



Oral Health Programme  
Ministry of Health  
Malaysia

**2019**  
**ANNUAL**  
**REPORT**

# **ANNUAL REPORT 2019**

**Oral Health Programme  
Ministry of Health Malaysia**

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*Foreword*

**Principal Director of Oral Health  
Ministry of Health Malaysia**



In line with 11<sup>th</sup> Malaysia Plan and five strategic objectives identified in the Ministry of Health Malaysia, Strategic Plan for 2016 – 2020, year 2019 has been filled with oral health programs and activities for various target groups which aim towards improving the well-being of the people. Among others, Dental Icon (iGG) Programme was implemented for the Orang Asli community to increase awareness and oral health status through the spirit of volunteerism and empowerment of the people. The Oral Health Promotion Week in September 2019 was held to increase awareness of the Malaysian people about illegal dental practitioners. Oral Cancer Awareness Week conducted annually in collaboration with various agencies continued to foster community awareness on oral cancer.

Active involvement of oral health personnel in innovation projects and quality assurance activities ensure that creative and innovative culture of working is always invigorated and practiced. Clinical monitoring activities were introduced to ensure safe and quality oral health services are provided to patients.

Regular monitoring revealed existing programme and activities need to be strengthened to achieve better output for the betterment of the Malaysian people. Caries-free status among 12 and 16 years old schoolchildren showed no significant progress despite more than 90 percent school coverage since 2015. The estimated percentage of population who had a dental visit within 12 months (National Health and Morbidity Survey 2011, 2015 and 2019) showed less encouraging trends even though oral health promotion activities increases.

In addition, Malaysia's population growth pattern leading to population aging requires better effective strategies to ensure 60 percent of Malaysian elderly population aged 60 and above have 20 teeth or more as targeted in the National Oral Health Plan 2011-2020 can be achieved.

This report gives an insight on the oral health activities implemented throughout 2019, its achievements, issues and challenges as well as the way forward for 2020. Significant changes in approaches, concepts and policies are required if oral disease burdens need to be reduced or prevented. Greater effort is needed to ensure oral health is given high priority on the political and health agendas. Oral health need to be integrated into the national health programmes and promoted as an effective dimension for development policy of society.

**YBHG. DR NOORMI BINTI OTHMAN  
PRINCIPAL DIRECTOR OF ORAL HEALTH  
MINISTRY OF HEALTH MALAYSIA**

## 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 centered
- Innovative

With emphasis on:

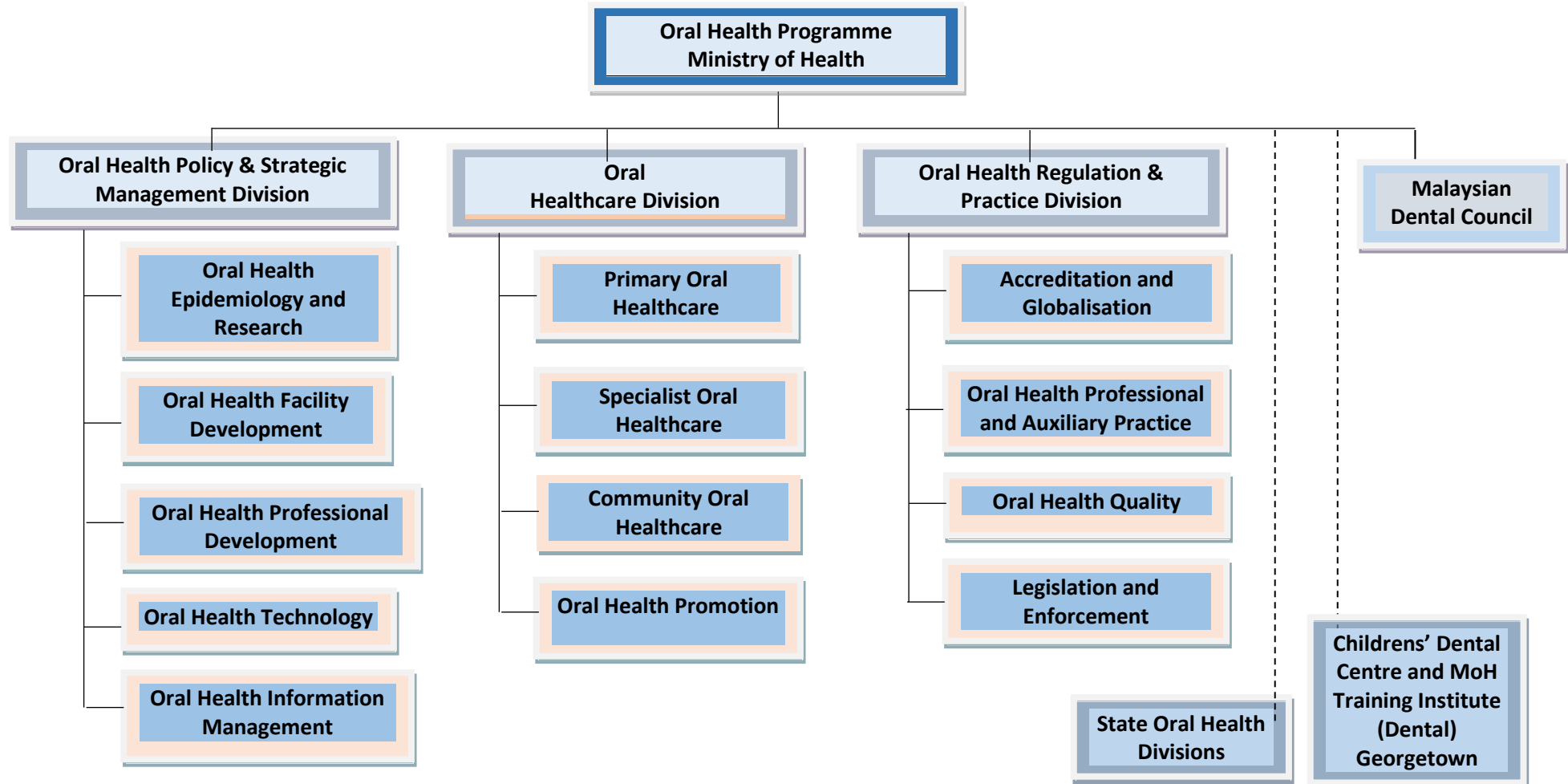
- Professionalism, caring and teamwork value
- Respect for human dignity
- Community participation

## OBJECTIVE OF THE ORAL HEALTH PROGRAMME

To improve the oral health status of Malaysians through collaboration with stakeholders of public and private sectors in promoting oral healthcare, clinical prevention, treatment and rehabilitation with emphasis on identified priority groups, including marginalised and vulnerable populations in such a way that the oral health status of the people will continually be in conformity with the socio-economic progress of the country.

# ORGANISATION STRUCTURE

## ORAL HEALTH PROGRAMME, MINISTRY OF HEALTH MALAYSIA





## RESOURCE MANAGEMENT

### FINANCIAL RESOURCE MANAGEMENT

#### Financial Management at Programme Level

The Oral Health Programme has received an increasing allocation of operational budget for 2019 with a total adjusted operational allocation of RM948,166,476 (*Peruntukan Di Pinda*) which was 4.19 per cent more of 2018 and 3.72 per cent above that of 2017 (**Table 1**).

**Table 1:**  
**Adjusted Operational Allocation, Oral Health Programme, 2010 to 2019**

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
2016	764,288,702.00	101,138,772.00	-	865,427,474.00
2017	815,182,671.00	98,947,857.00	-	914,130,528.00
2018	808,421,900.00	101,636,285.00	-	910,058,185.00
2019	843,683,100.00	104,483,376.00	-	948,166,476.00

Source: Account Division, MoH

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 RM948,162,128.00 showed a spending of 99.99 per cent above the final adjusted allocation received for the year (**Table 2**). Expenditures under *Dasar Sedia Ada* included *Pengurusan Kesihatan Pergigian* (Administration - Financial Code 040100), *Kesihatan Pergigian Primer* (Primary Oral Healthcare - Financial Code 040200), *Kesihatan Pergigian Masyarakat* (Community Oral Healthcare - Financial Code 040300), and *Kesihatan Pergigian Kepakaran* (Specialist Care - Financial Code 040400).

**Table 2:**  
**Adjusted Budget Allocation & Expenditures, Oral Health Programme MoH, 2019**

Activity	Program Code	Final Adjusted Allocation (RM)	Final Expenditures (RM)	% Final Expenditures
<i>Dasar Sedia Ada</i>	030000	948,166,476.00	948,162,128.00	99.99
<i>Dasar Baru</i>	100500	0.00	0.00	-
<i>One-off (Assets)</i>	110100	0.00	0.00	-
<b>Total</b>	-	<b>948,166,476.00</b>	<b>948,162,128.00</b>	<b>99.99</b>

Source: Account Division, MoH

### Financial Management, Oral Health Programme

In 2019, the Oral Health Programme at the ministry level (OHP) received RM5,935,258.00, of which RM5,800,389.98 (97.73 per cent) was spent (**Table 3**). Funds for OHP were from the following sources:

- a) Management of Oral Health
- b) Primary Oral Healthcare
- c) Community Oral Healthcare
- d) Specialist Care Oral Healthcare
- e) MoH Innovation Award
- f) Low Value Assets
- g) Assets
- h) In-service training
- i) Research & Development
- j) Upgraded Medical Equipment & Non-Medical Equipment

The operating budget under Financial Codes 040100, 040200, 040300 and 040400 includes the operating costs for the Programme, the Malaysian Dental Council (MDC) and other activities at ministry level.

**Table 3:**  
**Adjusted Budget Allocations and Expenditures, Oral Health Programme, MoH, 2019**

Activity	Activity Code	Adjusted Allocation (RM)	Final Expenditures (RM)	% Final Expenditures to Initial Allocations
Management of Oral Health	040100	1,944,000.00	1,813,302.51	93.28
Primary Oral Healthcare	040200	15,800.00	14,950.00	94.62
Community Oral Healthcare	040300	195,000.00	195,000.00	100.00
Specialist Care Oral Healthcare	040400	83,100.00	82,251.00	98.98
MOH Innovation Award	010100	94,800.00	90,170.02	95.12
Low Value Assets	010300	24,350.00	20,298.00	83.36
Assets	080900	38,500.00	38,458.00	99.89

In-service Training	00105	929,125.00	928,945.35	99.98
Research & Development	00500	1,017,673.00	664,105.10	65.26
Upgraded Medical Equipment & Non-Medical Equipment	01100	1,592,910.00	1,952,910.00	100.00
<b>Total</b>	-	<b>5,935,258.00</b>	<b>5,800,389.98</b>	<b>97.73</b>

Source: Oral Health Programme, MoH

### Funds For Latihan Dalam Perkhidmatan (LDP)

The Programme also received RM929,125.00 for LDP, of which 99.98 per cent (RM928,945.35) was spent.

### Monitoring State Finances

The OHP also monitored allocation and expenditure at state level. In 2019, under *Dasar Sedia Ada*, Selangor received the highest allocation, followed by Sarawak and Sabah. A total of 13 states and 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, 2019**

State	Adjusted Allocation (RM)	Final Expenditure (RM)	% Final Expenditure to Initial Allocation
Perlis	17,926,885.00	18,686,891.31	104.24
Kedah	61,431,800.00	62,941,979.00	102.46
Pulau Pinang	52,478,504.15	54,213,248.42	103.31
Perak	82,468,810.00	84,265,988.13	102.18
Selangor	93,101,211.31	96,935,762.30	104.12
Negeri Sembilan	50,268,864.00	54,519,284.20	108.46
Melaka	39,566,821.50	39,930,827.27	100.92
Johor	75,286,990.00	78,078,578.68	103.71
Pahang	67,288,700.00	68,994,355.29	102.53
Terengganu	60,041,550.00	60,245,233.15	100.34
Kelantan	69,274,460.00	71,435,398.33	103.12
Sabah	80,920,672.60	83,061,511.61	102.65
Sarawak	93,870,690.00	95,456,233.66	101.69
FT KL & Putrajaya	51,463,860.00	53,253,605.39	103.48
FT Labuan	3,719,560.00	3,615,093.83	97.19
OHD, MoH	2,237,900.00	2,105,503.51	94.08
PPKK & KLPM	295,300.00	290,655.98	98.43
HKL	6,968,468.50	7,189,610.78	103.17
IMR	521,000.00	454,705.34	87.28
IKN	75,000.00	74,929.42	99.91
<b>Total</b>	<b>909,207,047.06</b>	<b>935,749,395.60</b>	<b>102.92</b>

Source: Oral Health Programme, MoH

## HUMAN RESOURCE MANAGEMENT

A successful health system depends on the provision of effective, efficient, accessible, sustainable and high quality services by a workforce that is sufficient in number, appropriately trained and equitably distributed. The oral health workforce in MoH consists of dental specialist, dental officer, dental auxiliaries (dental therapist, dental technologist and dental surgery assistant) and support staff (health attendant, administrative staff and driver).

### Dental Officer

Even though there was a slight increase in the number of permanent posts in 2019, the number of officers serving in MoH has reduced as compared with 2018. Sabah and Sarawak remained as states with high number of vacant posts for officers (**Table 5 and 6**).

**Table 5:**  
**Status of Dental Officer Posts, 2016 to 2019**

Year	P	F	Per cent F
2016	3,839	3,647	95.0
2017	3,839	3,418	89.0
2018	3,839	3,095	80.6
2019	3,847	3,051	79.3

P = Posts      F = Filled  
Source: Oral Health Programme, MoH

**Table 6:**  
**Status of Dental Officer Posts at State/ Hospital/Institution, 2019**

State/ Hospital/ Institutions	P	F	% F
Perlis	80	60	75.0
Kedah	272	197	72.4
Pulau Pinang	197	183	92.9
IL(Pergigian) KKM	38	35	92.1
Perak	315	258	81.9
Selangor	371	334	90.0
FT KL & Putrajaya	202	188	93.1
Negeri Sembilan	223	206	92.4
Melaka	162	137	84.6
Johor	376	299	79.5
Pahang	342	254	74.3
Terengganu	283	223	78.8
Kelantan	290	221	76.2
Hospitals / Institutions	75	73	97.3
<b>Peninsular Malaysia</b>	<b>3,226</b>	<b>2,668</b>	<b>82.7</b>
Sabah	280	173	61.8
Sarawak	328	200	61.0
FT Labuan	13	10	76.9
<b>East Malaysia</b>	<b>621</b>	<b>383</b>	<b>61.7</b>
<b>Total</b>	<b>3,847</b>	<b>3,051</b>	<b>79.3</b>

P = Posts      F=Filled  
Source: Oral Health Programme, MoH

Starting 2017, all new dental officers in MoH were appointed on contract basis for a period of three (3) years. A total of 3,626 new contract dental officers were appointed from 2017 to 2019 (**Table 7**). Those who fulfil the criteria and conditions were given consideration for permanent appointment after their two (2) years contract period ended. A total of 163 officers from the first cohort and 142 officers from the second cohort were appointed respectively based on the number of vacant posts available.

**Table 7:**  
**Contract Dental Officers in MoH, 2017 to 2019**

Cohort	Year		
	2017	2018	2019
First cohort	526	708	566
Second cohort	441	286	390
Third cohort	362	130	217
<b>Total</b>	<b>1,329</b>	<b>1,124</b>	<b>1,173</b>

Source: Oral Health Programme, MoH

### Attrition of Dental Officers

In 2019, a total of 1,173 dental officers joined MoH to undergo compulsory service while 512 left the service due to various reasons, hence a total net gain of 661 officers (**Table 8**).

**Table 8:**  
**Nett Gain/Loss of Dental Officers in MoH, 2016 to 2019**

Reasons	Year			
	2016	2017	2018	2019
Joined MOH	880	1,329	1,124	1,173
Left MOH	270	267	443	512
Retired (Compulsory )	7	16	13	18
Retired (Optional)	9	14	12	5
Resigned	252	237	414	487
Released with Permission	0	0	0	0
Other Reasons	2	0	4	2
<b>Net Gain/Loss</b>	<b>610</b>	<b>1,062</b>	<b>681</b>	<b>661</b>

Source: Oral Health Programme, MoH

### Dental Specialist

The number of clinical dental specialists has increased from 284 (2018) to 301 (2019). However, the number of Dental Public Health Specialists continue to decline since 2016 due to retirement and lack of new dental public health graduates entering the service (**Table 9**).

There were inadequate number of posts for clinical dental specialists since 2017. However, about 15 per cent of the Dental Public Health (DPH) specialist posts were still vacant in 2019 (**Table 10**). Majority of the specialists were posted to hospitals / dental clinics in Peninsular Malaysia (**Table 11**).

**Table 9:**  
**Number of Dental Specialists in MoH, 2016 to 2019**

Year	Clinical								Dental Public Health	Total
	Oral & Maxillo-facial Surgery	Orthodontic	Periodontic	Paediatric Dentistry	Oral Pathology & Oral Medicine	Restorative Dentistry	Special Needs Dentistry	Forensic Odontology		
2016	64	52	34	39	11	24	4	1	93	<b>322</b>
2017	75	64	36	38	15	28	4	1	90	<b>351</b>
2018	77	69	42	45	14	31	5	1	85	<b>369</b>
2019	81	70	44	46	15	37	6	2	80	<b>381</b>

(Exclude dental specialists undergoing gazzatement)

Source: Oral Health Programme, MoH

**Table 10:**  
**Status of Dental Specialist Posts, 2019**

Year	Clinical Dental Specialist			DPH Specialist		
	P	F	% F	P	F	% F
2015	244	215	88.1	-	-	-
2016	244	229	93.8	94	70	74.4
2017	244	261	106.9	94	90	95.7
2018	244	284	116.4	94	85	90.4
2019	244	301	123.4	94	80	85.1

P = Posts F=Filled

Source: Oral Health Programme, MoH

**Table 11:**  
**Status of Dental Specialist Posts at State / Hospital / Institution, 2019**

State/ Hospital/ Institutions	Clinical Dental Specialist			DPH Specialist		
	P	F	% F	P	F	%F
Perlis	5	6	120.0	1	1	100.0
Kedah	15	22	146.7	4	3	75.0
Pulau Pinang	15	17	113.3	4	2	50.0
KLPM	1	1	100.0	2	2	100.0
Perak	18	23	127.8	6	4	66.7
Selangor	35	45	128.6	7	7	100.0
FT Kuala Lumpur	18	26	144.4	5	3	60.0
Negeri Sembilan	19	19	100.0	4	3	75.0
Melaka	12	13	108.3	4	4	100.0
Johor	20	29	145.0	6	5	83.3
Pahang	13	18	138.5	6	4	66.7
Terengganu	7	10	142.9	4	4	100.0
Kelantan	16	16	100.0	5	5	100.0
Hospitals / Institutions	17	16	94.1	27	28	103.7

State/ Hospital/ Institutions	Clinical Dental Specialist			DPH Specialist		
	P	F	% F	P	F	%F
<b>Peninsular Malaysia</b>	<b>211</b>	<b>261</b>	<b>123.7</b>	<b>85</b>	<b>75</b>	<b>88.2</b>
Sabah	15	20	133.3	5	2	40.0
Sarawak	18	20	111.1	4	3	75.0
FT Labuan	0	0	0	0	0	0
<b>East Malaysia</b>	<b>33</b>	<b>40</b>	<b>121.2</b>	<b>9</b>	<b>5</b>	<b>55.6</b>
<b>Total</b>	<b>244</b>	<b>301</b>	<b>123.4</b>	<b>94</b>	<b>80</b>	<b>85.1</b>

P = Posts F=Filled

Source: Oral Health Programme, MoH

### Attrition of Dental Specialist

30 dental officers were gazetted as specialist in 2019 whilst 28 left the service due to various reasons; hence a net gain of two (2) specialists. Net gain and losses of dental specialist from 2016 to 2019 is shown in **Table 12**.

**Table 12:**  
**Gazettement and Attrition of Dental Specialist, 2016 to 2019**

	Year			
	2016	2017	2018	2019
Gazetted as Specialist	21	51	43	30
<b>Attrition</b>				
Retired (Compulsory )	3	12	10	15
Retired (Optional)	3	6	4	1
Resigned/ Released with Permission	6	1	10	11
Other Reasons	0	0	2	1
			(contract)	
<b>Total</b>	<b>12</b>	<b>19</b>	<b>26</b>	<b>28</b>
<b>Net Gain/Loss</b>	<b>9</b>	<b>32</b>	<b>17</b>	<b>2</b>

Source: Oral Health Programme, MoH

### Dental Auxiliaries and Support Staff

In 2019, more than 90 per cent of permanent posts for dental auxiliaries and support staff have been filled (**Table 13 and 14**).

**Table 13:**  
**Status of Dental Auxiliaries Posts, 2019**

CATEGORY	2019		
	P	F	
		No.	Percentage
Dental Therapist	2,952	2,810	95.2
Dental Technologist	1,003	928	92.5
Dental Surgery Assistant	4,108	3,951	96.2
<b>Total</b>	<b>8,063</b>	<b>7,689</b>	<b>95.3</b>
Support Staff	4,430	4,099	92.5
<b>Total</b>	<b>12,493</b>	<b>11,788</b>	<b>94.4</b>

P = Posts F=Filled

Source: Oral Health Programme, MoH

**Table 14:**  
**Status of Dental Auxilliaries Posts at State / Hospital /Institution, 2019**

State/ Hospital/ Institution	D/Therapist			D/Technologist			DSA		
	P	F	% F	P	F	% F	P	F	% F
Perlis	61	58	95.1	22	18	81.8	93	86	92.5
Kedah	185	178	96.2	71	66	92.9	257	253	98.4
Pulau Pinang	182	175	96.2	43	40	93.0	266	256	96.2
KLPM	25	20	80.0	8	7	87.5	23	22	95.7
Perak	237	228	96.2	80	73	91.3	345	339	98.3
Selangor	244	238	97.5	98	88	89.8	409	376	91.9
FT KL & Putrajaya	143	130	90.9	47	43	91.5	247	230	93.1
Negeri Sembilan	138	138	100	58	52	89.7	226	221	97.8
Melaka	103	99	96.1	34	33	97.1	180	169	93.9
Johor	190	178	93.7	74	64	86.5	353	329	93.2
Pahang	207	205	99.0	62	61	98.4	328	315	96.0
Terengganu	154	152	98.7	74	72	97.3	280	276	98.6
Kelantan	201	197	98.0	79	75	95.0	251	251	100
Hospital /Institutions	28	26	92.8	13	12	92.3	63	55	87.3
<b>Pen. Malaysia</b>	<b>2,098</b>	<b>2,022</b>	<b>96.4</b>	<b>763</b>	<b>704</b>	<b>92.3</b>	<b>3,321</b>	<b>3,178</b>	<b>95.7</b>
Sabah	382	364	95.3	104	99	95.2	358	353	98.6
Sarawak	429	391	91.1	118	113	95.8	410	404	98.5
FT Labuan	15	12	80.0	3	3	100	16	16	100.0
<b>East Malaysia</b>	<b>826</b>	<b>767</b>	<b>92.9</b>	<b>225</b>	<b>215</b>	<b>95.6</b>	<b>784</b>	<b>773</b>	<b>98.6</b>
<b>Jaw. Kumpulan</b>	<b>28</b>	<b>21</b>	<b>75</b>	<b>15</b>	<b>9</b>	<b>60</b>	<b>3</b>	<b>0</b>	<b>0</b>

P = Posts F=Filled DSA= Dental Surgery Assistant

(\*Total number including "Jawatan Kumpulan")

Source: Oral Health Programme, MoH

Starting March 2019, all dental auxilliary trainees graduated from the *Institut Latihan (Pergigian)* KKM, Penang were recruited on contract basis for a period of (2 + 2) years. A total of 29 Dental Technologists (DTech) and 250 Dental Surgery Assistants (DSA) in two (2) cohorts were appointed respectively (**Table 15**).

**Table 15:**  
**Contract Dental Auxilliaries in MoH, 2019**

2019	No. of DTech	No. of DSA
First cohort	29	125
Second cohort	-	125
<b>Total</b>	<b>29</b>	<b>250</b>

Source: Oral Health Programme, MoH



### Promotion Exercise

In 2019, a total of 359 dental officers including specialists was given promotion to a higher grade (**Table 16**). A total of 137 dental auxiliaries in various schemes was also promoted in 2019 (**Table 17**).

**Table 16:**  
**Promotion for Dental Specialist and Officer, 2019**

Category	Grade											Total
	Khas A	Khas B	Khas C	Utama A	Utama B	Utama C	UG56	UG54	UG52	UG48	UG44	
Specialist	1	3	3	0	2	9	10	1	0	0	0	29
Officer	0	0	0	0	0	0	0	14	29	187	100	330
<b>Total</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>9</b>	<b>10</b>	<b>15</b>	<b>29</b>	<b>187</b>	<b>100</b>	<b>359</b>

Source: Oral Health Programme, MoH

**Table 17:**  
**Promotion for Dental Auxiliaries, 2019**

Category	Grade								Total
	U40	U38	U36	U32	KUP U32	U29	U26	U24/U22	
Dental Therapist	1	5	33	24	0	0	0	0	63
Dental Technologist	0	6	13	0	0	28	0	0	47
Dental Surgery Assistant	0	0	0	0	0	0	3	24	27
<b>Total</b>	<b>1</b>	<b>11</b>	<b>46</b>	<b>24</b>	<b>0</b>	<b>28</b>	<b>3</b>	<b>24</b>	<b>137</b>

Source: Oral Health Programme, MoH

## ORAL HEALTH FACILITY DEVELOPMENT

In 2019, eleven dedicated dental projects under the 10<sup>th</sup> and 11<sup>th</sup> Malaysia Plan were still under development as follows: -

- i. Standalone Dental Clinic:
  - *Klinik Pergigian Bukit Selambau, Kedah*
  - *Klinik Pergigian Kluang, Johor*
  - *Klinik Pergigian Tanjung Karang, Kuala Selangor, Selangor*
  - *Klinik Pergigian Daro, Mukah, Sarawak*
  - *Klinik Pergigian Pasir Akar, Besut, Terengganu*
  - *Upgrading Klinik Pergigian Tronoh, Kinta, Perak*
- ii. *Pusat Pakar Pergigian Seremban, Negeri Sembilan*
- iii. *Klinik Pakar Pergigian di Klinik Kesihatan (Jenis 3) Presint 6, Putrajaya*
- iv. *Pusat Pakar Pergigian Sabah*
- v. *Kuarters Klinik Pergigian Chiku 3, Gua Musang, Kelantan*
- vi. *Upgrading Jabatan Pergigian Pediatrik, Hospital Melaka, Melaka*

### Norms and Guidelines for New Facilities

The Operational Policy and Oral Health Facility Development Plan MoH (2019 – 2025) was distributed to all states to be used as guidance in planning dental facility development.

Medical Brief of Requirements (MBoR), Standard List of Equipment and Specifications of Equipment for new dental facilities were also reviewed and updated:

Medical Brief of Requirement for;

- *Klinik Pakar Pergigian di KK Jenis 3, Presint 6, FT KL & Putrajaya*
- *Pusat Pakar Pergigian Seremban, Negeri Sembilan*

Standard list of Equipment for;

- Primary Dental Clinic
- Specialist Dental Clinic
- Mobile Dental Team
- Mobile Dental Clinic

Specifications of Equipment for;

- Heavy Equipment (List 1 – for Dental Facilities)
- Dental Laboratory Equipment
- Specialist Equipment (Cone Beam Computer Tomography, Orthopantomogram (OPG) and Cephalometric X-Ray Unit, Drill and Saw, Surgical Micromotor, Intraoral X-Ray, Dental Operating Microscope, Intraoral Scanner, Nitrous Oxide Machine and Mobile Dental Cutting Unit (OT use)

**Supply, Delivery, Installation, Testing, Commissioning and Maintenance of Biomedical Equipment Under Medical Equipment Enhancement Tenure (Meet) Programme**

The Medical Equipment Enhancement Tenure (MEET) programme were continuously monitored by the Technical Audit from the Engineering Services Division, MoH covering two (2) dental clinics i.e. Teluk Datuk, Selangor Dental Clinic and Teluk Bahang, Pulau Pinang Dental Clinic.

**Privatisation of Clinic Support Services / *Perkhidmatan Sokongan Klinik (PSK)***

New contract for the Clinical Support Services in 13 states were approved in 2019 whilst the support service contract for Sarawak was extended for six (6) months until 31 May 2020. A new system for PSK contract management, Clinic Asset and Services Information System (CASIS) by ADL System Sdn. Bhd. in Sarawak was approved.

## ACTIVITIES AND ACHIEVEMENTS

## ORAL HEALTH EPIDEMIOLOGY AND RESEARCH

The main focus in 2019 was preparation for the National Health and Morbidity Survey 2020: National Oral Health Survey of Adults 2020 (NHMS 2020: NOHSA 2020). This survey aims to assess the oral health status and treatment needs of Malaysian adults aged 15 years and above and to describe the socio-dental aspects in relation to their oral health.

Several activities were conducted as follows:

- i. Calibration and standardisation between benchmark and gold standard examiners for each criteria (i.e. oral lesion, dental caries and treatment need, and periodontal condition) from 11 until 13 March 2019 at Air Jernih, Kuala Terengganu Dental Clinic and Oral Pathology and Oral Medicine Clinic, Hospital Sultanah Nur Zahirah, Terengganu.
- ii. Calibration and standardisation between Selangor' examiners and benchmark examiners from April to June 2019.
- iii. Trial run involving three (3) enumeration blocks in Hulu Langat district from end of June until July 2019.
- iv. Training for the state NOHSA team consisting of the state co-ordinators, field supervisors, examiners and interviewers from 31 October 2019 until 2 November 2019 at The Pearl Hotel, Kuala Lumpur.

NHMS 2020: NOHSA 2020 will start with the standardisation and calibration between state examiners and benchmark examiners that will be held in six (6) zones from February 2020 until April 2020. Data collection will start from May 2020 until July 2020 involving 22,528 adults aged 15 years and above in Malaysia. This data will be analysed by the Core Team which consist of selected Dental Public Health Specialists, who will be responsible in the preparation of the final technical report at the end of December 2020. It is hope that information regarding nation's oral health status can be obtained through this survey which in turn will provide and help us in making better oral health policy for the country.

## ORAL HEALTH PROFESSIONAL DEVELOPMENT

### Recognition and Endorsement of Dental Postgraduate Qualifications

There were no newly accredited local postgraduate qualifications in dentistry by the Malaysian Qualifications Agency in 2019. Similarly, there were no newly endorsed foreign postgraduate qualifications in dentistry by the *Jawatankuasa Khas Perubatan (JKP)*.

### Gazettement of Dental Specialists

There were four (4) meetings of the Dental Specialist Gazettement and Evaluation Committee [*Jawatankuasa Penilaian Pewartaan Pakar Pergigian (JPPPP)*] in 2019 to assess and make recommendations to the *Jawatankuasa Khas Perubatan (JKP)* for gazettement of Dental Specialists in the MoH.

#### i. Dental Public Health Specialists

Two (2) Dental Public Health Specialists were gazetted in 2019 (**Table 18**).

**Table 18:**  
**Dental Public Health Specialists Gazetted, 2019**

No.	Name	Gazettement Date
1.	Dr Nuryastri binti Md Mustafa	3 March 2019
2.	Dr Sabrina Julia binti Mohd Jeffery	18 June 2019

Source: Oral Health Programme, MoH

#### ii. Clinical Dental Specialists

28 Clinical Dental Specialists were gazetted in 2019 (**Table 19**).

**Table 19:**  
**Clinical Dental Specialists Gazetted, 2019**

No.	Name	Specialty	Gazettement Date
1.	Dr Nuriah binti Buhari	Orthodontic	16 February 2019
2.	Dr Fairuz bin Abdul Rahman	Oral Pathology & Oral Medicine	24 February 2019
3.	Dr Norul Hana binti Ismail	Paediatric Dentistry	27 February 2019
4.	Dr Syahir bin Hassan	Oral & Maxillofacial Surgery	27 February 2019
5.	Dr Tan Chuey Chuan	Oral & Maxillofacial Surgery	27 February 2019
6.	Dr Nor 'Izzati binti Mohtar	Oral & Maxillofacial Surgery	27 February 2019
7.	Dr Juliana binti Khairi	Oral & Maxillofacial Surgery	27 February 2019
8.	Dr Sabrina a/p Peter	Oral & Maxillofacial Surgery	27 February 2019
9.	Dr Suraya binti Ahmad Nasir	Oral & Maxillofacial Surgery	27 February 2019
10.	Dr Ong Li Sze	Restorative Dentistry	19 March 2019
11.	Dr Ooi Ee Fen	Orthodontic	25 March 2019
12.	Dr Kong Lik Lin	Restorative Dentistry	29 March 2019
13.	Dr Hairuladha bin Abdul Razak	Forensic Odontology	01 April 2019
14.	Dr Wahidatunur binti Musa	Periodontic	01 April 2019
15.	Dr Nik Mukhriz bin Nik Mustapha	Orthodontic	02 April 2019
16.	Dr Tan Chiew Ee	Paediatric Dentistry	02 April 2019

17.	Dr Mohamad Termizi bin Bakar	Restorative Dentistry	06 April 2019
18.	Dr Adelene binti Agos	Paediatric Dentistry	07 April 2019
19.	Dr Evelyn Able Padtong	Periodontic	23 April 2019
20.	Dr Stefanie Tan Jun Yen	Orthodontic	25 April 2019
21.	Dr Loo Zia Howe	Restorative Dentistry	13 May 2019
22.	Dr Adlin Aslina binti Suhaimi	Special Needs Dentistry	09 July 2019
23.	Dr Nabihah binti Dziaruddin	Paediatric Dentistry	24 July 2019
24.	Dr Noreen Fitrisha binti Mat Nor	Orthodontic	08 September 2019
25.	Dr Noor Hidayah binti Awang Kechik	Orthodontic	09 September 2019
26.	Dr Siti Maisarah binti Ahmad Razin	Orthodontic	18 September 2019
27.	Dr Sindhuja Rajadorai	Orthodontic	29 September 2019
28.	Dr Tan Wan Jiun	Periodontic	30 November 2019

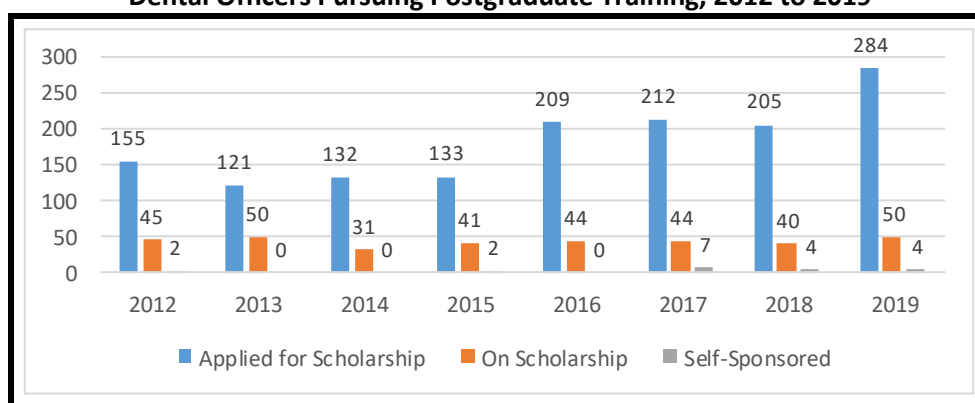
Source: Oral Health Programme, MoH

### iii. Postgraduate Training for Dental Professionals

Out of 284 dental officers who applied and passed the screening selection, 50 (18 per cent) were offered Federal Scholarships for postgraduate training in 2019 and four (4) were offered study leave without the Federal Scholarship (**Figure 1**).

The local training for Special Needs Dentistry (SND) did not materialised in 2019. Hence, one (1) of the Federal Scholarship slots for local training was converted to one (1) Federal Scholarship slot for SND training in oversea. Out of those offered the Federal Scholarships for local training, only 45 (90 per cent) were taken up due to limited training slots particularly in the discipline of Orthodontics. In relation to that, the unused Federal Scholarships were distributed to those who obtained offer from university in other disciplines and appealed for full-paid study leave. The Secretary-General also approved additional six (6) dental officers who appealed for full-paid study leave without the Federal Scholarship.

**Figure 1:**  
**Dental Officers Pursuing Postgraduate Training, 2012 to 2019**



Source: Oral Health Programme, MoH

Taking into consideration of the additional six (6) full-paid study leave without the Federal Scholarship and four (4) recipients of 2018 Federal Scholarship who did not managed to secure training places previously, a total of 64 dental officers were offered training places in 2019. Out of these, 59 dental officers pursued postgraduate training at local universities, while five (5) went abroad (**Table 20**).

**Table 20:**  
**Dental Officers Pursuing Postgraduate Training by Discipline, 2019**

Discipline	On Federal Scholarship		Self-sponsored/ other sponsorship		Total
	Local	Abroad	Local	Abroad	
Oral & Maxillofacial Surgery	10	0	2	0	12
Orthodontic	5	0	1	1	7
Periodontic	6	0	0	0	6
Paediatric Dentistry	11	0	0	1	12
Restorative Dentistry	4	0	1	0	5
Oral Pathology & Oral Medicine	2	0	1	0	3
Special Needs Dentistry	0	1	0	0	1
Dental Public Health	14	0	0	0	14
Forensic Odontology	0	1	0	1	2
Area of Special Interest	0	0	0	0	0
Enforcement Law	0	0	2	0	2
<b>Total</b>	<b>52</b>	<b>2</b>	<b>7</b>	<b>3</b>	<b>64</b>

Source: Oral Health Programme, MoH

24 dental officers completed postgraduate training in 2019 and commenced the pre-gazettement period (**Table 21**).

**Table 21:**  
**Dental Officers Who Completed Postgraduate Training by Speciality, 2019**

Speciality	Local Universities	Institutions Abroad
Oral & Maxillofacial Surgery	6	0
Orthodontic	8	0
Periodontic	2	0
Paediatric Dentistry	2	0
Restorative Dentistry	2	0
Oral Pathology & Oral Medicine	0	0
Special Needs Dentistry	0	0
Dental Public Health	4	0
Forensic Odontology	0	0
<b>Total</b>	<b>24</b>	<b>0</b>

Source: Oral Health Programme, MoH



**iv. In-Service Training For Dental Personnel (*Latihan Dalam Perkhidmatan*)**

- **Local In-Service Training**

As of end December 2019, there were 80 consultancy trainings, courses and conferences conducted and attended by Dental Specialists, Dental Officers, Dental Auxilliaries and Supporting Staff (**Table 22**).

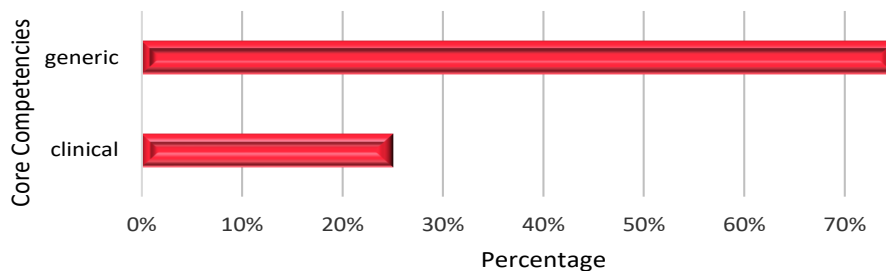
- **Advanced Competency Programme (ACP)**

In 2019, three (3) Dental Specialists received offer to undergo training under the Advanced Competency Programme (ACP) (**Table 23**).

- **Continuing Professional Development (CPD)**

Many CPD sessions were held in the Oral Health Programme in 2019 (**Table 24**). These sessions comprised of two (2) areas of core competencies; Clinical (25 per cent) and Generic (75 per cent) (**Figure 2**).

**Figure 2:**  
**Number of CPD Sessions According to Areas of Core Competencies, 2019**  
**Percentage of CPD Sessions Held According to Areas of Core Competencies 2019**



Source: Oral Health Programme, MoH

**Table 22:**  
**Consultancy Trainings and Courses Conducted and Attended in 2019**

No	Training Topic	Participants	Date	Expenses (MYR)	Venue
1	26th MDA Scientific Conference and Trade Exhibition 2019	40 Officers	18 - 20 January 2019	30,000.00	Kuala Lumpur Convention Centre (KLCC)
2	A Short Course on Data Analysis Using R Software	1 officer	13 - 14 February 2019	550.00	<i>Institut Pengajian Siswazah USM @ KL</i>
3	Effective Understanding and Implementation of ISO 9001:2015 in an Organisation	1 officer	6 March 2019	2,909.70	Oral Health Programme, MoH
4	<i>Kursus Perkhidmatan Berhenti Merokok bagi Program KOTAK 2019</i>	31 officers and 14 auxiliaries	6 - 8 March 2019	14,055.00	Avillion Legacy Hotel, Melaka
5	MADPHS Scientific Conference and 10th Annual General Meeting	62 officers	16 March 2019	31,000.00	Swiss Garden Beach Resort, Kuantan
6	Training of Trainers (TOT) "OralDETECT"	23 officers	18 - 19 March 2019	11,730.00	Summit Hotel, USJ Subang
7	<i>Bengkel Metodologi dan Analisa Data 2019</i>	45 officers	19 - 21 March 2019	20,100.00	Eastin Hotel, Kuala Lumpur
8	<i>Kursus Forensik Digital (First Responder)</i>	25 officers and 1 auxiliary	25 - 27 March 2019	11,695.00	Eastin Hotel, Kuala Lumpur
9	MAOMS Annual Scientific Meeting & AGM 2019	14 officers	22 - 24 March 2019	9,800.00	Hyatt Regency Kuantan Resort, Pahang
10	<i>Kursus Audit ISO 9001:2015 untuk Ahli Pasukan Audit Dalaman</i>	9 officers and 24 auxiliaries	3 - 4 April 2019	5,819.40	Oral Health Programme, MoH
11	4th Malaysian Dental Therapists' Scientific Conference 2019	100 auxiliaries	5 - 7 April 2019	45,000.00	Berjaya Times Square, Kuala Lumpur
12	MAPD Scientific Conference & Trade Exhibition 2019	20 officers	12 - 14 April 2019	10,450.00	Weil Hotel, Ipoh Perak

No	Training Topic	Participants	Date	Expenses (MYR)	Venue
13	Certified Smoking Cessation Services Provider Training Course / Motivational Interviewing Course	24 officers and 1 auxiliary	17 - 19 April 2019	15,100.00	Premiera Hotel, Kuala Lumpur
14	Development, Implementation and Evaluation of Community Based Oral Health Interventions Workshop	15 officers	19 April 2019	2,400.00	International Medical University (IMU) Bukit Jalil, Kuala Lumpur
15	Malaysia International Dental Show (MIDS) 2019	30 officers	19 - 21 April 2019	19,800.00	Putra World Trade Centre, Kuala Lumpur
16	National Oral Health Scientific Conference 2019	146 officers and 4 auxiliaries	23 - 24 April 2019	32,650.00	Eastin Hotel, Kuala Lumpur
17	<i>Kursus Pengukuhan Pengurusan Kewangan bagi Pembantu Tadbir (Kewangan) dan Pembantu Tadbir (P/O) PKP KKM 2019</i>	1 officer and 36 auxiliaries	26 - 28 April 2019	11,814.30	Grand Puteri Hotel, Kuala Terengganu
18	MAO Scientific Conference and Trade Exhibition 2019 (MAOISCTE)	12 officers	27 – 29 April 2019	21,600.00	Double Tree by Hilton Hotel Kuala Lumpur
19	MPDPA Asean DSA Congress & Trade Exhibition 2019	25 auxiliaries	28 April 2019	5,000.00	Royal Selangor Club, Dataran Merdeka, Kuala Lumpur
20	<i>Ceramah Sahsiah Diri</i>	51 officers and 51 auxiliaries	29 May 2019	6,232.00	Oral Health Programme, MoH
21	1st Suction Effective Mandibular Complete Denture	10 officers	11 June 2019	2,000.00	Faculty of Dentistry, University of Malaya
22	Digital Health Conference : Telemedicine 4.0	4 officers	20 - 21 June 2019	1,600.00	Dorsett Grand, Subang Jaya
23	<i>Bengkel Penyediaan Bahan Infografik</i>	39 officers and 11 auxiliaries	24 - 25 June 2019	2,530.00	Oral Health Programme, MoH
24	<i>Kursus Perancangan Pembangunan Fasiliti Kesihatan Pergigian ke arah RMK-12</i>	30 officers and 13 auxiliaries	25 - 27 June 2019	17,860.00	Geno Hotel, Shah Alam

No	Training Topic	Participants	Date	Expenses (MYR)	Venue
25	Negeri Sembilan Oral Health Scientific Conference 2019 (N9 OHSC 2019)	26 officers and 14 auxiliaries	29 - 30 June 2019	12,000.00	Klana Resort Seremban, Negeri Sembilan
26	<i>Kursus Pemantapan Kes Siasatan Rakaman Percakapan</i>	25 officers	8 - 10 July 2019	11,290.00	Amverton Heritage Hotel, Ayer Keroh, Melaka
27	Program Periodontology Classification Masterclass	20 officers	9 July 2019	5,980.00	Armada Hotel, Petaling Jaya
28	Malaysia-International Dental Exhibition and Conference (MIDEC 2019)	73 officers	11 - 14 July 2019	54,750.00	Kuala Lumpur Convention Centre (KLCC)
29	<i>Kursus Biopsi Mulut - Zon Utara</i>	59 officers and 6 auxiliaries	15 July 2019	2,345.00	IPPT, USM Kampus Bertam, Pulau Pinang
30	<i>Bengkel Latihan Panel Penilai Akreditasi Program Pengajian Pergigian Tahun 2019</i>	37 officers and 2 auxiliaries	16 - 17 July 2019	13,915.00	Hotel Avilion Admiral Cove, Port Dickson
31	Kursus Paediatric Resuscitation & Inhalation Sedation Course	26 officers and 1 auxiliary	16 - 18 July 2019	7,003.00	Tunku Azizah Hospital, Kuala Lumpur
32	TOT Pain as 5th Vital Sign and Pain Free Programme Course	44 officers	17 - 18 July 2019	1,590.00	Oral Health Programme, MoH
33	Masterclass in Orthognathic Planning and Surgery (OMFS)	28 officers	20 - 21 July 2019	20,750.00	Serdang Hospital
34	Masterclass in Orthognathic Planning and Surgery (Orthodontic)	14 officers	20 - 21 July 2019	5,000.00	Serdang Hospital
35	6th Asia Pacific Conference on Public Health	5 officers	22 - 25 July 2019	3,250.00	Equatorial Hotel, Pulau Pinang
36	6th Questionnaire Validation Workshop 2019	2 officers	29 - 30 July 2019	800.00	School of Medical Sciences, USM
37	<i>Kursus Meningkatkan Keberkesanan Diri dan Organisasi bagi Anggota Pentadbiran dan Kewangan PKP KKM 2019</i>	35 auxiliaries	26 - 28 July 2019	21,000.00	Berjaya Hotel, Johor Bahru
38	<i>Kursus Pembantu Perawatan Kesihatan (PPK) Peringkat Kebangsaan 2019</i>	3 officers and 64 auxiliaries	22 - 24 July 2019	14,840.00	Hotel Beach Village Resort, Kota Bharu, Kelantan

No	Training Topic	Participants	Date	Expenses (MYR)	Venue
39	<i>Bengkel Pembangunan Standard of Procedure (SOP) Audit Klinikal bagi Perkhidmatan Kesihatan Pergigian Primer</i>	35 officers and 22 auxiliaries	31 July - 2 August 2019	16,410.00	Summit Hotel, USJ Subang
40	20th Asia Pacific Dental Technologist Federation Conference & Trade Exhibition	23 auxiliaries	2 - 4 August 2019	10,350.00	Sunway Putra Hotel, Kuala Lumpur
41	9th International Conference on Traditional and Complementary Medicine (INTRACOM 2019)	2 officers	3 - 5 August 2019	1,600.00	One World Hotel, Petaling Jaya
42	<i>Kursus Pemurnian Draf Peraturan Pergigian Bersama PUU</i>	8 officers	5 - 7 August 2019	5,480.00	Klana Beach Resort, Port Dickson
43	Paediatric Dentistry Conference (CRIPD) 2019	6 officers	7 - 9 August 2019	3,000.00	Balai Ungku Aziz, Faculty of Dentistry, University of Malaya
44	21st Asia Pacific Regional Conference of Alzheimer's Disease International	6 officers	16 - 18 August 2019	6,000.00	Istana Hotel, Kuala Lumpur
45	2019 Malaysia-China Conjoint Conference of Oral & Maxillofacial Surgery	10 officers	17 - 18 August 2019	940.00	<i>Hospital Canselor Tuanku Muhriz (PPUKM)</i>
46	<i>Bengkel Pengukuhan Penyelarasan Pelaksanaan Caj Rawatan Pergigian 2019</i>	35 officers	21 - 22 August 2019	8,300.00	Crystal Crown Hotel, Petaling Jaya
47	9th Conference of Asian Society of Oral and Maxillofacial Pathology (ASOMP) 2019	15 officers	22 - 24 August 2019	9,750.00	MAHSA University, Bandar Saujana Putra
48	Restorative Dentistry Symposium 2019 : Sports Dentistry to Enhance Performance	5 officers	24 August 2019	1,250.00	Balai Ungku Aziz, Faculty of Dentistry, University of Malaya
49	<i>Pemanduan Berhemah Peringkat Kebangsaan 2019</i>	64 auxiliaries	26 - 28 August 2019	14,570.00	Langkawi Seaview Hotel
50	13th MOH-AMM Scientific Meeting 2019	11 officers	27 - 29 August 2019	3,850.00	National Institutes of Health (NIH)

No	Training Topic	Participants	Date	Expenses (MYR)	Venue
51	Dentistry Going Digital Workshop 2019 - Produce Video Like A Pro	44 officers and 1 auxiliary	27 - 29 August 2019	15,028.00	Bella Vista Waterfront, Langkawi
52	<i>Kursus Pemantapan Keselamatan dan Kesihatan Pekerja</i>	34 officers and 2 auxiliaries	28 - 30 August 2019	13,100.00	Summit Hotel, USJ Subang
53	ILKMM Regional Conference on Medical and Allied Health Education 2019	2 officers	3 - 4 September 2019	800.00	Berjaya Times Square Hotel, Kuala Lumpur
54	<i>Kursus Latihan Pengukuhan Pengguna (Refresher Course) untuk Teleprimary Care-Oral Health Clinical Information System (TPC-OHCIS) 2019 (Sesi 1,2,3)</i>	101 officers and 68 auxiliaries	S1 : 27 - 28 August 2019 S2 : 4 - 5 September 2019 S3 : 11 - 12 September 2019	4,165.00	<i>Bilik ICT, Jabatan Kesihatan Negeri Sembilan</i>
55	4th International Conference on Radiation safety & Security in Healthcare Services 2019 (ICoRSSiHS 2019)	20 officers and 12 auxiliaries	4 - 5 September 2019	7,600.00	KSL Hotel & Resort, Johor Bahru
56	<i>Kursus TOT Pencegahan Klinikal</i>	26 officers and 12 auxiliaries	17 September 2019	741.00	Oral Health Programme, MoH
57	<i>Seminar Keselamatan Pesakit dan Pelancaran 1st Global Patient Safety Day 2019</i>	3 officers	17 September 2019	600.00	The Everly Hotel, Putrajaya
58	Paediatric Dental Updates for Post Basic Dental Therapist Course 2019	1 officer and 35 auxiliaries	17 - 18 September 2019	4,920.00	Regency Hotel, Kuala Lumpur
59	13th Asian Pacific Society of Periodontology Meeting 2019	20 officers	28 - 29 September 2019	16,000.00	Royale Chulan Hotel, Kuala Lumpur
60	ISO 9001 : 2015 Effective Internal Auditing Training Workshop	3 officers	25 - 26 September 2019	3,052.80	Kuala Lumpur

No	Training Topic	Participants	Date	Expenses (MYR)	Venue
61	<i>Kursus Pemantapan Pembantu Pembedahan Pergigian (DSA) Peringkat Kebangsaan 2019</i>	4 officers and 53 auxiliaries	25 - 27 September 2019	14,900.00	The Straits Hotel & Suites
62	<i>Seminar Slaid Patologi Mulut</i>	51 officers	5 - 6 September 2019	360.00	Institute of Medical Research (IMR)
63	10th Asian Conference of Oral Health Promotion for School Children (ACOHpsc) 2019	36 officers and 14 auxiliaries	20 - 21 September 2019	37,500.00	St Giles The Wembley Hotel, Pulau Pinang
64	Dentistry in Times of Disaster	10 officers	23 September 2019	300.00	Faculty of Dentistry, UKM
65	<i>Kursus Pemantapan Kerjaya Setiausaha Pejabat Program Kesihatan Pergigian</i>	1 officer and 26 auxiliaries	4 - 6 October 2019	19,190.00	Langkawi Seaview Hotel
66	<i>Kursus Pakar Pergigian Dalam Tempoh Pra-Pewartaan 2019</i>	28 officers	29 - 31 October 2019	12,720.00	Crystal Crown Hotel, Petaling Jaya
67	<i>Kursus Pemantapan Juruterapi Pergigian Pengkhususan Periodontik KKM 2019</i>	3 officers and 45 auxiliaries	7 - 8 October 2019	7,200.00	Ancasa Hotel & Spa Kuala Lumpur
68	7th Training Course of Intensive Microsurgery	15 officers	7 - 11 October 2019	19,900.00	Kuala Lumpur Hospital (HKL) & Institute of Medical Research (IMR)
69	21st IMAM Annual Scientific Conference	15 officers	17 - 19 October 2019	7,425.00	Grand Riverview Hotel, Kota Bharu, Kelantan
70	<i>Bengkel Kerja Penyeragaman Caj Rawatan Pergigian 2019 Sesi II</i>	22 officers and 1 auxiliary	30-31 October 2019	4,600.00	Palm Garden Hotel, IOI Resort City Resort City, Putrajaya
71	Systematic Review in the Development & Implementation of Dental Course CPG bagi Pakar & Pegawai Pergigian 2019	30 officers and 1 auxiliary	28 - 31 October 2019	17,576.20	Concorde Hotel, Shah Alam

No	Training Topic	Participants	Date	Expenses (MYR)	Venue
72	<i>Bengkel Pakar Pergigian Kesihatan Awam 2019</i>	52 officers	25 - 27 October 2019	21,000.00	Avillion Admiral Cove, Port Dickson
73	<i>Bengkel Pemantauan Klinikal, Program Kesihatan Pergigian KKM 2019</i>	44 officers	4 - 6 November 2019	15,550.00	Hotel Tower Regency, Ipoh
74	SNOMED CT Expo 2019	11 officers	31 October - 1 November 2019	5,500.00	Grand Hyatt Hotel, Kuala Lumpur
75	Talent Grooming Programme (TGP) Forum 2019	100 officers and auxiliaries	4 November 2019	9,389.00	Bangi Resort Hotel
76	9th Malaysian Association for Prosthodontics (MAP) Scientific Conference & Annual General Meeting	12 officers	15 - 16 November 2019	3,600.00	Tamu Hotel & Suites, Kuala Lumpur
77	<i>Kursus Pemantapan Sahsiah Diri Program Kesihatan Pergigian KKM (Sesi 1)</i>	16 officers and 32 auxiliaries	20 - 22 November 2019	31,920.00	Residence Inn Cherating Pahang
78	<i>Kursus Pemantapan Sahsiah Diri Program Kesihatan Pergigian KKM (Sesi 2)</i>	26 officers and 21 auxiliaries	22 - 24 November 2019	31,680.20	Residence Inn Cherating Pahang
79	<i>Kursus Pengurusan Rekod</i>	30 officers and auxiliaries	27 - 28 November 2019	3,800.00	Oral Health Programme, MoH
80	MES 31st Annual Scientific Conference and AGM 2019	15 officers	29 November - 1 December 2019	15,750.00	Royale Chulan Damansara, Petaling Jaya

Source: Oral Health Programme, MoH



**Table 23:**  
**List of Dental Specialists Attending Advanced Competency Programme, 2019**

No.	Name	Course	Expenses (RM)	Venue	No. of Days
1	Dr Mohammad Adzwin bin Yahiya	Composite Maxillary Reconstruction	67,770.00	Ramón y Cajal & Puerta de Hierro University Hospitals, University of Alcalá, Madrid, Spain	92 days
2	Dr Ch'ng Lay Ling	Temporomandibular Arthroscopy and Arthrocentesis	65,160.00	Shanghai JiaoTong University, Shanghai Ninth People's Hospital, China	92 days
3	Dr Aswani binti Che Ahmad	<i>Pengendalian Kes-Kes Kompleks Restoratif</i>	8,898.00	Faculty of Dentistry, National University of Malaysia (UKM)	61 days

Source: Oral Health Programme, MoH

**Table 24:**  
**List of CPD conducted in the Oral Health Programme, 2019**

No.	CPD Courses	Date
1	<i>Taklimat Pengurusan Harta dan Persaraan</i>	5 April 2019
2	Restore, Protect and Maintain	10 May 2019
3	<i>Ceramah Sahsiah Diri</i>	29 May 2019
4	KOSPEN PLUS : <i>Menangani Stres di Tempat Kerja</i>	14 June 2019

Source: Oral Health Programme, MoH

## ORAL HEALTH INFORMATION MANAGEMENT

### Teleprimary Care-Oral Health Clinical Information System (TPC-OHCIS)

The TPC-OHCIS system has been successfully implemented at ten (10) dental clinics and six (6) health clinics in Seremban District, Negeri Sembilan since June 2017 to better manage patient health records across the MoH facilities through the use of electronic health records.

On 1 June 2019, the operational and maintenance services (O&M) contract of the TPC-OHCIS system which supported the primary oral health care services (outpatient services, oral health promotion and outreach activities) as well as the non-hospital based oral health specialist services (orthodontic, periodontic and restorative specialties) ended. Thus, the O&M services would not be provided by any contractor until the appointment of new contractor takes place.

To ensure the oral health services at the 10 dental clinics and six (6) health clinics in Seremban District, Negeri Sembilan would not be interrupted, the information technology (IT) resources in Negeri Sembilan and MoH headquarters were recruited to provide the technical supports in handling Facility Agent (FA) and Public Sector Data Center (PDSA) issues, monitoring complaints from the TPC-OHCIS users and fixing the hardware, software and network matters. In July 2019, the O&M services was then awarded to the appointed contractor and the kick off meeting was held on 10 July 2019 (**Image 1**).

In ensuring the TPC-OHCIS administrators and users continue to be competent in handling the system, three series of “module-focused training approach” training sessions were held in August and September 2019 at Negeri Sembilan Health State Department computer facilities. The topics covered in the training were chosen at the request of the TPC-OHCIS Administrator and users themselves (**Image 2**).

**Image 1:**  
**Kick Off Meeting On Operations And Maintenance For TPC-OHCIS at MoH**



Source: Oral Health Programme, MoH

**Image 2:**  
**“Module- Focused Training Approach” Training Session at**  
**Negeri Sembilan Health State Department, Computer Lab**



Source: Oral Health Programme, MoH

### **Clinical Documentation (CD) Sistem Pengurusan Pesakit (SPP) and Operating Theatre Management System (OTMS) Project for HIS@MoH Phase 1 System**

The Ministry of Health has developed the strategic core ICT support towards the establishment of Lifetime Health Record (LHR) in line with the mission and vision of ICT Strategic Plan, MoH (ISPMOH) 2016-2020. In line with this, the Oral Health Programme supported the effort by ensuring participation of the dental SME’s in related system developed by MoH.

*Sistem Pengurusan Pesakit (SPP)* is the operational Hospital Information System (HIS) in hospitals since 2008. In 2017, the Medical Development Division had started their strategic focus in software development as well as clinical modules and clinical support to enhance SPP towards HIS@MoH. Furthermore, the efforts would fulfilled the MoH aspiration to use government owned applications for MoH hospitals.

Since 2015, the Medical Development Division, Oral Health Programme and Oral Health specialties i.e Oral & Maxillofacial Surgery, Paediatric Dentistry, Special Needs Dentistry, Oral Pathology & Oral Medicine and Forensic Odontology collaboratively developed the Clinical Documentation (CD) for Oral Health Discipline. The developments of the CD would made the SPP complete and move towards the development of HIS belonging to MoH comprehensively. For that purpose, Hospital Raja Perempuan Bainun Ipoh, Perak has been chosen as piloted site for CD modules development in SPP enhancement project and expected to start operating in 2020.

The Oral Health Programme is also involved in the HIS@MoH Phase 1 Project which consists of 3 systems i.e Laboratory Information System (LIS), Central Sterile Supply Services Information System (CenSSIS) and Operating Theatre Management System (OTMS). However, the Oral Health Programme is not involved in LIS as there are no dental laboratory devices that require integration. The scope of the OTMS project allows users to schedule an appointment for the surgery until the surgery is carried out and exit the surgery room.

Dental Charting Module in TPC-OHCIS was used as a prototype in CD for SPP and OTMS for HIS@MoH Phase 1 System. The CD SPP and OTMS teams collaborated with TPC-OHCIS team in the development of the Module which consist of Dental Charting, Intraoral Examination and Lesion sub-module.

Development of Dental Charting Module by OTMS is ongoing and the project will be implemented in Hospital Tuanku Ja'afar, Seremban, Negeri Sembilan. It is expected to start operating in 2020. In ensuring the Clinical Documentation (CD) for Oral Health Discipline meets the user's clinical needs, a series of User Acceptance Test (UAT) 2nd Phase-1st Cycle for CD were held in March and October 2019 (**Image 3**).

**Image 3:**  
**User Acceptance Test (UAT) Session,**  
**25 to 29 March 2019 and 22 to 24 October 2019**



*Source: Oral Health Programme, MoH*

### **Expansion of Oral Health Clinical Information System (OHCIS) Project**

The facility preparation activities which involved upgrading of ICT infrastructure at 20 facilities with OHCIS system and installation of ICT infrastructure and hardware at 54 dental clinics without any EMR system had been completed in January 2018.

Due to limited financial resources in 2019, the TPC-OHCIS system expansion plan at the identified dental facilities had been delayed. These efforts shall be continued in year 2020 under TPC-OHCIS expansion project plan through collaborative effort with the Health Development Division and Management System Division, MoH.

## ORAL HEALTH TECHNOLOGY

### Clinical Practice Guidelines

There are 13 Clinical Practice Guidelines (CPG) published by the Oral Health Programme. As of 31 December 2019, seven (7) CPGs are current (less than five (5) years), two (2) were approved for publication by the Malaysian Health Technology Assessment and CPG Council in June and December 2019, one was being reviewed whilst three (3) were due for review, as listed in **Table 25**.

**Table 25:**  
**Clinical Practice Guidelines (CPG) as of 31 December 2019**

Title of CPG	Publication (Year)	Status
Management of Condylar Fracture of the Mandible	2005	Draft was approved and published in June 2019
Management of Avulsed Permanent Anterior Teeth in Children 2nd edition	2010	Draft was approved and published in December 2019
Management of Unerupted and Impacted Third Molar	2005	Review in Progress
CPG Management of Severe Early Childhood Caries	2012	Due for review
CPG Orthodontic Management of Developmentally Missing Incisors	2012	Due for review
CPG Management of Chronic Periodontitis 2nd edition	2012	Due for review

*Source: Oral Health Programme, MoH*

A course on 'Systematic Review in the Development of Dental CPG 2019' was held from 29 to 31 October 2019 at Concorde Hotel Shah Alam attended by 21 participations. The objective was to train dental specialists and officers on the CPG work process outlined by the Scottish Intercollegiate Guidelines Network (SIGN) and the Malaysian Health Technology Assessment Section.

### Approved Purchase Price List (APPL)

This section supports the role of the Procurement and Privatisation Division MoH by providing input in finalising the companies, lists of products and price negotiations for APPL 2017-2019 with tendering companies and monitor issues on APPL including penalty on late delivery and product complaints.

### Managing Enquiries related to Dental Technology

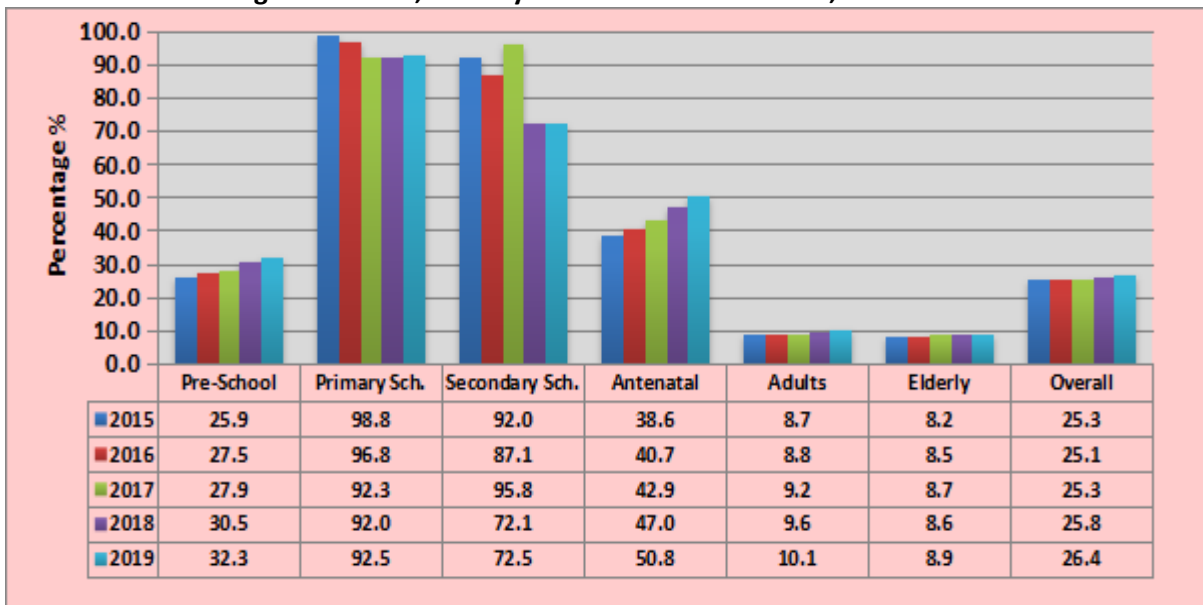
Literature search of scientific papers was done on dental technology related topics as stated below:

- Minamata Convention on Mercury: Usage of Dental Amalgam in Malaysia
- Triclosan and the Effects on Oral Health

**PRIMARY ORAL HEALTHCARE**

The Oral Health Programme is the lead agency in the provision of oral healthcare to the population and continues to provide care to target groups which includes; toddlers (0 - 4 years), preschool children (5 - 6 years), schoolchildren (7 - 17 years), children with special needs, antenatal mothers, adults and the elderly. Overall, the utilisation of primary oral healthcare service in MoH increases from 25.8 per cent in 2018 to 26.4 per cent in 2019 (Figure 3).

**Figure 3:**  
Percentage Utilisation, Primary Oral Healthcare Services, MoH 2015 to 2019



Source: Health Informatics Centre, MoH

The actual number of utilization of primary oral healthcare services by target group over the years are as shown in Table 26. Overall, there is increasing trend for all target groups.

**Table 26:**  
Utilisation of Primary Oral Healthcare by Category of Patients, 2015 to 2019

Year	Preschool	Primary School	Secondary School	Antenatal	Adults	Elderly	Special Children	Overall
2015	924,920	2,757,792	1,934,031	221,444	1,588,623	226,039	54,686	7,707,535
2016	1,001,064	2,785,178	1,933,640	225,843	1,702,521	249,966	57,881	7,956,093
2017	1,047,391	2,809,766	1,964,105	245,018	1,810,480	269,500	62,114	8,208,374
2018	1,146,680	2,861,585	1,944,312	257,609	1,918,086	292,665	68,339	8,489,276
2019	1,218,595	2,890,267	1,948,194	272,179	2,036,601	317,007	75,827	8,523,311

Source: Health Informatics Centre, MoH

### Early Childhood Oral Healthcare For Toddlers

In 2019, there were a total of 476,934 (17.5 per cent) new toddlers seen under primary oral healthcare services as in **Table 27**. cursory examination of the oral health cavity for toddler through ‘lift-the-lip’ was done in settings such as child care centers or Mother and Child Health Clinic.

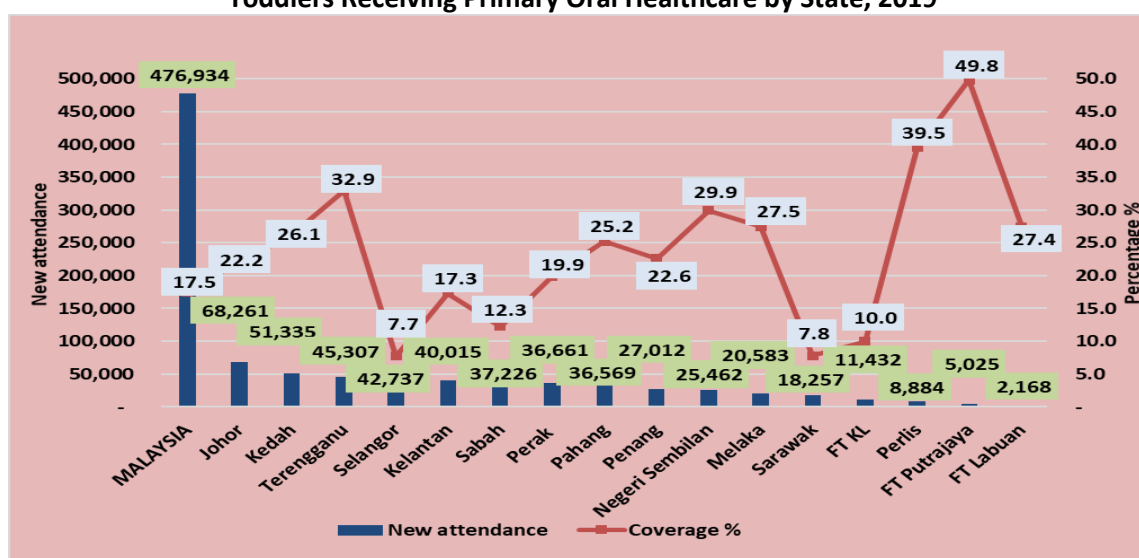
**Table 27:**  
**Coverage of Toddlers, 2015 to 2019**

Year	Toddler Population (0-4 years old)	No. of Toddler seen	% of Toddler seen
2015	2,577,500	300,517	11.7
2016	2,634,800	341,664	13.0
2017	2,720,900	379,335	13.9
2018	2,727,100	425,887	15.6
2019	2,729,700	476,934	17.5

Source: Oral Health Programme Data, MoH 2019

In 2019, the FT Putrajaya followed by Perlis and Terengganu recorded the highest number of coverage of toddler (**Figure 4**).

**Figure 4:**  
**Toddlers Receiving Primary Oral Healthcare by State, 2019**



Source: Oral Health Programme Data, MoH 2019

Clinical preventive measures for toddlers such as fluoride varnish application were instituted where required. Only three (3) states namely Kelantan, Terengganu and Sabah were involved in the implementation of the programme until 2019. About 97.0 per cent (39,343/40,558) of toddlers received topical fluoride varnish application in 2019 as compared to 90.9 per cent (43,477/47,827) in 2018 in these three (3) states.



Three (3) states namely Kelantan, Sabah and Sarawak participated in weekly Fluoride Mouth Rinsing Programme in 2019, involving 64 primary schools and 18,640 primary schoolchildren.

### Oral Healthcare For Preschool Children

In 2019, there were a total of 21,799 kindergartens or preschool institutions in Malaysia which includes 16,867 Government and 4,932 Privates. The coverage of kindergartens nationwide from 2015 to 2019 as tabulated in **Table 28**.

**Table 28:**  
**Coverage of Kindergartens, 2015 to 2019**

Year	No of Kindergartens	No. of Government Kindergartens covered	No. of Private Kindergartens covered	% Government Kindergartens Coverage	% Private Kindergartens coverage
2015	20,930	16,615	4,315	96.0	95.9
2016	21,272	16,807	4,465	97.0	95.6
2017	21,245	16,714	4,531	96.1	90.4
2018	21,488	16,769	4,719	97.0	92.1
2019	21,799	16,867	4,932	97.1	97.2

Source: Health Informatics Centre, MoH

A total of 1,218,595 (32.3 per cent) preschool children aged 0-6 years of age were given primary oral healthcare. It shows a increase in coverage (1.9 per cent) from year 2018 (**Table 29**).

**Table 29:**  
**Coverage of preschool children, 2015 to 2019**

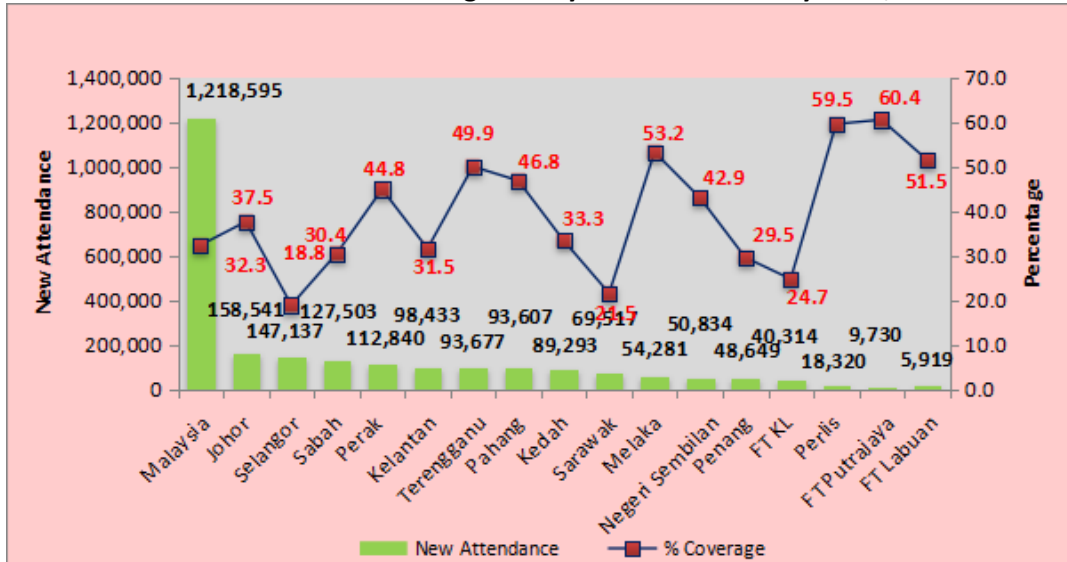
Year	Estimated Preschool Pop. (0-6 years of age)	No. of Preschool Children Covered (0-6 years of age)	% Coverage
2015	3,573,400	924,920	25.9
2016	3,637,700	1,001,064	27.5
2017	3,750,100	1,047,391	27.9
2018	3,755,300	1,146,680	30.4
2019	3,774,700	1,218,595	32.3

Source: Health Informatics Centre, MoH



The state of FT Putrajaya (60.4 per cent) followed by Perlis (59.5 per cent) and Melaka (53.2 per cent) recorded the highest coverage of preschool children in 2019 (Figure 5).

**Figure 5:**  
**Preschool Children Receiving Primary Oral Healthcare by State, 2019**



Source: Health Informatics Centre, MoH 2019

**Oral Healthcare For Schoolchildren**

The 7-surface Gingival Index for Schoolchildren (GIS) was approved for use in 2013 and implemented in 2014. GIS was aimed to evaluate the gingival status of schoolchildren based on scientific evidence. The 7-surface GIS was found to be equally sensitive to the 12-surfaces of 6 index teeth and can be done in less time. The index tooth are visually examined for obvious presence of gingivitis and or calculus and the GIS score categories are: GIS score 0= No gingivitis, No calculus; GIS score 1= No gingivitis, with calculus; GIS score 2= With gingivitis, No calculus; GIS score 3= With gingivitis, With calculus. The GIS score for primary and secondary school children are as in Table 30 and 31.

It was noted that 81.1 per cent of primary schoolchildren and 72.3 per cent of secondary schoolchildren are having GIS score 0.

**Table 30:**  
**GIS score for Primary Schoolchildren, 2019**

Year	New attendances	GIS 0 (%)	GIS 1 (%)	GIS 2 (%)	GIS 3 (%)
2017	2,629,005	2,036,310 (77.5)	128,316 (4.9)	324,031 (12.3)	140,347 (5.3)
2018	2,665,769	2,129,361 (79.9)	148,326 (5.6)	262,569 (9.8)	125,513 (4.7)
2019	2,706,494	2,195,260 (81.1)	158,975 (5.9)	231,449 (8.6)	120,810 (4.5)

Source: Oral Health Programme, MoH

**Table 31:**  
**GIS score for Secondary Schoolchildren, 2019**

Year	New attendances	GIS 0	GIS 1	GIS 2	GIS 3
2017	1,923,699	1,346,571 (70.0)	128,733 (6.7)	239,033 (12.4)	209,368 (10.9)
2018	1,923,072	1,365,278 (70.7)	165,474 (8.6)	204,602 (10.6)	187,718 (9.7)
2019	1,896,608	1,371,551 (72.3)	167,445 (8.8)	184,359 (9.7)	173,253 (9.1)

Source: Oral Health Programme, MoH

### Primary schoolchildren

Dental therapists and supporting teams are entrusted with the oral healthcare for primary schoolchildren under the Incremental Dental Care Programme. Overall, the coverage of primary schools showed an increasing trend from 94.5 per cent in 2018 to 94.9 per cent in 2019 (**Table 32**). Most states achieved above 99 per cent coverage in 2019 except Selangor and Sarawak (**Table 33**).

**Table 32:**  
**Coverage of Primary Schools, 2015 to 2019**

Year	No. of Schools	No. of Schools Covered	% Coverage
2015	7,828	7,511	96.1
2016	7,847	7,606	96.9
2017	7,858	7,390	94.0
2018	7,851	7,420	94.5
2019	7,865	7,469	94.9

Source: Health Informatics Centre, MoH 2019

**Table 33:**  
**Coverage of Primary Schools by States, 2015 to 2019**

State	Percentage of Coverage of Primary Schools				
	2015	2016	2017	2018	2019
Perlis	100	100	100	100	100
Kedah	100	100	99.6	99.8	100
Pulau Pinang	100	100	95.2	98.9	100
Perak	99.4	100	100	99.5	99.3
Selangor	99.5	99.4	94.2	99.8	79.8
FT KL	100	100	100	100	100
FT Putrajaya	100	100	100	100	100
N. Sembilan	100	100	100	100	100
Melaka	94.9	100	99.6	100	100
Johor	100	100	100	100	100
Pahang	100	99.8	98.6	100	99.6
Terengganu	99.5	100	100	100	100
Kelantan	98.1	99.8	98.6	99.3	99.8

State	Percentage of Coverage of Primary Schools				
	2015	2016	2017	2018	2019
FT Labuan	100	100	100	100	100
Sabah	88.2	90.1	88.4	89.5	95.1
Sarawak	88	91.7	78.2	75.8	84.3
<b>MALAYSIA</b>	<b>96.1</b>	<b>96.9</b>	<b>94.0</b>	<b>94.5</b>	<b>94.9</b>

Source: Health Informatics Centre, MoH

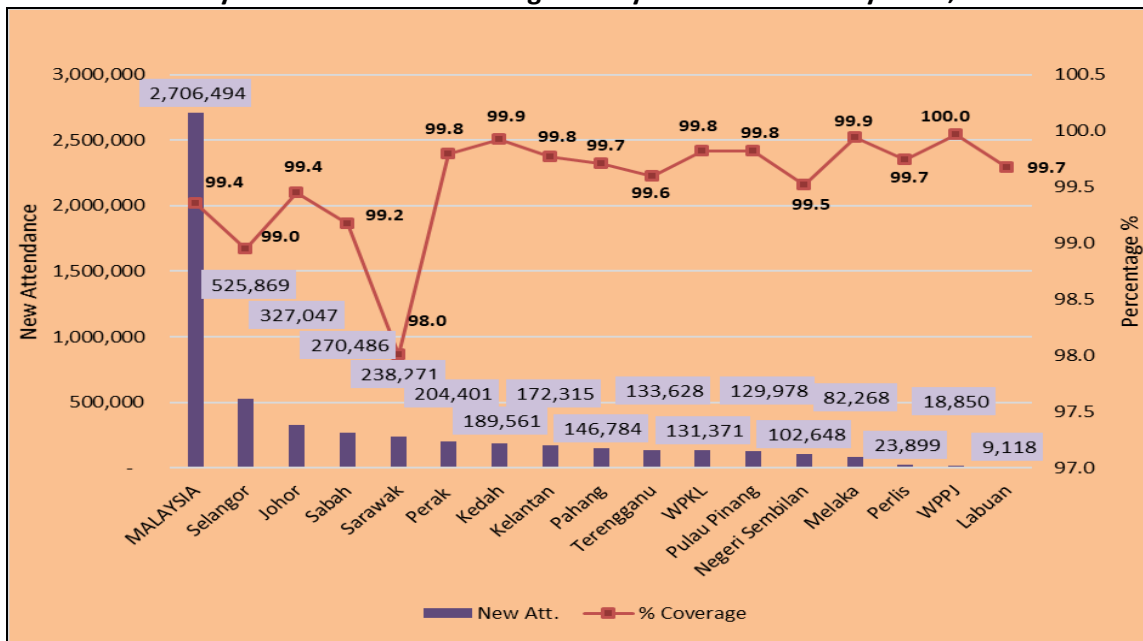
The coverage has exceeded 98 per cent over the past 6 years, with 99.4 per cent of primary schoolchildren examined in 2019 (Table 34). All states achieved 98 per cent and more of coverage (Figure 6).

**Table 34:**  
Coverage of Primary Schoolchildren, 2015-2019

Year	Total Pop. of Primary Schoolchildren	No of Primary Schoolchildren Covered	% Coverage
2015	2,686,750	2,654,585	98.8
2016	2,677,950	2,649,420	98.9
2017	2,678,793	2,656,519	99.2
2018	2,689,218	2,670,944	99.3
2019	2,724,019	2,706,494	99.4

Source: Health Informatics Centre, MoH

**Figure 6:**  
Primary Schoolchildren Receiving Primary Oral Healthcare by State, 2019



Source: Health Informatics Centre, MoH

Over the years, the percentage of primary school children rendered orally-fit (Case Completion), No Treatment Required (NTR) and maintained caries-free have increased (Table 35).

**Table 35:**  
**Percentage Primary Schoolchildren Orally-Fit, NTR and Caries-free, 2015 to 2019**

Year	No of children covered	% Case Completion	% NTR	% Maintained Caries-free Mouth
2015	2,654,585	96.4	64.0	35.4
2016	2,649,420	97.9	63.7	35.8
2017	2,656,519	97.0	63.4	37.1
2018	2,670,944	97.4	62.5	38.2
2019	2,706,494	96.9	62.5	38.3

Source: Health Informatics Centre, MoH

All states achieved 95.0 per cent and above for Case Completion in 2019. As for NTR, Johor has achieved the highest percentage (78.8 per cent) followed by Kedah (71.0 per cent) and FT KL (70.1 per cent). Overall, Caries-free has increased slightly (38.3 per cent) compared to 2018 (38.2 per cent) whereas FT KL reported the highest achievement for Caries-free status (61.4 per cent) followed by Negeri Sembilan (56.4 per cent) and Selangor (56.1 per cent) (Table 36).

**Table 36:**  
**Oral Health Status of Primary Schoolchildren by State, 2019**

State	% Case Completion	% No Treatment Required (NTR)	% Maintained Caries-free
Perlis	98.8	60.1	26.8
Kedah	98.6	71.0	33.4
Pulau Pinang	97.4	63.3	37.2
Perak	99.0	73.6	37.6
Selangor	93.8	64.4	56.1
FTKL	97.5	70.1	61.4
FT Putrajaya	96.9	64.9	49.2
N. Sembilan	99.0	70.0	56.4
Melaka	98.9	47.0	36.4
Johor	97.8	78.8	47.6
Pahang	98.1	51.8	29.8
Terengganu	98.7	63.0	21.9
Kelantan	98.3	31.5	21.0
FT Labuan	95.4	43.4	23.7
Sabah	96.5	53.3	8.5
Sarawak	95.0	57.0	33.2
<b>MALAYSIA</b>	<b>96.9</b>	<b>62.5</b>	<b>38.3</b>

Source: Health Informatics Centre, MoH

### Secondary Schoolchildren

With more dental officers coming into the service, they now shoulder the responsibilities for the secondary school dental service. The coverage of secondary schools showed an increasing trends in 2019 (91.0 per cent) as compared to 2018 (Table 37).

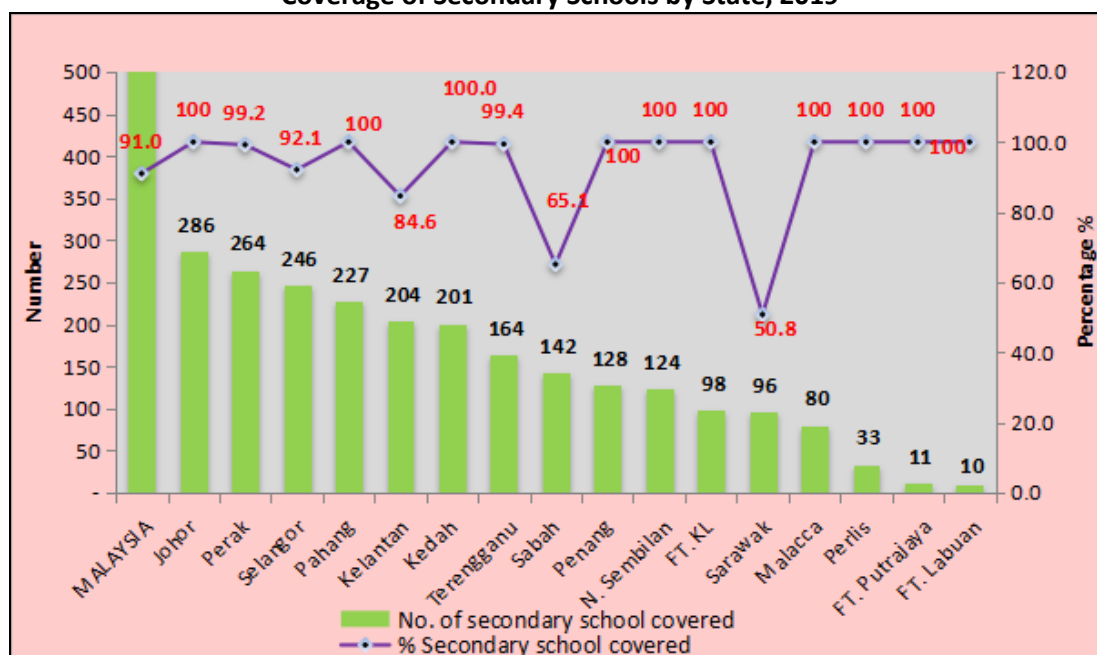
Majority of the states has achieved above 94 per cent of secondary school coverage in 2019 except for Kelantan (84.6 per cent, Sabah (65.1 per cent) and Sarawak (50.8 per cent) (Figure 7). However, there was an increasing trend over the years in Kelantan and Sabah (Table 38).

**Table 37:**  
Coverage of Secondary Schools, 2015 to 2019

Year	Total No. of Secondary Schools	No. of Secondary Schools Covered	% Coverage of Secondary Schools
2015	2,508	2,096	84.0
2016	2,558	2,196	86.7
2017	2,563	2,142	83.6
2018	2,567	2,247	87.5
2019	2,544	2,314	91.0

Source: Health Informatics Centre, MoH

**Figure 7:**  
Coverage of Secondary Schools by State, 2019



Source: Health Informatics Centre, MoH

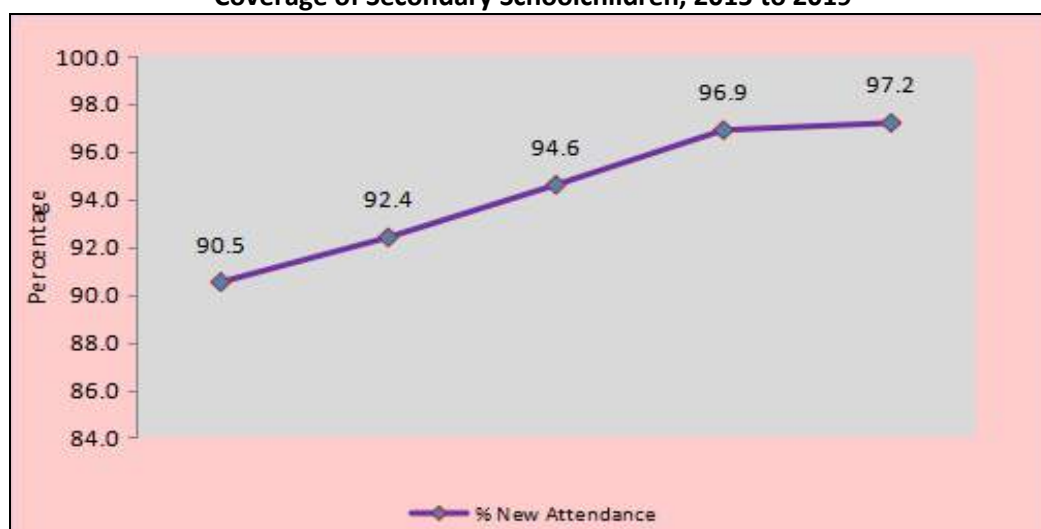
**Table 38:**  
**Secondary School Coverage under Incremental Dental Care by State, 2015 to 2019**

State	Percent Secondary Schools Covered				
	2015	2016	2017	2018	2019
Perlis	100	100	100	100	100
Kedah	97.9	99.5	91.6	98.0	100
Pulau Pinang	97.6	100.0	94.4	97.7	100
Perak	98.9	100.0	100	99.3	99.2
Selangor	92.5	94.2	72.9	89.6	92.1
FTKL	100	100	100	100	100
FT Putrajaya	100	100	100	100	100
N.Sembilan	100	100	100	100	100
Melaka	92.6	100	100	100	100
Johor	100	100	100	100	100
Pahang	99.5	99.6	98.7	100	100
Terengganu	96.2	99.4	99.4	98.8	99.4
Kelantan	52.9	60.9	68.4	71.4	84.6
FT Labuan	100	100	100	100	100
Sabah	44.8	47.2	48.9	57.7	65.1
Sarawak	31.4	40.8	32.3	38.1	50.8
<b>MALAYSIA</b>	<b>81.5</b>	<b>84.1</b>	<b>86.7</b>	<b>87.5</b>	<b>91.0</b>

Source: Health Informatics Centre, MoH

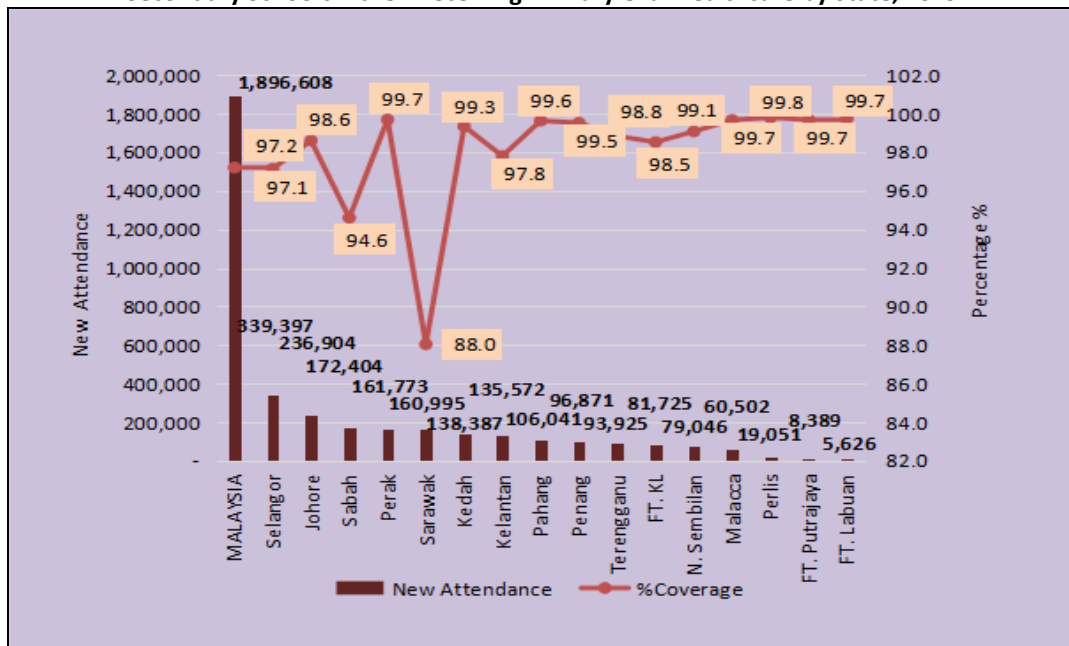
Meanwhile, 97.2 per cent of secondary schoolchildren were seen in 2019, an improvement from previous year by 0.3 per cent (**Figure 8**). Sabah (94.6 per cent) and Sarawak (88.0 per cent) recorded below the average coverage of secondary schoolchildren (90.0 per cent) in 2019 (**Figure 9**).

**Figure 8:**  
**Coverage of Secondary Schoolchildren, 2015 to 2019**



Source: Health Informatics Centre, MoH 2019

**Figure 9:**  
**Secondary Schoolchildren Receiving Primary Oral Healthcare by State, 2019**



Source: Health Informatics Centre, MoH 2019

Over the years there was an improvement in percentage of Case Completion, NTR and Caries-free among secondary schoolchildren (Table 39). In 2019, 94.5 per cent of secondary schoolchildren were rendered orally-fit while 68.4 per cent were NTR and 60.1 per cent were Caries-free. The state of Sarawak recorded lowest percentage of case completion (85.6 per cent) among secondary schoolchildren in 2019 (Table 40).

**Table 39:**  
**Percentage Secondary Schoolchildren Orally-Fit, NTR and Caries-free, 2015 to 2019**

Year	No of Secondary Schoolchildren Covered	% Case Completion	% NTR	% Maintained Caries-free
2015	1,802,582	94.1	68.2	56.0
2016	1,934,828	94.2	68.8	58.8
2017	1,936,477	92.5	68.3	59.2
2018	1,926,123	93.6	67.7	59.1
2019	1,896,608	94.5	68.4	60.1

**Table 40:**  
**Oral Health Status of Secondary Schoolchildren by State, 2019**

State	% Case Completion	% NTR	% Maintained Caries-free
Perlis	94.7	63.7	57.1
Kedah	96.2	76.3	69.6
Pulau Pinang	97.4	77.4	65.6
Perak	97.5	76.4	68.8
Selangor	95.6	74.9	76.8

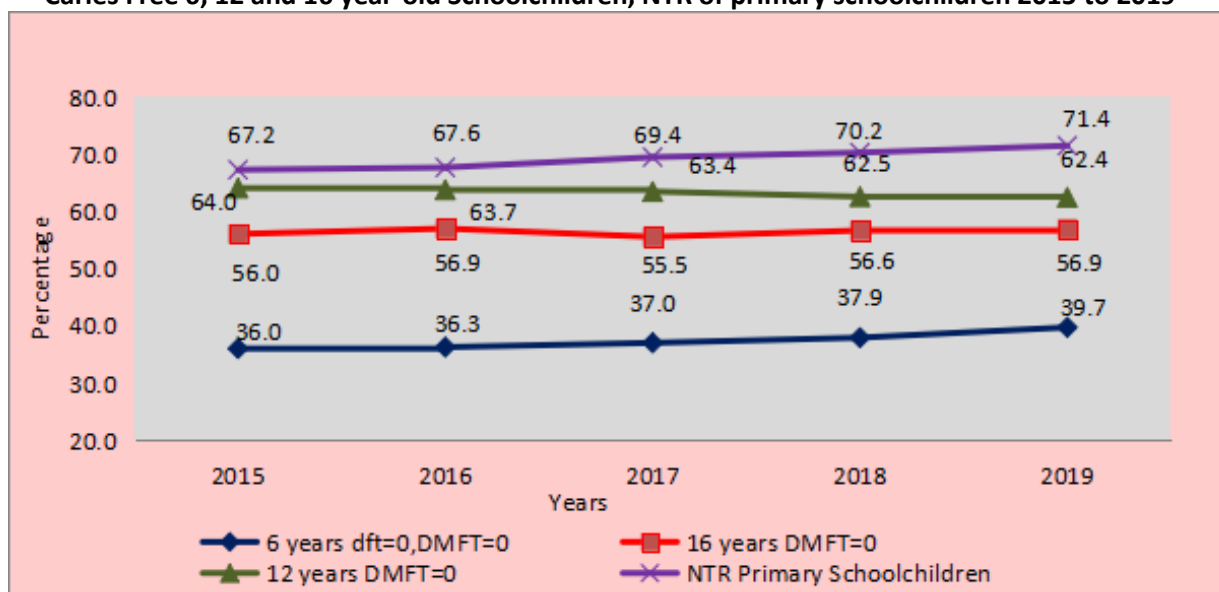
State	% Case Completion	% NTR	% Maintained Caries-free
FTKL	96.2	83.1	78.3
FT Putrajaya	97.2	72.5	67.9
N. Sembilan	97.3	74.2	72.5
Melaka	97.1	56.4	61.7
Johor	96.2	77.2	71.7
Pahang	96.4	57.2	49.2
Terengganu	94.8	61.7	40.2
Kelantan	94.0	53.7	35.5
FT Labuan	97.8	68.8	51.8
Sabah	88.0	48.6	27.0
Sarawak	85.6	61.0	47.1
<b>MALAYSIA</b>	<b>94.5</b>	<b>68.4</b>	<b>60.1</b>

Source: Health Informatics Centre, MoH

### Impact Indicators - Caries-free 6, 12 and 16 year-old Schoolchildren and NTR for Primary Schools

Overall, the percentage of caries-free among 6, 12 and 16 year-olds schoolchildren has shown a slight increase in 2019. However there is a slight reduction of NTR among primary schoolchildren (**Figure 10**). FT Kuala Lumpur showed the highest percentage of caries-free among 16-year-olds while the state of Sabah reported the lowest (**Table 41**).

**Figure 10:**  
Caries Free 6, 12 and 16 year-old Schoolchildren, NTR of primary schoolchildren 2015 to 2019



Source: Health Informatics Centre, MoH 2019



**Table 41:**  
**Percentage of Caries Free 16-year olds by State, 2015 to 2019**

State	2015	2016	2017	2018	2019
Perlis	56.9	57.8	60.0	94.1	54.4
Kedah	66.4	67.3	65.4	95.8	67.2
Pulau Pinang	58.6	60.0	60.2	97.3	61.9
Perak	60.8	63.0	62.8	97.4	65.8
Selangor	72.6	75.7	72.7	96.3	74.3
FT Kuala Lumpur	74.8	75.8	76.1	96.9	75.7
FT Putrajaya	68.2	70.0	62.8	94.4	61.6
N Sembilan	69.4	68.6	67.4	96.7	68.4
Melaka	53.7	56.3	56.2	96.9	58.5
Johor	67.9	68.8	68.2	96.1	68.0
Pahang	46.5	47.2	44.0	96	45.4
Terengganu	32.5	33.1	32.4	94.6	34.7
Kelantan	25.4	26.6	29.0	93.3	31.7
FT Labuan	34.5	35.3	35.1	95.5	49.7
Sabah	21.0	21.7	22.9	86.1	24.4
Sarawak	42.5	42.7	41.0	82	43.7
<b>MALAYSIA</b>	<b>56.0</b>	<b>56.9</b>	<b>55.5</b>	<b>56.6</b>	<b>56.9</b>

Source: Health Informatics Centre, MoH

The mean DMFT score for 12-year-olds has reduced from 0.71 in 2018 to 0.68 in 2019 and from 1.35 to 1.31 for 16-year-olds (**Table 42**).

**Table 42:**  
**Mean DMFT Score for 12 and 16-year-olds, 2013-2019**

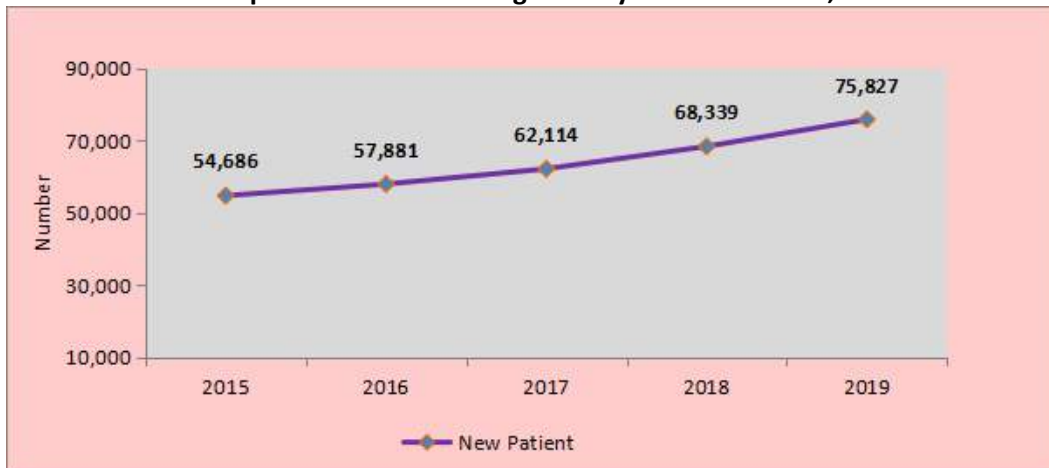
Age Group	2015	2016	2017	2018	2019
<b>12-year-olds</b>	0.82	0.79	0.75	0.71	0.68
<b>16-year-olds</b>	1.35	1.34	1.40	1.35	1.31

Source: Health Informatics Centre, MoH

### Oral Healthcare for Children with Special Needs

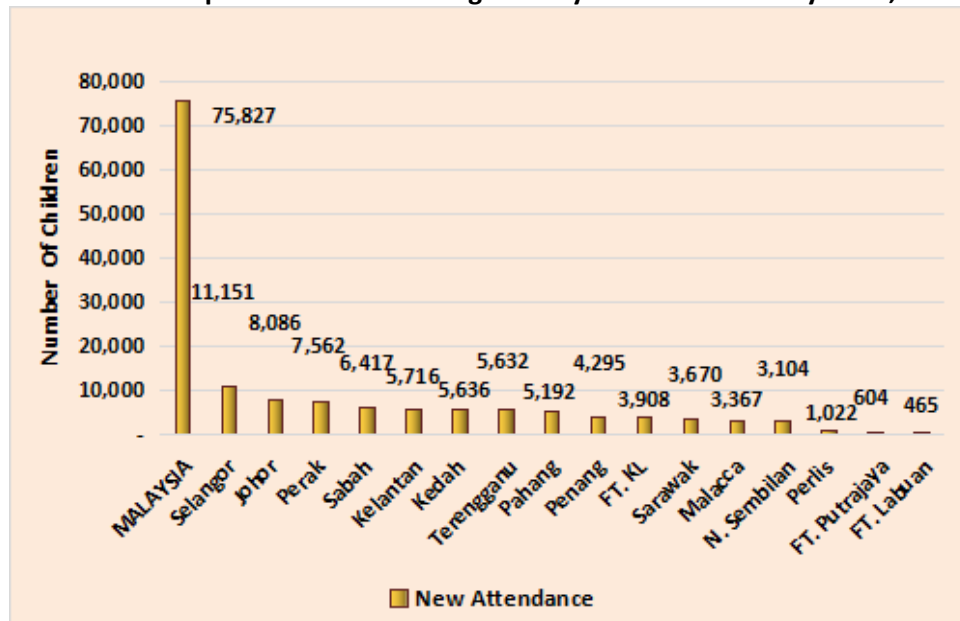
The number of children with special needs utilising primary oral healthcare services has been increasing steadily over the years. This was mainly due to the initiatives under the National Blue Ocean Strategy 7 (NBOS 7) which prioritised healthcare to special needs children, the elderly and single mothers. In 2019, a total of 75,827 special needs children received primary oral healthcare (**Figure 11**). The highest number of special needs children were seen in Selangor, Johore and Perak (**Figure 12**).

**Figure 11:**  
**Children with Special Needs Receiving Primary Oral Healthcare, 2015 to 2019**



Source: Health Informatics Centre, MoH

**Figure 12:**  
**Children with Special Needs Receiving Primary Oral Healthcare by State, 2019**



Source: Health Informatics Centre, MoH

### Oral Healthcare For Antenatal Mothers

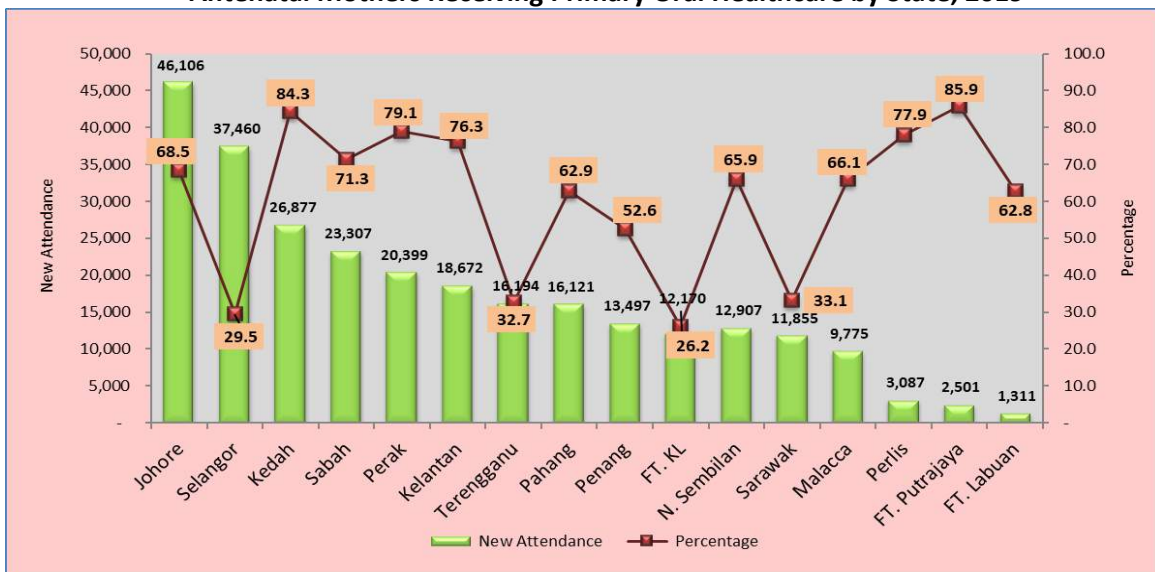
More efforts were taken to increase the attendance of antenatal mothers at dental clinics by way of referrals from MCH clinics and health clinics so as to ensure that mothers whom are considered as agents of change would get the essential oral health awareness as well as to render them orally-fit. In 2019, there was an increase in the number of antenatal mothers utilising the primary oral healthcare as compared to previous year (**Figure 13**). The FT Putrajaya has the highest coverage were followed by Kedah and Perlis (**Figure 14**).

**Figure 13:**  
Coverage of Antenatal Mothers, 2015 to 2019



Source: Health Informatics Centre, MoH

**Figure 14:**  
Antenatal Mothers Receiving Primary Oral Healthcare by State, 2019

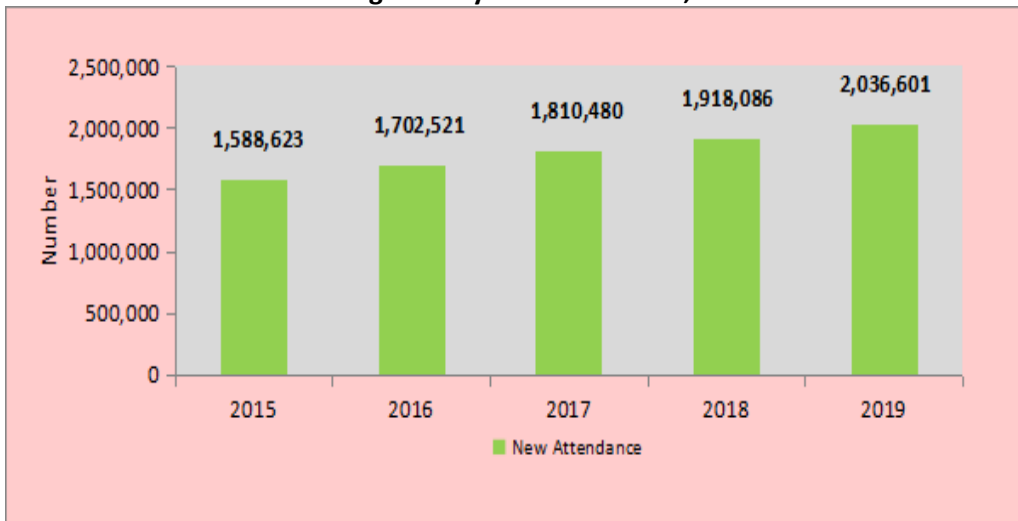


Source: Health Informatics Centre, MoH

### 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 the need among adults and to date 97.0 per cent (499/512) of dental clinics with 2 or more dental officers offer daily outpatient services. In 2019, adults utilisation of primary oral healthcare increased by 5.0 per cent from 2018 (**Figure 15**).

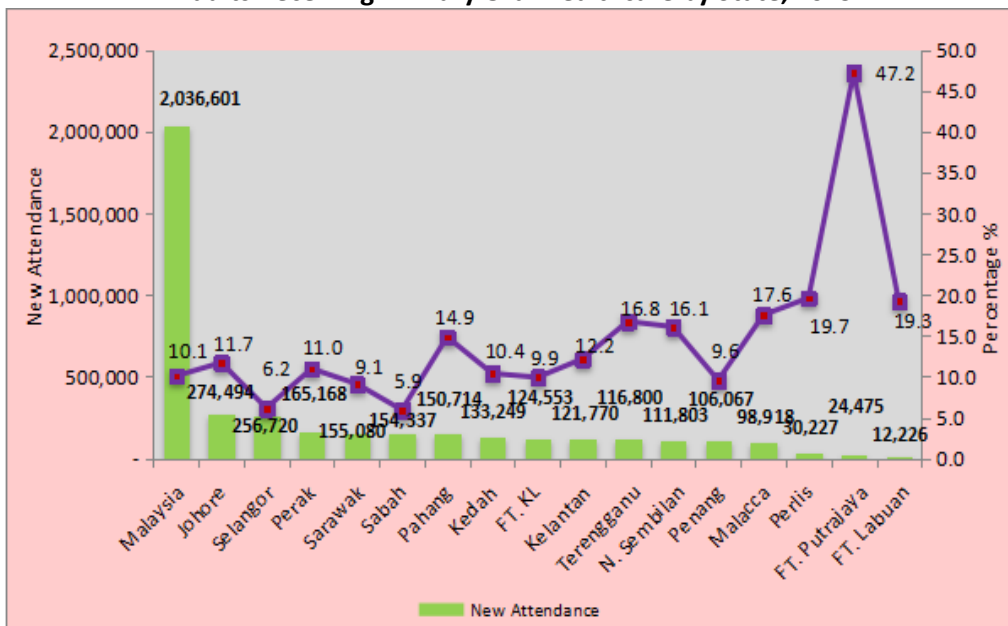
**Figure 15:**  
**Adults Receiving Primary Oral Healthcare, 2015 to 2019**



Source: Health Informatics Centre, MoH

Overall, 10.1 per cent of the adult population aged 18 - 59 years received primary oral healthcare in 2019. FT Putrajaya (47.2 per cent) recorded the highest percentage followed by Perlis (19.7 per cent) and FT Labuan (19.3 per cent) (Figure 16).

**Figure 16:**  
**Adults Receiving Primary Oral Healthcare by State, 2019**



Source: Health Informatics Centre, MoH

There were 45 conducted clinics (acronym KEPP- *Klinik Endodontik di Perkhidmatan Primer*) in 2019 which offer endodontic treatment. Identified dental officers were trained to undertake endodontics on anterior and posterior teeth using rotary instruments. In 2019, a total of 2,862 endodontic cases were seen and completed in these KEPPs (**Table 43**).

**Table 43:**  
Completed Endodontic Cases in KEPP, 2015 to 2019

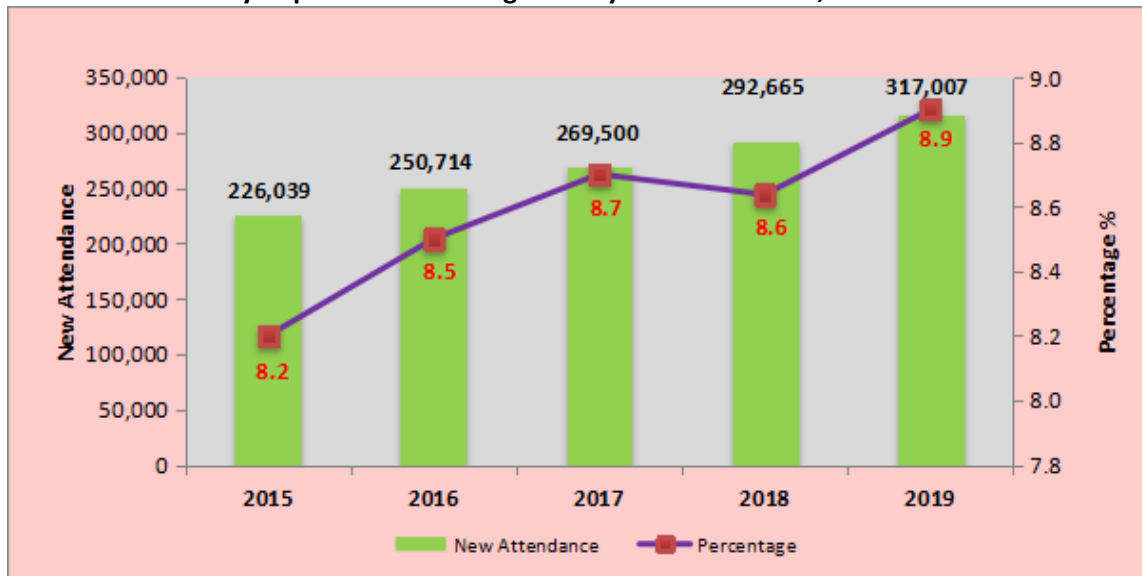
Year	Number of Completed Endodontic Cases				Total
	Anterior	Premolar	Molar	Retreatment	
2015	852	468	744	63	2,127
2016	899	543	1,170	99	2,711
2017	554	397	1,226	49	2,226
2018	491	446	1,274	38	2,249
2019	578	459	1,762	63	2,862

Source: Oral Health Programme, MoH

### Oral Healthcare For The Elderly

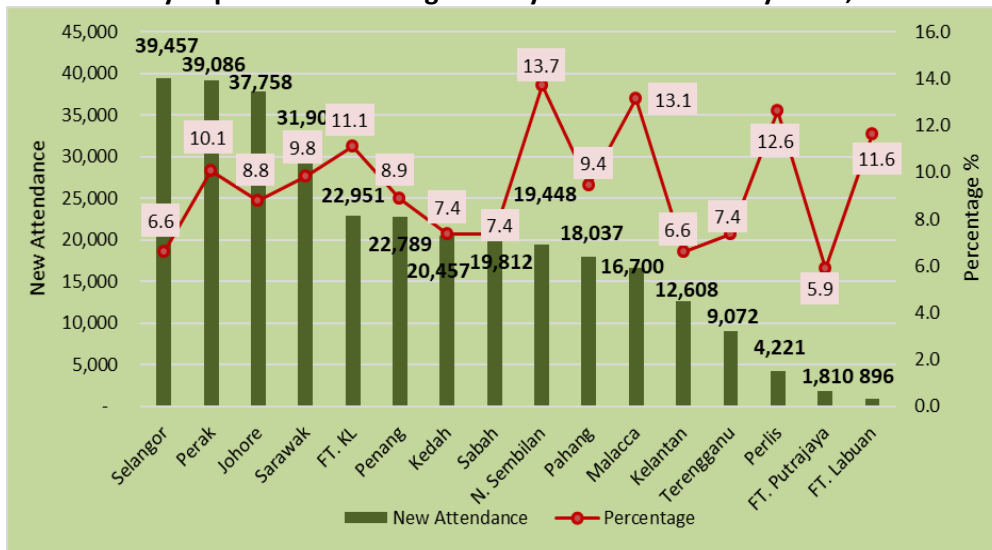
In 2019, 8.9 per cent of the estimated elderly population received primary oral healthcare service (**Figure 17**). The highest coverage was in Negeri Sembilan (13.7 per cent) followed by Malacca (13.1 per cent) and Perlis (12.6 per cent) (**Figure 18**).

**Figure 17:**  
Elderly Population Receiving Primary Oral Healthcare, 2015 to 2019



Source: Health Informatics Centre, MoH

**Figure 18:**  
**Elderly Population Receiving Primary Oral Healthcare by State, 2019**



Source: Health Informatics Centre, MoH

Despite the increase in elderly population utilising oral healthcare facilities, their oral health status is still far from satisfactory. Only 43.2 per cent of 60-year-olds had 20 or more teeth (Table 44). This is far from the targeted goal of National Oral Health Plan 2011-2020 which is 60 per cent by 2020.

**Table 44:**  
**Oral Health Status of the Elderly, 2019**

Age group (years)	Average no. of teeth present				Edentulous (%)				With 20 or more teeth (%)			
	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
60	15.8	16.1	16.2	16.3	7.8	8.0	7.0	7.1	40.3	41.4	41.6	43.2
65	14.0	14.3	14.6	14.7	11.1	10.4	9.6	9.3	31.1	32.5	33.8	35.1
75 and above	10.4	10.5	10.6	10.8	21.4	20.6	19.8	19.4	19.5	19.8	19.9	20.5

Source: Health Informatics Centre, MoH

### Workload Of Dental Providers, 2019

The workload of the dental providers are collected and kept in the Health Information Management System (HIMS)-Oral Health Subsystem which started in 1981. These data serve as the basis for monitoring performance and as input for future planning towards improving the oral healthcare delivery system. Some of the basic dental procedures carried out by Dental Officers' and Dental Therapists' in year 2019 were as below (**Table 45**).

**Table 45:**  
**Workload of Dental Officers and Dental Therapists by Dental Procedure, 2019**

Dental Procedure	Dental Officer	Dental Therapist	Total
Restoration	1,825,215	1,477,554	3,302,769
Scaling	1,001,841	318,947	1,320,788
Periodontal Cases	17,159	-	17,159
Fissure Sealant	75,967	558,423	634,390
Tooth Extraction	1,638,512	396,352	2,034,864
Surgical Extraction	1,995	-	1,995
Abscess Management	36,155	-	36,155
Endodontic	5,445	-	5,445
Crown & Bridges	691	-	691
Partial Denture	56,684	-	56,684
Full Denture	43,830	-	43,830
<b>Total</b>	<b>4,703,494</b>	<b>2,751,276</b>	<b>7,454,770</b>

Source: Health Informatics Centre, MoH

## SPECIALIST ORAL HEALTHCARE

There are nine (9) dental specialties in MoH and the specialties are divided into two categories; hospital based and non-hospital based specialties. Overall in 2019, there were 381 dental specialists in MoH (**Table 46**).

**Table 46:**  
**Gazetted Dental Specialists in MoH, 2015 to 2019**

Specialty \ Year	2015	2016	2017	2018	2019
<b>Hospital-Based Specialist</b>					
Oral and Maxillofacial Surgery	60	64	75	77	81
Paediatric Dentistry	39	38	38	45	46
Oral Pathology and Oral Medicine	11	11	15	15	15
Special Needs Dentistry	3	4	4	6	6
Forensic Dentistry	1	1	1	1	2
<b>Non Hospital-Based Specialist</b>					
Orthodontic	47	52	64	70	70
Periodontic	34	24	36	41	44
Restorative Dentistry	20	24	28	34	37
Dental Public Health Specialist	97	93	86	86	80
<b>TOTAL</b>	<b>312</b>	<b>311</b>	<b>347</b>	<b>375</b>	<b>381</b>

(Not inclusive of Specialist Undergoing Gazettement and Contract Dental Specialist)

Source: Oral Health Programme, MoH

Mapping of specialist services were done to ensure appropriate distribution of existing specialists based on needs and also to identify future training requirements for all specialties. The expansion of five (5) dental specialist services was undertaken for nine (9) dental facilities in 2019 (**Table 47**).

**Table 47:**  
**New Specialty Services Established in 2019**

Specialty	Hospital / Dental Facility
Paediatric Dentistry	<ul style="list-style-type: none"> <li>• Hospital Slim River, Perak</li> <li>• Hospital Sandakan, Sabah</li> </ul>
Special Needs Dentistry	<ul style="list-style-type: none"> <li>• Hospital Rehabilitasi Cheras, Kuala Lumpur</li> </ul>
Forensic Odontology	<ul style="list-style-type: none"> <li>• Hospital Pulau Pinang, Pulau Pinang</li> </ul>
Orthodontic	<ul style="list-style-type: none"> <li>• KP Parit Buntar, Perak</li> <li>• KP Machang, Kelantan</li> <li>• KP Sungai Petani, Kedah</li> </ul>
Restorative Dentistry	<ul style="list-style-type: none"> <li>• KP Kurnia, Pahang</li> <li>• KP Dungun, Terengganu</li> </ul>

Source: Oral Health Programme, MoH

Service data has been collected through the e-reporting system, except for Special Needs Dentistry and Forensic Odontology which was done manually. The workload of the dental specialists is reflected in the ratio of specialist to patients as in **Table 48**.



**Table 48:**  
**Workload of Dental Specialist by Disciplines, 2015 to 2019**

Specialties \ Year	2015	2016	2017	2018	2019
<b>Hospital-based specialist</b>					
Oral Surgery	3823	3991	3554	3680	3716
Paediatric Dentistry	2427	2730	3005	2854	2541
Oral Pathology & Oral Medicine	744	878	833	864	951
Special Needs Dentistry	727*	889*	1159*	1297*	1413*
Forensic Dentistry	173*	108*	141*	110*	88*
<b>Non-Hospital-Based Specialist</b>					
Orthodontics	4083	4056	3556	3423	3711
Periodontics	1312	2113	1466	1349	1373
Restorative Dentistry	1732	1439	1294	1308	1327

Source: Health Informatics System, MoH (preliminary data, 2019) & \*Oral Health Programme, MoH

### Dental Specialist Meetings

Dental Specialist Meetings are organized annually for each discipline to discuss Annual Plan of Actions, Achievements, Key Performance Indicators, Patient Safety Indicators and issues pertaining to each specialty. In 2019, ten (10) Dental Specialist Meeting were held inclusive of a Combined Dental Specialists Meeting (**Table 49 / Image 4**).

**Table 49:**  
**Dental Specialist Meeting, 2019**

Specialty	Date	Venue
Combined Dental Specialist Meeting	20-21 Feb 2019	Grand Bluewave Hotel, Shah Alam
Dental Public Health	14-15 March 2019	Hotel Eastin Kuala Lumpur
Orthodontic	10-11 April 2019	Hotel Premiere, Klang
Oral and Maxillofacial Surgery	24-25 April 2019	Hotel Geno, Shah Alam
Forensic Dentistry	24-25 April 2019	Hotel Geno, Shah Alam
Special Needs Dentistry	2 May 2019	Program Kesihatan Pergigian, KKM
Restorative Dentistry	19-20 June 2019	Hotel Concorde, Shah Alam
Paediatric Dentistry	27-28 June 2019	Hotel Palm Seremban, Negeri Sembilan
Periodontic	15-16 July 2019	Holiday Inn Kuala Lumpur, Glenmarie
Oral Pathology Oral Medicine	24-25 July 2019	Program Kesihatan Pergigian, KKM

Source: Oral Health Programme, MoH

**Image 4:**  
**Combined Dental Specialist Meeting, Hotel Grand Blue Wave, Shah Alam, Selangor**  
**20 to 21 February 2019**



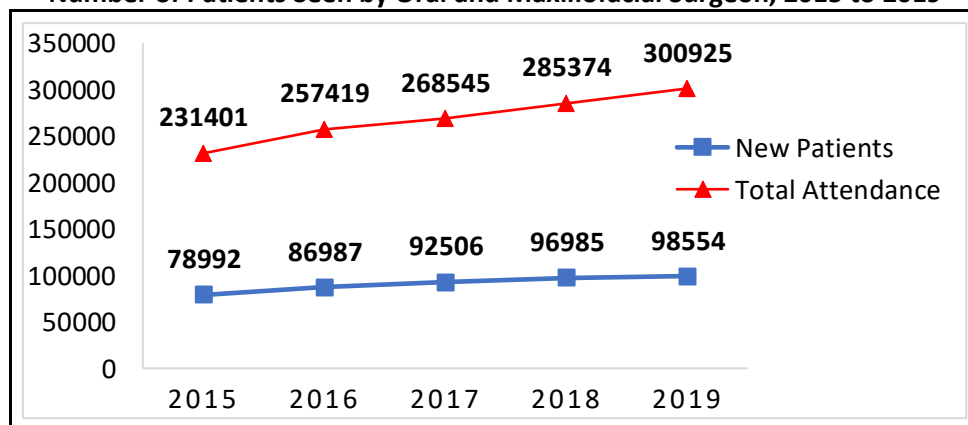
Source: Oral Health Programme, MoH

### Hospital Based Dental Specialties

#### Oral And Maxillofacial Surgery

There was a gradual increase of total attendance for oral and maxillofacial surgery patients in the last five years. The average number of patient seen by an Oral and Maxillofacial Surgeon was 3,715 (**Figure 19**). Ninety per cent (30,128) of all oral surgeries performed in 2019 were minor surgical cases. Majority were pre-prosthetic and pre-orthodontic procedures, removal of impacted teeth, biopsies, excision or ablative surgeries and removal of retained or displaced roots. Major surgery cases accounted for 10.0 per cent (2,923) which consist of surgical removal of malignant lesions, primary or secondary facial reconstruction, cleft lip and palate repair, orthognathic surgery and distraction osteogenesis (**Table 50**).

**Figure 19:**  
**Number of Patients Seen by Oral and Maxillofacial Surgeon, 2015 to 2019**



Source: Health Informatics Centre, MoH (preliminary data)

**Table 50:**  
**Surgeries Performed by Oral and Maxillofacial Surgeons, 2019**

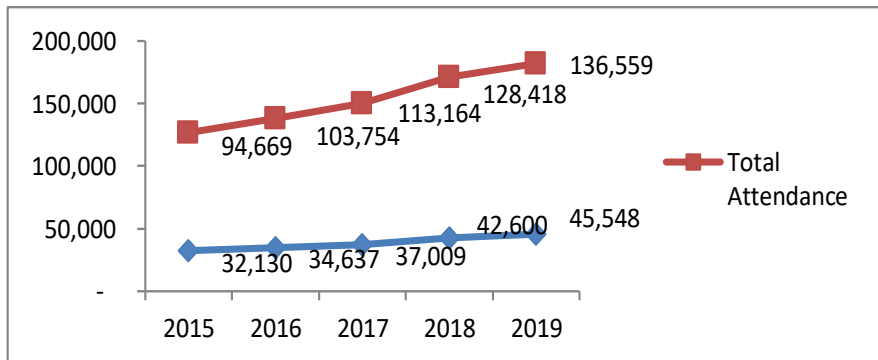
Type of Cases	No.	%
Minor Surgery	30,128	90.0
Major Surgery	2,923	10.0

Source: Health Informatics Centre, MoH (preliminary data)

**Paediatric Dentistry**

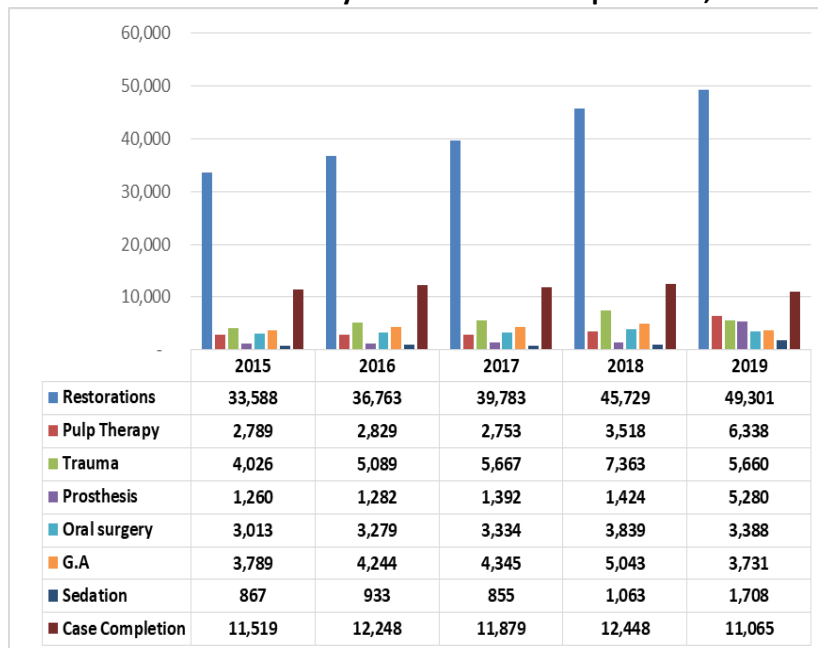
Paediatric Dental Specialist attends to children below 17 years old. There was an increase in number of new patient and total attendance in 2019 as compared to 2018 (**Figure 20**). **Figure 21** shows the treatment rendered by Paediatric Dental Specialists in 2019, some was done under general anaesthesia or sedation. Majority of the treatment rendered was restoration.

**Figure 20:**  
**Number of New Patient and Total Attendance for Paediatric Dental Specialty, 2015 to 2019**



Source: Oral Health Programme, MoH

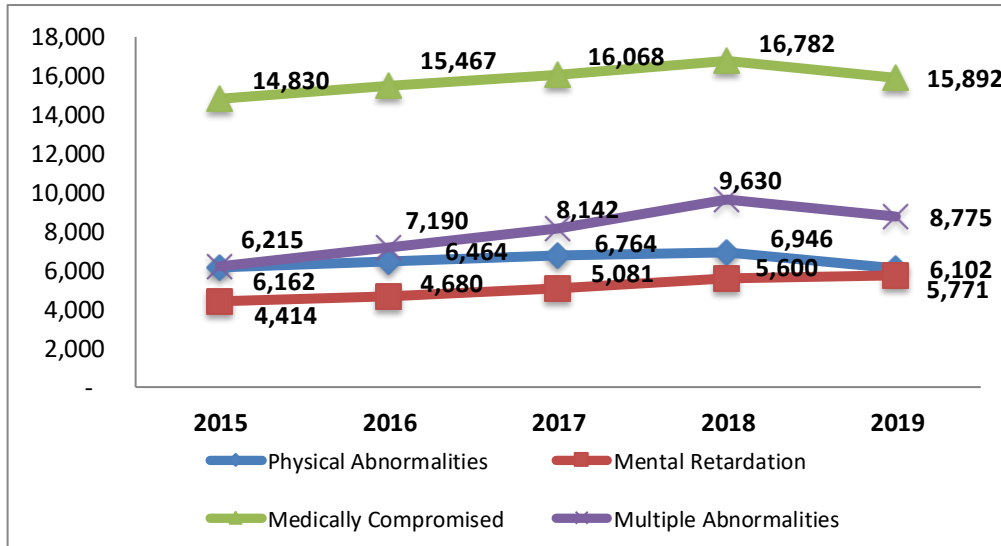
**Figure 21:**  
**Treatment Rendered by Paediatric Dental Specialists, 2019**



Source: Health Informatics Centre, MoH (preliminary data)

Paediatric Dental Specialist 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. There was a decline in overall special needs cases, except for children with mental retardation cases (**Figure 22**).

**Figure 22:**  
**Number of Dental Paediatric Patients Based on Special Needs Conditions, 2015 to 2019**

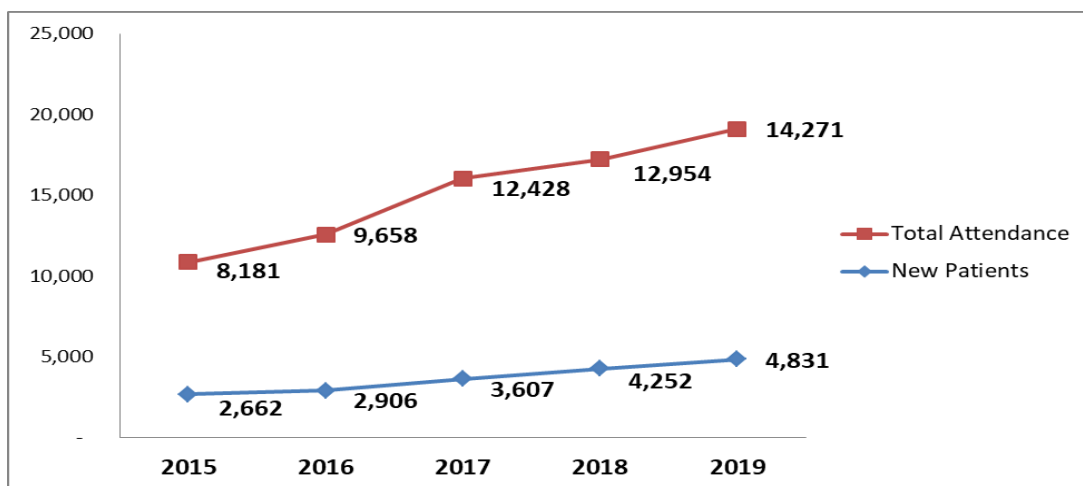


Source: Health Informatics Centre, MoH (preliminary data)

### Oral Pathology And Oral Medicine

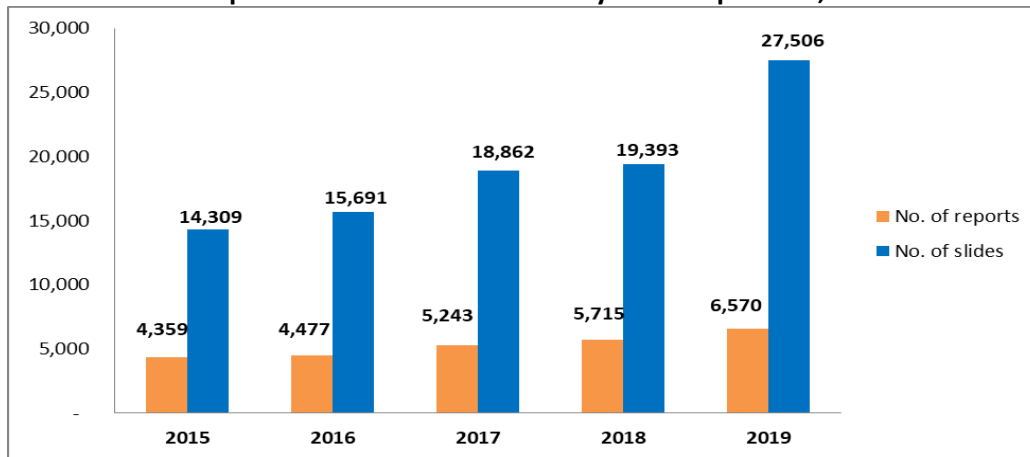
The number of new patient and total attendance have increased in 2019 as compared to 2018 (**Figure 23**). The number of reports issued and slides seen by the Oral Pathology and Oral Medicine Specialists in year 2019 have also increased (**Figure 24**).

**Figure 23:**  
**New Patients and Total Attendances for Oral Pathology and Oral Medicine Specialty, 2015 to 2019**



Source: Health Informatics Centre, MoH (preliminary data)

**Figure 24:**  
**Number of Reports Issued and Slides Seen by OPOM Specialist, 2015 to 2019**

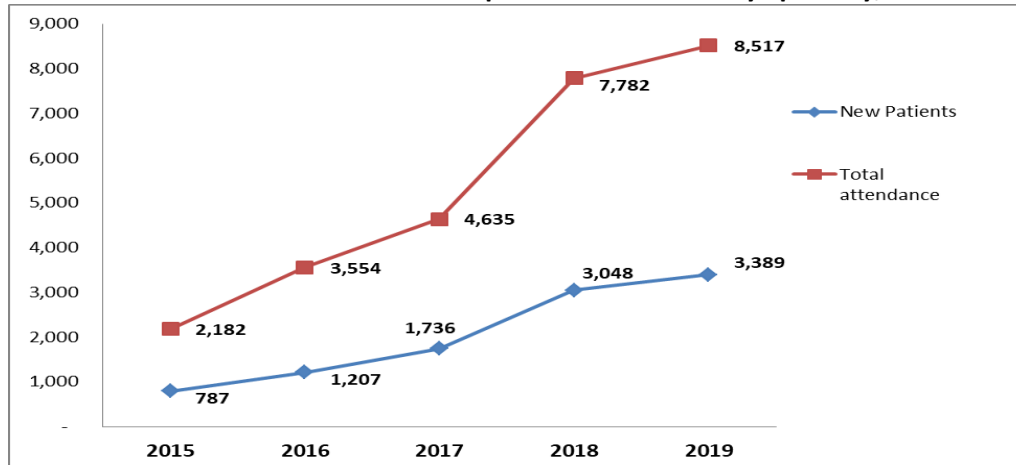


Source: Oral Health Programme, MoH

### Special Needs Dentistry

Special Needs Dentistry (SND) services started in early 2011. In 2019, there were six (6) SND Specialists in MoH based in Kuala Lumpur Hospital (HKL), Cheras Rehabilitation Hospital, Kajang Hospital, Seberang Jaya Hospital, Queen Elizabeth Hospital Kota Kinabalu, and Hospital Raja Perempuan Zainab II Kota Bharu, Kelantan. The number of new patients and total attendance have steadily increased in 2019 as compared to 2018 (**Figure 25**).

**Figure 25:**  
**New Patients and Total Attendance for Special Needs Dentistry Specialty, 2015 to 2019**



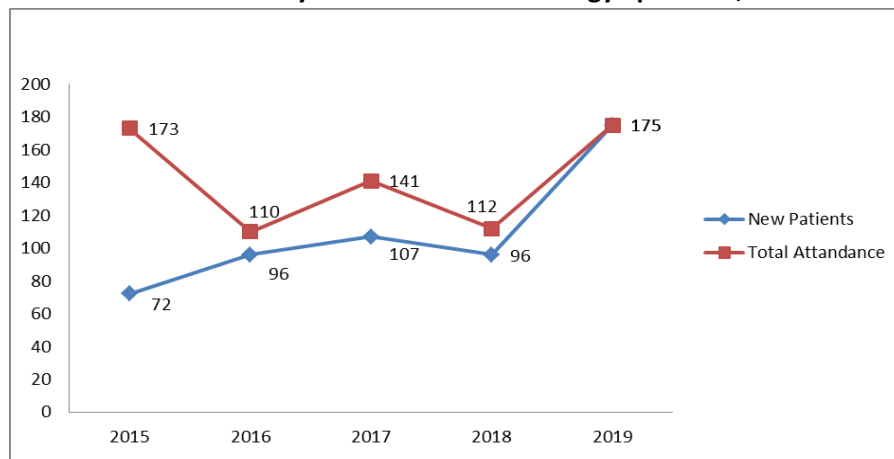
Source: Oral Health Programme MoH

### Forensic Odontology

Forensic Odontology Unit was established in Hospital Kuala Lumpur (HKL) with one (1) specialist working closely with General Forensic Department in HKL. In 2019, HKL received one more Forensic Odontology Specialist to manage forensic cases throughout the country. Dental forensic cases included internal and external referred cases from HKL, as well as from Disaster Victim Investigation (DVI) cases.

In 2019, MoH Forensic Odontology was involved in identifying bodies of several public attention cases, such as the death of Orang Asli from the Batek tribe in Kuala Koh, Gua Musang; the murder of Kuching Businessman; the missing Irish teenager in Negeri Sembilan; the missing Singaporean kayaker; sexual allegation, etc. **Figure 26** shows the increasing trend in the number of cases seen by Forensic Odontology Specialist for the last five (5) years.

**Figure 26:**  
Number of Cases Seen by the Forensic Odontology Specialist, 2015 to 2019



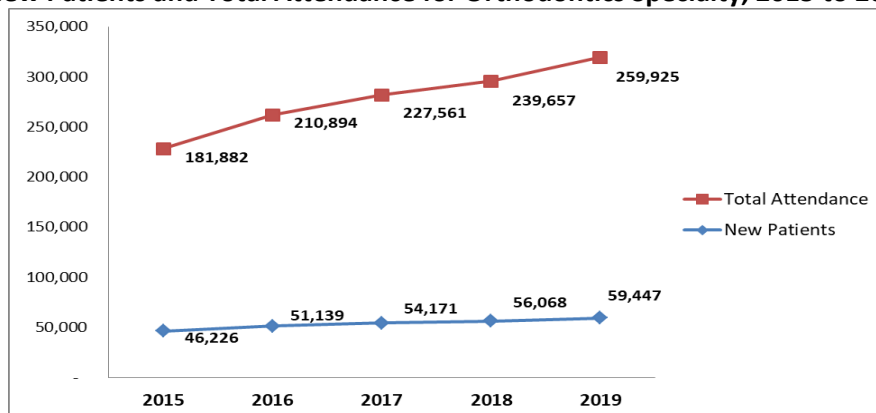
Source: Oral Health Programme MoH

### Non-Hospital Based Dental Specialties

#### Orthodontics

The demand for orthodontics treatment has always been on the rise. The total attendance has increased by 8.46 per cent in 2019 (**Figure 27**). There was an increase in the completion of active treatment cases and patients issued with removable appliances as compared to 2018. (**Table 51**). The majority of cases seen were malocclusion Class II Div 1. Increasing number of consultation II has led to the increase of all malocclusion cases in 2019 compared to the previous year (**Figure 28**).

**Figure 27:**  
New Patients and Total Attendance for Orthodontics Specialty, 2015 to 2019



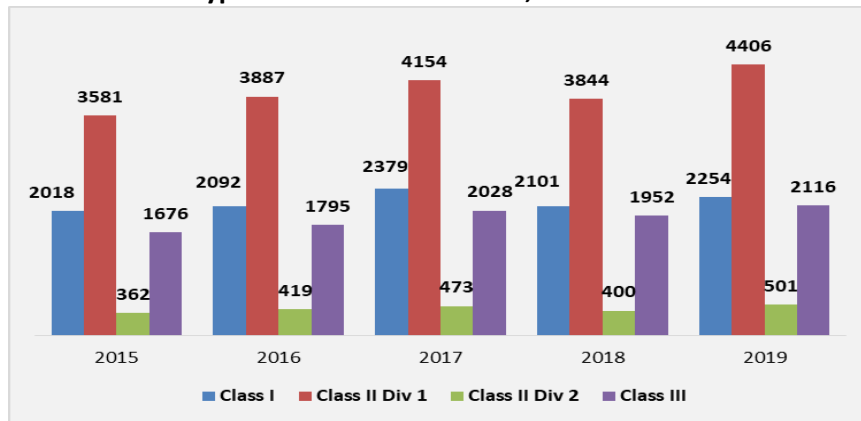
Source: Health Informatics Centre, MoH (preliminary data)

**Table 51:**  
**Type of Services for Orthodontic Cases, 2015-2019**

Items of Care		2015	2016	2017	2018	2019
Consultation	I	13643	13498	13498	13077	13737
	II	8207	9131	9131	8297	9277
Removable Appliances	No. of patients	7159	7844	7844	8024	9084
Fixed Appliances	No. of Patients	9666	10333	10333	9684	10418
No. of active treatment cases		24528	27358	31389	34868	37186
Active treatment completed		3971	4580	4665	5267	6501

Source: Health Informatics Centre, MoH (preliminary data)

**Figure 28:**  
**Types of Malocclusion Seen, 2015 to 2019**

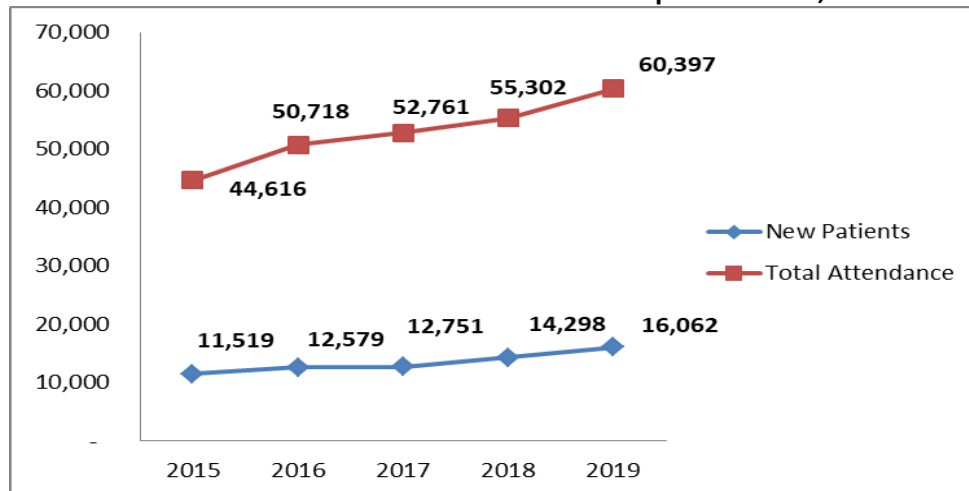


Source: Health Informatics Centre, MoH (preliminary data)

**Periodontics**

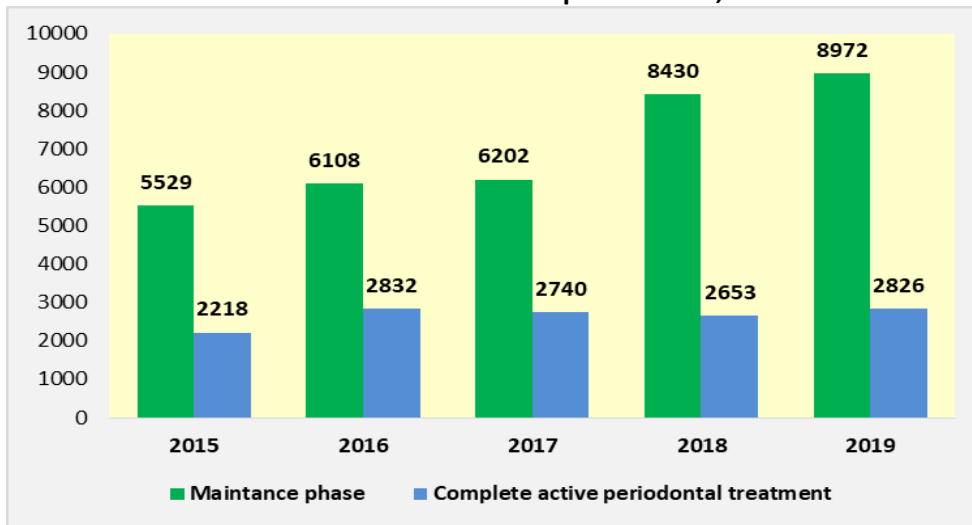
The trend for new patients and total attendance have steadily increased in the last 5 years (**Figure 29**) and the number of patients in maintenance phase has increased in 2019 as compared to the previous year (**Figure 30**).

**Figure 29:**  
**New Patients and Total Attendance for Periodontics Specialist Care, 2015 to 2019**



Source: Health Informatics Centre MoH (preliminary data)

**Figure 30:**  
Cases in Maintenance Phase and Completed Cases, 2015 to 2019

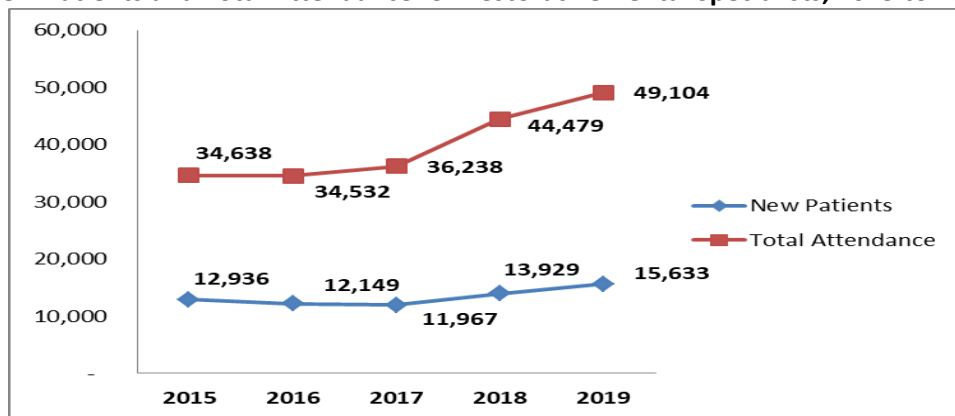


Source: Health Informatics Centre MoH (preliminary data)

**Restorative Dentistry**

The total attendance in Restorative Dentistry Specialist Clinics has drastically increased in 2019 as compared to 2018 (Figure 31). The highest attendance was among those in the age group of 30 – 59 years old (Table 52). Endodontics cases contributed the highest number of cases compared to crowns and bridges. In addition, there was an increase of restorative cases in particular endodontic in 2019 as compared to 2018 (Figure 32).

**Figure 31:**  
New Patients and Total Attendance for Restorative Dental Specialists, 2015 to 2019



Source: Health Informatics Centre MoH (preliminary data)

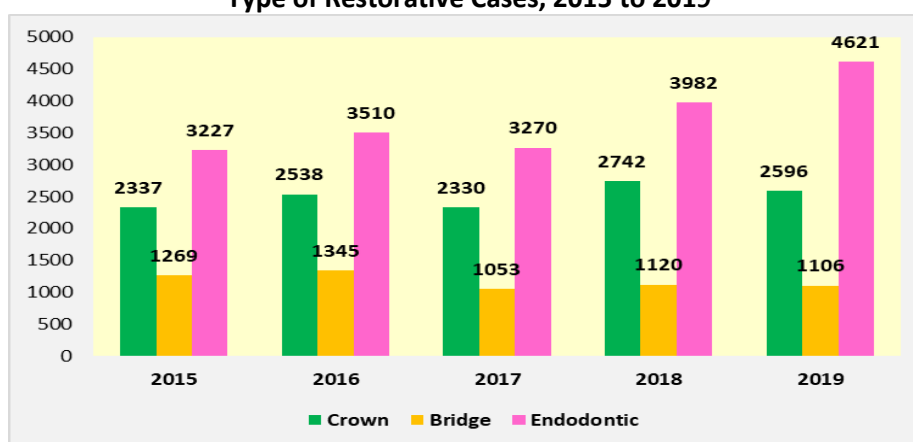


**Table 52:**  
**New Patients and Total Attendance for Restorative Dentistry, 2015 to 2019**

Age Group	New Patients					Total Attendance				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
7-12	79	73	112	175	195	136	123	158	288	310
13-17	785	686	755	879	1,107	1,591	1,474	1,714	2,162	2,469
18-29	2,820	2,553	2,462	3,018	3,297	6,828	6,478	6,407	8,274	8,871
30-59	7,249	6,651	6,456	7,340	7,996	19,738	19,449	20,149	23,736	26,004
≥60	2,003	2,186	2,182	2,517	3,035	6,345	7,008	7,810	10,019	11,447
<b>TOTAL</b>	<b>12,936</b>	<b>12,149</b>	<b>11,967</b>	<b>13,929</b>	<b>15,630</b>	<b>34,638</b>	<b>34,532</b>	<b>36,238</b>	<b>44,479</b>	<b>49,101</b>

Source: Health Informatics Centre MoH (preliminary data)

**Figure 32:**  
**Type of Restorative Cases, 2015 to 2019**



Source: Health Informatics Centre MoH (preliminary data)

### Dental Public Health

The Dental Public Health Specialist (DPHS) takes on the administration of the whole MoH programme, from management of activities, managing issues of human resource and funding, regulation and enforcement, clinical affairs, research and epidemiology, inter-sectoral collaboration as well as managing challenges that face the dental profession, within and outside of the country.

DPHS also play a pivotal role in decisions made through the Malaysian Dental Council and matters pertaining to professional associations. Hence, this Annual Report covers almost all activities undertaken under the role and function of the DPHS.

## COMMUNITY ORAL HEALTHCARE

### Fluoridation of Public Water Supply

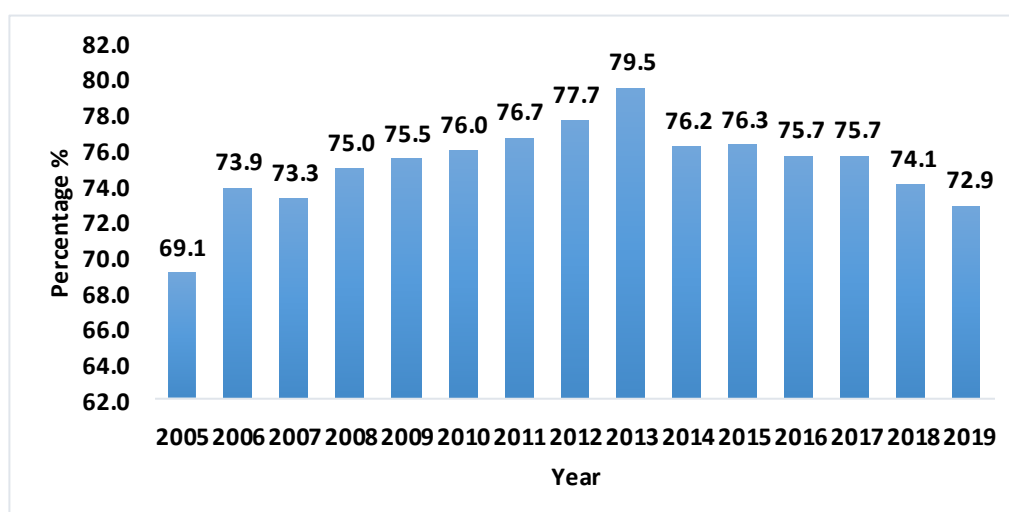
#### Population Coverage

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 and income or educational levels. However, the coverage and maintenance of optimum levels of fluoride at water treatment plants and reticulation points still remain a challenge for some states, in particular, Sabah, Sarawak, Kelantan and Pahang.

The trend on the estimated population receiving fluoridated water is generally on the increase from 2005 to 2013. However, there was a drop in coverage in 2014 (from 79.5 per cent to 76.2 per cent), 2016 (from 76.3 per cent to 75.7 per cent), 2018 (from 75.7 per cent to 74.1 per cent) and in 2019 (from 74.1 per cent to 72.9 per cent) (**Figure 33**).

The drop was due to a decline in population coverage for Pahang as a result of cessation of water fluoridation in majority of the water treatment plants in the state. The water authority in Pahang was corporatised in 2012. Since then, due to financial constraints, there has been no purchase of fluoride compounds.

**Figure 33:**  
**Population Coverage for Water Fluoridation Programme, 2005 to 2019**

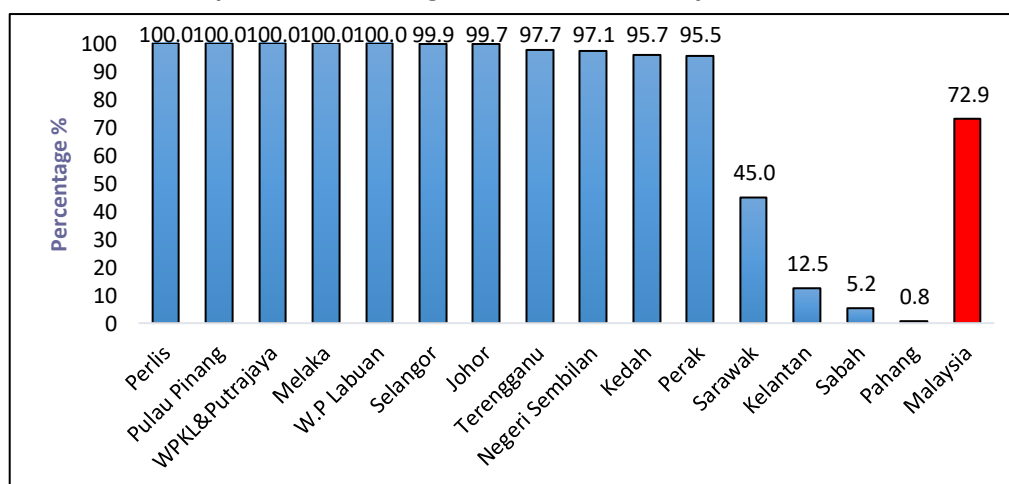


Source: Oral Health Programme, MoH

Three (3) states achieved less than 15 per cent population coverage of fluoridated water – Kelantan, Sabah and Pahang, with Pahang being the lowest at 0.8 per cent (**Figure 34**). Kelantan and Sabah achieved a population coverage of 12.5 per cent and 5.2 per cent respectively.

The Sabah State Cabinet Committee approved the re-activation of water fluoridation programme on 6 October 2010. However, the implementation of the programme remains a continuing challenge due to funding and technical issues in the state, rendering Sabah with the second lowest population coverage of 5.2 per cent (**Figure 34**).

**Figure 34:**  
**Population Receiving Fluoridated Water by State, 2019**



Source: State Oral Health Programme, 2019

### Water Treatment Plants (WTP)

In 2019, there were 490 Water Treatment Plants (WTPs) in Malaysia (**Table 53**). Majority (284, 58.0 per cent) have been privatised. A total of 307 (62.7 per cent) WTPs have had fluoride feeders installed (**Table 54**). Among those with feeders, 242 (78.8 per cent) were active while 65 (21.2 per cent) were inactive due to lack of resources to purchase fluoride compound or technical problems such as fluoride feeders that require repairs or replacement.

In 2019, all WTPs in Perlis, Penang, Selangor, Federal Territory Kuala Lumpur/Putrajaya, Melaka and Terengganu were producing fluoridated water. However, less than 50 per cent of water treatment plants in Sarawak, FT Labuan, Kelantan, Sabah and Pahang produce fluoridated water (**Table 54**).

**Table 53:**  
**Water Treatment Plant by Sector, 2019**

State	Government	Water Board	Private	Total
Perlis	0	0	3	3
Kedah	0	0	36	36
Penang	0	0	8	8
Perak	0	38	5	43
Selangor	0	0	29	29
FT KL/ FT Putrajaya	0	0	3	3
N. Sembilan	0	0	22	22
Melaka	0	9	0	9

State	Government	Water Board	Private	Total
Johor	0	0	44	44
Pahang	0	0	68	68
Terengganu	0	0	12	12
Kelantan	0	0	35	35
Sabah	69	0	14	83
Sarawak	76	10	4	90
FT Labuan	4	0	1	5
<b>MALAYSIA</b>	<b>149</b> <b>(30.4%)</b>	<b>57</b> <b>(11.6%)</b>	<b>284</b> <b>(58.0%)</b>	<b>490</b> <b>(100.0%)</b>

Source: Oral Health Programme, MoH

**Table 54:**  
**WTP with Fluoride Feeders by State, 2019**

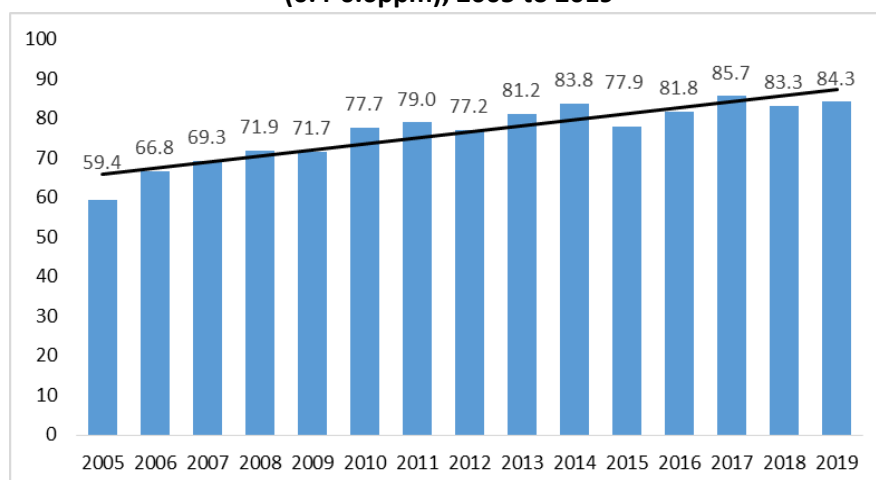
State	No. of WTP	WTP with Fluoride Feeder		WTP with Active Fluoride Feeder		WTP producing fluoridated water (%)
		No.	%	No.	%	
Perlis	3	3	100.0	3	100.0	100.0
Kedah	36	34	94.4	34	100.0	94.4
Penang	8	8	100.0	8	100.0	100.0
Perak	43	42	97.7	40	95.2	93.0
Selangor	29	29	100.0	29	100.0	100.0
FT KL/ Putrajaya	3	3	100.0	3	100.0	100.0
N. Sembilan	22	20	90.9	20	100.0	90.9
Melaka	9	9	100.0	9	100.0	100.0
Johor	44	43	97.7	43	100.0	97.7
Pahang	68	48	70.6	1	2.1	1.5
Terengganu	12	12	100.0	12	100.0	100.0
Kelantan	35	5	14.3	1	20.0	2.9
Sabah	83	10	12.1	6	60.0	7.2
Sarawak	90	37	41.1	32	84.2	35.6
FT Labuan	5	4	80.0	1	25.0	20.0
<b>MALAYSIA</b>	<b>490</b>	<b>307</b>	<b>62.7</b>	<b>242</b>	<b>78.8</b>	<b>49.4</b>

Source: Oral Health Programme, MoH

### Maintaining Fluoride Levels in Public Water Supply

Maintenance of fluoride levels within the recommended range of 0.4 – 0.6 ppm is important to achieve maximum benefit for control and prevention of dental caries while ensuring health and safety. In general, there is an upward trend in conformance of readings to the recommended range for the years 2005 to 2019 (**Figure 35**). In 2019, 84.3 per cent of readings at reticulation points conformed to the recommended range.

**Figure 35:**  
**Conformance of Fluoride Level in Public Water Supplies to the Recommended Range (0.4-0.6ppm), 2005 to 2019**



Source: Oral Health Programme, MoH

Nine (9) out of 15 states, namely Kedah, Penang, Perak, Selangor, FT Kuala Lumpur/Putrajaya, Negeri Sembilan, Melaka, Johor and FT Labuan, complied with the National Indicator Approach (NIA) standards for the lower limit (not more than 25 per cent of the readings below 0.4 ppm) and the upper limit (not more than 7 per cent of readings exceeding 0.6 ppm) of fluoride level in public water supplies (**Table 55**).

Six (6) states did not comply with the standard for the lower limit (not more than 25 per cent of the readings below 0.4 ppm) of fluoride level, highest in Kelantan with 91.7 per cent non-compliance of reticulation readings.

**Table 55:**  
**Fluoride Level at Reticulation Points by State, 2019**

States	Total Readings	Fluoride Readings					
		0.4 - 0.6 ppm		< 0.4 ppm (Std. < 25%)		> 0.6 ppm (Std. < 7%)	
		No.	%	No.	%	No.	%
Perlis	102	56	54.90	46	45.10	0	0.00
Kedah	893	863	96.64	30	3.36	0	0.00
Penang	384	384	100.00	0	0.00	0	0.00
Perak	926	865	93.41	60	6.48	1	0.11
Selangor	1248	1236	99.04	8	0.64	4	0.32
FT KL/FT Putrajaya	144	144	100.00	0	0.00	0	0.00
N. Sembilan	704	678	96.31	8	1.14	18	2.56
Melaka	381	381	100.00	0	0.00	0	0.00
Johor	2057	2018	98.10	17	0.83	22	1.07
Pahang	197	18	9.14	177	89.85	2	1.02
Terengganu	576	291	50.52	275	47.74	10	1.74
Kelantan	60	5	8.33	55	91.67	0	0.00

States	Total Readings	Fluoride Readings					
		0.4 - 0.6 ppm		< 0.4 ppm (Std. < 25%)		> 0.6 ppm (Std. < 7%)	
		No.	%	No.	%	No.	%
Sabah	351	166	47.29	185	52.71	0	0.00
Sarawak	574	125	21.78	430	74.91	19	3.31
FT Labuan	96	96	100.00	0	0.00	0	0.00
<b>MALAYSIA</b>	<b>8,693</b>	<b>7,326</b>	<b>84.27</b>	<b>1,291</b>	<b>14.85</b>	<b>76</b>	<b>0.87</b>

Source: Oral Health Programme, MoH

### Annual Operating Budget for the Fluoridation Programme

Government funds only the government-operated WTPs. In 2019, a total of RM2,570,000.00 was allocated to fund this programme in three (3) states (Table 56). The states of Perak, Sabah and Sarawak spent a total of RM939,119.60 allocated from MoH for water fluoridation. Budget was also set aside to strengthen Clinical Preventive Programmes such as Fluoride Mouth Rinse, Fissure Sealant, Type 1 Preventive Resin Restoration and Flouride Varnish. Some government funds were used for monitoring fluoride levels at reticulation points in all states.

**Table 56:**  
**Government Funded Fluoridation Programme by State, 2019**

State	Annual Operating Budget		Dasar Baru (New Policy/One Off)		Development Fund (10MP)		Total Allocation (RM)	Total Expenditure (RM)
	Allocation (RM)	Expenditure (RM)	Allocation (RM)	Expenditure (RM)	Allocation (RM)	Expenditure (RM)		
Perak	1,240,000.00	649,943.50	-	-	-	-	1,240,000.00	649,943.50
Sabah	480,000.00	105,202.50	-	-	-	-	480,000.00	105,202.50
Sarawak	850,000.00	183,973.60	-	-	-	-	850,000.00	183,973.60
<b>MALAYSIA</b>	<b>2,570,000.00</b>	<b>939,119.60</b>	-	-	-	-	<b>2,570,000.00</b>	<b>939,119.60</b>

Source: Oral Health Programme, MoH

### Interagency Collaboration for Water Fluoridation

The Oral Health Programme continues to collaborate with various agencies to strengthen and expand community water fluoridation in the country. Visits to WTPs and meetings were conducted with relevant agencies at national and state level in 2019. Various implementation issues were discussed and these included fluoride levels in public water supplies, conformance of fluoride levels to the recommended range, and the supply and storage of fluoride compounds.

### 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. Nationwide, 118 training sessions were conducted in 2019, including hands-on training on the use of colorimeters.

### Research

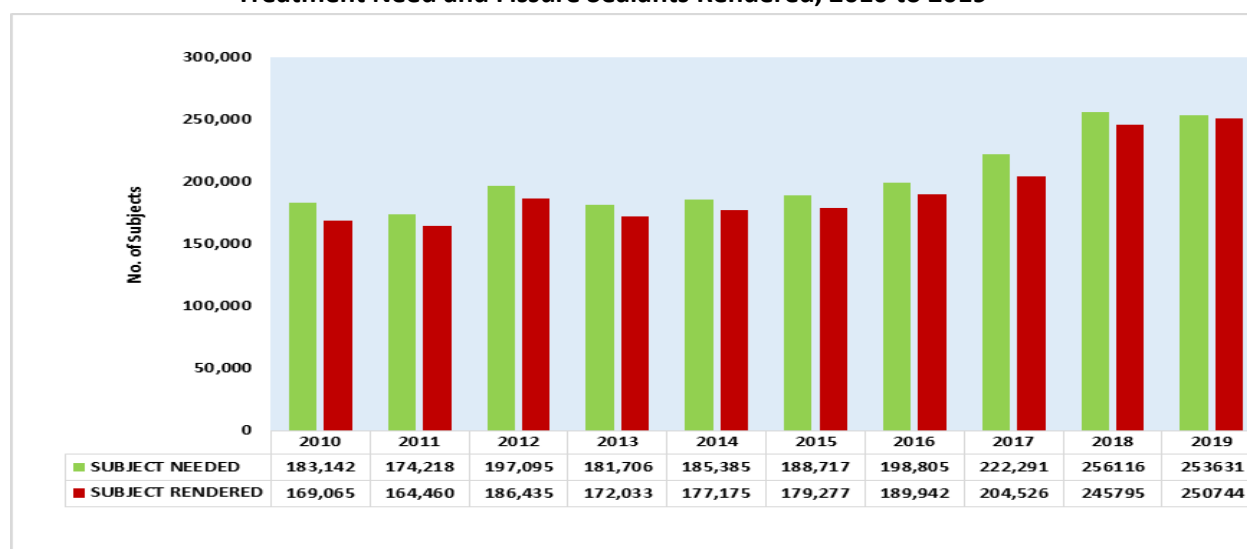
Data collection for the study on ‘Fluoride Enamel Opacities among 16-Year-Old Schoolchildren’ was completed in November 2013 and the report was published in June 2018. The report can be cited as Oral Health Division, Ministry of Health Malaysia. Fluoride Enamel Opacities in 16-year-old Schoolchildren 2013. Ministry of Health Malaysia 2018.

### Clinical Prevention

#### Fissure Sealant Programme

A school-based fissure sealant programme started in 1999, is part of a comprehensive approach to caries prevention which focuses on primary schoolchildren. A sealant is a professionally applied material to occlude the pits and fissures on occlusal, buccal and lingual surfaces of posterior teeth to prevent caries initiation and to arrest caries progression by providing a physical barrier that inhibits microorganisms and food particles from collecting in pits and fissures. In 2019, about 98.9 per cent of schoolchildren needing fissure sealants (FS) were rendered fissure sealants under the School-based Fissure Sealant Programme (**Figure 36**).

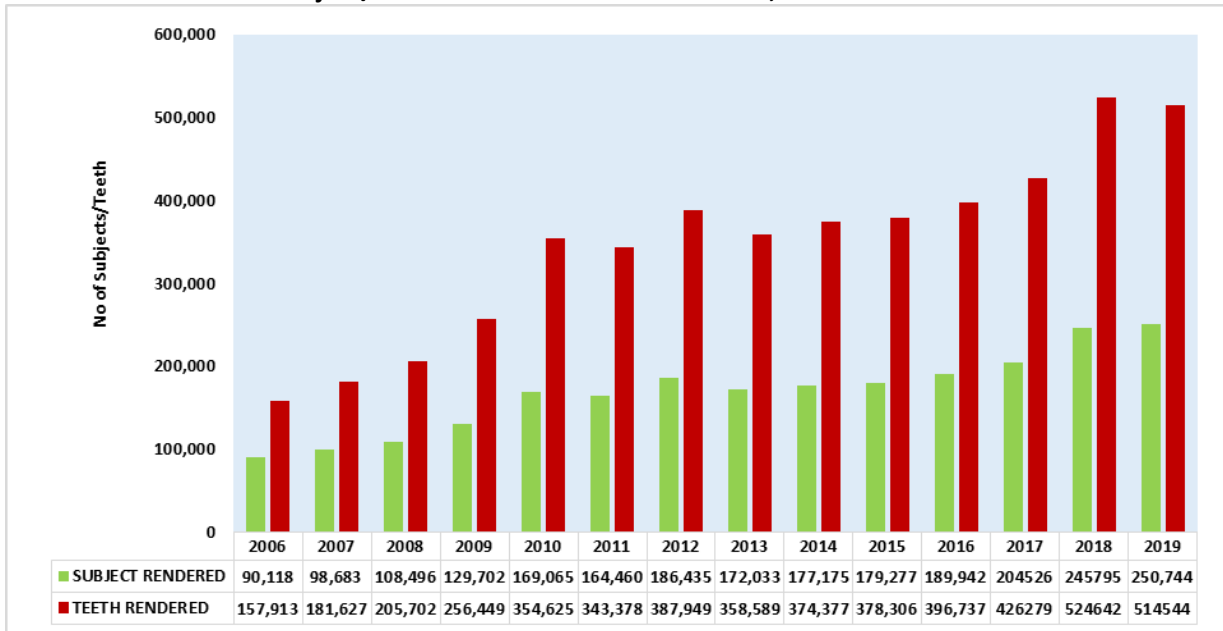
**Figure 36:**  
Treatment Need and Fissure Sealants Rendered, 2010 to 2019



Source: Oral Health Programme, MoH

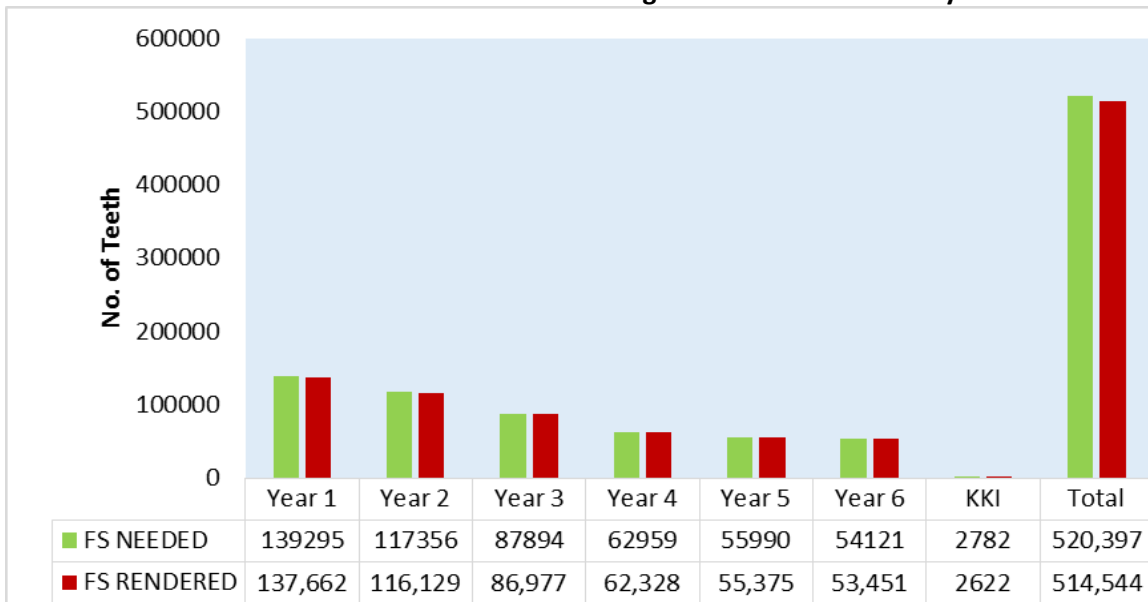
Overall, there is an increasing trend of subjects and teeth provided with fissure sealants from year 2006 to 2019 (Figure 37). A total number of 520,397 teeth examined required fissure sealants. Of these, 98.9 per cent were fissure-sealed and more than half were in year 1 and year 2 primary schoolchildren (Figure 38).

**Figure 37:**  
**Subject/Teeth Rendered Fissure Sealants, 2006 to 2019**



Source: Oral Health Programme, MoH

**Figure 38:**  
**Teeth Needed and Rendered Fissure Sealants among Year 1 to Year 6 Primary Schoolchildren**



Source: Oral Health Programme, MoH



Over the last 9 years, the percentage of children in need of fissure sealant and those rendered fissure sealant have increased from 92.3 per cent in year 2010 to 98.8 per cent in 2019 (**Table 57**). The percentage of teeth in need of fissure sealant and rendered fissure sealant had increased from 90.7 per cent in 2010 to 98.9 per cent in 2019. This met the target set, i.e. 95 per cent of schoolchildren needing fissure sealants, received fissure sealants. Provision of fissure sealant by state is shown in **Table 58**.

**Table 57:**  
**Provision of Fissure Sealants, 2010 to 2019**

Year	No. of Children			No. of Teeth		
	Needed FS	Rendered FS		Needed FS	Rendered FS	
	n	n	%	n	n	%
<b>2010</b>	183,142	169,065	92.3	391,115	354,625	90.7
<b>2011</b>	174,218	164,460	94.4	363,861	343,378	94.4
<b>2012</b>	197,095	186,435	94.6	409,923	387,949	94.6
<b>2013</b>	181,706	172,033	94.7	379,401	358,589	94.5
<b>2014</b>	185,385	177,175	95.6	391,867	374,377	95.5
<b>2015</b>	188,717	179,277	95.0	398,633	378,306	94.9
<b>2016</b>	198,805	189,942	95.5	415,933	396,737	95.4
<b>2017</b>	222,291	204,526	92.0	470,692	426,279	90.6
<b>2018</b>	256,116	245,795	96.0	549,302	524,642	95.5
<b>2019</b>	253,631	250,744	98.8	520,397	514,544	98.9

Source: Oral Health Programme, MoH

**Table 58:**  
**Provision of Fissure Sealants by States, 2019**

State	No. of Children			No. of Teeth		
	Needed FS	Rendered FS		Needed FS	Rendered FS	
	n	n	%	n	n	%
Perlis	3,138	3,136	99.94	5,755	5,752	99.95
Kedah	11,075	11,063	99.89	19,879	19,866	99.93
Penang	8,333	8,269	99.23	15,876	15,747	99.19
Perak	17,935	17,929	99.97	31,904	31,895	99.97
Selangor	4,037	3,915	96.98	6,097	5,883	96.49
FT KL & Putrajaya	12,400	12,150	97.98	19,735	19,375	98.18
N. Sembilan	6,840	6,788	99.24	13,001	12,885	99.11
Melaka	12,337	12,269	99.45	23,080	22,942	99.40
Johor	11,236	10,990	97.81	20,590	20,170	97.96
Pahang	18,661	18,511	99.20	32,186	31,942	99.24
Terengganu	24,209	24,079	99.46	48,349	48,056	99.39
Kelantan	43,552	43,163	99.11	101,566	100,761	99.21
<b>Pen. Malaysia</b>	<b>173,753</b>	<b>172,262</b>	<b>99.14</b>	<b>338,018</b>	<b>335,274</b>	<b>99.19</b>
Sabah	55,275	54,035	97.76	135,436	132,491	97.83
Sarawak	23,849	23,696	99.36	45,884	45,727	99.66
FT Labuan	754	751	99.60	1,059	1,052	99.34
<b>MALAYSIA</b>	<b>253,631</b>	<b>250,744</b>	<b>98.86</b>	<b>520,397</b>	<b>514,544</b>	<b>98.88</b>

Source: Oral Health Programme, MoH

The trend of decayed teeth among selected year 6 schoolchildren from 2004 until 2019 was also captured. The data shows that 66.0 per cent to 75.6 per cent caries experience were in posterior teeth and between 58.4 per cent to 68.83 per cent involved only the occlusal surface (**Table 59**).

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.

**Table 59:**  
**Trend Data of Decayed Teeth among Year 6 Schoolchildren, 2004 to 2019**

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 type (** Class I and II)		Class I only		N-n1	%
		n1	%	n2	%		
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	64.4	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
2016	326,614	238,989	73.2	216,141	66.2	87,625	26.8
2017	303,320	221,302	73.0	197,512	65.1	82,018	27.0
2018	286,324	213,979	74.7	194,234	67.8	72,345	25.3
2019	277,833	209,934	75.6	189,683	68.3	67,899	24.4

\* 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

Source: Oral Health Programme, MoH

### 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 2019, a total of 39,343 (97.0 per cent) high risk toddlers were rendered fluoride varnish in Kelantan, Terengganu and Sabah (**Table 60**).

Compliance rates were low among children rendered FV in 2019, with only 4.8 per cent, 5.0 per cent and 7.7 per cent in Kelantan, Terengganu and Sabah respectively completed 4 times application (**Table 61**).

**Table 60:**  
**Fluoride Varnish Application, 2011 to 2019**

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	91.39	2,989	2,975	99.53	13,467	10,237	76.02
2012	5,530	2,616	47.31	7,742	7,004	90.47	6,408	6,232	97.25	19,680	15,852	80.55
2013	5,816	2,875	49.43	11,269	10,333	91.69	12,147	11,380	93.69	29,232	24,588	84.11
2014	8,037	3,656	45.49	14,720	13,659	92.79	11,018	10,245	92.98	33,775	27,560	81.60
2015	33,596	5,496	16.36	13,004	11,981	92.13	9,676	7,764	80.24	56,276	25,241	44.85
2016	9,506	7,032	73.97	16,704	15,662	93.76	10,101	9,509	94.13	36,311	32,203	88.69
2017	15,918	10,600	66.60	22,579	20,222	89.56	8,909	8,805	98.83	47,406	39,627	83.59
2018	16,909	12,971	76.7	21,191	21,191	100.0	9,727	9,315	95.76	47,827	43,477	90.9
2019	9,971	9,665	96.9	19,893	19,893	100.0	10,694	9,785	91.3	40,558	39,343	97.0

Source: Oral Health Programme, MoH

**Table 61:**  
**Compliance Rate for Fluoride Varnish Application Done for Cohort 2018 to 2019**

State	Need FV	Rendered FV	With 2 times application		With 3 times application		With 4 times application		Compliance to six-monthly application (±1 month)	
	No.	No.	No.	%	No.	%	No.	%	No.	%
Kelantan	16,909	12,971	4,467	34.4	2,123	16.4	625	4.8	269	2.1
Terengganu	21,191	21,191	5,803	27.4	2,849	13.4	1,058	5.0	542	2.6
Sabah	9,727	9,315	5,242	56.3	2,737	29.4	718	7.7	431	4.6
<b>TOTAL</b>	47,827	43,477	15,512	35.67	7,709	17.73	2,401	5.52	1,242	2.85

Source: Oral Health Programme, MoH

### School-Based Fluoride Mouth Rinsing Programme

School-based fluoride mouth rinsing (FMR) activities have been carried out in Sabah, Sarawak and Kelantan. In 2019, the programme was conducted for Year 1 to Year 6 children in selected schools in non-fluoridated areas in Kelantan, Sabah and Sarawak. In total, 101 schools and 26,993 students benefited from this programme (**Table 62**).

**Table 62:**  
**Schools and Students Participating in FMR Programme, 2019**

State	No of Schools participated			Total	No of student involved			Total
	Kelantan	Sabah	Sarawak		Kelantan	Sabah	Sarawak	
2010	7	44	25	76	1,204	21,641	5,585	28,430
2011	7	43	26	76	723	21,835	5,758	28,316
2012	7	46	30	83	765	23,835	5,077	29,677
2013	7	38	26	71	720	20,898	5,436	27,054
2014	7	47	24	78	557	27,579	4,076	32,212
2015	7	30	24	61	580	14,796	4,459	19,835
2016	6	54	23	83	673	18,029	4,173	22,875
2017	4	48	22	74	446	16,035	4,227	20,708
2018	4	37	23	64	415	14,386	3,839	18,640
2019	24	54	23	101	1,293	21,771	3,929	26,993

Source: Oral Health Programme, MoH

There was an increase in the number of schools and schoolchildren involved in FMR programme in 2019 but a slight decrease in 2017 and 2018. It is recommended that FMR Programme be continued in communities with no water fluoridation programme with vigilant monitoring by the oral healthcare professionals.

### Community Oral Health Services

#### Rural Transformation Centre (RTC)

RTC aims to serve as 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 healthcare among the rural population. In 2019, there were seven (7) RTCs in the country, namely RTC Gopeng (Perak), RTC Wakaf Che Yeh (Kelantan), RTC Sungai Rambai (Melaka), RTC Kuala Pahang, Pekan (Pahang) and RTC Napoh, Jitra (Kedah), RTC Sibuti (Sarawak) and RTC Mid Layar, Betong (Sarawak).

Services provided at the RTCs are dental examination and basic dental treatment such as dental extraction, filling and scaling. A total of 14,171 patients visited dental clinics in RTCs in 2019 (**Table 63**).

**Table 63:**  
**Oral health services in RTCs, 2012 to 2019**

Year	Dental clinics at RTCs		Patient Attendances
	No.	Location	
2012	3	Gopeng, Linggi, Wakaf Che Yeh	912
2013	4	Gopeng, Linggi, Wakaf Che Yeh, Pekan	1,621
2014	6	Gopeng, Linggi, Wakaf Che Yeh, Pekan, Jitra, Kulaijaya	2,519
2015	6	Gopeng, Wakaf Che Yeh, Pekan, Jitra, Kulaijaya, Sibuti	6,320
2016	8	Gopeng, Wakaf Che Yeh, Pekan, Jitra, Kulaijaya, Sibuti, Mid Layar, Sungai Rambai	9,577
2017	8	Gopeng, Wakaf Che Yeh, Pekan, Jitra, Kulaijaya, Sibuti, Mid Layar, Sungai Rambai	11,338
2018	8	Gopeng, Wakaf Che Yeh, Pekan, Jitra, Kulaijaya, Sibuti, Mid Layar, Sungai Rambai	13,059
2019	7	Gopeng, Wakaf Che Yeh, Pekan, Jitra, Sibuti, Mid Layar, Sungai Rambai	14,171

Source: Oral Health Programme, MoH

### Urban Transformation Centre (UTC)

In 2019, there were 22 dental clinics operating at UTCs in the country namely UTC Ayer Keroh Melaka, UTC Pudu Sentral and UTC Mini Sentul in FT Kuala Lumpur, UTC Ipoh Perak, UTC Kuantan Pahang, UTC Kompleks MBAS and UTC Sungai Petani in Kedah, UTC Kota Baharu Kelantan, UTC Galeria Johore, UTC Kuala Terengganu, UTC Labuan, UTC Kota Kinabalu, UTC Keningau and UTC Tawau in Sabah, UTC Kuching, UTC Sibul and UTC Miri in Sarawak, UTC Kangar Perlis, UTC Seremban Negeri Sembilan, UTC Pasir Gudang Johore, UTC Shah Alam Selangor and UTC Keramat. A total of 378,929 patients attended the dental clinics in UTCs in 2019 compared to 355,670 in 2018, 287,640 in 2017 and 219,934 in 2016 (Table 64).

The increasing trend of patients attending the UTCs was due to the increase in the number of UTCs and also due to awareness of the public about the existence of these UTCs.

**Table 64:**  
**Oral health services in UTCs, 2012 to 2019**

Year	Dental clinics at UTCs		Patient Attendances
	No.	Location	
2012	2	Ayer Keroh Melaka, Pudu Sentral	3,983
2013	7	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan	56,889
2014	8	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan, Kota Kinabalu	128,179
2015	9	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan, Kota Kinabalu, Galeria Johor	157,966

Year	Dental clinics at UTCs		Patient Attendances
	No.	Location	
2016	17	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan, Kota Kinabalu, Galeria Johor, Kuching Sarawak, Sungai Petani Kedah, Labuan, Sibul Sarawak, Miri Sarawak, Terengganu, Tawau Sabah, Kota Bharu Kelantan, Keningau Sabah	219,934
2017	20	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan, Kota Kinabalu, Galeria Johor, Kuching Sarawak, Sungai Petani Kedah, Labuan, Sibul Sarawak, Miri Sarawak, Terengganu, Tawau Sabah, Kota Bharu Kelantan, Keningau Sabah, Kangar Perlis, Seremban Negeri Sembilan, Pasir Gudang Johor	287,640
2018	21	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan, Kota Kinabalu, Galeria Johor, Kuching Sarawak, Sungai Petani Kedah, Labuan, Sibul Sarawak, Miri Sarawak, Terengganu, Tawau Sabah, Kota Bharu Kelantan, Keningau Sabah, Kangar Perlis, Seremban Negeri Sembilan, Pasir Gudang Johor, UTC Shah Alam Selangor	355,670
2019	22	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan, Kota Kinabalu, Galeria Johor, Kuching Sarawak, Sungai Petani Kedah, Labuan, Sibul Sarawak, Miri Sarawak, Terengganu, Tawau Sabah, Kota Bharu Kelantan, Keningau Sabah, Kangar Perlis, Seremban Negeri Sembilan, Pasir Gudang Johor, UTC Shah Alam Selangor, UTC Keramat	378,929

Source: Oral Health Programme, MoH

### Organise Health Fairs for Sabah and Sarawak

Ministry of Health is the lead agency for 'Organise Health Fairs for Sabah & Sarawak' initiative together with Implementation Coordination Unit (ICU) of Prime Minister's Department, Ministry of Education (MOE), Ministry of Defence (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 Sabah and Sarawak. The oral health services delivered were oral health examination, screening for oral potentially malignant disorder and cancer, filling, extraction, scaling and oral health promotion activities.

**Table 65:**  
**Oral health activities conducted during Organise Health Fair in Sabah and Sarawak, 2012 to 2019**

Year	Sabah			Sarawak		
	No. of Health Fair	No. of patients attendance	No. of participants for Oral Health Talks	No. of Health Fair	No. of patients attendance	No. of participants for Oral Health Talks
2012	7	1,529	-	35	3,495	-
2013	3	273	80	12	857	-
2014	34	1,332	1,429	75	3,009	2,127
2015	74	5,189	615	176	10,174	4,369
2016	190	22,258	2,402	331	21,332	5,392
2017	106	13,814	2,102	73	15,250	4,789

2018	167	12,317	2,573	107	8,538	2,650
2019	324	20,904	4,799	178	8,619	2,119

Source: Oral Health Programme, MoH

In 2019, a total of 502 health fairs were organised in Sabah and Sarawak with 29,523 patients seen; 20,904 in Sabah and 8,619 in Sarawak (**Table 65**).

### Oral Health Services at Elderly and Special Needs Institutions

Outreach oral healthcare at elderly and special needs (*PDK, Pusat Pemulihan Dalam Komuniti* and non-*PDK*) institutions through mobile dental teams/clinics aims to provide holistic support in terms of health and social to these identified groups with collaboration between government and non-government agencies.

A total of 382 institutions for the elderly were visited and 9,426 patients were seen in 2019. The highest number of patients seen was in Perak (1,834) and the highest number of institutions visited was in Johor (78) (**Table 66**). There were 629 institutions for the special needs visited in 2019, with highest coverage in Johor (88). A total of 18,158 patients were seen, highest was in Sarawak (2,446) (**Table 67**).

**Table 66:**  
**Number of Elderly Patients Seen in Institutions, 2019**

State	Government Institution		Private Institution		Total Patients Seen
	No. of Institution	No. of Institution Visited	No. of Institution	No. of Institution Visited	
Perlis	1	1	3	3	139
Kedah	3	3	19	19	545
Penang	2	2	40	40	1,265
Perak	5	5	69	69	1,834
Selangor	5	5	57	56	1,092
FT KL/ FT Putrajaya	3	3	6	6	131
N. Sembilan	0	0	22	22	319
Melaka	4	4	10	10	265
Johor	13	13	65	65	1,360
Pahang	5	5	21	15	448
Terengganu	5	5	1	1	223
Kelantan	1	1	7	7	205
Sabah	4	4	6	6	596
Sarawak	23	11	8	1	1,004
FT Labuan	0	0	0	0	0
<b>MALAYSIA</b>	<b>74</b>	<b>62</b>	<b>334</b>	<b>320</b>	<b>9,426</b>

Source: Oral Health Programme, MoH

**Table 67:**  
**Number of Special Need Patients Seen in Institutions, 2019**

State	PDK		Non PDK		Total Patients Seen
	No. of Institution	No. of Institution Visited	No. of Institution	No. of Institution Visited	
Perlis	8	8	1	1	227
Kedah	42	42	4	4	1,300
Penang	23	23	7	7	1,082
Perak	41	41	22	22	1,616
Selangor	50	50	4	4	1,126
FT KL/ FT Putrajaya	13	13	2	2	619
N. Sembilan	44	44	2	2	1,417
Melaka	18	18	8	8	717
Johor	73	73	15	15	2,413
Pahang	51	50	3	0	914
Terengganu	47	47	1	1	2,160
Kelantan	44	44	1	1	936
Sabah	36	36	21	21	1,091
Sarawak	46	37	12	12	2,446
FT Labuan	2	2	1	1	94
<b>MALAYSIA</b>	<b>538</b>	<b>528</b>	<b>104</b>	<b>101</b>	<b>18,158</b>

Source: Oral Health Programme, MoH

### Mobile Community Services

Mobile Community Services was organised by the National Strategic Unit (NSU), Ministry of Finance. The aim of this initiative is to assemble main services of various government agencies 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 33 activities conducted in 2019 with 3,167 attendances (**Table 68**).

**Table 68:**  
**MCTC activities, 2019**

Date	Location
9 February 2019	<i>Program Mahkamah Bergerak Dan Kesihatan Bergerak Untuk Komuniti Tempatan KP Luyang, Sabah</i>
17 February 2019	<i>Program Aktiviti Kesihatan Pergigian Sempena Majlis Rumah Terbuka Malaysia Tahun Baru Cina 2019 Dataran D'Centrio, Seremban 2, Negeri Sembilan</i>
5-7 April 2019	<i>Dataran Bagandang, Beaufort, Sabah</i>
6-7 April 2019	<i>Program Karnival Selangor Agro Market (Sam)@My Best Buy, Selangor</i>
27-28 April 2019	<i>Program Pesta Chenor 2019 Di Jeti Lama, Chenor, Maran, Pahang</i>
1 May 2019	<i>Larian Amal HKL City Run 2019 di Dataran Merdeka, WPKL</i>
20 June 2019	<i>Perkarangan Jabatan Kebudayaan &amp; Kesenian Negara Sabah</i>
29 June 2019	<i>Program Santuni Rakyat, Sarawak</i>
29-30 June 2019	<i>Program Perkhidmatan Komuniti Bergerak@Mobile Community Service Siri 1 Tahun 2019 Di Pusa, Betong, Sarawak</i>
4 July 2019	<i>Perkarangan Tempat Letak Kenderaan Rumah Persekutuan KK, Sabah</i>
7 July 2019	<i>Klinik Pergigian Bergerak Dan Aktiviti Kanak Kanak Di SK Taman Sri Sinar, WPKL</i>
11-13 July 2019	<i>Festival Kesenian Rakyat Kelate 2019 di Pantai Geting, Tumpat, Kelantan</i>
19-21 July 2019	<i>Festival Kesenian Balik Pulau 2019 di Kompleks Sukan Balik Pulau, Pulau Pinang</i>
25-26 July 2019	<i>Sabindo Tawau, Sabah</i>
25-27 July 2019	<i>Temasya Oghang Kedah 2019 di Dataran Sungai Korok, Jitra, Kedah</i>



Date	Location
2-4 August 2019	<i>Pelancaran Bulan Kebangsaan dan Kibar Jalur Gemilang 2019 di Dataran Pahlawan, Melaka</i>
2-4 August 2019	<i>Kompleks Sukan Lahad Datu, Sabah</i>
22-25 August 2019	<i>Kompleks Sukan Likas, Sabah</i>
28-29 August 2019	<i>Top Ten Mini Stadium Sipitang, Sabah</i>
11-12 September 2019	<i>Perkarangan Pisompunuan Square Tambunan, Sabah</i>
13-15 September 2019	<i>Padang Bandar Keningau, Sabah</i>
27-29 September 2019	<i>Karnival Rahmah 2019 di hadapan Palace of Justice, Putrajaya</i>
1-2 October 2019	<i>Padang Bandaran Semporna, Sabah</i>
18-20 October 2019	<i>Festival Seni Silat Melaka 2019 di Perkarangan A'Famosa, Banda Hilir, Melaka</i>
19-20 October 2019	<i>Padang Bandaran Sandakan, Sabah</i>
26 October 2019	<i>Program Pegawai Daerah dan YDP Bersama Komuniti Daerah Muallim 2019 di Balai Lintang, Tanjong Malim, Perak</i>
26-27 October 2019	<i>Program Perkhidmatan Komuniti Bergerak@Mobile Community Service Siri 2 Tahun 2019 Di Sarikei, Sarawak</i>
16 November 2019	<i>Majlis Rumah Terbuka Malaysia Deepavali 2019 di Dataran Ipoh, Perak Darul Ridzuan</i>
23-24 November 2019	<i>Program Perkhidmatan Komuniti Bergerak@Mobile Community Service Siri 3 Tahun 2019 Di Sibu, Sarawak</i>
7-8 December 2019	<i>Program Perkhidmatan Komuniti Bergerak Roadshow Siri Jelajah 11/2019 di Kampung Tae, Serian, Samarahan, Sarawak</i>
7-8 December 2019	<i>Program Perkhidmatan Komuniti Bergerak Roadshow Siri Jelajah 10/2019 di Sadong Jaya, Samarahan, Sarawak</i>
8 December 2019	<i>Program Kampungku Sihat di Kuching, Sarawak</i>
31 December 2019	<i>Majlis Rumah Terbuka Malaysia (MRTM) Krismas 2019 dan Majlis Pelancaran Melawat Malaysia 2020 di Dataran Merdeka, Kuala Lumpur</i>

Source: Oral Health Programme, MoH

### Outreach Services at People's Housing Project (PPR)

This initiative was started in 2018, targeting the marginalised population of the lower socio-economic status. Thus, outreach services providing promotive, preventive and curative care utilising mobile dental clinic/mobile dental lab/mobile dental team were held at PPRs for the B40 communities. In 2019, a total of 28 PPRs were visited and 1,549 residents received oral healthcare (Table 69).

Table 69:  
Outreach services at PPR, 2019

States	No. of PPRs visited	No. of Patients Seen
Perlis	2	102
Kedah	2	145
Pulau Pinang	2	132
Perak	2	204
Selangor	2	75
FT KL & FT Putrajaya	2	94
Negeri Sembilan	2	82
Melaka	3	94
Johor	2	48
Pahang	2	17

Terengganu	1	21
Kelantan	1	117
Sabah	3	347
Sarawak	2	71
<b>TOTAL</b>	<b>28</b>	<b>1,549</b>

Source: Oral Health Programme, MoH

### Primary Prevention & Early Detection of Oral Potentially Malignant Disorders (OPMD) & Oral Cancers

Oral cancer remains a major health concern in Malaysia. The Oral Health Programme in the MoH Malaysia continues its emphasis on Primary Prevention and Early Detection of OPMDs and Oral Cancer Programme since 1997 in collaboration with relevant agencies. In 2019, 379 high-risk *kampung*/estates/communities were visited and 2,888 residents aged 20 years and above were screened for oral lesions (Table 70).

**Table 70:**  
**OPMD & Oral Cancer Screening and Prevention Programme**  
**(High Risk Community Screening), 2019**

No. of estates/villages visited		No. of patients screened
New	Repeat	
276	103	2,888

Source: Oral Health Programme, MoH

Among the screened patients, 11 were seen with suspected lesion and two (2) were referred to oral surgeons for further investigation and management (Table 71 & 72). However, none of them complied with the referral to oral surgeons (Table 71, 72 & 73).

Of the malignant cases detected with TNM staging reported from 2003 to 2019, 23.6 per cent were detected at stage 1 and 65.0 per cent were detected at later stages, stage 3 and 4 (Table 74). There is a need to improve patient's compliance for referral to prevent delayed treatment.

**Table 71:**  
**Participants Screened and Referred by State (High Risk Community Screening), 2019**

State	No. of patients screened	No. With Lesion		No. Referred	No. Seen by Surgeons	
		n	%		n	%
Perlis	0	0	0	0	0	0
Kedah	51	0	0	0	0	0
Penang	154	0	0	0	0	0
Perak	1015	1	0.10	0	0	0
Selangor	106	0	0	0	0	0
FT KL/ FT Putrajaya	0	0	0	0	0	0
Negeri Sembilan	372	2	0.54	2	0	0
Melaka	0	0	0	0	0	0
Johor	109	0	0	0	0	0

Pahang	231	1	0.43	0	0	0
Terengganu	0	0	0	0	0	0
Kelantan	72	0	0	0	0	0
<b>Pen. Malaysia</b>	<b>2110</b>	<b>4</b>	<b>0.19</b>	<b>2</b>	<b>0</b>	<b>0</b>
Sabah	731	6	0.82	0	0	0
Sarawak	47	1	2.13	0	0	0
FT Labuan	0	0	0	0	0	0
<b>MALAYSIA</b>	<b>2888</b>	<b>11</b>	<b>0.38</b>	<b>2</b>	<b>0</b>	<b>0</b>

Source: Oral Health Programme, MoH

**Table 72:**  
**Participants Screened and Referred (High Risk Community Screening), 2007 to 2019**

Year	No. of patients screened	No. With Lesion		No. Referred	No. Seen by Surgeons	
		n	%		n	%
2007	3,717	88	2.4	76	50	65.8
2008	4,878	113	2.3	68	48	70.6
2009	7,233	128	1.8	105	47	44.8
2010	5,813	36	0.6	17	8	47.1
2011	7,055	55	0.8	16	5	31.3
2012	16,043	37	0.23	29	15	51.7
2013	10,581	51	0.5	33	2	6.1
2014	10,994	59	0.54	39	17	43.6
2015	13,901	46	0.33	31	8	25.8
2016	15,350	28	0.18	15	9	60.0
2017	14,293	12	0.08	4	0	0.00
2018	2,972	5	0.2	3	2	66.7
2019	2888	11	0.38	2	0	0.0
<b>TOTAL</b>	<b>105,137</b>	<b>669</b>	<b>0.64</b>	<b>438</b>	<b>211</b>	<b>48.2</b>

Source: Oral Health Programme, MoH

**Table 73:**  
**Clinical and Histological Diagnosis of Referred Cases (High Risk Community Screening), 2019**

State	No. of Cases Seen by oral Surgeon	Clinical Diagnosis						TNM Staging				Histological diagnosis						Lesion Status				
		Leukoplakia	Erythroplakia	Lichen Planus	Submucous 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
Pen. Malaysia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>MALAYSIA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: Oral Health Programme, MoH

**Opportunistic Screening for Walk-in Patients and other communities**

In 2019, a total of 112,748 patients were screened in the dental clinics (**Table 75**), 847 patients were found with suspected lesion and 492 were referred to oral surgeons for further investigation and management (**Table 75 & 76**). Of these, 354 (72.0 per cent) complied with referral to oral surgeon (**Table 75, 76 & 77**).

A higher number of malignant cases were detected among patients screened in the dental clinic compared to screening at high risk communities (**Table 73 & 77**).

**Table 74:**  
**Clinical and Histological Diagnosis of Referred Cases (High Risk Community Screening), 2003 to 2019**

Year	No. of Cases Seen by Oral Surgeon	Clinical Diagnosis						Staging				Histological Diagnosis						Lesion Status				
		Leukoplakia	Erythroplakia	Lichen Planus	Submucous 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	15	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
2016	9	1	1	4	0	2	1	5	0	0	0	0	0	0	1	2	0	1	0	4	1	1
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	2	0	0	0	0	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>315</b>	<b>40</b>	<b>14</b>	<b>37</b>	<b>18</b>	<b>137</b>	<b>77</b>	<b>29</b>	<b>14</b>	<b>31</b>	<b>49</b>	<b>4</b>	<b>20</b>	<b>3</b>	<b>99</b>	<b>19</b>	<b>4</b>	<b>14</b>	<b>20</b>	<b>40</b>	<b>49</b>	<b>126</b>

*\*Histological diagnosis only available for cases with biopsy done  
Source: Oral Health Programme, MoH*

**Table 75:**  
**Walk-in Patients Screened and Referred by State, 2019**

State	No. of new attendees	No of Patients Screened	No. With Lesion		No. Referred	No. Seen by Surgeons	
			n	%		n	%
Perlis	19,070	2,367	22	0.93	15	12	80.0
Kedah	153,698	23,415	28	0.12	21	17	80.9
Penang	134,851	7,324	43	0.59	31	15	48.4
Perak	201,839	11,617	58	0.50	39	28	71.8
Selangor	299,928	6,613	168	2.54	122	87	71.3
FT KL/ Putrajaya	123,150	3,469	50	1.44	39	29	74.3
N. Sembilan	130,436	7,407	21	0.28	20	14	70.0
Melaka	124,272	7,083	51	0.72	31	23	74.2
Johor	310,039	14,810	173	1.17	46	19	41.3
Pahang	184,872	3,568	26	0.73	18	16	88.9
Terengganu	142,129	9,169	81	0.88	22	16	72.7
Kelantan	156,519	7,642	33	0.43	19	19	100
<b>Pen. Malaysia</b>	<b>1,980,803</b>	<b>104,484</b>	<b>754</b>	<b>0.72</b>	<b>423</b>	<b>295</b>	<b>69.3</b>
Sabah	192,850	4,264	61	1.43	44	40	90.9
Sarawak	198,840	3,490	30	0.86	23	18	78.3
FT Labuan	14,736	510	2	0.39	2	1	50.0
<b>MALAYSIA</b>	<b>238,7229</b>	<b>112,748</b>	<b>847</b>	<b>0.75</b>	<b>492</b>	<b>354</b>	<b>72.0</b>

Source: Oral Health Programme, MoH

**Table 76:**  
**Walk-in Patients Screened and Referred, 2014 to 2019**

Year	No. of new attendees	No of Patients Screened	No. With Lesion		No. Referred	No. Seen by Surgeons	
			n	%		n	%
<b>2014</b>	1,711,097	55,871	349	0.62	189	93	49.2
<b>2015</b>	2,036,106	61,109	464	0.80	282	139	49.3
<b>2016</b>	2,178,330	88,947	309	0.35	214	129	60.3
<b>2017</b>	2,325,005	107,582	367	0.34	328	200	61
<b>2018</b>	2,468,360	113,650	969	0.85	478	348	72.8
<b>2019</b>	2,387,229	112,748	847	0.75	492	354	72.0
<b>TOTAL</b>	<b>13,106,127</b>	<b>539,907</b>	<b>3305</b>	<b>0.61</b>	<b>1983</b>	<b>1263</b>	<b>63.7</b>

Source: Oral Health Programme, MoH

Opportunistic screening data is available starting 2014. Of the malignant cases detected with TNM staging reported from 2014 to 2019, 17.8 per cent were detected at stage 1 and 65.6 per cent were detected at later stages, stage 3 and 4 (**Table 78**).

Combined data of community and opportunistic screening from 2003 to 2019 showed 19.6 per cent were detected at stage 1 and 65.4 per cent were detected at later stages, stage 3 and 4 (**Table 79**). This achievement is still below the National Oral Health Plan for Malaysia 2021 to 2030 goal of '30 per cent of oral cancers detected at stage 1'.

**Table 77:**  
**Clinical and Histological Diagnosis of Referred Cases (Walk-in patients), 2019**

State	No. of Cases Seen by Oral Surgeon	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 Sub mucous Fibrosis	Other Malignancy	Benign Pathologies	Benign	Pre malignant	Malignant
Perlis	12	1	0	0	0	2	10	0	0	0	2	0	0	0	2	0	0	0	1	9	1	2
Kedah	17	2	0	3	0	7	4	2	1	0	3	0	1	0	2	1	0	1	5	5	2	3
Penang	15	3	0	0	1	0	11	0	0	0	2	1	0	0	0	1	0	2	5	5	1	2
Perak	28	2	0	8	0	4	11	0	0	2	2	1	0	0	3	2	0	1	4	5	2	4
Selangor	87	11	1	20	1	18	39	0	3	4	9	6	5	1	11	10	0	5	13	22	13	16
FT KL/ Putrajaya	29	3	1	4	0	2	17	1	2	0	1	0	2	1	3	3	0	0	7	12	0	4
Negeri Sembilan	14	1	0	3	0	5	5	2	0	0	1	0	0	0	2	0	0	1	0	0	1	2
Melaka	23	3	0	3	0	3	14	0	1	1	0	2	0	0	2	0	0	0	5	7	0	2
Johor	19	0	0	3	0	6	10	0	0	1	0	0	1	0	3	1	0	0	7	8	1	3
Pahang	16	1	0	1	1	5	9	0	1	0	0	1	0	0	1	0	0	0	7	8	0	1
Terengganu	16	0	0	0	0	2	10	0	0	0	0	0	0	0	1	0	0	0	2	2	0	1
Kelantan	19	0	0	2	0	4	13	0	1	0	1	0	0	2	1	0	0	1	2	2	1	3
<b>Pen. M'sia</b>	<b>295</b>	<b>27</b>	<b>2</b>	<b>47</b>	<b>3</b>	<b>58</b>	<b>153</b>	<b>5</b>	<b>9</b>	<b>8</b>	<b>21</b>	<b>11</b>	<b>9</b>	<b>4</b>	<b>31</b>	<b>18</b>	<b>0</b>	<b>11</b>	<b>58</b>	<b>85</b>	<b>22</b>	<b>43</b>
Sabah	40	1	0	6	0	27	40	0	0	1	20	1	4	2	17	7	0	4	2	10	5	22
Sarawak	18	0	3	1	8	2	0	1	0	0	4	1	4	0	4	1	0	1	1	1	6	5
FT Labuan	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1
<b>Malaysia</b>	<b>354</b>	<b>32</b>	<b>2</b>	<b>56</b>	<b>4</b>	<b>94</b>	<b>195</b>	<b>6</b>	<b>9</b>	<b>9</b>	<b>46</b>	<b>13</b>	<b>17</b>	<b>6</b>	<b>52</b>	<b>26</b>	<b>0</b>	<b>17</b>	<b>61</b>	<b>96</b>	<b>33</b>	<b>71</b>

\*Histological diagnosis only available for cases with biopsy done

Source: Oral Health Programme, MoH

**Table 78:**  
**Clinical and Histological Diagnosis of Referred Cases (Opportunistic Screening), 2014 to 2019**

Year	No. of Cases Seen by Oral Surgeon	Clinical Diagnosis						Staging				Histological Diagnosis						Lesion Status				
		Leukoplakia	Erythroplakia	Lichen Planus	Submucous 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
2014	93	3	0	5	2	32	51	4	2	0	9	2	2	1	26	4	0	1	17	26	7	27
2015	139	4	0	14	5	45	74	6	9	7	6	0	0	4	33	7	3	13	7	16	8	56
2016	129	8	1	8	2	56	48	17	9	8	12	6	4	5	36	7	0	8	17	16	6	41
2017	200	13	3	22	5	67	71	7	10	6	23	4	4	3	51	8	1	3	18	10	11	56
2018	348	40	3	53	4	90	158	8	6	15	36	14	20	13	55	16	0	7	58	104	40	76
2019	354	32	2	56	4	94	195	6	9	9	46	13	17	6	52	26	0	17	61	96	33	71
<b>Total</b>	<b>1263</b>	<b>100</b>	<b>9</b>	<b>158</b>	<b>22</b>	<b>384</b>	<b>597</b>	<b>48</b>	<b>45</b>	<b>45</b>	<b>132</b>	<b>39</b>	<b>47</b>	<b>32</b>	<b>253</b>	<b>68</b>	<b>4</b>	<b>49</b>	<b>178</b>	<b>268</b>	<b>105</b>	<b>327</b>

*\*Histological diagnosis only available for cases with biopsy done*  
Source: Oral Health Programme, MoH



**Table 79:**  
**Clinical and Histological Diagnosis of Referred Cases (High Risk Community and Opportunistic Screening), 2003 to 2019**

Year	No. of Cases Seen by Oral Surgeon	Clinical Diagnosis						Staging				Histological Diagnosis						Lesion Status				
		Leukoplakia	Erythroplakia	Lichen Planus	Submucous 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	15	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	110	6	1	6	2	33	62	4	2	0	9	2	2	1	26	4	0	1	17	38	8	27
2015	147	4	4	15	6	45	76	6	9	7	6	0	0	4	33	7	3	13	8	17	15	56
2016	138	9	2	12	2	58	49	22	9	8	12	6	4	5	37	9	0	9	17	20	7	42
2017	200	13	3	22	5	67	71	7	10	6	23	4	4	3	51	8	1	3	18	10	11	56
2018	350	40	3	53	4	91	159	8	6	15	37	14	20	13	56	16	0	7	58	104	40	77
2019	354	32	2	56	4	94	195	6	9	9	46	13	17	6	52	26	0	17	61	96	33	71
<b>Total</b>	<b>1578</b>	<b>140</b>	<b>23</b>	<b>195</b>	<b>40</b>	<b>521</b>	<b>674</b>	<b>77</b>	<b>59</b>	<b>76</b>	<b>181</b>	<b>43</b>	<b>67</b>	<b>35</b>	<b>352</b>	<b>87</b>	<b>8</b>	<b>63</b>	<b>198</b>	<b>308</b>	<b>154</b>	<b>453</b>

*\*Histological diagnosis only available for cases with biopsy done  
Source: Oral Health Programme, MoH*

In year 2019, oral health promotion for oral cancer was undertaken through 554 exhibitions and 11,012 chair side education/talks involving 78,912 adult patients/members of the communities (**Table 80**).

**Table 80:**  
**Promotion Activities for Oral Cancer, 2019**

No. of Exhibitions held	Dental Health Talks	
	No. of talks given	No. of participants
554	11,012	78,912

*Source: Oral Health Programme, MoH*

### **Mouth Cancer Awareness Week**

Mouth Cancer Awareness Week was held from 17 to 23 November 2019 aimed to increase oral cancer awareness among health professionals and the public. Activities include screening of 31,257 people, 1,163 awareness campaigns/exhibitions and talks to 14,385 individuals on risk habits (**Table 81**).

At the national level, Mouth Cancer Awareness Week was launched by the Principal Director of Oral Health, MoH Malaysia on 17 November 2019 at Dataran DBKL, in conjunction with the KL Car Free Morning Programme. The event was conducted in collaboration with 17 other agencies namely the Oral Cancer Research & Coordinating Centre, Angkatan Tentera Malaysia, UKM, UiTM, USIM, MAHSA, SEGI, IMU, Lincoln University College, Malaysian Dental Association, Malaysian Private Dental Practitioners Association, Malaysian Association for Orofacial Disease, Malaysian Association of Oral & Maxillofacial Surgeons, Malaysian Association of Dental Public Health Specialists, Malaysian Society of Periodontology, Cancer Research Malaysia and Malaysian Dental Students' Association.

Walking/cycling at 3km or 5km route, flash mob dance and mouth cancer warrior recognition and appreciation were among the highlights in conjunction with the launch.

### **Training**

In 2019, there were 219 trainings on primary prevention and early detection of oral cancer conducted by the states involving 2,340 dental officers. The highest number of officers trained was in Perak (**Table 82**).

**Table 81:**  
**Activities during Mouth Cancer Awareness Week by State, 2019**

State	Oral Screening				Oral Health Education			Oral Health Promotion (No. of activities held)				*Advice/ Counselling
	Total Attendance	No of patients have lesion and /or risk habit	No. of patients with lesion (%)	No. of Patients Referred	Talks			Radio Talks	Television Talks	Exhibition / Campaigns	Others**	No. of Participants
					Group		Individual					
					No. Held	No. of Participants						
Perlis	945	73	2	2	49	581	545	-	-	13	280	315
Kedah	3,533	561	-	4	201	4,509	2,168	-	10	88	21	2,940
Penang	1,497	339	5	4	158	2,624	968	-	5	38	14	329
Perak	1,579	334	3	3	169	2,881	735	-	-	60	18	309
Selangor	2,613	683	7	8	201	4,901	763	-	-	37	32	473
FT KL & FT Putrajaya	5,302	418	2	7	118	4,093	1,896	-	-	95	99	884
Negeri Sembilan	1,718	455	5	5	137	1,922	1,209	-	1	66	12	673
Melaka	1,000	254	7	6	81	1,442	670	-	-	20	7	412
Johor	1,278	240	1	1	125	1,481	402	-	10	102	64	974
Pahang	2,617	698	13	6	159	2,687	1,969	-	-	69	-	834
Terengganu	1,731	275	1	2	168	2,269	725	-	-	42	19	727
Kelantan	2,500	576	2	1	229	4,375	956	-	-	115	4	786
Sabah	1,314	1,028	8	3	127	4,999	573	-	-	351	1	479
Sarawak	2,652	874	27	19	165	3,194	420	1	-	61	-	461
FT Labuan	161	56	-	-	6	126	-	-	-	Shari	5 (Quiz)	76
HKL	386	53	12	11	-	-	386	-	1	1	1	-
CDC, DTCM***	431	21	-	-	5	339	-	-	-	5	15	-
OHD, MOH	-	-	-	-	-	-	-	1	1	-	-	-
<b>Total</b>	<b>31,257</b>	<b>6,938</b>	<b>95</b>	<b>82</b>	<b>2,098</b>	<b>42,423</b>	<b>14,385</b>	<b>2</b>	<b>28</b>	<b>1,163</b>	<b>587</b>	<b>10,672</b>

\*Example : Stop smoking habits/chewing betel quid/drinking alcohol/others

\*Example : MSE demonstration

\*Children's Dental Centre, Dental Training College, Malaysia

Source: Oral Health Programme, MoH

**Table 82:**  
**Oral Cancer Related Courses Conducted by States, 2019**

States	Oral Cancer Training	
	No. of courses conducted	No. of dental officers trained
Perlis	3	60
Kedah	12	119
Penang	6	197
Perak	36	319
Selangor	21	317
FT KL/ Putrajaya	14	57
N. Sembilan	7	154
Melaka	9	73
Johor	34	284
Pahang	19	265
Terengganu	4	100
Kelantan	14	216
<b>Pen. Malaysia</b>	<b>179</b>	<b>2,161</b>
Sabah	34	144
Sarawak	5	25
FT Labuan	1	10
<b>Malaysia</b>	<b>219</b>	<b>2,340</b>

Source: Oral Health Programme, MoH

**ORAL HEALTH PROMOTION**

Oral Health Programme, Ministry of Health Malaysia (OHP MoH) focuses on oral health promotion activities that aim to enable the community to increase control over the determinants of oral health. Activities are mainly directed to increase knowledge and awareness, strengthen the skills and capabilities of individuals and changing social and environmental conditions to improve the oral health status of the population.

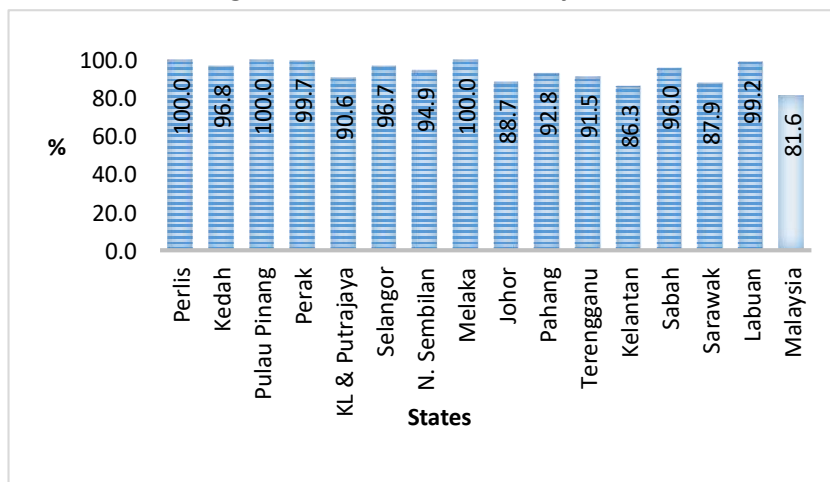
Throughout the year 2019, the OHP MoH continues its effort in educating the public on the importance of oral health. Major oral health promotion activities carried out were as follows:

- i. Tooth Brushing Drills (TBD) and Oral Health Education (OHE) Talk at Schools
- ii. *Kesihatan Oral Tanpa Asap Rokok (KOTAK)*
- iii. *Ikon Gigi* Programme (iGG)
- iv. Oral Health Programme For Trainee Teachers
- v. Transformation With One Smile Together (TWIST)
- vi. *Kolaborasi Oral Dan Agama (KOA)*
- vii. Oral Health Promotion Week (OHPW)
- viii. *Kembara Sihat* Programme
- ix. Use of Social Media In Promoting Oral Health
- x. Production of Oral Health Education Materials
- xi. Other Oral Health Promotion Activities

**Tooth Brushing Drills (TBD) And Oral Health Education (OHE) Talks At Schools**

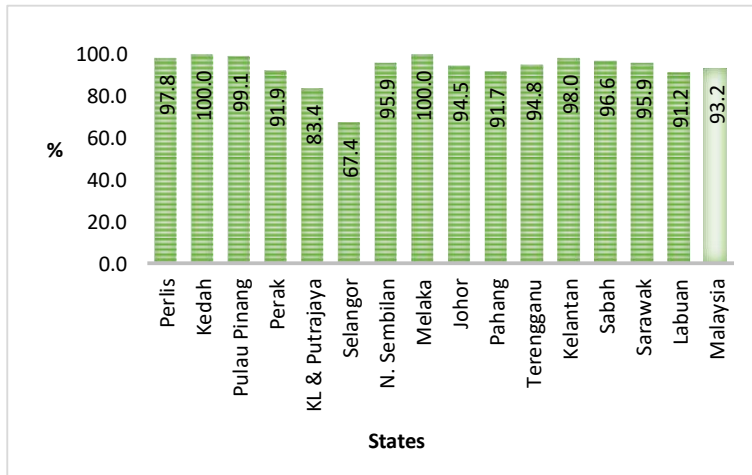
Dental plaque is one of the main risk factors of dental caries and gum diseases. Therefore, it is crucial to inculcate dental plaque control as early as possible to achieve optimal oral health status. In 2019, a total of 81.9 per cent of pre-school children (**Figure 39**) and 93.2 per cent of primary schoolchildren (**Figure 40**) has participated in TBD. For oral health education, a total of 94.9 per cent of pre-school children (**Figure 41**) and 92.9 per cent of primary schoolchildren (**Figure 42**) has participated in OHE talks.

**Figure 39:**  
**TBD Coverage of Pre-School Children by State, 2019**



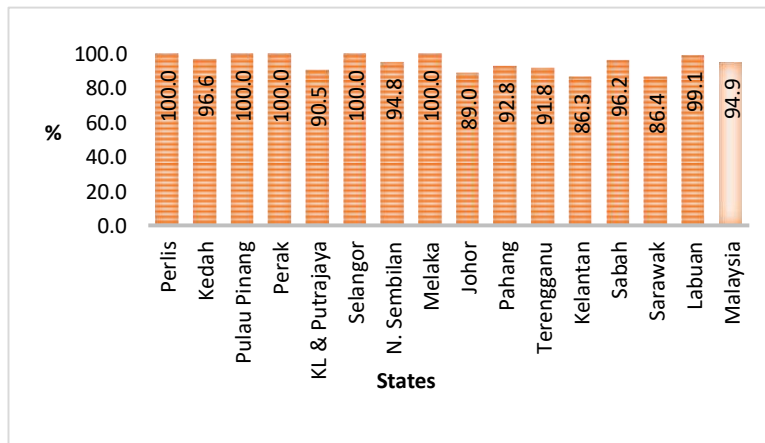
Source: Oral Health Programme, MoH

**Figure 40:**  
**TBD Coverage of Primary Schoolchildren by State, 2019**



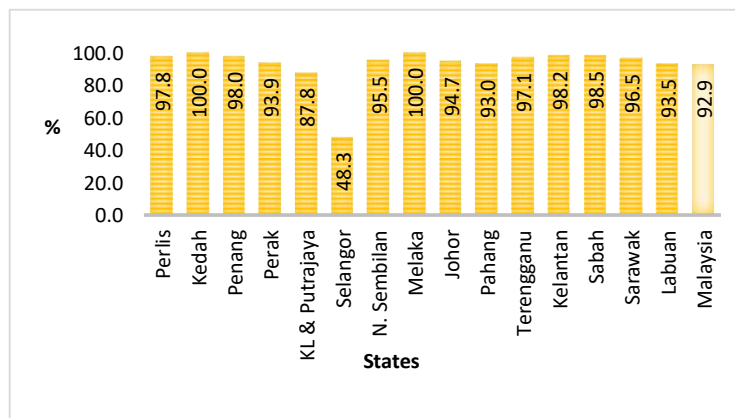
Source: Oral Health Programme, MoH

**Figure 41:**  
**OHE Coverage of Pre-School Children by State, 2019**



Source: Oral Health Programme, MoH

**Figure 42:**  
**OHE Coverage of Primary Schoolchildren by State, 2019**

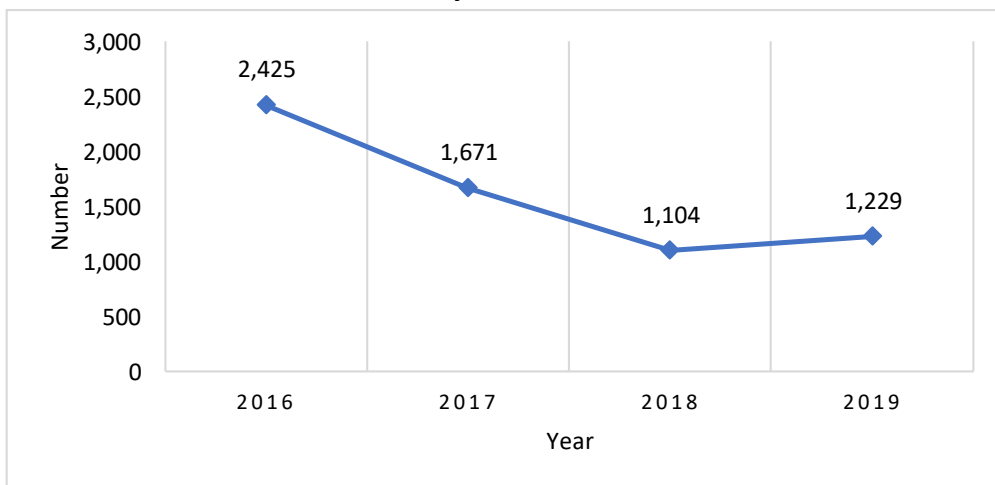


Source: Oral Health Programme, MoH

**Kesihatan Oral Tanpa Amalan Merokok (KOTAK)**

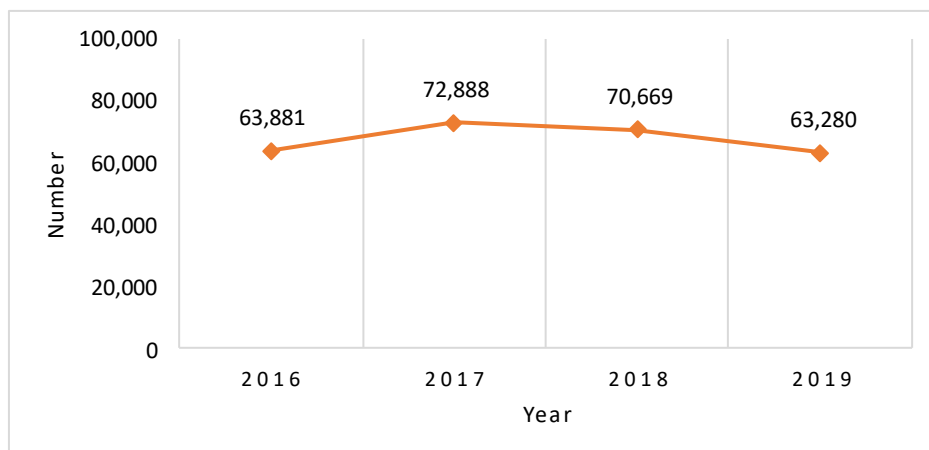
This Programme is a collaboration between OHP MoH, the Disease Control Division, MoH and the School Education Division, Ministry of Education Malaysia. It is part of the School Dental Service programme where all primary and secondary schoolchildren are screened for smoking. Identified smokers will undergo Smoking Intervention to help them quit smoking. In 2019, a total of 2,687,219 primary schoolchildren and 1,905,028 secondary schoolchildren were screened under this programme. In general, there was a decreasing trend of current smokers in primary and secondary schoolchildren from 2016 to 2019 (Figure 43 and 44).

**Figure 43:**  
**Current Smokers in Primary Schoolchildren, 2016 to 2019**



Source: Oral Health Programme, MoH

**Figure 44:**  
**Current Smokers in Secondary Schoolchildren, 2016 to 2019**



Source: Oral Health Programme, MoH

As part of an initiative to strengthen the *KOTAK* Programme, a convention was held at Melaka International Trade Centre (MITC), Melaka on 19 and 20 June 2019. The convention was jointly officiated by YB Low Chee Leong (Health & Anti-Drug Exco) as representative of Malacca’s Chief Minister, YBhg. Dato’ Mohd Shafiq bin Abdullah, Vice-Secretary (Management) Ministry of Health Malaysia as the representative of the Minister of Health Malaysia and YBrs. Dr. Latip bin Muhammad, Deputy Director (Research and Appraisal), Educational Planning and Research Division as representative of the Minister of Education Malaysia. It was estimated nearly 1,000 participants consist of schoolchildren, teachers, health personnel, Malacca’s Parents and Teachers Associations and Non-Governmental Organisations (NGOs) attended the convention (**Image 5,6,7 & 8**).

**Image 5, 6, 7 & 8:**

***Kesihatan Oral Tanpa Asap Rokok (KOTAK) Convention on 19<sup>th</sup> & 20<sup>th</sup> June 2020, MITC, Melaka***



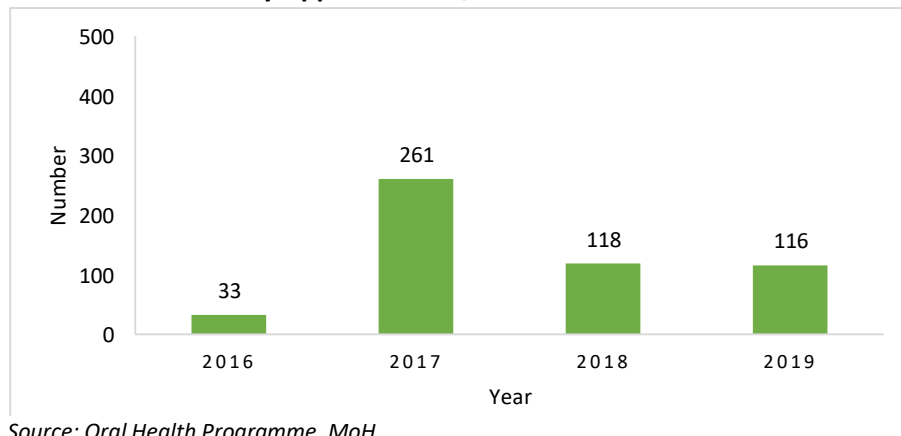
Source: Oral Health Programme, MoH

### **Ikon Gigi Programme (iGG)**

Dental icon is a special programme whereby influential individuals in the community are trained on oral health education modules. The main objective of this initiative is to disseminate oral health information more widely and to empower the community to take action and improve their oral health status. There was a decreasing trend in the newly appointed iGG from 261 in 2017 to 116 in 2019 (**Figure 45**).



**Figure 45:  
Newly Appointed iGG, 2016 to 2019**



Source: Oral Health Programme, MoH

In view of the potential of the iGG programme to disseminate oral health information more widely, the programme was expanded to the vulnerable group i.e. Orang Asli in 2019. The launching of Ikon Gigi Orang Asli (iGG-OA) was officiated by YB Datuk Seri Dr. Dzulkefly Ahmad, the Honourable Minister of Health Malaysia at Kampung Orang Asli Menderang 1, Sungkai, Perak on 11 July 2019 (Image 9,10 & 11).

**Image 9,10 & 11:  
Launching of Ikon Gigi Orang Asli (iGG-OA) by The Honourable Minister of Health Malaysia on 11 July 2019, Sungkai, Perak**

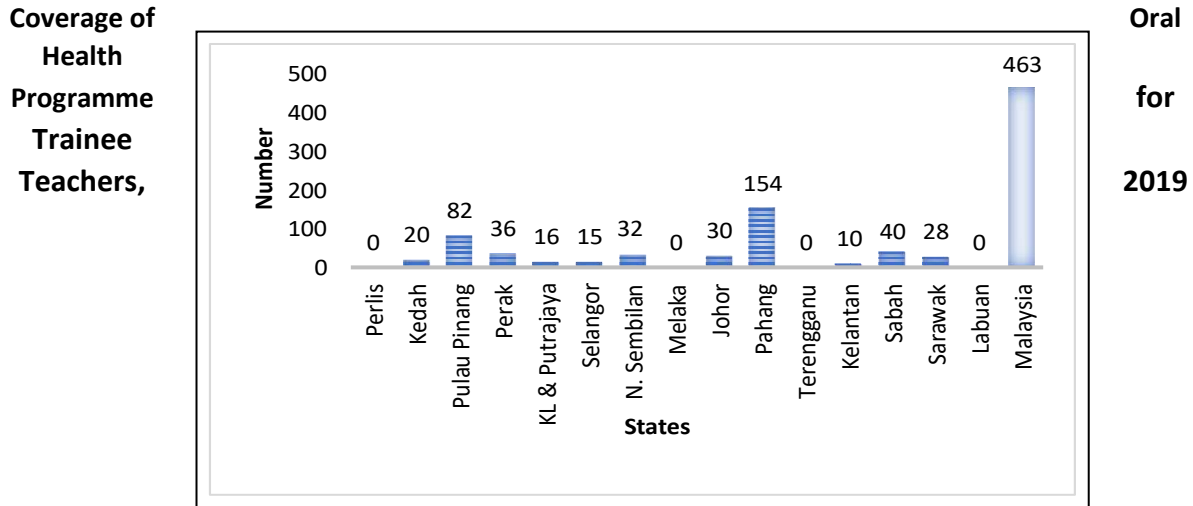


Source: Oral Health Programme, MoH

**Oral Health Programme For Trainee Teachers**

This is one of the oral health promotion initiatives designed for trainee teachers in *Institut Pendidikan Guru Malaysia* (IPGM). The objective is to empower trainee teachers on good oral health practices so that they can be role models and help improve student’s oral health status. In 2019, a total of 463 trainee teachers from 11 IPGM has participated in this programme (**Figure 46**).

**Figure 46:**



Source: Oral Health Programme, MoH

**Transformation With One Smile Together (TWIST)**

The Community College Oral Health Programme or known as *Transformation with One Smile Together* (TWIST) aims to enhance knowledge and awareness on the importance of oral health as well as to improve student’s oral health status of the Community Colleges. TWIST was launched in September 2017 by YAB Dato’ Seri Dr Ahmad Zahid Hamidi, Deputy Prime Minister of Malaysia and a ‘Memorandum of Understanding’ signing was held to symbolise the collaboration between the Oral Health Programme, MoH and the Community College Education Department, Ministry of Higher Education. In 2019, a total of 6,934 community college students benefited from this programme. Apart from oral health screening, other activities held in the colleges include treatment, exhibition, ikon gigi remaja (iGG-R) and Latihan Memberus Gigi (LMG).

**Kolaborasi Oral Dan Agama (KOA)**

KOA is a collaborative effort between the OHP MoH and major religious bodies in Malaysia. The objective is to deliver oral health messages through religious activities, increase awareness and inculcate good oral health practices among the believers. Oral health messages were delivered in religious activities such as *Khutbah Jumaat*. In 2019, a total of 477 activities with various religious bodies were conducted (**Table 83**).

**Table 83:**  
**Number of Activities and Participants in KOA Programme, 2019**

Religion	No. of activities with religious body	No. of participants
Islam	341	5,511
Buddha	40	1,763
Hindu	61	1,444
Kristian	26	1,293
Others	9	416
<b>Total</b>	<b>477</b>	<b>10,427</b>

Source: Oral Health Programme, MoH

### Oral Health Promotion Week (OHPW)

This initiative started in 2018 with the aim to increase public oral health awareness through various oral health activities in a week. Oral health promotion activities such as oral health education talks, exhibitions, oral health screening, preventive treatment and competitions are carried out based on selected themes in a week in all states.

The theme ‘*Doktor Gigi: Pastikan Yang Ori!*’ was selected for 2019 and OHPW was launched on 7 September at Seremban, Negeri Sembilan by YAB Dato’ Seri Haji Aminuddin bin Harun, Chief Minister of Negeri Sembilan (**Image 12**). A total of 6,002 activities comprise of oral screening, oral health education talk, dental exhibition, tooth brushing drill demonstration, interactive games and multimedia shows were carried out from 8 to 14 September 2019.

**Image 12:**

**Oral Health Promotion Week officiated by The Honourable Negeri Sembilan’s Chief Minister on 7 September 2019, Seremban, Negeri Sembilan**



Source: Oral Health Programme, MoH

### Kembara Sihat Programme

This is a collaboration effort between the Oral Health Programme MoH and the Department of Social Welfare, Ministry of Women, Family and Community Development. In 2019, *Kembara Sihat* was officially launched on 30 March by Johor’s Chief Minister, YAB Dato’ Haji Osman bin Haji Sapian in Johor Bahru, Johor (**Image 13 & 14**). The closing ceremony was held at Sg. Petani, Kedah a week later. YBhg. Dato’ Dr. Norhizan Ismail, Kedah State Health

Director (representative for Minister of Health) has officiated the closing ceremony on 7 April 2019. A total of 1,529 participants throughout Malaysia had participated in this one week programme.

Image 13 & 14:

**Kembara Sihat officiated by the Honourable Johor's Chief Minister, 30 March 2019**



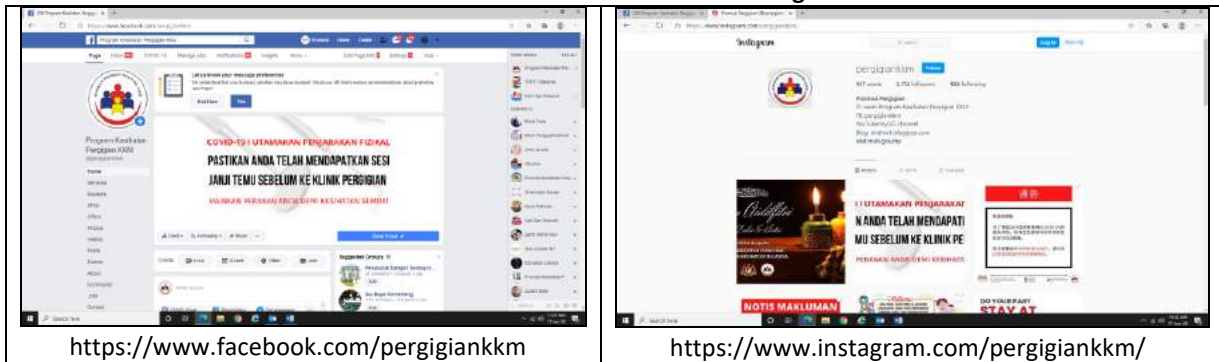
Source: Oral Health Programme, MoH

### Use of Social Media in Promoting Oral Health

Oral health messages are disseminated through social network such as the Facebook and Instagram, and messenger / chat application such as the WhatsApp. The aim is to improve knowledge, attitude and practice of good oral health behaviour among the *rakyat*. Activities that were carried out include producing infographics, videos, mobile applications, e-flyers and e-posters on oral health messages. Official OHP MoH Facebook and Instagram can be browsed as below (Image 15 & 16):

Image 15 & 16

**Official OHP MoH Facebook and Instagram**



<https://www.facebook.com/pergigiankkm>

<https://www.instagram.com/pergigiankkm/>

Source: Oral Health Programme, MoH

### Production of Oral Health Education Materials

#### Poster Prints

Four (4) new posters, sized 20" x 30" were designed, printed and distributed to the states:

- Doktor Gigi Pastikan Yang Ori!*
- Denda bagi Doktor Gigi Haram*
- Tak sakit tak semestinya sihat: Jom periksa gigi*
- Masalah Kesihatan Pergigian Remaja*

### Short Video

In 2019, a total of 50 talented participants consisted of dental officers and dental therapists participated in a three-day course from 27 until 29 August 2019. The course on “Dentistry Going Digital: Produce Video Like a Pro” was held in Langkawi, Kedah. Throughout this course, five (5) interesting short videos related to oral health were successfully produced. YBrs. Dr. Doreyat bin Jemun, Senior Principal Director of Oral Health Programme, Ministry of Health Malaysia officiated the course (**Image 17, 18 & 19**).

### Guidelines Development

Two (2) new guidelines were developed, printed and distributed to the states:

- a. *Prosedur Operasi Standard: Latihan memberus Gigi*
- b. *Garis Panduan Pelaksanaan Program Ikon Gigi*

#### Image 17, 18 & 19:

**Launching of the course ‘Dentistry Going Digital: Produce Video Like a Pro’ on 27 July 2019 in Langkawi, Kedah**



Source: Oral Health Programme, MoH

### Other Oral Health Promotion Activities

#### Jom Heboh Event

Participation in *Jom Heboh* events organised by TV3 Media Prima Bhd. in six (6) locations were as follows:

- Sg. Petani, Kedah
- Shah Alam, Selangor
- Johor Bahru, Johor
- Batu Kawan, Pulau Pinang
- Kota Kinabalu, Sabah
- Ayer Keroh, Melaka

#### TV and radio talk

TV and radio slots acquired through collaboration with Corporate Communication Unit and Health Education Division MOH were as follows:

- “Vape: Fakta Atau Mitos” on 22 July 2019 (TV Al-Hijrah) (**Image 20**)
- “Merokok Seawal Usia 8 Tahun?!” on 15 July 2019 (Radio Selangor FM) (**Image 21**)
- “Hari Kesihatan Pergigian Sedunia” on 20 March 2020 (Traxx FM and Bernama Radio)



Image 20 & 21 :  
TV and radio talk shows on oral health related topics



Source: Oral Health Programme, MoH

### Dental Kits for Standard One Primary School Children

As part of Colgate Palmolive Marketing Sdn. Bhd. corporate social responsibility, the company has contributed 300,096 sets of dental kits for distribution to standard one primary schoolchildren in Malaysia in 2019. Each dental kit consists of one toothbrush, one toothpaste and an oral health brushing chart.

### Kuala Lumpur City Hall (DBKL)

Kuala Lumpur Car Free Morning (KLCFM) event – participation in five (5) KLCFM events in 2019 (Image 22, 23, 24 & 25).

Image 22, 23, 24 & 25:  
KL Car Free Morning held at Dataran DBKL, Kuala Lumpur



Source: Oral Health Programme, MoH

Oral Health Programme, MoH focuses on oral health promotion activities that aim to enable the *rakyat* to increase control over the determinants of oral health. Activities are mainly directed to increase knowledge and awareness, strengthen the skills of individuals and also change social and environmental conditions to improve the oral health status of the population.

Throughout the year 2019, OHP continues its effort in educating the public on the importance of oral health. Major oral health promotion activities were carried out on:

- i. Tooth Brushing Drills (TBD) and Oral Health Education (OHE) Talks at Schools
- ii. *Kesihatan Oral Tanpa Asap Rokok* (KOTAK)
- iii. *Ikon Gigi* Programme (iGG)
- iv. Oral Health Programme for Trainee Teachers
- v. Transformation with One Smile Together (TWIST)
- vi. *Kolaborasi Oral Dan Agama* (KOA)
- vii. Oral Health Promotion Week (OHPW)
- viii. *Kembara Sihat* Programme
- ix. Use of Social Media in Promoting Oral Health
- x. Production of Oral Health Education Materials
- xi. Other Oral Health Promotion Activities

## ACCREDITATION AND GLOBALISATION

### Accreditation of Undergraduate Dental Degree Programmes

In 2019, several accreditation visit were conducted to evaluate and monitor the quality standard of undergraduate dental degree programmes offered by the Higher Education Providers (HEPs) in Malaysia;

**USM** - accreditation visit by panel of assessors was conducted from 14 to 15 January 2019 and USM DDS programme was granted full accreditation for a period of 5 years from 20 April 2019 until 19 April 2024.

**AIMST** - accreditation visit by panel of assessors was conducted from 9 to 11 January 2019 and AIMST BDS programme was granted full accreditation for a period of 3 years from 12 February 2019 until 11 April 2022.

**SEGi** - accreditation visit by panel of assessors was conducted from 26 to 27 February 2019 and SEGi BDS programme was granted full accreditation for a period of 4 years from 2 June 2019 until 1 June 2023.

**IIUM** - compliance monitoring visit was conducted by the panel of assessors on 28 May 2019 and the panel was satisfied with the actions taken by the university on the areas of concern found during panel's previous visit in 2018.

**PIDC** - compliance monitoring visit was conducted by the panel of assessors from 28 to 29 January 2019 and the panel was satisfied with the actions taken by the College on the areas of concern found during panel's previous visit.

**MAHSA-PIDC collaboration** - compliance monitoring visit was conducted by the panel of assessors on 11 April 2019. The panel was satisfied with the implementation of the pre-clinical phase of PIDC BDS programme by MAHSA University as it complied with the accreditation standards.

**USM** - evaluation visit following a request for an increase in student intake was conducted by the panel of assessors from 14 to 15 January 2019 and USM was given the approval to increase additional intake of five (5) international students (from 10 to 15 international students) per year.

**USIM** - evaluation visit for increase student intake was conducted by the panel of assessors from 11 until 12 March 2019 and USIM was given the approval to increase intake to 10 international students per year.



### Evaluation for Increase Student Intake

**USM** - evaluation visit following a request for an increase in student intake was conducted by the panel of assessors from 14 to 15 January 2019 and USM was given the approval to increase additional intake of five (5) international students (from 10 to 15 international students) per year.

**USIM** - evaluation visit for increase student intake was conducted by the panel of assessors from 11 until 12 March 2019 and USIM was given the approval to increase intake to 10 international students per year.

### Code of Practice for Programme Accreditation – Undergraduate Dental Degree [COPPA (Dental), 2019] Workshop

Workshop to update panel of assessors on *Code of Practice for Programme Accreditation – Undergraduate Dental Degree [COPPA (Dental), 2019]* was conducted from 16 until 17 July 2019 at Avillion Admiral Cove Hotel, Port Dickson Negeri Sembilan. There were 30 participants consisting of current panel of assessors, identified lecturers and MoH dental specialist trained to become future panel of assessors.

### Moratorium on Undergraduate Dental Degree Programme

In June 2019, the Higher Education Department, Ministry of Education informed of their decision not to extend the Dental Moratorium period. In response, MoH requested that the Higher Education Department reconsider their decision and suggested to have a discussion between all relevant stakeholders for their views before decision is made.

### Joint Technical Accreditation Committee (JTAC) Meetings

A total of six (6) JTAC meetings were held in 2019 as follows:

**Table 84:**  
**JTAC Meeting, 2019**

JTAC meeting	Date
1/2019	18 January 2019
2/2019	19 March 2019
3/2019	14 May 2019
4/2019	4 July 2019
5/2019	19 September 2019
6/2019	12 November 2019

Source: Oral Health Programme, MoH

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

In 2019, 15 panel assessment reports/documents were presented at the JTAC meetings:

**Table 85:  
Reports Presented at JTAC Meeting, 2019**

JTAC meeting	No. of Reports Presented
1/2019	1 – AIMST Full accreditation evaluation report
2/2019	6 – USM Full accreditation evaluation report & USM Increase student intake evaluation report; MSU Bachelor of Oral Health Sciences Program Presentation; USIM increase student intake evaluation report; SEGi USM Full accreditation evaluation report; PIDC monitoring compliance evaluation report
3/2019	2 – implementation of PIDC BDS pre-clinical phase by MAHSA University report; PIDC Change of partner from VMRF to MAHSA University report
4/2019	3 – PIDC curriculum mapping of equivalency between VMRF curriculum and MAHSA DDS curriculum report; UKM Curriculum review assessment report; IIUM monitoring compliance evaluation report
5/2019	2 – Increase full accreditation maximum period from 5 to 7 years paper; Criteria and calculation of flexi academic staff paper
6/2019	2 – AIMST Curriculum review assessment report; Revised Rating system

Source: Oral Health Programme, MoH

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

In 2019, 13 JTAC recommendations on the accreditation of HEP undergraduate dental degree programmes / increase student’s intake were submitted to MDC for agreement and approval:

**Table 86:  
JTAC Proposal Papers at MDC Meeting, 2019**

MDC meeting	No. of Proposal Papers submitted
127 <sup>th</sup> meeting	1 – BDS AIMST Full accreditation
128 <sup>th</sup> meeting	5 – BDS USM Full accreditation and increase student intake; BDS SEGi Full accreditation; PIDC accreditation monitoring compliance; USIM Increase student intake
129 <sup>th</sup> meeting	5 – BDS SEGi improved panel’s report IIUM accreditation monitoring compliance PIDC-MAHSA Collaboration implementation of PIDC BDS pre-clinical phase by MAHSA University PIDC Change of collaborative partner from VMRF to MAHSA University UKM revised curriculum

MDC meeting	No. of Proposal Papers submitted
130 <sup>th</sup> meeting	2 - Increase full accreditation maximum period from 5 to 7 years paper; Criteria and calculation of flexi academic staff paper.

Source: Oral Health Programme, MoH

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

In 2019, nine (9) MDC / JTAC decisions on the accreditation of HEP undergraduate dental degree programmes / increase student’s intake were submitted to MQA:

**Table 87:**  
**Submission of MDC Decisions to MQA, 2019**

HEP	Date of letter to MQA
AIMST Full accreditation	7 February 2019
USM Full accreditation & increase student intake	13 May 2019
USIM increase student intake	13 May 2019
PIDC Accreditation Monitoring Compliance	13 May 2019
UKM Curriculum review assessment	8 July 2019
PIDC Change of partner from VMRF to MAHSA	15 July 2019
SEGi Full accreditation	24 July 2019
PIDC-MAHSA Collaboration (implementation of PIDC BDS pre-clinical phase by MAHSA)	28 August 2019
IIUM Accreditation Monitoring Compliance	13 September 2019
AIMST Curriculum review assessment	5 December 2019

Source: Oral Health Programme, MoH

### Use of MoH Facilities for The Training of Dental Students

#### Memorandum of Agreement (MoA) For the Use of MoH facilities

In 2019, a total of two (2) new applications received from HEPs for MoA for the use of MoH facilities for the training of their dental students was processed:

- UM
- UKM

In 2019, one (1) application received from HEP for renewal of MoA for the use of MoH facilities for the training of their dental students was processed:

- USM

#### Placements of Undergraduate Students for Field Training

In 2019, six (6) applications received from HEPs for undergraduate posting at MoH dental facilities were processed:

- Clinical – 2 (IMU, MAHSA)
- Community – 4 (PIDC, IMU, MAHSA, USIM)

### **Elective Postings by Undergraduate Students from Foreign Universities**

In 2019, (9) applications received for elective posting at MoH dental facilities from overseas undergraduate students were processed.

### **Globalisation and Liberalisation of Healthcare Services**

#### **Joint Coordinating Committee on Dental Practitioners (AJCCD) Meetings**

In 2019, two (2) officers from the Oral Health Programme and the Malaysian Dental Council representing Malaysia attended the Joint Coordinating Committee on Dental Practitioners (AJCCD) Meetings held as follows:

- 22<sup>th</sup> AJCCD Meeting – 11 and 12 February 2019 in Bandar Seri Begawan, Brunei
- 23<sup>rd</sup> AJCCD Meeting – 21 and 22 October 2019 in Manila, Philippines

Technical input were given on the following matters:

- ASEAN Minimum Common Competency Standards for Dental Undergraduate Education
- ASEAN Dental Practice Standards
- Mechanism to enhance mobility of ASEAN dentists
- Country database on practitioners from ASEAN countries

#### **ASEAN Framework Agreement on Services (AFAS) Package**

From 10 until 11 December 2019, two (2) officers from the Oral Health Programme participated in the workshop on ASEAN Trade in Services Agreement (Negative-list Approach) at Le Meridien Putrajaya Hotel. It was organised by the Ministry of International Trade and Industry (MITI), Ministry of Economy Trade and Industry (METI) of Japan as well as Economic Research Institute for ASEAN and East Asia.

This workshop aims to deliver the understanding and skills necessary for participants to analyse and transpose AFAS positive-list limitations into a negative-list format and prepare lists of non-conforming measures.

#### **Other Bilateral / Multilateral Negotiations between Malaysia and Other Countries**

In 2019, technical input/ feedback was given on the following matters:

- Regional Comprehensive Economic Partnership (RCEP) – content for Annex I & II
- White Paper on WHO Work in The Western Pacific Region
- Trade monitoring report

Proposal on areas of cooperation (*cadangan bidang kerjasama*) for the following bilateral negotiations were provided:

**Table 88:**  
**Proposed Areas of Cooperation, 2019**

<b>Bilateral negotiations</b>	<b>Area of Cooperation proposed</b>
M'sia - Belanda	No cooperation proposed
M'sia - Egypt	No cooperation proposed
M'sia – New Zealand	Training of dental specialists and auxiliaries
M'sia - UK	No legal instrument document entered between both countries

*Source: Oral Health Programme, MoH*

**ORAL HEALTH LEGISLATION & ENFORCEMENT**

**Legislation Activities**

**Dental Act 2018 [ACT 804]**

The bill was enacted and name as Dental Act 2018 [Act 804] on June 2018 but has not yet been enforced. It will be enforced once the draft of the Dental Regulation is approved.

**Draft of Dental Regulations**

The draft of the Dental Regulation was submitted to the Legal Adviser Office, Ministry of Health on 28 December 2018 and has been forwarded to the Drafting Division, Attorney General Chambers on 21 October 2019. A discussion was held and the draft was updated on 8 November 2019.

**Enforcement Provision in the Dental Act 2018**

The Standard Operating Procedure for handling complaints and enforcement activities under the Dental Act 2018 has been developed. Training for enforcement officers was conducted in accordance with the provision under the Dental Act 2018 and the appointment of authorised person will be made as soon as the Act comes into force.

**Enforcement Activities**

**Registration of Private Dental Clinics**

The registration of private dental clinics began in 1 May 2006. All private dental clinics which submitted complete application had been registered with the Ministry of Health. This brought the total number of registered private dental clinics to 1,537. The application for registration has been increasing every year as shown in **Figure 47**.

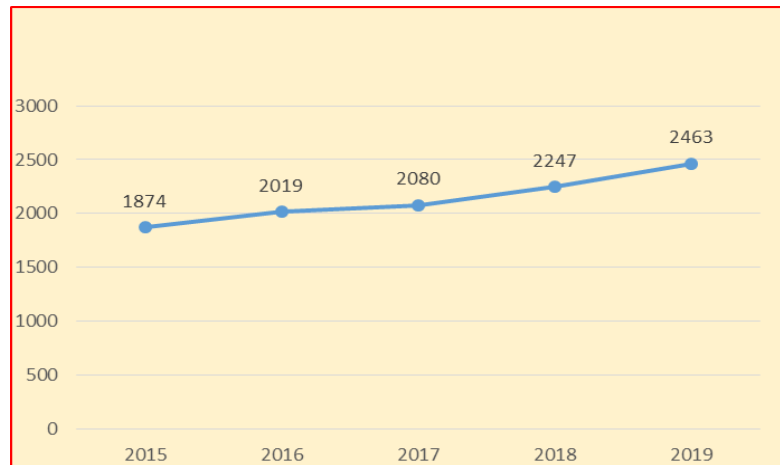
**Figure 47:**  
**Application for Registration of Private Dental Clinic Approved, 2015 to 2019**



Source: Oral Health Programme, MoH

Out of 332 application received for registration in 2019, 265 (79.8 per cent) were approved; an increase of 31.8 per cent compared to 2018 with Selangor registering the most number of new private dental clinics at 97. At the end of 2019, a total of 2,463 private dental clinics has been registered and the highest is in Selangor (811) (**Figure 48**).

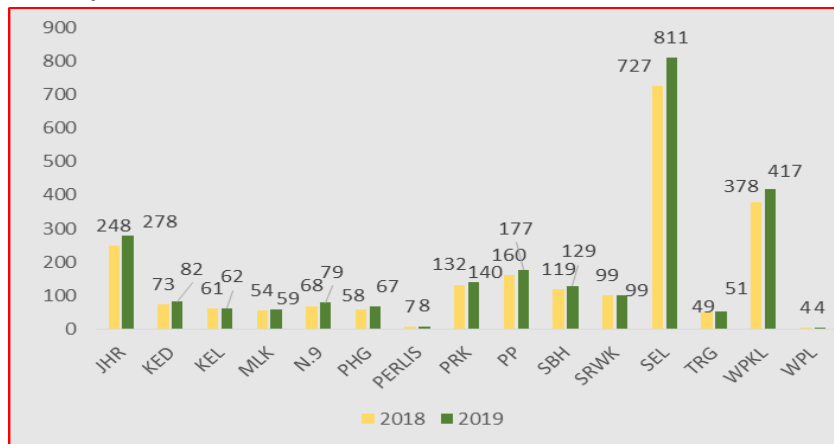
**Figure 48:**  
**Total Number of Registered Private Dental Clinics, 2015 to 2019**



Source: Oral Health Programme, MoH

All states showed an increase in the number of private dental clinics in 2019 except the Federal Territories of Labuan and Sarawak (**Figure 49**).

**Figure 49:**  
**Comparison Distribution of Private Dental Clinics, 2018 and 2019**

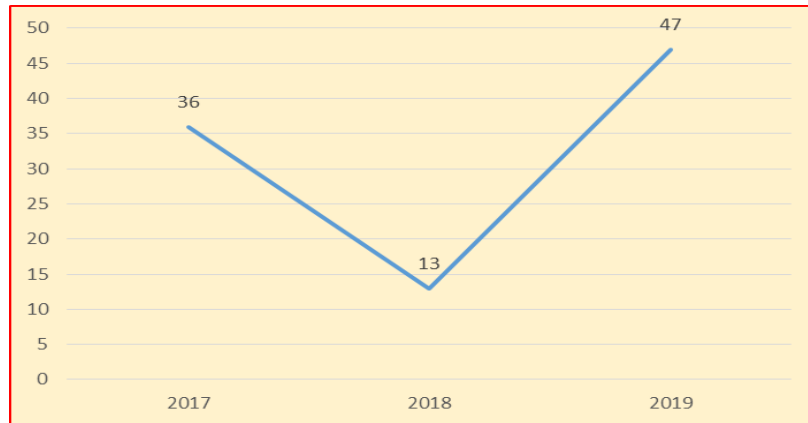


Source: Oral Health Programme, MoH

**Withdrawn/ Cancellation/ Closure of Private Dental Clinics**

Apart from registration, there are also private dental clinics that were closed or withdrawn from the person in charge (PIC) or the owner of the registration certificate or the registration applicant. In 2019, a total of 47 (17.7 per cent) clinics was closed/ cancelled or application withdrawn with Selangor having the highest number of clinics closed (13) (**Figure 50**).

**Figure 50:**  
**Number of Private Dental Clinics Closed, 2017 to 2019**



Source: Oral Health Programme, MoH

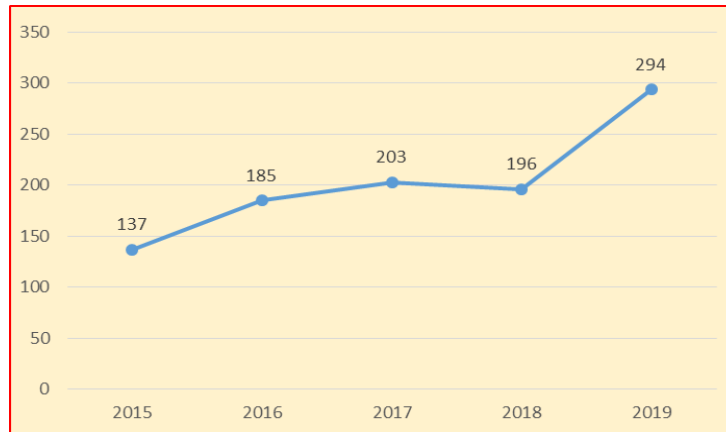
### Inspection of Private Dental Clinics

There are four (4) types of inspection carried out at private dental clinics, namely pre-registration inspection, post registration inspection, monitoring inspection and surveillance inspection.

#### i. Pre-Registration Inspection

The pre-registration inspection is conducted upon receipt of notification of complete renovation from the applicant or PIC of the clinic. **Figure 51** shows an increase in pre-registration inspection from 2015 to 2019.

**Figure 51:**  
**Number of Pre-Registration Inspection, 2015 - 2019**



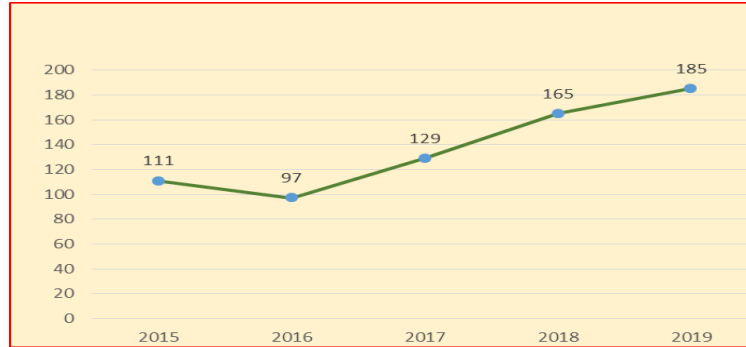
Source: Oral Health Programme, MoH



**ii. Post Registration Inspection**

Post registration inspection involves newly approved registered private dental clinics which is carried out within six (6) months upon receipt of Certificate of Registration. Post-registration inspections have increased by 12.1 per cent compared to year 2018 (**Figure 52**).

**Figure 52:**  
**Number of Post Registration Inspection, 2015 to 2019**



Source: Oral Health Programme, MoH

**iii. Monitoring Inspection**

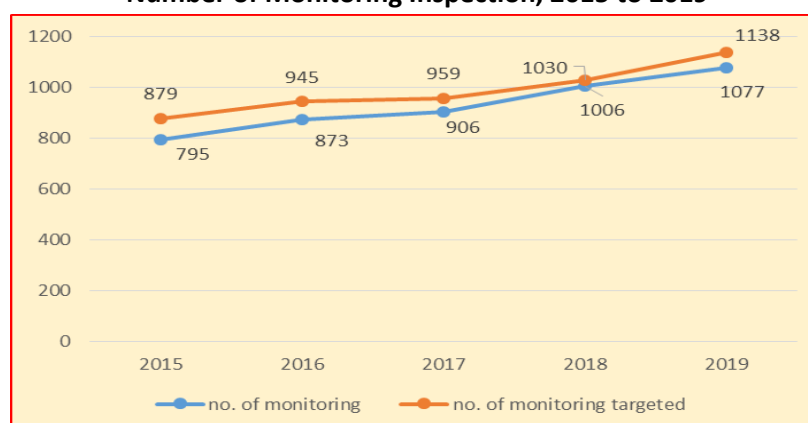
These inspections are carried out on private dental clinics on a yearly basis. Targets for the number of monitoring inspection to be carried out are based on the size of the state and the number of private dental clinics in each state (**Table 89**). Although the number of clinics monitored increased during 2019 (**Figure 53**), the performance has decline from 97.7 per cent (2018) to 94.6 per cent (2019). This is due to dental clinics that were closed but did not go through proper closure process.

**Table 89:**  
**Targets for Monitoring Inspection, 2019**

Number of Private Dental Clinics	Monitoring Targets (%)
≤ 80	100%
81-200	50%
201- 250	40%
≥ 351	33.3%

Source: Oral Health Programme, MoH

**Figure 53:**  
**Number of Monitoring Inspection, 2015 to 2019**



Source: Oral Health Programme, MoH

Overall achievement in 2019 was 94.6 per cent; a 3 per cent reduction compared to 2018 with five (5) states did not meet 100 per cent monitoring inspection target which is Johor, Kelantan, Melaka, Sarawak and Selangor (**Table 90**).

**Table 90:**  
**Monitoring Inspection by State, 2019**

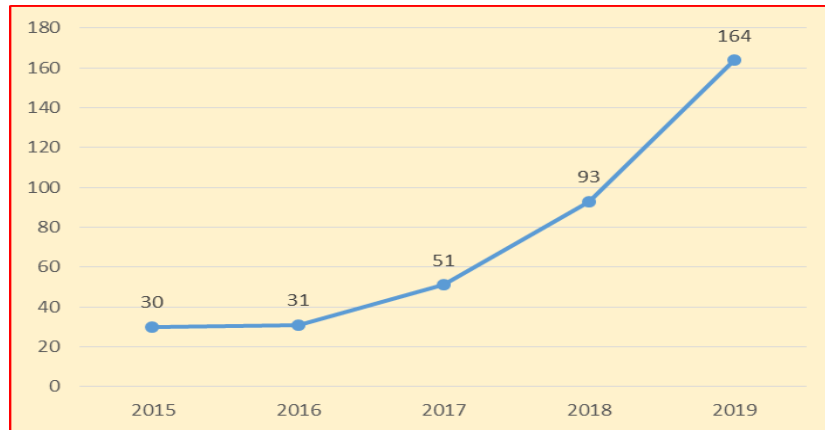
No	State	No. of Private DC (as of 1 January 2019)	Target		Achievement	
			Number	Percentage	Number	Percentage
1.	Johor	254	127	50	121	95.3
2.	Kedah	73	73	100	73	100
3.	Kelantan	61	57	100	56	98.2
4.	Melaka	54	54	100	53	98.1
5.	Negeri Sembilan	68	56	100	56	100
6.	Pahang	58	58	100	58	100
7.	Perak	132	66	50	66	100
8.	Perlis	7	7	100	7	100
9.	Penang	160	80	50	80	100
10.	Sabah	119	59	50	59	100
11.	Sarawak	99	49	50	45	91.8
12.	Selangor	727	240	33.3	191	79.6
13.	Terengganu	49	46	100	46	100
14.	FT Kuala Lumpur	378	162	40	162	100
15.	FT Labuan	4	4	100	4	100
<b>Total</b>		<b>2,243</b>	<b>1,138</b>		<b>1,077</b>	<b>94.6</b>

Source: Oral Health Programme, MoH

#### iv. Surveillance Inspection

Revisited inspection or surveillance inspection is carried out for private dental clinics that do not comply with Act 586 and its Regulations whether during pre-registration, post-registration or monitoring inspection. Inspections are carried out after the improvement period for the person in charge (PIC) or certificate of registration holder. A total of 164 (10.5 per cent) surveillance inspection was carried out due to non-compliance found during the inspection (**Figure 54**).

**Figure 54:**  
**Surveillance Inspection, 2015 to 2019**

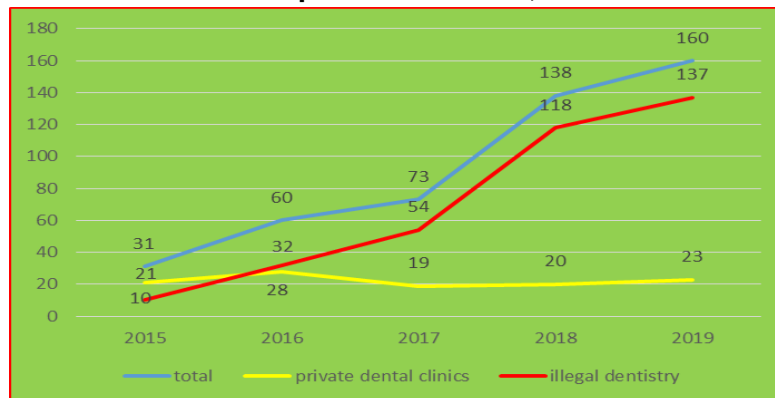


Source: Oral Health Programme, MoH

**Complaints Management**

There are two (2) categories of complaints which are complaints against private dental clinics and complaints regarding illegal dental practices. The number of complaints received increases each year. **Figure 55** shows 85.6 per cent (137/160) of the complaints received in 2019 were of illegal dental practices; an increase of 16.7 per cent compared to 2018.

**Figure 55:**  
**Number of Complaints Received, 2015 to 2019**



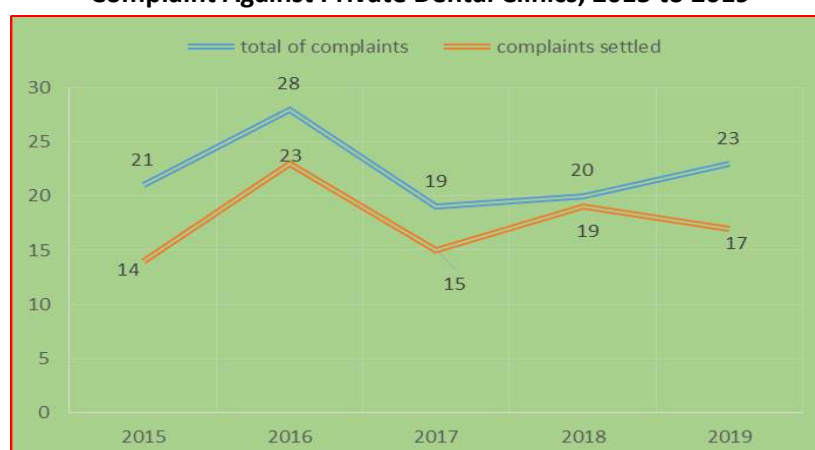
Source: Oral Health Programme, MoH

**i. Complaints Against Private Dental Clinics**

Complaints regarding private dental clinics are handled using the patient’s grievance mechanism. Complaints have risen in 2018 and increased by 15 per cent in 2019 (**Figure 56**). However, 17 out of 23 complaints received (73.9 per cent) were resolved successfully as shown in **Table 91**.

The Federal Territories of Kuala Lumpur and Putrajaya have the highest number of complaints with eight (8) complaints whilst Selangor has the highest number of complaints regarding private dental clinics.

**Figure 56:**  
**Complaint Against Private Dental Clinics, 2015 to 2019**



Source: Oral Health Programme, MoH

**Table 91:**  
**Number of Complaints Received and Settled in Each State, 2019**

No.	State	No. of Complaints Received	No. of Complaints Settled
1.	Johor	4	3
2.	Kedah	0	0
3.	Kelantan	0	0
4.	Melaka	1	1
5.	Negeri Sembilan	1	1
6.	Pahang	0	0
7.	Perak	0	0
8.	Perlis	1	1
9.	Penang	0	0
10.	Sabah	0	0
11.	Sarawak	1	1
12.	Selangor	7	2
13.	Terengganu	0	0
14.	FT Kuala Lumpur	8	8
15.	FT Labuan	0	0
<b>Total</b>		<b>23</b>	<b>17</b>

Source: Oral Health Programme, MoH

### ii. Complaints Regarding Illegal Dental Practice

Qualified dental practitioner means a practitioner who is registered under the Dental Act and has a valid Annual Practising Certificate (APC). However, there were complaints concerning the illegal dental practices on provision of dental practices by unqualified dentists. Illegal dental practices usually being performed in unregistered places, for example the installation of braces which was done in hotels, homestay, residences or beauty centers.

With that said, illegal dental practices can also occur in registered private dental clinics by a registered practitioners who used invalid APC. It was found that the number of complaints on illegal dentistry increased by 16.1 per cent in 2019 compared to 2018 (**Figure 57**).

**Figure 57:**  
**Complaints on Illegal Dentistry and Number Settled, 2015 to 2019**



Source: Oral Health Programme, MoH

The percentage of complaints settled has decreased from 44.9 per cent (2018) to 16 per cent (2019). Penang received the highest number of complaints on illegal dentistry while Perak managed to resolve all complaints it received in 2019. The Federal Territories of Kuala Lumpur and Putrajaya received the second highest number of complaints in 2019 and managed to resolve 50 per cent of the complaints (**Table 92**).

**Table 92:**  
**Complaints on Illegal Dentistry Received and Settled in each State, 2019**

No.	State	No. of Complaint Received	No. of Complaint Settled
1	Johor	10	0
2	Kedah	5	1
3	Kelantan	7	0
4	Melaka	19	0
5	Negeri Sembilan	0	0
6	Pahang	5	2
7	Perak	1	1
8	Perlis	12	1
9	Penang	23	0
10	Sabah	11	0
11	Sarawak	0	0
12	Selangor	19	5
13	Terengganu	3	1
14	FT Kuala Lumpur	22	11
15	FT Labuan	0	0
<b>Total</b>		<b>137</b>	<b>22</b>

Source: Oral Health Programme, MoH

### v. Compoundable Offences

Compounding offenses under Act 586 have been enforced since August 2017 against private health care including private dental clinics that do not comply with the Act and its Regulations. Therefore, full investigation papers need to be prepared to provide proof of the offense and for prosecution purposes. Four (4) investigation papers have been prepared for compounding offences under Act 586 in 2019 and the amount compounded is shown in **Table 93**.

**Table 93:**  
**Compounded Offences Under Act 586 Against Private Dental Clinics, 2018 to 2019**

Year	No. of Cases	State	Offences	Punishment
2018	3	Melaka	1. S31(1)(c) Act 586	Fine RM20,000
			2. S31(1)(c) and S39(1) Act 586	Fine RM40,000
		FT Kuala Lumpur	S31(1)(c) Act 586	Fine RM70,000
2019	1	Selangor	S39(1) Act 586	Fine RM10,000
<b>Total</b>	<b>4</b>			<b>RM140,000.00</b>

Source: Oral Health Programme, MoH

### Prosecution Activities

Prosecution will start after obtaining consent from the Deputy Public Prosecutor. A prosecutor will be appointed to handle the pronouncement of the case while the trial will be handled by the Deputy Public Prosecutor from MoH. The prosecution's activities up to 2019 were taken against complaints or information received regarding illegal dental practices (**Table 94**). There are eleven (11) cases pending due to sanction from the Deputy Public Prosecutor. All of the prosecution cases were violation of the Subsection 4(1) of Act 586.

**Table 94:**  
**Summary of Prosecution Cases and Sentencing, 2015 to 2019**

Year	No of Cases	State	Offences	Punishment
2015	11	FT KL & Putrajaya (3)	Unregistered premise & unregistered practitioners	DNAA*
		FT KL & Putrajaya	Unregistered premise & unregistered practitioners (FB)	Fined RM30,000
		FT KL & Putrajaya (4)	Unregistered premise & unregistered practitioners	NFA**
		Melaka	Unregistered premise & unregistered practitioners (FB)	DNAA
		Terengganu	Unregistered premise & unregistered practitioners (FB)	Fined RM20,000
		Perak	Unregistered premise & unregistered practitioners	NFA
2016	8	Kedah	Unregistered premise & unregistered practitioners (FB)	Fined RM25,000
		Perak	Unregistered premise & unregistered practitioners	Fined RM30,000

Year	No of Cases	State	Offences	Punishment
		Perak	Unregistered premise & unregistered practitioners	Fined RM25,000
		FT KL & Putrajaya	Unregistered premise & unregistered practitioners (FB)	Jailed 2 months
		Melaka	Unregistered premise & unregistered practitioners (FB)	Fined RM30,000
		Johor	Unregistered practitioner	Fined RM20,000
		Terengganu	Unregistered premise & unregistered practitioners (FB)	Fined RM25,000
		Sarawak	Unregistered premise & unregistered practitioners (FB)	Fined RM15,000
2017	14	Pahang (3)	Unregistered premise & unregistered practitioners (FB)	Fined RM60,000 Jailed 6 months
		Pahang	Unregistered premise & unregistered practitioners (FB)	DNNA
		FT KL & Putrajaya	Unregistered premise & unregistered practitioners (FB)	DNNA
		FT KL & Putrajaya (2)	Unregistered premise & unregistered practitioners	Fined RM100,000 Jailed 1 month
		Selangor (2)	Unregistered premise & unregistered practitioners (FB)	Fined RM30,000 Fined RM200
		Melaka	Unregistered premise & unregistered practitioners (FB)	Fined RM70,000
		Terengganu	Unregistered premise & unregistered practitioners (FB)	Fined RM40,000
		Perak	Unregistered premise & unregistered practitioners (FB)	Jailed 6 months
		Kedah	Unregistered premise & unregistered practitioners (FB)	Jailed 12 months
		Johor	Unregistered premise & unregistered practitioners (FB)	Jailed 3 months
2018	16	Melaka (3)	Unregistered premise & unregistered practitioners compounded (2)	Waiting for sanction Fined RM62,000
		Johor (2)	Unregistered premise & unregistered practitioners (FB)	Fined RM30,000
		Terengganu	Unregistered premise & unregistered practitioners (FB)	Fined RM40,000
		Selangor	Compound	Fined RM10,000
		FT KL & Putrajaya (2)	Unregistered premise & unregistered practitioners (FB)	Fined RM30,000
		Kelantan (2)	Unregistered premise & unregistered practitioners (FB)	Waiting for sanction
		Negeri Sembilan	Unregistered premise & unregistered practitioners	
		Sarawak	Unregistered premise & unregistered practitioners (FB)	
		Penang (2)	Unregistered premise & unregistered practitioners (FB)	
Perlis	Unregistered premise & unregistered practitioners (FB)			

Year	No of Cases	State	Offences	Punishment
2019	3	Pahang (2)	Unregistered premise & unregistered practitioners (FB)	Waiting for sanction
		Perak	Unregistered premise & unregistered practitioners	
<b>Total</b>	<b>42</b>			

\*DNAA = Discharge not amounting to acquittal

\*\*NFA = No further action

Source: Oral Health Programme, MoH

### Promotion Activities

Legislation and Enforcement Division, Oral Health Programme also took precautionary measures in addressing the issue of illegal dental practice activities. Participation in promotion activities include radio talk programme, television interview programme, KOA programme, circulating pamphlets and brochures and displaying bunting in dental clinics (Table 95).

**Table 95:**  
**Promotion Activities, 2019**

No	State	Radio / TV talks	Live Talk (live audience)	Lecture/ CDE
1.	Johor	0	0	4
2.	Kedah	0	2	4
3.	Kelantan	1	0	5
4.	Melaka	1	1	1
5.	Negeri Sembilan	0	1	3
6.	Pahang	0	0	3
7.	Perak	0	0	4
8.	Perlis	0	3	2
9.	Pulau Pinang	0	0	0
10.	Sabah	0	0	0
12.	Sarawak	4	15	0
11.	Selangor	0	0	4
13.	Terengganu	0	1	1
14.	FT KL & Putrajaya	0	4	4
15.	FT Labuan	0	0	0
<b>Total</b>		<b>6</b>	<b>27</b>	<b>34</b>

Source: Oral Health Programme, MoH

### Enhance Competency Activities for Dental Enforcement Officer

Legislation and Enforcement Division (CPP), Oral Health Programme organised trainings and courses to enhance the competency of dental enforcement officer. In 2019, a total of RM32,000.00 has been spent on courses and trainings. In addition, the dental enforcement officer also attended training organised by the Private Medical Practice Control Division (CKAPS HQ) and the State Private Medical Practice Control Division (CKAPS JKN/ JKWP) and other organisation. Each dental enforcement officer must attend at least two (2) courses/



trainings throughout the year. The list of training organised by CPP and other trainings attended by dental enforcement officers are as shown in **Table 96 and 97**.

**Table 96:**  
**List of Courses Organised by CPP, 2019**

Date	Title Of Courses	No. of Officers
25 - 27 March 2019	<i>Kursus Digital Forensik (1<sup>st</sup> Responder) Bagi Pegawai Pergigian Penguatkuasa</i>	24
8 - 10 July 2019	<i>Kursus Pemantapan Kertas Siasatan (Rakaman Percakapan)</i>	22
10 - 13 September 2019	<i>Intelligence Gathering Pegawai Penguatkuasa</i>	15

Source: Oral Health Programme, MoH

**Table 97:**  
**Other Courses Attended by Dental Enforcement Officer, 2019**

Date	Name Of Courses	No. of Officers	Organiser
4-7 March 2019	Course On Medico legal For Legal Officer	1	ILKAP
5 March 2019	<i>Kursus Penguatkuasaan CKAPS Sarawak</i>	4	CKAPS, JKN SWK
12-13 March 2019	<i>Kursus Penguatkuasaan Akta 586 &amp; 804</i>	3	BKP, JKNJ
18-19 March 2019	<i>Kursus Serbuan Siri 1/2019</i>	5	CKAPS PP
12-15 March 2019	<i>Kursus Penyediaan Kertas Siasatan &amp; Pendakwaan</i>	10	CKAPS WPKL&P
2-4 April 2019	<i>Kursus Pemantapan Penyediaan Kertas Siasatan &amp; Pendakwaan</i>	2	CKAPS LABUAN
10-13 September 2019	<i>Kursus Pemantapan Kertas Siasatan</i>	1	ILKAP
25-27 September 2019	<i>Kursus Pemantapan Pegawai Penguatkuasa (Pergigian)</i>	11	BKP, JKNS
7 November 2019	<i>Kursus Jurufoto Untuk Kes Serbuan</i>	6	BKP, JKNT
14-15 November 2019	<i>Bengkel Kertas Siasatan</i>	4	FARMASI SABAH

Source: Oral Health Programme, MoH

### Occupational Safety and Health Activities

Various guidelines relating to occupational safety and health in dental practices have been published, namely:

- i. Guidelines on Infection Control in Dental Practice (February 2017);
- ii. Guidelines on Maintaining Quality of the Dental Unit Water System (2010);
- iii. Guidelines on Radiation Safety in Dentistry (2<sup>nd</sup> edition 2010);
- iv. Guidelines for Occupational Safety and Health in the Dental Laboratory (1<sup>st</sup> edition 2002, 2<sup>nd</sup> edition 2011);
- v. Methods of Disposal of Hypodermic Needles (2013);
- vi. Guidelines for Position Statement on The Use of Dental Amalgam (2<sup>nd</sup> edition 2013);

vii. Guidelines for The Oral Healthcare Practitioner Infected with Blood-borne Viruses (2014)

Based on the above guidelines, checklist for Occupational Safety and Health Audit was developed and used throughout the country to ensure that the working environment is safe, especially to oral health personnel and the public who seek treatment at MoH dental facilities. The Occupational Safety and Health Checklist contain five (5) sections namely:

- i. Safety and Health Management at Dental Facilities;
- ii. Cross Infection Control in Dental Facilities;
- iii. Use of Dental Amalgam in Dental Practices;
- iv. Dental Radiation Safety; and
- v. Safety and Health in Dental Laboratories

**i. Distribution of Audited Facilities**

In 2019, a total of 1,107 dental facilities (46.4 per cent) has been audited with the target set at 33.3 per cent. However, the performance was lower than 2018 which was 52.5 per cent (1196/2290). Three (3) states did not achieve the target as shown in **Table 98**.

**Table 98:**  
**Occupational Safety and Health Audit of Dental Facilities, 2019**

No.	State	No. of District	Number of Dental Facilities		
			Total	No. Audited	% Audited
1	Kelantan	10	256	145	56.6
2	FT Labuan	1	9	8	88.9
3	Perak	10	254	177	69.7
4	Johor	10	188	94	50.0
5	Sabah	9	197	96	48.7
6	Sarawak	11	284	147	51.8
7	Kedah	11	176	88	50.0
8	Terengganu	8	119	81	68.1
9	Selangor	9	160	54	33.7
10	FT Kuala Lumpur & Putrajaya	5	147	62	42.2
11	Perlis	2	56	18	32.1
12	Pahang	11	187	62	33.1
13	Pulau Pinang	5	144	51	35.4
14	Negeri Sembilan	7	119	42	35.3
15	Malacca	3	86	28	32.6
<b>Total</b>		<b>112</b>	<b>2,382</b>	<b>1,107</b>	<b>46.5</b>

Source: Oral Health Programme, MoH

**Occupational Safety and Health Audit Compliance**

The target is for all audited dental facilities to achieve compliance score  $\geq$  80 per cent. Ten (0.9 per cent) dental facilities were found with a compliance score  $<$  80 per cent and have to undergo surveillance audit the following year. Audit performance is as shown in **Table 99**.

**Table 99:**  
**Occupational Safety & Health Audit Performance 2019**

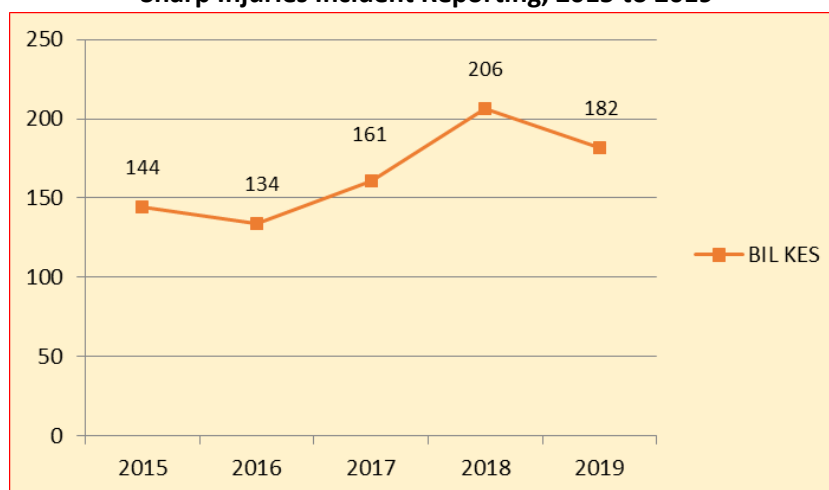
No	State	No of Dental Facilities	
		Audited	Compliance Score < 80%
1	Kelantan	145	0
2	FT Labuan	8	0
3	Perak	177	0
4	Johor	94	0
5	Sabah	96	4
6	Sarawak	147	5
7	Kedah	88	1
8	Terengganu	81	0
9	Selangor	54	0
10	FT KL & Putrajaya	62	0
11	Perlis	18	0
12	Pahang	62	0
13	Pulau Pinang	51	0
14	Negeri Sembilan	42	0
15	Malacca	28	0
<b>Total</b>		<b>1,107</b>	<b>10</b>

Source: Oral Health Programme, MoH

### Sharp Injuries Reporting

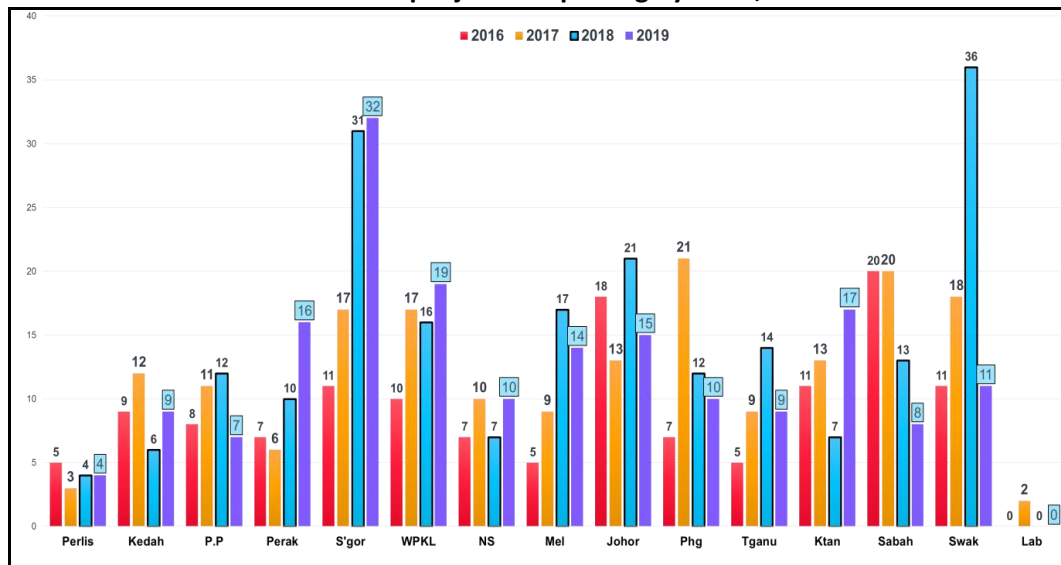
Besides regular occupational safety and health audit, injuries due to sharp equipment were also monitored. Incidence of sharp injuries in 2019 showed a decrease compared to 2018 (**Figure 58**). Kelantan showed an increase in incidence but Sarawak showed a downward trend compared to 2018. The highest number of sharp injuries were reported in Selangor. (**Figure 59**).

**Figure 58:**  
**Sharp Injuries Incident Reporting, 2015 to 2019**



Source: Oral Health Programme, MoH

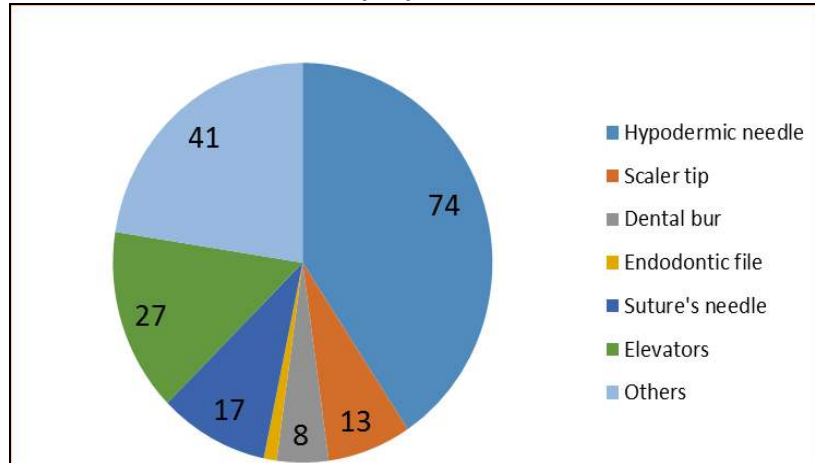
**Figure 59:**  
**Incident Sharp Injuries Reporting by State, 2019**



Source: Oral Health Programme, MoH

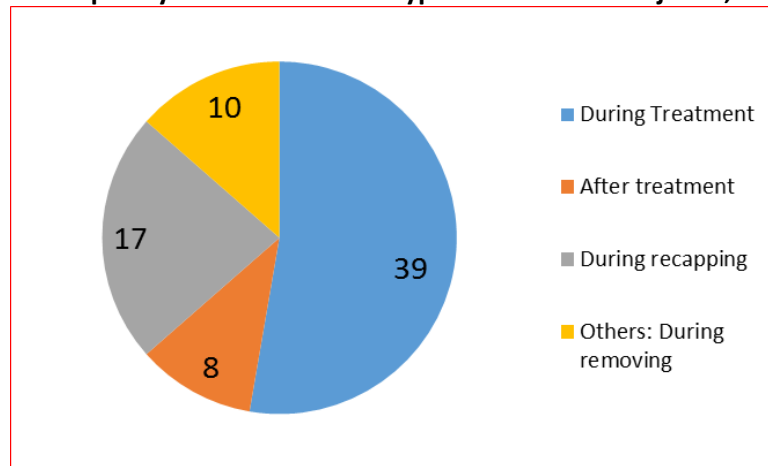
Hypodermic needle is the leading cause of injury and most of the injury occurs during treatment. However, in the “Others” category of causes, dental probe contributes towards the highest number of injuries (Figure 60, 61 and 62).

**Figure 60:**  
**Causes of Sharp Injuries Incident, 2019**



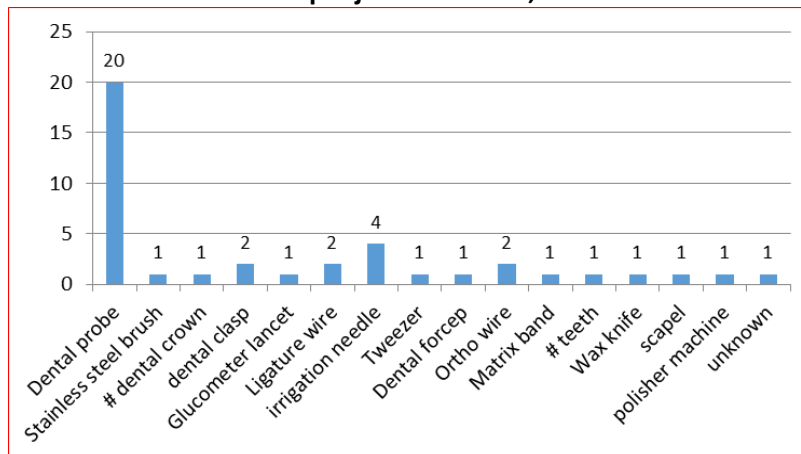
Source: Oral Health Programme, MoH

**Figure 61:**  
**The Frequency of Occurrence of Hypodermic Needle Injuries, 2019**



Source: Oral Health Programme, MoH

**Figure 62:**  
**Other Equipment under “Others” Category that Contributed to Sharp Injuries Incident, 2019**



Source: Oral Health Programme, MoH

## ORAL HEALTH QUALITY

The Quality Assurance Programme (QAP) is intended to improve the quality, efficiency and effectiveness of health services delivery including oral health. The QAP also facilitates the planned and systematic evaluation of the quality of services delivered. The goal of the QAP is to ensure that within the constraints of resources the ‘optimum achievable benefit’ is delivered.

### National Indicator Approach (NIA)

In 2019, four (4) NIA indicators were monitored to measure the performance of the primary and community oral healthcare services (**Table 100**).

**Table 100**  
**Oral Health Indicators under NIA, 2019**

No.	Indicator	Standard (Per cent)	Achievement (Per cent)	SIQ Yes/No
			2019	
1	Percentage of primary schoolchildren maintaining orally-fit status	≥ 65	62.5	Yes
2	Percentage of secondary schoolchildren maintaining orally-fit status	≥ 80	68.4	Yes
3	Percentage of non-conformance of fluoride level at reticulation points (Level < 0.4ppm)	≤ 25	14.9	No
4	Percentage of non-conformance of fluoride level at reticulation points (Level > 0.6ppm)	≤ 7	0.9	No

### Key Performance Indicators (KPI) 2019

25 KPIs were monitored by the Oral Health Programme in 2019. 16 KPIs are monitored three (3) monthly, eight (8) KPIs are monitored every six (6) months and one (1) KPI is monitored on a yearly basis. Overall, 15 KPIs achieved targets and 10 KPIs were below the targets set.

The number of dental clinics providing daily outpatient service contributed towards one (1) KPI for the Health Minister. Two (2) of the KPIs were also chosen as KPIs for the Director-General of Health and monitored by the Public Services Department (**Table 101**).

**Table 101**  
**Key Performance Indicators, Oral Health Programme, MoH 2019**

KPI Domain	Monitoring Indicator	Target (%)	Achievement (%)
Accessibility to MoH oral healthcare services	Percentage of dental clinics providing daily outpatient service	≥84.0	84.4
	Percentage of Health Clinics with dental facility component	≥75.0	64.7
	Percentage of antenatal patient coverage	≥60.0	50.7
Oral health status of schoolchildren	Percentage of primary schoolchildren rendered orally-fit (over new attendances)	≥96.0	96.9

KPI Domain	Monitoring Indicator	Target (%)	Achievement (%)
	Percentage of secondary schoolchildren rendered orally-fit (over new attendances)	≥85.0	94.5
	Percentage of primary schoolchildren maintaining orally-fit status	≥65.0	62.5
	Percentage of secondary schoolchildren maintaining orally-fit status	≥70.0	68.4
	Percentage of 6 years old schoolchildren free of dental caries	≥50.0	39.7
	Percentage of 12 years old schoolchildren free of dental caries	≥70.0	62.4
	Percentage of 16 years old schoolchildren free of dental caries	≥50.0	56.9
	Percentage of primary schoolchildren whom required fissure sealant received fissure sealant treatment	≥95.0	98.8
	Percentage of schoolchildren identified smoking (through a KOTAK program) has undergone at least 3 interventions	≥51.0	63.8
Oral health status of antenatal mother	Percentage of antenatal mother with orally fit status	≥45.0	31.0
Oral health status of elderly	Percentage of 60 years old with functional 20 teeth or more	≥60.0	43.2
Delivery of denture services	Percentage of patients received dentures within 3 months	≥64.0	84.4
	Percentage of patients aged 60 years and above received dentures within 8 weeks	≥50.0	66.7
Efficiency and Effectiveness of Service Delivery	Percentage of <i>Ikon Gigi</i> (iGG) conduct activity at least once (1) a month	≥61.0	37.8
	The percentage of budget for <i>Latihan Dalam Perkhidmatan (LDP)</i> in the Country organized by the Oral Health Programme completed in the first week of December of the current year	100	100
Quality dental service and MS ISO certification	Percentage of dental clinics with MS ISO certification	≥85.0	79.6
	Percentage of MoH dental facilities achieving at least 80 per cent compliance during Safety and Health audits	≥95.0	99.1
Monitoring of Private Dental Clinics	Percentage of monitoring inspection conducted on identified private dental clinics	100	94.6
Clients Charter Index	Percentage of outpatients received treatment in 60 minutes	≥86.0	91.7
Index of Customers Satisfaction	Percentage of customers satisfied with dental service / treatment	≥95.0	96.8
Index of Innovation Culture	Innovation Culture Replication - all Dental Clinics replicating / practicing innovation (innovation refers to the replication of innovation and innovation developed within 2 (two) years.	≥80.0	94.0

KPI Domain	Monitoring Indicator	Target (%)	Achievement (%)
Complaints Index	Performance of action taken on complaints	≥85.0	97.2

Source: Oral Health Programme, MoH

### MS ISO 9001: 2015

Nationwide, out of 671 dental clinics providing primary oral healthcare services, 535 dental clinics (79.7 per cent) are ISO-certified. Sawarak and Pahang were the only states which have not received MS ISO 9001:2015 certification. In addition, Sarawak (with 11 Divisions) is the only state that still has the original district approach certification.

Training on MS ISO is done regularly to update the knowledge and skills of existing personnel as well as to train new personnel. The majority of states conducted courses on ISO awareness and training in internal audits. Many of the training sessions were ‘in-house’ due to limited funds for ISO training.

Bengkel Lead Assessor MS ISO 9001:2015 was conducted at The Pearl Hotel, Kuala Lumpur from 18 until 22 November 2019. 20 participants attended this workshop. An exam was held at the end of the session and 16 participants have passed the exam.

### Innovation Awards, MoH

Innovation Awards, MoH 2019 was held at Premiere Hotel, Klang from 29 until 30 October 2019. The objectives of the convention were to:

- give recognition to innovations by MoH personnel
- inspire creativity and innovation in their daily work
- share the application of useful innovations
- improve services through adoption of innovations

The event was officiated by YBrs. Dr Doreyat Bin Jemun the Principle Director of Oral Health Programme, Ministry of Health. The awards were classified into four (4) categories - Product, Process, Service and Technology (**Table 102**).

**Table 102**  
**Winners of National Innovation Awards, 2019**

Position	Project	Organisation	State
<b>Product Category</b>			
1st	Quick Clip Connector	<i>Hospital Sultanah Aminah, Johor Bahru</i>	Johor
2nd	Oralglow	<i>Jabatan Bedah Mulut &amp; Maksilofasial, Hospital Raja Perempuan Zainab II</i>	Kelantan
3rd	Whizz Bounce Chair	<i>Perkhidmatan Pemulihan Carakerja, Pejabat Kesihatan Daerah Seremban</i>	Negeri Sembilan



Process Category			
1st	Waxbite Helper	<i>Klinik Pergigian Padang Serai</i>	Kedah
2nd	Fabricated Iris Mould (FIM) bagi Pembuatan Iris Dalam Penghasilan Prosthesis Okular	<i>Bahagian Kesihatan Pergigian, JKN Johor</i>	Johor
3rd	Quick Reference Mind Map For Primary Health Care	<i>Klinik Kesihatan Petaling Bahagia</i>	Kuala Lumpur
Service Category			
1st	Heart Failure Frequent Flyer Programme	<i>Hospital Tengku Ampuan Rahimah, Klang</i>	Selangor
2nd	Pharmfair	<i>Bahagian Perkhidmatan Farmasi, JKN Terengganu</i>	Terengganu
3rd	Dengue Abating Shooter Drone	<i>Pejabat Kesihatan Daerah Melaka Tengah</i>	Melaka
Technology Category			
1st	Sistem Pengurusan Pendaftaran Ahli Farmasi (PRISMA)	<i>Program Perkhidmatan Farmasi</i>	IPKKM
2nd	Emergency Department Resources Integrated Computerised System (EDRICS)	<i>Jabatan Kecemasan dan Trauma, Hospital Tengku Ampuan Afzan</i>	Pahang
3rd	e-PAPS	<i>Jabatan Patologi, Hospital Queen Elizabeth</i>	Sabah

Source: Oral Health Programme, MoH

### MoH Client's Charter

The Client's Charter for the Legal and Enforcement Division is application for registration of new dental clinics received from the state and federal territories. To meet customer expectations, this goal is set to measure the division ability on managing and approving the application. The performance will also have an impact on the performance of legal and enforcement units at the state and federal levels. **Table 103** shows customer charter achievements for 2019.

**Table 103:**  
**Performance of MoH Client's Charter, 2019**

Indicator	Target	Achievement
To ensure applications and approvals are processed and completed within the targeted period from the date complete application is received and meets the requirements of the application and legal requirements.		
i. Percentage of private dental clinics registration verified within 5 days (from the date of application files received by CKAPS HQ)	95%	100% (287/287)

## WAY FORWARD / CONCLUSION

Oral health is essential to overall health and quality of life. Dental diseases and problems such as dental caries and periodontal problems are one of the most common non-communicable diseases (NCDs) in the world and in Malaysia. It has an impact on the productivity of an individual and puts strain on the society and economy as well as pressure on the oral healthcare services and resources.

The oral health status of the Malaysian population has improved but at a rather slow rate despite Oral Health Programme efforts in providing comprehensive oral health services. Thus, there is a need to relook at the strategies aiming towards a more effective service delivery.

To help an individual achieve and maintain a healthy level of life that enables him to lead a productive life, a global status of oral healthcare services focusing on the needs of the people must be provided. Thus as a way forward, the following strategies can be considered:

- i. Integrating oral health with general health in all health-related policies using the Common Risk Factor Approach to better manage diseases and oral health problems in the community as oral health problems and other health diseases have the same social determinants. Moreover, oral health problems share the same risk factors as other non-communicable diseases (NCDs). For example, controlling the level of sugar intake in an individual's diet can prevent and reduce the incidence of dental caries as well as diabetes. This approach not only contributes to improving people's oral health but also reduces NCDs.
- ii. Holistic and comprehensive network of services to help bridge the oral health gap between the urban and rural communities to be further enhanced. Current oral health services focusing on the target groups that include the toddlers, ante-natal mothers, pre-school children, primary and secondary schoolchildren, special need children and the elderly need to be further strengthen to improve the oral health status of the populations.
- iii. Equitable access to quality oral healthcare services by ensuring all segment of the society receive services regardless of gender, ethnicity, geographical and socioeconomic factors as well as affordable services that focus on poorer and less vulnerable groups.
- iv. Responsive, patient-centered and timely oral healthcare services to the population.
- v. Scientific based services with optimal use of resources to ensure efficiency as well as to prevent duplication and waste.

- vi. Services which focuses on prevention and promotion that aim to empower individuals, families and communities on health and thus play a greater role in enhancing their health status. This in turn will promote healthy lifestyle practices among the population.
- vii. Enhance engagement and collaboration with the private sectors and non-governmental organisations to facilitate in the expansion of services through resource sharing, and also help to mobilise the communities as well as promote healthy lifestyles.
- viii. Provide services in a safe and conducive working environment driven by well-trained and dedicated oral health personnel that work as a team at dental facilities which is being continuously improved with technology appropriate equipment.
- ix. Provide services in accordance to the Standard Operating Procedures and in compliance with the quality standard as well as being supported by ICT systems to ensure more efficient services.
- x. Regular monitoring on the performance and evaluation on the effectiveness of all programmes and activities conducted to ensure appropriate actions are taken to improve the services provided.

## EDITORIAL COMMITTEE 2019

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Editors	:	Dr Noorashikin binti Mustapha Yahya
	:	Dr Lily Laura binti Azmi
Proof Reader	:	Dr Cheng Lai Choo

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## **ORAL HEALTH PROGRAMME MINISTRY OF HEALTH MALAYSIA**

Level 5, Block E10, Precint 1  
Federal Government Administrative Centre  
62590 Putrajaya, Malaysia

**Tel : 60(3) 88834215 Fax : 60(3)88886133**