



# *Oral health for an ageing population*



**Achieving a healthy ageing society**



## Achieving a healthy ageing society

The world's population is ageing: both the number and the share of older adults are rapidly increasing in virtually every country in the world. Back in 2002, the Population Division of the United Nations already reported that world "population ageing is unprecedented and has profound implications for many facets of human life".

Epidemiological studies show that older persons are particularly affected by poor oral health, with negative consequences on their general health. Diseases such as dental caries, periodontal disease, tooth loss, dry mouth or oral cancer affect their chewing function and nutritional intake, as well as their ability to interact socially, thus leading to a drastic decrease in quality of life or even death.

Not only do elderly populations today have poor oral health, but they also have difficulty accessing oral healthcare due to affordability and physical accessibility issues.

The number of people aged 60 years or more is projected to increase from 901 million in 2015 to 1.4 billion in 2030, i.e. a 56% growth. This highlights the urgency to adapt health systems to meet the emerging and increasing oral health needs of ageing populations to avoid a public health crisis.

## Towards lifelong oral health

Lifelong oral health aims to maintain good oral health and an optimal quality of life through oral health promotion, risk assessment, disease prevention, early diagnosis, and intervention at all stages of life. Successful models must

respond to the needs of healthy, vulnerable, frail and ill older adults, whether they are living alone, with their family, are homebound, or live in residential care facilities. In doing so, they must deal with cognitive impairment, the increased prevalence of noncommunicable diseases (NCDs), polypharmacy, etc. In addition, because maintaining access to adequate oral healthcare for ageing populations is important, any barriers to access must be removed, be they financial, physical or otherwise.

Shaping a future-proof society requires integrating oral health into an integrated approach to health that spans all stages of life. Oral health and its impact on general health and well-being through all stages of life must be promoted and explained in settings ranging from senior housing and senior daycare centres to schools, workplaces and nursing homes. Political, legislative, and decision-making processes which aim to improve oral health promotion and care throughout life must be supported.

## Conclusion

The emergence of a “society of longevity” is the result of human progress. On the other hand, the decline of vital functions and health with age is a biological process which cannot be halted. Oral healthcare systems must be reshaped to allow elderly individuals to lead their lives with purpose and dignity. To this end, specific measures must be taken to reduce health inequalities among generations and regions, thereby extending healthy life expectancy and quality of life for all. Essential considerations when designing an oral healthcare system that is fit-for-purpose include the incorporation of oral health into overall health; a life-course approach which accounts for common risk factors; a community-based approach; an integrative dimension which rallies all stakeholders (older adults, the oral health team, carers, family members); an adequate sharing of tasks and responsibilities among stakeholders; financial and physical accessibility to care; and finally, an enabling environment both for contemporary and adapted oral treatment and care, and interprofessional collaborative practice.



## OHAP Achieving a healthy ageing society

Through OHAP, with the support of GC, FDI has created a roadmap for healthy ageing. It is based on the following overarching principles:

- The need to **cover the oral healthcare needs of today’s older adults**, who have poor oral health due to a lack of prevention in the past;
- The need to **reinforce prevention activities throughout the life-course** to ensure that today’s youth, who are tomorrow’s elderly, reach their senior years with much better oral health than today’s older adults.
- The need to **adapt health systems to set up prevention and care strategies** which are fit-for-purpose and evidence-based.

**FIGURE 1** Oral health and general health are closely linked – the mouth is often described as the ‘mirror of the body’

### **EDENTULOUSNESS**

The extensive or complete loss of teeth may negatively impact nutrition, the ability to eat, and quality of life.

### **ORGAN INFECTIONS**

Oral bacteria are associated with infections of the heart, brain, and other organs.

### **SALIVA**

Can be used to identify specific markers of disease, such as HIV infection.

### **NOMA**

Acute necrotizing gingivitis/periodontitis is an important risk factor for noma.

### **PNEUMONIA**

Oral infections can be associated with an increased risk for pneumonia.

### **CARDIOVASCULAR DISEASE**

Periodontal disease may be associated with cardiovascular disease.

### **STOMACH ULCERS**

The mouth may be a reservoir for bacteria associated with stomach ulcers.

### **PRETERM AND LOW-BIRTH-WEIGHT BABIES**

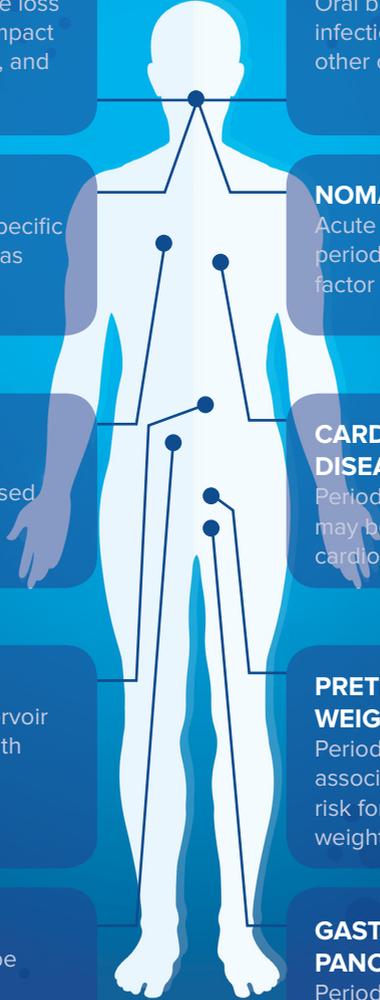
Periodontal disease may be associated with increased risk for preterm and low-birth-weight babies.

### **DIABETES**

Periodontal disease can be associated with diabetes and may increase the risk for diabetic complications.

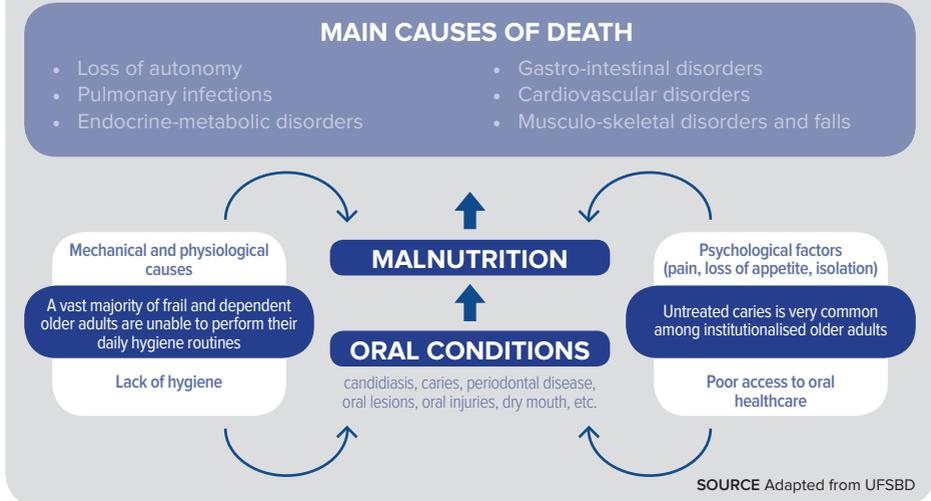
### **GASTROINTESTINAL AND PANCREATIC CANCERS**

Periodontal disease may be associated with gastrointestinal and pancreatic cancers.



## 8 core pillars and 4 steps to improve the oral health of the elderly

**FIGURE 2** Poor oral health has severe consequences on the general health of older adults



## INTEGRATE ORAL CARE INTO GENERAL CARE

Connections between poor oral health and other major NCDs, such as cardiovascular diseases, cancers, chronic respiratory diseases, diabetes and obesity are an undisputed fact. Mental disorders such as dementia or Alzheimer's disease also affect the oral health of older adults.

Oral diseases share a range of risk factors with other major NCDs, such as an unhealthy diet, tobacco use and harmful use of alcohol. Therefore, prevention of chronic diseases and oral diseases should be strengthened by integrating oral health into general health promotion activities. National Dental Associations (NDAs), dental care providers, and government authorities should jointly promote oral health, as a healthy and functional dentition is a fundamental part of general health and well-being.

**Importantly, there is an urgent need to consider oral health in all policies,** such as tobacco, nutrition, and sugar policies. In addition, mental health and frailty/dependency issues must be taken into consideration when shaping policies that address the oral health of older adults.



## PROMOTE ORAL HEALTH THROUGHOUT THE LIFE-COURSE

Maintaining good oral health and dental health throughout life is a fundamental factor for improving quality of life, helping protect from NCDs and contributing towards preventing the further aggravation of such diseases. It can also contribute to longer, healthy life expectancy. Adopting a **life-course approach** to oral health is particularly relevant since oral conditions are chronic in nature, cumulative over time, and socially patterned. A life-course approach should focus on the causes rather than the consequences of poor oral health. It should include oral health promotion messages targeting the needs of individuals at critical periods throughout their lives, from early childhood to old age.

The **common risk factor approach (CRFA)** is well-adapted to shape messages for older adults, who are particularly vulnerable to NCDs.



## SHAPE EVIDENCE-BASED ORAL HEALTH POLICIES

A concerted effort must be encouraged to accumulate **scientific evidence** on dental care and oral health's contribution to longer, healthy life expectancy and to formulate health policies based on such evidence.

**In terms of research**, government authorities, NDAs and academic institutions need to support scientific research on the link between oral diseases and other NCDs and their impact on general health, well-being and quality of life to optimize the prospect of healthy ageing for all.

**Finally, a sustainable oral healthcare system must rely on surveillance and monitoring:** regular monitoring and periodical reports of oral health measures and related health factors, using standardized epidemiological surveillance methods, must be implemented to support public health policies for healthy ageing. Different globally applicable monitoring systems are available to foster the acquisition of reliable and comparable data, and their use in all countries is strongly encouraged.<sup>1</sup>



## REMOVE FINANCIAL BARRIERS

When excluded from public health services, oral care may be unaffordable for a significant proportion of older adults. The inclusion of oral care in public health services is therefore desirable to reduce economic barriers to care.

Renunciation of oral care for financial reasons can be avoided through the inclusion of regular dental check-ups in health coverage. Such an inclusion will also contribute to systemic disease prevention and control. Furthermore, it will ensure that elderly populations benefit from professional dental care, including risk assessment.



## REMOVE PHYSICAL BARRIERS

With age, the level of dependency of older adults tends to increase. Highly dependent older adults, whether they are homebound or living in a residential care setting, may not be mobile enough to visit a dental office. A care system that provides support for accessing dental services (transport service, adapted premises) or that enables dental care to come to the patient (such as mobile dental clinics), must be fostered.



## PROVIDE APPROPRIATE ORAL HEALTHCARE

Providers will face an increased need and demand for oral health services from dentate older adult patients, including preventive and restorative services, as complete tooth loss among older adults is declining.

As a result, health authorities must ensure that national policies (for education and training, remuneration and reimbursement schemes, etc.) will produce sufficient numbers of adequately-trained **oral healthcare professionals**.

Relevant institutions must provide **training and education** to the oral health workforce, at all levels, to meet the increasing needs of the elderly, understanding that age-associated changes in systemic health and medication use can impact oral health and function.

Oral health professionals' openness to new treatment approaches, such as minimally invasive interventions, can have a particularly beneficial effect on older adults in terms of quality of life and cost-effectiveness and constitutes a cornerstone of successful policy implementation.



## MOBILIZE ALL STAKEHOLDERS ALONG THE CARE PATHWAY

As we age, simple tasks such as daily hygiene routines or dental visits become more cumbersome, until one day they can no longer be performed without assistance. Increasing levels of dependency mean that various people – professional and lay caregivers – will be supporting the older person. Care models that foster **interprofessional communication** between members of the healthcare team and family members, must be advanced. Adequate task-sharing, supervision, support, recognition and respect for the work performed by other caregivers, including lay caregivers, will lead to better care, better oral health and less costs.

Therefore, there is a need to ensure that appropriate measures for providing oral care are integrated into a primary oral care model which encourages **multi-disciplinary collaborative approaches** adapted to national environments.

**The fundamental role of the dentist** in promoting, providing and coordinating/ supervising oral care to achieve optimal lifelong oral health must be recognised.

The **important role of the entire healthcare team** (e.g.: GPs, home-care nurses, nursing home personnel), as well as that of **lay caregivers**, mostly family members or neighbours, must also be recognised.



## FOSTER COMMUNITY-BASED PROGRAMMES

Encouraging the development of a lifelong preventive approach to good oral health in main community settings such as day-care centres, schools, workplaces, nursing homes, or senior homes will contribute to maintaining good oral health across the life-course.

In particular, community dental care providers and institutions have a major role to play in ensuring that appropriate dental care is provided at all stages of life, including for the elderly.

In addition, community-based programmes which aim to improve self-care practices and support caregivers (professionals and family) in their tasks should be encouraged. Caregivers who are adequately educated and trained to assist elderly people in their daily oral hygiene routines can help achieve a significant improvement in the maintenance of good oral health, while reducing care costs.

# Adopting a 4-step approach to improve oral health of the elderly



## Step 1 Assess and monitor needs

- Define core oral health indicators and assess oral healthcare needs
- Collect data on oral healthcare manpower and system
- Share and adapt data on a continuous basis

## Step 2 Seek appropriate health care system and provision

- Provide information and evidence to policymakers
- Introduce multiprofessional and sectoral collaboration for sustainable systems (CRFA)
- Raise awareness of oral health measures and values
- Integrate oral/general healthcare systems

## Step 3 Reduce the global burden of oral diseases and disability

- Shape evidence-based oral health programmes
- Prevent/control tooth loss and oral diseases
- Reduce oral health risk factors for NCDs and prevent frailty
- Contribute to reducing health inequalities
- Strengthen health policy

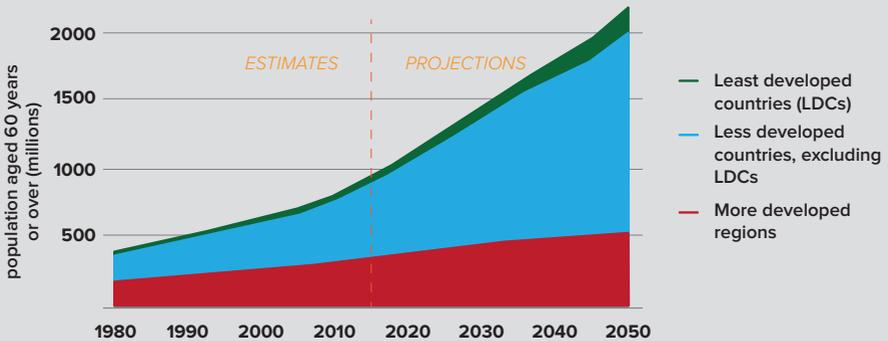
## Step 4 Contribute to and achieve a healthy ageing society

- Promote the shared value of oral/general health
- Achieve active ageing in a healthy community
- Seek more effective/efficient healthcare systems
- Monitor health inequalities on a continuous basis

# Facts and figures to remember

The number of persons aged 60 years and over is rapidly increasing. Projected growth is particularly staggering in less developed countries.

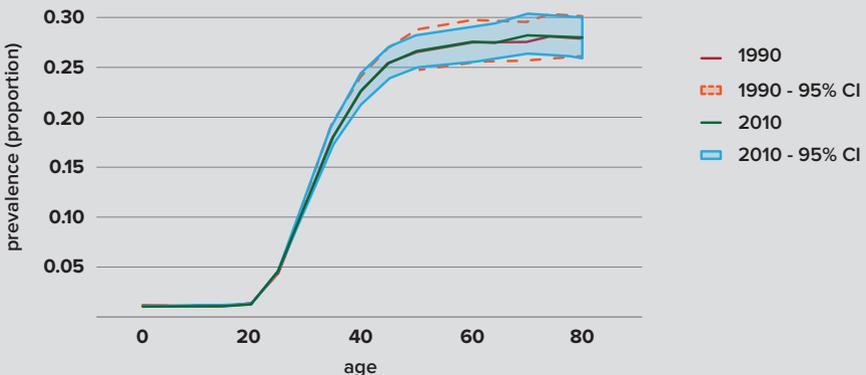
**FIGURE 3 Ageing societies: a global trend – number of persons aged 60 years or over by development group, from 1980 to 2050**



SOURCE World Population Prospects the 2017 Revision, United Nations (2017)

As shown by this graph of severe periodontal disease prevalence, older people are the most affected. The same applies to other oral conditions, such as tooth loss and root caries.

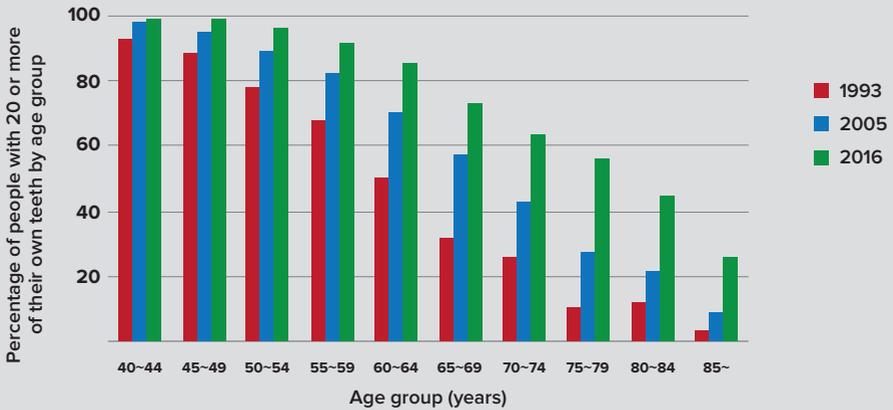
**FIGURE 4 Oral conditions: chronic in nature and cumulative over time**



SOURCE Kassebaum NJ, Bernabe E, Dahiya M, et al. «Global burden of severe periodontitis in 1990-2020: a systematic review and meta-regression». Journal of Dental Research 2014 93(11): 1045–105

Japan has been able to record significant progress in tooth retention among older adults over the last 20 years, thanks to the 8020 (Eighty-Two) Campaign, a coherent long-term strategy which focuses on the oral health of its elderly population.

**FIGURE 5** Implementing a successful strategy



SOURCE Survey of Dental Diseases, Health Policy Bureau, Ministry of Health Labor and Welfare (MHLW) Japan

## About FDI

FDI World Dental Federation serves as the principal representative body for more than one million dentists worldwide, developing health policy and continuing education programmes, speaking as a unified voice for dentistry in international advocacy, and supporting member National Dental Associations in global oral health promotion activities. Over the years, it has developed programmes, initiatives, campaigns, policies and congresses, always with a view to occupying a space that no other not-for-profit group can claim.

FDI works at the national and international level through its own activities and those of its member National Dental Associations. It is in official relations with the World Health Organization and is a member of the World Health Professions Alliance.

### References

Access references and further reading for this document by visiting the project page:  
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