ORAL HEALTH PROGRAMME
MINISTRY OF HEALTH MALAYSIA

ANNUAL REPORT

2015

MOH/K/GIG/8.2017

ANNUAL REPORT 2015

ORAL HEALTH PROGRAMME
MINISTRY OF HEALTH MALAYSIA

December 2016

Contents

Foreword

PRINCIPAL DIRECTOR OF ORAL HEALTH
MINISTRY OF HEALTH MALAYSIA

As the year 2015 ends, it is time to take stock of yet another set of accomplishments. Over time, people come and go and on 14 August 2015 the Oral Health Programme bid a sad farewell to YBhg. Datuk Dr Khairiyah binti Abd Muttalib who left on compulsory retirement. Our appreciation and gratitude goes to YBhg. Datuk who had steered and guided this programme for 4 years. Our heartiest congratulations goes to our new top management, YBhg. Datuk Dr Chen Chaw Min on his promotion to Secretary General of the Ministry of Health on 4 July 2015 and YBhg. Dato' Mohd Shafiq Abdullah, as the new Deputy Secretary General (Finance) of Ministry of Health effective on 26 August 2015. YBhg. Datuk Chen Chaw Min had graciously visited the Oral Health Programme on 24 August 2015 and had noted the complexity of this programme and praised the programme tag line "Proud to Care" as to be relevant and very appropriate.

Several activities were undertaken in year 2015 to improve the organizational capacity for service provision which include, restructuring the Oral Health Programme organization and reduction of Compulsory Service to one year which took effect from 1st July 2015. A total of 94 dedicated Dental Public Health Specialist posts were approved as strategic placement. The scope and function of Dental Nurses and Dental Technologists were revised and the Degree Programme for the Dental Technologist intake started in September 2015.

Year 2015 also saw us supporting the first International Periodontal Conference 2015 at Berjaya Times Square on 1st to 2nd August 2015, with a turnout of 121 Periodontic Specialists and Dental Public Health Specialists. The theme of the conference was 'Periodontal Disease: Overcoming Challenges and Moving Forward', aimed to address the rising trends of prevalence of periodontal disease and its link to diabetes mellitus among the Malaysian population. The 5th collaborative Intensive Microsurgery Training Course with the Ninth Peoples' Hospital and Jiao Tong University Shanghai on 27 to 31 July 2015 was yet another accomplishment of the Oral Surgery Department, Hospital Kuala Lumpur and the Malaysian Association of Oral & Maxillofacial Surgeons (MAOMS). The conference aimed to enhance the capability and expertise of the local specialist and gained new insights within valuable experience shared by distinguished speakers led by Professor Zhang Chen Ping from Ninth Peoples' Hospital and Jiao Tong University Shanghai, China.

Throughout the year 2015, the Oral Health Programme continues its efforts in empowering the public on the importance of oral health by participating in various health campaigns, exhibitions, media slots and collaborative efforts. Collaboration with relevant stakeholders emphasizing on the common risk factor approach is very much needed to attain behavioural change among the population. In the coming year, the young adults will be given focus in oral

health promotion. Recognizing the important role of oral health promotion in the prevention and control of oral diseases, the Oral Health Programme has organized a workshop on 'Story-telling Technique' to get new ideas on how to innovatively deliver effective oral health messages to preschoolers and primary schoolchildren.

Oral healthcare for adults is provided through various dental facilities through outreach services which include the Urban Transformation Centre (UTC), Rural Transformation Centre (RTC) and the increasing number of dental clinics providing daily outpatient services. Thus there is an increasing number of adults and elderly receiving primary oral health care in 2015. A total of 45 regional quality assurance projects were completed and many of these studies were presented at various conventions at state level. The Oral Health Programme continuously needs to undertake the responsibility for the development of policies, guidelines and monitoring of outcomes. Governance is also expected to be further strengthened with the gradual conversion to MS ISO 9001:2015 in the forthcoming year.

As we share common values and goals, I thank each and every member of the Oral Health family for your contribution in 2015. Stay focus on the ultimate reason for our existence in the MOH - serving the *rakyat*, and work towards fulfilling the oral health goals of our National Oral Health Plan 2011-2020.

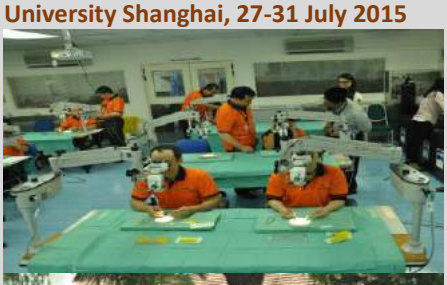
YBhg. Datuk Dr Noor Aliyah binti Ismail
Principal Director of Oral Health
Ministry of Health Malaysia

HIGHLIGHTS 2015

National Oral Cancer Initiatives, 29 June 2015

The first National Oral Cancer Initiatives meeting was held on the 29th June 2015 at the Oral Health Programme, Putrajaya. It was aimed to rationalize and coordinate all initiatives in oral cancer control and prevention including its issues and challenges. Discussions also include developing the TOR for members and planning for the National Mouth Cancer Awareness Week including public promotion activities. Members of the meeting were the Armed Forces, Oral Cancer Research and Coordinating Centre, University of Malaya, Cancer Research Malaysia, Public and Private Universities, Professional Dental Associations and the Oral Health Programme.

5th Collaborative Intensive Microsurgery Training Courses with Ninth Peoples' Hospital and Jiao Tong University Shanghai, 27-31 July 2015



The Microsurgery Training Course was jointly organized by the Malaysian Association of Oral & Maxillofacial Surgeons (MAOMS) and Oral Surgery Department Hospital Kuala Lumpur with the aim to enhance the capability and expertise of local specialists. This course was attended by 36 local and foreign participants. Four distinguished speakers were invited to share their invaluable knowledge and expertise led by Professor Zhang Chen Ping from the Ninth Peoples' Hospital Shanghai and Jiao Tong University which is one of the leading centers in head and neck reconstructive oncology surgery. Participants gained new insight and valuable experience and knowledge sharing in the ever changing advances in the field of maxillofacial surgery.

1st International Periodontal Conference 2015, 1-2 August 2015

The conference is jointly organized by the Malaysian Society of Periodontology, Malaysian Association of Dental Public Health Specialists and the Oral Health Programme on 1-2 August 2015 at Berjaya Times Square. The theme of the conference was 'Periodontal Disease: Overcoming Challenges and Moving Forward' which aimed to address the rising trends of prevalence of periodontal disease and its link to increasing prevalence of Diabetes Mellitus among the Malaysian population. A total of 121 Periodontic Specialists and Dental Public Health Specialists attended the conference.

HIGHLIGHTS 2015

Story Telling Technique in Oral Health Promotion Workshop, 24-26 October 2015

The workshop was successfully conducted at Flamingo Hotel Ampang on the 24-26 October 2015. The participants were given exposure on new ideas and innovative medium to deliver effective oral health messages to preschoolers and primary school children. The technique involves use of puppets, origami and fruits. There was also a presentation by the well-known storyteller, Puan Hasniah Hassan. Participants include Dental Officers and Dental Therapists.

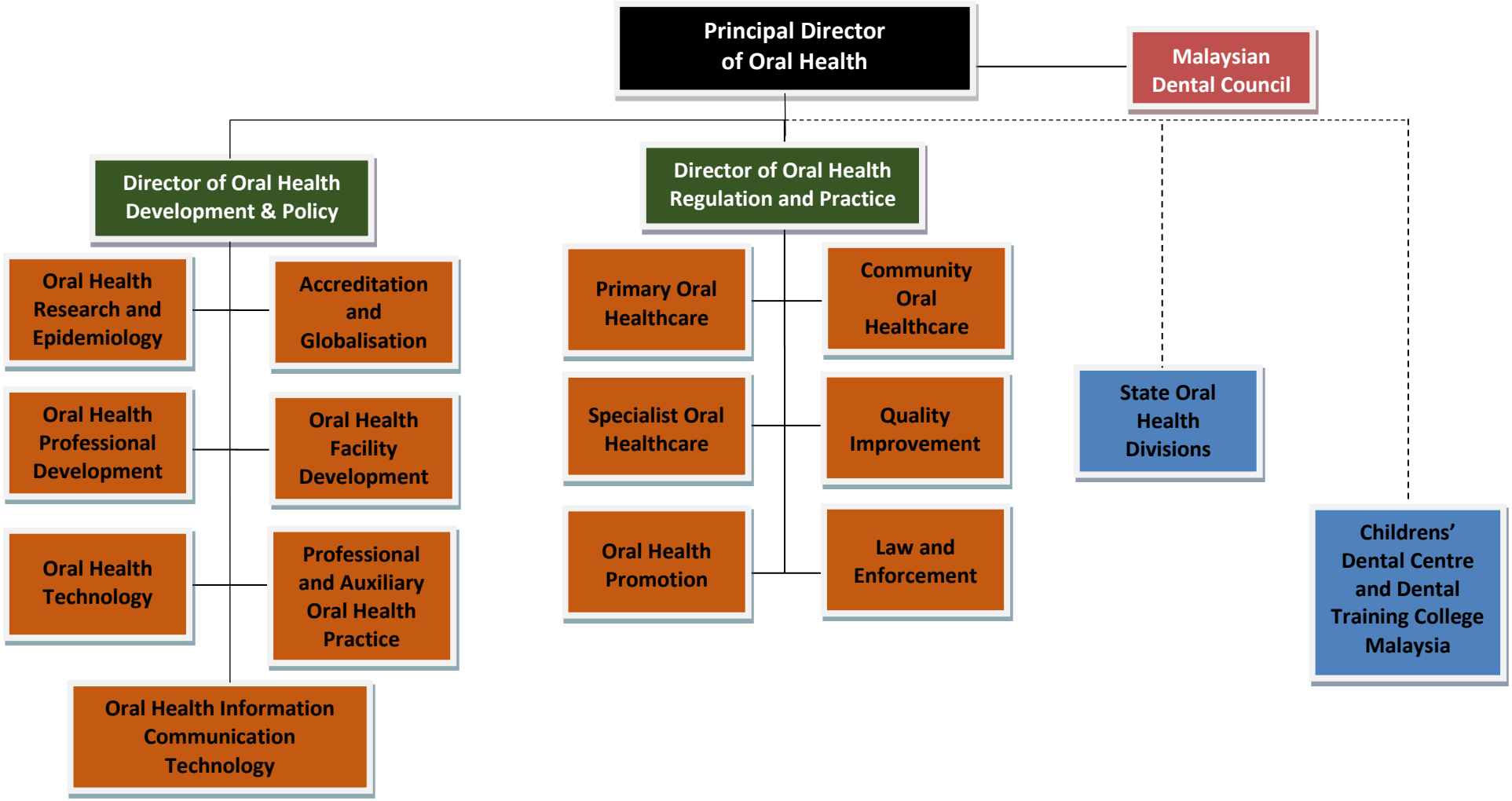
National Innovation Awards, 8-10 September 2015

The National Level Innovation Awards MOH was held from 8-10 September 2015 at Hotel Summit, USJ with the objective to inspire creativity and innovation among personnel in their daily task towards improving the service. The event was officiated by YBhg. Tuan Saiful bin Lebai Hussen the Vice-Secretary General of the Ministry of Health. A total of 54 innovation projects comprising of 30 products, 8 processes, 8 services and 8 technology. Out of 54 innovation projects, 10 dental projects received awards.

The Way Forward for Oral Health Promotion Workshop, 18-20 November 2015

The Oral Health Promotion Workshop was successfully conducted from 18-20 November 2015 at Best Western Hotel, Shah Alam with the theme 'Paradigm Shift: Enhancement of Oral Health Promotion'. The aim of the workshop was to produce oral health promotion guidelines suitable for gen Y and Z, Ikon GG, new age human resource in Oral Health Promotion and enhancement in collaborative efforts towards effective oral health promotion.

ORGANISATION STRUCTURE
ORAL HEALTH PROGRAMME, MINISTRY OF HEALTH MALAYSIA



MANAGEMENT AND PROFESSIONAL STAFF
(as of 1st JULY 2015)

Principal Director of Oral Health
YBhg. Datuk Dr Khairiyah Abd Muttalib

Director of Oral Health Development & Policy
Dr Jegarajan S.Pillay

Director of Oral Health Regulation & Practice
Dr Noor Aliyah Ismail

Personal Assistant
Pn Nur Aisyah Rutel Abdullah,
Pn Rosyatimah Redzuan, Pn Halimah Abu Kassim

Oral Health Research and Epidemiology
Dr Yaw Siew Lian, Dr Natifah Che Salleh,
Dr Nurrul Ashikin Abdullah, Pn Haziah Hassan,
Pn. Nurulliyana Mohd Don

Oral Health Promotion
Dr Sharol Lail Sujak, Dr Noor Syahidah Hisamuddin,
Dr Nur Farohana Zainol, Pn Siti Zuraidah Alias,
Cik Umi Khairul Abdul Kadir, Pn Azirah Muhammad,
En Ganesan Karuppiah

Facility Development
Dr Mohd Rashid Baharon,
Dr Suhana Ismail,
Dr Aiman Shafiq Abdul Jalil,
En Mohd Tohir Ibrahim,
En Zainudin Abdul Majid

Oral Health Technology
Dr Salleh Zakaria,
Dr Nazita Yaacob

Oral Health Professional Development
Dr Nomah Taharim,Dr Azlina Abu Bakar,Dr Siti Zuriana Mohd Zamzuri, Dr Azizi Abd Malik,
Dr Nor Fatimah Syahraz Abdul Razakek

Quality Improvement
Dr Zurina Abu Bakar, Dr Nurul Izzati Mohamad Ali,
Pn Zabidah Othman

Oral Health Information & Communication Technology

Dr Chu Geok Theng, Dr Tuan Yuswana Tuan Soh,
Cik Norjanah Mohd Nawi,
En Gauthama Dasa Edwin, Pn Julaiha Mohd Sarif

Community Oral Healthcare

Dr Norlida Abdullah,
Dr Tan Ee Hong

Law & Enforcement

Dr Elise Monerasinghe,
Dr Haznita Zainal Abidin

Accreditation & Globalisation

Dr Savithri a/p Vengadasalam,
Dr Noorashikin Mustapha Yahya, Pn Suriyanti Sudin

Primary Oral Healthcare

Dr Zainab Shamdol, Dr Cheng Lai Choo,
Dr 'Ainun Mardhiah Meor Amir Hamzah,
Pn Hayati Mohd yasin, Pn Jayendra Ghandi Chelliah

Specialist Oral Healthcare

Dr Norliza Mohamed,
Dr Faizah Kamaruddin, Dr Noor Hasmin Mokthar,
Pn Norliza Jamalludin, Pn Azlina Linggam

Professional & Auxiliary Oral Health Practice

Dr Che Noor Aini Che Omar, Dr Rohayati Mohd Noor, Pn Fatimah Rahman, En Abd Rahaman Jaafar, Pn Arbiah Basri, Pn Sarina Othman

Management & Administrative

Pn Suzana Ahmad, Pn Jamillah Sha'ari, Pn Nik Iwani Nik Mohd Azami, Pn Wan Ismawati Wan Yusof,
Pn Kamariah Ibrahim, Pn Norulhuda Ghazali, En Ahmad Razaidi Mohd Othman,
Pn Nurul Asyikin Muhamad, Pn Rahanah Mad Nor, Pn Umi Kalsom Azmi, Azimah Abd Manab ,
En Mohamad Agil Yusoff, En Raymond Rengas, En Shahrul Naim Saad, En Mustafar An Nor Abdul Ghani,
En Muhammad Thahir Rosein, En Raszali Mahmud, Pn Rosilawani Ismail, En Emir Ashraff Abdullah, En Hidzer Harun, En Azman Alias, En Yusree Mahiyar, En Mohd Sabre Omar

Vision of the Ministry of Health

A nation working together for better health

Mission of the Ministry of Health

To lead and work in partnership

To facilitate and support the people to:

- attain fully their potential in health
- appreciate health as a valuable asset
- take individual responsibility and positive action for their health

To ensure a high quality system that is:

- equitable
- affordable
- efficient
- technologically appropriate
- environmentally adaptable
- customer centred
- innovative

With emphasis on:

- professionalism, caring and teamwork value
- respect for human dignity
- community participation

Mission of the Oral Health Programme

To enhance the quality of life of the population
through the promotion of oral health
with emphasis on patient-centered care and
the building of partnerships for health

Resource Management

Financial Resource Management
Human Resource Management
Facilities Management

FINANCIAL RESOURCE MANAGEMENT

1. FINANCIAL MANAGEMENT AT PROGRAMME LEVEL

The Oral Health Programme has received increasing allocation of operational budget over the years. In 2015, the Programme received a total adjusted operational allocation of RM 806,691,163 (*Peruntukan Di Pinda*) which was 10.2% above that of 2014 and 31 % above that of 2013 **(Table 1).**

Table 1: Adjusted Operational Allocation, Oral Health Programme, 2010-2015

Year	Emolument (RM)	Services (RM)	Asset (RM)	Total (RM)
2010	365,771,400.00	72,337,947.00	1,649,159.00	439,758,506.00
2011	425,297,450.00	92,502,300.00	3,350,000.00	521,149,750.00
2012	433,309,400.00	92,914,975.00	5,952,027.00	532,176,402.00
2013	517,050,700.00	94,499,420.00	5,678,281.00	617,228,401.00
2014	591,410,587.00	99,517,656.00	40,868,344.00	731,796,587.00
2015	664,549,726.00	105,619,709.00	36,521,728.00	806,691,163.00

Source: Finance Division, MOH 2015

Expenditures covered the following:

a. *Dasar Sedia Ada*
b. *Dasar Baru*
c. One-off
d. *Latihan Dalam Perkhidmatan* (In-service training), and
e. MS ISO 9001 activities

The final expenditure of RM 831,023,867.11 showed spending of 99.9% above the final adjusted allocation received for the year **(Table 2)**. Expenditures under *Dasar Sedia Ada* included *Pengurusan Kesihatan Pergigian* (Administration - Financial Code 050100), *Kesihatan Pergigian Primer* (Primary Oral Healthcare - Financial Code 050200), *Kesihatan Pergigian Masyarakat* (Community Oral Healthcare - Financial Code 050300), and *Kesihatan Pergigian Kepakaran* (Specialist Care - Financial Code 050400).

Table 2: Adjusted Budget Allocation & Expenditures, Oral Health Programme MOH, 2015

Activity	Object Code	Final Adjusted Allocation (RM)	Final Expenditures (RM)	% Final Expenditures
Dasar Sedia Ada	050000	806,691,163.00	806,691,159.84	99.99
Dasar Baru	100500	998,208.00	998,207.94	99.99
One-off (Assets)	110100	24,198,210.00	23,334,499.33	96.43
TOTAL	-	**831,887,581.00**	**831,023,867.11**	**99.90**

Source: Finance Division and Oral Health Programme, MOH 2015

2. FINANCIAL MANAGEMENT, ORAL HEALTH PROGRAMME

In 2015, the Programme received RM 7,374,557.00, of which RM 7,201,980.50 (97.66%) was spent **(Table 3).** Funds for the Oral Health Programme (OHD) Ministry of Health were from the following sources:

a) Management of Oral Health
b) Primary Oral Healthcare
c) MOH Management (Innovation Award)
d) MS ISO 9001
e) One-off for Assets
f) In-service training

The operating budget under Financial Codes 050100 and 050200 included the operating costs for the Programme, the Malaysian Dental Council (MDC) and other activities at Ministry level. The OHD also received RM 150,000.00 from MOH Management for the National Innovation Award annual event in 2015.

The MS ISO 9001:2008 fund of RM 10,800.00 was used for external auditor fees and training. The training sessions were for internal quality auditors and other quality-related courses for all categories of personnel of the OHD and from the states.

RM 1,180,940.00 (50.8%) of the LDP for in-country training was retained at the Programme. In-service training included Continuing Professional Development (CPD) activities for oral health personnel at all levels.

The Programme also received RM 24,198,209 under the 'One-off for Training' Development Funds, 93.9% (RM 93,994.22) was spent on 11 dental officers attending conferences and training abroad.

Table 3: Adjusted Budget Allocations and Expenditures, Oral Health Programme, MOH, 2015

Activity	Program Code	Adjusted Allocation (RM)	Final Expenditures (RM)	% Final Expenditures to Initial Allocations
Management of Oral Health	050100	3,961,600.00	3,833,272.09	96.76%
Primary Oral Healthcare	050200	274,200.00	273,176.90	99.63%
MOH Management (Innovation Award)	010100	150,000.00	146,072.76	97.38%
MS ISO 9001:2008	010300	10,800.00	10.790.00	99.91%
In-service Training	00105	1,180,940.00	1.157,064.88	97.98%
Research & Development	00500	188,998.00	173,589.04	91.85%
ICT Facility	00800	1,608,019.00	1,608,015.13	99.99%
TOTAL	**-**	**7,374,557.00**	**7,201,980.80**	**97.66%**

Source: Oral Health Programme MOH 2015

3. FUNDS FOR *LATIHAN DALAM PERKHIDMATAN (LDP)*

The Programme also received RM 3 Million for LDP, of which 97.1% (RM 2,913,067.29) was spent, and the other 2.9% left to be used for overseas attachments.

4. MONITORING STATE FINANCES

The OHD also monitored allocation and expenditure at state level. In 2015, under *Dasar Sedia Ada,* Sarawak received the highest allocation, followed by Perak and Selangor. 11 states or institutions spent more than their initial allocation due to the increase in emoluments **(Table 4).**

Table 4: Adjusted Budget Allocations and Expenditures under Existing Policies by State and Institution, 2015

State	Adjusted Allocation (RM)	Final Expenditure (RM)	% Final Expenditure to Initial Allocation
Perlis	19,517,400.00	18,296,011.19	93.74%
Kedah	52,590,782.00	56,628,022.00	107.68%
Pulau Pinang	42,467,736.00	45,900,418.37	108.08%
Perak	77,248,920.00	75,581,148.84	97.84%
Selangor	72,333,378.00	79,178,266.15	109.46%
Negeri Sembilan	49,203,466.00	49,040,684.00	99.67%
Melaka	35,170,625.00	33,897,676.09	96.38%
Johor	70,881,370.00	68,404,613.55	96.51%
Pahang	54,161,186.00	62,237,843.16	114.91%
Terengganu	46,750,430.00	53,344,542.51	114.10%
Kelantan	54,352,433.00	62,857,086.05	115.65%
Sabah	71,803,378.13	76,809,636.42	106.97%
Sarawak	75,795,573.00	88,494,106.54	116.75%
FT KL & Putrajaya	42,500,902.00	45,392,393.01	106.80%
FT Labuan	3,284,900.00	3,320,787.69	101.09%
OHD, MOH	10,533,700.00	13,704,789.17	130.10%
PPKK & KLPM	460,600.00	455,964.95	98.99%
HKL	8,024,900.00	6,836,138.49	85.19%
IMR	913,380.00	912,324.22	99.89%
TOTAL	**787,995,061.00**	**841,292,470.40**	**106.76%**

Source: Oral Health Programme, MOH 2015

HUMAN RESOURCE MANAGEMENT

The oral health work force in the Ministry of Health consists of dental officers (including dental specialists), dental auxiliaries (dental nurses, dental technologists, dental surgery assistants), training staffs (Dental Training College Malaysia, Penang) and support staff (attendants, administrative staff and drivers).

1. COMPOSITION OF ORAL HEALTH WORK FORCE

There were 16,200 posts for oral health personnel in the Ministry of Health in 2015. There was a decrease in the number of posts because 46 Dental Surgery Assistant posts were traded-off due to the lean Civil Servant Policy. However, the percentage of the vacancy did not reflect the needs of the services **(Table 5).**

Table 5: Oral Health Personnel in MOH, 2012 – 2015

CATEGORY	2012			2013			2014			2015		
	Post	Filled	% vac	Post	Filled	% vac	Post	Filled	% vac	Post	Filled	% vac
Dental Officers	2,721	2,461	9.6	3,307	2,844	14.0	3,692	3,274	11.3	3,692	3,492	5.4
Dental Nurse	2,815	2,574	8.6	2,835	2,626	7.4	3,013	2,655	11.8	3,015	2,726	9.6
Dental Technologist	943	858	9.0	987	892	9.6	1009	933	7.5	1,007	949	5.7
Dental Surgery Assistants	3,583	3,422	4.5	3,981	3,503	12.0	4,021	3,581	10.9	3,975	3,731	6.0
Others	3,253	3,055	6.1	4,168	3,064	26.5	4,493	4,162	7.4	4,511	4,190	7.0
TOTAL	**13,315**	**12,370**	**7.1**	**15,278**	**12,929**	**15.4**	**16,228**	**14,605**	**10.0**	**16,200**	**15,088**	**6.9**

Source: Oral Health Programme, MOH 2015
vac= vacant

1.1 Distribution of Dental Officers and Dental Specialists

From 2012, more Dental officers and Specialists have been posted to Sabah and Sarawak to address the states' needs. Every year more Dental Specialists are trained for expansion of services to remote areas **(Table 6).**

Table 6: Dental Officers and Clinical Dental Specialists in MOH, 2015

State	Dental Officers			Clinical Dental Specialists		
	Post	Filled	% vac	Post	Filled	% vac
West Malaysia	2,871	2,722	5.2	211	191	9.5
Sabah	265	261	1.5	13	11	15.7
FT Labuan	11	9	18.2	0	0	0
Sarawak	301	285	5.3	20	13	35.0
Total	**3,448**	**3,277**	**4.9**	**244**	**215**	**11.9**

Source: Oral Health Programme, MOH 2015
Vac= vacancy

1.2 New Posts Approved / Trade-Off

There was no new post approved in 2015 due to the lean civil service policy. Some new graduates had to wait as long as one year to be posted to Ministry of Health for their compulsory service **(Table 7).**

Table 7: Trade-off Posts, 2015

CATEGORY OF PERSONNEL	NO. OF POSTS APPROVED
Dental Surgery Assistant	
• Grade U17	46

Source: Oral Health Programme, MOH 2015

2. PROMOTION EXERCISE

In 2015, a total of 23 Dental Officers and Specialists were promoted to JUSA / *Khas* Posts **(Table 8).**

Table 8: Promotion Exercise for Clinical Specialists and Dental Officers, 2015

Category	Grade						Total
	Special A	Special B	Special C	JUSA A	JUSA B	JUSA C (KUP)	
Clinical Specialist	-	3	2	1	0	17	23

Source: Oral Health Programme, MOH 2015

For dental auxiliaries, 233 from various categories were also promoted **(Table 9).**

Table 9: Promotion Exercises for Dental Auxiliaries, 2015

Category	Grade								Total
	U40	U38	U36	U32	KUP U32	U29	U24	U22	
Dental Nurses	5	12	20	15	108	0	0	0	160
Dental Technologists	0	12	11	16	15	0	0	0	54
Dental Surgery Assistants	0	0	0	0	0	0	3	16	19
Total	**5**	**24**	**31**	**31**	**123**	**0**	**3**	**16**	**233**

Source: Oral Health Programme, MOH 2015

3. DENTAL SPECIALTIES IN THE MINISTRY OF HEALTH

There are nine dental specialty disciplines recognized under the Oral Health Programme. These are Oral and Maxillofacial Surgery, Orthodontics, Periodontology, Paediatric Dentistry, Oral Pathology & Oral Medicine, Restorative Dentistry, Special Needs Dentistry, Forensic Dentistry and Dental Public Health.

3.1 Number of Dental Specialists

The number of dental specialists in MOH increased 7.3% from 302 in 2014 to 324 in 2015. Among them, there were 109 Dental Public Health Specialists in MOH (33.6%) in 2015 **(Table 10).**

Table 10: Number of Dental Specialists in MOH, 2015

Discipline	Oral Surgery	Orthodontics	Periodontics	Paediatric Dentistry	Oral Pathology & Oral Medicine	Restorative Dentistry	Special Needs Dentistry	Forensic Odontology	Dental Public Health	Total
2010	45	32	19	25	8	14	0	0	129	**272**
2011	45	25	20	27	9	16	0	0	118	**260**
2012	48	34	21	29	9	17	2	1	116	**276**
2013	54	38	24	33	9	19	2	1	111	**291**
2014	56	48	29	35	10	20	3	1	114	**302**
2015	60	47	34	39	11	20	3	1	109	**324**

Source: Oral Health Programme, MOH 2015

4. NETT GAIN/LOSS OF DENTAL OFFICERS

In 2015, a total of 504 Dental Officers joined the MOH, while 281 left the service for various reasons, resulting in an overall nett gain of 223 in the MOH **(Table 11).**

Table 11: Nett Gain/Loss of Dental Officers in MOH, 2005-2015

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Joined MOH	145	179	232	215	222	297	415	514	693	604	504
Left MOH	**56**	**78**	**107**	**84**	**81**	**104**	**105**	**96**	**129**	**219**	**281**
Retired (Compulsory)	7	10	20	9	2	10	13	3	1	16	12
Retired (Optional)	9	5	2	0	2	5	2	3	5	4	9
Resigned	32	48	73	54	54	72	82	89	122	198	260
Released with Permission	6	14	10	20	23	16	7	0	0	0	0
Other Reasons	2	1	2	1	0	1	1	1	1	1	0
Nett Gain/Loss	**89**	**101**	**125**	**131**	**141**	**193**	**310**	**418**	**564**	**385**	**223**

Source: Oral Health Programme, MOH 2015

5. DENTAL OFFICERS ON CONTRACT WITH THE MINISTRY

There has been a declining trend of contract officers in MOH with the revised policy for contract employment**.** Recruitment of retirees limited only to those with specialty qualifications but subject to placement in areas of service need **(Table 12).**

Table 12: Recruitment of Contract Dental Officers in MOH, 2010 – 2015

YEAR	MALAYSIANS	NON - CITIZENS	
	Retiree	Non-Spouse	Spouse
	Filled	Filled	Filled
2010	39	43	15
2011	37	35	12
2012	36	24	10
2013	15	2	10
2014	14	1	11
2015	14	0	11

Source: Oral Health Programme, MOH 2015

6. PROFESSIONALS AND AUXILLARIES

Matters related to career advancements and welfare of professionals and auxiliaries undertaken in 2015 were as below:

6.1 Improving Organisational Capacity for Service Provision

- Restructuring of the Oral Health Programme organization.
- Proposal for reduction of Compulsory Service to one year was approved effective from 1st July 2015.
- 94 dedicated Dental Public Health Specialist post was approved as strategic placement.
- Managed 4 (four) *Mesyuarat Penempatan dan Pertukaran Pegawai Pergigian.*
- The scope and function of Dental Nurses and Dental Technologists were revised.
- Degree programme for the Dental Technologist intake starts in September 2015.

6.2 Ensuring Staff Welfare

- *Grade Utama* and *Grade Khas* post was approved for:
  - 15 Grade JUSA C KUP
  - 3 Grade Khas B
  - 2 Grade Khas C
- 391 trade off posts for dental officers was approved
- Promotional exercise for Dental Officers was undertaken for:
  - 391 Grade U44
  - 164 Grade U48
  - 95 Grade U52
  - 43 Grade U54
- Promotional exercise for Dental Technologist:
  - 18 Grade U32
  - 11 Grade U36
  - 12 Grade U38
- Promotional exercise for Dental Nurse:
  - 123 Grade U32
  - 20 Grade U36
  - 12 Grade U38
  - 5 Grade U40
- Promotional exercise for Dental Surgery Assistant:
  - 16 Grade U22
  - 3 Grade U24
- Ensuring Continuous Professional Development for all dental auxiliaries
  - 2nd Malaysian Dental Therapists' Scientific Conference 2015 (8 – 10 May 2015) *at* Berjaya Times Square
  - *Kursus Pembantu Perawatan Kesihatan Pergigian* (27 – 29 September 2015) at MyHotel Langkawi
  - *Kursus Pembantu Pembedahan Pergigian* (22 – 24 November 2015*)* at Hotel Seri Costa Melaka

FACILITIES MANAGEMENT

1. ORAL HEALTH FACILITIES

The Ministry of Health has established a comprehensive network of oral healthcare facilities which are located as stand-alone clinics, within health clinics, hospitals, primary and secondary schools and institutions.

Under the Government's National Blue Ocean Strategy, Urban Transformation Centres (UTCs) have been established. These have been built by the Ministry of Finance, but staffed and operated by the Ministry of Health. 1Malaysia Clinics within the UTCs are aimed at providing Malaysians access to outpatient health services, including oral health services. In addition to the UTCs, Rural Transformation Centres (RTC) which are also funded by MOF have been established, and outpatient oral healthcare is delivered through the outreach concept.

In addition, various Mobile Dental Clinics (buses, trailers, lorries and caravans) and mobile dental teams are used to provide outreach services, especially to schoolchildren and populations in suburban and remote areas of the country.

In 2015, there were 1,696 dental facilities with 3,219 dental units in MOH **(Table 13).**

Table 13: Oral Health Facilities, MOH 2015

Facility Type	No. of Facilities	No. of Dental Units
Stand-alone Dental Clinics*	56	493
Dental Clinics in Health Centres	583	1446
Dental Clinics in Hospitals	66	353
School Dental Clinics	925	843
Mobile Dental Clinics	28	44
Mobile Dental Laboratories	2	-
1Malaysia Mobile Dental Clinics • Bus • Boat	 1 2	 1 2
Dental Clinic in 1Malaysia Clinics • Urban Transformation Centres (UTC) • Rural Transformation Centres (RTC) • Klinik Pergigian di Klinik 1Malaysia (K1M)	9 7 1	16 3 1
Others: • IMR, Prisons, *Maktab Rendah Sains MARA (MRSM) Pusat Serenti,* Handicapped Children's Centres and Children Spastic Centres.	16	17
Total	**1696**	**3219**

Source: Health Informatics Centre, MOH as of 31.12.2015
** Including Children Dental Centre & Malaysian Dental Training College, Penang*

In addition, there were 593 mobile dental teams, with 2,576 mobile dental chairs **(Table 14**).

Table 14: Mobile Dental Teams, MOH 2015

Facility Type	Number of Facilities	Number of Dental Units
Mobile Dental Team • School Mobile Dental Teams (Primary and Secondary Schools) • Pre-School Mobile Dental Teams • Elderly & Special Needs Mobile Dental Teams	 450 139 4	 2576**
Total	**593**	**2576**

Source: Health Informatics Centre, MOH as of 31.12.2015
***Total no. of portable dentals units for mobile dental teams*

2. DEVELOPMENT PROJECTS UNDER THE 10 TH MALAYSIAN PLAN (10MP)

Under the 4th Rolling Plan of the 10MP (2015), dedicated oral health development projects approved were as listed below:

a) Four (4) Standalone Dental Clinics:
   - *Klinik Pergigian Bukit Selambau*, Kedah.
   - *Klinik Pergigian Kluang*, Johor.
   - *Klinik Pergigian Sipitang,* Sabah.
   - *Klinik Pergigian Beluran*, Sabah.

b) Non Hospital Based Dental Specialist Centre, Jalan Zaaba, Seremban, Negeri Sembilan.
c) Upgrading dental facilities in hospital - *Jabatan Pergigian Pediatrik*, Hospital Melaka, Melaka.
d) Upgrading *Klinik Pergigian Karakit*, Pulau Banggi, Sabah.
e) Mobile Dental Clinic for FT Kuala Lumpur & Putrajaya.
f) Mobile Dental Teams for Negeri Terengganu.
g) Public Water Fluoridation in Perak.

The built up of Mobile Dental Clinic bus with two (2) dental chairs built up was completed and delivered to FT Kuala Lumpur & Putrajaya.

3. DEVELOPMENT OF NORMS AND GUIDELINES FOR NEW FACILITIES

Brief of Requirements (BOR) and standard list of equipment and specification for other requirement of new dental facilities were reviewed and updated:

a) BOR for Paediatric Dental Specialist Department in Women's and Child Hospital (WCH)
b) Specification of Mobile Dental Clinics Bus with 2 Dental Chairs.
c) Specification of Mobile Dental Clinics Van with 1 Dental Chair.
d) Specification of Mobile Dental Laboratory.
e) Specification of Portable Mobile Cart.
f) Specification of Electric Portable Dental Chair.
g) BOR for new development projects approved under 4th Rolling Plan 2015 10MP.

4. DISASTER FUNDING

End of December 2014, a total of 20 dental facilities including school dental clinics in Kelantan, Pahang, Terengganu and Perak were affected by flood. Total estimated damaged cost was 6.4 million.
In 2015, flood budgets for replacement of equipment, vehicles and upgrading of infrastructures of affected facilities was approved for the following states:

- RM415,305.00 -Terengganu
- RM469,700.00 - Pahang
- RM584,000.00 – Perak
- RM16,237,464.00 – Kelantan

5. HEALTH CLINIC SUPPORT SERVICES OF BIOMEDICAL EQUIPMENT MANAGEMENT SERVICES (BEMS) UNDER MEDICAL EQUIPMENT ENHANCEMENT TENURE (MEET) PROGRAMME

Maintenance services for existing biomedical equipment in dental clinics under MEET by Quantum Medical Services (QMS) started on 15 January 2015 in Pulau Pinang, Perak, Selangor, FTKL, Negeri

Sembilan, Melaka, Johor, Sabah, Sarawak and *Pusat Pergigian Kanak-Kanak dan Kolej Latihan Pergigian Malaysia,* Pulau Pinang. The delivery and implementation of these services were monitored together with the Engineering Division and Procurement and Privatisation Division of MOH.

6. HEALTH CLINIC SUPPORT SERVICES OF FACILITIES ENGINEERING MANAGEMENT SERVICES (FEMS), CLEANING SERVICES (CLS) AND CLINICAL WASTE MANAGEMENT SERVICES (CWMS) UNDER *PERKHIDMATAN SOKONGAN KLINIKAL* (PSK).

Privatization of health clinic support services at MOH dental clinics were also expanded to three other services such as FEMS, CLS and CWMS. In 2015, MOH coordinated by *Bahagian Perkhidmatan Kejuruteraan* MOH managed to finalize a new contract agreement of PSK for 11 states effective 1st July 2015 until 30 Jun 2018. With this new PSK contracts, 11 different contractors for 11 states were appointed to deliver support services at 118 identified MOH clinics which include nine Standalone Dental Clinics. The PSK contracts for continual delivery of support services at identified health clinics in Sabah (Jawat Johan Sdn. Bhd.) and in Sarawak (ADL Sdn. Bhd.) were renewed. All activities are monitored together with *Seksyen Operasi Klinik, Bahagian Perkhidmatan Kejuruteraan* MOH.

7. MEDICAL AND NON-MEDICAL EQUIPMENT AND NON-AMBULANCE VEHICLES

A total of RM 20,056,370 were approved under the Development Funds for the following:

- RM 7,679,630 for replacement, upgrading and procurement of new medical and non-medical equipment for primary care.
- RM 7,380,740 for replacement, upgrading and procurement of new medical and non-medical equipment for specialist care.
- RM 4,996,000 for replacement and procurement of new non-ambulance vehicles.

8. PROCUREMENT OF ASSETS UNDER OPERATING BUDGET

A total of RM35.2 million was received under the Operating Budget (B42) *Dasar Sedia Ada Penjimatan MEET 2015* and used for procurement of assets for primary and specialist care. In addition, another RM3 million was given for the procurement of medical and non-medical asset as follows:

- 2 new edition of Dental Laboratories (coaster type) - RM 830,000.00.
- 2 Portable Cart With Built In Suction Air Compressor - RM 120,000.00
- 2 Mobile Dental Clinics van type with dental chair(portable)- RM 440,000.00
- 10 Automatic Portable Dental Chair - RM 37,800.00
- 11 Electric Motor Cutting System - RM 424,249.00

A centralized tender for the procurement of one bus was made coordinated by the Procurement and Privatisation Division, MOH for a total cost of RM6 million, under the development budget and another 4 buses under the National Blue Ocean Strategy (NBOS) funding for Mobile Community Transformation Centre (MCTC).

9. TRAINING

Kursus Pembangunan dan Perkembangan Fasiliti Kesihatan Pergigian was held on the 15-17 November 2015 at Hotel Mahkota, Melaka to review and update dental equipment specification (Dental Chair cum Unit (officer & specialist), Portable Dental Unit, Autoclave Vacum Type B, Intra-Oral Computed Radiography, Digital Panaromic & Cephalometric X-Ray Unit (Digital Managing System) and Dental Technology Workstation. In addition, guide on management of development projects and procurement process was also included in the agenda.

Oral Health Development

Oral Health Professional Development
Oral Health Promotion
Oral Health Epidemiology and Research
Oral Health Technology

ORAL HEALTH PROFESSIONAL DEVELOPMENT

PROFESSIONAL DEVELOPMENT

The Oral Health Programme has made significant strides to improve personal development as well as career pathways.

1. RECOGNITION OF DENTAL POST-GRADUATE QUALIFICATIONS

The Programme pursued recognition for various postgraduate qualifications in the MOH. The following qualifications were recognised by the *Jawatankuasa Khas Perubatan* (JKP) and subsequently by *Kementerian Pendidikan Tinggi* on 9 June 2015 **(Table 15)**.

Table 15: Postgraduate Dental Qualifications Recognised in 2015

Recognition by ***Kementerian Pendidikan Tinggi***	
1.	Doctorate in Clinical Dentistry (DClinDent) Periodontics- University of Sheffield, United Kingdom
2.	Master of Dental Surgery (Periodontology), University of Hong Kong
3.	Doctor of Clinical Dentistry (Orthodontics), Universiti Teknologi MARA (UiTM)

Source: Oral Health Programme MOH, 2015

2. GAZETTEMENT OF DENTAL SPECIALISTS

2.1 Gazettement of Dental Public Health Specialists

There were six (6) Dental Public Health Specialists gazetted in 2015 **(Table 16).**

Table 16: Gazzettement of Dental Public Health Specialists, 2015

No.	Name	Gazettement Date	Pre-Gazettement Period	Posting
1.	Dr Nurul Syakirin bt Abdul Shukor	3.3.2015	6 months	*Bahagian Kesihatan Pergigian, KKM*
2.	Dr Khairol Niza bt Ahmad	27.5.2015	6 months	*PKPD Larut Matang & Selama, Perak*
3.	Dr Zaihan bt Othman	27.5.2015	6 months	*PKPD Besut, Terengganu*
4.	Dr Nurul Ashikin bt Hussin	5.9.2015	6 months	*PKPD Melaka Tengah, Melaka*
5.	Dr Sabarina bt Omar	7.10.2015	8 years	*Pejabat TPKN(G) Johor*
6.	Dr Roslinda bt Abdul Samad	7.10.2015	8 years	*PKPD Johor Bahru, Johor*

Source: Oral Health Programme, MOH 2015

2.2 Gazettement of Clinical Dental Specialists

In 2015, the Dental Specialist Gazettement and Evaluation Committee [*Jawatankuasa Penilaian Pewartaan Pakar Pergigian (JPPPP)]* conducted 5 meetings to assess and make recommendations to

the JKP for gazettement of Clinical Dental Specialists in the MOH. A total of twenty three (23) Clinical Dental Specialists were gazetted in 2015 **(Table 17).**

Table 17: Gazzettement of Dental Clinical Specialists, 2015

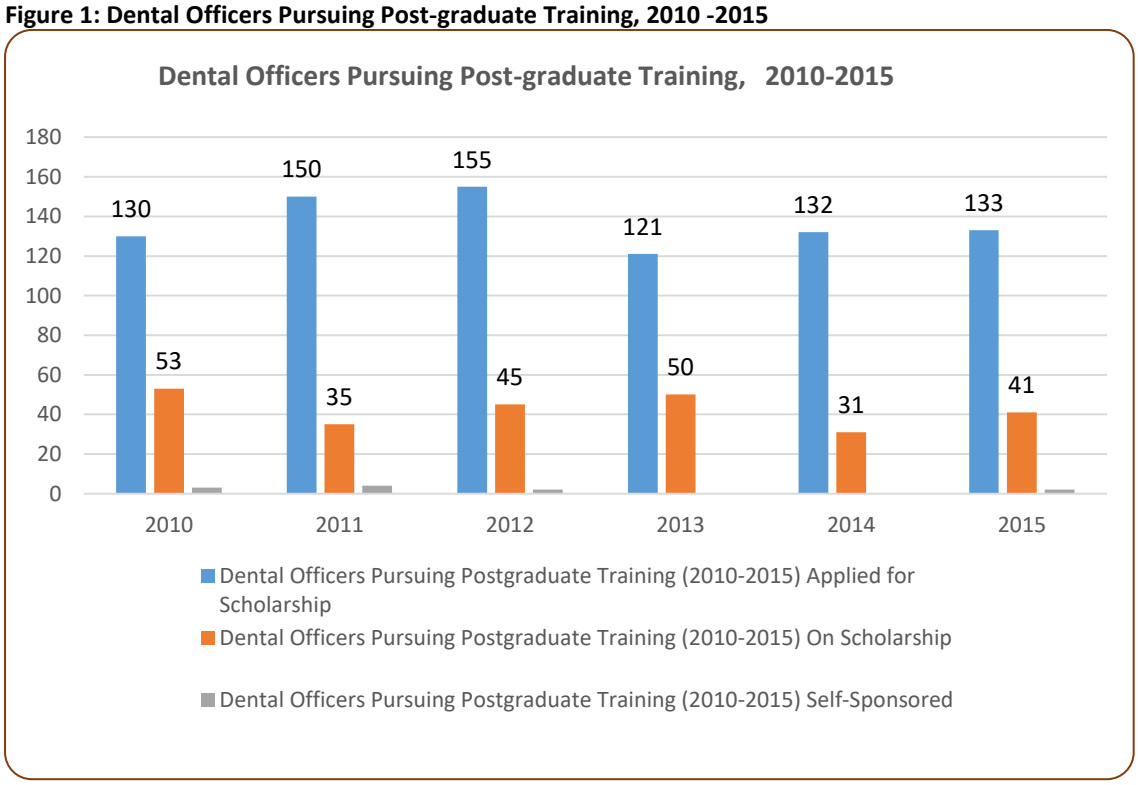
No.	Name	Pre-Gazettement Period	Gazettement Date	Posting Place
1	Dr Lee Chee Wei	18 months	1.1.2015	*Hospital Keningau, Sabah*
2	Dr Logesvari a/p Thangavalu	6 months	28.2.2015	*Hospital Teluk Intan, Perak*
3	Dr Sundrarajan Naidu a/l Ramasamy	6 months	28.2.2015	*Hospital Sultan Ismail, Johor*
4	Dr Aisah bt Ahmad	6 months	2.3.2015	*KP Jalan Masjid, Sarawak*
5	Dr Nur Fazilah bt Mohd Tahir	6 months	28.2.2015	*Hospital Sultan Ismail, Johor*
6	Dr Hoe Ai Sim	6 months	28.2.2015	*Hospital Kulim, Kedah*
7	Dr Farah Aliya bt Mohamed Azahar	6 months	28.2.2015	*Hospital Selayang, Selangor*
8	Dr Navasheilla Retna a/p Retnasingam	6 months	15.3.2015	*Hospital Kuala Lipis, Pahang*
9	Dr Nur 'Adilah bt Ahmad Othman	6 months	8.3.2015	*Hospital Alor Setar, Kedah*
10	Dr Thavamalar a/p Marimuthoo	6 months	8.3.2015	*Hospital Melaka, Melaka*
11	Dr Saliana bt A. Aziz	6 months	8.3.2015	*KP Bakri, Muar, Johor*
12	Dr Swee Wen Yeng	18 months	23.3.2015	*KP Sungai Petani, Kedah*
13	Dr Norashikin bt Hamzah	6 months	8.2.2015	*KP Putatan, Sabah*
14	Dr Nor Azreen bt Md Noor	12 months	12.2.2015	*KP Tudan, Miri, Sarawak*
15	Dr Arlene Khaw Bee Hong	18 months	20.10.2015	*KP Seri Tanjung, Melaka*
16	Dr Eileen Yap Ai Ling	18 months	11.6.2015	*Hospital Queen Elizabeth II, Kota Kinabalu, Sabah*
17	Dr Samsanizah bt Azman	6 months	2.3.2015	*KP Jalan Sultan Abdul Samad, Johor*
18	Dr Samihah bt Anuar	6 months	8.3.2015	*KP Taiping, Perak*
19	Dr Wan Nor Aziani bt Mohd Azmi	6 months	8.3.2015	*Hospital Raja Perempuan Zainab II, Kelantan*
20	Dr Aimeeza bt Rajali	6 months	2.10.2015	*Resigned*
21	Dr Norjehan bt Latib	6 months	2.12.2015	*KP Kuala Pilah, Negeri Sembilan*
22	Dr Hairulnizam bin Baharin	6 months	1.12.2015	*Hospital Kemaman, Terengganu*
23	Dr Mazida Najwa bt Md. Zin	6 months	1.12.2015	*Hospital Pulau Pinang, Pulau Pinang*

Source: Oral Health Programme, MOH 2015

3. POST-GRADUATE TRAINING FOR DENTAL PROFESSIONALS

Out of 133 dental officers who applied, 49 (29.32%) were offered Federal Scholarships for postgraduate training in 2015. Only 41 were taken up due to limited training slots (**Figure 1**). 1 dental officer went on *Cuti Belajar Bergaji Penuh (CBBP)* without a Federal Scholarship to pursue a Master of Enforcement Law and 2 dental officers went abroad on *Cuti Belajar Tanpa Gaji (CBTG)*.

Figure 1: Dental Officers Pursuing Post-graduate Training, 2010 -2015



Source: Oral Health Programme, MOH 2015

A total of 25 dental officers pursued post-graduate training at local universities, while 16 went abroad, including those going for 'Areas of Special Interest' **(Table 18**).

Table 18 : Dental Officers Pursuing Postgraduate Training by Discipline, 2015

Discipline	On Scholarship		Total
	Local	Abroad	
1. Oral & Maxillofacial Surgery	7	2	9
2. Orthodontics	4	4	8
3. Periodontics	5	3	8
4. Paediatric Dentistry	2	2	4
5. Restorative Dentistry	3	0	3
6. Oral Pathology & Oral Medicine	0	0	0
7. Special Needs Dentistry	0	1	1
8. Forensic Dentistry	0	2	2
9. Dental Public Health	4	0	4
10. Area of Special Interest	0	2	2
TOTAL	**25**	**16**	**41**

Source: Oral Health Programme, MOH 2015

A total of 34 dental officers completed post-graduate training in 2015 **(Table 19).**

Table 19: Dental Officers Completed Post-graduate Training, 2015

Discipline	Local Universities	Foreign Universities	Total
1. Oral & Maxillofacial Surgery	7	2	9
2. Orthodontics	5	5	10
3. Periodontic	2	2	4
4. Paediatric Dentistry	0	1	1
5. Restorative Dentistry	2	3	5
6. Oral Pathology & Oral Medicine	0	1	1
7. Special Needs Dentistry	0	0	0
8. Dental Public Health	4	0	4
TOTAL	**20**	**14**	**34**

Source: Oral Health Programme, MOH 2015

4. PROFESSIONAL DEVELOPMENT OF DENTAL AUXILIARIES

4.1 Post-Basic Training

Post-basic training in Orthodontics for Dental Nurses was conducted from July to December 2015 at the Children's Dental Centre and Malaysia Dental Training College in Penang (*Pusat Pergigian Kanak-kanak & Kolej Latihan Pergigian Malaysia* – PPKK & KLPM). Out of 26 dental nurses who has completed the basic training in Orthodontics, 25 were from Ministry of Health and one from Universiti Sains Malaysia **(Table 20).**

Table 20: Dental Auxilliaries trained in Post-basic Courses, 2010-2015

Year	Dental Nurse		Dental Technologist	
	Post-basic	No.	Post-basic	No.
2010	Paediatric Dentistry	25	-	-
2011	-	-	Orthodontics	24
2012	Periodontics	25	-	-
2013	Periodontics	22	-	-
2014	-	-	Oral and Maxillofacial Surgery	16
2015	Orthodontics	25	-	-

Source: Oral Health Programme, MOH 2015

In 2015, there was a total of 161 dental nurses with post-basic training in MOH service. By discipline, there were 35 dental nurses with post-basic training in Orthodontics, 25 in Paediatric Dentistry, 89 in Periodontic and 12 in Oral and Maxillofacial Surgery.

5. IN-SERVICE TRAINING FOR DENTAL PERSONNEL (*LATIHAN DALAM PERKHIDMATAN*)

Out of a total of RM3.0 million received in 2015, RM 2,724,940.00 (90.8 %) was allocated for in-service training in the country, while the remaining RM 275,060.00 (9.2 %) was set aside for training abroad (**Table 21**).

Table 21: Funds for In-Service Training under 9th & 10th Malaysia Plans

Year	In-Service Training	Allocation (RM)	Dental Professionals And Auxiliaries Trained	Expenses (RM)	% Expenditure
9th Malaysia Plan (2006-2010)					
2006	Local	290,000.00	645	272,817.45	97.2
	Overseas	417,190.00	15	383,876.00	92.0
2007	Local	1,070,000.00	4756	1,067,638.10	99.8
	Overseas	708,801.00	30	688,870.00	97.2
2008	Local	1,199,533.00	5424	1,192,942.16	99.8
	Overseas	733,800.00	23	711,252.12	96.9
2009	Local	1,253,000.00	3434	1,246,149.28	99.5
	Overseas	1,047,000.00	27	850,000.00	81.2
2010	Local	1,825,000.00	12433	1,822,130.00	99.8
	Overseas	1,175,000.00	32	1,100,000.00	93.6
10th Malaysia Plan (2011-2015)					
2011	Local	2,015,000.00	14929	2,014,731.00	99.9
	Overseas	985,000.00	23	960,000.00	97.5
2012	Local	2,660,000.00	17,294	2,571,992.00	96.7
	Overseas	340,000.00	10	340,000.00	100.0
2013	Local	2,914,660.00	20,450	2,913,067.29	99.9
	Overseas	35,340.00	2	35,340.00	100.0
2014	Local	2,870,000.00	19,460	2,847,701.57	99.2
	Overseas	130,000.00	8	129,080.00	99.3
2015	Local	2,724,940.00	38,011	2,996,629.83	99.9
	Overseas	275,060.00	13	275,060.00	100.0

Source: Oral Health Programme, MOH 2015

5.1 Local In-Service Training

By the of December 2015, 42 Consultancy Training and Courses for Specialties were conducted and attended by 1,305 Dental Specialists and Dental Officers (**Table 22**).

Table 22: Consultancy Training & Courses for Specialties, 2015

Specialty	Training Topic	Consultant & Participants	Date	Expenses	Venue
Dental Public Health Specialists (DPHS)	22nd MDA Scientific Convention & Trade Exhibition	200 DPHS & Dental officers,100 Auxiliaries	23-25 Jan 2015	RM 130,000	Sunway Pyramid Convention Centre, Petaling Jaya, Selangor
	Bengkel : Workshop on Casemix Development For Primary Oral Health Care : Data Cleaning	30 DPHS	23 - 26 Feb 2015	RM 20,700	Hotel Premiere ,Klang
	Dental Caries Control Looking Back Forging Ahead	70 DPHS	28 & 29 March 2015	RM 24,500	M Suite Hotel, JB

	ICD Section XX International Scientific Conference & Trade Exhibition	20 DPHS & Dental officers	29 March 2015	RM 4,000	Aloft Hotel, KL
	37th Asia Pacific Dental Congress (APDC) 2015	20 DPHS & Dental officers	3 - 5 April 2015	RM 25,600	Suntec Singapore Convention Centre
	Data Entry Training for State Coordinators, Dental Examiners and Field Supervisors for NOHPS 2015	68 DPHS & Dental officers, 16 Auxiliaries	8-10 April 2015	RM 32,200	Hotel Summit, Selangor
	Kuala Lumpur Nicotine Addiction International Conference (KLNAC) 2015	25 DPHS	23-24 April 2015	RM 13,750	Aloft Hotel, KL
	Latihan 'Standardization and Calibration ' *Kajiselidik* NOHPS 2015 (Sesi 1)	2 DPHS	5-8 May 2015	RM 13,972	Hotel Primere Klang dan Pra Sekolah SK Pulau Indah, Kelang, Selangor
	Latihan 'Standardization and Calibration ' *Kajiselidik* NOHPS 2015 (Sesi 2)	11 DPHS	11-14 May 2015	RM 10,411	Hotel Sentral Riverview, Melaka, Pra SK Padang Temu, Melaka,
	Latihan 'Standardization and Calibration ' *Kajiselidik* NOHPS 2015 (Sesi 3)	12 DPHS	18 - 21 May 2015	RM 11,085	Hotel Klana Resort , Seremban, Pra SK Taman Tuanku Jaafar 2
	MLSM Regional Medico-Legal Conference 2015	3 DPHS & Dental officer	23 - 24 May 2015	RM 3,300	The Royale KL
	MIDEC 2015	350 DPHS & Dental officers, 200 Auxiliaries	12 - 14 June 2015	RM 254,400	KLCC
	"*Bengkel* Training of Trainers on Occupational Safety and Health in Dental Practice"	18 DPHS & Dental officers, 26 Auxiliaries	28 - 30 July 2015	RM 11,986	Hotel Concorde Inn KLIA Sepang
	Kursus Advanced Leadership Programme For Physician 2015 (*Program Kolaborasi* Royal College of Physician, London *Dan KKM*	5 DPHS	5-9 October 2015	RM 25,500	IPK
	Negotiation Skills (Middle Managers)	30 DPHS & Dental officers	25-27 October 2015	RM 24,804	Best Western i-City Shah Alam
	Scientific Writing Seminar	5 DPHS	26-27 November 2015	RM1,250	PPUM
Oral Surgery	Operative Technique in Oral and Maxillofacial Surgery	6 Oral & Maxillofacial Surgeons	21 - 22 April 2015	RM 15,000	Anatomy Dissection Hall, Faculty of Medicine, Universiti Malaya
	5th Intensive Microsurgery Training Course - July	17 Oral & Maxillofacial Surgeons, Dental officers,8 Auxiliaries	27 - 31 July 2015	RM 25,000	IMR
	Current Operative Maxillofacial Surgery : Techniques in Orthognatic Surgery & Distraction Osteogenesis 2015 PART II	27 Oral & Maxillofacial Surgeons, Dental officers	28 September – 2 October 2015	RM 60,000	HKL

	ICOMS Melbourne 2015	2 Oral & Maxillofacial Surgeons	27 - 30 October 2015	RM 11,600	Melbourne Australia
	Current Operative Maxillofacial Surgery : Techniques in Orthognatic Surgery & Distraction Osteogenesis	46 Oral & Maxillofacial Surgeons, Dental Officers	22-26 September 2015	RM93,390	Hospital Kuala Lumpur
	2015 Annual Scientific Meeting of CPATH AMM & 40th Anniversary Celebration of the Pathology Advocates	7 OMOP	13 -14 June 2015	RM 3,500	Berjaya Times Square, KL
Oral Medicine and Oral Pathology	21st Malaysian Association of Orthodontists International Scientific Conference and Trade Exhibition (MAOISCTE)	32 Orthodontists	20-21 April 2015	RM 24,000	Eastern and Oriental Hotel, Penang
Orthodontics	`Asian Pacific Cleft Lip and Palate / Craniofacial Congress' 2015	2 Orthodontists	23-25 April 2015	RM 4,600	Eastern and Oriental Hotel, Penang
	Kursus Dental Officer With Special Interest in Orthodontics (DOSIO)	12 Dental Officers	8 - 10 June 2015	RM 3,520	KP Botani, WPKL
	8th International Orthodontic Congress	2 Orthodontists	27 - 30 September 2015	RM 9,400	Excel, London
	Multidisciplinary Approaches to Orthodontics - a UK perspective	5 Orthodontists	23-24 November 2015	RM 1,500	Grand Seasons Hotel
	"Accelerated Orthodontic Tooth Movement- “Fast NOT Furious”"	2 Orthodontists	12&13 December 2015	RM 1,400	Novotel, KL
Paediatric Dentistry	3rd MAPD Biennial Scientific Conference & Trade Exhibition	70 Paediatric Dentistry Specialists & Dental Officers, 40 Auxiliaries	13-15 March 2015	RM 45,500	Zenith Hotel, Kuantan
Periodontics	Euro Perio	2 Periodontists	3 - 6 June 2015	RM 7,480	Excel, London
	1st International Conference on Periodontal Health 2015	76 Periodontists	1 - 2 August 2015	RM 41,000	Berjaya Times Square, KL
Restorative Dentistry Restorative Dentistry	*Kursus* “Endodontics, Make It Easy”	5 Restorative Dentistry Specialists	5 - 6 March 2015	RM 3,500	USAINS
	12th Annual General Meeting & Scientific Meeting	6 Restorative Dentistry Specialists	3 May 2015	RM 2,100	Grand Prince Ballroom Prince Hotel & Residence
	2015 Annual Scientific Conference & AGM	8 Restorative Dentistry Specialists	15 November 2015	RM 2,800	Prince Hotel & Residence Kuala Lumpur
	RDITN *Peringkat Zon Selatan*	20 Restorative Dentistry Specialists	14-15 September 2015	RM 6,108	Bayu Lagoon Park Resort, Bukit katil Melaka

	RDITN *Peringkat Zon Tengah*	20 Restorative Dentistry Specialists	17-18 September 2015	RM 6,450	De Palma Hotel Shah Alam
	5th Scientific Conference & Annual General Meeting	14 Restorative Dentistry Specialists	19 September 2015	RM 3,400	KPJ Tawakal Specialist Hospital Kuala Lumpur
	RDITN Peringkat Zon Utara	14 Restorative Dentistry Specialists	21-22 September 2015	RM 6,480	TH Hotel& Convention Centre, Alor Setar Kedah
Forensic Dentistry	Forensic Odontology Disaster Preparedness Workshop 1/2015-Sabah & Labuan States	17 Forensic Dentistry Specialists & Dental Officers, 16 Auxiliaries	5 - 7 May 2015	RM 14,610	Tang Dynasty Hotel, KK
	Forensic Odontology Disaster Preparedness *(Zon Utara)** (Penang)	11 Specialists: Oral Surgery and Paediatric Dentistry	17-19 November 2015	RM20,040	Hotel Royal Penang
Special Needs Dentistry	Palliative Care Workshop on Pain & Symptom Management	5 Specialists SND	7-9 November 2015	RM 1,750	Auditorium HOSPIS Malaysia
	11th National Geriatric Conference	5 Specialists SND	6 - 8 August 2015	RM 3,000	Grand Season, Kuala Lumpur

Source: Oral Health Programme, MOH 2015

5.2 In-service Training Abroad

A total of RM 275,060 was spent in 2015 for training/attachments abroad involving nine dental professionals **(Table 23).**

Table 23: List of Overseas Courses/Attachment, 2015

No.	Course	Venue	Participant	Date
1.	Master Class in Orthognatic Surgery	Capetown, South Africa	1. Dr Ma Bee Chai 2. Dr Rosliza Parumo	2 – 8 December 2015
2.	Team Training In Management of Oncology Patient (Head and Neck Cancer) for Brachytherapy	Mumbai, India	3. Dr. Mohd Nury bin Yusoff	15 – 30 November 2015
3.	Custom Made Courses for Advanced Implant Training on Live Patients	Kerala, South India	4. Dr Eng Heng Ling	21 – 27 July 2015
4.	Economic Analysis and Evaluation of Health Care Services	Bangkok, Thailand	5. Dr Naziah bt Ahmad Azli 6. Dr Hasni bt Mat Zain	7 September – 2 October 2015
5.	NCI Summer Curriculum in Cancer Prevention	Rockville, Maryland, Amerika Syarikat	7. Dr Norlida bt Abdullah	5 July - 1 August 2015
6.	Team training in management of Molar Incisor Hypomineralisation (MIH) in Paediatric Patients (facility, equipment, residence training program and R&D)	Melbourne Dental School, University of Melbourne	8. Dr Jama'iah bt Hj Mohd Sharif 9. Dr Wan Mazidah bt Wan A. Rahman	12 – 31 May 2015

Source: Oral Health Programme, MOH 2015

5.3 'One-off' Courses

In 2015, there were twelve courses/training abroad attended by dental professionals in MOH of which RM 153,000 was spent (**Table 24).**

Table 24: List of 'One-off' Overseas Courses / Attachment, 2015

No.	Course	Venue	Date
1	World Congress 2015 - Dental Care and Oral Health for Healthy Longevity in Aging Society	Japan	13 - 15 Mac 2015
2	*Mesyuarat* '7th Asian Chief Dental Officer Meeting 2015' as 'Chief Dental Officer'	Singapore	01 - 03 April 2015
3	International Congress of Anthropological Science	Ankara, Turki	9 - 11 April 2015
4	37th Asia Pacific Dental Congress 2015	Singapore	03 - 05 April 2015
5	8th Conference of the European Federation of Periodontology (Euro Perio 8)	UK	3 - 6 June 2015
6	12th World Down Syndrome Congress	India	19 - 21 August 2015
7	25th Congress of the International Association of Paediatric Dentistry	United Kingdom	01 - 04 July 2015
8	22nd International Conference on Oral & Maxillofacial Surgery	Australia	27 - 30 October 2015
9	8th International Orthodontic Congress 2015	United Kingdom	27 - 30 September 2015
10	29th International Association For Dental Research (Southeast Asian Division) Annual Meeting	Indonesia	14-15 August 2015
11	2015 FDI Annual World Dental Congress Theme: "Dentistry in the 21st Century"	Thailand	22 – 25 September 2015
12	8th Asian Conference Oral Health Promotion For School Children (ACOHPSC)	Thailand	18-20 September 2015

Source: Oral Health Programme, MOH 2015

5.4 Continuing Professional Development (CPD)

The following CPD sessions were held in the Oral Health Programme (**Table 25).**

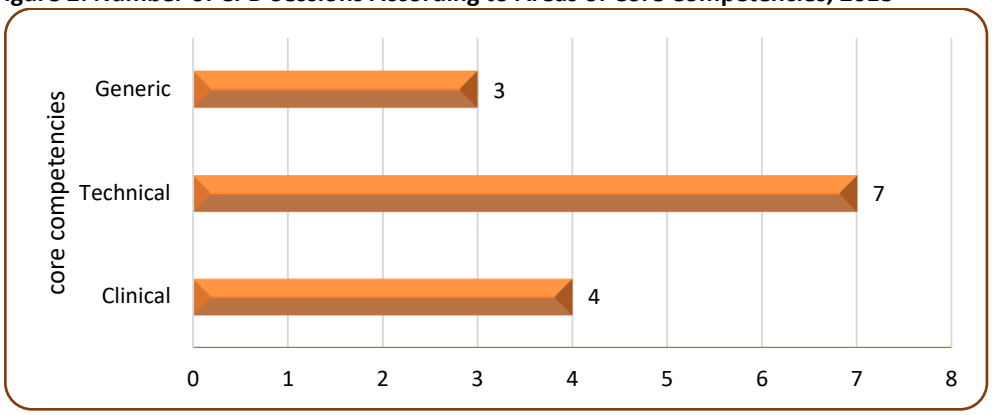
Table 25: List of CPD conducted in the Oral Health Programme, 2015

No.	CPD Course
1	*Taklimat ISO untuk Anggota Baru*
2	Clinical Key
3	*Penerapan Nilai-Nilai Murni - Ketenangan Mengatasi Tekanan*
4	Smart Preventive Restoration
5	*Hala Tuju Penjagaan Kesihatan Pergigian Primer*
6	Capsulated Dental Amalgam
7	Universal Coverage in Thailand
8	MaHTAS Roadshow Dental
9	*Isu-Isu Kewangan Berkaitan Pengendalian Latihan dan Mesyuarat*
10	*Ekosistem Kondusif Sektor Awam (EKSA) Bahagian Kesihatan Pergigian*
11	*Pelan Strategik KKM* 2011-2015
12	Hands-on *Penggunaan DDMS*
13	Consent
14	*Penulisan Teks Ucapan dan Kenyataan Akhbar*

Source: Oral Health Programme, MOH 2015

CPD sessions held comprised of three areas of the core competencies namely Clinical, Technical and Generic as in **Figure 2**.

Figure 2: Number of CPD Sessions According to Areas of Core Competencies, 2015



Source: Oral Health Programme, MOH 2015

5.5 MyCPD for Dental Technologists and Dental Nurses

In line with the *Pekeliling Ketua Pengarah Kesihatan Malaysia Bil (11) dlm KKM/87/SKB01/600-1/2/2 Jld.3,* three Dental Technologists and ten Dental Nurses (10) at the Oral Health Programme were registered with MyCPD online.

6. DEVELOPMENT OF THE DENTAL PROFESSION

6.1 The Extension of *Bayaran Insentif Pakar* (BIP) to Dental Public Health Specialists

Efforts and discussions with various stakeholders including the Secretary General, Human Resource Division, the Malaysian Armed Forces and Public Services Department (PSD) began in early 2014. This was subsequent to the approval of the *Jawatankuasa Khas Perubatan* (JKP) through a letter from the Director of Medical Development Division dated 21 October 2013 which authorized the gazettement of Dental Public Health Officers in the Ministry of Health as Dental Public Health Specialist (DPHS).

The authorization for the payment of BIP to DPHS was obtained from the PSD through the BIP Extension Letter dated 10 March 2015. BIP is received by all DPHS who had been gazetted as Specialists by the Director General of Health or *JKP* or a special committee established by the Government. This is a recognition of Dental Public Health as a specialty in dentistry similar to other fields of specialization.

ORAL HEALTH PROMOTION

Throughout the year 2015, the Oral Health Programme continues its effort in educating the public on the importance of oral health, by participating in various health campaigns, exhibitions, media slots and collaborative efforts.

Media slots

In 2015, 20 oral health topics was identified for radio/ TV slots but only 13 slots were successfully held **(Table 26).**

Table 26: Oral Health Topics for Radio/TV Slots, 2015

Media	Topic	Speaker
TV1	*Gigi Palsu dan Implan Pergigian*	Dr Rosrahimi bt Abd Rahim
Selamat Pagi Malaysia	*Hari Kesihatan Pergigian Sedunia 2015*	Datin Dr Nooral Zeila bt Junid
Stetoskop, Nasi Lemak Kopi O TV9	*Bahaya Pendakap Gigi Palsu*	Dr Rashidah bt Dato' Hj Burhanudin
Radio Nasional FM	*Rawatan dan Penjagaan Pergigian di Bulan Ramadan*	Dr Ahmad Sharifuddin bin Mohd Asari
Radio Asyik FM	*Tanam Gigi: Apa yang perlu saya tahu?*	Dr Sharifah Munirah bt Al Idrus
Radio Nasional FM	*Wajib Tahu: Kepentingan Susu Ibu dan Gigi Susu Kanak-Kanak*	Dr Burhanuddin bin Saripudin
Radio Asyik FM	*'Doktor Gigi' Jalanan*	Dr Haznita bt Zainal Abidin
Radio Nasional FM	*Pemutihan Gigi: Selamat atau Mudarat?*	Dr Ithnaniah bt Abdul Wahab
Radio Asyik FM	*Ubat & Penjagaan Gigi Selepas Cabutan*	Dr Sharol Lail bin Sujak
Radio Nasional FM	*Penjagaan Gigi Palsu*	Dr Ithnaniah bt Abdul Wahab
Radio Asyik FM	*Aduh! Sakitnya Bengkak Gusi*	Dr Rosrahimi bt Abd Rahim
Radio Asyik FM	*Rawatan Akar: Peluang Kedua Gigi Anda*	Dr Balkis bin Ghazali
Rancangan Feminin TV1	*Antara Gigi Palsu dan Implan Pergigian*	Dr Rosrahimi bt Abd Rahim

Health Campaigns and Exhibitions

Activities such as health campaigns and exhibitions were carried out in collaboration with other Divisions in the MOH. The major events were as follows:

- MDA Scientific Convention and Exhibition at Sunway Pyramid – 23 to 25 January 2015
- *Karnival Jom Heboh* at Kajang - 8 March 2015
- One Kiddie Mom and Baby Expo at PICC – 13 to 15 March 2015
- *Mini Jom Heboh* at Tangga Batu Melaka - 27 March 2015
- *Karnival Jom Heboh* at Stadium Hang Jebat, Melaka - 28 March 2015

- *Raudhah di Hatiku* at Amanjaya Mall, Kedah – 24 to 25 April 2015
- *Karnival Perpustakaan Negara* - 30 May 2015
- *Minggu Kesihatan dan Keselamatan Pekerjaan* at E1 Block, MOH – 2 to 4 September 2015
- *Raudhah di Hatiku* at RTC Kelantan – 4 to 5 September 2015
- *Karnival Jom Heboh* at Stadium Batu Kawan, Pulau Pinang - 2 October 2015
- *Karnival Jom Heboh* at Plaza Angsana, Johor Bharu – 30 to 31 October 2015
- *Program Sudut Rehat & Baca 'Rest n Read' Perpustakaan Negara* at Dataran Merdeka - 30 October to 1 November 2015
- *Karnival Jom Heboh* at Bukit Jalil, Selangor – 28 to 29 November 2015
- *Singgah Santai @ PNM* at Perpustakaan Negara Malaysia - 12 November 2015

Image 1: Jom Heboh with TV3, 8 Mac 2015, Kajang

Content development and production of new materials for oral health education and promotion

Pamphlets, posters and infographic roll-ups were developed, printed and distributed to the states. Some of the titles of printed materials were:

- Pamphlet on Bruxism
- Poster on BRUSH Concept- For Long Lasting Healthy Smile and Super Teeth
- Poster *Beruslah untuk Senyuman Berseri*
- Poster *Langkah Selepas Cabutan*
- Flipchart *Pengesanan Awal Kanser Mulut*

Human resource development in oral health promotion

- *Bengkel Teknik Bercerita Secara Kreatif* was held at Flamingo Hotel, Ampang Selangor on 24-26 October 2015
- *Bengkel Halatuju Promosi* was held at Best-Western Hotel, i-City, Shah Alam on 18-20 November 2015

ORAL HEALTH RESEARCH AND EPIDEMIOLOGY

As in previous years, research efforts were concentrated at National and Programme levels. In 2015, the continuation of several research projects initiated prior to 2015 were continued.

1. NATIONAL LEVEL RESEARCH PROJECTS AND INITIATIVES

1.1 National Health and Morbidity Survey (NHMS) 2015: Healthcare Demand Module

The NHMS is the country's platform for obtaining community-based data for healthcare policy decisions and is led by the Institute for Public Health, MOH (IPH).

The Oral Health Research and Epidemiology Section in the Programme undertook verification of analysis performed by the IPH in the months of June and August 2015. The statistical report for the oral healthcare component of the Health Care Demand Module, which included load of illness, health seeking behaviour and utilization of oral healthcare was completed in 2015.

1.2 NHMS 2014: Malaysian Nutrition Survey 2014 (MANS 2014)

This survey was initiated in 2013 by Institute for Public Health, MOH. The Oral Health Programme was involved in the sections on food consumption habits. In 2014, the Epidemiology and Oral Health Research Section served as the co-editor for the MANS Instrument. Training of data collectors was conducted by IPH with input from the Epidemiology and Oral Health Research Section.

Verification of data analysis output was carried out in September 2014, and the draft report on food consumption habits was completed and submitted to IPH in early 2015.

1.3 National Health Financing Mechanisms Studies

Data mining on oral health status, utilization and quality of life for Performance Analysis by the Harvard Consultancy Package in the Malaysia Health System Reform Research Project was carried out in early 2015. In addition, oral health-related data from MANS 2014 study and data on sugar consumption, oral health literacy and use of fluoride toothpaste, was also provided.

1.4 Collaborative Project 'An Evaluation of Diabetic Patients Referred to the Dental Clinic'

This study was initiated by the Oral Health Programme in 2010 in collaboration with Institute for Public Health, Institute for Health Systems Research, Disease Control Division and the Family Health Division in the MOH. Data collection for Phase I was completed in 2012 and preparation of two manuscript of phase I findings for journal publication was initiated in 2013. In 2014, one of the manuscript was completed and submitted for publication *(Publication: Sahril N, Aris T, Mohd Asari AS, Yaw SL, Omar MA, The CH, Abdul Muttalib K, Idzwan MF, Lan LL, Junid NZ, Ismail F, Ismail NA, Abu Talib N. Oral Health Seeking Behavior among Malaysians with Type II diabetes. J Public Health Aspects. 2014; 1:1).*

Preparation of a further manuscript of the Phase 1 Study *(Perception and trends in referral of diabetes patients for dental care among healthcare workers)* was carried out and was submitted for publication in 2015.

The data collection for phase II of the study was completed in June 2013. In 2014, data entry for Phase II survey and data analysis was undertaken by IPH. In 2015, verification of data analysis output was done.

1.5 National Oral Health Research Initiative (NOHRI)

The National Health Research Initiative (NOHRI) was established in 2010 to better manage the research agenda in oral healthcare. NOHRI membership comprises members of the dental fraternity from the Oral Health Programme, MOH Malaysia, Ministry of Defense, public and private local universities, Oral Cancer Research and Coordinating Centre, University Malaya (OCRCC) and the Malaysian Dental Association (MDA). In 2015, the NOHRI Steering Committee meeting was held on 06 October 2015.

Since the establishment of NOHRI, oral health research priorities for the 10MP (2011-2015) had been identified by NOHRI and uploaded on the Oral Health Programme MOH website. Online update of the database pertaining to abstracts submitted to NOHRI was done in January and November 2015.

2. PROGRAMME LEVEL RESEARCH PROJECTS

2.1 NHMS 2017: School-based Oral Health Survey

National oral health epidemiological surveys for schoolchildren had previously been conducted for 6-, 12- and 16-year schoolchildren in the country. In 2015, it was decided that the survey for schoolchildren would focus on 12-year-olds only due to the following reasons:

- 6-year-old schoolchildren are actually the age cohorts of 5-year-old preschool children in the National Oral Health Survey of Preschool Children, conducted two years preceding the national oral health epidemiological surveys for schoolchildren
- Oral health status data for 16-year-olds can be obtained from the national oral health surveys for adults in the country
- Country data for 12-year-olds are required for international comparisons as oral health status data of 12-year-olds are documented in the WHO oral health database.

Thus, in preparation of the national oral health epidemiological survey for schoolchildren in 2017, protocol development for the survey of 12-year-olds was initiated in November 2015.

2.2 National Oral Health Survey of Pre-school Children (NOHPS 2015)

NOHPS 2015 is the country's third national survey for preschool children and data collection was carried out in 2015, ten years after the second oral health survey of preschool children in 2005. In 2013, The National Steering Committee was established, with members from the Oral Health Programme, MOH and the academia from the public and private universities. Protocol development was initiated in 2013 and was finalized in April 2015. In preparation for data analysis, the Data Dictionary for NOHPS 2015 was completed in 2015.

Three sessions of standardization and calibration of examiners were conducted as follows:

- 5 – 8 May 2015 in Klang, Selangor (12 MOH examiners)
- 11 – 14 May 2015 in Melaka (11 MOH examiners and 1 examiner from International Medical University)

- 25 – 28 May 2015 in Seremban, Negeri Sembilan (11 MOH examiners and 1 examiner from International Medical University)

A total of eighteen (18) State Coordinators and thirty-three (33) Field Supervisors were involved in this survey and the training for these personnel was conducted on 14 – 15 January 2015 in the Oral Health Programme, MOH. The training focused on implementation aspects at state level.

Data-entry training for all NOHPS 2015 Examiners, State Coordinators and Field Supervisors was conducted on 8 – 10 April 2015 in Selangor state. Data collection was carried out in between July to October 2015. Monitoring of data collected and survey expenditures was done throughout the period of the survey. The feedback on survey expenditures from the states were compiled monthly and the financial report sent to the NIH at the end of every month. Data cleaning at national level began in December 2015 after the completion of data collection.

Two National Steering Committee Meetings were organized at the Oral Health Programme, MOH in 2015, with the first meeting on 20 January 2015 and the second meeting on 11 September 2015.

2.3 Costing of Dental Procedures in Sabah Dental Facilities

This study was initiated at the end of 2009 following the aforesaid multi-centre costing study done in Selangor. The objective was to estimate costs of dental procedures in public dental clinic in Sabah. Analysis for costing examination and diagnosis, scaling and prophylaxis and dental extraction procedure was completed in 2013. In 2015, the findings for macro-costing involving dental examination and diagnosis, scaling & prophylaxis and dental extraction procedures were presented at the 4th Asia Pacific Conference on Public Health on 7-9 Sept. 2015 at Kuantan, Pahang.

2.4 A Study on the Drinking Water Supplies, Dietary Habits and Oral Health Status of Adults in Kelantan

The above study was nested into NOHSA 2010 for Kelantan state. The first draft of the report was completed in 2013 with input from two officers from the Oral Health Division, Kelantan. The draft was finalized in December 2014 and printed in January 2015.

3. PUBLICATION OF COMPENDIUM OF ABSTRACTS

3.1 Publication of Compendium of Abstracts 2014

The Compendium of Abstracts 2014 is the 16th publication of the Compendium of Abstracts in the Oral Health Programme, MOH. It was completed in 2015 and distributed in 2016.

This compendium featured 70 abstracts which were received from oral health personnel in the Oral Health Programme, MOH at both national and state level. Of these, 60 were papers/posters presented at scientific meetings, 9 were publications in local and international journals.

3.2 Compilation for Compendium of Abstracts 2015

Compilation of abstracts for scientific presentations and publications in 2015 into the 'Compendium of Abstracts 2015' commenced in 2015. Efforts towards the completion of this document for publication will continue into 2016.

4. HUMAN RESOURCE DEVELOPMENT AND CAPACITY BUILDING

In 2015, two Dental Public Health Specialists (Dr Norliza bt Ismail and Dr Nurul Syakirin bt Abd Shukor) from the Oral Health Programme, MOH attended the 'Multivariate Data Analysis' course, held at USM, Penang organized by *Universiti Sains Malaysia* (USM), Kelantan on 18 – 19 August 2015.

5. OTHER ORAL HEALTH RESEARCH ACTIVITIES

Other oral health research activities conducted in 2015 were as follows:

- Preparation for the collaborative study "The effectiveness of dental health home visits on caries prevention in young children" with International Medical University and University of Malaya (IMU) continued in 2015, with one meeting held on 13 February another on 24 August 2015 at IMU.

- The collaborative study 'Dental Care Pathways for Geriatric Populations in ASEAN Countries: Clinicians' Knowledge, Perceptions and Barriers Faced' with the University Malaya, which started in 2014 continued into year 2015. A total of 5 discussion sessions were held to develop the survey instrument and the pre-test was conducted on 6 August 2015. Data collection involving the elderly institutions in Selangor, Johor and Sabah was conducted from October – November 2015.

- The Oral Health Research and Epidemiology Section in the Oral Health Programme is a permanent member of the *Mesyuarat Jawatankuasa Kelulusan Etika Perubatan, Fakulti Pergigian* Universiti Malaya (UM). This committee examines research proposals by the academia and both undergraduate and postgraduate students in UM to ensure the ethical conduct of research. In 2015, the permanent member from the Oral Health Programme MOH attended three ethics meeting at UM.

  In addition to these meetings, this permanent member also carried out desktop reviews for research proposals from UM which did not require the *Mesyuarat Jawatankuasa Kelulusan Etika Perubatan, Fakulti Pergigian* Universiti Malaya (UM) to meet.

- In 2015, oral health research submissions from oral health personnel at state level seeking approval from the Director General of Health for oral/poster presentation and publication were reviewed and duly submitted.

- Review of oral health personnel's manuscripts for publication which were sent directly by oral health personnel at state level to the NIH, was also carried out as per request by the National Institute of Health, MOH to the Oral Health Programme in the MOH.

6. HEALTH SYSTEMS RESEARCH (HSR) FOR ORAL HEALTH

Monitoring of health systems research projects conducted by the states began in 1999 and continued through the years since then. There were 1,136 topics identified by the states and institution over that period. Of the identified projects, 737 (64.9%) were successfully completed **(Table 27).**

Table 27: Status of Health Systems Research Projects by State/Institution, 1999 – 2015

State/Institution	Proposed	Completed		Cancelled		In progress	
	N	n	(%)	n	(%)	n	(%)
Perlis	26	15	57.7	5	19.2	6	23.1
Kedah	102	70	68.6	15	14.7	17	16.7
P. Pinang	47	28	59.6	13	27.7	6	12.8
Perak	77	48	62.3	21	27.3	8	10.4
Selangor	72	22	30.6	31	43.1	19	26.4
FT KL & Putrajaya	49	33	67.3	13	26.5	3	6.1
N. Sembilan	56	32	57.1	20	35.7	4	7.1
Melaka	73	38	52.1	24	32.9	11	15.1
Johor	141	136	96.5	4	2.8	1	0.7
Pahang	87	44	50.6	31	35.6	12	13.8
Kelantan	64	39	60.9	16	25.0	9	14.1
Terengganu	64	45	70.3	12	18.8	7	10.9
Sabah	77	55	71.4	16	20.8	6	7.8
Sarawak	95	55	57.9	27	28.4	13	13.7
FT Labuan	0	0	0	0	0	0	0
HKL (Paediatric)	45	41	91.1	1	2.2	3	6.7
HKL (Oral Surgery)	31	24	77.4	1	3.2	6	19.4
PPKK and KLPM	30	12	40.0	11	36.7	7	23.3
ALL	**1,136**	**737**	**64.9**	**261**	**23.0**	**138**	**12.1**

Source: Oral Health Programme, MOH 2015

The majority of the states/institutions had completed at least 50% of their proposed research projects (**Table 27).** As of 2015, 138 (12.1%) projects were on-going and 261 (23.0%) had been cancelled. Selangor reported a substantial proportion of projects cancelled with 31 out of 72 (43.1%) projects cancelled**.**

A substantial number of projects cancelled and delayed were partly due to staff transfers, competing roles and priorities and resignation of the project's Principal Investigator. Uncompleted projects will continue in 2016.

In an effort to ensure that research results are accessible and used by those who need them most, the dissemination of research projects continued to be adopted by the states/Institutions. Towards this endeavor, state research teams have either published or presented the completed research project findings at accredited meetings or conferences held locally and internationally.

Of the 737 completed projects, more than two thirds have been presented (508, 68.9%) and slightly more than half have been published (371, 50.3%) **(Table 28)**.

Table 28: Presentation and Publication of Health Systems Research Projects by State/Institution, 1999–2015

State/Institution	Proposed	Completed		Presentation		Publication	
	N	n	(%)	n	(%)	n	(%)
Perlis	26	15	57.7	11	73.3	4	26.7
Kedah	102	70	68.6	28	40.0	35	50.0
P. Pinang	47	28	59.6	18	64.3	20	71.4
Perak	77	48	62.3	29	60.4	32	66.7
Selangor	72	22	30.6	5	22.7	2	9.1
FT KL & Putrajaya	49	33	67.3	22	66.7	13	39.4
N. Sembilan	56	32	57.1	27	84.4	27	84.4
Melaka	73	38	52.1	29	76.3	12	31.6
Johor	141	136	96.5	122	89.7	84	61.8
Pahang	87	44	50.6	34	77.3	24	54.5
Kelantan	64	39	60.9	25	64.1	20	51.3
Terengganu	64	45	70.3	40	88.9	43	95.6
Sabah	77	55	71.4	31	56.4	13	23.6
Sarawak	95	55	57.9	34	61.8	6	10.9
FT Labuan	0	0	0	0	0	0	0
HKL (Oral Surgery)	31	24	77.4	10	41.7	16	66.7
HKL (Paediatric)	45	41	91.1	39	95.1	14	34.1
PPKK and KLPM	30	12	40.0	4	33.3	6	50.0
ALL	**1,136**	**737**	**64.9**	**508**	**68.9**	**371**	**50.3**

Source: Oral Health Programme, MOH 2015

The National HSR Advisory Committee Meeting was held on 23 April 2015 at the Oral Health Programme MOH to select suitable State HSR projects to be conducted at State level for year 2015. Prior to the meeting, a total of forty-nine HSR proposals from the states were collated in the first quarter of 2015 for this meeting.

ORAL HEALTH TECHNOLOGY

1. CLINICAL PRACTICE GUIDELINES (CPG)

The Oral Health Technology Section is the secretariat for the development of dental CPGs in the management of various oral conditions/diseases and works in collaboration with the Malaysian Health Technology Section (MaHTAS), MOH, Malaysia. In 2015, the status of CPGs are as in **Table 29.**

Table 29: Status of Clinical Practice Guidelines 2015

Bil	Title of CPG	Publication (Year)	Edition	Status
1.	Management of Ameloblastoma	2015	1st edition	* Current
2.	Management of Anterior Crossbite in Mixed Dentition	2013	2nd edition	* Current
3.	Orthodontic Management of Developmentally Missing Incisors	2012	1st edition	* Current
4.	Management of Chronic Periodontitis	2012	2nd edition	* Current
5.	Management of Severe Early Childhood Caries	2012	1st edition	* Current
6.	Management of Unerupted Maxillary Incisors	2006	2nd edition	Printing
7.	Management of Palatally Ectopic Canine	2004	2nd edition	Printing
8.	Antibiotic Prophylaxis in Oral Surgery for Prevention of Surgical Site Infection	2003	2nd edition	Printing
9.	Management of Unilateral Condylar Fracture of the Mandible	2005	Review	In Progress
10.	Management of Periodontal Abscess	2003	Review	In Progress
11.	Management of Acute Orofacial Infection of Odontogenic Origin in Children	-	New topic	In Progress
12.	Management of Unerupted and Impacted Third Molar	2005	1st edition	Due for Review
13.	Management of Avulsed Permanent Anterior Teeth in Children	2010	2nd edition	Due for Review

** Current: Less than 5 years as of Dec 2015*

Image 2: The Development Group of CPG Management of Acute Orofacial Infection of Odontogenic Origin in Children

2. LITERATURE SEARCH

Literature searches were conducted to assist CPG development groups as well as scanning for information on dental products in the market continues.

3. APPROVED PURCHASE PRICE LIST (APPL)

The APPL activities in 2015 included attending meetings coordinated by the Procurement and Privatisation Division, MOH to discuss matters related to the supply of items to MOH by Pharmaniaga Logistics Sdn. Bhd. APPL issues include delivery time, penalty on late delivery, product shelf life and complaints regarding products.

The APPL log of complaints was updated in 2015. As of December 2015 there were 9 complaints made on various dental products under APPL. Pharmaniaga Logistics Sdn. Bhd. took the responsibility of communicating with product suppliers to improve the quality of products and/or other shortfalls. Follow-ups with the complainants and corrective actions were noted.

4. MEDICAL DEVICE

Officers of this Section attended various activities conducted by the Medical Device Authority. In 2015, an officer was appointed in the *Jawatankuasa Kerja Pembangunan Polisi/Garis Panduan – Kompetensi Pengguna Peranti Perubatan* to develop policies and guidelines to control user's competency in relation to medical devices.

5. MINAMATA CONVENTION ON MERCURY

Officers of this Section attended several meetings and discussions coordinated by the Disease Control Division, MOH Malaysia in 2015. The Division provided input for the draft "Minamata Convention on Mercury". Dental amalgam comes under the mercury-added products and provisions are for measures to phase down, not phase out, dental amalgam, taking into account domestic circumstances and relevant international guidance. Other related activities continue into 2015.

6. INQUIRIES

The Oral Health Technology Section also handles inquiries from various agencies. In 2015, the inquiries were:

6.1 Amalgam fillings

The Section provided information in relation to mercury contamination and the use of dental amalgam in dental practice.

6.2 Wisdom teeth removal

The section responded to an unfounded claim that wisdom teeth removal may cause heart problem and cancer. There is no scientific evidence to support the statement.

6.3 Root Canal Treatment

The Section also responded to another ungrounded claims that Root Canal Treatment is unsafe and can cause many systemic diseases. Findings from studies showed that Root Canal Treatment is safe and has been shown to be a practicable procedure with a high degree of success.

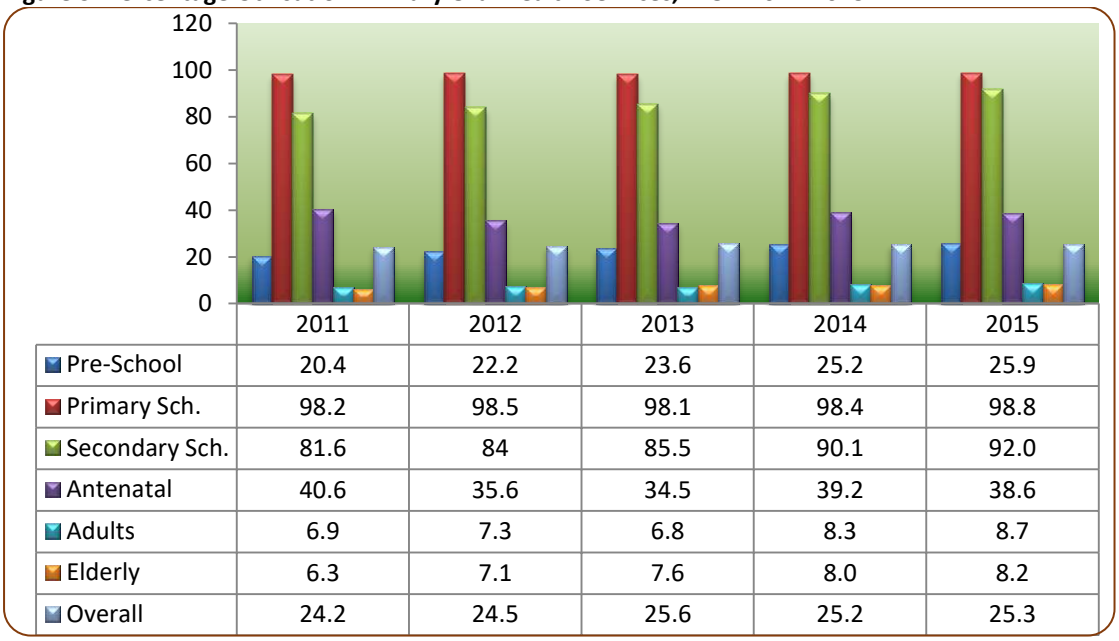
ORAL HEALTHCARE

Primary Oral Healthcare
Specialist Oral Healthcare
Community Oral Healthcare
Quality Improvement Initiatives
Oral Health Information & Communication Technology

PRIMARY ORAL HEALTHCARE

The provision of oral healthcare to the population has been, and continues to be given priority by the target groups; toddlers (0 - 4 years), pre-school children (5 - 6 years), schoolchildren (7 - 17 years), children with special needs, antenatal mothers, adults and the elderly. Overall, there has been a slight increase in the utilisation of MOH primary oral healthcare from 25.2 % in 2014 to 25.3% in 2015 **(Table 30 and Figure 3)**.

Figure 3: Percentage Utilisation Primary Oral Health Services, MOH 2011-2015



	2011	2012	2013	2014	2015
Pre-School	20.4	22.2	23.6	25.2	25.9
Primary Sch.	98.2	98.5	98.1	98.4	98.8
Secondary Sch.	81.6	84	85.5	90.1	92.0
Antenatal	40.6	35.6	34.5	39.2	38.6
Adults	6.9	7.3	6.8	8.3	8.7
Elderly	6.3	7.1	7.6	8.0	8.2
Overall	24.2	24.5	25.6	25.2	25.3

Source: Health Informatics Centre, MOH 2015

Although percentage utilisation does not change, the actual numbers in each target group have increased over the years **(Table 30)**. In 2015, 61% among those who utilised MOH oral healthcare were the primary and secondary schoolchildren. Since the introduction of NBOS activities and increasing government focus on adults and also number of dental graduates joining the MOH contributing to more outreach services for adults, there has been a gradual shift towards more oral healthcare for adults.

Table 30: Utilisation of Primary Oral Healthcare by Category of Patients, 2011-2015

Year	Pre-School	Primary School	Secondary School	Antenatal	Adults	Elderly	Special Children	Overall
2011	717,525	2,811,680	1,842,661	185,363	1,181,989	146,311	40,745	6,926,274
2012	778,674	2,762,362	1,886,058	199,493	1,357,237	173,580	44,018	7,201,422
2013	829,710	2800209	1,940,643	204,351	1,379,228	192,429	46,673	7,393,243
2014	893,544	2,795,879	1,929,388	225,389	1,499,105	211,992	50,571	7,605,868
2015	924,920	2,757,792	1,934,031	221,444	1,588,623	226,039	54,686	7,707,535

Source: Health Informatics Centre, MOH 2015

1. EARLY CHILDHOOD ORAL HEALTHCARE FOR TODDLERS

Cursory examination of the oral cavity for toddlers - 'lift-the-lip' - is done in health facilities such as at Child Care Centres or Maternal and Child Health Clinics. Clinical preventive measures such as fluoride varnish are instituted where required.

Under the *PERMATA Negara* programme, 1061 (82.8%) of the 1282 *Taska Permata* were visited in 2015, and 17.1% of toddlers examined.

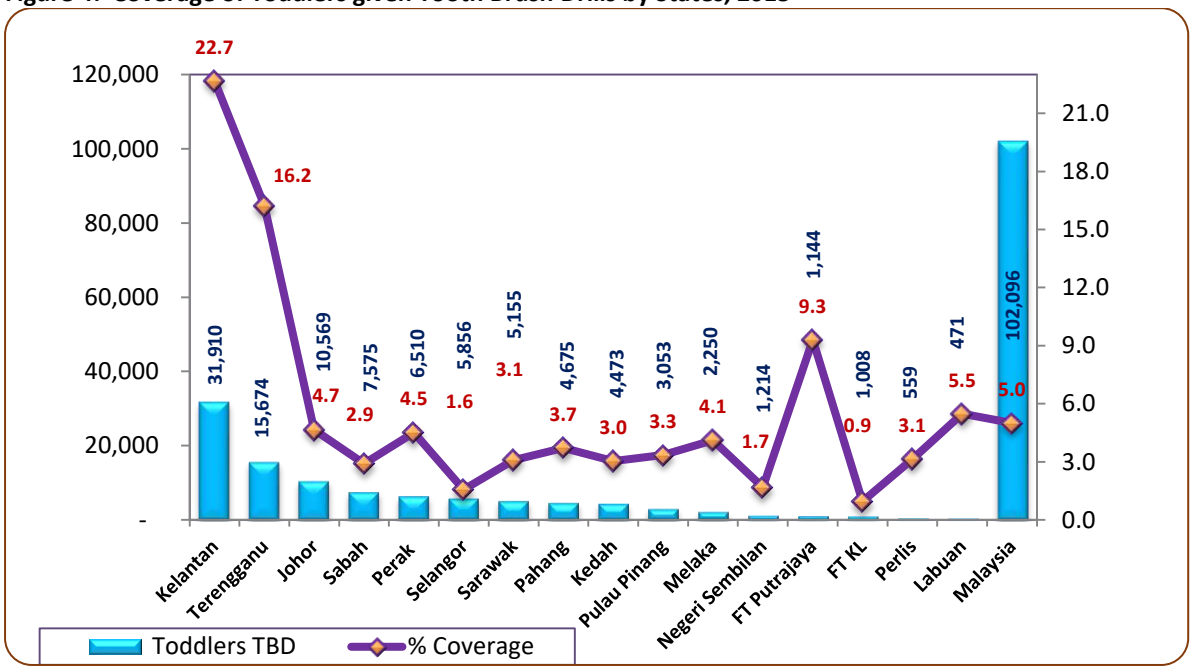
Table 31: *Taska Permata* and Toddlers Covered, 2011-2015

Year	Total Taska Permata	No. of Taska Permata Covered	% Taska Covered	Total No. of Toddlers	No. of Toddlers Covered	% Toddlers Covered
2011	66	59	59.4	1,998,300	5,497	0.3
2012	381	340	89.2	1,996,700	6,101	0.3
2013	812	360	44.3	2,006,700	7,021	0.4
2014	936	732	78.2	2,019,300	329,356	16.3
2015	1282	1061	82.7	2,047,400	349,193	17.1

Source: Appendix 31 Annual Report, HIMS (2011 - 2015), OH Data 2011-2015

In 2015, an overall 5.0% (102,096) of the toddler population were given tooth brush drills with the state of Kelantan recording the highest coverage for tooth brush drills at 22.7% (**Figure 4**).

Figure 4: Coverage of Toddlers given Tooth Brush Drills by States, 2015



Source: Health Informatics Centre, MOH 2015

2. ORAL HEALTHCARE FOR PRESCHOOL CHILDREN

In 2015, there were a total of 20,930 kindergartens or preschool institutions in Malaysia – 16,615 Government and 4,315 Private. Coverage of kindergartens nationwide from 2011 to 2015 is as tabulated in **Table 32.**

Table 32: Kindergartens Covered, 2011-2015

Year	Total Kindergartens	Government Kindergartens	Private Kindergartens	% Government Kindergartens Coverage	% Private Kindergartens coverage
2011	18,977	14,927	4,050	99.1	87.6
2012	19,840	15,717	4,123	97.0	90.4
2013	19,190	15,220	3,970	95.5	95.8
2014	20,473	16,232	4,241	95.5	95.3
2015	20,930	16,615	4,315	96.0	95.9

Source: Annual Report HIMS (2011 – 2015)

In 2015, a total of 924,920 pre-school children (0 – 6 years of age) were given primary oral healthcare compared to 893,544 in 2014 **(Table 33) -** a 0.7 % increase in coverage compared to the previous year.

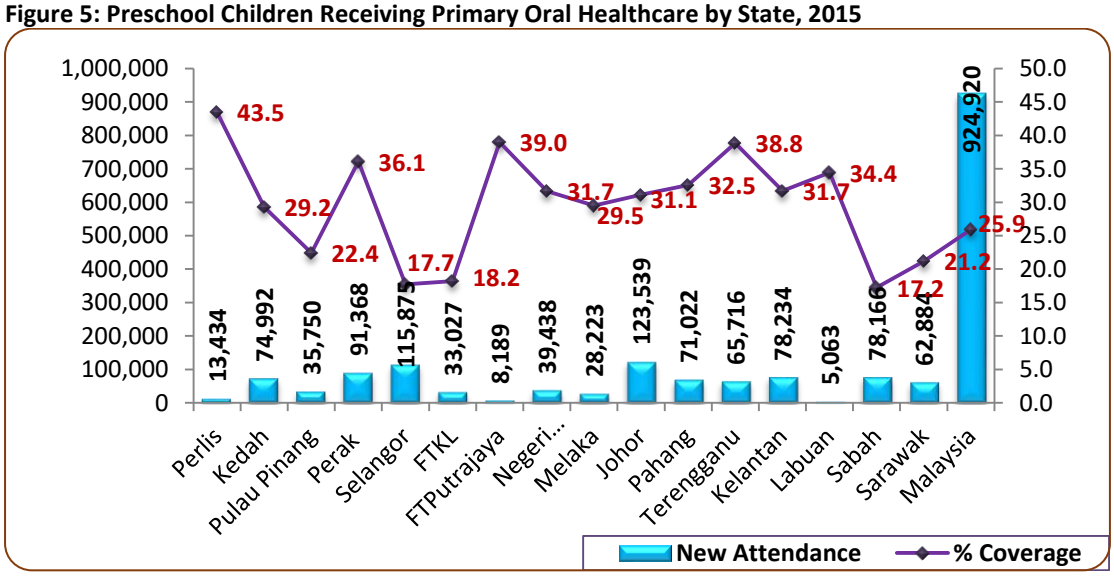
Table 33: Coverage of preschool children, 2011-2015

Year	Estimated Preschool Pop (0-6 years of age)	No. of Preschool Children Covered (0-6 years of age)	% Coverage
2011	3,525,500	717,525	20.4
2012	3,515,900	778,674	22.1
2013	3,522,500	829,710	23.6
2014	3,543,000	893,544	25.2
2015	3,573,400	924,920	25.9

Source: Health Informatics Centre, MOH (2011-2015)

The states of Perlis, FT Putrajaya and Terengganu **(Figure 5)** recorded the highest coverage of pre-school children (0-6 years of age) receiving primary oral healthcare.

Figure 5: Preschool Children Receiving Primary Oral Healthcare by State, 2015



Source: Health Informatics Centre, MOH (2011-2015)

3. ORAL HEALTHCARE FOR SCHOOLCHILDREN

The 7-surface Gingival Index for Schoolchildren (GIS) was approved for use at the *Mesyuarat Jawatankuasa Dasar dan Perancangan Kesihatan Pergigian Bil*. 1/2013 on 4 February 2013 and implemented nationwide beginning 1st January 2014.

However, due to the large differences in scoring between states, the results are put on hold, while a review is undertaken to check for understanding and application of the Index by examiners.

• Primary schoolchildren

Dental nurses and supporting teams are entrusted with the oral healthcare for primary schoolchildren under the Incremental Dental Care Programme. While the coverage of primary schools showed an improving trend from 2011 to 2015, the achievement plateaued in 2013 and subsequently increased to 96.1% in 2014 and decrease slightly to 96.0% in 2015 **(Table 34).**

Table 34: Coverage of Primary Schools, 2011-2015

Year	Total No. of Primary Schools	No. of Primary Schools Covered	% Coverage of Primary Schools
2011	7782	7442	95.6
2012	7792	7469	95.9
2013	7807	7485	95.9
2014	7816	7472	96.1
2015	7828	7511	96.0

Source: Health Informatics Centre, MOH (2011-2015)

Majority of the states have achieved above 98% coverage of primary schools in 2015 with the exception of Melaka 94.8%, Sabah (88.2%) and Sarawak (88.0%) **(Table 35)**.

Table 35: Coverage of Primary Schools by State, 2011 – 2015

State	Percent Coverage of Primary Schools				
	2011	2012	2013	2014	2015
Perlis	100.0	100.0	100.0	100.0	100.0
Kedah	100.0	99.1	100.0	100.0	100.0
Pulau Pinang	100.0	99.6	100.0	100.0	100.0
Perak	97.8	99.4	99.7	99.2	99.4
Selangor	99.5	99.8	99.7	98.8	99.5
FTKL	100.0	100.0	100.0	100.0	100.0
FT Putrajaya	100.0	100.0	100.0	100.0	100.0
N. Sembilan	100.0	100.0	100.0	100.0	100.0
Melaka	100.0	100.0	100.0	100.0	94.8
Johor	100.0	100.0	100.0	100.0	100.0
Pahang	100.0	99.6	100.0	100.0	100.0
Terengganu	99.7	99.7	100.0	99.5	99.5
Kelantan	96.3	98.8	99.5	98.8	98.1
FT Labuan	100.0	100.0	100.0	100.0	100.0
Sabah	84.0	83.5	82.4	79.6	88.2
Sarawak	89.7	90.0	89.9	91.7	88.0
MALAYSIA	95.6	95.9	95.9	95.6	96.1

Source: Health Informatics Centre, MOH (2011-2015)

In terms of primary schoolchildren, the overall coverage has exceeded 95% over the past 5 years, with 98.8% of primary schoolchildren examined in 2015 **(Table 36).**

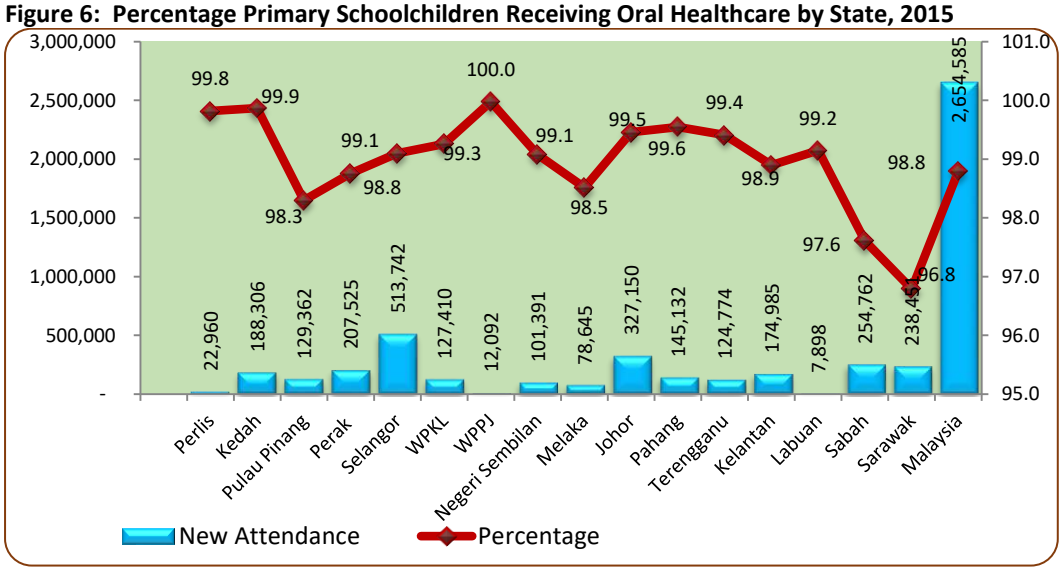
Table 36: Coverage of Primary Schoolchildren, 2011-2015

Year	Total Pop of Primary Schoolchildren	No of Primary Schoolchildren Covered	% Coverage
2011	2,864,264	2,811,680	98.2
2012	2,805,153	2,762,362	98.5
2013	2,746,364	2,694,533	98.1
2014	2,707,876	2,664,738	98.4
2015	2,686,750	2,654,585	98.8

Source: Health Informatics Centre, MOH (2011-2015)

All states achieved 98.0% and more on coverage of primary schoolchildren except for Sabah (97.6%) and Sarawak (96.8%) **(Figure 6)**.

Figure 6: Percentage Primary Schoolchildren Receiving Oral Healthcare by State, 2015



Source: Health Informatics Centre, MOH 2015

Over the years, the percentage of 'rendered orally-fit' (Case Completion), 'No Treatment Required' (NTR) and 'Maintained Caries-free' have increased except for year 2014 which registered a decreased in NTR cases. However in 2015, there is an increase in NTR whilst a slight decrease in rendered orally-fit **(Table 37).**

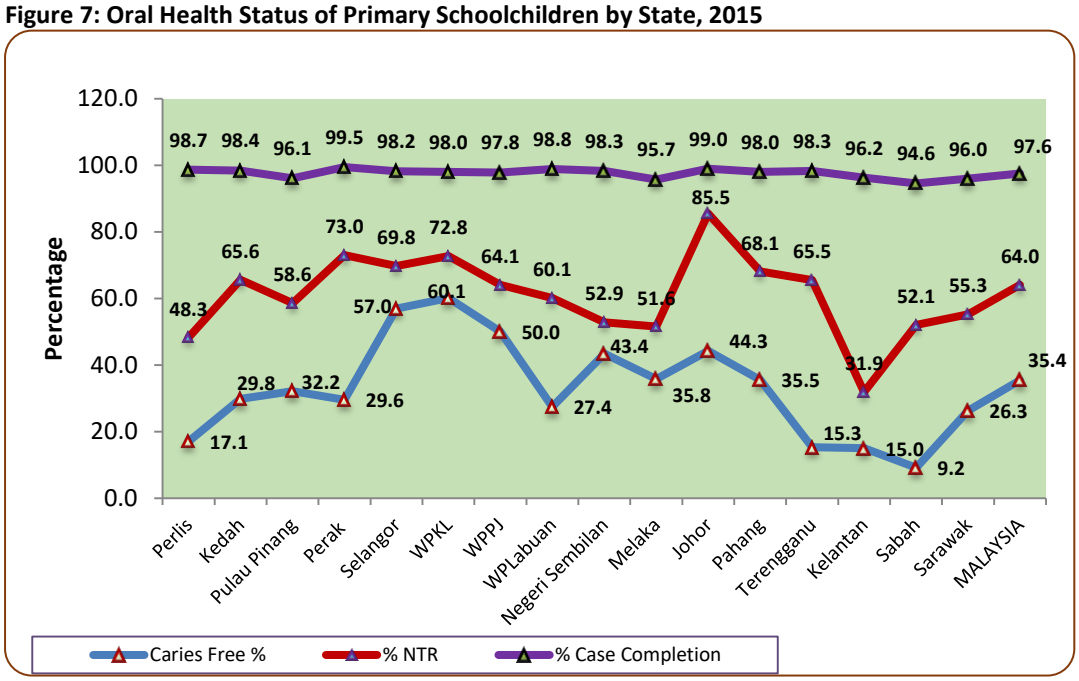
Table 37: Percentage Primary Schoolchildren Orally-Fit, NTR and Caries-free, 2011-2015

Year	No of Primary Schoolchildren Covered	% Case Completion	% No Treatment Required (NTR)	% Maintained Caries-free
2011	2,811,680	97.3	66.3	33.4
2012	2,762,362	97.4	67.1	33.9
2013	2,694,533	97.5	67.4	33.9
2014	2,664,738	97.7	61.5	34.4
2015	2,654,585	97.6	64.0	35.4

Source: Health Informatics Centre, MOH (2011-2015)

In 2015, 97.6% of primary schoolchildren covered were rendered orally-fit (case completion) **(Figure 7)**. All states achieved more than 95% 'Case Completion' except for Sabah (94.6%). Johor achieved the highest percentage of 'NTR' (85.5%) followed by Perak (73.0%). The percentage for 'Caries-free' was 50% and more was noted for FT KL (60.1%) and Selangor (57.0%).

Figure 7: Oral Health Status of Primary Schoolchildren by State, 2015



Source: Health Informatics Centre, MOH 2015

• Secondary Schoolchildren

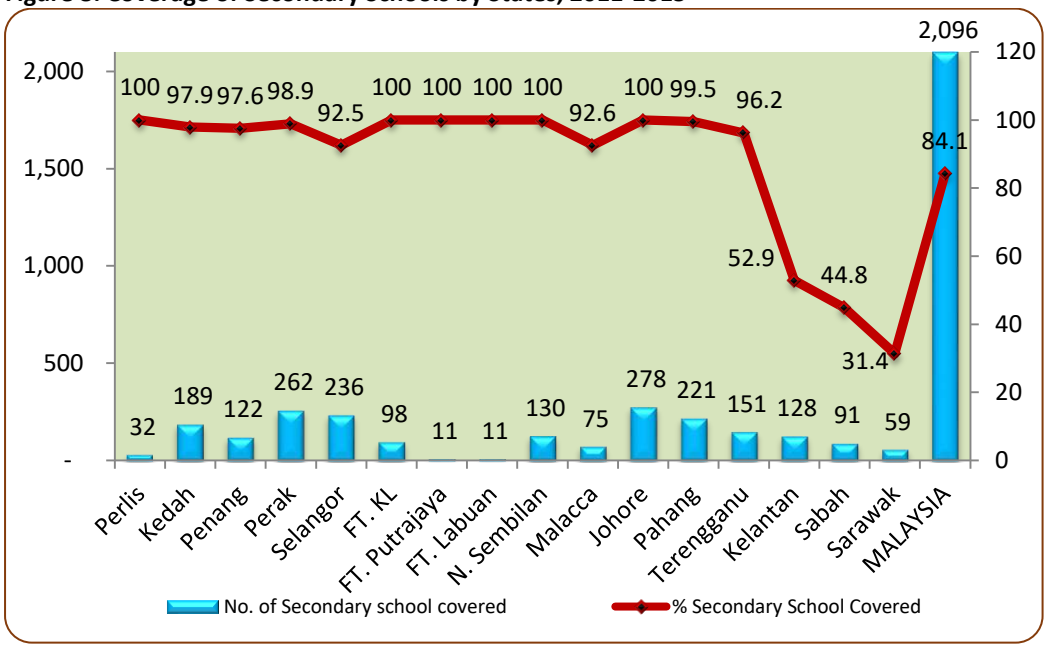
With the move for dental officers to provide daily outpatient services in the dental clinics, dental nurses now shoulder more responsibilities for the secondary school dental service. The coverage of secondary schools showed an increase over the years with 84.1% of the secondary schools covered in 2015 **(Table 38)**.

Table 38: Coverage of Secondary Schools, 2011-2015

Year	Total No. of Secondary Schools	No. of Secondary Schools Covered	% Coverage of Secondary Schools
2011	2406	1800	74.8
2012	2438	1898	77.9
2013	2470	1982	80.2
2014	2477	2019	81.5
2015	2508	2096	84.1

Source: Health Informatics Centre, MOH (2011-2015)

Figure 8: Coverage of Secondary Schools by States, 2011-2015



Source: Health Informatics Centre, MOH 2015

Majority of states achieved above 92% secondary school coverage in 2015 except for Kelantan (52.9%), Sabah(44.8%) and Sarawak(31.4%) **(Figure 8)**. It is also noted, the state of Melaka has recorded a reduction of coverage of secondary school as compared to the year 2014 **(Table 39).**

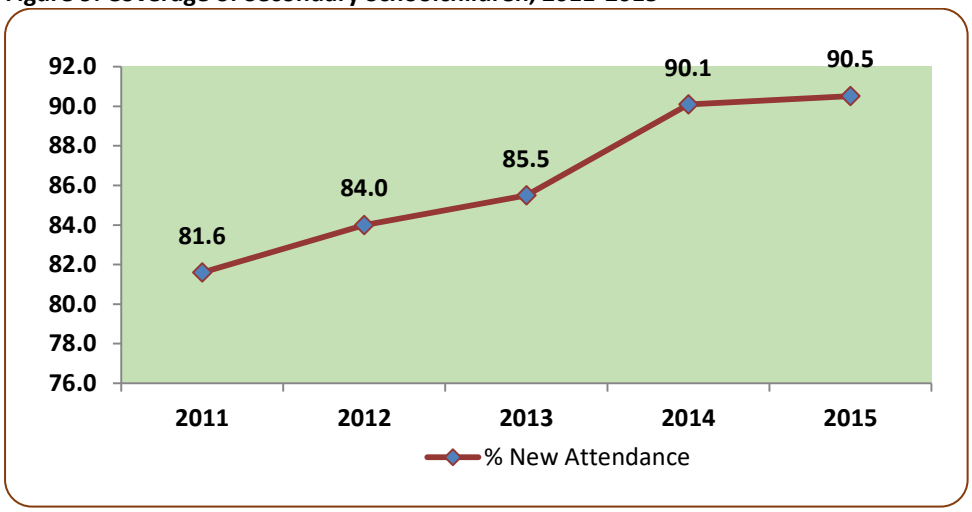
Table 39: Percentage Secondary School Coverage under Incremental Dental Care by State, 2011-2015

State	Percent Secondary Schools Covered				
	2011	**2012**	**2013**	**2014**	**2015**
Perlis	100.0	100.0	100.0.	100.0	100.0
Kedah	82.5	92.0	93.6	94.7	97.9
Pulau Pinang	95.1	97.6	99.2	99.2	97.6
Perak	96.9	99.2	99.6	97.3	98.9
Selangor	75.4	82.8	83.3	79.6	92.5
FTKL	100.0	100.0	100.0	100.0	100.0
FT Putrajaya	100.0	100.0	100.0	100.0	100.0
N.Sembilan	100.0	100.0	100.0	100.0	100.0
Melaka	100.0	100.0	100.0	100.0	92.6
Johor	100.0	100.0	100.0	100.0	100.0
Pahang	100.0	100.0.	1000	97.7	99.5
Terengganu	68.1	75.5	87.2	96.0	96.2
Kelantan	38.3	42.8	49.8	50.8	52.9
FT Labuan	100.0	100.0	100.0.	100.0	100.0
Sabah	27.0	31.0	29.2	35.9	44.8
Sarawak	16.7	15.4	24.7	29.3	31.4
MALAYSIA	**74.8**	**77.9**	**80.2**	**81.5**	**84.1**

Source: Health Informatics Centre, MOH (2011-2015)

Overall there was an improvement of the coverage of secondary school children from 2011-2015 **(Figure 9).**

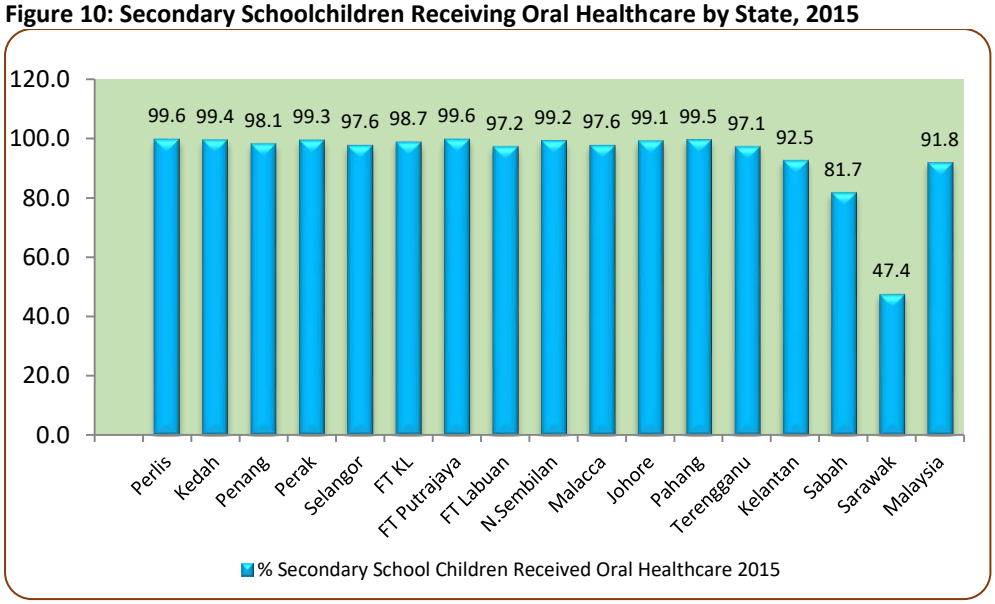
Figure 9: Coverage of Secondary Schoolchildren, 2011-2015



Source: Health Informatics Centre, MOH 2015

Two states – Sabah and Sarawak - recorded the coverage of secondary schoolchildren below the target of 85.0% **(Figure 10).**

Figure 10: Secondary Schoolchildren Receiving Oral Healthcare by State, 2015



Source: Health Informatics Centre, MOH 2015

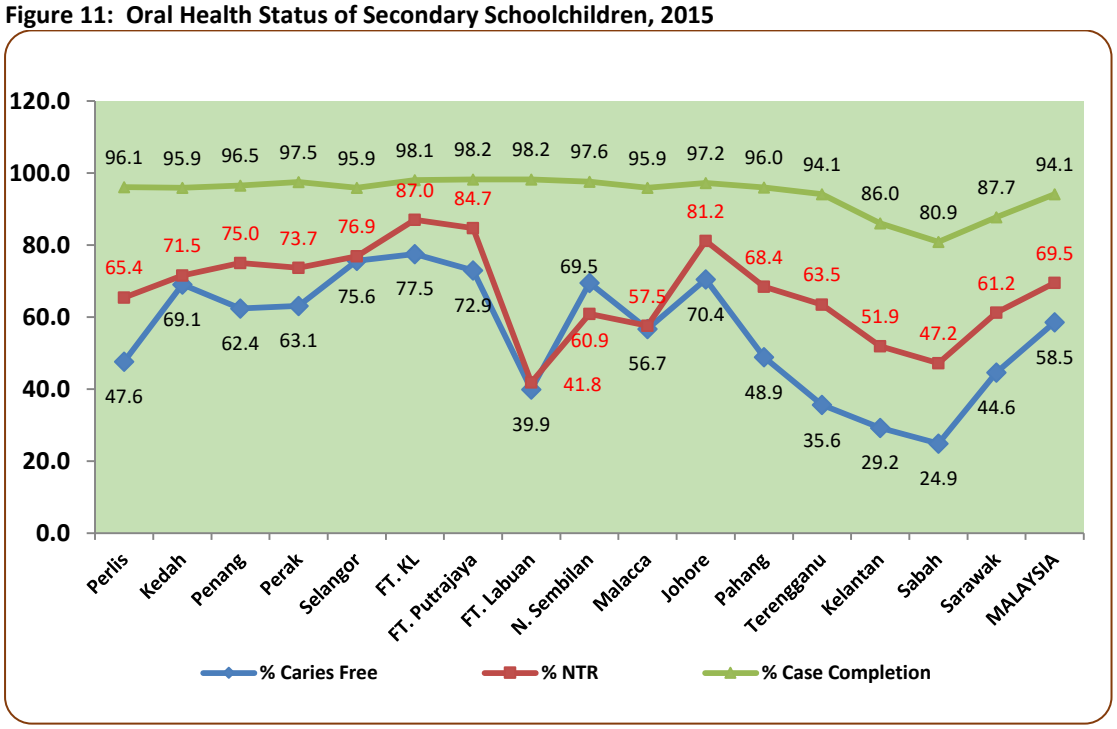
Table 40: Percentage of Secondary Schoolchildren Orally-Fit, NTR and Caries-free, 2011-2015

Year	No of Secondary Schoolchildren Covered	% Case Completion	% No Treatment Required (NTR)	% Maintained Caries-free
2011	1,886,058	93.3	77.8	57.5
2012	1,842,661	93.4	77.3	57.0
2013	1,805,591	92.8	77.1	56.2
2014	1,929,388	93.1	66.8	57.5
2015	1,802,582	94.1	68.2	56.0

Source: Health Informatics Centre, MOH (2011-2015)

In 2015, 94.1% of secondary schoolchildren covered were rendered orally-fit -'Case Completion' **(Figure 11)** while 58.5% were 'caries-free' and 69.5% 'did not require any treatment'. The state of Sabah recorded below 85.0% of 'case completion' among secondary schoolchildren.

Figure 11: Oral Health Status of Secondary Schoolchildren, 2015

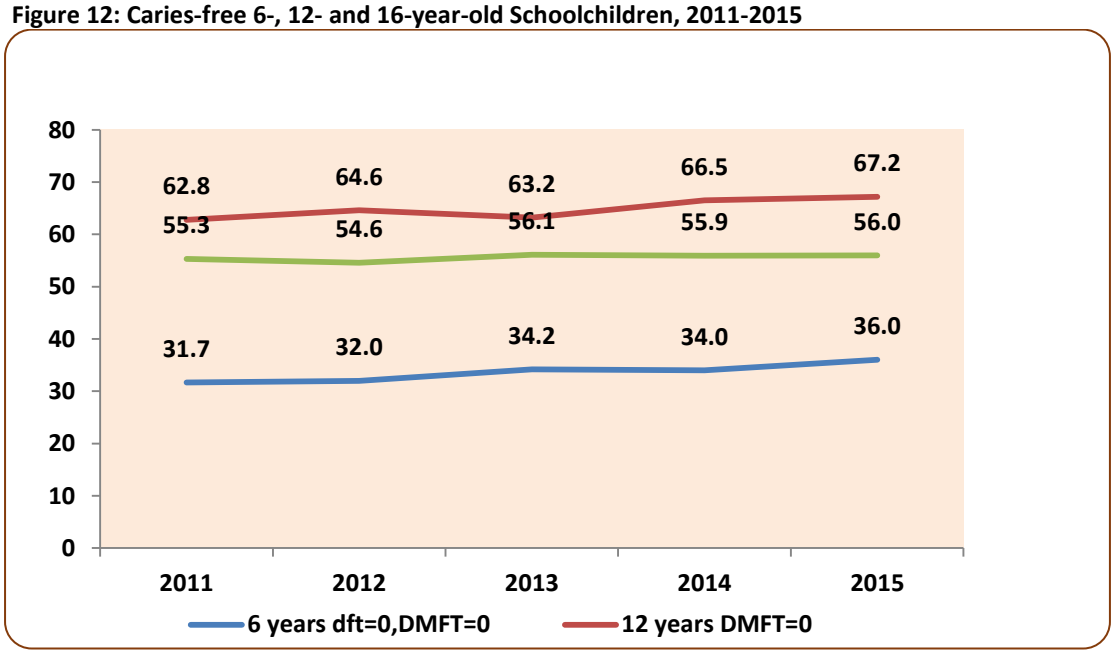


Source: Health Informatics Centre, MOH 2015

- **Impact Indicators - Caries-free 6, 12 and 16 year-old Schoolchildren**

Generally, the percentage of 'caries-free' children among 6, 12 and 16 year-olds showed an increase over 2011-2015 **(Figure 12)**.

Figure 12: Caries-free 6-, 12- and 16-year-old Schoolchildren, 2011-2015



Source: Health Informatics Centre, MOH 2011-2015

In 2015, FT Kuala Lumpur showed the highest percentage of 'Caries-free' 16-year-olds (74.8%) while Sabah (21.0%) reported the lowest **(Table 41)** whilst the states of Pulau Pinang, Selangor, FT Putrajaya, Terengganu, Kelantan and FT Labuan recorded a drop in 'Caries-free' of 16-year-olds from year 2014.

Table 41: Percentage of Caries-Free for 16-year olds by State, 2011 – 2015

State	2011	2012	2013	2014	2015
Perlis	56.2	58.1	56.8	54.6	56.9
Kedah	64.5	64.3	65.5	66.3	66.4
Pulau Pinang	56.3	55.3	56.8	59.3	58.6
Perak	56.6	56.3	59.2	59.9	60.8
Selangor	69.4	70.4	72.3	73.3	72.6
FT Kuala Lumpur	71.6	71.5	73.4	74.8	74.8
FT Putrajaya	65.1	71.8	67.7	72.8	68.2
N Sembilan	64.2	63.1	66.6	66.0	69.4
Melaka	53.7	52.0	53.3	52.4	53.7
Johor	63.0	62.7	64.8	66.6	67.9
Pahang	45.7	45.2	46.0	46.6	46.5
Terengganu	39.0	37.0	38.0	33.9	32.5
Kelantan	29.3	26.0	27.5	25.7	25.4
FT Labuan	35.5	34.1	35.7	36.3	34.5
Sabah	17.1	18.4	19.2	18.4	21.0
Sarawak	43.0	51.8	41.6	40.1	42.5
MALAYSIA	**55.3**	**54.9**	**56.1**	**55.9**	**56.0**

Source: Health Informatics Centre, MOH 2011-2015

The mean DMFT score for 12-year-olds and 16-year-olds in 2015 remained the same as in year 2014 **(Table 42)**.

Table 42: Mean DMFT Score for 12 and 16-year-olds, 2011-2015

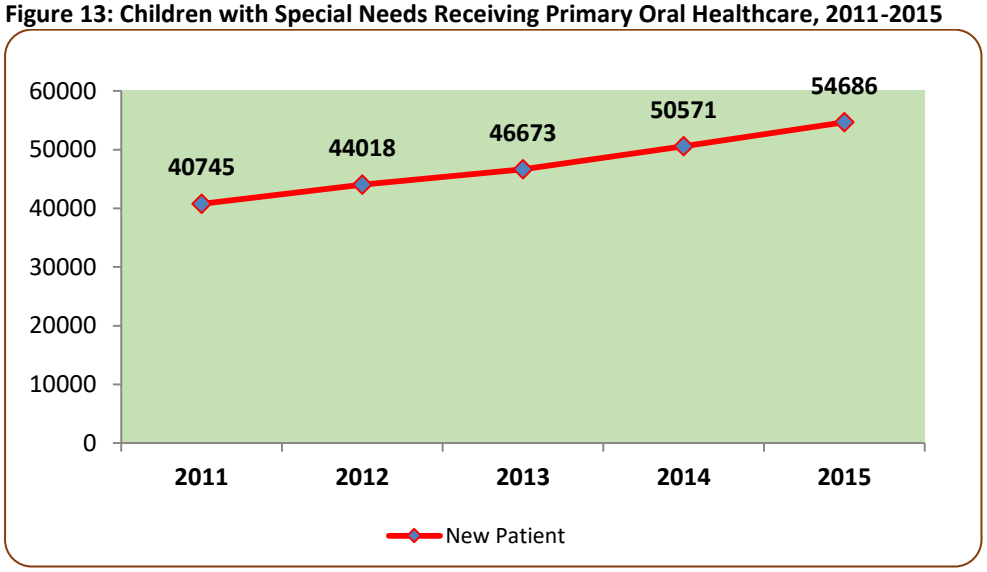
Age Group	2011	2012	2013	2014	2015
12-year-olds	0.96	0.89	0.91	0.85	0.85
16-year-olds	1.37	1.32	1.30	1.35	1.35

Source: Health Informatics Centre, MOH 2011-2015

- ## Oral Healthcare for Children with Special Needs

The number of children with special needs utilising primary oral healthcare services has been steadily increasing over the years. The increase has been mainly due to the initiatives under the National Blue Ocean Strategy 7 (NBOS 7) which prioritised healthcare to special needs children, the elderly and single mothers. In 2015, a total of 54,686 special needs children received oral healthcare services **(Figure 13).**

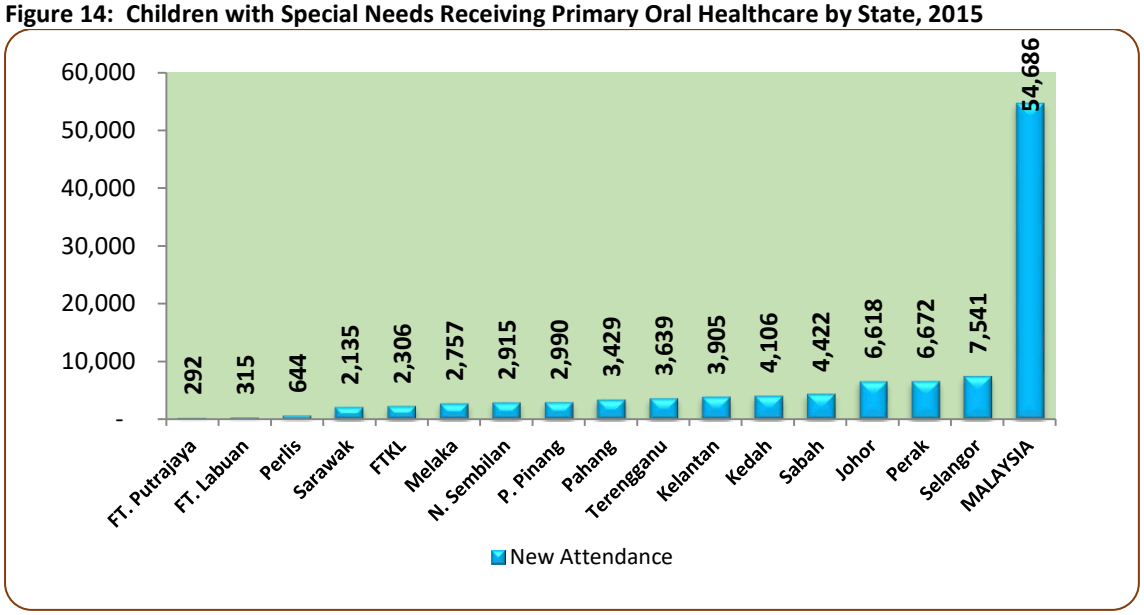
Figure 13: Children with Special Needs Receiving Primary Oral Healthcare, 2011-2015



Source: Health Informatics Centre, MOH 2015

The highest number of special needs children receiving oral healthcare was in Selangor followed by Perak and Johor **(Figure 14).**

Figure 14: Children with Special Needs Receiving Primary Oral Healthcare by State, 2015

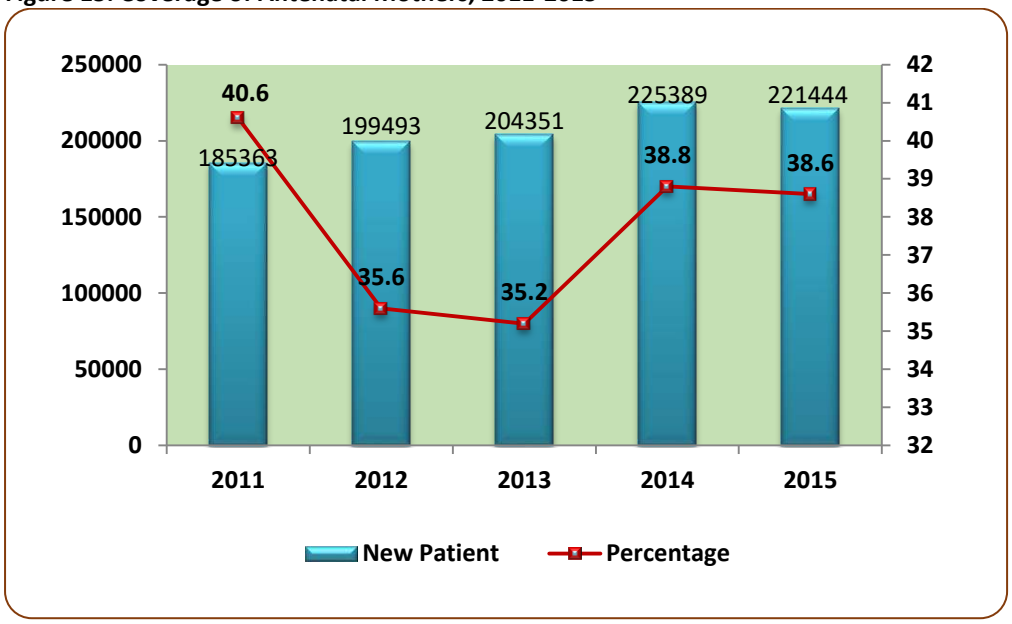


Source: Health Informatics Centre, MOH 2015

4. ORAL HEALTHCARE FOR ANTENATAL MOTHERS

Efforts have been made to increase the attendances of antenatal mothers at dental clinics by way of referrals from health clinics or from MCH clinics. This is to ensure that essential awareness on oral health to mothers as agents of change were provided and to also render them orally-fit. There was a decrease in percentage of antenatal mothers utilising primary oral healthcare in 2015 **(Figure 15).**

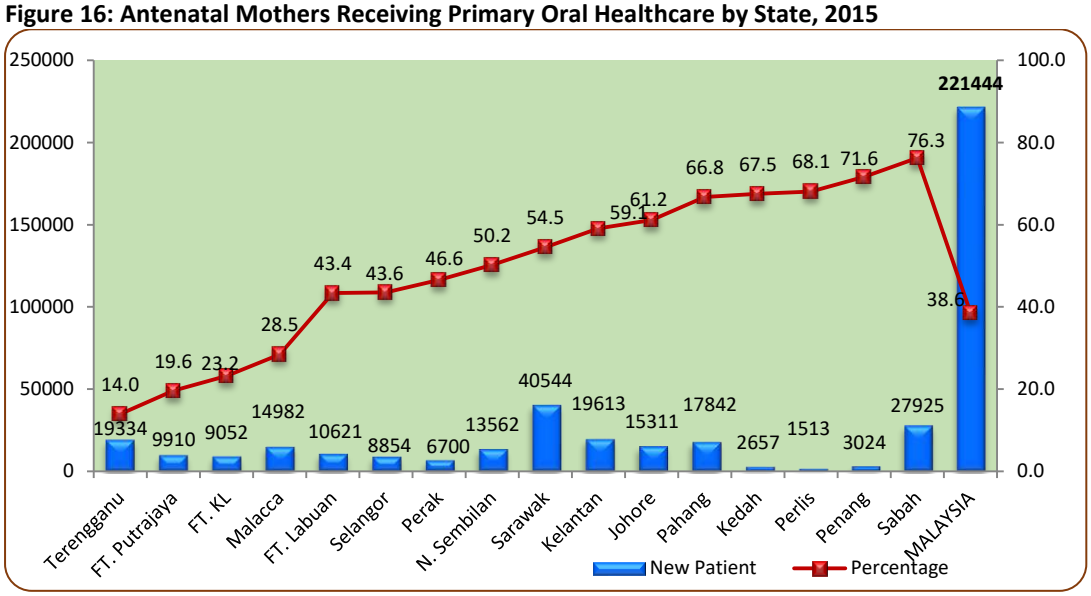
Figure 15: Coverage of Antenatal Mothers, 2011-2015



Source: Health Informatics Centre, MOH 2011-2015

The highest percentage of antenatal mothers who sought dental care was in Sabah (76.3%) followed by Pulau Pinang (71.6%) **(Figure 16)**.

Figure 16: Antenatal Mothers Receiving Primary Oral Healthcare by State, 2015

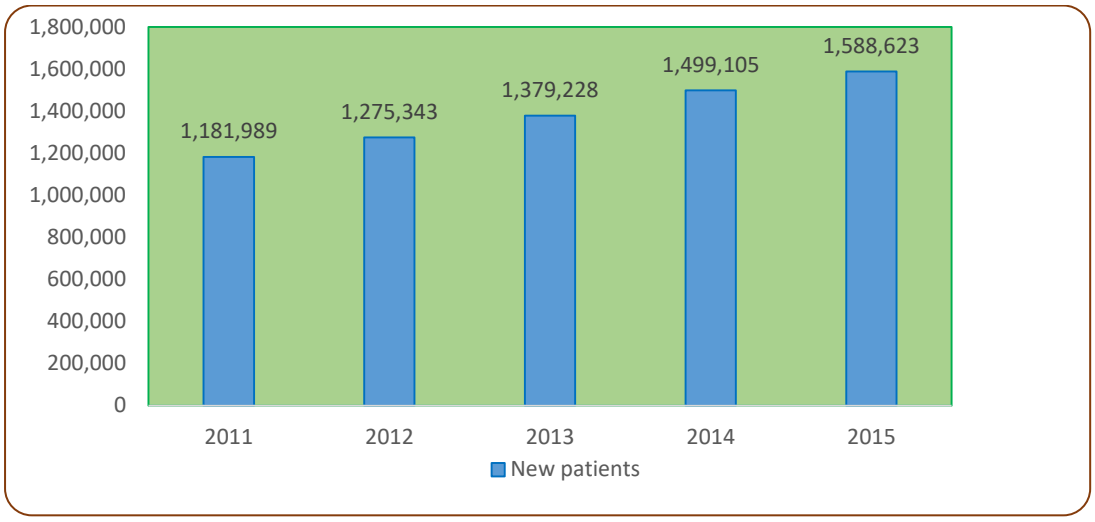


Source: Health Informatics Centre, MOH 2015

5. ORAL HEALTHCARE FOR ADULTS

The demand for oral healthcare among adults is steadily increasing. Hence, the number of dental clinics providing daily outpatient services has been included as one of the Key Performance Indicators (KPI) for the Oral Health Programme. Efforts have been made to accommodate this need among adults and to date 74.7% (497/665) of dental clinics with 2 or more dental officers offer daily outpatient services. In 2015, adult utilisation of primary oral healthcare increased by 6% from 2014 **(Figure 17).**

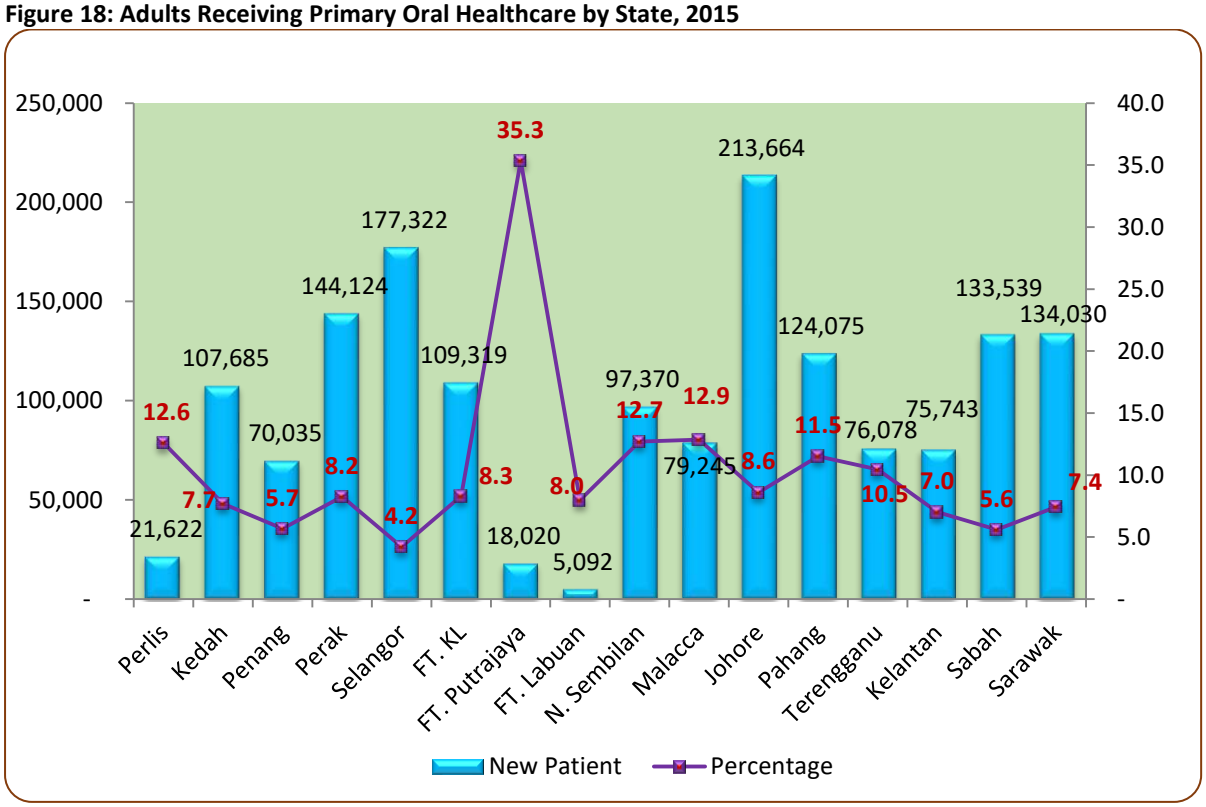
Figure 17: Adults Receiving Primary Oral Healthcare, 2011-2015



Source: Health Informatics Centre, MOH 2011-2015

Overall, 8.7% of the adult population aged 18 - 59 years received primary oral healthcare in 2015. FT Putrajaya (35.3%) recorded the highest coverage while Selangor (4.2%) recorded the lowest coverage of adults **(Figure 18)**.

Figure 18: Adults Receiving Primary Oral Healthcare by State, 2015



Source: Health Informatics Centre, MOH 2015

To further ensure decrease in tooth loss among adults, in 2013 the Oral Health Programme established 21 clinics *Klinik Endodontik Pergigian Primer (KEPP)* which offer endodontic treatment. Identified dental officers from these 21 clinics have been trained to undertake endodontics on anterior and posterior teeth using rotary instruments. In 2015, a total of 2,127 endodontic cases were seen and completed in these KEPPs **(Table 43)**.

Table 43: Completed Endodontic Cases in KEPP, 2014-2015

Year	Number of Completed Endodontic Cases				Total
	Anterior	Premolar	Molar	Retreatment	
2014	582	278	403	16	1,279
2015	852	468	744	63	2,127

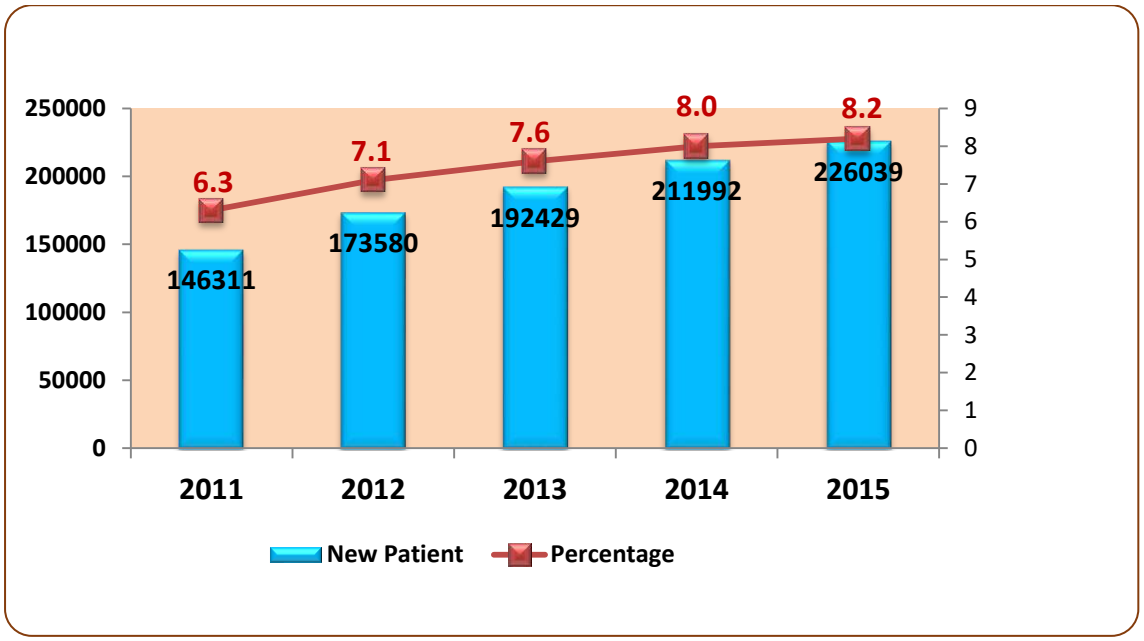
Source: Health Informatics Centre, MOH (2011-2015)

The oral health services were also provided through new initiatives such as the Urban Transformation Centres (UTCs) and Rural Transformation Centres (RTCs). UTCs operate on extended hours from 8.00 am to 10.00 pm. In 2015, a total of 114,156 people utilised the UTCs and 3,946 utilized the RTCs, as compared to 124,815 and 2,519 respectively in 2014.

6. ORAL HEALTHCARE FOR THE ELDERLY

In 2015, a total of 8.2% (226,039) of the estimated elderly population received oral healthcare under the MOH (**Figure 19**). Of these, 6,903 were rendered dental care in 331 elderly institutions.

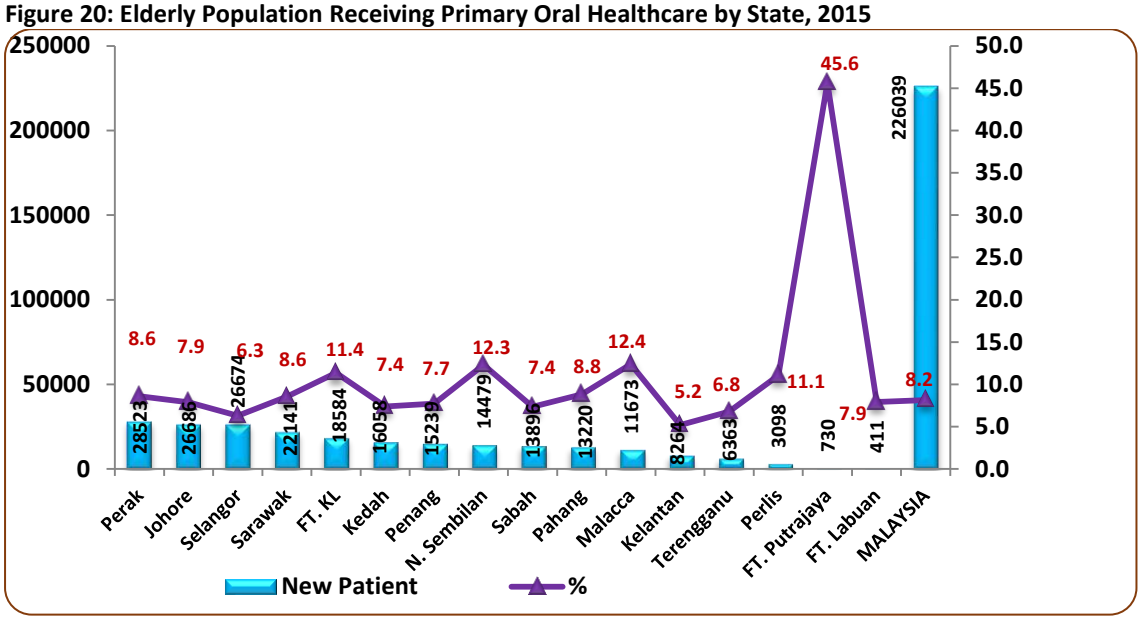
Figure 19: Elderly Population Receiving Primary Oral Healthcare, 2011-2015



Source: Health Informatics Centre, MOH 2011-2015

The highest coverage of elderly was in FT Putrajaya (45.6%) followed by Melaka (12.4%) and Negeri Sembilan (12.3%) **(Figure 20)**.

Figure 20: Elderly Population Receiving Primary Oral Healthcare by State, 2015



Source: Health Informatics Centre, MOH 2015

Despite an increase in the elderly population utilising oral healthcare facilities, their oral health status is still far from satisfactory. Only 40.1% of 60-year-olds had 20 or more teeth **(Table 44)**. This is far from the targeted goal of 60% in the National Oral Health Plan 2011-2020.

Table 44: Oral Health Status of the Elderly, 2015

Age group (years)	Average no. of teeth present		Edentulous (%)		With 20 or more teeth (%)	
	2014	2015	2014	2015	2014	2015
60	15.1	15.7	9.7	8.2	37.1	40.0
65	13.5	13.8	12.5	11.6	29.6	30.1
75 and above	9.9	10.1	24.0	22.3	17.9	18.7

Source: Health Informatics Centre, MOH 2015

SPECIALIST ORAL HEALTHCARE

1. DENTAL SPECIALTY DISCIPLINES

There are eight (8) clinical dental specialties and one (1) non-clinical dental specialty recognised in the MOH. Five (5) of the clinical specialties are hospital-based. In 2015, there 215 clinical dental specialists and 109 Dental Public Health Specialists in the MOH **(Table 45).**

Table 45: Number of Dental Specialists in MOH, 2011-2015

Year Discipline	2011	2012	2013	2014	2015
Clinical Dental Specialists					
Hospital-based					
Oral and Maxillofacial Surgery	45 (*4)	48 (*3)	55(*3)	56(*4)	60(*3)
Paediatric Dentistry	27	29	33	35	39
Oral Pathology & Oral Medicine	9	9	9	10	11
Special Needs Dentistry	0	2	2	3	3
Forensic Dentistry	0	1	1	1	1
Non-hospital-based					
Orthodontics	25 (*5)	34 (*6)	46 (*4)	48(*3)	47(*1)
Periodontics	20	21	24	29	34
Restorative Dentistry	16	17	20	20	20
Total Number of Clinical Dental Specialists	**142 (*9)**	**161 (*9)**	**190 (*7)**	**202**	**215(*4)**
Non- Clinical Dental Specialists					
Dental Public Health Specialist	123	122	119	121	109

Source: Facts That Figure, Oral Health Programme, MOH 2015
(Not inclusive of postgraduates undergoing specialty gazettement)
**Contract Dental Specialists*

Five (5) additional specialist services were established in fifteen (15) facilities in 2015 **(Table 46).**

Table 46: New Specialty Services Established, 2015

Specialty	Hospital / Dental Facilities
Oral and Maxillofacial Surgery & Paediatric Dentistry	Hospital Shah Alam
Special Needs Dentistry	Hospital Rehabilitasi Cheras Kuala Lumpur
Orthodontics	KP Presint 18 Putrajaya, KP Kuala Krai, KP Petrajaya, KP Bukit Minyak, KP Tampin, KP Alor Gajah.
Periodontics	KP Presint 18, Putrajaya, KP Teluk Intan Perak, KP Jerantut, KP Padang Luas, KP Sungai Petani.
Restorative Dentistry	KP Presint 18, Putrajaya, KP Simpang Taiping, KP Bakri Muar, KP Tanjung Lalang Temerloh.

Source: Dental Specialists Mapping MOH 2015

• Dental Specialist Meetings

Dental Specialist Meetings are organised annually for each discipline to discuss Annual Plans of Action, Achievements, Key Performance Indicators, National Indicator Approaches, Patient Safety Indicators and issues pertaining to each specialty. In 2015, nine (9) dental specialists meetings were held inclusive of a Combined Dental Specialists Meeting **(Table 47).**

Table 47: Dental Specialist Meetings, 2015

Specialty	Date	Venue
Restorative Dentistry	25 – 27 February 2015	Hotel Everly, Putrajaya
Oral Pathology & Oral Medicine	30 March 2015	Oral Health Programme Headquartes, MOH
Orthodontics	24 – 26 March 2015	PPKK & KLPM, Pulau Pinang
Paediatric Dentistry	13 – 15 April 2015	Hotel Grand Paragon, Johor Baharu
Special Needs Dentistry	13 – 15 April 2015	Hotel Grand Paragon, Johor Baharu
Periodontics	11 – 13 May 2015	Hotel Corus Paradise Resort, Port Dickson
Oral and Maxillofacial Surgery and Forensic Dentistry	27 – 29 May 2015	Hotel Swiss Garden Beach Resort, Kuantan
Dental Public Health	30 Jul -1 August 2015	Hotel Swiss Garden, Kuala Lumpur
Combined Dental Specialists Meeting	11 -13 October 2015	Hotel Thistle, Port Dickson

Source: Oral Health Programme, MOH 2015

Image 3: Combined Dental Specialists Meeting
Hotel Thistle, Port Dickson, Negeri Sembilan
11-13 October 2015

- **Monitoring of Specialist Oral Healthcare**

The dental specialist workload is reflected in the number of patients seen per specialist in a year **(Table 48).**

Table 48: Workload per Dental Specialists by Discipline, 2011-2015

No.	Specialty	Workload				
		2011	2012	2013	2014	2015
1	Paediatric Dentistry	1:3,264	1:3,144	1:3,400	1: 2676	1 : 2427
2	Oral and Maxillofacial Surgery	1:2,950	1:2,950	1:3,182	1: 3,843	1: 3,823
3	Oral Pathology and Oral Medicine	1:527	1:816	1:828	1: 848	1: 744
4	Orthodontics	1:2,754	1: 2,362	1:2,788	1: 3,689	1: 4,083
5	Restorative Dentistry	1:1,332	1:1,495	1:1,376	1: 1658	1 : 1732
6	Periodontics	1:1,494	1:1,627	1:1,222	1: 1,368	1 : 1312

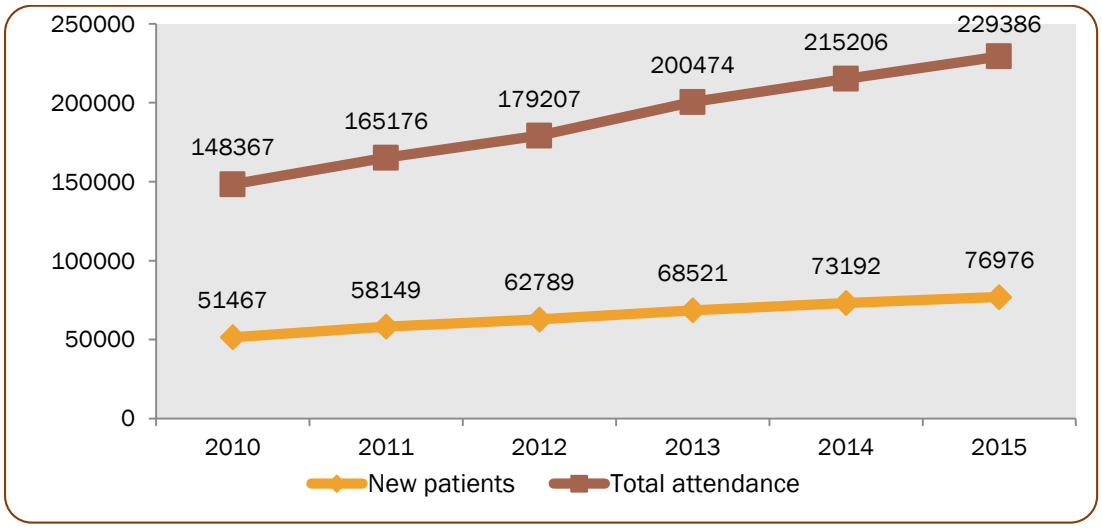
Source: Oral Health Programme, MOH 2015

2. HOSPITAL-BASED CLINICAL DENTAL SPECIALTIES

2.1 Oral and Maxillofacial Surgery

There was an increasing trend in new patients and total attendance over the last 5 years for Oral and Maxillofacial Surgery (2011 - 2015) **(Figure 21).**

Figure 21: Total Attendance and New Patients, Oral and Maxillofacial Surgery 2011 - 2015



Source: Health Informatics Centre, MOH 2015

Of all oral surgeries performed in 2015, 91.0% were minor surgical cases. Major surgical cases accounted for 9.0% which consisted of surgical removal of malignant lesions, primary or secondary facial reconstruction, cleft lip and palate repair, orthognathic surgery and distraction osteogenesis **(Table 49).**

Table 49: Surgeries Performed by Oral Surgeons, 2015

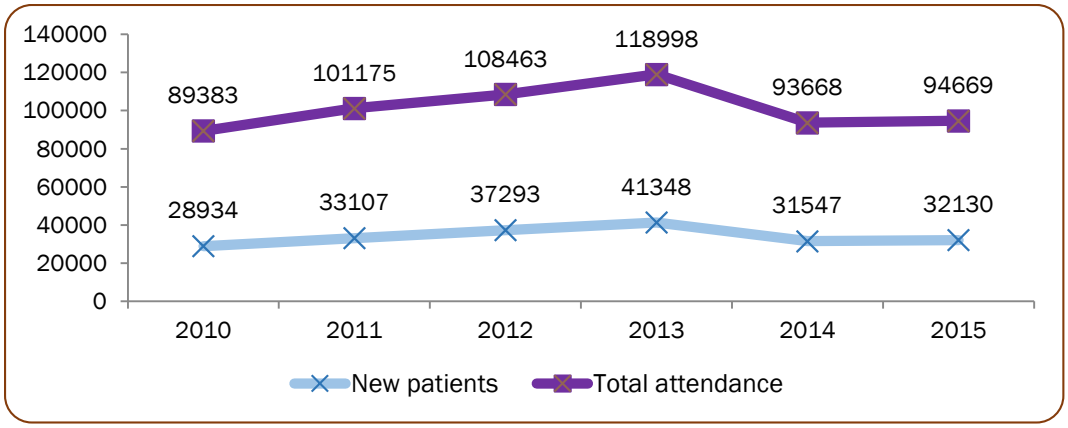
Type of Cases	No.	%
Minor Surgery	21,766	91.0%
Major Surgery	2,078	9.0%

Source: Health Informatics Centre, MOH 2015

2.2 Paediatric Dental Specialty

Paediatric Dental Specialists attend to children below 17 years old. There was an increase of new and total attendance in 2015 compared with 2014 **(Figure 22).**

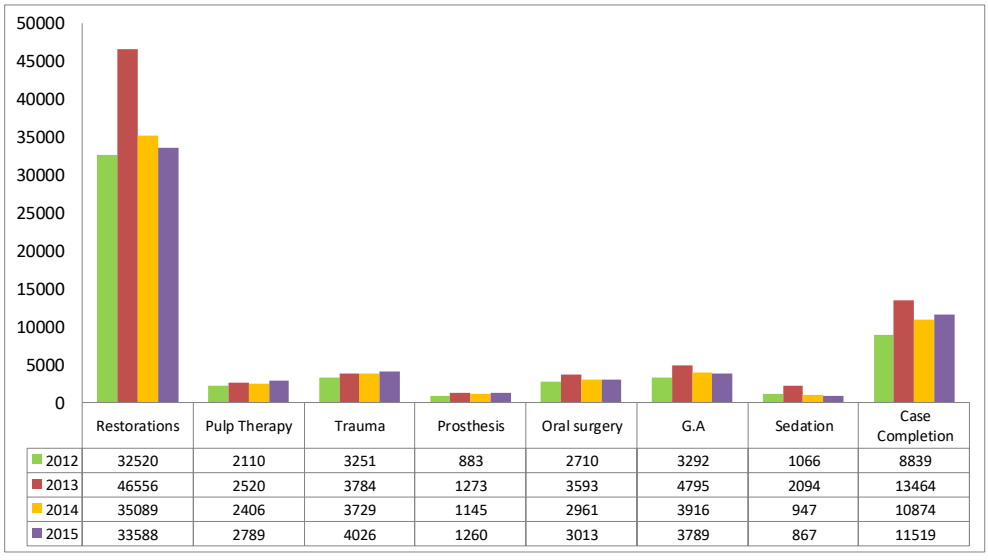
Figure 22: New Patients and Total Attendance for Paediatric Dental Specialty, 2011-2015



Source: Health Informatics Centre, MOH 2015

Three quarter of the treatment rendered by Paediatric Dental Specialists in 2015 were restorations (**Figure 23),** with some procedures under general anaesthesia or sedation.

Figure 23: Treatment Rendered by Paediatric Dental Specialists, 2012-2015



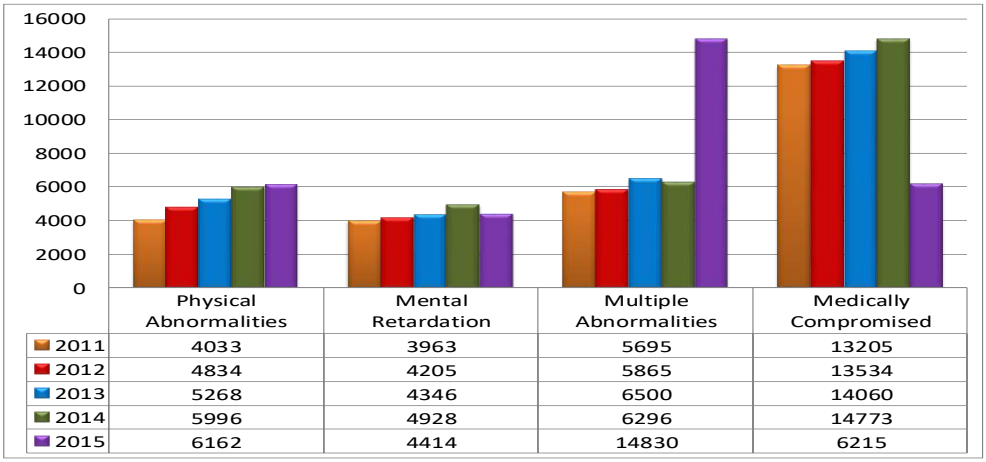
	Restorations	Pulp Therapy	Trauma	Prosthesis	Oral surgery	G.A	Sedation	Case Completion
2012	32520	2110	3251	883	2710	3292	1066	8839
2013	46556	2520	3784	1273	3593	4795	2094	13464
2014	35089	2406	3729	1145	2961	3916	947	10874
2015	33588	2789	4026	1260	3013	3789	867	11519

Source: Health Informatics Centre, MOH 2015

Paediatric Dental Specialists also manages children with special needs. These patients are categorised as those with physical abnormalities, mental retardation, multiple abnormalities and/or those who

are medically-compromised. In 2015, there was a significant increase in cases with multiple abnormalities as compared to the previous year **(Figure 24).**

Figure 24: Dental Paediatric Patients based on Special Needs Conditions, 2011-2015



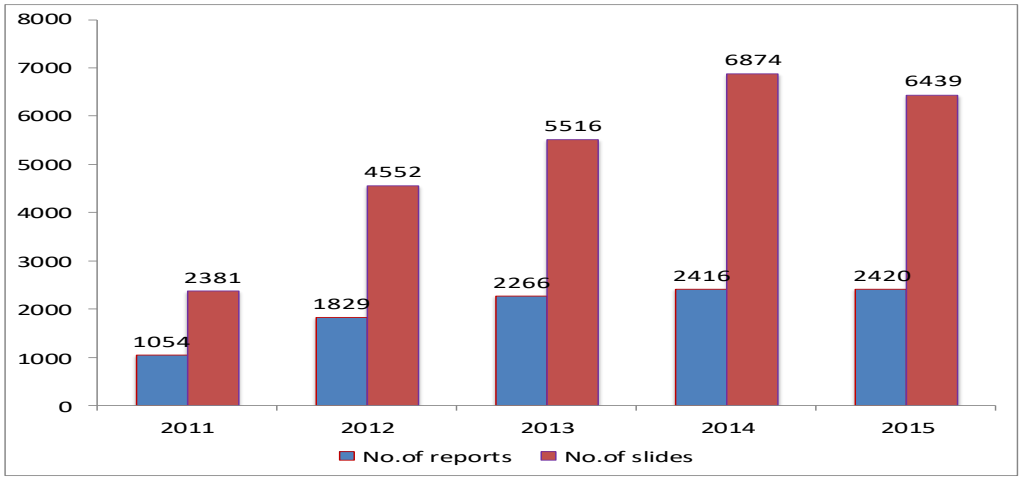
	Physical Abnormalities	Mental Retardation	Multiple Abnormalities	Medically Compromised
2011	4033	3963	5695	13205
2012	4834	4205	5865	13534
2013	5268	4346	6500	14060
2014	5996	4928	6296	14773
2015	6162	4414	14830	6215

Source: Health Informatics Centre, MOH 2015

2.3 Oral Pathology and Oral Medicine

In 2015, the average number of patient per Oral Pathology & Oral Medicine (OPOM) specialist had reduced from 848 per specialist to 744 per specialist. However, there was an increase in number of reports issued (0.2%) in 2015 as compared to 2014. On the other hand, the number of slides seen by OPOM specialists in year 2015 was reduced by 6.3% compared to the previous year. (**Figure 25).**

Figure 25: Reports Issued and Slides Seen Per OPOM Specialist (2011-2015)

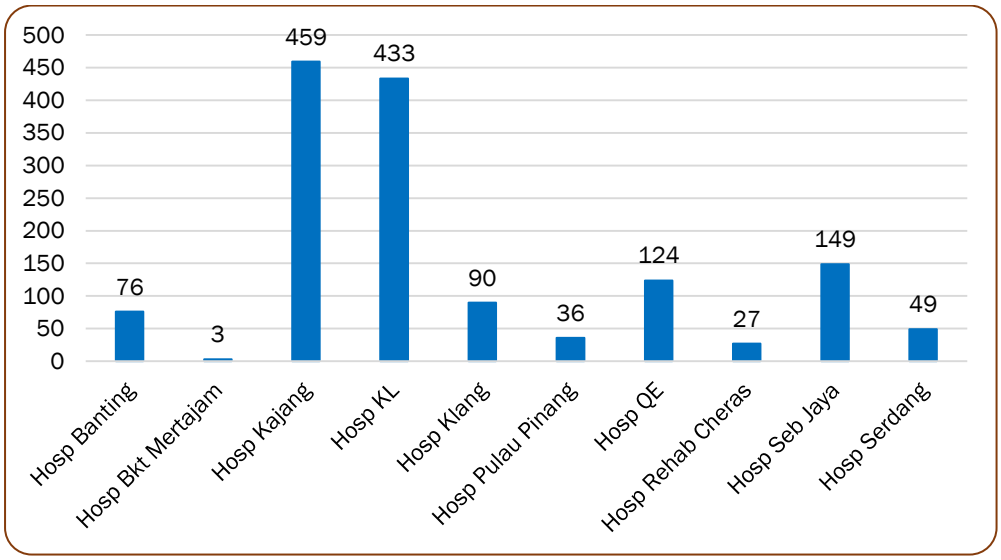


Source: Health Informatics Centre, MOH 2015

2.4 Special Needs Dentistry (SND)

Currently, there are four SND specialists based in Kuala Lumpur Hospital (HKL), Kajang Hospital, Seberang Jaya Hospital and Queen Elizabeth Hospital. The number of attendance covered by SND specialists including visiting hospitals are shown in **Figure 26.**

Figure 26: Patients Attendance by Hospital 2015



2.5 Forensic Odontology

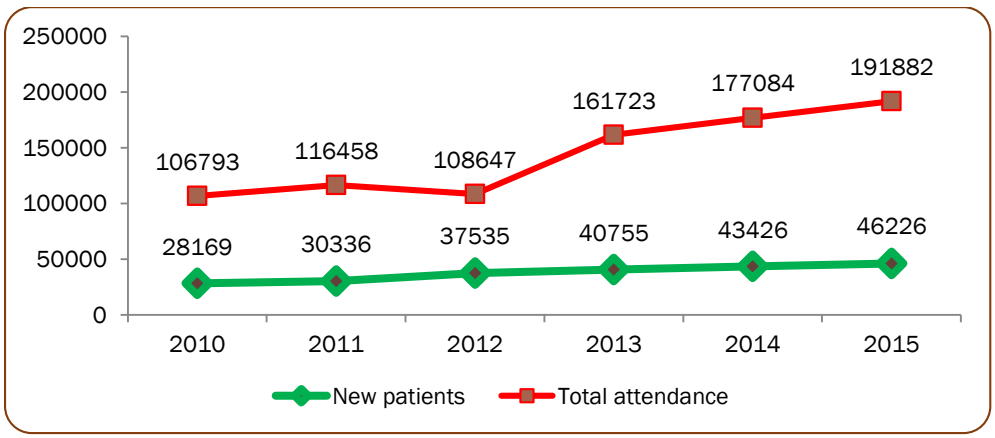
The Forensic Odontology Unit in the MOH was established in Hospital Kuala Lumpur with one MOH Forensic Odontology specialist working closely with the General Forensic Department in Kuala Lumpur Hospital. In 2015, besides routine forensic cases, this unit held a Forensic Odontology Course for oral health personnel in East Coast region with the objective of forming local Disaster Victim Identification (DVI) Teams in the MOH.

3. NON-HOSPITAL-BASED CLINICAL DENTAL SPECIALTIES

3.1 Orthodontics

The demand for orthodontics treatment is on the rise over the last few years. Total attendance has increased by 8.36% in 2015 as compared to the previous year **(Figure 27)**.

Figure 27: New Patients and Total Attendance for Orthodontics, 2011-2015



Source: Health Informatics Centre, MOH 2015

Over the years there has been a gradual increase of cases on the waiting lists (Consultation II). At the same time, there was an increase in completion of active treatment cases and patients issued with removable and fixed appliances as compared to the previous year. In 2015, a total of 8,443 patients were treated with fixed appliances and 6,495 patients with removable appliances **(Table 50).**

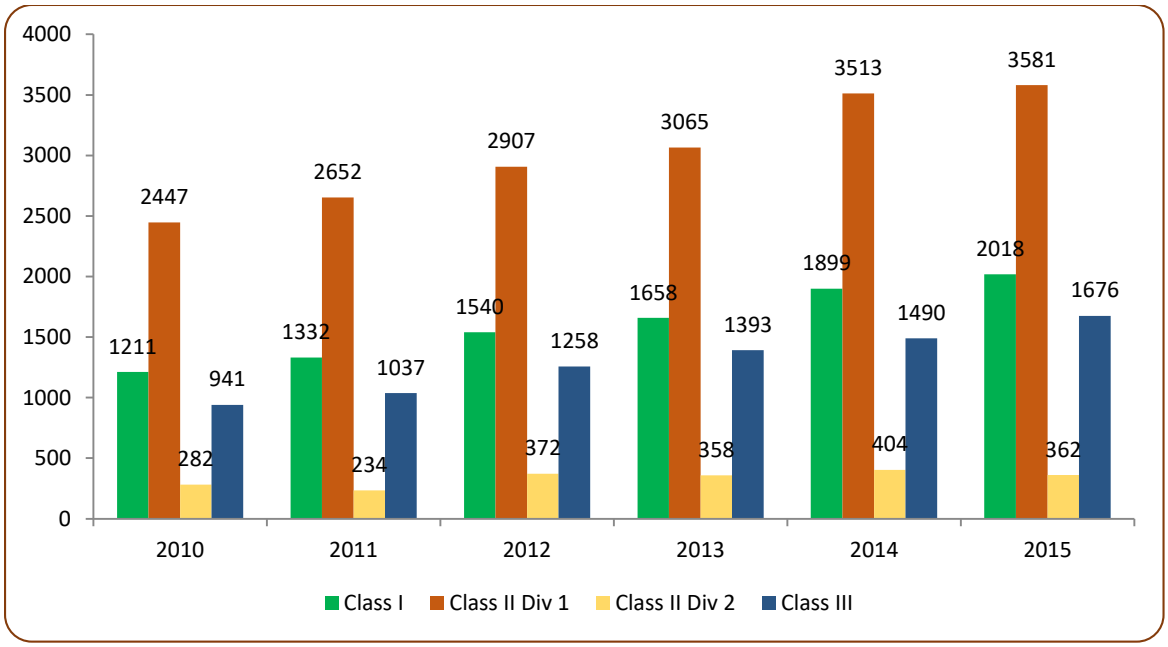
Table 50: Items of Care for Orthodontic Cases, 2011-2015

Items of Care		2011	2012	2013	2014	2015
Consultation	**I**	9,888	11,542	12,117	12,130	12,315
	II	5,253	6,079	6,474	7,306	7,643
Removable Appliances	**No. of Patients**	4,693	5,373	5,669	6,069	6,495
Fixed Appliances	**No. of Patients**	5,726	6,733	7,471	8,291	8,443
Number of active treatment cases		16,879	19,380	22,340	24,528	27,358
Active treatment completed		2,951	3,314	3,623	3,971	4,580

Source: Health Informatics Centre, MOH 2015

Majority of cases seen were malocclusion Class II Div I cases. There has been an increasing trend in Class 1 and Class III cases over the last 5 years **(Figure 28).**

Figure 28: Types of Malocclusion Seen, 2011-2015

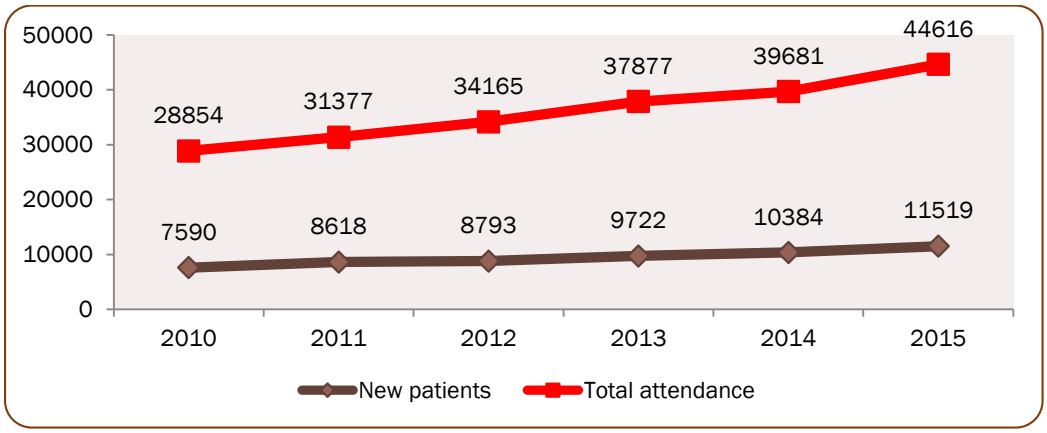


Source: Health Informatics Centre, MOH 2015

3.2 Periodontics

There was an increasing trend of new periodontics patients and total attendance over the last 5 years **(Figure 29).**

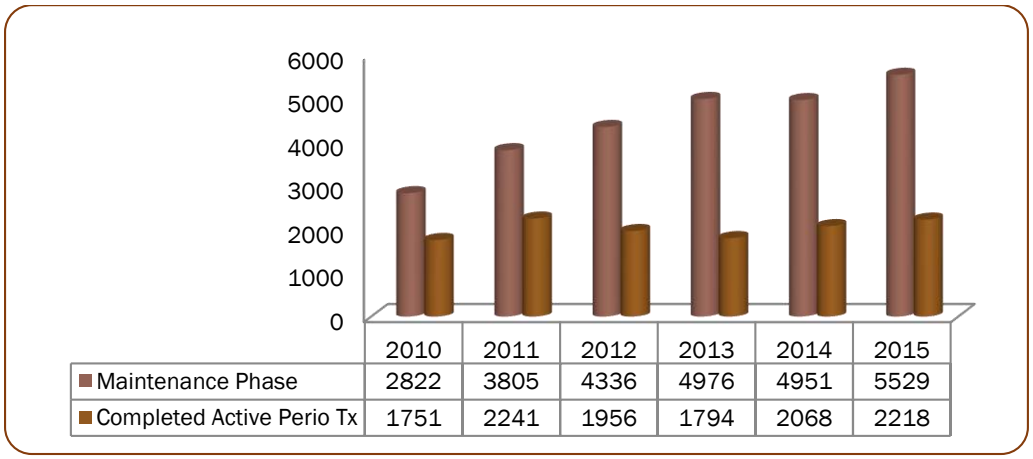
Figure 29: New Patients and Total Attendance for Periodontics Specialist Care, 2011-2015



Source: Health Informatics Centre, MOH 2015

The number of patients in the maintenance phase seen in the Periodontics Units has increased compared to the previous year **(Figure 30).** Similarly with the number of patients completed active treatment in 2015.

Figure 30: Cases in Maintenance Phase and Completed Cases, 2011-2015



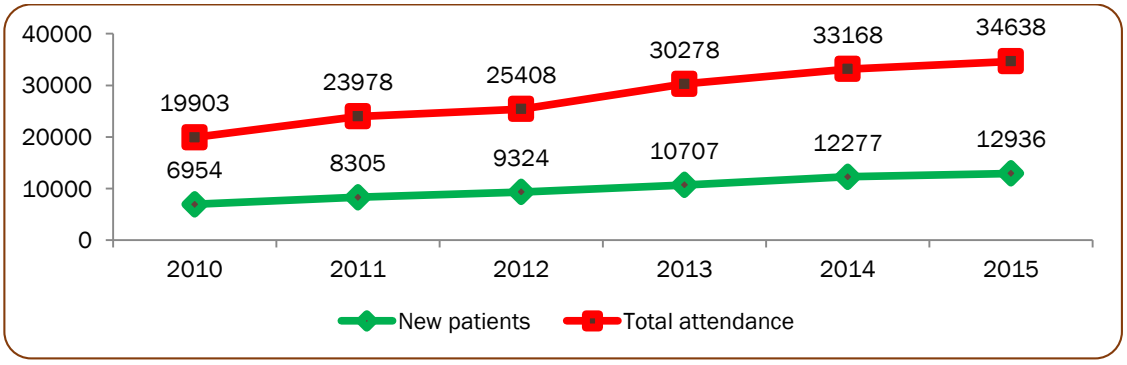
	2010	2011	2012	2013	2014	2015
Maintenance Phase	2822	3805	4336	4976	4951	5529
Completed Active Perio Tx	1751	2241	1956	1794	2068	2218

Source: Health Informatics Centre, MOH 2015

3.3 Restorative Dentistry

New patients and total attendance in Restorative Dentistry Specialist Clinics have steadily increased for the last five years (**Figure 31**).

Figure 31: New Patients and Total Attendance for Restorative Dentistry Specialist Clinics, 2011-2015



Source: Health Informatics Centre, MOH 2015

In 2015, the highest attendance was among those in the 30 - 59 age group **(Table 51).**

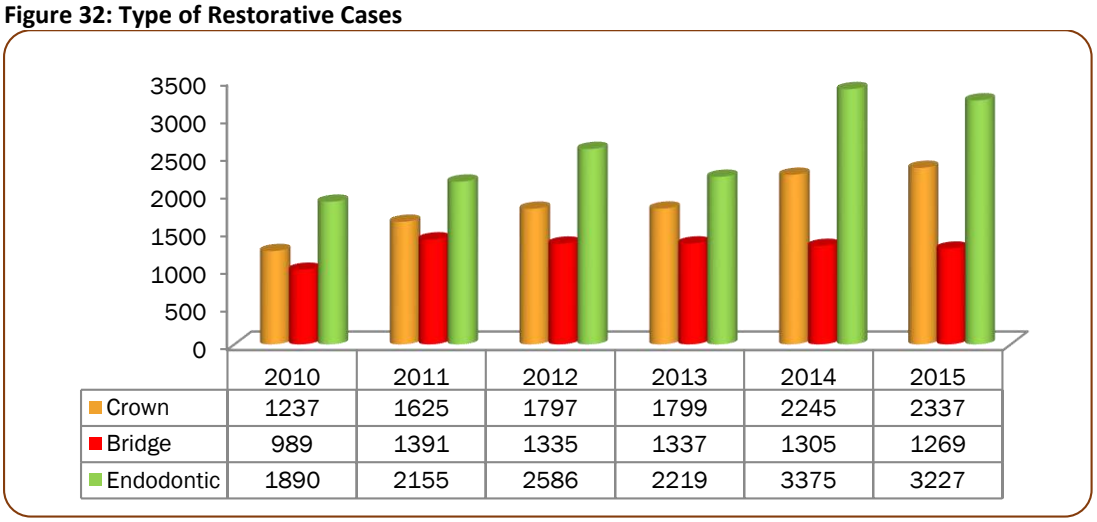
Table 51: New Patients and Total Attendance for Restorative Dental Specialty, 2011 – 2015

Age Group	New Patients					Total Attendance				
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
7-12	97	111	102	96	79	159	175	160	147	136
13-17	517	557	597	723	785	1,148	1,154	1,348	1,536	1,591
18-29	1,619	1,902	2,246	2,634	2820	3,902	4363	5,522	6,178	6,828
30-59	4,798	5,325	6,098	6,892	7249	14,495	15,187	17,797	19,229	19,738
≥60	1,274	1,429	1,664	1,932	2,003	4,274	4,529	5,451	6,078	6,345
TOTAL	**8,305**	**9,324**	**10,707**	**12,277**	**12,936**	**23,978**	**25,408**	**30,278**	**33,168**	**34,638**

Source: Health Informatics Centre, MOH 2015

There was an increase in endodontic, crown and bridge cases in 2015. Among these, endodontic cases contributed the highest number of cases **(Figure 32).**

Figure 32: Type of Restorative Cases



Source: Health Informatics Centre, MOH 2015

4. NON-CLINICAL DENTAL SPECIALTY: DENTAL PUBLIC HEALTH

In the MOH, the Dental Public Health Specialist (DPHS) undertook a major role in governance of the MOH programme, which includes the management of Oral Health activities, issues of human resources and budget allocation, regulation and enforcement, clinical affairs, research and epidemiology and inter sectoral collaboration. DPHS also manages the challenges facing the dental profession from both within and outside of the country. DPHS also plays a crucial role in decision making through the Malaysian Dental Council on matters pertaining to the profession.

COMMUNITY ORAL HEALTHCARE

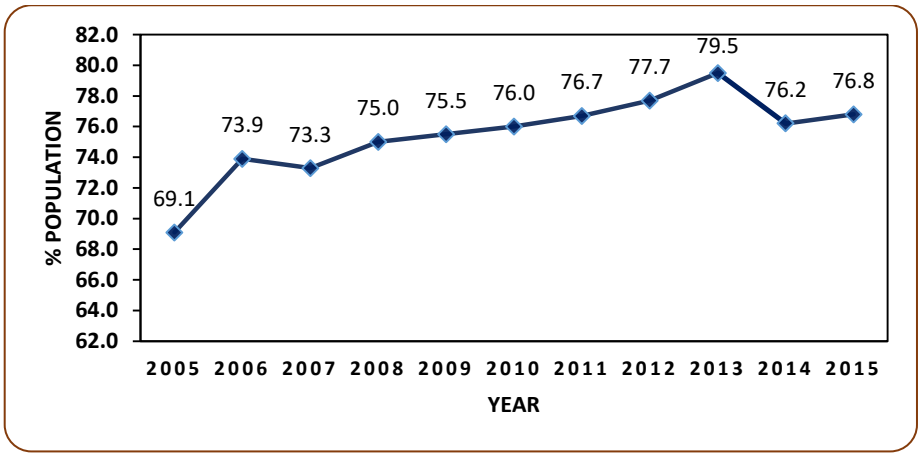
1. FLUORIDATION OF PUBLIC WATER SUPPLY

1.1 Population Coverage

The fluoridation of public water supplies is a safe, effective, economical¸ practical and socially equitable public health measure for prevention and control of dental caries for people of all age groups, ethnicity, incomes and education levels.

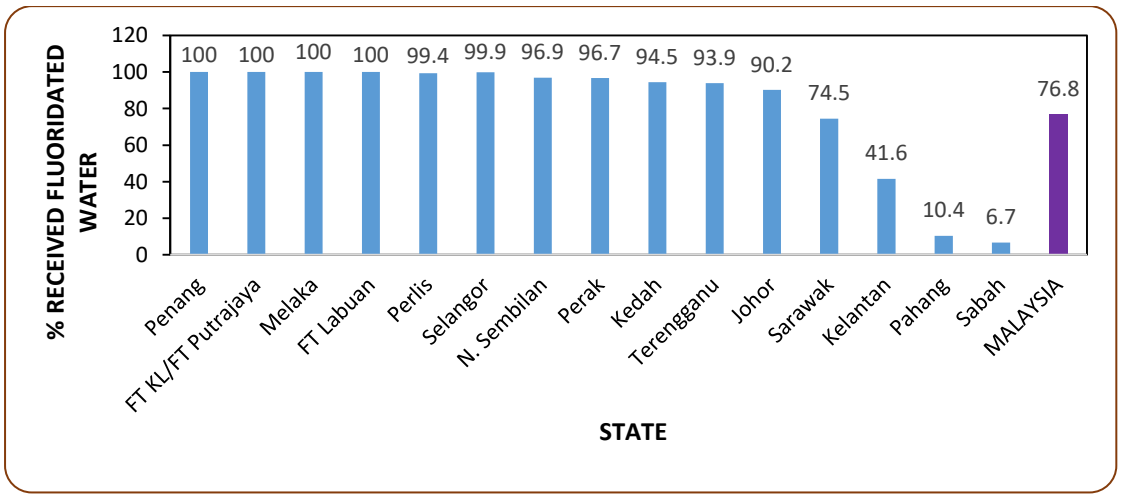
The estimated population receiving fluoridated water has increased from 69.1% in 2005 to 79.5% in 2013, with a drop to 76.2% in 2014 and increased slightly to 76.8% in 2015 **(Figure 33)**. The drop was due to a decline in population coverage for Pahang as a results of cessation of water fluoridation in majority of the water treatment plants in Pahang. The water entity in Pahang was corporatized in 2012. Due to financial problem, there was no purchase of fluoride compounds since then. All states achieved over 90% population coverage except for Sarawak, Kelantan, Pahang and Sabah **(Figure 34)**.

Figure 33: Population Coverage for Water Fluoridation Programme, 2005-2015



Source: State Oral Health Division, 2015

Figure 34: Population Receiving Fluoridated Water by State, 2015



Source: State Oral Health Division, 2015

1.2 Water Treatment Plants (WTP)

In 2015, there were a total of 478 WTPs in Malaysia **(Table 52).** All WTPs were fully privatized except for those in Perak, Sabah, Sarawak and Federal Territory Labuan.

Out of which 307 (62.0%) were installed with fluoride feeders **(Table 53)**. Among those with feeders, 242 (78.8%) were active while 65 (21.2%) were inactive due to lack of resources to purchase fluoride compound or technical problems such as fluoride feeders that require repairs or replacement.

Table 52: Number of Water Treatment Plant by Sector, 2015

State	Government	Water Board	Private	TOTAL
Perlis	0	0	3	3
Kedah	0	0	36	36
Penang	0	0	8	8
Perak	0	39	5	44
Selangor	0	0	29	29
FT Kuala Lumpur & Putrajaya	0	0	3	3
N. Sembilan	0	0	22	22
Melaka	0	0	8	8
Johor	0	0	45	45
Pahang	0	0	76	76
Terengganu	0	0	14	14
Kelantan	0	0	33	33
Sabah	32	6	25	63
FT Labuan	4	0	1	5
Sarawak	78	7	4	89
MALAYSIA	**114**	**52**	**312**	**478**

Source: State Oral Health Division, 2015

Table 53: WTP with Active Fluoride Feeders by State, 2015

State	No. of WTP	WTP with Fluoride Feeder		WTP with Active Fluoride Feeder		WTP Producing fluoridated water (%)
		No.	%	No.	%	
Perlis	3	3	100.0	3	100.0	100.0
Kedah	36	36	100.0	32	100.0	88.9
Penang	8	8	100.0	8	100.0	100.0
Perak	44	42	95.5	42	100.0	95.5
Selangor	29	29	100.0	29	100.0	100.0
FT Kuala Lumpur & Putrajaya	3	3	100.0	3	100.0	100.0
N. Sembilan	22	20	90.9	20	100.0	90.9
Melaka	8	8	100.0	8	100.0	100.0
Johor	45	39	86.7	39	100.0	86.7
Pahang	76	54	71.1	3	5.6	3.9
Terengganu	14	14	100.0	14	100.0	100.0
Kelantan	33	5	15.2	3	60.0	9.1
Sabah	80	11	13.8	10	90.9	12.5
FT Labuan	5	4	80.0	1	25.0	20.0
Sarawak	89	35	39.3	27	77.1	30.3
MALAYSIA	**495**	**307**	**62.0**	**242**	**78.8**	**48.9**

Source: State Oral Health Division, 2015

Seven (7) out of 15 states, namely Kedah, Penang, Perak, Selangor, FT Kuala Lumpur & Putrajaya, Negeri Sembilan and Johor complied with the National Indicator Approach (NIA) standards for lower (not more than 25% of the readings below 0.4 ppm) and upper limits (not more than 7% of the readings exceeding 0.6 ppm) of fluoride level in public water supplies.

Eight states did not comply with the standard for lower limit (not more than 25% of the readings below 0.4 ppm) of fluoride level, highest in Kelantan with 92.3% readings uncomplied. All state complied with the standard upper limit (exceeding 0.6 ppm) **(Table 54).**

Table 54: **Fluoride Level at Reticulation Points by State, 2015**

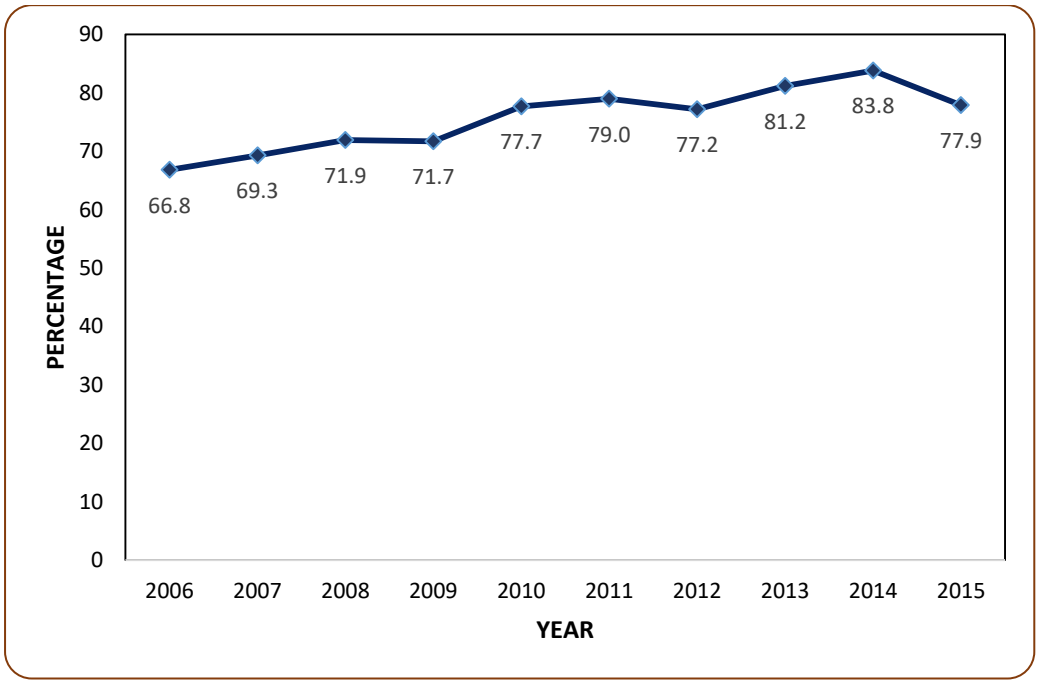
States	Total Readings	Fluoride Readings					
		0.4 - 0.6 ppm		< 0.4 ppm (Std. < 25%)		> 0.6 ppm (Std. < 7%)	
		No.	%	No.	%	No.	%
Perlis	332	236	71.1	96	28.9	0	0.0
Kedah	1,397	1,237	88.5	125	8.9	30	2.1
Penang	371	353	95.1	17	4.6	1	0.3
Perak	2,010	1,865	92.8	133	6.6	12	0.6
Selangor	1,246	1,244	99.8	2	0.2	0	0.0
FT Kuala Lumpur /FT Putrajaya	672	672	100.0	0	0.0	0	0.0
N. Sembilan	960	960	100.0	0	0.0	0	0.0
Melaka	384	268	69.8	108	28.1	8	2.1
Johor	1,817	1,801	99.1	12	0.7	4	0.2
Pahang	1,192	188	15.8	1,003	84.1	1	0.1
Terengganu	607	409	67.4	182	30.0	14	2.3
Kelantan	495	15	3.0	457	92.3	23	4.6
Sabah	414	276	66.7	123	29.7	3	0.7
FT Labuan	75	50	66.7	24	32.0	1	1.3
Sarawak	624	238	38.1	368	59.0	18	2.9
MALAYSIA	**12,596**	**9,812**	**77.9**	**2,650**	**21.0**	**115**	**0.9**

Source: Oral Health Division (Quality Assurance Programme), MOH 2015

1.3 Maintaining Fluoride Levels in Public Water Supply

In 2015, 77.9% of readings taken at reticulation points conformed to the recommended range. There was a slight decrease in conformance of readings to the recommended range in 2015 when compared to 2014 **(Figure 35).**

Figure 35: Conformance of Fluoride Level in Public Water Supplies to the Recommended Range (0.4-0.6ppm), 2006-2015



Source: State Oral Health Division, 2015

1.4 Annual Operating Budget for the Fluoridation Programme

Government funds only the government-operated WTPs. In 2015, nearly RM 2.2 million was spent for this programme **(Table 55).** However, some government funds were used for monitoring fluoride levels at reticulation points in WTP operated by the private sector.

Table 55: Government Funded Fluoridation Programme by State, 2015

States	Annual Operating Budget		New Policy/One Off		Development Fund (MP-10)		Total Budget (RM)	Total Spent (RM)
	Amount Received (RM)	Amount Spent (RM)	Amount Received (RM)	Amount Spent (RM)	Amount Received (RM)	Amount Spent (RM)		
Perak	847,900	847,229.89	0	0	625,000	625,000	1,472,900	1,472,230
Perlis	100,000	100,000	0	0	0	0	100,000	100,000
Sabah	0	0	0	0	200,000	200,000	200,000	200,000
Sarawak	404,000	404,000	6,800	6,800	0	0	410,800	410,800
MALAYSIA	**1,351,900**	**1,351,230**	**6,800**	**6,800**	**825,000**	**825,000**	**2,183,700**	**2,183,030**

Source: State Oral Health Division, 2015

1.5 Interagency Collaboration

The Oral Health Programme continues to collaborate with various agencies to strengthen and expand community water fluoridation. Visits to WTPs and meetings were conducted with relevant agencies at national and state levels. Various implementation issues were discussed and these included

fluoride levels in public water supplies, conformance of fluoride levels within the recommended levels and supplies and storage of fluoride compounds.
A few remedial actions has been taken to address issues raised during meetings with relevant stakeholders. Procedure for monitoring of fluoride levels at reticulation points by oral health personnel has been improved while work processes for budget application and monitoring has been developed.

1.6 Training and Public Awareness

Recognising that knowledge and understanding of water fluoridation is crucial, training is conducted each year for the health personnel as well as personnel from WTPs. Throughout the states, 76 training sessions were conducted in 2015, including hands-on training on the use of colorimeter.

2. PRIMARY PREVENTION & EARLY DETECTION OF ORAL PRE-CANCER & CANCER

Oral cancer remains as one of the major health concern in Malaysia. The Oral Health Programme in the Ministry of Heath Malaysia continues its emphasis on Primary Prevention and Early Detection of Oral Pre-Cancer and Cancer Programme since 1997 in collaboration with relevant agencies.

2.1 Screening during Outreach Programme

In 2015, a total of 432 high-risk *kampung*/estates/communities were visited and 13,901 residents aged 20 years and above were screened for oral lesions. A total of 32,688 participants were given dental health education **(Table 56)**.

Table 56: Oral Cancer and Pre-cancer Screening and Prevention Programme, 2015

No. of estates/ villages visited		No. of patients screened	No. of Exhibitions held	Dental Health Education	
New	Repeat			No. of talks given	No. of participants
432	87	13,901	536	2,051	32,688

Source: State Oral Health Division, 2015

Among the screened patients, 46 (0.3%) were seen with oral lesion and 31 (67.4%) were referred to oral surgeons for further investigation and management. In the current year, none of the referred patients were seen by Oral Surgeons in Selangor, Johor and Sabah **(Table 57).** Over the years 2007-2015, 200 participants (48.3%) complied with referral to the Oral Surgeons. However, compliance rate was low (below 30%) in 2013 and 2015 **(Table 58)**.

Of those referred cases seen by Oral Surgeon, 87.5% were premalignant lesions. **(Table 59)**. Data from 2003-2015 showed that out of oral cancer cases diagnosed with TNM staging, about 21% were detected at stage 1 while more than 65% were detected at later stages (Stages 3 & 4) **(Table 60)**. Hence, there is a need to improve patient's compliance to referral to prevent delayed treatment.

Table 57: Participants Screened and Referred by State, 2015

State	No. Examined		Total Attendance	No. With Lesion		No. Referred	No. Seen by Oral Surgeons	
	New	Repeat		n	%		n	%
Perlis	0	0	0	0	0	0	0	0
Kedah	2,245	0	2,245	0	0	0	0	0
Penang	0	0	0	0	0	0	0	0
Perak	1,787	269	2,056	3	0.2	1	1	100
Selangor	1,247	0	1,247	7	0.6	2	0	0
FT Kuala Lumpur & Putrajaya	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
N. Sembilan	905	23	928	4	0.4	4	2	50
Melaka	590	0	590	1	0.2	0	0	0
Johor	2,092	0	2,092	1	05	1	0	0
Pahang	1,315	22	1,337	5	0.4	4	4	100
Terengganu	1,163	0	1,163	0	0	0	0	0
Kelantan	126	0	126	0	0	0	0	0
Pen. Malaysia	**11,470**	**314**	**11,784**	**21**	**0.2**	**12**	**7**	**58.33**
Sabah	1,549	0	1,549	18	1.2	18	0	0
Sarawak	568	0	568	7	1.2	1	1	100
FT Labuan	0	0	0	0	0	0	0	0
MALAYSIA	**13,587**	**314**	**13,901**	**46**	**0.3**	**31**	**8**	**25.81**

Source: State Oral Health Division, 2015
Note: n.a.: all screening cases were walk-in patients

Table 58: Participants Screened and Referred, 2007-2015

Year	No. Examined		Total Attendances	No. With Lesion		No. Referred	No. Seen by Oral Surgeons	
	New	Repeat		n	%		n	%
2007	3,606	111	3,717	88	2.4	76	50	65.8
2008	4,745	133	4,878	113	2.3	68	48	69.6
2009	7,131	102	7,233	128	1.8	105	47	44.8
2010	5,680	133	5,813	36	0.6	17	8	47.1
2011	7,036	19	7,055	55	0.8	16	5	31.3
2012	15, 887	156	16,043	37	0.2	29	15	51.7
2013	10, 542	39	10, 581	51	0.5	33	2	6.1
2014	10,763	231	10,994	59	0.5	39	17	43.6
2015	13,587	314	13,901	46	0.3	31	8	25.8
TOTAL	**52,548**	**1,238**	**69,634**	**613**	**0.9**	**414**	**200**	**48.3**

Source: State Oral Health Division, 2015

Table 59: Clinical and Histological Diagnosis of Referred Cases Seen, 2015

State		Clinical Diagnosis						TNM Staging				Histological diagnosis								Lesion Status		
	No. of Cases Seen by oral Surgeons	Leukoplakia	Erythroplakia	Lichen Planus	Sub Mucous Fibrosis	Suspicious of Oral Cancer	Other Pathology	Stage 1	Stage 2	Stage 3	Stage 4	Hyperkeratosis	Epithelial Dysplasia	Carcinoma In-situ	Invasive Squamous Cell Carcinoma	Oral Lichen Planus	Oral Submucous Fibrosis	Other Malignancy	Benign Pathologies	Benign	Pre malignant	Malignant
Perak	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
N. Sembilan	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Pahang	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Pen. Malaysia	**7**	**0**	**4**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**6**	**0**
Sarawak	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
TOTAL	**8**	**0**	**4**	**1**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**7**	**0**

Source: State Oral Health Division, 2015

Table 60: Clinical and Histological Diagnosis of Referred Cases, 2003 – 2015

Year		Clinical Diagnosis						Staging				Histological diagnosis								Lesion Status		
	No. of Cases Seen by Oral Surgeons	Leukoplakia	Erythroplakia	Lichen Planus	Sub Mucous Fibrosis	Suspicious of oral cancer	Other Pathology	Stage 1	Stage 2	Stage 3	Stage 4	Hyperkeratosis	Epithelial Dysplasia	Carcinoma In-situ	Invasive Squamous Cell Carcinoma	Oral Lichen Planus	Oral Submucous Fibrosis	Other Malignancy	Benign Pathologies	Benign	Pre malignant	Malignant
2003	26	6	1	8	4	2	6	1	0	0	0	1	4	0	0	2	1	0	4	5	6	0
2004	19	3	1	3	1	2	10	0	0	3	0	0	0	0	3	0	0	0	0	0	1	2
2005	25	9	1	3	2	9	6	5	2	3	1	0	1	0	10	0	0	2	0	1	6	10
2006	34	1	1	6	1	18	7	7	1	5	7	0	0	0	17	3	0	1	4	3	2	19
2007	50	6	1	4	3	27	13	4	5	6	8	0	6	1	22	3	3	2	5	5	11	26
2008	48	2	1	0	1	35	7	4	2	8	13	0	5	2	20	8	0	2	2	3	6	32
2009	47	4	0	4	2	30	5	3	3	5	16	2	2	0	20	1	0	5	1	0	1	28
2010	8	1	0	2	0	1	4	0	0	1	0	0	2	0	1	0	0	0	0	0	3	1
2011	5	1	0	0	1	3	0	0	1	0	1	1	0	0	2	0	0	0	0	0	2	2
2012	16	3	2	1	2	6	2	0	0	0	2	0	0	0	2	0	0	1	3	4	2	4
2013	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
2014	17	3	1	1	0	1	11	0	0	0	0	0	0	0	0	0	0	0	0	12	1	0
2015	8	0	4	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	7	0
TOTAL	**305**	**39**	**9**	**32**	**17**	**134**	**66**	**24**	**14**	**31**	**48**	**4**	**20**	**3**	**97**	**17**	**4**	**13**	**19**	**35**	**41**	**124**

Source: State Oral Health Division, 2015

*Histological diagnosis only available for cases with biopsy done

2.2 Opportunistic Screening

In 2015, a total of 61,109 patients were screened in the dental clinics **(Table 61)**. Among those screened, 464 (0.76%) patients were seen with oral lesion and 282 (60.8%) were referred to Oral Surgeons for further investigation and management **(Table 62 & 63)**. Of these, 139 (49.3%) complied with referral to Oral Surgeons **(Table 62)**.

Table 61: Oral Cancer and Pre-cancer Screening for Walk-in Patients, 2015

No. of patients screened	No. of Exhibitions held	Dental Health Talks	
		No. of talks given	No. of participants
61,109	406	5,352	22,508

Source: State Oral Health Division, 2015

Table 62: Walk-in Patients Screened and Referred by State, 2015

State	No. Examined		Total Attendances	No. With Lesion		No. Referred	No. Seen by Oral Surgeons	
	New	Repeat		n	%		n	%
Perlis	1,153	0	1,153	19	1.6	19	4	21.1
Kedah	22,042	0	22,042	15	0.1	15	13	86.7
Penang	3,744	0	3,744	21	0.6	19	14	73.7
Perak	5,295	15	5,310	90	1.7	46	28	60.9
Selangor	1,351	0	1,351	37	2.7	31	22	71.0
FT Kuala Lumpur & Putrajaya	2,571	0	2,571	55	2.1	54	21	38.9
N. Sembilan	1,406	0	1,406	0	0	0	0	0.0
Melaka	2,366	0	2,366	27	1.1	25	9	36.0
Johore	4,401	0	4,401	17	0.4	14	4	28.6
Pahang	2,017	36	2,053	5	0.2	2	1	50.0
Terengganu	4,600	0	4,600	6	0.1	6	6	100.0
Kelantan	4,651	0	4,651	2	0	2	2	100.0
Pen. Malaysia	**55,597**	**51**	**55,648**	**294**	**0.5**	**233**	**124**	**53.2**
Sabah	2,717	0	2,717	33	1.2	33	8	24.2
Sarawak	2,460	0	2,460	105	4.3	15	6	40.0
FT Labuan	284	0	284	32	11.3	1	1	100.0
MALAYSIA	**61,058**	**51**	**61,109**	**464**	**0.8**	**282**	**139**	**49.3**

Source: State Oral Health Division, 2015

Table 63: Clinical and Histological Diagnosis of Referred Cases (Walk-in patients), 2015

State	No. of Cases Seen by Oral Surgeons	Clinical Diagnosis						Staging				Histological diagnosis*								Lesion Status		
		Leukoplakia	Erythroplakia	Lichen Planus	Sub Mucous Fibrosis	Suspicious of oral cancer	Other Pathology	Stage 1	Stage 2	Stage 3	Stage 4	Hyperkeratosis	Epithelial Dysplasia	Carcinoma In-situ	Invasive Squamous Cell Carcinoma	Oral Lichen Planus	Oral Submucous Fibrosis	Other Malignancy	Benign Pathologies	Benign	Pre malignant	Malignant
Perlis	4	0	0	0	0	1	3	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1
Kedah	13	0	0	2	2	8	2	2	3	3	0	0	0	3	3	0	2	1	1	1	2	8
Penang	14	0	0	0	0	12	3	0	0	0	0	0	0	0	12	0	0	2	0	0	0	14
Perak	28	3	0	5	2	6	13	0	1	0	1	0	0	0	4	0	0	1	5	5	1	5
Selangor	22	0	0	2	0	1	19	0	0	0	0	0	0	0	1	2	0	0	0	1	1	1
FT Kuala Lumpur & Putrajaya	21	1	0	1	0	0	19	0	0	0	0	0	0	0	2	0	0	5	0	0	0	7
N. Sembilan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Melaka	9	0	0	1	1	2	5	0	0	0	0	0	0	0	0	0	0	0	0	5	2	2
Johor	4	0	0	0	0	2	2	1	1	0	0	0	0	0	2	0	0	0	0	0	0	2
Pahang	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Terengganu	6	0	0	0	0	4	2	0	0	1	3	0	0	0	2	0	0	4	0	0	0	6
Kelantan	2	0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
Pen. Malaysia	124	4	0	12	5	36	70	3	5	5	5	0	0	3	27	2	3	13	6	13	6	46
Sabah	8	0	0	0	0	8	0	2	4	2	0	0	0	1	4	3	0	0	0	0	0	8
Sarawak	6	0	0	2	0	1	3	1	0	0	0	0	0	0	1	2	0	0	1	3	2	1
FT Labuan	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
MALAYSIA	139	4	0	14	5	45	74	6	9	7	6	0	0	4	33	7	3	13	7	16	8	56

Source: State Oral Health Division, 2015
**Histological diagnosis only available for cases with biopsy done*

Generally, more malignant cases were detected among patients screened in the dental clinic compared to the screening done at high risk communities **(Table 59 & 63)**.

2.3 Mouth Cancer Awareness Week

Mouth Cancer Awareness Week was held from 15th -21st November 2015 aimed to increase oral cancer awareness among health professionals and the public. This year, no specific launching event was held as students from UKM had done the ''Mouth Cancer Awareness Walkathon' in February 2015 in conjunction with World Cancer Day. Nevertheless, all agencies were encouraged to conduct related activities on the appointed date.

Activities done by Oral Health Divisions at state levels include screening of 23,763 people, 626 awareness campaigns, 1,101 health education talks, 2 radio slots, and counselling of 10,234 individuals on risk habits **(Table 64)**.

Under the spirit of Mouth Cancer Awareness Week as well, a Training of Trainers for Early Detection of Oral Potentially Malignant Lesions and Oral Cancer was held by Oral Cancer Research and

Coordinating Centre (OCRCC) on 15th – 17th November 2015 at Armada Hotel, Petaling Jaya. A total of 24 participants from Oral Health Programmes, MOH attended the training session. Participants comprised of Oral Surgeons, Oral Pathology & Oral Medicine Specialists and Dental Public Health Specialists representing their states in the country.

Table 64: Activities during Mouth Cancer Awareness Week by State, 2015

State	Oral Screening	Oral Health Education			Oral Health promotion (No. of activities held)				*Advice/ Counselling
		Talks			Radio Talk	Television Talk	Exhibition/ Campaign	Others**	No. of Participants
	Total Attendance	Group		Individual					
		No. Held	No. of Participants	No. Held					
Perlis	225	9	225	0	0	0	5	0	0
Kedah	2,326	66	1,127	1,050	1	0	67	0	973
Penang	602	10	173	128	0	0	14	0	174
Perak	1,385	101	1,479	982	0	0	62	0	340
Selangor	1,354	27	560	771	0	0	32	1	566
FT Kuala Lumpur & Putrajaya	4,956	161	2,192	3,638	0	0	86	140	4,233
N. Sembilan	1,022	52	607	482	0	0	38	1	476
Melaka	396	23	286	100	0	0	15	0	146
Johor	1,889	239	1,746	41	0	0	31	9	585
Pahang	1,702	53	542	722	0	0	55	49	543
Terengganu	1,018	15	145	857	0	0	42	6	830
Kelantan	1,295	106	2,103	460	0	0	36	0	232
Sabah	2,395	98	3,454	620	0	0	78	4	143
Sarawak	2,596	127	2,520	218	0	0	60	2	267
FT Labuan	9	7	169	0	0	0	1	1	0
CDC, DTCM***	115	5	140	115	1	0	1	0	115
HKL	478	2	491	50	0	0	3	3	50
OHD, MOH	0	0	0	0	0	0	0	0	0
TOTAL	**23,763**	**1,101**	**17,959**	**10,234**	**2**	**0**	**626**	**216**	**9,673**

Source: State Oral Health Division, 2015
** Example: Stop smoking habits / chewing betel quid / drinking alcohol / others*
*** Example: MSE demonstration*
****Children's Dental Centre, Dental Training College, Malaysia*

2.4 Training

In 2015, there were 225 trainings on primary prevention and early detection of oral cancer conducted by all states involving 1,974 Dental Officers. The highest number of training done was done in Selangor. The highest number of Dental Officers trained was in Kedah. No training was done in Perlis and FT Labuan **(Table 65)**.

Table 65: Oral Cancer Related Courses Conducted by States, 2015

States/ Institutions	Oral Cancer Training	
	No. of courses conducted	No. of Dental Officers trained
Perlis	0	0
Kedah	5	177
Penang	1	9
Perak	4	145
Selangor	68	101
FT Kuala Lumpur & Putrajaya	2	52
N. Sembilan	18	37
Melaka	1	16
Johor	3	99
Pahang	3	119
Terengganu	2	98
Kelantan	2	40
OHD, MOH	1	24
Pen. Malaysia	**110**	**917**
Sabah	1	40
Sarawak	4	100
FT Labuan	0	0
MALAYSIA	**225**	**1,974**

Source: State Oral Health Division, 2015

2.5 National Meetings

The idea of establishing National Oral Cancer Initiatives (NOCI) arose during the annual Mouth Cancer Awareness Week Meeting in 2013. The intention of NOCI was to offer an opportunity for dental fraternity and other relevant key stakeholders in Malaysia to provide leadership and surveillance over oral cancer control programme in Malaysia. Other than the Oral Health Programme, MOH, members of NOCI includes the Ministry of Defence, Oral Cancer Research and Coordinating Centre (OCRCC), Cancer Research Malaysia (CRM), dental faculties of public and private universities as well as professional dental associations. The 1st NOCI meeting was held on 29th June 2015 at the Oral Health Programme, MOH. Chaired by former Principal Director of Oral Health, YBhg. Datuk Dr Khairiyah bt. Abdul Muttalib, the aim of the meeting was to (1) share current national initiatives in oral cancer control and prevention including its issues and challenges; (2) discuss the term of reference (TOR) of NOCI; and (3) plan the National Mouth Cancer Awareness Week 2015-2016.

Image 4: National Oral Cancer Initiatives (NOCI) Meeting on 29 June 2015.

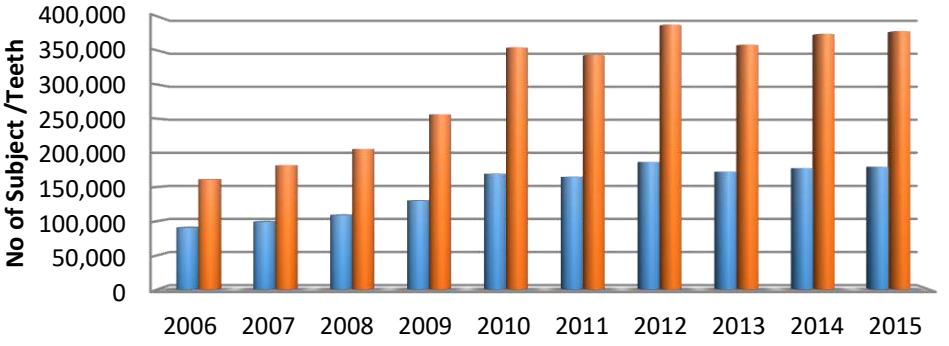
Representatives from 12 organizations and associations participated in the meeting with members of the Community Oral Health Section as the secretariat. The main points made by non-governmental and health professional organizations concerning their contributions to oral cancer control programme in the country includes training in management of oral cancers, collaboration and conduct of research in oral cancer as well as development and dissemination of educational materials on prevention of oral cancer.

3. CLINICAL PREVENTION

3.1 Fissure Sealant Programme

In 2015, a total number of 179,227 school children rendered with fissure sealant, a slight increase compared to the previous year **(Figure 36).**

Figure 36: Subject/Teeth Rendered Fissure Sealants, 2006-2015

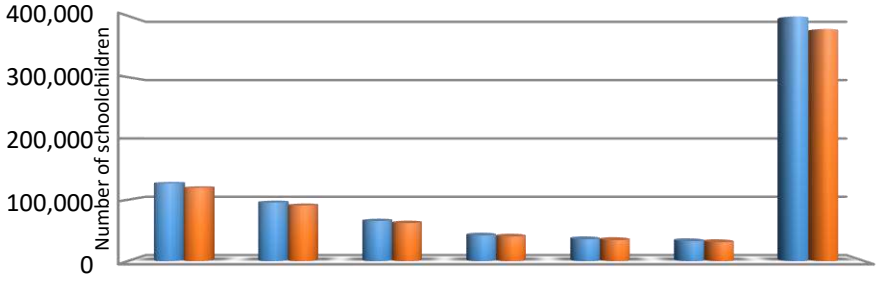


	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Subjects	90,118	98,683	108,496	129,702	169,065	164,460	186,435	172,033	177,175	179,277
Teeth	161,052	181,627	205,702	256,449	354,625	343,378	387,949	358,589	374,377	378,306

Source: State Oral Health Division, 2015

A total number of 398,633 teeth examined required fissure sealants. Of these, 94.9% were fissure-sealed and more than half were the Year 1 and Year 2 primary schoolchildren (**Figure 37).**

Figure 37: Teeth Needed and Rendered Fissure Sealants among Year 1 to Year 6 Primary Schoolchildren



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
FS Needed	127,084	95,736	65,476	41,962	35,774	32,601	398,633
FS Rendered	119,761	90,902	62,126	40,185	34,408	30,924	378,306

Source: State Oral Health Division, 2015

Over the last 5 years, the percentage of children in need of fissure sealant and those rendered fissure sealant have increased from 94.4% in year 2011 to 95.0% in 2015 **(Table 66)**. The percentage of teeth in need of fissure sealant and rendered fissure sealant had increased from 94.4% in 2011 to 94.9% in 2015. Thus achieved target set, i.e. 95% of schoolchildren needing fissure sealants, received fissure sealants. Provision of fissure sealant by state is shown in **Table 67**.

Table 66: Provision of Fissure Sealants, 2011-2015

Year	No. of Children			No. of Teeth		
	Needed FS	Rendered FS		Needed FS	Rendered FS	
	n	n	%	n	n	%
2011	174,218	164,460	94.4	363,861	343,378	94.4
2012	197,095	186,435	94.6	409,923	387,949	94.6
2013	181,706	172,033	94.7	379,401	358,589	94.5
2014	185,385	177,175	95.6	391,867	374377	95.5
2015	188,717	179,277	95.0	398,633	378,306	94.9

Source: State Oral Health Division, 2015

Table 67: Provision of Fissure Sealants by States, 2015

State	No. of Children			No. of Teeth		
	Needed FS	Rendered FS		Needed FS	Rendered FS	
	n	n	%	n	n	%
Perlis	3,569	3,564	99.9	6,554	6,543	99.8
Kedah	4,703	4,681	99.5	8,336	8,302	99.6
Penang	8,354	8,195	98.1	17,111	17,095	99.9
Perak	9,774	9,771	100.0	17,302	17,301	100.0
FT Kuala Lumpur & Putrajaya	3,440	3,274	95.2	4,960	4,712	95.0
Selangor	9,201	8,947	97.2	15,945	15,463	97.0
N. Sembilan	2,306	2,294	99.5	4,696	4,684	99.7
Melaka	8,732	8,495	97.3	16,025	15,519	96.8
Johor	9,305	9,248	99.4	17,456	17,371	99.5
Pahang	8,143	8,128	99.8	13,272	13,243	99.8
Terengganu	9,615	9,547	99.3	18,301	18,172	99.3
Kelantan	42,873	39,535	92.2	90,338	83,088	92.0
KLPM	1,064	749	70.4	2,344	1,030	43.9
Pen. Malaysia	**121,079**	**116,428**	**96.2**	**232,640**	**222,523**	**95.7**
Sarawak	13,756	12,042	87.5	25,734	23,169	90.0
Sabah	52,846	49,777	94.2	138,509	130,872	94.5
FT Labuan	1,036	1,030	99.4	1,750	1,742	99.5
MALAYSIA	**188,717**	**179,277**	**95.0**	**398,633**	**378,306**	**94.9**

Source: State Oral Health Division, 2015

The trend of occlusal caries experience among selected year 6 schoolchildren from 2004 until 2015 was also captured. The data shows that 66.0% - 73.3% caries experience were in posterior teeth of which 58.4% – 64.8% involved only the occlusal surface (Class I) (**Table 68**).

Table 68: Trend Data of Occlusal Caries Experience among Year 6 Schoolchildren, 2004-2015

Year	No. of Teeth with Caries Experience (* D + F)	No. of teeth with occlusal caries experience (D + F)				Percentage of Caries in Anterior Teeth	
		All types (** Class I and II)		Class I only			
	N	n1	%	n2	%	N-n1	%
2004	436,840	288,382	66.0	255,270	58.4	148,458	34.0
2005	450,665	313,757	69.6	277,151	61.5	136,908	30.4
2006	455,964	323,174	70.9	291,583	63.9	132,790	29.1
2007	414,610	289,671	69.9	260,901	62.9	124,939	30.1
2008	430,798	292,397	67.9	256,954	59.6	138,401	32.1
2009	426,747	301,298	70.6	266,766	62.5	125,449	29.4
2010	409,324	287,626	70.3	258,963	63.3	121,698	29.7
2011	409,162	291,587	71.3	262,771	64.2	117,575	28.7
2012	441,440	297,460	67.4	284,107	63.9	143,980	32.6
2013	409,858	293,282	71.6	265,716	64.8	116,576	28.4
2014	362,116	265,286	73.3	234,934	64.8	96,830	26.7
2015	341,614	245,580	71.9	217,622	63.7	96,034	28.1

Source: State Oral Health Division, 2015

* D: Carious tooth
F: Filled tooth

** Class I : Caries involves only the occlusal surface of the posterior tooth
Class II :Caries involves other surfaces and/or occlusal of the posterior tooth

Evaluation on trend of occlusal caries further justifies the need for fissure sealants. Thus, it is recommended that fissure sealant provision continues as an integral part of incremental care in primary schoolchildren aimed to prevent pit and fissure caries. With limited resources, priority should be given to high risk individuals and teeth.

3.2 Fluoride Varnish Programme

In order to further strengthen the Early Childhood Oral Healthcare programme, fluoride varnish (FV) programme was introduced for toddlers and piloted in Sabah, Kelantan, and Terengganu in 2011. Additional funds were allocated for the purchase of fluoride varnish for the pilot project. Data collection forms were further improved based on feedbacks from state coordinators. In 2015, a total of 27,921 (46.4%) high risk toddlers were rendered fluoride varnish in Kelantan, Terengganu and Sabah **(Table 69).**

Table 69: Fluoride Varnish Application, 2011-2015

Year	Kelantan			Terengganu			Sabah			TOTAL		
	Need FV	FV Applied		Need FV	FV Applied		Need FV	FV Applied		Need FV	FV Applied	
	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%
2011	4,337	1,650	38.04	6,141	5,612	91.4	3,896	3,866	99.2	14,374	11,128	77.4
2012	5,530	2,616	47.31	7,742	7,004	90.5	6,048	6,232	97.3	19,680	15,852	80.6
2013	5,816	2,924	50.28	11,269	10,318	91.6	12,147	11,380	93.7	29,232	24,622	84.2
2014	8,037	2,981	37.09	14,382	13,247	92.1	11,018	10,245	92.9	33,437	26,473	79.2
2015	33,596	5,097	15.17	16,918	15,060	89.0	9,676	7,764	80.2	60,190	27,921	46.4

Source: State Oral Health Division, 2015

Attrition rates were high among children rendered FV in 2013, with only 14.2%, 11.1% and 4.6% in Kelantan, Sabah and Terengganu respectively completed recommended 4 times application in 2 years **(Table 70**).

Table 70: Compliance Rate for Fluoride Varnish Application Done for Cohort 2013-2015

State	Need FV	Rendered FV	With 2 times application		With 3 times application		With 4 times application		Compliance to six-monthly (±1 month) application	
	No.	No.	No.	%	No.	%	No.	%	No.	%
Kelantan	5,816	2,875	1,811	62.9	1,078	37.50	409	14.2	382	13.3
Sabah	12,147	11,380	4,035	35.5	2,241	19.7	1,264	11.1	1,083	9.5
Terengganu	11,269	10,333	3,395	32.9	1,305	12.6	472	4.6	272	2.6
TOTAL	**29,232**	**24,588**	**9,241**	**37.6**	**4,624**	**18.8**	**2,145**	**8.7**	**1,737**	**7.1**

Source: State Oral Health Division, 2015

3.3 School-Based Fluoride Mouth Rinsing Programme

School-based fluoride mouth rinsing (FMR) programmes have been carried out in Sabah, Sarawak and Kelantan. In 2015, the programme was conducted for Year 2 to Year 6 children in selected schools in non-fluoridated areas in Kelantan, Sabah and Sarawak. In total, 61 schools and 19,835 students benefited from this programme **(Table 71).**

Table 71: Schools and Students Participating in FMR Programme, 2010-2015

State	No. of schools participated						No. of student involved					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Kelantan	7	7	7	7	7	7	1,204	723	765	720	557	580
Sabah	44	43	46	38	47	30	21,641	21,835	23,835	20,898	27,579	14,796
Sarawak	25	26	30	26	24	24	5,585	5,758	5,077	5,436	4,076	4,459
TOTAL	**76**	**76**	**83**	**71**	**78**	**61**	**28,430**	**28,316**	**29,677**	**27,054**	**32,212**	**19,835**

Source: State Oral Health Division, 2015

There were an increase in the number of schools and schoolchildren involved in FMR programme in 2015. It is recommended that FMR Programme be continued in communities with no water fluoridation programme with vigilance monitoring by the oral healthcare professionals.

4. NATIONAL BLUE OCEAN STRATEGY (NBOS) 2015

NBOS is a government initiative to ensure that services can be delivered to the people at a low cost, high impact and rapid execution. Ministry of Health (MOH) is one of the leading agencies in ensuring the successful delivery of services through NBOS initiatives. Thus, oral health services are also directly involved in the activities outlined.

NBOS initiatives involving oral health services are as follows:

Type	Description	Year of Commence
NBOS 4 & 5	Rural Transformation Centre (RTC)	2012
NBOS 6	Urban Transformation Centre (UTC)	2012
NBOS 6	Organize Health Fairs for Sabah and Sarawak	2012
NBOS 7	1Malaysia Family Care	2013
NBOS 8	Mobile Community Transformation Centres (MCTC)	2014
NBOS 10	1Malaysia Civil Service Retirement Support	2014

4.1 NBOS 4 & 5: Rural Transformation Centre (RTC)

RTC aims to serve as a one-stop centre to facilitate access by the rural population to services provided by various government and non-governmental agencies. Dental clinic is among the services available in RTC. It is implemented to deliver outpatient dental care and at the same time to develop optimum oral health care among the rural population. In 2015, there were 7 RTCs in the country, namely RTC Gopeng (Perak), RTC Wakaf Che Yeh, Kota Bharu (Kelantan), RTC Linggi (Melaka), RTC Pekan (Pahang) and RTC Napoh, Jitra (Kedah), RTC Kulaijaya (Johor) and RTC Sibuti (Sarawak). All dental services are given using Mobile Dental Team (MDT) except RTC Linggi, Kulai Jaya and Wakaf Che Yeh, which uses the Mobile Dental Clinic (MDC).

Services provided at the RTCs are dental examination and basic dental treatment such as dental extraction, filling and scaling. A total of 6,320 patients visited dental clinics in RTCs in 2015 **(Table 72)**. In RTC Linggi, dental service was ceased since 2014 due to low patient uptake and the MDC was then transferred to Kelantan for pasca-banjir activities in December 2014. Currently RTC Sibuti is the only RTC providing daily services with one dental chair in a Static Dental Clinic.

Table 72: Oral Health Services in RTCs, 2013-2015

No	RTC	Mode of Delivery/ visit frequency	Operationalised Date	Patient Attendance		
				2013	2014	2015
1	Napoh	MDT/ every Wednesday morning	23.03.2014	-	410	381
2	Gopeng	MDT/ every Monday	09.01.2012	564	877	866
3	Linggi	MDC/ 2nd and 4th week, Monday morning	07.01.2013	144	118	-
4	Kulai Jaya	MDC / 2nd week, Thursday morning	13.03.2015	-	86	102
5	Pekan	MDT/ every Thursday morning	01.03.2013	260	291	408
6	Wakaf Che Yeh	MDC / every Sunday morning	10.01.2012	653	737	455
7	Sibuti	Static Clinic in RTC/ Every day	05.01.2015	-	-	4,108
Total Number of Patient Attendance				**1,621**	**2,519**	**6,320**

Source: State Oral Health Division, 2015

4.2 NBOS 6: Urban Transformation Centre (UTC)

In 2015, there were nine (9) dental clinis operating at UTCs in the country namely UTC Majlis Bandaraya Alor Setar (MBAS, Kedah), UTC Ipoh (Perak), UTC Pudu Sentral (FT Kuala Lumpur), UTC Mini Sentul (FT Kuala Lumpur), UTC Ayer Keroh (Melaka), UTC Johor Baharu (Johor), UTC Kuantan (Pahang), UTC Kota Kinabalu (Sabah) and UTC Kuching (Sarawak). A total of 162,975 patients attended the dental clinics in UTCs in 2015 compared to 56, 889 in 2013 and 124,815 in 2014 **(Table 73)**. The increasing trend of patients attending UTC was due to the increase in the number of UTCs and also due to the awareness of the public on the existence of UTCs.

Table 73: Oral Health Services in UTCs, 2013-2015

No	UTC	Operationalised Date	No of Dental Unit	Patient Attendances		
				2013	2014	2015
1	UTC Ayer Keroh, Melaka	23.06.2012	1	9,224	12,463	10,889
2	UTC Pudu Sentral FT Kuala Lumpur	22.09.2012	1	2,883	3,795	8,074
3	UTC Ipoh, Perak	07.01.2013	2	17,345	21,948	20,079
4	UTC Sentul, FT Kuala Lumpur	Mac 2013	2	4,294	12,004	17,871
5	UTC Kuantan, Pahang	01.04.2013	2	17,158	29,979	30,726
6	UTC MBAS, Kedah	16.08.2013	2	5,463	14,982	12,502
7	UTC Kota Kinabalu, Sabah	01.12.2013	2	525	24,941	35,849
8	UTC Johor Baharu, Johor	03.07.2014	2	-	4,703	18,982
9	UTC Kuching, Sarawak	05.01.2015	2	-	-	8,003
Total Number of Patient Attendances				**56,892**	**124,815**	**162,975**

Source: State Oral Health Division, 2015

4.3 NBOS 6: Organize Health Fairs for Sabah and Sarawak

MOH is the lead agency for 'Organize Health Fairs for Sabah & Sarawak' together with Implementation Coordination Unit (ICU) of Prime Minister's Department, Ministry of Education (MOE), Ministry of Defense (MINDEF), Ministry of Finance (MOF) and the state government of Sabah and Sarawak. This initiative aims at providing various services for the convenience of the people in those state. Under NBOS 6, oral health services delivered were oral health examination, screening for oral pre-cancer and cancer, filling, extraction, scaling and oral health promotion activities.

Table 74: Oral Health Activities Conducted during Organize Health Fairs in Sabah and Sarawak, 2013-2015

Year	Sabah			Sarawak		
	No. of Health Fair	No. of patients Attendances	No. of participants for Oral Health Talks	No. of Health Fair	No. of patients Attendances	No. of participants for Oral Health Talks
2013	3	273	80	12	857	-
2014	34	1,332	1,429	75	3,009	2,127
2015	21	1,119	615	74	3,193	4,369

Source: State Oral Health Division, 2015

In 2015, a total of 95 health fairs were organised in Sabah and Sarawak with 4,312 patients seen; 1,119 in Sabah and 3,193 in Sarawak respectively **(Table 74)**.

4.4 NBOS 7: 1Malaysia Family Care

NBOS 7 aims to provide holistic support in terms of health and social to the identified groups through collaboration with government and non-government agencies. One of the activities under this initiative is provision of outreach oral healthcare at the institutions for the elderly and special needs, *Pusat Pemulihan Dalam Komuniti (PDK)* through mobile dental teams/clinics.

A total of 347 institutions for the elderly were visited and 7,387 patients were seen in 2015. The highest number of patients seen was in Penang (1,922) while the highest number of institutions visited was in Selangor (74) **(Table 75)**. In 2015, there were 577 institutions for the special needs visited with the highest in Johor (81). A total of 13,276 patients were seen, highest was in Johor (1, 772) **(Table 76)**.

Table 75: Number of Elderly Patients Seen in Institutions, 2014 – 2015

State	2014			2015		
	Government and Private Institutions		Total Patients Seen	Government and Private Institutions		Total Patients Seen
	No. of Institutions	No. of Institutions Visited		No. of Institutions	No. of Institutions Visited	
Perlis	4	4	162	4	4	187
Kedah	20	20	389	21	21	510
Penang	50	48	2,570	50	45	1,922
Perak	67	67	1,524	75	73	1,600
Selangor	48	47	681	194	74	762
FT Kuala Lumpur & Putrajaya	9	9	195	3	3	172
N. Sembilan	17	13	76	14	14	273
Melaka	40	31	203	16	16	213
Johor	17	15	938	50	50	744
Pahang	51	51	197	22	22	221
Terengganu	5	5	233	6	6	177
Kelantan	14	7	167	8	8	135
Sabah	4	4	179	5	5	205
Sarawak	20	4	111	39	6	266
FT Labuan	0	0	0	0	0	0
MALAYSIA	**366**	**325**	**7,625**	**507**	**347**	**7,387**

Source: State Oral Health Division, 2015

Table 76: Number of Special Need Patients Seen in Institutions, 2014 -2015

State	2014			2015		
	PDK & Non - *PDK*		Total Patients Seen	*PDK* & Non - *PDK*		Total Patients Seen
	No. of Institutions	No. of Institutions Visited		No. of Institutions	No. of Institutions Visited	
Perlis	9	9	114	9	9	129
Kedah	39	39	1,103	51	51	1,175
Penang	24	23	538	24	24	598
Perak	46	46	1,242	59	59	1,641
Selangor	76	75	1,045	64	41	549
FT Kuala Lumpur & Putrajaya	10	10	308	10	9	372
N. Sembilan	102	76	1,292	46	45	1,104
Melaka	60	51	222	24	24	326
Johor	71	71	1,911	83	81	1,772
Pahang	80	79	438	52	51	897
Terengganu	45	45	1,258	45	45	1,278
Kelantan	160	157	774	33	33	824
Sabah	64	64	1,137	74	66	1,637
Sarawak	62	39	974	69	36	884
FT Labuan	3	3	89	3	3	90
MALAYSIA	**851**	**787**	**12,445**	**646**	**577**	**13,276**

Source: State Oral Health Division, 2015

4.5 NBOS 8: Mobile Community Transformation Centres (MCTC)

MCTC initiative was introduced in May 2014 and was organised by National Strategic Unit (NSU), Ministry of Finance. The aim of this initiative is to assemble main services of various government agencies at the same time according to local needs and at identified location based on the concept of UTC/RTC. Oral health programme was involved in this initiative through invitation by NSU. There were 34 activities conducted in 2015 with a total of 1,871 patients **(Table 77)**.

Table 77: Mobile Community Transformation Centre (Mobile CTC) Activities, 2015

Month	State	Location	Total Patients Seen
January	Johor	(1) Bandar Paloh	13
	N. Sembilan	(2) Kuala Pilah	Exhibition only
February	Perlis	(3) Simpang Empat	15
	Penang	(4) Taman Pauh	237
	Kelantan	(5) Gua Musang* (6) Manik Urai Lama* (7) Kuala Krai*	111
March	Perak	(8) Dataran Selama	48
	FT Kuala Lumpur	(9) Tasik Permaisuri	103
	Pahang	(10) Kuala Lipis (11) Temerloh*	56
	Kelantan	(12) Tanah Merah* (13) Tumpat*	104
April	Kedah	(14) Baling	51
	Penang	(15) Guar Perahu	120

	Melaka	(16) Jasin	29
	Johor	(17) Kota Tinggi	41
	Terengganu	(18) Kuala Telemong	55
May	Pahang	(19) Pekan	56
	Terengganu	(20) Gong Badak (21) Hulu Terengganu	108
	Kelantan	(22) Ketereh	46
June	Kedah	(23) Amanjaya Mall	70
July	No program		
August	N. Sembilan	(24) Gemencheh	30
	Johor	(25) Bandar Tenggara	42
September	Penang	(26) Penaga	97
October	Perlis	(27) Kuala Perlis	14
	Selangor	(28) Puchong	61
	Kelantan	(29) Dabong	24
November	Perak	(30) Padang Awam Berus	26
	Johor	(31) Dataran Jalok Benut	66
	Kelantan	(32) Bachok	79
December	Kedah	(33) Dataran Air Hangat, Pulau Langkawi (34) Mahsuri International Exhibition Centre, Pulau Langkawi	169
TOTAL		**34**	**1,871**

Source: State Oral Health Division, 2015

Note: **Pasca banjir* program

4.6 NBOS 10: 1Malaysia Civil Service Retirement Support (1M CSRS)

The aim of this initiative is to improve the quality of service delivery to the pensioners. There are 5 strategic trusts for this initiative, i.e. Healthcare Advocacy, financial management, pensioners' wellbeing, re-employment guidance and entrepreneurship development.

Under healthcare advocacy, rapid lane (R-lane) for pensioners visiting healthcare facilities in the Ministry of Health was introduced in June 2014. In 2015, there were 533 dental clinics providing R-lane for pensioners with 16.30% of the pensioners using the R-lane provided **(Table 78)**.

Table 78: Patients using R-Lane, 2014 - 2015

		2014 (Jun-Dec 2014)			2015		
		Num. of Pt used R-Lane	**Num. of Pensioner used R-Lane**	**% Pensioners used R-Lane**	**Num. of Pt used R-Lane**	**Num. of Pensioner used R-Lane**	**% Pensioners used R-Lane**
Age < 60 years old	Male	32,364	6,460	19.9	74,656	16,250	21.8
	Female	89,448	4,484	5.0	185,450	20,276	10.9
	Total	**121,812**	**10,944**	**8.9**	**260,106**	**36,526**	**14.0**
Age > 60 years old	Male	73,434	11,110	15.1	168,468	34,870	20.7
	Female	68,190	6,349	9.3	157,464	24,103	15.3
	Total	**14,1624**	**17,459**	**12.3**	**325,932**	**58,973**	**18.1**
Total Overall	Male	105,798	17,570	16.6	243,124	51,120	21.0
	Female	157,638	10,833	6.8	342,914	44,379	12.9
	Total	**263,436**	**28,403**	**10.8**	**586,038**	**95,499**	**16.3**

Source: State Oral Health Division, 2015

Table 79: Oral Health Screening, 2014 - 2015

		No of pensioner	Mean DMFX	Edentulous (%) 0% of 35-44 age group[1] ≤ 30% of 60 years and above[2]	With ≥ 20 teeth (%) ≥ 60% of 60-year-olds[1] ≥ 30% of 60 years and above[2]
2014	**< 60 year**	8,651	14.57	**3.2**	64.1
	≥ 60 year	13,735	15.94	**6.9**	46.4
	Total	**22,386**	**15.41**	**5.5**	**53.3**
2015	**< 60 year**	16,469	14.84	2.8	57.9
	≥ 60 year	26,895	17.28	4.1	43.6
	Total	**43,364**	**16.35**	**3.6**	**49.0**
	1. 2020 National Oral Health Goals 2. Guidelines on Oral Healthcare for the Elderly in Malaysia				

Source: State Oral Health Division, 2015

4.7 Budget Allocation

In 2015, the Oral Health Programme received RM 6,320,000 for four (4) NBOS initiative activities **(Table 80).** The state of Kedah, Perak, Pahang and Kelantan received RM 100,000.00 each, to buy a vehicles for the RTC Mobile Dental Team, while Johor and Sarawak received RM 213,660.00 to set up dental clinic in UTC Johor Baharu and UTC Kuching respectively. Another RM 220,000.00 was allocated to buy dental materials and consumables under 1 Malaysia Family Care initiative and 4 Mobile CTCs were purchased for the state of Selangor (1), Kelantan (1) and Sabah (2) with a total allocated budget of RM 4,800,000.00.

Table 80: Budget Allocation for NBOS Initiatives, 2015

	Dental Services under NBOS Initiatives	Allocation (RM)
1	NBOS 4 & 5: Dental Services in RTC	400,000.00
2	NBOS 6: Dental Services in UTC	900,000.00
3	NBOS 7 : Dental Services for 1Malaysia Family Care	220,000.00
4	NBOS 8 : Mobile Community Transformation Centre (Mobile CTC)	4,800,000.00
	TOTAL	**6,320,000.00**

Source: Oral Health Programme, 2015

QUALITY IMPROVEMENT INITIATIVES

1. QUALITY ASSURANCE PROGRAMME (QAP)

The Quality Assurance Programme (QAP) is intended to improve the quality, efficiency and effectiveness of the delivery of health services including oral health. The QAP also facilitates the planned, systematic evaluation of the quality services. The goal of the QAP is to ensure that, within the constraints of the resources available within the MOH, the patient, his family and the community obtain the 'optimum achievable benefit' from the oral health services.

The National Indicator Approach (NIA) together with the District/Hospital Specific Approach (DSA/HSA) have been used under the QAP of the MOH. At national level, the achievement of these indicators was monitored half-yearly. The indicators were periodically reviewed to ensure relevance and appropriateness.

1.1 National Indicator Approach (NIA)

In 2015, four National Indicator Approach (NIA) Indicators were monitored to measure the performance of the primary and community oral health services. This is the sixth year that NIA indicators 1 and 2 were monitored based on the standards that were set in 2010. The achievements of the NIA Indicators monitored in 2015 are listed in **Table 81**.

Table 81: Oral Health NIA Performance, January-December 2015

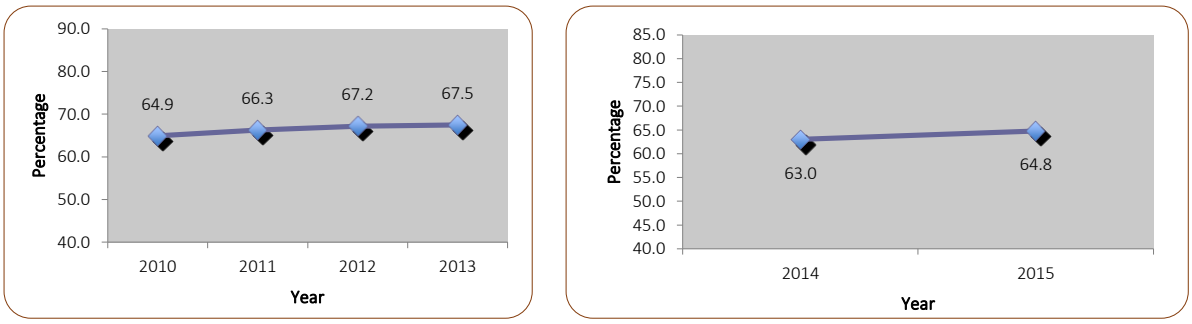
No.	Indicator	Standard (%)	Achievement 2015 (%)	SIQ Yes/No
1	Percentage of primary schoolchildren maintaining orally-fit status	≥ 65	64.8	Yes
2	Percentage of secondary schoolchildren maintaining orally-fit status	≥ 80	70.0	Yes
3	Percentage of non-conformance of fluoride levels at reticulation points (Level < 0.4ppm)	≤ 25	20.9	No
4	Percentage of non-conformance of fluoride levels at reticulation points (Level > 0.6ppm)	≤ 7	0.9	No

Source: Oral Health Programme, MOH 2015
** SIQ: shortfall in quality*

Two out of the four NIA indicators achieved their targets **(Table 81).** Although the achievement was below the set standard, Indicator 1 and 2 showed better achievements in 2015 compared to 2014 **(Figure 38 and 39).**

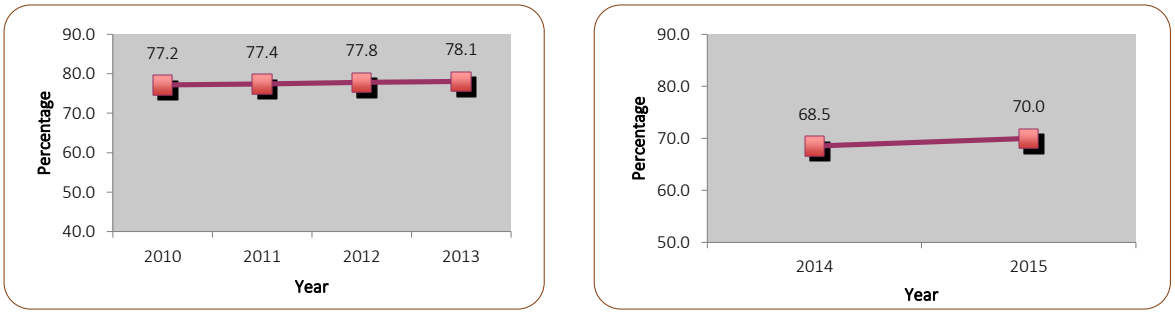
The introduction of the Gingival Index for Schoolchildren (GIS) in 2014 has been identified as the main factor in the decrease in 'Percentage of schoolchildren maintaining orally-fit status' in 2014. Nevertheless, the result showed an improvement from 63.0% in 2014 to 64.8% in 2015 for primary schoolchildren **(Figure 38)** and 68.5% in 2014 to 70.0% in 2015 for secondary schoolchildren **(Figure 39).**

Figure 38: Percentage of Primary Schoolchildren Maintaining Orally-fit Status, Std ≥65%)



Source: Oral Health Programme, MOH 2015

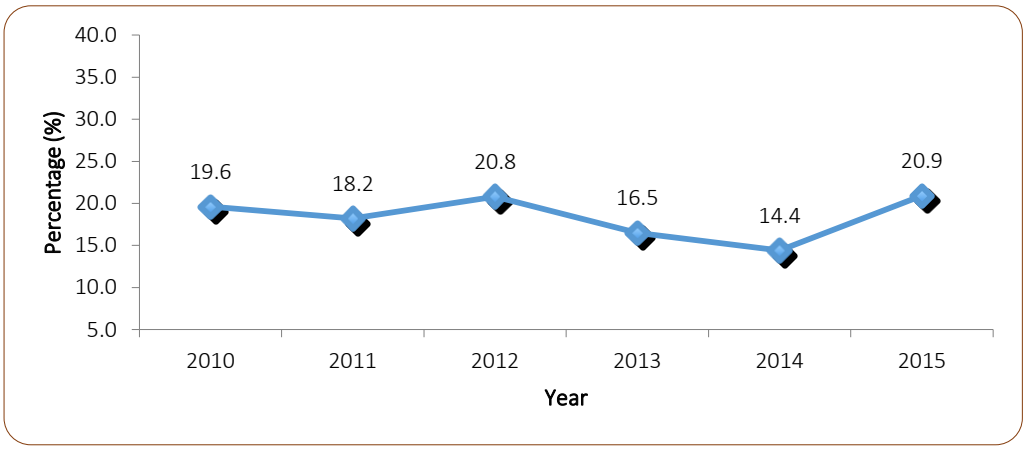
Figure 39: Percentage of Secondary Schoolchildren Maintaining Orally-fit Status, Std ≥80%



Source: Oral Health Programme, MOH 2015

From 2010, the percentage of non-conformance of fluoride levels < 0.4 ppm has achieved the set standard. However, in 2015, the achievement 'dropped' to 20.9% (**Figure 40**).

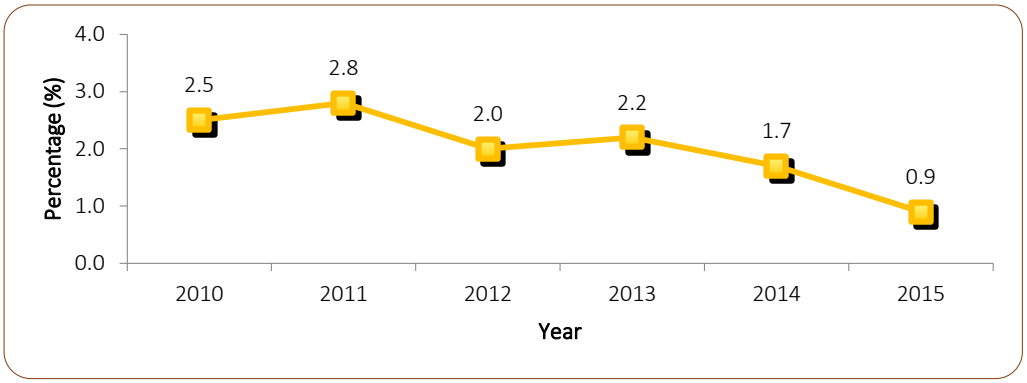
Figure 40: Percentage of Non-conformance of Fluoride Levels at Reticulation Points, Level < 0.4ppm (Std.≤ 25%), 2010-2015



Source: Oral Health Programme, MOH 2015

The percentage of non-conformance of fluoride levels at reticulation points > 0.6 ppm has shown an improvement from 2.5 % in 2010 to 0.9% in 2015 **(Figure 41**). The non-conformance of fluoride levels (> 0.6 ppm) showed a marked improvement compared to 2014, and all states complied with the standard.

Figure 41: Percentage of Non-conformance of Optimal Fluoride Levels at Reticulation Points, Level > 0.4ppm (Std.≤ 7%), 2010-2015



Source: Oral Health Programme, MOH 2015

The fluoride level still needs vigilant monitoring to ensure maintenance of optimal fluoride levels for optimum effectiveness.

1.2 District Specific Approach (DSA)

DSA indicators are developed by the states and districts based on their specific issues. As in previous years, DSA indicators pertaining to monitoring and measuring performance of the ante-natal service are the most commonly used indicator.

Specific related indicators include rates of attendance, treatment and oral health education given to ante-natal mothers. Other DSA indicators commonly used relate to oral health services for toddler, pre-school, primary and secondary schoolchildren. The overall performance of DSA indicators related to primary care has improved, based on the improved (higher) standard set by the districts and states.

Some states have DSA indicators that are not used in other states. Some of the unique indicators are related to:

- toddlers given fluoride varnish
- toddlers given fissure sealants
- private kindergarten pre-school children treated
- loss of teeth due to caries in every 100 children
- incidence of sharps injuries (all healthcare workers)
- failed fissure sealants
- new attendance of toddlers at MCHC, Klinik Desa and Dental Clinic
- full dentures issued within two months

All states have specific DSA indicators for each district. However, Perlis, Kedah, FT Kuala Lumpur, Selangor, Negeri Sembilan, Melaka, Pahang, Kelantan, Terengganu and Sarawak have the same indicators for the whole state (State Specific Approach).

1.3 Quality Assurance Projects/Studies

Oral health personnel are actively involved in quality assurance projects/studies. In 2015, a total of 45 projects were completed and 34 projects were to be continued in 2016. Sarawak had the most completed QA projects/studies (13 studies) followed by Johore (12 studies). Many of these studies were presented at various conventions at state and regional level.

2. MS ISO 9001: 2008

2.1 Certification Status

Nationwide, out of the 651 dental clinics with primary oral healthcare, 541 dental clinics (83.1%) are ISO-certified **(Table 82).** This is the third year since the definition of the denominator 'clinics providing primary oral health care' was adopted *(agreed at Mesyuarat Jawatan Dasar dan Perancangan Kesihatan Pergigian Bil. 6/2012).*

Table 82: MS ISO 9001:2008 Certification Status by State, District and Facility, 2015

MULTI-SITE CERTIFICATION								
States	**District**			**Dental Clinic**			**Certification Period**	**Registration Number**
	No. with certification	**Total**	**%**	**No. with certification**	**Total**	**%**		
Perlis	2	2	100.0	9	9	100.0	24.06.14-12.06.17	AR 3676
Kedah	11	11	100.0	59	59	100.0	15.09.14-07.08.17	AR 4665
P. Pinang	5	5	100.0	24	28	85.7	30.10.15-14.09.18	AR 5028
Perak	10	10	100.0	57	72	79.2	10.10.13-09.10.16	AR 4449
Selangor	9	9	100.0	61	63	96.8	11.03.14-26.01.17	AR 3530
FT KL & Putrajaya	5	5	100.0	15	19	78.9	26.01.14-26.01.17	AR 3531
N. Sembilan	7	7	100.0	40	40	100.0	06.02.15-16.01.18	AR 3889
Melaka	3	3	100.0	17	26	65.4	25.02.14-24.02.17	AR 3569
Johor	10	10	100.0	89	89	100.0	18.03.14-20.01.17	AR 5365
Pahang	11	11	100.0	38	72	52.8	21.03.15-20.03.18	AR 3949
Kelantan	10	10	100.0	48	63	76.2	28.04.12-11.04.15	AR 3975
Terengganu	7	7	100.0	44	44	100.0	03.02.15-02.02.18	AR 5591
Sabah	9	9	100.0	19	34	55.9	29.04.15-30.03.18	AR 3950
FT Labuan	1	1	100.0	1	1	100.0	20.02.13-19.02.16	AR 3135
Total	**100**	**100**	**100.0**	**521**	**619**	**84.2**	-	-
DISTRICT CERTIFICATION								
Sarawak	10	11	90.9	20	32	62.5	**Refer Table 3**	
Malaysia	**110**	**111**	**99.1**	**541**	**651**	**83.1**	-	-

Source: Oral Health Programme, MOH 2015

Sarawak (with a total of 11 Divisions) is the only state that still practices the original district certification approach. **Table 83** shows Certification Status of the districts in Sarawak under MS ISO 9001:2008 District Certification.

Table 83: MS ISO 9001:2008 District Certification Status in Sarawak, 2015

District/ Division	Location	Certification Period	Registration No.
Kuching	KP Jln Masjid KP Tanah Puteh KP Kota Sentosa KP Lundu	06.01.14-29.12.16	AR 3494
Sri Aman	KP Sri Aman	03.01.13 - 01.04.16	AR 3175
Samarahan	KP Samarahan KP Serian KP Simunjan	16.12.14 – 15.12.17	AR 3858
Miri	KP Jalan Merbau KP Tudan	06.01.15 – 05.01.18	AR 3873
Sibu	KP Jalan Oya KP Lanang KP Kanowit	17.01.12 - 16.01.15	AR 3890
Sarikei	KP Sarikei KP Bintangor	12.04.15 – 11.04.18	AR 3976
Bintulu	KP Bintulu	23.11.13 - 22.11.16	AR 4474
Limbang	KP Limbang	04.02.15 – 22.10.17	AR 4722
Mukah	KP Mukah KP Dalat	05.10.12 - 04.10.15	AR 5717
Kapit	KP Kapit	10.01.14 - 09.01.17	AR 6042
Betong	-	-	-

Source: Oral Health Programme, MOH 2015

2.2 Quality Management System

Since 2014, there have been no funds for the expansion of the electronic Quality Management System (eQMS). Thus the number of states using the system remains at nine. States with the eQMS are Perlis, Kedah, Pulau Pinang, Perak, Selangor, FT Kuala Lumpur, Negeri Sembilan, Melaka and Johor. The Oral Health Programme MOH and the Children's Dental Centre & Malaysian Dental Training College Malaysia also utilize the eQMS. The system is supported by a central server placed at the Health Informatics Centre, MOH.

Changes/improvements were made to the eQMS at the Oral Health Programme MOH in terms of function and user-friendliness. The eQMS web page content was updated as follows:

- February - Audit Schedule and Objective Quality 2015
- February - marquee on first internal audit
- August - marquee on second internal audit and audit surveillance

The following procedures were reviewed in 2015:

i. *Prosedur Pelaksanaan Komponen Pergigian Melalui Aktiviti Program Kesihatan KKM*
ii. *Prosedur Pengurusan Projek Kajian Kesihatan Pergigian*
iii. *Prosedur Pendaftaran Pengamal Pergigian Di Bawah Akta Pergigian 1971*
iv. *Prosedur Pengurusan Pengeluaran Sijil Perakuan Pengamalan Tahunan (SPPT)*
v. *Prosedur Pewartaan Pakar Klinikal Pergigian*
vi. *Prosedur Pengurusan Aduan Oleh Jawatankuasa Penyiasatan Permulaan (JKPP)*
vii. *Prosedur Pengiktirafan Ijazah Asas Pergigian Dalam Negara*
viii. *Prosedur Pengiktirafan Ijazah Lanjutan Dalam Bidang Pergigian*

ix. *Prosedur Perancangan, Pengurusan Pelaksanaan, Pemantauan dan Penilaian Program Penjagaan Kesihatan Pergigian Masyuarkat*
x. *Prosedur Pembangunan/Kajisemula Panduan Amalan Klinikal (PAK)*
xi. *Prosedur Penyediaan Permohonan Dasar Baru/One Off*
xii. *Prosedur Pengurusan Kutipan Hasil*
xiii. *Prosedur Pengendalian Panjar Wang Runcit*
xiv. *Prosedur Penyelenggaraan Aset*
xv. *Prosedur Pemantauan Perkhidmatan Sokongan Serah Urus Bagi Pengurusan Teknologi Maklumat*

2.3 Technical Advisor for Certification Body

In 2015, the Program arranged for technical advisors among senior dental officers to assist Certification Bodies in auditing sites undergoing surveillance or recertification audits. Fifteen sites underwent recertification audits while another eleven underwent surveillance audits (**Table 84**). All sites received their certification.

Table 84: List of MS ISO Audit by Certification Body, 2015

Place of Audit	Date	Type of Audit	Certification Body
Recertification Audit			
Kedah	3-5 Aug 2015	Recertification	SIRIM
Sri Aman, Sarawak	6-7 Aug 2015	Recertification	SIRIM
Bintulu, Sarawak	1-2 Sept 2015	Recertification	SIRIM
Mukah, Sarawak	10-11 Sept 2015	Recertification	SIRIM
Melaka	22-23 Sept 2015	Recertification	SIRIM
Sibu, Sarawak	28-30 Sept 2015	Recertification	SIRIM
PPKK & KLPM	19-20 Oct 2015	Recertification	CI Certification
Samarahan, Sarawak	29-30 Oct 2015	Recertification	SIRIM
Kuching, Sarawak	2-4 Nov 2015	Recertification	SIRIM
Johor	2-5 Nov 2015	Recertification	SIRIM
FT KL & Putrajaya	3-4 Nov 2015	Recertification	SIRIM
Negeri Sembilan	18-20 Nov 2015	Recertification	SIRIM
Selangor	25-27 Nov 2015	Recertification	SIRIM
Oral Health Programme, MOH	24-25 Nov 2015	Recertification	CI Certification
Kapit, Sarawak	14-16 Dec 2015	Recertification	SIRIM
Surveillance Audit			
Sabah	14-16 Jan 2015	Surveillance	SIRIM
PPKK & KLPM	11-12 Feb 2015	Surveillance	CI Certification
Pahang	16-18 Feb 2015	Surveillance	SIRIM
Sarikei, Sarawak	10-11 Mar 2015	Surveillance	SIRIM
Kelantan	22-24 Mar 2015	Surveillance	SIRIM
FT Labuan	28-30 April 2015	Surveillance	SIRIM
Perak	24-26 Aug 2015	Surveillance	SIRIM
Pulau Pinang	1-2 Sept 2015	Surveillance	SIRIM
Limbang, Sarawak	9-11 Nov 2015	Surveillance	SIRIM
Miri, Sarawak	12-13 Nov 2015	Surveillance	SIRIM
Terengganu	24-26 Nov 2015	Surveillance	SIRIM

Source: Oral Health Programme, MOH 2015

3. OTHER QUALITY IMPROVEMENT ACTIVITIES

3.1 Innovation

Innovation is one of the quality initiative activities actively being carried out by oral health personnel throughout the country. In 2015, a total of 45 innovation projects were completed and 34 projects were continued to 2016. The number of innovation projects completed had decreased from 73 projects that were completed in 2014.

Several dental projects received awards at state, regional and national levels. Among the top achievers were:

- Safe Needle Remover, Perlis:-
  - 2nd place (process category) at *Anugerah Inovasi Peringkat Kebangsaan KKM 2015.*
  - 1st place (process category) at *Pertandingan Inovasi Kualiti Zon Utara 2015.*
- Intra-oral Light Device, Penang:-
  - 1st place *at Pertandingan Inovasi Zon Utara 2015.*
  - Jury's Award (product category) at *Anugerah Inovasi Peringkat Kebangsaan KKM 2015.*
- Water Distiller, Kelantan- 2nd place at *Pertandingan Inovasi JKN Kelantan 2015.*
- Mi'S BITE, Terengganu – *Anugerah Gangsa* at *Konvensyen Kualiti JKN Terengganu 2015.*
- Enlarge Collection Jar Capacity & Movable Suction Trolley, Sarawak – 1st place *Anugerah Eureka JKN Sarawak.*

3.2 National Awards for Innovation, MOH

The National Innovation Awards, MOH 2015 was held at the Summit Hotel, USJ Selangor from 8-10 September 2015. The objectives of the Convention are; to give recognition to innovations by MOH personnel, to inspire creativity and innovation in their daily work, to share the application of useful innovations and to improve services through adoption of innovations.

The event was officiated by Tuan Saiful Anuar Bin Lebai Hussen, representing YBhg. Datuk Dr Chen Chaw Min, the Secretary General of the Ministry of Health. This was the fourth year in which the awards were categorised into four categories, i.e. Product, Process, Service and Technology. A total of 54 teams (30 Product, 8 Process, 8 Service and 8 Technology) competed for the awards. Judges constituted a good mix of eminent personalities from the public and private sectors.

Winners **(Table 85)** received a certificate and a cash prize of RM5000, RM3000 and RM 2000 for 1st, 2nd and 3rd places respectively.

Table 85: Winners of National Innovation Awards, 2015

Position	Project	Organisation/State
Product		
1st	Universal Portable Traction Device	*Jabatan Ortopedik, Hospital Queen Elizabeth II, Sabah*
2nd	Kejora Portable Bed	*Hospital Tampin, Negeri Sembilan*
3rd	Base Plate Tray	*Klinik Pakar Pergigian, Hospital Umum Sarawak*
Process		
1st	*Proses 'Denture Penuh Satu Hari'*	*Klinik Pergigian Betong, Sarawak*
2nd	Safe Needle Remover	*Klinik Pakar Pergigian Pediatrik Hospital Tuanku Fauziah, Perlis*
3rd	*eREAP - Kaedah Memasukkan Data Saringan REAP secara online*	*Pejabat Kesihatan Muar, Johor*
Service		
1st	Single Channel vs Multi-channel Cystometry : A Cost Effective, Practical and Reliable Test for Bladder Dysfunction	*Jabatan Perubatan Rehabilitasi Hospital Sg Buloh, Selangor*
2nd	Collection, Delivery & Coordination (CDC)	*Jabatan Patologi Hosp Sg Buloh, Selangor*
3rd	*KB Klorinator*	*Pejabat Kesihatan Daerah, Kota Bharu, Kelantan*
Technology		
1st	*Sistem Medical Report HKBPP*	*Unit IT, Hospital Kepala Batas, Pulau Pinang*
2nd	Wills Cephalometric Tracing System	*Klinik Pakar Ortodontik Lanang, Sibu, Sarawak*
3rd	Warfarin Dosing HTK Android Application	*Unit Farmasi Dan Bekalan, Hospital Tanjung Karang, Selangor*

Source: Oral Health Programme, MOH 2015

In 2015, the panel of judges introduced the Jury's Award for innovation under the product category **(Table 86).**

Table 86: Recipients of the Jury's Award at the National Innovation Awards, 2015

Project	Organisation/State
Static and Dynamic Foot Visual Biofeedback	*Jabatan Rehabilitasi, Hospital Serdang, Selangor*
Intra Light (Intra Oral Light Device)	*Jabatan Kesihatan Pergigian Daerah Seberang Prai Tengah, Pulau Pinang*
Sublingual Hematoma Trephine Training Simulator	*Jabatan Kecemasan & Trauma, Hospital Sultanah Bahiyah, Alor Star, Kedah*
Pemegang Filem Eureka	*Klinik Pakar Pergigian, Hospital Sibu, Sarawak*
High Pressure Long Ranged Lavva Cider V2 (HILO)	*Pejabat Kesihatan Daerah Sabak Bernam, Selangor*
Exo - Layer Technique For Shell Reconstration in Autopsy Cases	*Jabatan Perubatan Forensik Hosp Sultanah Aminah, Johor*

Source: Oral Health Programme, MOH 2015

Among the competing innovation projects, nine (9) were dental projects:

i. *Proses 'Denture Penuh Satu Hari' - Klinik Pergigian Betong, Sarawak*
ii. Base Plate Tray - *Klinik Pakar Pergigian, Hospital Umum Sarawak*
iii. Safe Needle Remover - *Klinik Pakar Pergigian Pediatrik, Hospital Tuanku Fauziah, Perlis*
iv. Wills Cephalometric Tracing System - *Klinik Pakar Ortodontik Lanang, Sibu, Sarawak*
v. *Pemegang Filem Eureka - Klinik pakar Pergigian, Hospital Sibu, Sarawak*

vi. Intra Light (Intra Oral Light Device) – *Jabatan Kesihatan Pergigian Daerah Seberang Prai Tengah, Pulau Pinang*
vii. Smart Membrane - *Bahagian Kesihatan Pergigian, Jabatan Kesihatan Pergigian WPKL*
viii. *MAFDI – Jabatan Bedah Mulut, Hospital Sultanah Nur Zahirah, Terengganu*
ix. TOD 3 in 1 – *Pejabat Pergigian Kawasan Kudat, Sabah*

3.3 Innovative and Creative Circle (ICC)

In 2015, 25 ICC projects were completed and another 29 projects were to be continued into 2016. The dental ICC projects that won awards at state and national level were:

- *Proses Pengendalian Rawatan Pergigian ke atas Pesakit Berkerusi Roda yang Sukar Dilakukan 'Stance Wheel' :*
  - First place at *Konvensyen Kualiti JKN Perlis*
  - First place (technical category) at *Konvensyen KIK Peringkat Kebangsaan KKM*
  - First plave (technical category) *at Konvensyen KIK Sektor Awam 2015*
- *Peningkatan Kegagalan Pengambilan X-ray Intra-oral di Klinik Pergigian Kangar* - third place at *Konvensyen Kualiti JKN Perlis*
- *Kelewatan Dentur Siap Bagi Pesakit Warga Emas* - third place at *Konvensyen KIK JKN Pulau Pinang*
- *Pengurusan Forcep Tercemar Selepas Rawatan Cabutan di Klinik Pergigian Air Jernih Tidak Efisien* – second place at *Konvensyen Kualiti JKN Terengganu 2015*
- *MYSMS* - second place at *Pertandingan KIK Peringkat Zon Institusi Latihan KKM (ILKKM)*
- EZ Mounting Case – third place at Pertandingan KIK Zon Utara ILKKM

3.4 Key Performance Indicators (KPI)

Altogether, 22 KPIs were monitored by the Oral Health Programme in 2015. The KPIs were maintained from the previous year.
All the KPIs achieved the targets set for 2015, except for the following, which nevertheless, achieved more than 90% of the target:

- Percentage of Health Clinics with a dental facility component (74.5% versus target of 75.0%)
- Percentage of primary schoolchildren rendered orally-fit (over new attendances) (97.6% vs. target of 97.9%)
- Percentage of population receiving fluoridated water supply (76.8% vs. target of 78.0%)
- Percentage of customers satisfied with services received (94.0% vs. target of 95.0%)
- Percentage of dental clinics with MS ISO certification (83.1% vs. target of 85.0%)
- Percentage of dental staff with 7 days training per year (97.5% vs. target of 100%)

The number of dental clinics with 2 or more full-time dental officers providing daily outpatient services contributed towards one KPI for the Minister of Health (KPI 3, **Table 87**). Three of the KPIs i.e. KPI 8, 16 and 18 **(Table 87)** were also chosen as KPIs for the Director-General of Health monitored by the Public Services Department.

Table 87: Key Performance Indicators 2015, Oral Health Programme, MOH 2015

KPI Domain	Monitoring Indicator	Target 2015	Achievement
Accessibility to MOH oral healthcare services	1. Percentage of dental clinics with a full-time dental officer	77.0%	79.4%
	2. Percentage of dental clinics with a full-time dental officer providing daily outpatient services	90.7%	92.8%
	3. Percentage of dental clinics with 2 or more full-time dental officers providing daily outpatient services	446 clinics	446 clinics
	4. Percentage of Health Clinics with a dental facility component	75.0%	74.5%
	5. Number of dental facilities implementing the shift system	8	9
Comprehensive oral healthcare for schoolchildren	6. Percentage of primary schools treated under the incremental dental care system	99.4%	99.9%
	7. Percentage of primary schoolchildren treated	98.5%	99.0%
	8. Percentage of secondary schools treated under the incremental dental care system	93.0%	96.0%
	9. Percentage of secondary schoolchildren treated	88.0%	90.9%
Oral health status of schoolchildren	10. Percentage of primary schoolchildren rendered orally-fit (over new attendances)	97.9%	97.6%
	11. Percentage of primary schoolchildren rendered orally-fit (over enrolment)	96.4%	96.6%
	12. Percentage of secondary schoolchildren rendered orally-fit (over new attendances)	93.7%	94.1%
	13. Percentage of secondary schoolchildren rendered orally-fit (over enrolment)	81.9%	85.6%
Population receiving fluoridated water supply	14. Percentage of the population receiving a fluoridated water supply	78.0%	76.8%
Client Charter Compliance Index	15. Percentage of outpatients seen within 30 minutes by a dental officer (DO)	≥ 83%	86.5%
	16. Percentage of appointments seen within 30 minutes by a vDO	≥ 91.0%	93.5%
Delivery of denture services	17. Percentage of dental clinics with waiting list for dentures exceeding 3 months	≤ 8.0%	7.0%
	18. Percentage of patients receiving dentures within 3 months	63.0%	70.6%
	19. Percentage of patients aged 60 years and above receiving dentures within 8 weeks	48.7%	53.9%
Customer satisfaction Index	20. Percentage of customers satisfied with services received	95.0%	94.0%
MS ISO certification of dental clinics	21. Percentage of dental clinics with MS ISO certification	85.0%	83.1%
Training policy compliance index	22. Percentage of dental staff with 7 days training per year	100%	97.5%

Source: Oral Health Programme, MOH 2015

3.5 Client's Satisfaction Survey

Client Satisfaction Surveys were carried out by dental clinics using a self-administered questionnaire from the Oral Health Programme, MOH that measures patients' satisfaction. For 2015, more than 90% of patients expressed satisfaction except for the states of Federal Territory of Kuala Lumpur &

Putrajaya and Sabah. The highest score was in Sarawak (99.0%), followed by Melaka (98.2%). Overall, an average of 94.0% of patients involved expressed satisfaction with MOH dental clinics.

3.6 Clients' Charter

There are two main areas for the Oral Health Programme Clients' Charter:

1. Core Clients' Charter of the MOH, forms part of the KPI indicators of the Secretary General of Health and is uploaded on to the MOH web site **(Table 88).**

Table 88: Clients' Charter of the MOH 2015

Core Clients' Charter	Indicator	Target	Achievement
Taraf Perkhidmatan	*Pesakit luar dipanggil untuk rawatan oleh pegawai pergigian dalam tempoh 30 minit*	70%	86.5%
Maklumat Perkhidmatan	*Pesakit berpuas hati dengan perkhidmatan pergigian yang diberikan*	90%	94.0%
	Pendaftaran Klinik Pergigian Swasta ditentusahkan dalam tempoh 7 hari (dari tarikh fail permohonan diterima oleh Unit Kawalan Amalan Perubatan Swasta (UKAPS)	90%	98.9%

Source: Oral Health Programme, MOH 2015

2. Clients' Charter for the Oral Health Programme MOH **(Table 89)**.

Table 89: Clients' Charter of Oral Health Programme 2015

No.	Client's Charter Indicator	Target	Achievement
1	*Semua pelanggan dilayan oleh petugas kaunter dengan mesra*	100%	100%
2	*Semua pelanggan dilayan oleh petugas kaunter dengan cekap*	100%	100%
3	*Semua pelanggan diberi maklumat mengenai perkhidmatan yang disediakan*	100%	100%
4	*Semua pelanggan yang ada temujanji akan dapat berjumpa dengan pegawai berkenaan dalam 15 minit*	100%	100%
5	*Semua permohonan Klinik Pergigian Swasta ditentusahkan dalam tempoh 7 hari {dari tarikh fail permohonan diterima oleh Unit Kawalan Amalan Perubatan Swasta (UKAPS)}*	90%	98.9%

Source: Oral Health Programme, MOH 2015

Quarterly, six-monthly and yearly reports are submitted to the Clients' Charter Secretariat, Pharmaceutical Services Programme MOH.

3.7 Star Rating System (SSR)

The Star Rating System (SSR) was introduced in 2008 to assess the performance of Ministries. Since then, it has been expanded to other public sector agencies, frontline agencies and state governments. The objectives of SSR are:

- to evaluate and measure the performance of government agencies
- to give formal recognition to outstanding agencies
- to give wide publicity to the policies, strategies and practices implemented
- to promote healthy competition among public sector agencies.

In 2015, under the new assessment criteria developed by MAMPU, only selected activities that meet all the assessment criteria were assessed. The activities selected were under three criteria:

Criteria	Activities
Transformation criteria	Imunisasi HPV
Innovation criteria	Perkhidmatan Tambah Nilai Farmasi
Social innovation criteria	Komuniti Sihat Perkasa Negara (KOSPEN)

The Oral Health Programme contributed input for the Organisational Management (Pengurusan Organisasi) and Client Management (Pengurusan Pelanggan) components.

3.8 *Amalan Ekosistem Kondusif Sektor Awam (Amalan EKSA)*

MAMPU has taken initiatives to improve the implementation of *Amalan* 5S and has now rebranded to *Ekosistem Kondusif Sektor Awam* (EKSA). The move is in line with efforts to strengthen the organizational culture of high performance and innovation among public sector agencies through the provision of condusive environment, healthy workplace culture and exemplary values.

At the Oral Health Programme, MOH, the implementation of Amalan EKSA continued to be strengthened and improved. New staff who reported to the Programme, were briefed on the implementation of EKSA and attended training organized by the *Jawatankuasa Latihan EKSA, KKM*.

To ensure the assessment criteria were adhered to, audits were carried out at regular interval by EKSA internal auditors and also by MOH EKSA Auditors. Audit findings were shared with all the staff and actions taken for continual improvement.

4. TRAINING

4.1 MS ISO

To continually update the knowledge and skills of oral health personnel and for new personnel as well, most states conducted courses on ISO awareness and internal audits. Most of the training sessions were conducted in-house due to limited funds for ISO training. Training on 'Gap Analysis ISO 9001:2015 vs ISO 9001:2008' was conducted for Oral Health Programme staff and central training to all state representatives.

Several states have also embarked on creating awareness and workshops on preparation of documentation for the new ISO 9001:2015. Other workshops include Failure Mode Effect Analysis and Root Cause Analysis Training

4.2 Quality Assurance

Training on quality initiatives related to dental departments at regional, state and districts levels were carried out. Apart from this, training was also carried out in collaboration with State Health Departments and the Institute of Health System Research. In 2015, a total of 39 courses related to quality assurance were conducted involving 1,094 participants.

4.3 Corporate Culture

Activities and courses related to corporate culture were carried out at all states, either by the oral health services or in collaboration with the health departments / hospitals. In 2015, a total of 197 courses related to corporate culture were conducted, with 7,074 oral health service personnel attending various courses on Corporate Culture at state level.

5. RECOGNITION FOR OUTSTANDING PERFORMANCE

Several State Oral Health Divisions received recognition for their outstanding performance in the following areas:

a) Anugerah Kewangan Naziran eSPKB Tahap Cemerlang

- *Kedah*
- *Pulau Pinang*
- *Bintulu, Sarawak*

b) Audit Pengurusan Kewangan oleh Audit Dalam KKM Tahap Cemerlang-Yan, Kedah

*c) Sijil Penghargaan Pembayaran Bil. 100% dalam Tempoh 7 Hari Sepanjang 2014 (*received in March 2015*) – Kulim, Kuala Muda & Yan (Kedah), Pejabat TPKN (G) Johor, Jasin (Melaka), Mukah (Sarawak)*

d) Sijil Penghargaan 'Significantly Exceed Target (ST)' bagi Petunjuk Prestasi KPI HRMIS Ketua Jabatan 2014 (received in July 2015) – Kulim, Kuala Muda & Yan (Kedah)

e) Naziran bersih eSPKB – Samarahan (Sarawak)

f) Anugerah Penarafan Cemerlang dalam Pengurusan Kewangan bagi Lawatan Naziran sesi 2015 oleh Jabatan Akauntan Negara Malaysia Cawangan Kapit

ORAL HEALTH INFORMATION AND COMMUNICATION TECHNOLOGY

1. Oral Healthcare Information Management

Functions

a. Responsible for the planning, implementation, monitoring and evaluation of clinical information systems in primary and secondary care dental clinics.
b. Responsible for ICT governance in the Oral Health Programme.
c. Collaborate with Information Management Division (IMD), MOH for implementation of other MOH ICT projects.
d. Collaborate with Health Informatics Centre, MOH to provide domain requirements in health informatics and standards development.
e. Responsible for health information management in terms of reviewing data collection requirements and reporting formats.

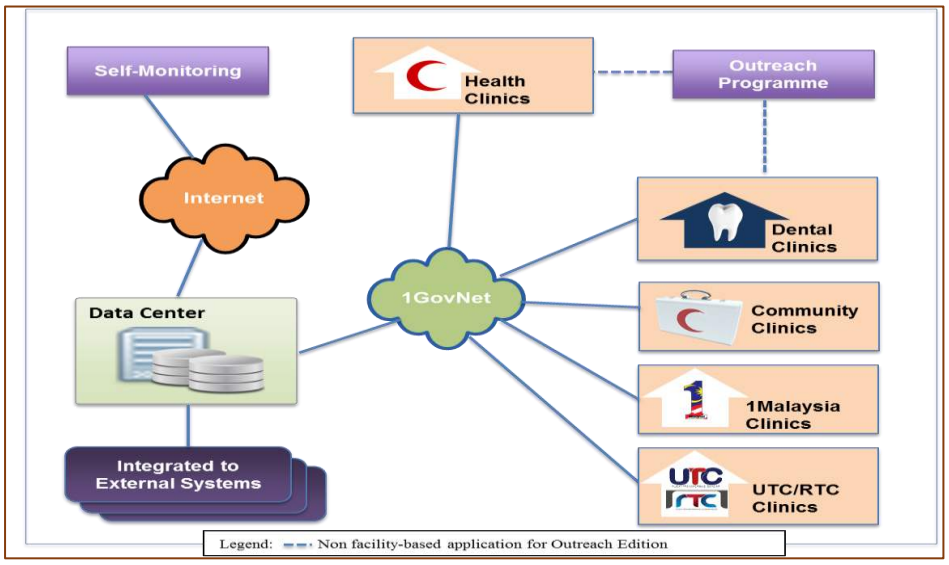
2. TelePrimary Care and Oral Health Clinical Information System (TPC-OHCIS) Project

In line with the Health Ministry's efforts to provide better healthcare delivery to the people through information technology, the MOH developed TelePrimary Care (TPC) for health services in 2005 and Oral Health Information Clinical System (OHCIS) for oral health services in 2008.

Recognizing that 60% of dental clinics are located in the same building as the health clinics and the need for continuity of care, the development of a new unified TPC-OHCIS should bring better healthcare services to the Rakyat. Thus, the MOH in collaboration with the Ministry of Science, Technology and Innovation (MOSTI) under the Public Service Delivery Transformation (PSDT) initiative, embarked on the TelePrimary Care and Oral Health Clinical Information System (TPC-OHCIS) Project.

MIMOS, which is a government-owned company under MOSTI, is the technology provider and developer. The project was kicked-off on 8 December 2014 and is expected to end in November 2016. The TPC-OHCIS system takes advantage of new technologies such as cloud computing, web services and security and has included participation of clients through a self-monitoring portal.

Figure 42: TPC-OHCIS system coverage in supporting primary healthcare services.



3. OHCIS and eKL (Dental)

The e-KL (Dental) project was implemented in 2009 as part of the e-Government project to provide SMS appointment service to patients in the Klang Valley. A new 3-year support and maintenance service contract for OHCIS and eKL (Dental) began on 22nd June 2015 and will run for three years, with a contract value of RM4,006,800.00. The highlight of the year was the rollout of OHCIS to Putrajaya Presint 18 on 1 Mac 2015 for primary oral health, orthodontic and periodontic services.

4. Sistem Pengurusan Pesakit (SPP)

SPP is an initiative of the MOH for the realization of the aspiration of an excellent and efficient hospital service. SPP application development started in September 2007.

SPP version 3.0 was implemented at Hospital Raja Perempuan Bainun, Ipoh, Perak, in March 2012 as a platform for the Hospital Information System (HIS) for government hospitals. In 2015, Oral Health hospital-based specialties were included in the development of clinical documentation (CD) modules in the SPP enhancement project. Various system requirement specifications (SRS) workshops were conducted starting in February 2015. The disciplines involved are Oral Maxillofacial Surgery, Pediatric Dentistry, Oral Pathology & Oral Medicine, Special Needs Dentistry and Forensic Odontology.

The SRS CD Oral Health Discipline was-signed off with the SPP project team witnessed by the Principal Senior Director on 20 October 2015 at the Oral Health Programme, MOH. The CD module development projects and implementation of SPP at Hospital Raja Perempuan Bainun (HRPB) Ipoh is expected to begin in early 2016. The development of the CD modules will complete the SPP system and will be rolled-out to all other hospitals.

Image 5 & 6: The SRS CD Oral Health Discipline was signed-off by the Oral and Maxillofacial Chief Specialist, Datin Dr Norma Jalil (left) and the Pediatric Dentistry Chief Specialist, Dr. Ganasalingam a/l Sockalingam (right).

Image 7: The handing over of the SRS CD Oral Health Discipline document by Dr Fazilah Shaik Allaudin from the Telehealth Division.

5. Oral Health Programme Website

The OHD portal is updated regularly with new oral health education material and articles.

Practice of Dentistry

Accreditation and Globalisation
Legislation and Enforcement

ACCREDITATION AND GLOBALISATION

1. ACCREDITATION OF DENTAL PROGRAMMES

1.1 Guidelines for the Accreditation of Undergraduate Dental Degree Programmes

The Guidelines for the Accreditation of Undergraduate Dental Programmes were revised according to the MQA "Draft Revised COPPA 2015". The revision process will be continued in 2016.

The Terms of Reference for the Joint Technical Accreditation Committee (JTAC) were revised and endorsed by the Malaysian Dental Council (MDC) at their 109th meeting on the 24 February 2015.

The draft of the rating system for accreditation of undergraduate dental degree programmes was developed and presented at the the Joint Technical Accreditation Committee meeting on 4 November 2015. Piloting of the draft was carried out during a panel's site visit to MAHSA University on the 2 December 2015.

Two applications for Provisional Accreditation and approval to start a new Dental Surgery Assistant Diploma programme were received from MAHSA University and *Institut Latihan Angkatan Tentera Malaysia*. Hence, a working committee was set up to develop the draft of the Standards and Criteria for accreditation of Dental Surgery Assistant Diploma programme. The draft document was circulated among the JTAC members for comments. Further improvements to the documents were done based on feedback received.

1.2 Accreditation Visits to Institutions of Higher Educations Conducting Dental Programmes

- **Provisional Accreditation for approval of a new dental degree programme**

An accreditation visit to Quest International University, Perak (QIUP) was conducted on 5 May 2015. Based on the JTAC recommendations, the Malaysian Dental Council on 13 July 2015 concluded that QIUP was not ready to start the programme and hence their application for provisional accreditation to start a Doctor of Dental Surgery programme was rejected.

- **Full Accreditation (Renewal)**

Accreditation visits to Universiti Sains Islam Malaysia (USIM) were conducted on 10 & 11 February 2015. Based on the JTAC recommendations, the MDC on 9 March 2015 concluded that USIM has fulfilled the minimum standards for full accreditation and thus the accreditation period for their Bachelor of Dental Surgery programme was extended for a further period of 5 years from 16 April 2015 to 15 April 2020.

Accreditation visits to Universiti Malaya (UM) were conducted on the 25 & 26 February 2015. Based on the JTAC recommendations, the MDC on the 13 July 2015 concluded that UM has fulfilled the

minimum standards for full accreditation. Thus the accreditation period for their Bachelor of Dental Surgery programme was extended for a further period of 5 years from 16 March 2015 to 15 March 2020.

Accreditation visits to Universiti Islam Antarabangsa Malaysia (UIAM) were conducted on the 10 & 11 February 2015. Based on the JTAC recommendations, the MDC on the 13 July 2015 concluded that UIAM has fulfilled the minimum standards for full accreditation. Thus the accreditation period for their Bachelor of Dental Surgery programme was extended for a further period of 3 years from 16 April 2015 to 15 April 2018.

Accreditation visits to AIMST University were conducted on the 15 and 16 June 2015. Based on the JTAC recommendations, the MDC on the 13 July 2015 concluded that AIMST University needs to take corrective action in the areas of concern raised by the panel of assessors. Hence, the accreditation period for AIMST University Bachelor of Dental Surgery programme was extended for a period of 6 months (until 11 February 2016) before their BDS accreditation status can be ascertained.

Accreditation visits to International Medical University (IMU) were conducted on the 25 and 26 February 2015. Based on the JTAC recommendations, the MDC on the 13 July 2015 concluded that IMU has fulfilled the minimum standards for full accreditation. Thus the accreditation period for their Bachelor of Dental Surgery programme was extended for a further period of 5 years from 4 October 2015 to 3 October 2020.

- **Evaluation visit for Increased Student Intake**

An application for increase of student intake from 75 to 100 students per year was received from Melaka-Manipal Medical College (MMMC). An evaluation visit by the panel of assessors was conducted on 14 April 2015. Based on the JTAC recommendations, the MDC on the 28 October 2015 rejected the application as MMMC did not meet the academic staff (for clinical teaching) and support staff to student ratios (1:4 and 1:10 respectively) based on the existing student intake.

1.3 Joint Technical Accreditation Committee (JTAC) Meetings

In 2015, a total of six meetings were held as shown in the table below:

JTAC meeting	Date
1/2015	17/2/2015
2/2015	8/5/2015
3/2015	25/6/2015
4/2015	9/9/2015
5/2015	4/11/2015
6/2015	17/12/2015

1.4 Reports/Documents for Presentation at the Joint Technical Accreditation Committee (JTAC) Meeting

In 2015, a total of 11 reports/documents were presented at the JTAC meeting for opinion and recommendations from JTAC members. The details are as shown below.

JTAC meeting	No. of Proposal Papers/Documents Presented
1/2015	1 report (USIM – accreditation renewal)
2/2015	5 reports: UIAM, UM, IMU – accreditation renewal; MMMC – increase student intake; QIUP - provisional accreditation
3/2015	2 reports: SEGi – 2nd monitoring visit; AIMST- accreditation renewal
4/2015	None
5/2015	2 documents: Draft of Rating system ; Draft of Standards and Criteria for DSA Diploma Programme
6/2015	1 report: MAHSA increase of student intake

1.5 The Joint Technical Accreditation Committee Recommendations to the Malaysian Dental Council

In 2015, a total of 8 proposal papers based on JTAC recommendations were prepared to be presented at MDC meetings for approval as shown below.

MDC meeting	No. of Papers Submitted
109th meeting	1 (TOR JTAC)
110th meeting	6 (UM, UIAM, IMU, QIUP, AIMST, SEGi)
111th meeting	1 (MMMC)

1.6 Submissions of Decisions on Accreditation by the Malaysian Dental Council to the Malaysian Qualifications Agency

In 2015, a total of 8 decisions on Higher Education Providers (HEP) accreditation applications made by the MDC were submitted to the MQA as shown below:

HEP	Date of letter to MQA
USIM (reaccreditation)	23/3/2015
UM (reaccreditation)	23/7/2015
UIAM (reaccreditation)	27/7/2015
AIMST (reaccreditation)	27/7/2015
SEGi (2nd monitoring)	3/8/2015
IMU (reaccreditation)	3/8/2015
QIUP (Prov. Accreditation)	5/8/2015
MMMC (Increase intake)	19/11/2015

2. STUDENT ATTACHMENT AT MOH DENTAL FACILITIES

2.1 Memorandum of Agreement with Higher Education Providers on the Use of MOH Facilities for Students' Field Training

In 2015, two (2) MoAs were signed between Lincoln University College (new) and MAHSA University (renewal) allowing them to use MOH dental facilities for the training of their undergraduate dental students.

2.2 Placements of Undergraduate Students for Field Training

In 2015, 12 applications received from local institutions of higher education for posting of their undergraduate students at MOH dental facilities were processed and approved:

- Clinical Posting:
  4 applications - USIM, UIAM, IMU (2 applications)
- Community posting:
  8 applications - UM, PIDC, USIM, MAHSA, UKM, MMMC, UIAM, AIMST

2.3 Elective Postings by Undergraduate Students from Foreign Universities

In 2015, a total of 31 applications received from foreign university students for elective posting at MOH dental facilities were processed and approved:

- Al-Azhar University (26 applications)
- Alexandria University (3 applications)
- Dundee University (1 application)
- Kings College (1 application)

2.4 Attachment of Postgraduate Dental Students for Training at MOH Facilities

In 2015, a total of 7 applications received from local institutions of higher education for placement of their postgraduate students at MOH dental facilities were processed and approved:

- UKM (5 applications)
- UM (2 applications)
- USM (3 applications)

3. GLOBALISATION AND LIBERALISATION OF HEALTHCARE SERVICES

3.1 ASEAN Joint Coordinating Committee on Dental Practitioners

On 5 May 2015, the 14th AJCCD Meeting was held in Kuala Lumpur. The outcome of the meeting is as follows:

- All ASEAN member states (AMS) agreed on the comparison matrix which consists of:
  (i) Policies on Temporary Licensing/Practicing privileges for Foreign Dental Practitioners;
  (ii) Requirements for Temporary Registration/Licensing Process;
  (iii) Requirements for Full Registration/Licensing Process for Dental Practitioners;
  (iv) Types of Registration and Licensing Periods and Extension for Foreign Practitioners;
  (v) Requirement of CPD; and
  (vi) Malpractice Insurance.

- The AJCCD reviewed and updated its Future Plans and Goals for 2015 which includes the MRA objectives, outcomes and implementation status.

On 28 September 2015, the 15th AJCCD meeting was held in Singapore and the outcome was as mentioned below:

- Implementation status of Plans and Goals for 2015 was reviewed and updated.
- Activities to be undertaken in 2016-2020 towards full implementation of the ASEAN MRA on Dental Practitioners were deliberated:
  i. Provision of procedures and mechanism to facilitate mobility of ASEAN dental practitioners in the region;
  ii. Development of minimum competency standards for dental undergraduate education;
  iii. Discuss the possibility of developing common accreditation standards for dental schools; and
  iv. Sharing of training opportunities, including fellowship for postgraduate training.
- Members agreed to develop common core competency standards for dental undergraduate education.

3.2 Health Tourism

During several meetings held by the Malaysian Society of Quality in Health (MSQH) in 2015, technical inputs were provided for the development of the “Dental Standards” for Accreditation of Dental Clinics. The Standards were successfully finalised and launched on the 7 September 2015 at Putrajaya.

LEGISLATION AND ENFORCEMENT

The Legislation and Enforcement Unit has the responsibility of all activities pertaining to legislation, enforcement, safety and health. Its main functions are:

LEGISLATION

- drafting laws and regulations pertaining to the practice of dentistry and matters relating to the practice of dentistry;
- giving input relating to the effect of other laws on the practice of dentistry;
- drafting and reviewing guidelines for the use of dental practitioners;

ENFORCEMENT

- ensuring compliance to Malaysian Dental Council guidelines in private dental clinics;
- facilitating registration and licensing of private healthcare facilities under the Private Healthcare Facilities and Services Act 1998 (Act 586);
- verifying applications and recommending private dental clinics for registration under the Private Healthcare Facilities and Services Act (Act 586) together with the Control of Medical Practice Unit;
- ensuring that the post-registration inspection of private dental clinics is carried out;
- ensuring that the provisions of the various Acts under the Ministry of Health Malaysia are adhered to by all dental practitioners and in all dental clinics;
- carrying out enforcement activities under the Private Healthcare Facilities and Services Act 1998 (Act 586);
- carrying out investigations and others activities as required by Malaysian Dental Council under the Dental Act 1971;
- investigating into complaints against private dental clinics;
- co-ordinating the enforcement activities in the various states

SAFETY AND HEALTH

- co-ordinating the Health and Safety audits in the Ministry of Health Malaysia dental clinics;
- monitoring the achievement of the Patient Safety Goals in Ministry of Health Malaysia facilities.

1. LEGISLATION

1.1 Dental Bill

The amendments to the Dental Act 1971 were completed and presented to the Hon. Minister of Health in 2012. The Dental Bill was sent to the Legal Advisor's office in January 2013 and to the Attorney General's Chambers for vetting in November 2013. In 2014 there were 3 discussions with the legal advisors office regarding the Dental Bill and 1 with the Attorney General's office, and in 2015 there were 2 discussions with the legal advisors office and 3 with the Attorney General's office.

1.2 Dental Regulations

The first meeting to draft the new Dental Regulations was held on 11 November 2013 and the draft was completed on 30 June 2014. The Regulations will be completed for approval of the Minister of Health after approval of the Dental Bill by Parliament.

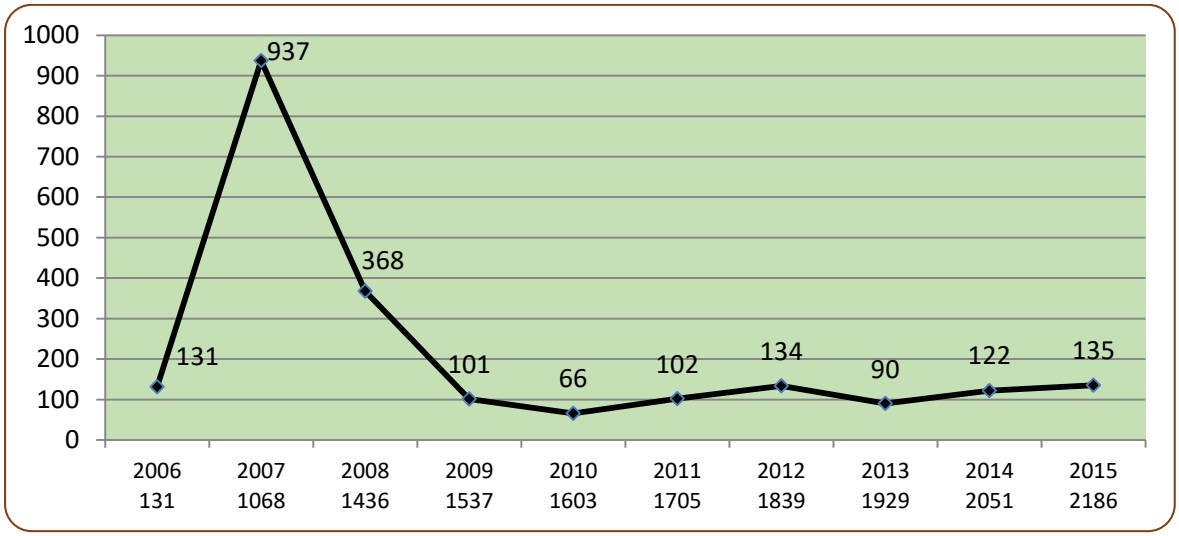
2. ENFORCEMENT ACTIVITIES

2.1 Registration of Private Dental Clinics

The registration of private dental clinics began on 1 May 2006, in which year 809 clinics applied for registration and 131 (16.2%) of the applications were approved.

By the year 2009 all clinics which had submitted complete applications had been registered, and this brought the total number of registered private dental clinics to 1,537. Since then the number of registered clinics has been steadily increasing and by the beginning of 2015 a total of 2,051 clinics had been registered **(Figure 43).** In 2015 a further 135 applications were approved, bringing the total number of clinics which have been registered to 2,186.

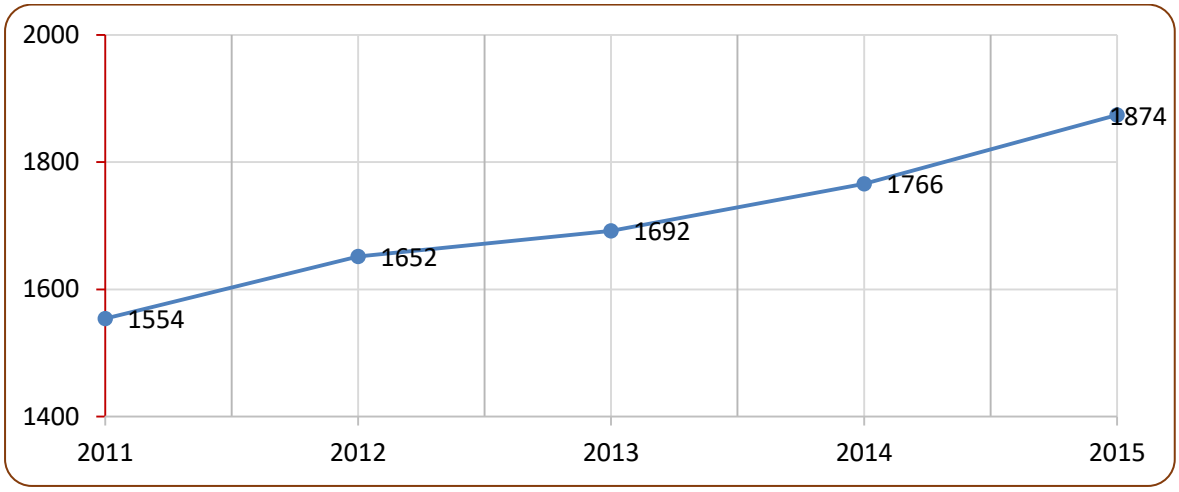
Figure 43: Number of Applications for Registration of Private Dental Clinics Approved, 2006 – 2015



Source: Oral Health Programme, MOH 2015

By the end of 2015, there were 1,874 operating dental clinics. This represents a 6.1% increase in the number of operating dental clinics in the past year and a 20.6% increase in the last 4 years **(Figure 44).**

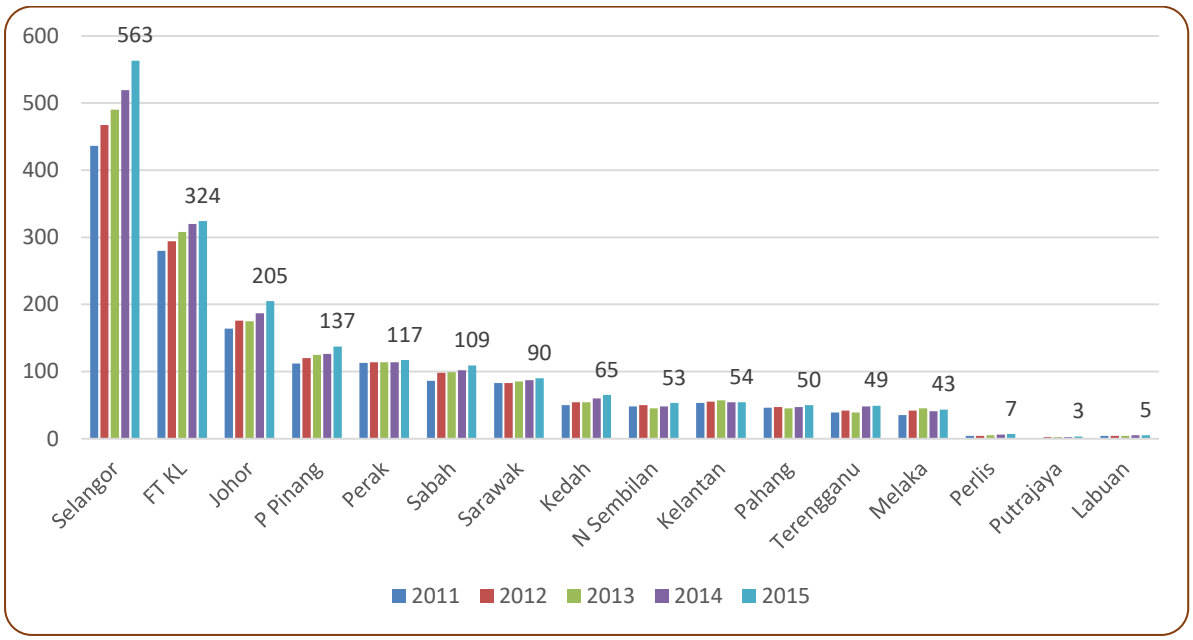
Figure 44: Total Number of Operating Dental Clinics, 2011 – 2015



Source: Oral Health Programme, MOH 2015

The number of operating private dental clinics by state is shown below **(Figure 45)**, with Selangor having the highest number of clinics and a steady rate of growth.

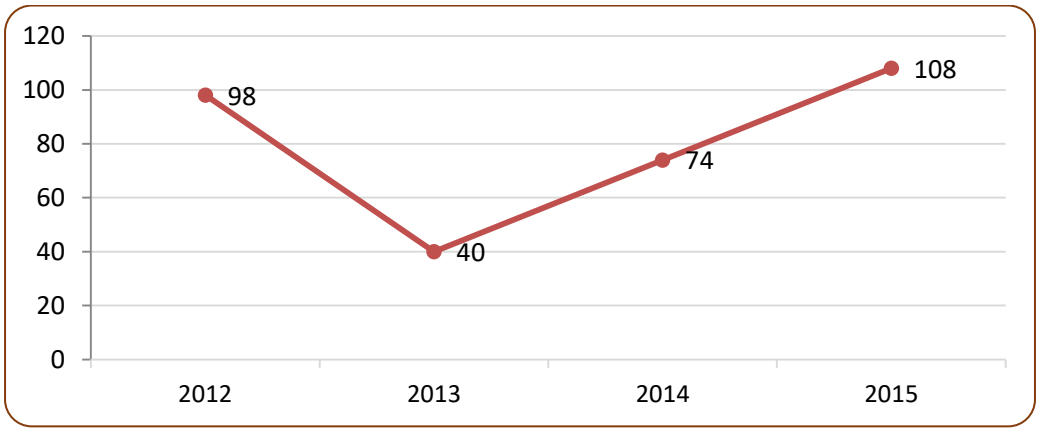
Figure 45: Number of Operating Dental Clinics by State, 2011 – 2015



Source: Oral Health Programme, MOH 2015

This year 135 applications for registration were approved and 27 registrations were withdrawn or cancelled. This resulted in an overall increase of 108 clinics, compared to 74 in 2014 **(Figure 46).**

Figure 46: Increase in Number of Private Dental Clinics, 2012 - 2015



Source: Oral Health Programme, MOH 2015

The number of applications which have been approved and the number of registrations which had been cancelled during the year in each state is shown below **(Table 90).**

Table 90: Number of Private Dental Clinics Registered or Closed in Each State, 2015

No	State	Number of Dental Clinics					
		Operating on 01 Jan	Approved	Cancelled	Increase		Operating on 31 Dec
					No	%	
1.	Perlis	6	1	-	1	16.7	7
2.	Kedah	60	5	-	5	8.3	65
3.	Pulau Pinang	126	14	3	11	8.7	137
4.	Perak	114	4	1	3	2.6	117
5.	Selangor	519	50	6	44	8.5	563
6.	FT KL & Putrajaya	322	15	10	5	1.6	327
7.	Negeri Sembilan	48	6	1	5	10.4	53
8.	Melaka	41	4	2	2	4.9	43
9.	Johor	187	18	-	18	9.6	205
10.	Pahang	47	3	-	3	6.4	50
11.	Terengganu	48	1	-	1	2.1	49
12.	Kelantan	54	1	1	0	0	54
13.	Sabah	102	9	2	7	6.9	109
14.	Sarawak	87	4	1	3	3.4	90
15.	FT Labuan	5	0	0	0	0	5
	Total	**1766**	**135**	**27**	**108**	**6.1**	**1874**

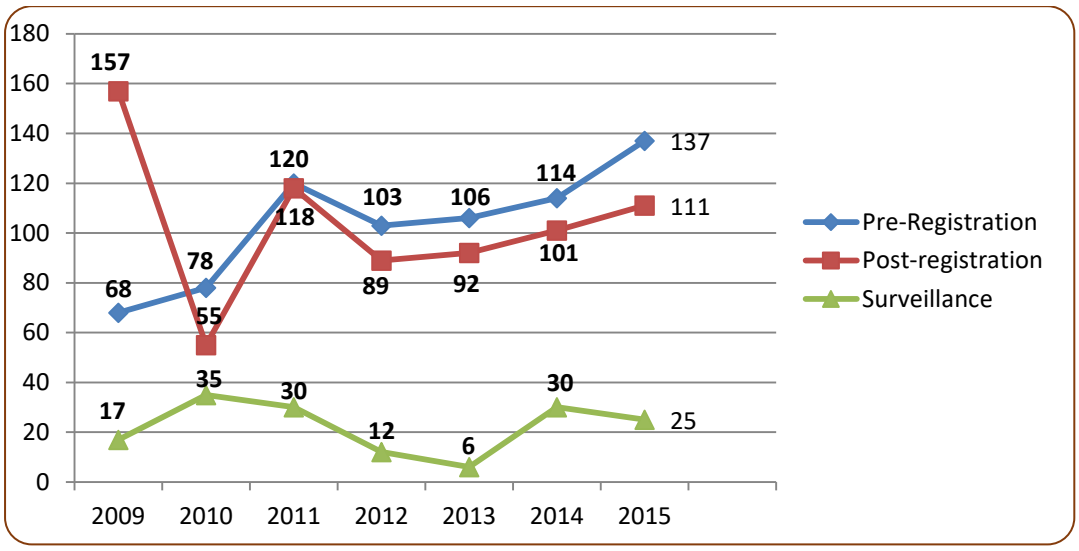
Source: Oral Health Programme, MOH 2015

Overall there was a 6.1% increase in the number of registered active dental clinics which was more than the 4.4% increase in 2014. Selangor with 30% of the registered clinics, had also the highest number of new clinics (44 clinics). Perlis with an increase of only one clinic had a 16.7% increase, followed by Negeri Sembilan (10.4%), Johor (9.6%) and P Pinang (8.7%). Selangor and FT Kuala Lumpur & Putrajaya account for nearly half (47.5%) of the private dental clinics, and together have a rate of growth of 5.8%, although the rate of growth in FT KL has decreased significantly from 3.9% (12 clinics) in 2014.

2.2 Inspection of Dental Clinics

By the end of 2014, 248 pre and post-registration inspections had been carried out and 25 clinics with non-compliance had been revisited. The number of pre and post- registration visit and the number of surveillance visits over the past six years is shown below **(Figure 47).**

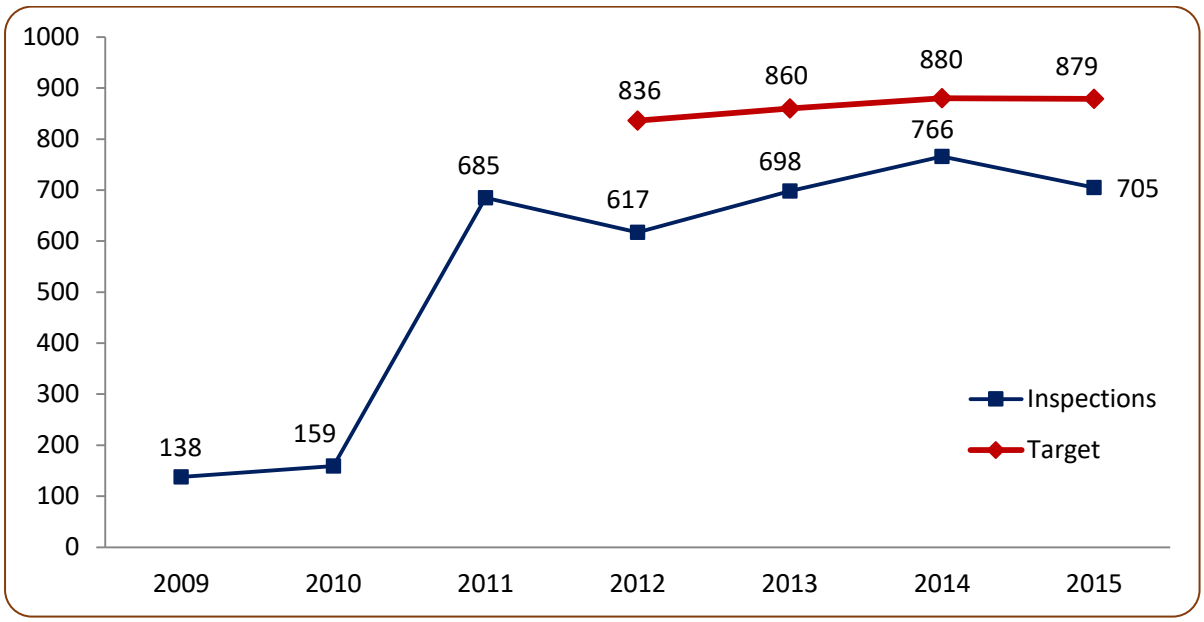
Figure 47: Number of pre-registration, post-registration and surveillance inspections, 2009-2015



Source: Oral Health Programme, MOH 2015

A certain number of the registered private dental clinics in each state are monitored based on the number of clinics in the state and the size of the state. The number of monitoring inspections carried out over the past 6 years is shown in **Figure 48**. In 2015, 706 of the registered clinics were re-visited for a routine inspection **(Table 91).**

Figure 48: Number of monitoring inspections, 2009 – 2015



Source: Oral Health Programme, MOH 2015

Table 91: Number of Routines Inspection and Achievement of Each State, 2015

No.	State	Number of Dental Clinics			
		No. on 1 Jan 2014	Target	Achievement	Percentage Achievement
1.	Perlis	6	6	6	100
2.	Kedah	60	35	35	100
3.	Pulau Pinang	126	63	47	74.6
4.	Perak	114	57	57	100
5.	Selangor	519	173	78	45.1
6.	FT Kuala Lumpur & Putrajaya	322	128	124	96.9
7.	Negeri Sembilan	48	37	33	89.2
8.	Melaka	41	41	36	87.8
9.	Johor	187	94	66	70.2
10.	Pahang	47	46	46	100
11.	Terengganu	48	48	43	89.6
12.	Kelantan	54	49	54	110.2
13.	Sabah	102	51	32	62.7
14.	Sarawak	87	44	44	100
15.	FT Labuan	5	5	5	100
	Malaysia	**1766**	**877**	**706**	**80.5**

Source: Oral Health Programme, MOH 2015

Overall the percentage achievement dropped from 86.8% in 2014 to 80.5%, although Pulau Pinang, Sabah and Melaka showed improved performance and Perlis, Kedah, Perak, Pahang, Kelantan, Sarawak and FT Labuan achieved 100%.

2.3 Complaints against Private Dental Clinics

Various enforcement activities were carried out in relation to the complaints, to ensure compliance to legislation and guidelines, and against illegal clinics. The highest number of enforcement activities was carried out in Selangor, followed by Johor, Perak, FT Kuala Lumpur, Kedah, Pahang and Kelantan.

The number of complaints received and enforcement activities in each state during the year 2015 is listed in **Table 92**.

Selangor, with the largest number of clinics, had the highest number of complaints, followed by WP Kuala Lumpur and Johor. The highest percentage of complaints was in Kedah (4.6%) followed by Pahang (4.3%), WP KL (2.5%) and Johor (2.4%). In 3 other states less than 2% of the clinics were complained against, with no complaints received in 8 states.

Table 92: Complaints Received and Enforcement Activities by State, 2015

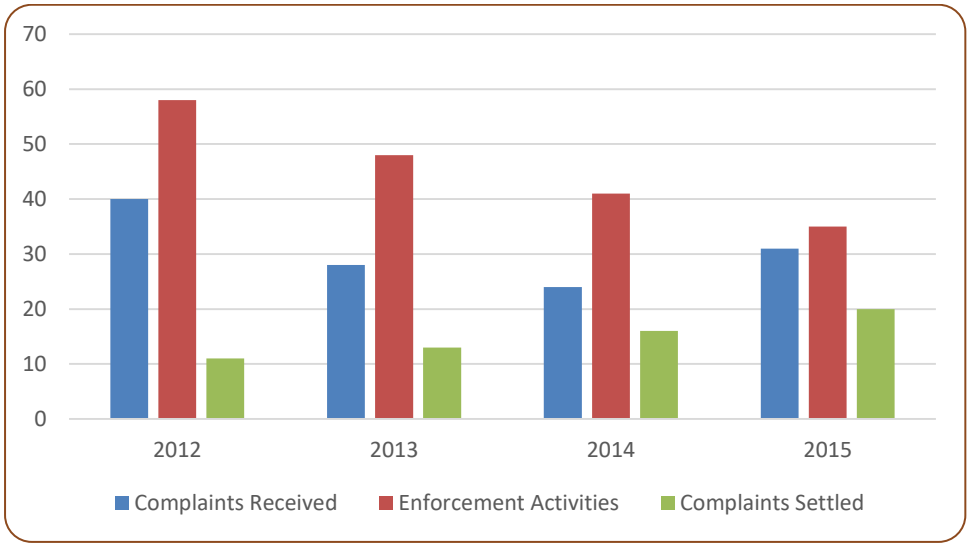
No.	State	No. of Clinics	No. of Complaints Received	No. of Enforcement Activities	No. of Complaints Settled
1.	Perlis	7	0	-	-
2.	Kedah	65	3	3	1
3.	Pulau Pinang	137	0	-	-
4.	Perak	117	2	4	2
5.	Selangor	563	10	15	6
6.	FT Kuala Lumpur	324	8	4	4

7.	FT Putrajaya	3	0	-	-
8.	Negeri Sembilan	53	0	-	-
9.	Melaka	43	0	-	-
10.	Johor	205	5	7	5
11.	Pahang	50	2	1	2
12.	Terengganu	49	0	-	-
13.	Kelantan	54	1	1	0
14.	Sabah	109	0	-	-
15.	Sarawak	90	0	-	2
16.	FT Labuan	5	0	-	-
	Malaysia	**1874**	**31**	**35**	**20**

Source: Oral Health Programme, MOH 2015

Although the total number of clinics increased by only 6.1% from the previous year, the number of complaints increased by 29.2%. With 35 enforcement activities 64.5% of the complaints were settled.

Figure 49: Record of Complaints and Enforcement Activities 2011 – 2015



Source: Oral Health Programme, MOH 2015

2.4 Enforcement Officers

In 2015, there were 37 enforcement officers in the states and 2 in the Oral Health Programme, Ministry of Health Malaysia. These 39 officers carried out all the duties and functions of the national and state legislation and enforcement units as well as the registration of clinics under the Private Healthcare Facilities and Services Act 1998.

2.5 Enforcement Courses

During the year the enforcement officers attended various courses organized by the Oral Health Programme, the Private Medical Practice Control Division (CKAPS) and the State Private Medical Practice Control Units (UKAPS) and others divisions. These courses were aimed at updating knowledge, reinforcing procedures and guidelines and improving skills of the enforcement officers, in order to carry out their surveillance and enforcement activities. The list of courses organised at national and state level are stated in **Table 93 and Table 94.**

Table 93: Courses at National level

No.	Title of Course	Date	Duration	Organizer	No of Officers
1.	Course on Utilizing Regulatory Impact Analysis (RIA) for Better Regulation	5-7 May	3 days	INTAN	2
2.	*Bengkel* TOT Occupational Safety & Health	28-30 July	3 days	OHD KKM	40
3.	Compliance to Regulations under Occupational Safety and Health Act 1994	5-6 Aug	2 days	NIOSH	2
4.	*Bengkel* Conflict Management	29 Sept -1 Oct	3 days	OHD KKM	30
5.	*Kursus Pendakwaan untuk Penguatkuasa Pergigian*	19-23 Oct	5 days	OHD KKM	30
6.	*Kursus Asas Risikan*	22 - 23 April	2 days	CKAPS	1
7.	*Kursus Penyediaan Kertas Siasatan Pegawai Penguatkuasaan KKM*	11-14 May	4 days	UKAPS / CKAPS	3
8.	A Course on Forensic Photography, It's application in Enforcement and Implication in Prosecution	12-15 May	4 days	UKAPS / CKAPS	2
9.	*Seminar Penguatkuasaan Akta 586 Bagi Anggota Penguatkuasa CKAPS & UKAPS*	8-10 June	3 days	CKAPS	4
10.	*Kursus Pemantapan Tatacara Serbuan Berpandukan Akta 586 (Bayou Lagoon Resort Melaka)*	17 - 20 August	4 days	CKAPS / UKAPS MELAKA	2
11.	*Bengkel Memproses Permohonan Pendaftaran Klinik Swasta dan Pelan Lantai*	25-27 Oct	3 days	CKAPS	11
12.	*Kursus* Intelligent Gathering	3-6 November	4 days	UKAPS / CKAPS	7
13.	*Kursus Pengendalian Aduan*	15 – 18 November	4 days	UKAPS / CKAPS	5

Source: Oral Health Programme, MOH 2015

Table 94: Courses at State Level

No.	Title of Course	Date	Duration	Organiser	No of Officers
1.	*Bengkel Pemurnian Senarai Semak Audit Kawalan Infeksi dan JKKP Bil.1/15*	9 Feb	1 day	JKN Perak	1
2.	*Taklimat Garis Panduan Penyeragaman Pelaporan Kesilapan Pengubatan* (Medication Error)	13 April	1 days	BKP Perak	1
3.	Malaysian Patient Safety Goals	21 – 22 April	2 days	JKN Terengganu	1
4.	*Kursus Kesedaran Dasar Keselamatan dan Kesihatan Pekerjaan*	8 June	1 day	JKWPKL	1
5.	*Bengkel Audit Keselamatan dan Kesihatan*	9-10 June	2 days	JKWPKL	1
6.	*Kursus* Data Entry on Occupational Safety and Health Report	8 Dec	1 day	BKP Melaka	2
7.	Perak Emerging Diseases Tabletop Simulation Exercise (EmDTS) 2015	14 Dec	1 day	BKP Perak	1
8.	*Seminar Penguatkuasaan, Aduan, Perlesenan dan Pendaftaran*	1 – 4 Dec	4 days	UKAPS Sarawak	3

Source: Oral Health Programme, MOH 2015

3. SAFETY & HEALTH

3.1 Safety & Health Activities

Safety of Health Care is one of the dimensions of quality in the provision of healthcare, thus, the major aim of any healthcare system should be the safe movement of patients through all parts of the system. Harm arising from care must be avoided and risks minimised in care delivery processes. The safety of the patients in healthcare delivery is achieved through:

- Accreditation audits
- Audits – for example on Infection control, Dental Radiation Safety, Mercury Hygiene and Safety in the Dental Laboratory
- Setting of Safety Goals
- Incident reviews
- Complaint reviews.

Auditing clinical practice against health and safety standards is a well-established process to identify risk, improve practice and gain assurance. The audit will demonstrate key quality factors and compliance with policy guidelines and procedures.

3.1.1 Safety & Health Audit

The Programme has also formulated compliance checklists, with a total of 52 items, to be used in inspection audits to track compliance with the guidelines in four areas pertaining to:

- Infection control and disposal of hypodermic needles
- Use of dental amalgam and compliance to dental mercury hygiene
- Dental radiation safety, and
- Safety and health in dental laboratories.

3.1.2 Distribution of facilities

A total of 1071 out of 1977 facilities (54.0%) in all states were audited in 2015. This is above the target of 33.3% or 1/3 of the facilities. The highest percentage of facilities visited was 97% in Johor and the lowest was in Sarawak (22.1%). Three states did not achieve the target of 33.3%, which is an improvement from five which did not achieve the target last year. Over the last 3 years, all states have audited all their facilities (total of 100% or more), except Melaka, Selangor, Negeri Sembilan and Sarawak as shown in **Table 95.**

Table 95: Distribution of Audited Facilities by State 2012-2015

No	State	No. of Districts	No. of Dental Facilities 2015			% Audited in 2014	% Audited in 2013	% Audited in 2012
			Total	Audited	% Audited			
1	Perlis	2	54	17	31.4	35.2	34.6	35
2	Kedah	10	173	113	65.3	65.3	52.9	49
3	Pulau Pinang	5	136	50	36.8	58.9	82.0	99

4	Perak	10	199	150	75.3	35.5	36.5	32
5	Selangor	10	165	49	26.0	33.3	15.8	25
6	FT KL & Putrajaya	4	112	57	50.9	41.8	57.8	27
7	Negeri Sembilan	7	115	79	68.7	28.1	26.6	34
8	Melaka	3	85	27	31.8	33.3	47.7	18
9	Johor	10	112	93	56.3	97.0	48.8	36
10	Pahang	11	167	100	59.9	59.9	13.5	46
11	Kelantan	10	254	235	92.5	-	98.4	65
12	Terengganu	7	113	27	23.9	23.9	32.7	81
13	Sabah	9	200	73	36.5	34.6	41.1	92
14	FT Labuan	1	8	7	87.0	87.5	75.0	75
15	Sarawak	12	284	67	23.5	22.1	19.3	33
	Total	**110**	**1977**	**1071**	**54.0**	**46.0**	**42.7**	38

Source: Oral Health Programme, MOH 2015

**Kelantan is not included in the report, as the returns were lost in the devastating floods in November 2014.*

Of the 1071 facilities that were audited, 519 were audited in the area of Management (Mobile Dental teams and Mobile Dental Clinics are not audited in this area), all were audited for Infection Control procedures and 1071 were audited for Amalgam Usage (2 centralised laboratories were not audited in this area). A total of 390 facilities had x-ray services and 237 had laboratories (including the 2 centralised laboratories) **(Table 96).**

Table 96: Type of Facilities Audited by State – 2015

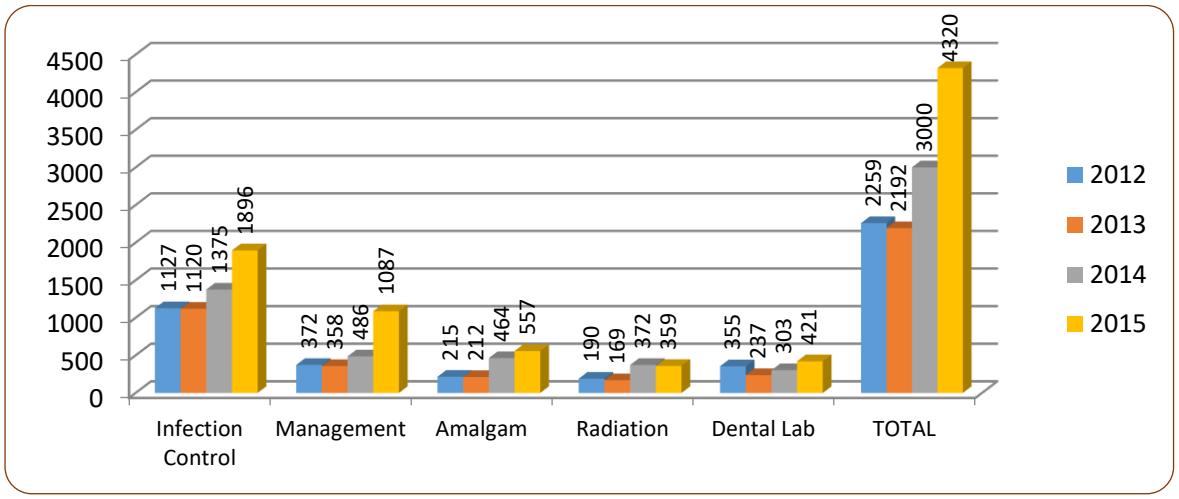
State	No. of Facilities		Areas audited				
	Total	Audited	Management	Infection Control	Amalgam Usage	Radiation Safety	Laboratory Safety
Perlis	54	**17**	17	17	17	3	1
Kedah	173	**113**	60	113	113	36	38
P Pinang	136	**50**	18	50	50	14	13
Perak	199	**150**	123	150	150	120	57
Selangor	165	**49**	23	49	49	6	7
FT KL	112	**57**	31	57	57	28	14
N Sembilan	115	**79**	28	79	79	26	19
Melaka	85	**27**	14	27	27	14	4
Johor	112	**93**	81	93	93	78	50
Pahang	167	**100**	35	100	100	35	4
Terengganu	113	**27**	18	27	27	17	17
Kelantan	254	**235**	137	235	235	135	38
Sabah	200	**73**	53	73	73	18	16
Sarawak	284	**67**	59	67	67	12	12
WP Labuan	8	**7**	4	7	7	1	1
Total	**1977**	**1071**	**519**	**1071**	**1071**	**390**	**237**

Source: Oral Health Programme, MOH 2015

3.2 Compliance in area of Management of Safety and Health, 2015

The total number of non-compliance items was 4,320. The area in which there was the highest number of items which did not comply was Infection Control (1,896 items) and the lowest was radiations safety (359 items) **(Figure 50).**

Figure 50: Non-Compliance in Area of Management of Safety and Health 2012-2015

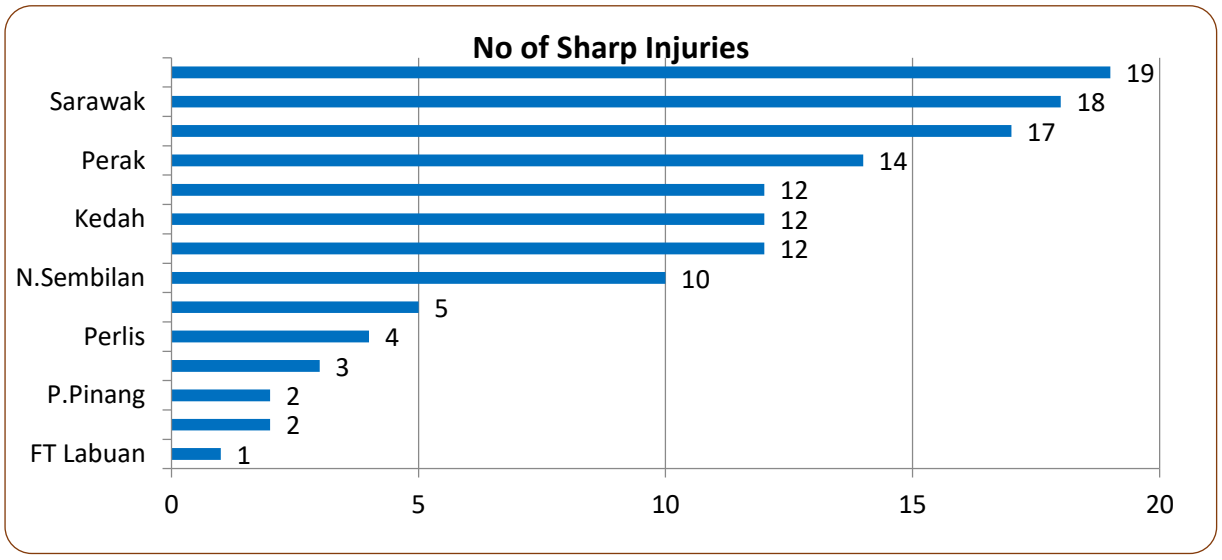


Source: Oral Health Programme, MOH 2015

3.3 Sharps Injuries

In a dental clinic sharps injuries constitute a portion of occupational safety and health which cannot be ignored, and in 2015 there were 142 sharps injuries recorded (injuries from sterile instruments are not included in this report). Sharps injuries are monitored through a feedback mechanism, and the total number of sharps injuries recorded in the states are seen below **(Figure 51).**

Figure 51: Number of sharps injuries by State, 2015



Source: Oral Health Programme, MOH 2015

CHALLENGES AND FUTURE DIRECTIONS

As the country develops, the healthcare system also needs to be continually transformed to keep up with the needs and demands of the population. There is a need to further enhance the accessibility to oral healthcare services by increasing the number of dental clinics providing daily outpatient services and also expanding the outreach services by increasing the number of mobile dental clinics serving both the urban and rural areas.

Efforts in community empowerment towards good oral health needs to be intensified. Collaboration with relevant stakeholders emphasizing on the common risk factor approach is very much needed to attain behavioural change among the population. In the coming year, the young adults will be given focus as they will be the future generation.

The new Dental Act is expected to be tabled in Parliament in the forthcoming year. As such the regulations need to be completed and presented to the Malaysian Dental Council for approval. Preparation for strengthening enforcement under the new Dental Act also includes application of new posts for enforcement officers and training also has to be done.

There is also an urgent need to manage the influx of new dental graduates. About 1,200 new dental graduates are expected to start their compulsory service in the MOH in 2016. In view of the limited number of new posts, it will indeed be a challenge to work out a mechanism to absorb them.

As the overall custodian for oral health of the population, the Oral Health Programme continuously needs to undertake the responsibility for the development of policies, guidelines and monitoring of outcomes. Governance is also expected to be further strengthened with the gradual conversion to MS ISO 9001:2015 in the forthcoming year.

ORAL HEALTH PROGRAMME EVENTS 2015

DATE	EVENTS
6-8 Jan	*Sesi* Data Cleaning *dan Pemetaan Prosedur Rawatan bagi* Case Mix Development for Primary Oral Healthcare
7 Jan	*Mesyuarat Jawatankuasa Pengurusan Kewangan dan Akaun (JPKA) Bil 1/2015*
9 Jan	*Mesyuarat Bahagian BKP Bil 1/2015*
9 Jan	*Mesyuarat Format Laporan Baru Selain Laporan HIMS*
14-15 Jan	*Mesyuarat Kajiselidik NOHPS 2015: Sesi Pengurusan dan Pelaksanaan*
16 Jan	*Mesyuarat Teknikal BKP 1/2015*
20 Jan	*Mesyuarat Jawatankuasa Pemandu NOHPS 2015*
21 Jan	*Sesi Perbincangan dan Penyeragaman Kriteria bagi* Modified MOH ICDAS *di kalangan* Benchmark Examiners
23-25 Jan	22nd MDA Scientific Convention & Trade Exhibition
29 Jan	*Mesyuarat Jawatankuasa Kerja* TPC-OHCIS *(Pergigian) Bil 2 (1/2015)*
5 Feb	*Sesi Persediaan bagi Pengumpulan Data* NHMS 2015
6 Feb	*Mesyuarat Bahagian BKP Bil 2/2015*
9 Feb	*Mesyuarat* CPG Management of Acute Orofacial Infections of Odontogenic Origin in Children Bil. 1/2015
9-10 Feb	*Mesyuarat Jawatankuasa Dasar & Perancangan Kesihatan Pergigian Bil 1/2015*
11-12 Feb	*Mesyuarat Pegawai-Pegawai Penguatkuasaan Pergigian di bawah Akta Kemudahan Dan Perkhidmatan Jagaan Kesihatan Swasta (AKTA 586) 1998 Bil 1/2015*
12 Feb	*Mesyuarat Jawatankuasa Pemantauan* OHCIS *versi 2008 dan eKL (Pergigian) Bil 1/2015*
13 Feb	*Mesy Jawatankuasa Penempatan & Pertukaran Pegawai Pergigian KKM Bil 1/2015*
13 Feb	*Mesyuarat Jawatankuasa Pengurusan Kewangan dan Akaun (JKPA) Bil 2/2015*
13 Feb	*Perbincangan* Nested Study *bersama* IMU-UM
17 Feb	*Mesyuarat Jawatankuasa Teknikal Akreditasi Pergigian (JKTAP) 1/2015*
23-26 Feb	Workshop on Development of Case Mix System for Primary Oral Healthcare
24 Feb	*Mesyuarat MPM 109*
25 Feb	*Mesyuarat Jawatankuasa Pengurusan Kewangan dan Akaun (JPKA) KKM Bil 1/2015*
25-27 Feb	*Mesyuarat Pakar Pergigian Restoratif KKM 2015*
27 Feb	*Mesyuarat Teknikal BKP 2/2015*
3 Mar	*Mesyuarat Jawatankuasa Penilaian dan Pewartaan Pakar-Pakar Pergigian 1/2015*
5 Mar	*Mesyuarat Pakar Patologi Mulut & Perubatan Mulut KKM 2015*
5 Mar	*Mesyuarat Kajian Semula* CPG Management of Palatally Ectopic Canine Bil 1/2015
6 & 24 Mar	*Mesyuarat Pakar Pergigian Kesihatan Awam 2015*
6 Mar	*Mesyuarat Bahagian BKP Bil 3/2015*
10 Mar	*Taklimat Hadiah Latihan Persekutuan*
12 Mar	*Mesyuarat Kajian Semula* CPG Management of Periodontal Abscess Bil 1/2015
20 Mar	World Oral Health Day
20-22 Mar	5th Borneo Dental Congress
24 Mar	*Mesyuarat Jawatankuasa Pengurusan Kewangan dan Akaun (JKPA) Bil 3/2015*
25 Mar	*Mesyuarat Kaukus Dekan*
28-29 Mar	MSP-MADPHS Conference
31 Mar	*Mesyuarat Teknikal BKP 3/2015*
6-8 April	*Mesyuarat Pakar Pergigian Pediatrik KKM*
7 April	*Mesyuarat Bahagian BKP Bil 4/2015*
8-10 April	Training of NOHPS 2015 State Coordinators,Field Supervisors & Examiners
9 April	*Pelancaran* Oral Health Month 2015

DATE	EVENTS
10 April	*Perjumpaan dengan* Professor Prathip Phantumvanit "SMART Prevention Restoration For Primary Teeth"
13-15 April	*Mesyuarat Pakar Pergigian Pediatrik KKM Bil 1/2015 dan Mesyuarat Pakar Pergigian Keperluan Khas Bil.1/2015*
14 April	*Mesyuarat Jawatankuasa Pengurusan Kewangan dan Akaun (JKPA) Bil 4/2015*
16 April	*Perbincangan Mengenai Latihan dan Perjawatan Pakar Pergigian Kesihatan Awam*
20-21 April	*Mesyuarat Jawatankuasa Dasar & Perancangan Kesihatan Pergigian 2/2015*
22 April	*Mesyuarat Jawatankuasa Teknikal Akreditasi Pergigian (JKTAP)*
23 April	*Mesyuarat* Health System Research
23 April	*Mesyuarat Jawatankuasa Pengurusan Kewangan dan Akaun (JPKA) KKM Bil 2/2015*
24 April	*Mesyuarat Kajian Semula Pengurusan (MKSP)*
27-28 April	*Mesyuarat Kajian Semula* CPG Management of Periodontal Abscess Bil 2/2015
28 April	*Mesyuarat JK Kerja* TPC-OHCIS *(Pergigian) C61*
29 April	*Mesyuarat Teknikal BKP 4/2015*
29-30 April	*Mesyuarat Kajian Semula* CPG Management of Palatally Ectopic Canine Bil. 2/2015
5-8 May	*Sesi I Kalibrasi* NOHPS 2015 *(Selangor)*
11 May	*Mesyuarat Bahagian BKP Bil 5/2015*
11-13 May	*Mesyuarat Pakar Periodontik KKM 2015*
11-14 May	*Sesi II Kalibrasi* NOHPS 2015 *(Melaka)*
12 May	*Mesyuarat Jawatankuasa Pengurusan Kewangan dan Akaun (JKPA) Bil 5/2015*
13 May	*Pembentangan* Human Resource Projection - System Dynamic *oleh UTM*
14 May	*Pembentangan Laporan* Attachment for Universal Health Coverage in Thailand
25-28 May	*Sesi III Kalibrasi* NOHPS 2015 *(NS)*
27-29 May	*Mesyuarat Pakar Bedah Mulut KKM 2015*
29 May	*Mesyuarat Teknikal BKP 5/2015*
4 June	*Bengkel Pasukan Analitikal Projek* Malaysia's Health System Research (MHSR)
5 June	*Mesyuarat Bahagian BKP Bil 6/2015*
8-9 June	*Mesyuarat Jawatankuasa Dasar & Perancangan Kesihatan Pergigian Bil 3/2015*
10 & 15 June	*Mesyuarat Teknikal BKP 6/2015*
11 June	*Mesyuarat Jawatankuasa Penilaian dan Pewartaan Pakar-Pakar Pergigian 2/2015*
11-12 June	*Mesyuarat Kajian Semula* CPG Management of Periodontal Abscess Bil 3/2015
12 June	*Mesyuarat Jawatankuasa Pengurusan Kewangan dan Akaun (JKPA) Bil 6/2015*
12-14 June	MIDEC (MDA Malaysia International Dental Exhibition and Conference) 2015
18 June	*Mesyuarat Jawatankuasa Penempatan & Pertukaran Pegawai Pergigian KKM Bil 2/2015*
25 June	*Mesyuarat Jawatankuasa Teknikal Akreditasi Pergigian (JKTAP)*
29 June	*Mesyuarat* National Oral Cancer Initiatives
29 June	*Mesyuarat Jawatankuasa Pemantauan* OHCIS *versi 2008 dan eKL (Pergigian) Bil 1/2015*
3 July	*Mesyuarat Bahagian BKP Bil 7/2015*
7 July	*Lawatan Delegasi Pergigian* Ministry of Public Health, Thailand- *Perbincangan* "Collaboration to Develop Dental Service System for the Elderly in the Public Sector of ASEAN Countries"
9 July	*Lawatan Pakar Perunding Pertubuhan Kesihatan Sedunia* (WHO) *berhubung Pelan Induk Sumber Manusia untuk Kesihatan*
10 July	*Mesyuarat Jawatankuasa Pengurusan Kewangan dan Akaun (JKPA) Bil 7/2015*
13 July	*Mesyuarat MPM 110*
27 July	*Mesyuarat Teknikal BKP 7/2015*
28 July	*Mesyuarat Jawatankuasa Anugerah Inovasi*
28-30 July	*Bengkel* Training of Trainers on Occupational Satefy and Health in Dental Practice
30 July-1 Aug	*Mesyuarat Pakar Pergigian Kesihatan Awam 2015*
7 Aug	*Mesyuarat Bahagian BKP Bil 8/2015*

DATE	EVENTS
7 Aug	*Mesyuarat Kajian Semula* CPG Management of Periodontal Abscess Bil 4/2015
7 Aug	*Majlis Jasamu Dikenang Sempena Persaraan Pengarah Kanan Kesihatan Pergigian, YBhg. Datuk Dr Khairiyah Abd Muttalib*
8-10 Aug	*Mesyuarat Jawatankuasa Dasar & Perancangan Kesihatan Pergigian Bil 4/2015*
12-13 Aug	Sesi Awareness and Standardisation of Modified MOH ICDAS *bagi Pegawai-Pegawai Pemeriksa*
14 Aug	*Majlis Amanat Pengarah Kanan Kesihatan Pergigian YBhg. Dr Noor Aliyah Ismail*
24 Aug	*Lawatan Kerja Ketua Setiausaha KKM YBhg. Datuk Dr Chen Chaw Min ke BKPKKM*
26-27 Aug	*Mesyuarat Kajian Semula* CPG Management of Palatally Ectopic Canine Bil. 4/2015
25 Aug	*Mesyuarat Penyeragaman Rekod dalam Kad Rawatan Pesakit dan Borang-Borang Reten HIMS bagi Pilot Projek* Modified MOH ICDAS
27 & 28 Aug	*Mesyuarat Teknikal BKP 8/2015*
1 Sept	*Perbincangan Hasil* Pre-test *Soal Selidik Kajian Kolaborasi Dengan Universiti Malaya*
2-4 Sept	*Bengkel Penulisan Laporan bagi Tinjauan Kebangsaan Kesihatan dan Morbiditi* (NHMS) *2015*
4 Sept	*Penyeragaman Kod bagi Model-Model Gigi bagi Pilot Projek* Modified MOH ICDAS
7 Sept	*Mesyuarat* CPG Management of Acute Orofacial Infections of Odontogenic Origin in Children Bil. 2/2015
8-10 Sept	*Anugerah Inovasi Peringkat Kebangsaan KKM*
9 Sept	*Mesyuarat Jawatankuasa Teknikal Akreditasi Pergigian (JKTAP) 4/2015*
11 Sept	*Mesyuarat Jawatankuasa Pemandu NOHPS 2015 Bil.2/2015*
17 Sept	*Mesyuarat Bahagian BKP Bil 9/2015*
17 Sept	*Mesyuarat Jawatankuasa Pengurusan Kewangan dan Akaun (JKPA) Bil 9/2015*
17-18 Sept	*Perbincangan Halatuju Penjagaan Kesihatan Pergigian Primer: Program Kanser Mulut*
21 Sept	*Perbincangan* 'Task Force' HSR
22 Sept	*Mesyuarat Jawatankuasa Penilaian Pewartaan Pakar Pergigian (JPPPP) Bil 3/2015*
28 Sept	*Mesyuarat* NOHRI *Bil. 1/2015*
28 Sept	*Perbincangan untuk Seminar Kajian Separuh Penggal* National Oral Health Plan (NOHP) 2011-2020
29 Sept	*Mesyuarat Teknikal BKP 9/2015*
29 Sept-1 Oct	Conflict Management
14,15,18,21 & 22 Sept	*Taklimat Draf Rang Undang-Undang Pergigian 2015*
1 Oct	*Mesyuarat MKSP 2/2015*
2 Oct	*Sesi Latihan dan Perbincangan Pra Pelaksanaan Pilot Projek* Modified MOH ICDAS *di WP Kuala Lumpur*
2,5 & 7 Oct	*Taklimat Draf Rang Undang-undang Pergigian 2015*
6 Oct	*Mesyuarat* NOHRI *Bil.1/2015*
6-9 Oct	*Bengkel Pemurnian Laporan* NHMS 2015 Modul Healthcare Demand
7 Oct	*Mesyuarat Jawatankuasa Induk Program Pemfluoridaan Bekalan Air BKPKKM Bil 2/2015*
11-13 Oct	Combined Specialist Meeting 2015
12-13 Oct	*Pengumpulan Data Kajian Kolaborasi dengan UM di RSSK, Cheras*
13-16 Oct	*Bengkel Pemurnian Laporan* NHMS 2015 Modul Healthcare Demand
15 Oct	*Pemantauan* NOHPS 2015
16 Oct	*Pengumpulan Data Kajian Kolaborasi dengan UM di Pusat Jagaan Warga Emas* Caring
19 Oct	*Pengumpulan Data Kajian Kolaborasi dengan UM di Pusat Jagaan Warga Emas Rumah Sejahtera Seri Kembangan*
21 Oct	*Pengumpulan Data Kajian Kolaborasi dengan UM di Kompleks Warga Emas Seksyen 24*
20-23 Oct	*Bengkel Pemurnian Laporan* NHMS 2015 Modul Healthcare Demand
27 Oct	*Pengumpulan Data Kajian Kolaborasi dengan UM di Pusat Jagaan Harian Warga Emas Jenjarom*
28 Oct	*Mesyuarat MPM 111*
1-3 Nov	*Mesyuarat Jawatankuasa Dasar & Perancangan Kesihatan Pergigian Bil 5/2015*

DATE	EVENTS
4 Nov	*Mesyuarat Jawatankuasa Teknikal Akreditasi Pergigian (JKTAP) 5/2015*
4 Nov	*Pemantauan* NOHPS 2015 *untuk Pahang*
5 Nov	*Pemantauan* NOHPS 2015 *untuk Kelantan*
12 Nov	*Mesyuarat Bahagian BKP Bil 11/2015*
12 Nov	*Pemantauan* NOHPS 2015 *untuk Terengganu*
13 Nov	*Mesyuarat Jawatankuasa Pengurusan Kewangan dan Akaun (JKPA) Bil 11/2015*
15 Nov	Malaysian Endodontic Society Scientific Meeting and Conference 2015
17 Nov	*Mesyuarat Jawatankuasa Pemantauan OHCIS versi 2008 dan eKL (Pergigian) Bil 2/2015 dan peluasan OHCIS*
18 Nov	*Pemantauan* NOHPS 2015 *untuk Kedah*
19 Nov	*Mesyuarat Kajian Semula* CPG Management of Periodontal Abscess Bil 5/2015
19 Nov	*Seminar '*Malaysia Health System Research (MHSR*) bagi Kesihatan Pergigian' sempena Lawatan Dr Marko Vujicic, Pakar Perunding Pasukan Analitikal Kesihatan Pergigian*
22-23 Nov	*Pemantauan* NOHPS 2015 *untuk Sarawak*
24-25 Nov	Audit Recertification MS ISO 9001:2008
25 Nov	*Pemantauan* NOHPS 2015 *untuk Perak*
26 Nov	*Sesi Perbincangan dan Analisa Data bagi Pilot Projek* Modified MOH ICDAS *di WP Kuala Lumpur*
27 Nov	*Mesyuarat Teknikal BKP 11/2015*
27 Nov	*Pemantauan* NOHPS 2015 *untuk Selangor*
29-30 Nov	*Pemantauan* NOHPS 2015 *untuk Sabah*
30 Nov-2 Dec	*Kursus* Training of Trainers (TOT) International Caries Detection and Assessment System II *Siri 1 Tahun 2015*
7 Dec	*Mesyuarat MPM 112*
9 Dec	*Mesyuarat Teknikal BKP 12/2015*
4 Dec	*Mesyuarat* Kick off *Projek Peluasan* OHCIS
4 Dec	*Mesy Jawatankuasa Penempatan & Pertukaran Pegawai Pergigian Bil 4/2015*
7-8 Dec	*Mesyuarat Jawatankuasa Dasar Dan Perancangan Kesihatan Pergigian Bil.6/2015*
7 Dec	*Kursus* Awareness of MS ISO 9001:2015 Key Changes Training *(kursus ini berkenaan pindaan/*conversion MS ISO 9001:2008 kepada MS ISO 9001:2015 (new version)
15 Dec	*Mesyuarat Jawatankuasa Teknikal Akreditasi Pergigian (JKTAP) 6/2015*
16 Dec	*Mesyuarat Jawatankuasa Penilaian Pewartaan Pakar Pergigian (JPPPP) Bil 4 Tahun 2015*

EDITORIAL COMMITTEE 2015

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