

# The New Definition of Oral Health and Relationship between Oral Health and Quality of Life

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FDI World Dental Federation, which has 200 dental association members in some 130 countries, is the official representative body and voice of more than 1 million clinicians worldwide. It set itself the task of creating a new definition for oral health as a baseline to develop tools to measure oral health and related indicators. The definition allows FDI to position oral health within the global health agenda in areas such as quality of life and wellbeing and the challenge of an ageing population worldwide. Furthermore, it provides an impetus for FDI activities in favour of worldwide periodontal health.

**Key words:** fundamental human right, non-communicable diseases, quality of life, risk factors, wellbeing

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In September 2016, FDI World Dental Federation accomplished a rather remarkable feat by adopting a definition of oral health. It was developed under the guiding principles that oral health does not exist in isolation, but is embedded in the wider framework of overall health, and is a multidimensional, dynamic construction that is approved by the FDI member clincians worldwide, from more than 130 national dental associations (NDAs). The definition heralds a new era for oral health and, from this starting point, FDI is now developing measurement tools based on indicators, enabling oral diseases to be fully integrated into policy and actions for the prevention and control of non-communicable diseases (NCDs).

Until this point, it had been impossible to assign the same priorities to oral health as to other NCDs that were considered life threatening. This was recognised in an FDI report called Vision 2010, shaping the future of oral health, that was developed by a Task Team with the mandate "to identify the main challenges and opportunities oral health and its workforce are facing today, with a specific focus on issues with a legislative, regulatory or advocacy dimension"<sup>1</sup>, and was adopted in 2012.

The principle guiding the report was that "Oral health is an essential component of good health, and

good oral health is a fundamental human right. The role of the dental profession is to help the population and decision makers to achieve health through good oral health"<sup>1</sup>. It noted that oral health had failed to be considered an issue worthy of being moved to the top of the agendas of governments and international organisations, perhaps because poor oral health primarily affects morbidity rather than mortality.

However, Vision 2020 also reported a growing realisation that oral health constitutes an integral part of overall health, noting that "a very positive move has been observed towards the inclusion of oral health into general health strategies"<sup>1</sup>. For example, a resolution adopted by the United Nations General Assembly in 2011 recognised 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 non-communicable diseases."<sup>2</sup>

## The definition of oral health

The FDI follow-up to this resolution provided new opportunities for collaboration with the World Health Organization (WHO) in fulfilling the tasks assigned to it by the resolution, for example in the development of global targets and indicators. But the collaboration was delayed due to serious gaps in recent epidemiological data on major oral diseases, particularly in low- and middle-income countries<sup>3</sup>.

It is for this reason that the FDI definition is particularly timely. Developed by the Vision 2020 Think Tank

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and the result of a wider consultation among patients, oral health professionals, national dental associations, the public health community, academia, government, industry and third-party payers, it is the start of a process to develop tools and indicators for measuring oral health. The definition reads:

"Oral health is multifaceted and includes the ability to speak, smile, smell, taste, touch, chew, swallow, and convey a range of emotions through facial expressions with confidence and without pain, discomfort, and disease of the craniofacial complex. Further attributes of oral health:

- It is a fundamental component of health and physical and mental wellbeing. It exists along a continuum influenced by the values and attitudes of people and communities.
- It reflects the physiological, social, and psychological attributes that are essential to the quality of life.
- It is influenced by the person's changing experiences, perceptions, expectations, and ability to adapt to circumstances."<sup>4</sup>

This positioning of oral health as an integral part of general health and wellbeing is an important milestone for the oral health profession and a reminder to policy makers, other medical practitioners and the public that oral health is an important part of general health.

## Next steps

The next step is to make the definition operational by developing an instrument that will allow oral health to be measured by a range of oral health professionals in diverse geographical settings by means of a standard set of consensus-based parameters. Indicators comprise the physiological and psycho-social dimensions of oral health, as well as disease and condition status, with a focus on common and preventable conditions, notably caries and periodontal disease. Once the dataset is finalised, it will undergo a review process among national dental associations and other members of the oral health community.

The ultimate objective is to develop an aggregate measure, an "index" or "score" of oral health, which can be used to score the oral health of: an individual patient; a group of patients within a practice; a community, or a population.

The process and issues raised dovetail with another FDI project currently under way, called the Oral Health Observatory (OHO), which seeks to ascertain issues, such as how patients rate their oral health and why they do not visit dental practices more often, as well as what the interactions are between oral health status, behaviour, quality of life, dental visits and so on.

# **Health policy**

The definition supports FDI activities to ensure that oral health is integrated in health and health-related policies recommended to Member States by the WHO and other members of the United Nations (UN) family. Furthermore, it provides a basis to position oral health within the context of the United Nations Agenda 2030 for Sustainable Development, notably Sustainable Development Goal (SDG) 3: Ensure healthy lives and promote wellbeing for all at all ages.

In its own literature, the UN stresses that SDG 3 is essential to sustainable development. "Significant strides have been made in increasing life expectancy and reducing some of the common killers associated with child and maternal mortality. Major progress has been made on increasing access to clean water and sanitation, reducing malaria, tuberculosis, polio and the spread of HIV/AIDS. However, many more efforts are needed to fully eradicate a wide range of diseases and address many different *persistent* (our italics) and emerging health issues".

In this regard, oral health qualifies as a "persistent" health issue. The Global Burden of Disease Study has estimated that oral diseases affect 3.9 billion people worldwide and that untreated dental caries is the most prevalent of the 291 conditions assessed<sup>5</sup>. Thus, FDI has called for a global mobilisation on oral health under the leadership of the WHO to revitalise integrated, population-wide prevention measures and comprehensive patient-centred care strategies (FDI comments on WHA/70, Agenda item 15.1: Preparation for the third high-level meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, to be held in 2018). Oral conditions are closely associated with other health conditions, notably NCDs – and the global momentum for NCDs. The next UN General Assembly on the Prevention and Control of NCDs takes place in 2018 and is an opportunity to improve oral health on a global scale.

# Quality of life

It is important to note that SDG 3 includes the notion of wellbeing, because this is precisely the field where practitioners play a major role with regard to the selfesteem of an individual and their quality of life. Looked at from this point of view, the role of the clinician is not only to restore oral function. A clinician is also someone closely involved with knowing, understanding and supporting the wellbeing of their patient, considering the important role that oral health plays in the quality of life of the individual.

In support of this, FDI has adopted a number of policy statements, focusing on the role of oral health in personal wellbeing and quality of life. These statements – which are declarations that lay out current thinking on various issues related to oral health, oral health policies and the dental profession – include:

- "Effect of Masticatory Efficiency on General Health", which states that "Masticatory efficiency in adults may be compromised if there are less than 20 functional teeth" and that "Masticatory efficiency has essential benefits, not only for the digestion of food, but also for its contribution to physical and mental well-being"<sup>6</sup>.
- "Preventing Oral Diseases", which states that "oral diseases have a negative impact on quality of life, affecting physical, psychological and social wellbeing" and, *inter alia*, calls for national health policies and programmes to be aimed towards preventing oral diseases and promoting and maintaining oral health<sup>7</sup>.
- "Oral Health and Quality of Life", which addresses the importance of incorporating "oral health-related quality of life" (OHRQoL) measures into assessments of oral healthcare needs and cost-effectiveness, as well as planning oral health services and setting policies<sup>8</sup>. OHRQoL measures the extent to which oral conditions affect an individual's behaviour and social functioning, and complement the conventional clinical assessments of oral health.

While these policy statements provide documentation to support FDI efforts in integrating oral health into SGC 3, the most illustrative support comes from FDI activities in the field of oral health and ageing populations, where issues of well-being, quality of life, oral function, and even mortality<sup>9</sup>, are the most closely interrelated.

#### FDI, oral health and healthy ageing

The figures are stark: 25% of the world's population – that is 2 billion people – will be aged over 60 in 2050. One-fifth of these – 400 million – will be over the age of  $80^{10}$ . Access to adequate oral healthcare is important at all stages of life, but especially in ageing populations, to promote healthy ageing and improve quality of life and transform life years into healthy life years. These should be life years where people can continue to be independent, to be able chew, to eat and enjoy a good quality of life. In all regions, rich, middle income and low-income, there is a gap of approximately 10 years between life expectancy and healthy life expectancy<sup>11</sup>.

In response, FDI has committed to a programme of advocacy and activities relating to oral health for an ageing population. For example, it has developed a policy statement entitled "Oral Health for Healthy Ageing", whose partial contents were communicated to the 138th meeting of the WHO in 2016.

Among the recommendations, with complete tooth loss among older adults on the decline, healthcare providers should prepare for an increased need for oral health services for dentate older adults. In addition, national health agencies and dental associations should monitor and periodically report oral health measures and related health factors, using standardised epidemiological surveillance, and, along with academic institutions, further support and commit to scientific research on the interrelation of NCDs with oral diseases and their impact on general health, well-being and quality of life<sup>12</sup>.

FDI has also followed up on the World Congress 2015 "Dental care and oral health for healthy longevity in an ageing society", which took place in Tokyo of that year, co-sponsored by the WHO and FDI. The Congress yielded a call for action, entitled the Tokyo Declaration, which highlights, *inter alia*, the need for research, evidence-based national oral health care policies, recognition of oral and dental health throughout life as fundamental to improving quality of life and helping to protect against NCDs, and an environment that enables and encourages multi-professional collaborative practice.

Inspired by the Tokyo Declaration, FDI has been implementing the project "Oral Health for an Ageing Population" (with support from GC International AG) since 2015. Its purpose is to share experience and research among experts and to promote debate. The first conference, at which more than 20 experts participated, including the WHO, covered five areas and yielded articles that following their peer review, will be published in the International Dental Journal (IDJ). The five subject areas of the articles are:

- 1. Oral Health for an Ageing Population: A plea for a natural dentition in old age;
- Relation Oral Health General Health/Non-communicable Diseases;
- 3. Prevention of tooth loss and dental pain for reducing the global burden of oral diseases;
- 4. Oral healthcare systems for an ageing population;
- 5. Surveillance and monitoring on oral health in elderly people.

The next step will be a second "Oral health for an ageing population" conference in 2018.

## **Periodontal health**

Research has shown an association between periodontal diseases and oral health-related quality of life<sup>13</sup>. Furthermore, periodontal disease may also be associated with systemic diseases such as diabetes, cardiovascular diseases, adverse pregnancy outcomes and respiratory diseases<sup>3</sup>.

FDI has therefore set up the Global Periodontal Health Project (GPHP), with the aim of achieving Global Periodontal Health (GPH) by reducing the burden of periodontal disease worldwide. It involves raising awareness of the impact of gum disease on public health and socio-economic development, and engaging stakeholders in promoting periodontal health and disease prevention by targeting oral health professionals, other health professionals, public, policy makers, educators and patients.

Under the GPHP's global awareness objective, a survey was disseminated to FDI member dental associations to assess the existence of national policies and measures in place to promote/prevent and manage periodontal disease and review how periodontal health is addressed within the existing national health frameworks. The survey included questions on national health policies, health information systems, health education and workforce, and prevention and promotion. The aim was to collect some baseline information to contribute towards the development of a white paper to help practitioners and oral health professionals better understand the issue of periodontal health and disease, propose recommendations and support decision making.

A recent GPHP activity included a World Oral Health Forum (WOHF) on periodontal health during the World Dental Congress, in August this year, providing further insights on periodontal diseases and potential input to the white paper; and an advocacy toolkit, derived from the white paper, to provide NDAs with practical guidance and tools to support and develop national advocacy and actions to tackle the burden of periodontal diseases.

### Conclusion

The FDI definition of oral health represents a huge step forward in the process of measuring health, rather than measuring disease. Now, FDI is better placed to develop the oral health measurement tools and indicators to integrate oral health into the global health agenda and position it within the context of the United Nations 2030 Agenda for Sustainable Development, notably SDG3.

This positioning of oral health provides an opportunity to emphasise the socio-economic aspects of oral health and its important contribution to quality of life and wellbeing. It also allows FDI to develop a concrete response to policy needs for the prevention and control of NCDs, based on common risk factors between oral diseases and other NCDs, as well as to current demographic trends and the particular challenge of ageing populations worldwide. It also positions FDI as agenda-setter, advisor and advocate in key areas, such as periodontal health.

#### **Conflicts of interest**

The author reported no conflicts of interest related to this study.

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