure established practitioners have easy access to new research findings;
- Encourage all dental medicine faculties to perform research so as to cultivate a common understanding of research mechanisms.

# Support a sustainable approach to dentistry

- Develop policies and strategies to support effective and sustainable green dentistry initiatives;
- Advocate environmentally safe manufacturing standards in dental industry and oral health care practice.

# Filling Materials



United Nations Environment Programme  
environment for development

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## Mercury in Products



Mercury

A priority for



Mercury  
in Products

promptly  
products.

FDI GA 2012 / 100

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**UNEP Intergovernmental  
Negotiating Committee on Mercury**  
Advocacy toolkit: advisory



ources

Products



Partnership Business Plan

Activities & Projects

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# Unfold the potential of teledentistry

Figure 1: Real-time consultation

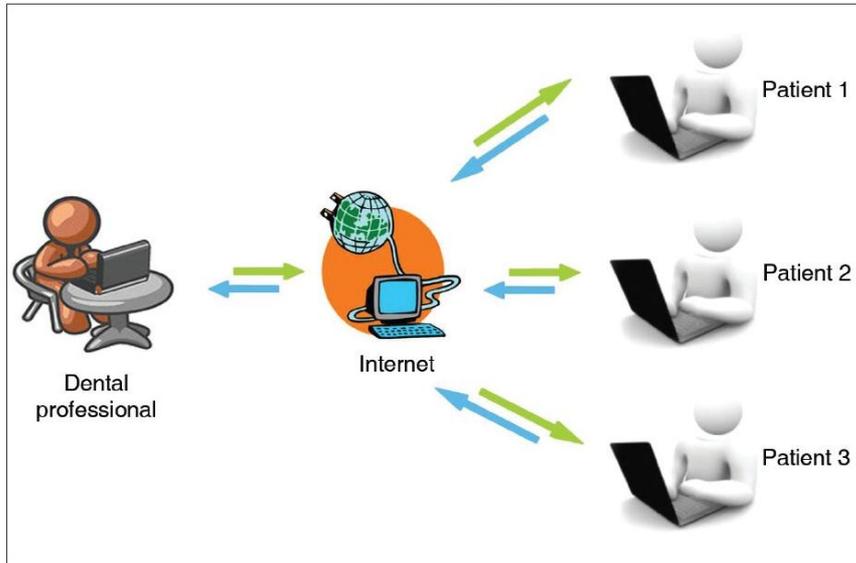
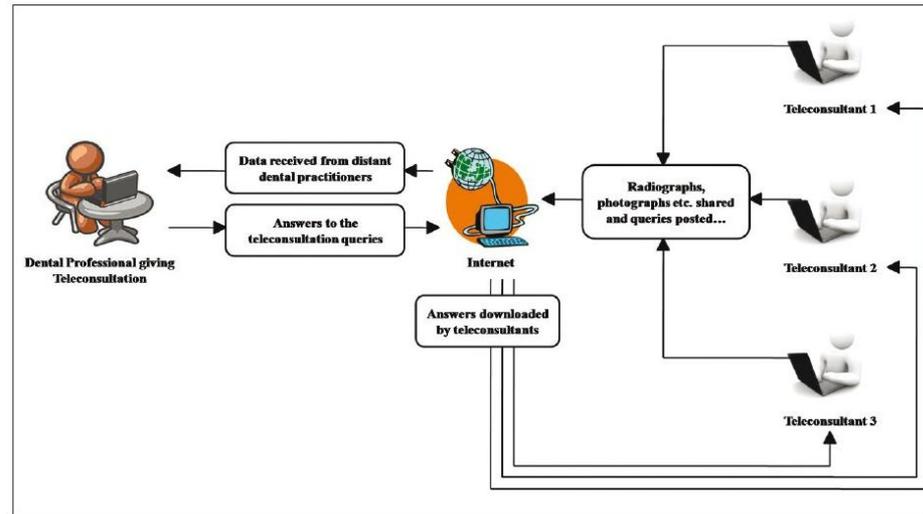


Figure 2: Store-and-forward method



Jampani ND, Nutalapati R, Dontula B, Boyapati R. Applications of teledentistry: A literature review and update. J Int Soc Prevent Communit Dent [serial online] 2011;1:37-44. Available from: <http://www.jspcd.org/text.asp?2011/1/2/37/97695>



# Opportunities

- Call to action to ensure that oral health research priorities receive resources;
- Dissemination and implementation;
- Support 'green dentistry' initiatives;
- Encourage all dental medicine faculties to perform research, including scientific, educational and social research;
- Work with partner organizations;
- Unfold the potential of e-health.

# VISION 2020: Next Steps

- Vision 2020 document was adopted by FDI General Assembly in Hong Kong (August 2012);
- Vision 2020 is the beginning of a continuous process aimed at generating discussion and collaboration between FDI and all of its partners, including the industry;
- In the aftermath of Hong Kong, FDI reached out to and invited the industry to join and support the implementation phase of Vision 2020.

# Turning the Vision into an action plan – Chicago meeting (Feb '13)



FDI: Dr. O.M. da Silva (President) – Dr. K. Kell (Treasurer) – Dr P. Hescot (Concilor) – Dr. G. Seeberger (Councilor) – Dr. M. Glick  
Dr. D. Williams (IADR) – JL. Eiselé (Executive Director) – E. Chevron

Industry

Partners: C. Brutzer (Ivoclar) – G. Meuchner (Henry Schein) – Dr. R. Labella (J&J)  
Dr. M. Butler (Colgate) – Dr. A. Mendez (Unilever) – M. Kaneda (Sunstar)  
F. Herbst (IDM)

# 2013: Three focus areas

1. Data Collection:
  - Identify which data to collect (set of indicators)
  - Create a database and initiate data collection
  - Develop a process to ensure regular data updates
2. Collaborative practice: identify successful models
3. Sustainable Dentistry: identify and disseminate best practices

**Where do we want to be in  
2020?**



# Leading the world to optimal oral health

1. Meet the increasing need and demand for oral healthcare
2. Expand the role of oral healthcare professionals
3. Shape a responsive educational model
4. Mitigate the impacts of socio-economic dynamics
5. Foster fundamental and translational research and technology

# Questions ?



# FDI headquarters, in Geneva



# Porto, my city!





# Thank you!

