# THE DENTAL PUBLIC HEALTH SPECIALIST IN THE MINISTRY OF HEALTH MALAYSIA

**Second Edition** 



Oral Health Division Ministry of Health Malaysia

MOH/K/GIG/1.2010 (BK)

## THE DENTAL PUBLIC HEALTH SPECIALIST

## IN THE MINISTRY OF HEALTH MALAYSIA

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Oral Health Division Ministry of Health Malaysia January 2010

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From the Principal Director of Oral Health Ministry of Health Malaysia

This document is an update of an earlier 1997 document on Dental Public Health Specialists (DPHS) by the Ministry of Health Malaysia (MOH). This updated edition is necessary as DPHS in the MOH are increasingly called upon to address issues and challenges of an increasingly borderless world.

The initial aspiration was to produce a document for all DPHS in Malaysia regardless of the organisation. However, we cannot possibly do justice to the scope of DPHS outside the MOH, especially those in the Universities and the Armed Forces. Hence, this document is limited to DPHS in the MOH only, but is targeted for distribution to all dental professionals, policy makers, health professionals and other stakeholders in health and oral health.

We refer to specialists in this discipline as 'Dental Public Health Specialists (DPHS)', and there is a move in the MOH for the nomenclature in Bahasa Malaysia to be *Pakar Pergigian Kesihatan Awam*. We acknowledge that DPHS in the MOH have various postgraduate qualifications in the disciplines of Dental Public Health / Public Health / Public Health (Oral Health) / Public Health (Dentistry) / Community Medicine (Oral Health) / Community Dentistry / Preventive Dentistry. Hence, we use the terms 'Dental Public Health' and 'Public Health Dentistry' interchangeably in this document.

Discharging public health values and practices mean focusing on populations rather than the individual, with particular emphasis on prevention, the environment and service to the community. In engaging that role, it is incumbent upon DPHS to be part of multidisciplinary teams where necessary, comprising professionals in various fields, including community representatives.

It is hoped that this document will serve as a reference to all stakeholders in Malaysia's quest to continually improve oral health of its people.

Dato' Dr Norain binti Abu Talib

## SUMMARY

Formulation and implementation of oral health population strategies and initiatives in the Ministry of Health Malaysia (MOH) have largely been the efforts of Dental Public Health Specialists (DPHS). The role and function of the DPHS in MOH in five core areas, delineated in an earlier 1997 document 'The Dental Public Health Specialist', remain relevant. There are minor adjustments to highlight increasing emphasis on clinical governance in dental practice as follows:

- Oral Health Policy Development
- Oral Health Programme Management
- Oral Health Promotion
- Oral Disease Prevention
- Clinical Governance in the Practice of Dentistry.

In addition, this document outlines 12 core competency areas of the DPH specialty. A specialist in DPH is required to have knowledge and skills in the 12 areas, including assuming the leadership role to effectively and efficiently discharge the five core areas above.

These 12 core competency areas pertain to:

- 1. Needs assessment and surveillance of populations' health and well-being
- Planning, implementation, monitoring and evaluation of public oral health programmes and services
- 3. Promotion and protection of population oral health and well-being
- Inculcation of quality improvement initiatives as a culture to maintain and improve standards for oral health based on research evidence
- Management, analysis & interpretation of data, information, knowledge and statistics using Information and Communication Technology (ICT)
- 6. Policy and strategy development & interpretation
- Community empowerment for improvement of oral health & reduction of inequalities
- 8. Strategic leadership for oral health & well-being across all sectors
- 9. Ethical management of self, people and resources & practice
- 10. Research and Development
- 11. Continuing Professional Development
- 12. Clinical Dental Prevention

In describing the role of the DPHS in the MOH, it is clear that they fulfill all six core areas of Public Health and the nine Essential Public Health Functions adopted by the MOH.

## THE DENTAL PUBLIC HEALTH SPECIALIST IN THE MINISTRY OF HEALTH MALAYSIA

#### 1. INTRODUCTION

Oral health is essential for well-being. As an important co-morbidity, oral diseases affect people's daily lives'. Pain and discomfort, functional and psychosocial impacts of oral diseases have the capacity to significantly diminish quality of life. In spite of great achievements in oral health of populations globally, oral health problems still remain in many communities all over the world. In Malaysia at present, the distribution and severity of oral diseases vary among different communities and regions in this country<sup>2</sup>.

Oral diseases may be linked to chronic diseases due to common risk factors. General disease conditions may also have oral manifestations that increase risk of oral diseases, which in turn may be risk factors for general health conditions. This linkage creates a potential cycle of infections. Strengthening effective public health programmes for oral health is thus imperative. This is the arena of the DPHS.

In Malaysia, the DPHS is not only responsible for planning, monitoring and evaluating oral healthcare to populations but their clinical training and competencies in managing public health issues ease advocacy and mediation for strategic management of oral health in national policies.

In 1997, the Ministry of Health Malaysia (MOH) produced a document entitled 'The Dental Public Health Specialist'<sup>3</sup>. The resolutions on the role and function of the DPHS in the MOH from that document are presented in **Appendix 1**. It was a sentinel document to structure the scope of what a DPHS executes on a daily basis. In an increasingly borderless digital world, the DPHS is increasingly called upon to debate on the health system and to manage resources, dental education and training, information technologies, regulation of dental practice, while addressing more stringent standards of clinical governance for quality dental care. Hence, this second document on the DPHS is much warranted to describe the expansion in scope of the DPHS in the MOH.

<sup>&</sup>lt;sup>1</sup>Petersen PE. The World Oral Health Report 2003. World Health Organization, Geneva, Switzerland

<sup>&</sup>lt;sup>2</sup>Oral Health Division, Ministry of Health Malaysia. Oral Health Status, 2008

<sup>&</sup>lt;sup>3</sup>Dental Services Division, Ministry of Health Malaysia. The Dental Public Health Specialist, MOH/K/GIG/2.97(GU), 1997

#### 2. THE DENTAL PUBLIC HEALTH SPECIALIST

Dental Public Health Specialists (DPHS) are individuals with basic qualification in dentistry and post-graduate education and training in the discipline of Dental Public Health / Public Health / Public Health (Oral Health) / Public Health (Dentistry) / Community Medicine (Oral Health) / Community Dentistry / Preventive Dentistry.

#### 2.1 Definition of Dental Public Health (DPH)

Dental Public Health (DPH) is defined as

"the science and art of preventing and controlling dental disease and promoting dental health through organised community efforts. It is that form of dental practice which serves the community as a patient rather than the individual. It is concerned with the dental health education of the public, with applied dental research and with the administration of group dental care programmes as well as the prevention and control of dental diseases on a community basis"<sup>4</sup>.

American Association of Public Health Dentistry

In the USA, the American Dental Association recognises DPH as one of nine dental specialties. DPH is also a specialty in the UK and the dynamics of current healthcare reforms in the National Health Service (NHS) have led to the strengthening of the role and function of the DPHS in ensuring the responsiveness of the healthcare system to local needs.

#### 2.2 Dental Public Health Parallels Public Health

The core business of Public Health itself is cited under six topics :5

- Disease control
- Injury prevention
- Health protection
- Healthy public policies

\*Competency Statements for Dental Public Health. American Association of Public Health Dentistry. Accessed at http://www.AAPHD.ORG - competencies.htm on 20.8.2009

<sup>5</sup>World Health Organisation Regional Office of the Western Pacific and the Ministry of Health Malaysia. Malaysia Report. The structure and sustainable delivery of essential public health functions in the Western Pacific Region, November 2001

- Combating threats to public health
- Promoting health and equitable health gains.

Public Health (PH) medicine and Dental Public Health (DPH) parallel each other. PH medicine is the 'branch of medical practice that is concerned with improving the health of the population rather than treating the diseases of an individual.' Dental Public Health (DPH) likewise is oriented towards the health needs of populations rather than individuals. PH specialists work with others to monitor health status, prevent disease, screen for early disease, control communicable disease, foster policies that promote health, and plan and evaluate the provision of health care. The DPH specialists have a similar role in oral health, food and nutrition, monitoring health status, promoting health improvement programmes such as screening for early disease, health education and fluoridation and planning and evaluating relevant healthcare services. Hence, rather than mere 'parallels', the role and function of the PHS and the DPHS is in essence one and the same.

In Malaysia, collective responsibility for oral health of Malaysians after World War II established the need for dental officers specialising in the discipline of DPH, and spearheaded many public sector oral healthcare initiatives. Central to success is a strong and robust group of DPHS. At the highest levels, the DPHS is called upon to exhibit leadership qualities to influence health policies and practice through research, education, advocacy and negotiations; and to articulate a vision for the organization and subsequently direct efforts towards making that vision a reality.

Such development has spurred the Oral Health Division of the MOH into taking the lead role in oral health for the country; and moved the MOH from an organisation principally concerned with oral health service delivery to one charged with creating, improving and sustaining oral health of the nation.

From the description of the role and scope of the DPHS, it is self-evident that a DPHS must exhibit competencies in the Nine Essential Public Health Functions<sup>4</sup> (EPHF) just as a PHS does. The EPHF are listed as:

- 1. Health situation monitoring and analysis
- 2. Epidemiological surveillance / disease prevention and control

- 3. Development of policies and planning in public health
- 4. Legislation and enforcement to protect public health
- Strategic management of health systems and services for population health gain
- 6. Health promotion, social participation and empowerment
- 7. Human resource development and planning in public health
- 8. Ensuring the quality of personal and population-based health services
- Research & development and implementation of innovative public health solutions.

### 2.3 DPHS Parallels Dental Clinical Specialists

The population-based approach to professional practice is quite different from the approach required for individual patient care. At the same time, the role and function of the DPHS parallels that of dental clinical specialists. The hallmarks of the DPHS are as follows:

- the DPHS serves entire communities rather than specific individuals, and has the potential of making an impact on the oral health status of whole communities
- the approach to problem-solving is through community efforts
- the DPHS embraces an outreach concept and is not confined by physical limitations of a clinic, and
- the DPHS has the unique capacity to convert needs to demands through their interactions in multidisciplinary teams and with the community.

The axiom of 'maximum good to maximum number' holds true. If we were to draw a parallel between the DPHS and dental clinical specialist, it would be that:

Clinical Specialist	= DPHS
Clinician	= Team leader/member of multidisciplinary team
Patient	= Community / populations
Diagnosis	= Surveying tools, analysis and evaluation
Treatment plan	= Strategies and methodologies
Treatment	= Policy development and community programmes

## 3. DENTAL PUBLIC HEALTH INITIATIVES IN MALAYSIA

In Malaysia, management of public health issues is the purview of the public sector. The DPHS, in possessing the scientific background and clinical skills to diagnose, prevent, and manage oral diseases and conditions, is required to demonstrate public health values, with the ability to view oral health issues as they affect populations rather than individuals. The list of DPH initiatives of the MOH is shown in **Appendix 2**.

## 4. ROLE AND FUNCTION OF THE DPHS

The earlier document defined the role and function of the DPHS in the MOH in five core areas as follows 1) Oral Health Policy Development 2) Oral Health Programme Management 3) Oral Health Promotion 4) Oral Disease Prevention and 5) Safety and Health of Clinical Environment. These core areas are expressed in the realm of oral health service delivery and remain relevant until today.

However, the DPHS is increasingly called upon to helm clinical governance in the management of oral health systems and practice of dentistry, which include the elements of education and training, clinical audits, clinical effectiveness, research and development, quality assurance and risk management.

#### **Five Core Areas**

Hence, while the first four core areas remain the same, the fifth is expanded from 'safety and health of the clinical environment' to 'clinical governance in the practice of dentistry'. The five core areas are therefore stated in this document as:

- 1. Oral Health Policy Development
- 2. Oral Health Programme Management
- 3. Oral Health Promotion
- 4. Oral Disease Prevention and
- 5. Clinical Governance in the Practice of Dentistry.

#### **Twelve Core Competency Areas**

The domains and attributes required of the DPHS have not changed over the years. A 2007 Seminar reached a consensus on 12 core competency areas for the DPH specialty<sup>6</sup> to better illustrate the pre-requisite skills, understanding, and professional values of a DPHS to effectively discharge their five core areas. The consensus is for areas of performance to be expected of all DPHS but there is no attempt at defining levels of performance.

- Needs assessment and surveillance of populations' health and well-being
- 2. Planning, implementation, monitoring and evaluation of public oral health programmes and services
- Promotion and protection of population oral health and wellbeing
- Inculcation of quality improvement initiatives as a culture to maintain and improve standards for oral health based on research evidence
- Management, analysis & interpretation of data, information, knowledge and statistics using Information and Communication Technology (ICT)
- 6. Policy and strategy development & interpretation
- Community empowerment for improvement of oral health & reduction of inequalities
- 8. Strategic leadership for oral health & well-being across all sectors
- 9. Ethical management of self, people and resources & practice
- 10. Research and Development
- 11. Continuing Professional Development
- 12. Clinical Dental Prevention

However, noting that 'competency' means being able to function in context, it is therefore incumbent for a DPHS to not only be competent, but also proficient in the above areas<sup>47</sup>.

The specific requirements for each competency domain are listed in **Appendix 3.** These core competency areas fulfill all domains for the core business of Public Health and the nine Essential Functions of Public Health (**Appendix 4**).

<sup>&</sup>lt;sup>6</sup>Core Competencies and Areas of Special Interests for Dental Public Health Specialists. Group 4. Presentation. Dental Public Health Seminar at Hotel Bayview Melaka 15-17 September 2007 <sup>7</sup>Adapted from Dental Public Health Competencies. J Public Health Dent 1998;58(Suppl 1):121-2

#### 5. CHALLENGES FOR THE DPHS – PRESENT AND FUTURE

There are some other aspects of a DPHS practice which are not readily encompassed in competency statements. In consideration of trends in knowledge and technology development, the oral health services in Malaysia must be geared towards managing change.

The following are some of the acknowledged local and global challenges in discharging the MOH stewardship role in the practice of dentistry in Malaysia. Specialists in DPH have increasingly important responsibilities in the management of such challenges. Some of the challenges are new, some are not. For those which are not new, the future scenario of oral healthcare in Malaysia may necessitate a shift in focus or a need for managing changes and trends.

#### Human resource development

Human resource development in the country needs to be viewed systematically in terms of (a) projection of quantum, types and mix of dental human capital development, including development of dental clinical specialties; (b) accreditation of dental education programmes for both professionals and auxiliaries; and (c) continuing professional development (CPD) of all categories of personnel.

#### Research and development in oral health

Research and development in oral health is increasing and includes oral epidemiology, health systems research, quality assurance studies and clinical research, the information of which is to test new and creative interventions for planning and evaluation purposes; and to support evidence-based dental public health practices. Research findings contribute to the national databank on oral health for surveillance purposes.

#### Change in demographic profiles

Change in demographic profiles is evident by the increasing ageing population retaining their natural teeth, necessitating programmes that will require sophisticated, high quality restorative and rehabilitative care to compensate for earlier oral health problems. The increase in the ageing population has already led to a programme for the elderly and it is expected that such a programme will need to be strengthened to cope with expected increase in demand.

#### Rising consumer expectation

There has been rising consumer expections in accord with overall socioeconomic development of Malaysia and aided and facilitated by ICT. Consumers are more aware of treatment options and their rights and privileges to such treatment. These trends require vigilance to balance needs against expressed demands. In this respect, there is growing recognition on self-empowerment with a stress on selfreliance and self-care. The DPHS needs to take advantage of potential opportunities for promotion and prevention resulting from increasing acknowledgement of oral health as a vital part of quality of life of individuals.

#### Clinical and corporate governance

Greater patient and provider awareness and focus on accountability, quality control, continuing education and professional development as well as in management of new technologies have led to growing standards in clinical governance. At the same time, the management of such issues requires the application of the principles of corporate governance.

#### Changing trends in management of oral conditions

 Changing trends in management of oral conditions have seen shifts in strategies towards Common Risk Factor Approaches for oral health in which more promotion and prevention activities for oral health have been integrated with that for other health determinants, a good example being the Tobacco Cessation Program.

#### Safety and health in clinical environment

Rising consumer expectations have also led to greater awareness of safety and health measures in the clinical environment, which have necessitated appropriate precautionary and remedial measures. These have been implemented on identified health hazards associated with oral healthcare especially in the areas of infection control, use of dental amalgam, dental radiation and occupational safety and health in dental laboratories.

## Strategic management of oral health against recent developments of the health system

Strategising oral health against concurrent health issues becomes the responsibility of the DPHS. In view of the current review of the health system, DPHS shoulder the responsibility to ensure that Malaysians can attain their optimum oral health through a healthcare system that is equitable, affordable, efficient, effective, and of quality.

#### Globalisation and liberalisation of health services

Current moves towards globalisation and liberalisation of dental services make it incumbent upon all DPHS to ensure that access, coverage and quality of health services for Malaysians are not adversely affected. There are great potential challenges if globalisation and liberalisation of dental services becomes reality, with the potential need to address cross-border supply of health services, cross-border movements of healthcare professionals, the increasing commercial presence of foreign investments in healthcare and the potential presence of foreign professionals in the country.

#### Sustaining and maintaining preventive and promotive approaches in dentistry

Sustaining and maintaining preventive and promotive approaches in dentistry may become a challenge as rising consumer expectation may push demand towards high-tech and aesthetic dentistry. This will necessitate the need to monitor incentives / disincentives to providers to sustain prevention and promotive approaches in dentistry.

#### Multisectoral collaboration and multidisciplinary approaches

Multisectoral collaboration and multidisciplinary approaches have always been a challenge. This is evident in past efforts to mobilize agencies for unified actions for the Malaysian National Oral Health Plan 2010. In broad terms, this will mean sharing of information and resources to create sustained and smart partnership between agencies.

## 6. CONCLUSION

The basic problems in oral health are the same worldwide. Nevertheless, solutions to problems must be in the context of the country. In this, the DPHS is as invaluable to the dental profession and the people as dental clinical specialists, and hence should be accorded the appropriate recognition.

Dental public health initiatives are based on the fundamental principles of ensuring equity of care, emphasis on prevention, collaboration between agencies, utilisation of appropriate technology, and focus on self-care. It is the DPHS who have successfully customized solutions to the needs, priorities, practices and attitudes of the local population.

Faced with current trends and future challenges in oral health, a DPHS in Malaysia will have an increasing stewardship role in managing change in the healthcare system, as well as in the areas of clinical governance, and management of resources, which encompass many concerns - human capital resource and development, cost-containment, technical efficiency, improving equity and access to oral health services, and optimising use of appropriate technology alongside state-of-the-art dentistry.

The DPHS will continue to ensure oral health of the people through formulation of appropriate policies, programmes and interventions.

#### WORK GROUP MEMBERS

## THE DENTAL PUBLIC HEALTH SPECIALIST IN THE MINISTRY OF HEALTH MALAYSIA

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Appendix 1

#### **Resolution on**

# The Role and Responsibilities of the Dental Public Health Specialist (1997)<sup>8</sup>

#### 1. GENERAL CONSIDERATIONS

#### The Committee

- recognizing salient points raised at the Dental Public Health Seminars of 1994, 1995 and 1996;
- accepting the definition of Dental Public Health as adopted by the American Association of Public Health Dentistry;
- giving due weight and consideration to the role and function of dentists in the specialty of Dental Public Health;
- considering the trends of oral diseases in Malaysia and the future challenges to be faced; and noting views of speakers and seminar participants;

#### Recommends:

The roles and responsibilities of a Dental Public Health Specialist in Malaysia be defined within the sphere of five core competencies, namely:

- Oral Health Policy Development
- Oral Health Programme Management
- Oral Health Promotion
- Oral Disease Prevention
- Safety and Health in Clinical Environment

#### and in addressing specific issues of concern:

<sup>9</sup>Dental Services Division, Ministry of Health Malaysia. The Dental Public Health Specialist, 1997

#### 2. THE SHIFT IN PHILOSOPHY FROM DENTAL HEALTH TO ORAL HEALTH

#### The Committee,

**recognising** the evolution of dentistry from a primarily technical profession with a relatively narrow focus, to a broad and scientifically-based biomedical discipline of oral health care,

**recommends** that strategies be focused on the oral cavity and all associated structures instead of teeth alone, with a holistic focus on the needs and demands of the individual, family and community.

#### 3. ORAL HEALTH AS AN ESSENTIAL PART OF GENERAL HEALTH

#### The Committee,

**recognising** the increasingly holistic approach towards oral health as an essential part of health, human function and quality of life; as well as the contribution of oral health services to medical and health services in promoting overall health,

**recommends** that the scope of oral health services be expanded to include other determinants of health in relation to healthy lifestyles.

#### 4. PRIMARY HEALTH CARE APPROACH

#### The Committee,

**recognising** the importance of the tenets of the Primary Health Care Approach to ensure oral health care that is accessible, affordable, equitable and appropriate towards achieving Health For All; and the paramount importance placed on prevention of oral diseases,

**recommends** there be continued utilization and implementation of the five tenets of the Primary Health Care Approach, namely:

- Focus on prevention
- Equitable distribution
- Community involvement
- Appropriate technology
- Multisectoral approach

#### 5. FORMULATION OF STRATEGIES

#### The Committee,

**recognising** that strategies for oral health promotion and oral disease prevention must address specific needs and problems under varied and different circumstances,

**recommends** that equal emphasis be given to the implementation of population and high-risk strategies and interventions in the prevention and control of oral diseases for individuals, or groups of individuals, in addressing specific problems in appropriate situations.

#### 6. SUSTAINING IMPROVEMENT IN ORAL HEALTH

#### The Committee,

**recognising** the crucial need to not only improve oral health status, but also to achieve and maintain oral fitness in the community,

**recommends** that every effort be made to ensure continued and sustained improvement of oral health in the community, by emphasizing prevention and preventive lifestyles with a stress on self-care, and that the community be motivated to be self-reliant.

## Appendix 2

#### INITIATIVES BY DENTAL PUBLIC HEALTH SPECIALISTS MINISTRY OF HEALTH MALAYSIA (1948 – 2008)

## Stewardship Role in Policy Development

1948	Establishment of school dental service	
1950	Establishment of Oral Surgery as a dental specialty discipline in the Ministry of Health	
1954	Establishment of Orthodontics as a dental specialty discipline in the Ministry of Health	
1961	Establishment of Dental Public Health as a specialty area in the Ministry of Health	
1967	Establishment of Oral Medicine/Oral Pathology as a dental specialty discipline in the Ministry of Health	
Early 1970s	Re-designationoftheDeputyDirectorofMedicalServices(Dental)as Director of Dental Services. State Principal Dental Officers (PDOs) became State Dental Directors (Pengarah Pergigian Negeri)	
1984	Establishment of Periodontology as a dental specialty discipline in the Ministry of Health	
1985	Establishment of Paediatric Dentistry as a dental specialty discipline in the Ministry of Health	
1986	Enunciation of the Objective of the dental programme, Ministry of Health 'to improve the oral health status of the population through the provision of preventive, promotive, curative and rehabilitative dental services, with special emphasis given to identified priority groups – primary school children, secondary school children, pre-school children, antenatal mothers, the physically-, socially- and economically-disadvantaged, as well as the elderly – in such a way that the oral health status of the nation will continually be in conformity with the socio-economic progress of the country'	
1992	Establishment of first Paediatric Dental Unit at the Paediatric Institute in Kuala Lumpur Hospital	

- 1996 Extension of 'Out-of-office hour allowances' (Elaun Khidmat Luar Waktu Bekerja Biasa) to all government medical and dental officers (following approval of revised "out-of-office hour allowances" for active and passive calls for medical officers in government hospitals in 1994)
- 1996-1997 Recruitment of retired dental officers on a contractual basis into the Ministry of Health Malaysia (MOH) to fill vacancies on dental officer posts
- 1999 Formulation of the National Oral Health Plan for 2010 (NOHP 2010) with goals in four areas - dental caries, periodontal disease, oral cancer and trauma
- 1999 Redesignation of the Dental Services Division on 5 May 1999 as the Oral Health Division on approval of the Special Committee Meeting of the Director-General of Health (Mesyuarat Ketua Pengarah Kesihatan Khas)
- 2002 Approval of 'critical allowance' for dental officers at 5% of basic emolument
- 2002 Cabinet Memorandum approval for recruitment of foreign medical and dental practitioners to serve the MOH - January 2002
- 2003 Redesignation of the Dental Training School as the Dental Training College Malaysia, Penang
- 2003 Recruitment of foreign dental practitioners on a contractual basis to serve the Ministry of Health for not more than 10 years (renewable every 3 years pursuant to the Cabinet Memorandum approval of January 2002). The first batch was from Indonesia.
- 2004 Restructuring of the Oral Health Division on 1 February 2004 into two Divisions – Oral Health Development and Policy Division and Oral Health Promotion, Control and Practice Division.
- 2004 Establishment of Restorative Dentistry as a dental specialty discipline in the Ministry of Health
- 2005 Enhancement of the Dental Surgery Assistant Scheme with upgrading of grades from two levels to three on 1 January 2005
- 2005 Upgrading of service scheme for dental trainers to degree qualifications (Skim Perkhidmatan Pengajar) in Dental Training College Malaysia 1 January 2005

- 2006 Conference on Review of NOHP 2010 goals held among stakeholders for oral health
- 2006 Oral Health accorded programme status with the Head of programme now directly answerable to the Director-General of Health
- 2007 The Director-General of Health approval for the establishment of Special Care Dentistry as a dental specialty discipline in the Ministry of Health. Two officers were awarded scholarships for postgraduate training at University of Otago and University of Melbourne
- 2007 Symposium on Dental Manpower Development in Malaysia held involving the dental fraternity from public and private sectors
- 2007 Revision of the 'critical allowance' for dental officers to be on par with medical officers
- 2007 The Director-General of Health approved the concept paper for doubly-qualified Oral Maxillofacial Surgeons (OMFS) with the graduation of two Oral Surgeons with the MBBS (Malaya)
- 2008 Designation of head of the oral health programme as Principal Director of Oral Health (formerly Director of Oral Health). Designation of Deputy Directors of Oral Health Development & Policy and Oral Health Promotion, Practice and Enforcement upgraded to Directors.
- 2008 Commencement of the consultancy for projection and development of oral health human capital needs for Malaysia up to year 2020 with Prof Prathip Phantumvanit.
- 2009 First two candidates for Special Needs Dentistry left for University of Otago, New Zealand and University of Melbourne, Australia
- 2009 Start of Forensic Odontology services in the MOH
- 2009 Establishment of Centres of Excellence for oral healthcare at Sarawak General Hospital, Kuching Kuala Lumpur Hospital and Paediatric Institute, Kuala Lumpur Hospital.

## Oral Health Programme Management and Oral Disease Prevention

1969	Appointment of the Committee for Fluoridation of Public Water Supplies by the Honorable Minister of Health in June 1969 'to study and report upon the feasibility of introducing fluoridation of public water supplies as a public health measure' in all states of West Malaysia
Early	Establishment of the oral healthcare programme for antenatal mothers in the
1970s	Ministry of Health
1971	Publication of the 'Report of the Committee Appointed to Inquire into and Report Upon the Fluoridation of Public Water Supplies – West Malaysia 1971'. The Committee strongly recommended 'that fluoridation of public water supplies be instituted in West Malaysia as soon as possible and further recommends that an optimum level of 0.7 ppm fluoride be maintained in the reticulation system'
1972	Cabinet Committee approval for fluoridation of public water supplies
1973	Introduction of outreach dental services using road and river transport, popularly known as 'flying squads'
1984	Introduction of Pre-school Preventive Mobile Dental Teams
1985	Implementation of comprehensive, systematic incremental dental care for schoolchildren
1989	Implementation of Oral Health Programme for Trainee Teachers
1993	Launch of the National Oral Health Programme for the Elderly
1993	Launch of the National Oral Health Programme for Children with Special Needs
1997	Launch of the National Primary Prevention and Early Detection of Oral Pre-cancer and Cancer Programme at Tanah Merah Estate, Negeri Sembilan
1999	Implementation of the School-based fissure sealant programme following recommendations from NOHSS '97
2002	Revision of the Guidelines for Primary Prevention & Early Detection of Oral Pre-Cancer and Cancer Programme (2 <sup>nd</sup> edition)
2005	Revision of the optimum level of fluoride in water supply from 0.7 ppm to 0.5 ppm with the new implementation range of 0.4-0.6 ppm

- 2006 Initiation of the Mouth Cancer Awareness Week scheduled annually for the month of November
- 2008 Launch of the National Programme for Early Childhood Oral Healthcare "Never too early to start" on the 11 July 2008 in conjunction with the 6th International Conference for Paediatric Dentistry Association of Asia on 10-12 July 2008 in Kuala Lumpur

#### **Oral Health Research and Epidemiology**

- 1971 First Dental Epidemiological Survey of Schoolchildren in West Malaysia (August 1970 – May 1971)
- 1974 First Dental Epidemiological Survey of Adults in Peninsular Malaysia (Sept 1975 – April 1975)
- 1978 Publication of the sentinel document 'A Report on the Fluoridation Projects in the State of Johore, Malaysia 1964-1976' by the Dental Division, Ministry of Health Malaysia. The document reported a 60.1% reduction in dental caries of permanent dentition and 29.4% reduction in deciduous dentition with the greatest benefit seen among 7-year-olds over that period. The increase of caries-free 7-year-olds was reported as 5-fold from the baseline in 1964.
- 1981 First Dental Epidemiological Survey of Schoolchildren in Sarawak 1981
- 1985 First Dental Epidemiological Survey of Schoolchildren in Sabah 1985
- 1986 Epidemiological Survey of Developmental Defects of Dental Enamel in Johore 1986
- 1988 Dental Epidemiological Survey of Schoolchildren in Peninsular Malaysia 1988
- 1990 First Dental Epidemiological Survey of Adults in Malaysia 1990
- 1993 Oral Mucosal Lesion Survey of Adults in Malaysia, a collaborative project between the University of Malaya, the Dental Division, MOH and Aichigakuin University, Japan 1993/1994
- 1994 Second Dental Epidemiological Survey of Schoolchildren in Sarawak 1994
- 1995 First Dental Epidemiological Survey of Pre-school Children in Malaysia

- 1997 First nationwide National Oral Health Survey for Schoolchildren (NOHSS '97)
- 1998 First annual Compendium of Abstracts published by the Oral Health Division showcasing research projects by oral health personnel of the Ministry of Health
- 1999 Conduct of the study on 'Fluoride Enamel Opacities in 16-year-old Schoolchildren 1999' utilising Dean's Index of Fluorosis
- 2000 National Oral Health Survey of Adults Year 2000 (NOHSA 2000)
- 2002 Conduct of collaborative project on 'Cost Analysis of Private Primary Care Services in Malaysia' with the Medical Practice Division, MOH, UKM and the Primary Care Doctors of Malaysia (PCDOM). Results were discussed in the formulation of the Dental Fee Schedule of the Private Healthcare Facilities and Services Act 1998 in 2004
- 2002 Conduct of the collaborative project 'Mercury exposure in dental health personnel' with officers of the Environmental Health Research Centre of the Institute for Medical Research as principal investigators. The Oral Health Division, MOH mooted the study which was completed in 2005
- 2003 Conduct of the collaborative study 'Cross cultural Adaptation and Validation of the Geriatric Oral Health Assessment Index (GOHAI) for use in Malaysia' with the Clinical Research Centre network
- 2003 The Oral Health Division, MOH participated contributed data to the National Burden of Disease database under the Public Health Institute, MOH
- 2005 National Oral Health Survey of Preschool Children 2005 (NOHPS 2005)
- 2005 The Oral Health Division participated in analysis of oral health items for the World Health Survey 2002-2003 under the auspices of the Institute for Health Systems Research, 2005
- 2006 The Oral Health Division, MOH participated in the 3rd National Health and Morbidity Survey 2006 (NHMS III) with an 'Oral Health Module' in the study led by the Public Health Institute, MOH. The report was published and distributed in 2008.
- 2006 Conduct of the collaborative project on 'Costing Dental Procedures : Restorations and Extractions' under the 3rd evaluation exercise for the Modified Budgeting System (2000-2005) with the University of Malaya

2007 National Oral Health Survey of Schoolchildren 2007 (NOHSS 2007)

#### **Oral Health Promotion**

- 1979 Establishment of the National Dental Health Education Unit, subsequently renamed Oral Health Promotion Unit in 1994
- 2004 Launch of the oral health programme website on 8 November 2004 at http://www.moh.gov.my/ohd
- 2005 The Oral Health Division put up an exhibition on outreach dental services and fluoridation of public water supplies in Malaysia at the 27<sup>th</sup> Asia Pacific Dental Congress (APDC) held at the Putra World Trade Centre 25 - 29 May 2005

#### Governance in Dental Practice

1971 The Dental Act 1971 (Act 51) passed by parliament and gazetted on 30 September 1971

> The 1971 Act gave much-awaited recognition to the profession. It allowed for the establishment of the Malaysian Dental Council (MDC) that functions as a regulatory body for the dental profession. Under the Dental Act 1971, every dental practitioner must be registered with the MDC and is required to obtain an Annual Practising Certificate (APC) to legally practise dentistry in Malaysia. The MDC continues to be under the administration of the MOH.

- 1972 Closure of the Division II Dentist Register following the enactment of the Dental Act 1971
- 1983 Implementation of the Health Management Information System (Dental Sub-system)
- 1992 Launch of the Dental Quality Assurance Programme by the Director-General of Health on 4 November 1992

The Dental QAP started with nine indicators in 1994 under the National Indicator Approach (NIA). Indicators were developed and monitored under the District/ Hospital Specific Approaches.

1996 Initiation of the electronic dental record system for primary oral healthcare in MOH

1998	The Oral Health Division recommended mandatory labelling of fluoridated toothpaste. The revised labelling parameters approved at the 90th Meeting of the Drug Control Authority, MOH on 26 February 1998
1998	The Private Healthcare Facilities and Services Act 1998 passed 'An Act to provide for the regulation and control of private healthcare facilities and services and other health-related facilities and services and for matters related hereto.'
	The Oral Health Division had contributed input on minimum standards of facilities, equipment and infection control processes for registration of private dental clinics with the Ministry of Health Malaysia under this Act.
	Development of a standard protocol for investigation of shortfalls in Quality
2000	Expansion of the electronic dental record system to include specialist oral healthcare
2001	Implementation of the 3-year national service for registrants on and from 29 June 2001 with the Amendment to Part VII of the Dental Act 1971 on 'Supplementary Provisions for National Purposes'
	This was a step to overcome long-standing professional manpower shortfalls in the MOH. With this, Guidelines for Compulsory Service were formulated.
2001	Launch of the MS ISO 9000 for the Oral Health programme by the Secretary-General, MOH on 11 September 2001. Melaka Tengah was the first district to achieve ISO certification in 2001 followed by the district of Kuala Terengganu.
2002	MS ISO 9001:1994 certification awarded to the Oral Health Division, Ministry of Health by the Malaysian Administrative Modernisation and Management Planning Unit (MAMPU)
2003	Launch of the pilot Oral Health Clinical Information System (e-SMKP) in May 2003 at three locations – Ampang Dental Clinic, Batu 9 Cheras Dental Clinic and Selayang Hospital
2004	MS ISO 9001:2000 certification awarded to the Oral Health Division, MOH and 31 District Dental Offices

2004	Single electronic Oral Health Clinical Information System (OHCIS) approved for implementation by the MOH ICT Steering Committee in November 2004	
2006	<ul> <li>Gazettement of 2 regulations under the Private Healthcare Facilities and Services Act 1998 (Act 586) on 1 April 2006 namely</li> <li>the Private Healthcare Facilities and Services (Private Medical Clinics or Private Dental Clinics) Regulations 2006 and</li> <li>the Private Healthcare Facilities and Services (Private Hospitals and Other Private Healthcare Facilities) Regulations 2006</li> <li>Act 586 came into effect on 1 May 2006.</li> </ul>	
2006	Commencement of the e-Reporting for the Health Information Management System (HIMS)	
2007	Approval of the integration of continuing professional development (CPD) and Competency Level Assessment (PTK) by the D-G of Public Services Department. Dental officers were one of three pioneer groups with medical officers and pharmacists.	
2008	Kick-off meeting for OHCIS, the web-enabled electronic patient care system followed by User Requirement Workshops	
2008	Initiation of the Dental Practitioner Information Management System (DPIMS) for the MDC for online application of annual practicing certificates, updating of personal information and application of letters of good standing	
2008	Online monitoring of Continuing Professional Development launched through the myCPD web portal	
Role in D	ental Education in Malaysia	

- 1948 Introduction of the Dental Nurse Scheme for oral healthcare of schoolchildren
- 1948 Establishment of the Dental Training School in Penang to train dental nurses
- 1951 Start of formal training for public sector dental technicians at the Dental Training School in Penang
- 1975 Expansion of the scope of duties for dental nurses (DN) to - undertake tooth-coloured restorations on anterior teeth

	where previously they were limited to deciduous teet fillings and extractions, dental health education (DHE) ar prescribed preventive services for school children aged and below, and	
	- treat children up to 17 years.	
1982	Introduction of 2-year course for Dental Surgery Assistant (DS/ at the Dental Training School Malaysia, Penang	
1993	Introduction of the distance learning component for DSA trainin at the Dental Training College Malaysia	
	Expansion of scope for dental nurses to include post-bas training in oral healthcare for special children	
	Expansion of scope for dental technicians into management equipment with a course on 'Pengurusan Kelengkapan Rawata Pergigian'.	
1994	MOH yielded input into review of the University of Malaya dent degree curriculum with extension of the degree programme fro 4 to 5 years	
	MOH became the major subscriber for the first local postgradua dental programme of Masters in Community Dentistry, Universi of Malaya	
1996	Upgrading of training for dental nurses and dental technologis (DT) from Certificate to Diploma level	
1998	Formal initiation of post-basic courses in dental clinical specialtic for dental nurses with first 6-month course in Paediatric Dentistr	
	Dental auxiliaries had previously undergone post-basic training in the early 1990s but these were ad-hoc, of shorter duration months) and not officially endorsed as post-basic training by the MOH.	
1999-2000	Approval gained for the first two Oral Surgeons to pursue th medical degree programme (MBBS), University of Malaya	
1999	Commencement of post-basic training for dental nurses to assi in the discipline of Orthodontics	
	Expansion of scope for dental nurses into use of Atraumat Restorative Treatment (ART) Technique	
	34	

	Upgrading of service scheme of dental technicians and name change to dental technologists on 1 January 1999
1999	Commencement of post-basic training for dental technologists to assist in the field of Oro-maxillofacial surgery
	Approval for use of high-speed handpieces by dental nurses to increase productivity while ensuring patients' comfort
1999	MOH became the major subscriber for the expanded postgraduate dental programmes of Master in Clinical Dentistry in Oral Surgery, Periodontology, Paediatric Dentistry, Restorative Dentistry and Oral Medicine/Oral Pathology in the University of Malaya
	MOH dental officers sent to the first 4-year Master in Community Medicine (Oral Health) of Universiti Sains Malaysia (USM) in the specialty discipline of Dental Public Health / Public Health Dentistry.
2001	Commencement of post-basic training for dental technologists to assist in Orthodontics
2002	Formulation of the Guidelines for Accreditation of Dental Degree Programme for Institutions of Higher Learning
2002	Commencement of post-basic training for dental nurses to assist in the discipline of Periodontology
2002	Approval for use ultra-sonic scalers by dental nurses
2004	Accreditation of two local universities, two universities in Indonesia and 12 dental degree programmes in India using the approved Guidelines for Accreditation of Dental Degree Programme for Institutions of Higher Learning
2004	Commencement of post-basic training for dental nurses to assist in the discipline of Oro-maxillofacial surgery
2004	MOH dental officers sent for the 4-year Master in Public Health programme of UM in the specialty discipline of Dental Public Health/Public Health Dentistry.
2007	Expansion of postgraduate training to encompass the Oral Surgery and Orthodontic programmes in Hong Kong University and the Oral Medicine/Oral Pathology programme in University of Western Australia, Perth, Australia

## CORE COMPETENCIES DENTAL PUBLIC HEALTH SPECIALTY

No.	<b>Competency Domain</b>	Requirement
1.	Needs assessment and surveillance of population's health and well-being	<ul> <li>Assess and report on the oral health status, needs and demands of populations and services</li> <li>Identify, profile and monitor the determinants of oral health disease</li> <li>Provide ongoing surveillance on the oral health and well-being of populations, including expertise in clinical oral epidemiology</li> <li>Monitor and profile the oral health status of populations, and inequalities between and within populations</li> <li>Diagnose and investigate health hazards in the working environment</li> </ul>
2.	Planning, implementation, monitoring and evaluation of public oral health programmes and services	<ul> <li>Establish goals and set priorities</li> <li>Prioritise options for improving the population's oral health and oral healthcare interventions</li> <li>Provide professional advice on oral health and oral healthcare</li> <li>Identify weaknesses in oral healthcare services</li> <li>Advise organizations on the impact that activities and policies may have on oral health</li> </ul>
3.	Promotion and protection of population oral health and well-being	<ul> <li>Plan, monitor and evaluate oral health promotion strategies to improve the oral health and well-being of the population</li> <li>Minimise and manage outbreaks of infectious and communicable diseases arising from dentistry to protect health</li> <li>Manage dental procedures and materials which put public's health at risk</li> </ul>

No.	Competency Domain	Requirement
4.	Inculcation of quality improvement initiatives as a culture to maintain and improve standards for oral health based on research evidence	<ul> <li>Develop and apply standards, guidelines and protocols to improve oral health</li> <li>Audit and evaluate oral healthcare services to improve quality</li> <li>Change practice, based in evidence from audits and evaluations</li> </ul>
5.	Management, analysis & interpretation of data, information, knowledge and statistics using Information and Communication Technology (ICT)	<ul> <li>Appraise the evidence for the effectiveness of different approaches to improving oral health</li> <li>Set and apply targets and performance indicators to improve oral health</li> <li>Manage change to improve oral health and oral healthcare services</li> <li>Develop skills in the use of dental and other computer software packages to analyse and interpret dental data</li> </ul>
6.	Policy and strategy development & interpretation	<ul> <li>Assess the impact of health policies</li> <li>Involve the public and communities a active partners in policy development implementation and service provision</li> <li>Shape and influence the development of oral health and oral healthcare policies and strategies</li> <li>Implement strategies for putting oral health and oral healthcare policies into place</li> </ul>
7.	Community empowerment for improvement of oral health & reduction of inequalities	<ul> <li>Involve communities in improving their own oral health and well-being, and develop their capacity to do so</li> <li>Medicate and advocate for the oral health of the population through legislation and regulations</li> </ul>

No.	Competency Domain	Requirement
8.	Strategic leadership for oral health & well-being across all sectors	<ul> <li>Promote oral health improvement and the reduction of inequalities as a key value</li> <li>Develop and maintain multi-sectoral collaboration to improve the population's oral health</li> <li>Lead teams and individuals who share common interest in improving oral health status</li> </ul>
9.	Ethical management of self, people and resources & practice	<ul> <li>Manage self within the job-role</li> <li>Develop and maintain effective communication with other practitioners, the public and the media</li> <li>Manage people and teams</li> <li>Manage resources</li> <li>Promote rights, responsibilities and diversity and practice ethically</li> <li>Enforce laws and regulations that protect health and ensure safety</li> </ul>
10.	Research and Development	<ul> <li>Design and conduct studies for innovative solutions to oral and public health questions/problems</li> <li>Conduct appraisal of oral health research and apply findings</li> <li>Provide results/feedback to the community</li> <li>Formulate and disseminate conclusions and recommendations</li> </ul>
11.	Continuing Professional Development	<ul> <li>Continually develop one's own knowledge and expertise</li> <li>Enable others to develop their knowledge and expertise</li> </ul>

No.	Competency Domain	Requirement
12.	Clinical Dental Prevention	<ul> <li>Demonstrate competence in clinical dental intervention procedures</li> <li>Provide counselling, personalised preventive treatment planning and clinical support for those at high risk to diseases/conditions in community settings</li> <li>Function effectively as part of a multi-disciplinary team in the clinical management of patients at high risk to diseases/conditions</li> </ul>

## DENTAL PUBLIC HEALTH CORE COMPETENCIES AND THE CORE BUSINESS OF PUBLIC HEALTH AND ESSENTIAL PUBLIC HEALTH FUNCTIONS

Core Business of Public Health (6)	Essential Public Health Functions (9)	DPH Core Competencies (12)
Disease control	Health situation monitoring and analysis	Clinical Dental Prevention
		Needs assessment and surveillance of population's health and well-being
Injury prevention	Epidemiological surveillance / disease prevention and control	Management, analysis & interpretation of data, information, knowledge and statistics using Information and Communication Technology (ICT)
Health protection	Development of policies and planning in public health	Promotion and protection of population oral health and well-being
Healthy public policies	Legislation and enforcement to protect public health	Policy and strategy development & interpretation
		Ethical management of self people and resources & practice
Promoting health and equitable health gains	Strategic management of health systems and services for population health gain	Community empowerment for improvement of oral health & reduction of inequalities
	Health promotion, social participation and empowerment	Strategic leadership for ora health & well-being across all sectors

Core Business of Public Health (6)	Essential Public Health Functions (9)	DPH Core Competencies (12)
Combating threats to public health	Human resource development and planning in public health Ensuring the quality of personal and population-based health services Research & development and implementation of innovative public health solutions	Planning, implementation, monitoring and evaluation of public oral health programmes and services Continuing Professional Development Inculcation of quality improvement initiatives as a culture to maintain and improve standards for oral health based on research evidence
		Research and Development