Islamic Republic of Afghanistan
Ministry of Public Health
General Directorate of Preventive Medicine
Primary Health Care Directorate

Oral Health Department

National Strategy on Oral Health

2018—2023

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Acronyms

CHW	Community Health Worker
CPI	community periodontal index
DCPs	Dental Care Professionals
DMF	Decayed, Missing, Filled
ECC	Early Childhood Caries
EM	East Mediterranean
FMR	Fluoride Mouth rinse
f/s	Fissure sealants
HICs	High income countries
HMIS	Health Management Information System
HR	Human Resource
LICs	Low income countries
LMICs	Low and middle income countries
MoE	Ministry of Education
Mohe	Ministry of higher education
MoPH	Ministry of Public Health
OH	Oral Hygiene
OHD	Oral Health Department
WHO	World Health Organization

Introduction

WHO definition of Oral Health: Oral Health is a state of being free from chronic mouth and facial pain, oral and throat cancers, Oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity.

Oral diseases are generally grouped into three main categories. The first category involves diseases of the teeth such as tooth decay and the formation of cavities. The second category of oral disease consists of diseases of the gum and teeth surrounding tissues. The first stage of gum disease is known as gingivitis. If left untreated, gingivitis can progress to a serious type of oral disease known as periodontal disease. Periodontal disease can lead to a weakening of the support system that holds the teeth in place and the erosion of the gum line surrounding the teeth. Over time, periodontal disease can even cause loss of the teeth. The damage caused by periodontal disease is permanent and is not reversible while gingivitis is reversible. The third category of oral diseases consists of other oral diseases specially oral cancers.

Yet oral diseases such as dental caries, periodontal disease, tooth loss, oral mucosal lesions, oral cancers, oral manifestation of HIV/AIDS, necrotizing ulcerative stomatitis (Noma), and Oro-dental trauma are serious public health problems and are most common chronic diseases as they affect large proportions of children, adults and old-aged people around the globe. Their impact on individuals and communities in terms of pain and suffering, impairment of function and reduced quality of life, is considerable.

It is generally accepted that prevention is better than cure. This is also true for oral and dental diseases. Anyone with toothache or dental infection cannot smile, eat, or sleep properly. This may even cause restriction of daily activities and absence of children from school or adults from work place. Untreated teeth may cause more complicated problems, which are extremely expensive to treat. Extraction (pulling) of the teeth would be the last remedy, especially in most people who cannot afford the cost of complicated treatments. Therefore, any one with such experiences appreciates the value and benefits of preventing oral diseases.

Globally, the greatest burden of oral disease lies on disadvantaged and poor population. Poor oral health negatively affects growth, development and learning and may hinder basic functions such as chewing food, communicating, cosmetics and compromise quality of life of children and adults. Poor oral health status is the demonstration of that there is lack of awareness of the impact of oral diseases on population and on general health, lack of political support and resources allocated for oral health as well as inadequate response of health care system.

Common risk factors for oral diseases include unhealthy diet and habits, tobacco use, alcohol use, poor oral hygiene, poverty, severe malnutrition, unsafe drinking water, which are preventable.

The impact of oral diseases is not only on the individuals, but also on the community, generally through health system and other economic costs. Both dental caries and periodontal diseases can be effectively prevented and controlled through a combination of community, professional and individual action.

What is the impact of poor oral health and why is action needed?

Oral diseases are important public health issue as they are among the most commonly found chronic disease (silent epidemic). These conditions place considerable burden on individual, family and the community. Based on WHO reports, oral diseases are highly prevalent in EM countries affecting both children and adults due to insufficient care. Traditional oral disease treatments are extremely expensive as reported by most industrialized countries. Untreated dental decay and gum disease may lead to different degree of complications and eventually cause tooth loss. Aside from local effect, broader impact is expected on general health and quality of life.

A range of health conditions are associated with oral diseases. Chronic infection of gum has adverse effect on the control of blood sugar and the incidence of diabetes complications. Poor oral health is associated with poor diet, increased risk of pneumonia, and infective endocarditis. Gum disease is strongly associated with rheumatoid arthritis, adverse pregnancy outcomes and coronary heart disease. Sufferers of rheumatoid arthritis, emphysema or liver conditions are 2.5, 3 and 5 times as likely to have urgent dental treatment needs compared to non-sufferers. These associations persist after controlling for common risk factors involved.

On the other hand, high cost of dental treatments makes oral conditions the fourth-most expensive disease group to treat after cardiovascular disease (WHO-Report 2003)

Oral disease is still a major public health problem in High income countries (HICs) and the burden of oral disease is growing in many Low and middle income countries (LMICs). In most LMICs, the general population does not benefit from systematic oral health care, nor have preventive programs been established. In some countries the incidence of dental caries has increased over recent years and may further increase as a result of the growing consumption of sugars and inadequate exposure to fluorides.

Key facts around the globe and the region:

Worldwide, 60–90% of school children and nearly 100% of adults have dental cavities.

Severe periodontal (gum) disease, which may result in tooth loss, is found in 15–20% of middle-aged (35-44 years) adults.

Globally, about 30% of people aged 65–74 have no natural teeth.

Oral disease in children and adults is higher among poor and disadvantaged population groups.

The incidence of oral cancer ranges from one to 10 cases per 100 000 people in most countries. The prevalence of oral cancer is relatively higher in men, in older people, and among people of low education and low income. Tobacco and alcohol are major causal factors.

Almost half (40–50%) of people who are HIV-positive have oral fungal, bacterial or viral infections. These often occur early in the course of HIV infection.

Across the world, 16-40% of children in the age range 6 to12 years old are affected by dental trauma due to unsafe playgrounds, unsafe schools, road accidents, or violence.

Noma is a gangrenous lesion that affects young children living in extreme poverty primarily in Africa and Asia. Lesions are severe gingival disease followed by necrosis (premature death of cells in living tissue) of lips and chin. Many children affected by noma suffer from other infections such as measles and HIV. Without any treatment, about 90% of these children die.

Birth defects such as cleft lip and palate occur in about one per 500–700 of all births. This rate varies substantially across different ethnic groups and geographical areas. http://www.who.int/mediacentre/factsheets/fs318/en/

Oral and pharyngeal cancers were estimated to affect more than 482 000 people globally in 2008, more than half of whom (273 000) died of the disease. Unfortunately, two-thirds of these cases occurred in developing countries. The prevalence of oral cancer and pharyngeal cancer shows a wide disparity by sex and geographical area. While nasopharyngeal cancer is prevalent among the Chinese, oral cancer has been known to be prevalent in South Asian countries such as India and Pakistan.

Severe periodontitis is estimated to affect 5%–20% of adults in both developed and developing countries. In different regions of Asia, including developed and developing countries, studies using the community periodontal index (CPI) showed that more than 60% of adults had CPI scores of 2–4, indicating detection of calculus during probing and pocket depths of 4 mm and more. In the Islamic Republic of Iran, this score is prevalent in about 70% of young adults and 93% of the middle-aged population. http://www.emro.who.int/emhj-volume-18-2012/issue-9/article-13.html

Some students of dentistry faculty of KMU (Kabul Medical University) with the collaboration of teachers and Research Committee of KMU conducted a pilot study (survey) to measure DMFT (Decayed, Missing, and Filled Teeth) and the incidence of dental caries according to different dental surfaces.

The survey was conducted from 15-Oct-2010 to 24-Oct-2010 in two governmental stomatology hospitals, which has revealed the following significant results:

The survey was conducted on 1391 participants above 16 years old. These participants were 100% affected, and the average of missing teeth in each individual was at least 6 teeth.

Lower molars were the most affected but lower central incisors were less affected by dental caries. Respectively, occlusal and approximal surfaces were most affected than other surfaces.

The first lower molars had the most fillings, while canines had the least fillings. The third and the first molars were respectively the teeth with the most incidence of missing.

In addition, it was reported that teeth brushing can prevent DMFT, while consuming more sugars and soft drinks increase dental caries.

Oral health department (OHD) was established in February 2009 (Dalwa 1387) by MoPH. This department has ten staff (seven professional staff, one admin officer and two workers). So far OHD has conducted oral hygiene workshops for school and kindergarten teachers, campaigns, designed and printed some oral hygiene messages, and dental brushing and flossing method brochures and posters for public awareness. OHD is designing its strategic plan to better allocate resources to guide the department's work for the next six years and in alignment with the mission, OHD established its National strategic directions to focus on the improvement of oral health as an important component of general health and quality of life.

Vision:

Healthy Afghan residents through better oral health

Mission:

To prevent and control oral diseases and conditions through extension of oral health services, building the knowledge, tools, and networks that promote healthy behaviors and effective and efficient public health practices and programs.

Policy Statement:

OHD is committed to promote oral health and to reduce oral diseases through increasing public awareness, quantity and quality of oral health services and appropriate nutrition.

GOAL:

The goal of the Oral Health Policy is to prevent and control oral diseases and to facilitate and promote better oral health to reduce the burden of oral diseases and maintain oral health and quality of life through different health promotion and preventive interventions.

National Oral Health Strategy 2018-2023

Strategic Direction I: Promotion of Oral health and prevention and control of oral diseases

Objective i: Promotion of oral health during pregnancy to prevent and reduce the number of premature or low birth weight babies due to dental disease and infections and other oral problems and to care for babies' teeth.

Strategic Intervention I.i.1: Encourage pregnant women to brush and floss their teeth, to use fluoridated toothpastes and to see their dental professional during their pregnancy.

Strategic Intervention I.i.2: Encourage right nutrition.

Strategic Intervention I.i.3: Provide oral health services and dental care for pregnant women.

Strategic Intervention I.i.4: Over-prescribing of drugs in pregnant women should be avoided in order to prevent side effects of drugs.

Objective ii: To maintain oral health for life and to prevent, reduce and control the burden of oral diseases across the life stages including dental caries (especially ECC), periodontal diseases, oral cancers, oral pre-cancers, other oral diseases related to tobacco use and their risk factors, oral developmental defects, and facial trauma largely through reducing risk factors, increasing quality of life and effective preventive interventions.

Strategic Intervention I.ii.1: Provision of sealants for children in targeted groups and schools (School – based and school-linked dental sealant programs) to prevent dental caries and periodontal diseases

Strategic Intervention I.ii.2: Developing and conducting Fluoride mouth rinse (FMR) program for high risk elementary school children during a defined period of time.

Strategic Intervention I.ii.3: Ensure fluoride application for all people with special needs attending public dental services where clinically appropriate and if water fluoridation is not feasible, implementation of other community preventive programs e.g. fluoridated toothpastes and Fissure sealants (f/s)

Strategic Intervention I.ii.4: Improve the management of oral cancer, oral and facial trauma, and oral developmental defects.

Strategic Intervention I.ii.5: The provision of trainings in detection, early diagnosis and treatment of oral cancers.

Strategic Intervention I.ii.6: Promotion of a healthy diet and nutrition, particularly lower consumption of sugars and increased consumption of fruits and vegetables.

Strategic Intervention I.ii.7: Encourage to use, import and manufacture affordable fluoridated toothpastes, milk and salt.

Strategic Intervention I.ii.8: Development and adoption of infection control guidelines into dental practice to prevent disease transmission (HIV/AIDS, HBS, HCV and other infections) and to minimize the risk for disease transmission in the dental environment, whether from patient to dental care personnel, from dental personnel to patient, or from one patient to another.

Strategic Intervention I.ii.9: Designing policy on smoking cessation to reduce and control consumption of tobacco products and alcohol through **i**ncreasing tobacco taxes (cigarettes and other tobacco products) and other effective interventions with the cooperation of Environmental Health Directorate.

Strategic Intervention I.ii.10: The establishment of oral health financing and increased funding for oral health/to involve public and private sectors in providing and financing oral health services.

Strategic Intervention I.ii.11: The mobilization of external resources for oral health.

Strategic Intervention I.ii.12: Seeking support from private sector for development of oral health.

Strategic Intervention I.ii.13: Development of insurance for oral health.

Objective iii: Increasing awareness on oral disease and healthy habits to influence the attitude and behavior of the individuals through oral health education and oral health promotion services.

Strategic Intervention I.iii.1: Development and provision of information and educational materials, Early Childhood Oral Health Guidelines, training resources for parents' awareness and update the materials to increase oral health literacy among high risk people and to encourage mothers to begin weaning around 6 months.

Strategic Intervention I.iii.2: Training and education of mothers and child caregivers on appropriate breast feeding method, infant Oral Hygiene (OH) including cleaning and brushing of their children's teeth and the disadvantages of feeding through nursing bottle.

Strategic Intervention I.iii.3: Provision of educational services for children.

Strategic Intervention I.iii.4: Partnership with MoE for integration of oral health education into the school curriculum.

Strategic Intervention I.iii.5: Discouraging children and young people from adopting the tobacco habit.

Strategic Intervention I.iii.6: Provision of age-appropriate and literacy-appropriate educational materials

Strategic Intervention I.iii.7: Oral health education for disabled persons (someone with physical or mental impairment)

Strategic Intervention I.iii.8: Appropriate trainings to increase awareness and understanding of people and to develop community oral health education to prevent dental caries, periodontal diseases and other diseases.

Strategic Intervention I.iii.9: Partnership with Child and Adolescent Health Department.

Strategic Intervention I.iii.10: Increase public awareness about the importance of good oral health e.g; through celebrating World Oral Health Day, 20 March/Oral Health Week and No Smoking Day/ World No Tobacco Day, 31 May

Strategic Intervention I.iii.11: Provision of oral health education through media.

Strategic Intervention I.iii.12: Delivering educational messages through electronic tools (e.g; Internet, website, etc.)

Strategic Intervention I.iii.13: Enhance health care providers' and educators' ability to support better oral health outcomes and to enhance the oral health knowledge base of educators to enable them to more accurately provide information.

Strategic Intervention I.iii.14: Maintain relationships with educators at all levels to incorporate preventive oral health education into their programs.

Strategic Intervention I.iii.15: Support to provide access to safe drinking water, general hygiene, and better sanitation for proper OH.

Strategic Intervention I.iii.16: Increase public awareness on the risks of tobacco use and traffic accidents.

Strategic Intervention I.iii.17: Involving oral health professionals in tobacco cessation programs

Strategic Intervention I.iii.18: Conducting workshops and seminars on oral health for public awareness, and for private sector staff.

Strategic Direction II: Increase access to quality dental care and oral health services.

Objective i: Promote access to dental care and oral health services and reduce /eliminate disparities or inequalities in oral health status of people who have poorer rates of access to oral health services or rural communities, or people whose oral health status is poor and are at high risk (early childhood and older people) and to improve oral health amongst these groups.

Strategic Intervention II.i.1: Provision of dental screening and services (especially for children and pregnant women)

Strategic Intervention II.i.2: Collaborate with school health workers, CHWs, etc. to assist families in achieving dental care and oral health services for their children.

Strategic Intervention II.i.3: Increase access of low income and rural communities, where access to oral health services is limited.

Strategic Intervention II.i.4: Reduce/eliminate scarcity of skilled providers in rural areas and encourage private sector to serve in these areas

Strategic Intervention II.i.5: Support refurbishment of existing clinics in rural and remote areas.

Strategic Intervention II.i.6: Support to increase outreach specialists.

Strategic Intervention II.i.7: Ensure that all people in remote and rural communities have access to fluoridated drinking water and/or fluoride toothpastes.

Strategic Intervention II.i.8: Eliminate discrimination against disabled people and gender.

Strategic Intervention II.i.9: Reduce oral health inequalities through educating and consulting communities and stakeholders.

Strategic Intervention II.i.10: Integration of Oral Health in Health Information Center /Creating a new Oral Health Information Center and Creating maternal and child oral health line.

Strategic Intervention II.i.11: Improve access through technology _ new information and communication technologies.

Strategic Direction III: The strengthening of HR management and infrastructure development for oral health. (The Capacity Building)

Objective i: To improve the management and to increase infrastructure capacity and effectiveness.

Strategic Intervention III.i.1: Improve skills of oral health providers especially in rural areas.

Strategic Intervention III.i.2: Developing new structure of OHD, according to the needs.

Strategic Intervention III.i.3: The development of a maintenance schedule for dental equipment within all hospitals.

Strategic Intervention III.i.4: Collaboration with other organizations for the development of infrastructure.

Strategic Intervention III.i.5: Support to develop the number and distribution of dental clinics and dental equipment and supplies.

Objective ii: To ensure a cadre of well-prepared professionals and leaders for the public health workforce

Strategic Intervention III.ii.1: Workforce development/providing opportunities (for trainings, courses, scholarships, residency program and fellowships) in oral/dental public health inside and outside the country.

Strategic Intervention III.ii.2: Improve the organizational capacity and functioning with an emphasis on increasing partnership (capacity development for public oral health).

Strategic Direction IV: Evidence-based decision making

Objective i: The establishment of data collection and research procedures to support the development and promotion of effective evidence-based policy, strategies and interventions.

Strategic Intervention IV.i.1: Conduct surveys on child and adult dental and oral health to give a picture of the oral health status (especially of primary school children who are most prone to ECC) and use of these data to inform policy and service development.

Strategic Intervention IV.i.2: Conducting researches which are necessary and collection of data with the corporation of other organizations on the prevalence and incidence of the oral diseases and conditions (including dental caries and periodontal diseases)

Strategic Intervention IV.i.3: Develop the surveillance and to monitor and characterize of oral health and the burden of oral diseases (including dental caries, periodontal infections, oral cancers and their risk factors) across the life stages through utilizing the best science and methods.

Strategic Intervention IV.i.4: Addressing level of fluoride in drinking water with provision of technical assistance to promote and extend fluoridation including administration of fluoride in drinking water (community water fluoridation), salt and milk, and increasing access to fluoridated drinking water.

Strategic Intervention IV.i.5: The development of HMIS for oral health/Oral Health Information System

Strategic Intervention IV.i.6: Provide evidence-based dental infection control information and recommendations

Strategic Intervention IV.i.7: Build an evidence base of effective strategies and interventions to improve early detection of oral cancers and to reduce incidence and mortality.

Strategic Intervention IV.i.8: Monitoring and Evaluation of the programs to ensure that implementation has been successful.

Main Activities:

- **Strategy Development:** Co-operation and assistance in the developing and promotion of Oral Health related strategies and policies.
- **Monitor/Surveillance**: Monitor the burden of diseases, risk factors, preventive services, and other associated factors.
- **Research:** Support oral health researches that directly applies to oral health policies and programs
- **Communications:** Communicate timely and relevant information to impact policy, practices, and programs of OHD
- **Preventive strategies:** Support the implementation and maintenance of effective preventive strategic interventions to reduce the burden of oral diseases and conditions.
- **Department infrastructure:** Build capacity and infrastructure for sustainable, effective, and efficient oral health programs.
- **Evaluation:** Evaluate oral health services and programs around the country to ensure successful implementation.
- **Partnerships:** Identify and facilitate partnerships to support oral health strategic priorities and efforts all over Afghanistan
- **Policy development:** Develop and advocate public oral health policies, develop and promote oral health services and oral hygiene services as basic primary health services in public health