

STRATEGIC PLAN FOR ORAL HEALTH IN THAILAND (2023-2037)

CORRESPONDENT AGENTS:

BUREAU OF DENTAL HEALTH,
DEPARTMENT OF HEALTH,
MINISTRY OF PUBLIC HEALTH

PUBLICATION DATE:

DECEMBER 2023



According to the United Nations (2022), an oral health problem is one of the world's health barriers and is also associated with many non-communicable diseases (NCDs). Previous studies have reported that periodontal disease in pregnant women was related to pre-term birth and the low birth weight of newborns. In early childhood and school-aged children, oral diseases were the leading causes of orofacial pain, chewing function, loss of appetite, and malnutrition. Moreover, oral health issues affect the children's quality of life, e.g., sleeping quality, delayed growth, physical development, and learning ability. Additionally, oral health problems are a significant public health problem and the main cause of tooth loss incidence in working-aged and older people. It was

related to health risk factors for overall health problems, e.g., respiratory diseases, cardiovascular events, and diabetes mellitus (Baiju *et al.*, 2017). Oral health was not only related to physical health but also impacted the quality of life and the physical and psychological aspects of human beings. Regarding Barranca-Enríquez and colleagues (2022), oral health maintenance could improve the state of well-being, preferable appearances and personalities, social engagement, verbal communication, chewing ability, and taste alteration or taste impairment (Dysgeusia).

According to the World Health Organization (2013), The relevant age group that could represent the changes in oral health status in each lifespan included preschool ages (three years and five years), school-aged and teenagers (12 years and 15 years), adults (35-44 years), youngest-old adults (60-74 years) and lastly oldest-old adults (80-85 years). Recently, Thailand's National Oral Health (Bureau of Dental Health, 2017) reported that the oral health situation in Thailand citizens at the age of three years, 35% (1989) of caries-free incidence had increased to 47.1% (2017). Similarly, at the age of five-year-old children, there was an increasing trend of caries-free from 19.4% to 24.4% over the decade from 2007 to 2017. In school-aged children, there was a successful outcome of oral healthcare behavior improvement by their parents. Consequently, the caries-free trend had decreased, and

there was a higher number of toothbrushing before bedtime. Nevertheless, there was a decline in lunchtime toothbrushing in 12-year-old students. **At the age of 15**, the caries-free numbers had climbed due to the before-bedtime toothbrushing behavior; however, the number of lunchtime brushing sessions was still lower. In the working-age group (35-44 years), the survey found that the number of periodontitis decreased with the improved before-bedtime brushing behavior and using more additional oral care devices such as mouth rinse, toothpicks, dental floss, and interproximal brush. **Lastly, in older adults (60-74 years)**, there was a higher number of 20 permanent teeth with preferable health behavior with bedtime tooth brushing.

Focusing on oral healthcare systems in Thailand it could be divided into five main points, which were: **1) Overall oral health care accessibility, 2) area and target group that access oral health services, 3) services structures and providers, and 4) Promotion and prevention in oral health services and dental utilization. 5) Gap analysis in oral healthcare.** First, the Health Data Center (HDC, 2022) showed that 27.9% (18.5 million people) received dental services from 2013 to 2018, which increased steadily each year. Secondly, Thai people could access oral health care services in urban areas compared to remote or rural areas, with 15.8 % of the total population. However, there was an oral health care accessibility issue: Thai older populations a significant challenge, as they have the lowest service utilization rate, with only approximately 7.1% having access to oral health services. Thirdly, both private and public sessions for oral health care provisions shared a similar proportion of access to oral health care. Notably, the patients visited the dentists or dental professionals in government services at community hospitals (38%), regional hospitals (17.9%), general hospitals (14.5%),

and community health centers or district health promotion hospitals (12.7%) respectively. The main dental services in Thailand were provided as dental treatment at 81.4%, whereas oral health promotion and prevention services were reported at only 18.6 % of all total dental services. Approximately half of the services are still provided by the private sector. The gaps in dental care access were analyzed and showed revealed several key challenges including delayed dental treatment, long waiting lists, and co-payments in each procedure or extra expenditures in some dental treatments. To find out the solution for dental health accessibility, extending the oral health care coverage in each dental healthcare scheme and benefits in the financial package is necessary. Thus, the Bureau of Dental Health and the Department of Health have driven the strategic plans with the partnership to implement oral health promotion planning for long-term sustainability. This strategic plan was set up to drive oral health services in the same direction, which could impact oral health behavior at the individual level and improve the oral health status of Thai populations nationwide to a national policy or upstream level.

STRATEGIC PLAN FOR ORAL HEALTH IN THAILAND

Oral health promotion was counted as a part of Thailand's 20-years national strategic plan driving (from 2018-2037); this plan aimed to accomplish the vision of "The country reaches security, prosperity, sustainability, and become a developed country under the royal philosophy of King RAMA IX: sufficient economy." The Bureau of Dental Health Department of Health made the strategic plan for oral Health in Thailand (2023-2037) that followed the master national

strategic plan, which included the aims, process, strategies, and assessments.

Aim: Thai people have good oral health, contributing to a better quality of life and well-being under the life-course approach concept in society.

Indicator: 50% of people aged 80 years can retain at least 20 permanent teeth.

There are four main strategies, which include.

Strategy I: Health Promotion, Prevention, and Protection in Oral Health

Strategy's goal: The Thai citizens in each age group had sufficient oral health literacy, adjusted their preferred oral health behaviors, and lived in a healthy environment and society, leading to better oral Health.

Strategy II: Oral Healthcare Services and System Development

Strategy's goal: Oral healthcare accessibility could be provided with adequate coverage under standardized quality.

Strategy III: Human Resources Management

Strategy's goal: In man, powers' management should be sufficient, high-quality, and harmonized with the well-being of the oral health care system.

Strategy IV: Governance and Administration

Strategy's goal: To develop the related mechanism and strategic management systems for driving the oral healthcare system in the same direction for achieving the aims of the strategic plan for oral in Thailand (2023-2037)

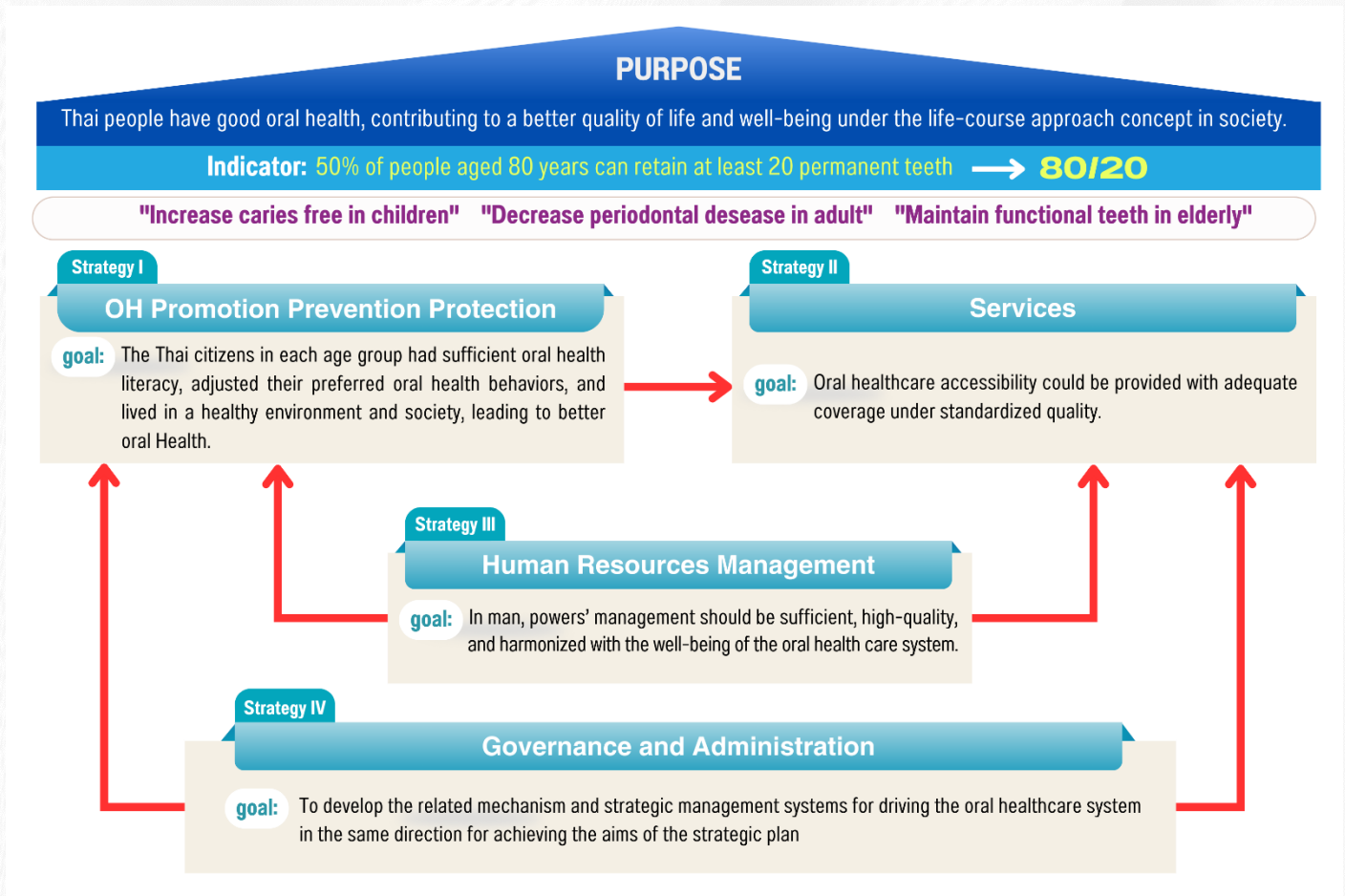


Figure 1. The Strategic Plan for Oral Health in Thailand (2023-2037)

Source: Department of Health (2023)

STRATEGIC PLAN'S INDICATORS

Lagging Indicator

| Indicators | Baseline (2017) | 2027 | 2032 | 2037 |
|---|-----------------|------|------|------|
| Percentages of functional tooth Maintenance \geq 20 teeth at the age of 80+ (80:20) | 22.4 | 32.0 | 40.0 | 50.0 |

Leading indicators

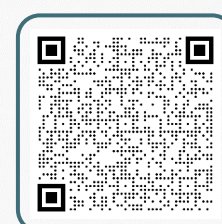
| Indicators | Baseline (2017) | 2027 | 2032 | 2037 |
|--|-----------------|------|------|------|
| 1. Increase number of children with good teeth (oral health) | | | | |
| 1.1 % Caries free in early childhood | 47.1 | 65.0 | 70.0 | 80.0 |
| 1.2 % Cavity free in permanent teeth among school-aged children | 66.7 | 80.0 | 85.0 | 90.0 |
| 2. The numbers of gingivitis in teenagers and periodontal disease in the working age group could be decreased | | | | |
| 2.1 % of Gingivitis in teenagers | 69.9 | 55.0 | 50.0 | 45.0 |
| 2.2 % Periodontal disease at the age of 35-44 years | 25.9 | 15.0 | 10.0 | 5.0 |
| 3. Permanent tooth maintenance in older adults | | | | |
| 3.1 % Maintain Functional Teeth at least 20, age 60-74 | 56.1 | 65.0 | 70.0 | 80.0 |

COMMITTEE

1. This strategic plan was arranged under partnerships from both private and public sections, including 20 persons from 7 different organizations in Thailand. The founders were from the Health Administration Division, Office of the Minister Ministry of Public Health, Institute of Dentistry, Department of Medicine, Faculty of Dentistry, Srinakharinwirot University, Dental Faculty Consortium of Thailand, Praboromarajchanok Institute, Dental Innovation Foundation under royal patronage, and Bureau of dental health processed as secretary function and main committee.
2. Co-founders of this strategic plan from the dentist club in nationwide provincial health offices, the dentist club in General/Central hospitals, the dentist club in community hospitals, and representatives from educational sessions, e.g., the universities (faculty of dentistry), experts and Praboromarajchanok Institute.

FULL TEXT:

https://dental.anamai.moph.go.th/th/oral-health-plan/download?id=115595&mid=38393&mkey=m_document&lang=th&did=32586



REFERENCES:

- Baiju, R. M., Peter, E., Varghese, N. O., & Sivaram, R. (2017). Oral Health and Quality of Life: Current Concepts. *Journal of clinical and diagnostic research: JCDR*, 11(6), ZE21–ZE26.
- Barranca-Enríquez, Antonia, and Tania Romo-González. "Your health is in your mouth: A comprehensive view to promote general wellness." *Frontiers in oral health* vol. 3 971223. 14 Sep. 2022, doi:10.3389/froh.2022.971223
- Bureau of Dental Health (2018) The 8th National Oral Health Survey 2017 of Thailand. Bangkok: Department of Health. Available at: https://dental.anamai.moph.go.th/web-upload/migrated/files/dental2/n2423_3e9aed89eb9e4e3978640d0a60b44be6_survey8th_2nd.pdf.
- National Institute of Dental and Craniofacial Research (2021), Oral Health in America: Advances and Challenges [Internet]. Bethesda (MD): 2021 Dec. Section 3B, Oral Health Across the Lifespan: Older Adults. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK578296/>(Accessed: 02 March 2024)
- United Nations. (2022) *Draft global oral health action plan (2023–2030)*, World Health Organization. Available at: <https://www.who.int/publications/m/item/draft-global-oral-health-action-plan-%282023-2030%29> (Accessed: 01 March 2024).
- World Health Organization (2013) *Oral Health Surveys: Basic Methods - 5th Edition*, World Health Organization. Available at: <https://www.who.int/publications/i/item/9789241548649> (Accessed: 01 March 2024).