

ORAL HEALTH INFORMATION BOOKLET 2011

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Introduction

VISION AND MISSION

Vision

Together towards a Healthy
Nation

Mission

To improve Oral Health through
effective, equitable, affordable,
accessible, safe & sustainable
Oral Health Care in Brunei
Darussalam

RESEARCH AND DEVELOPMENT DIVISION

Research and Development Division was established under the Department of Dental Services in January 2008, to provide the Ministry of Health and other relevant National, Regional and International Authorities with the essential oral health data.

The R & D Division's primary function is to ensure the implementation of a more proper scientific system that is essential to collect valid and reliable data on the oral health status of the population of Brunei Darussalam.

In addition to providing this epidemiological information, this Division will also give other significant oral health and related information which are needed by oral health policy- and decision-makers, health planners and administrators. This information includes:

1. Risk factors to oral health.
2. Oral health-related quality of life.
3. Oral health services coverage of and utilisation of oral health services by the population in general and the target groups in particular.
4. Intervention strategies and the oral health care provided.
5. Administrative procedures.
6. Quality of oral health care and services.

This information gathered can also contribute to the so-called WHO Global Oral Health Data Bank which, among other things, will show the trends and burden of oral diseases in most countries. These data can then be used to monitor oral diseases and trends over time and measure progress in oral health promotion and oral disease prevention. They can also be used to assess the impact of the Oral Health System as to whether it is effective or needs to be better rationalised and adjusted and developed accordingly.

On top of these, we also need vital information on the **Input** into the Oral Health Care Systems, the **Process** of delivering these systems, and the **Output** and **Outcome** from the services delivered. All these information can only be collected efficiently with the establishment of a dynamic Oral Health Information System under the R & D Division.

DEMOGRAPHY

Brunei Darussalam conducted the first population census in 1971. The fifth decennial 2011 census of population and housing has been completed by the Department of Economic Planning and Development, Prime Minister's Office.

Table 1.4 Population Demography (2008-2011)

<i>Estimated Population</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011[#]</i>	<i>2011^{##}</i>
Total (in thousands) :	398.0	406.2	414.4	422.7	393.162
Male (in thousands) :	211.0	215.0	219.1	223.3	202.668
Female (in thousands) :	187.0	191.2	195.3	199.4	190.494
Sex ratio (M / 100F) :	113	112	112	112	106
Persons / sq.km :	69	70	72	73	68
Annual rate of increase :	2.1%	2.1%	2.0%	2.0%	1.7%
Population median age :	26.4	26.6	26.8	27.3	...
<i>Age Structure (in thousands)</i>					
0 - 4 :	35.2 (8.8%)	34.7 (8.5%)	35.4 (8.5%)	35.1 (8.3%)	...
5 - 19 :	105.3 (26.5%)	106.4 (26.2%)	106.5 (25.7%)	107.3 (25.4%)	...
20 - 54 :	227.1 (57.1%)	232.5 (57.2%)	237.8 (57.4%)	242.7 (57.4%)	...
55 - 64 :	17.2 (4.3%)	18.8 (4.6%)	20.3 (4.9%)	22.6 (5.3%)	...
65 & Over :	13.2 (3.3%)	13.8 (3.4%)	14.4 (3.5%)	15.0 (3.5%)	...
<i>Race (in thousands)</i>					
Malay* :	265.1 (66.6%)	269.4 (66.3%)	273.6 (66.0%)	277.8 (65.7%)	...
Chinese :	43.7 (11.0%)	44.6 (11.0%)	45.4 (11.0%)	46.1 (10.9%)	...
Others :	89.2 (22.4%)	92.2 (22.7%)	95.4 (23.0%)	98.8 (23.4%)	...
<i>District (in thousands)</i>					
Brunei-Muara :	276.6 (69.5%)	283.3 (69.7%)	290.1 (70.0%)	296.5 (70.1%)	279.842 (71.2%)
Belait :	66.0 (16.6%)	67.1 (16.5%)	68.3 (16.5%)	69.6 (16.5%)	60.609 (15.4%)
Tutong :	45.3 (11.4%)	45.7 (11.3%)	45.8 (11.1%)	46.3 (11.0%)	43.855 (11.2%)
Temburong :	10.1 (2.5%)	10.1 (2.5%)	10.2 (2.5%)	10.3 (2.4%)	8.856 (2.3%)

Note :

* - Including Other Indigenous Groups of the Malay race namely Belait, Bisaya, Brunei, Dusun, Kedayan, Murut or Tutong.

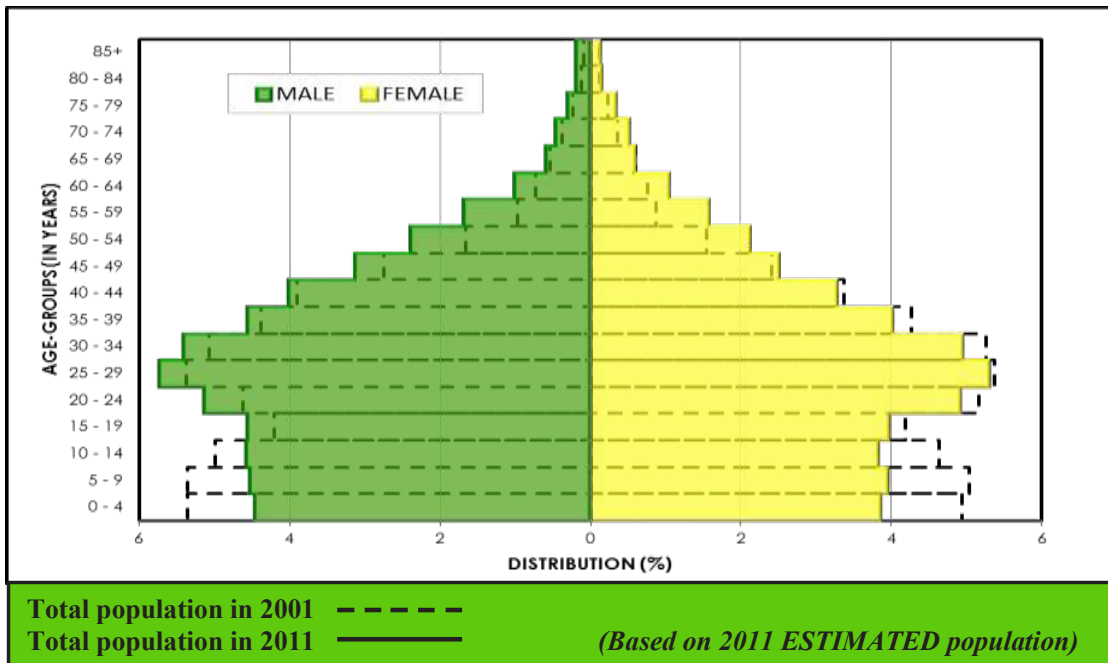
- Figures are based on 2011 ESTIMATED Population based on 2001 Census.

- Figures are based on Census 2011 Preliminary Report by Department of Economic Planning and Development. Census 2011 by age and race breakdowns are not available as yet.

Source :

Department of Economic Planning & Development, Prime Minister's Office

POPULATION PYRAMID



Note: Population pyramid shows percentage distribution of population by gender and age-groups. For example, (0 - 4) age-group for the year 2011 is represented with 8.3% of total population in which 4.4% and 3.9% are made up of male and female population respectively.

Figure 1.5a Population Pyramid 2011

POPULATION TREND OF BRUNEI DARUSSALAM (1911-2011)

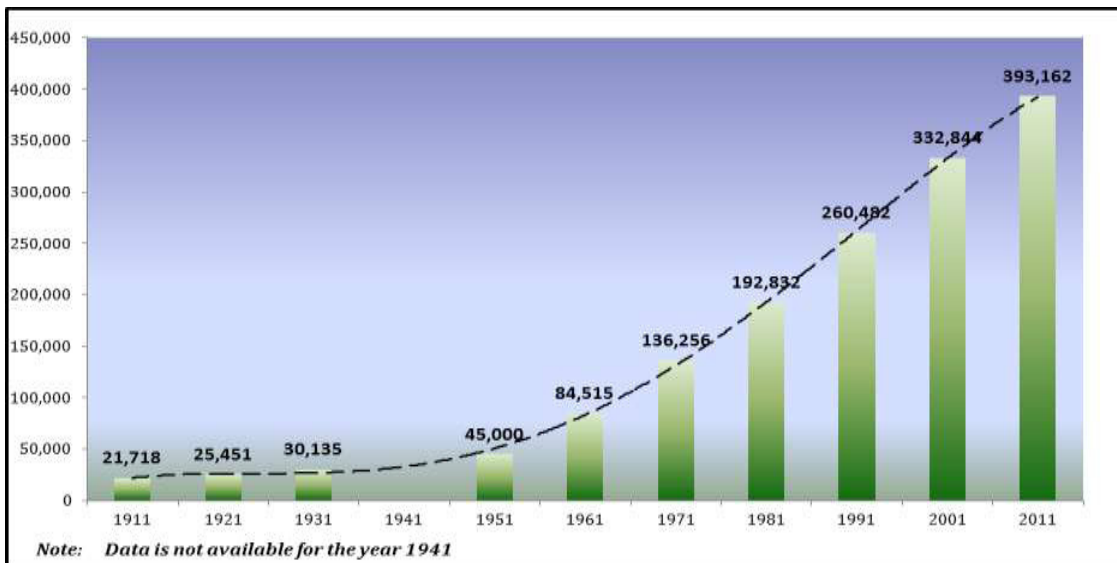


Figure 1.5b Population Trend of Brunei Darussalam (1911-2011)

HUMAN RESOURCES

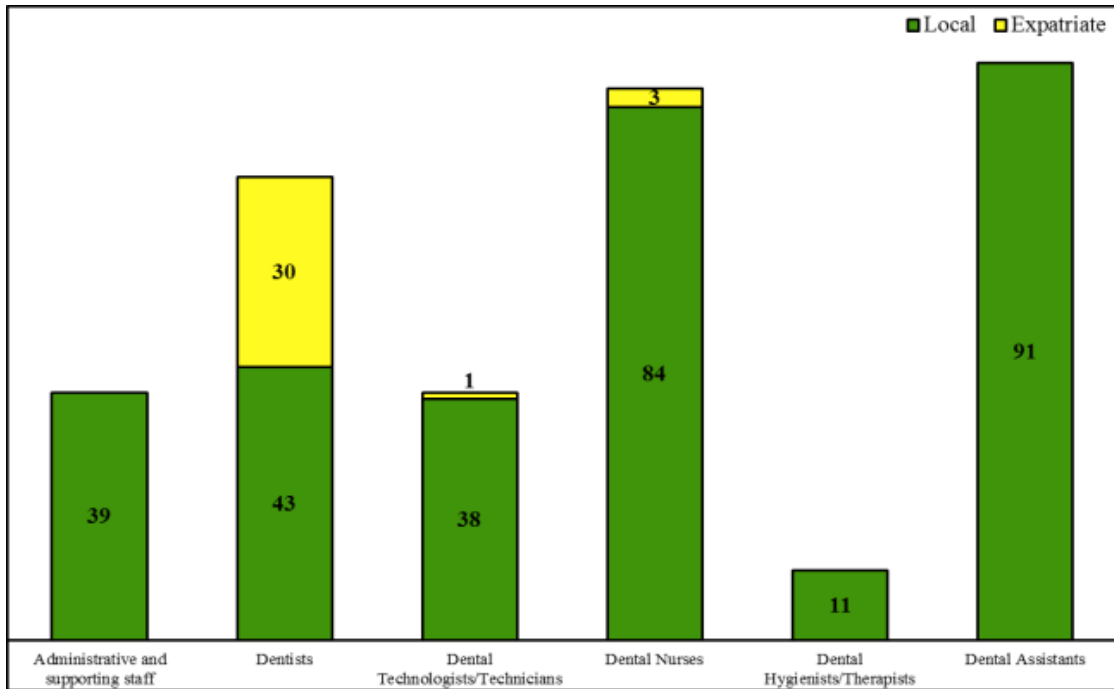


Figure 1.6a Number of human resources in the Department of Dental Services by each discipline (2011)

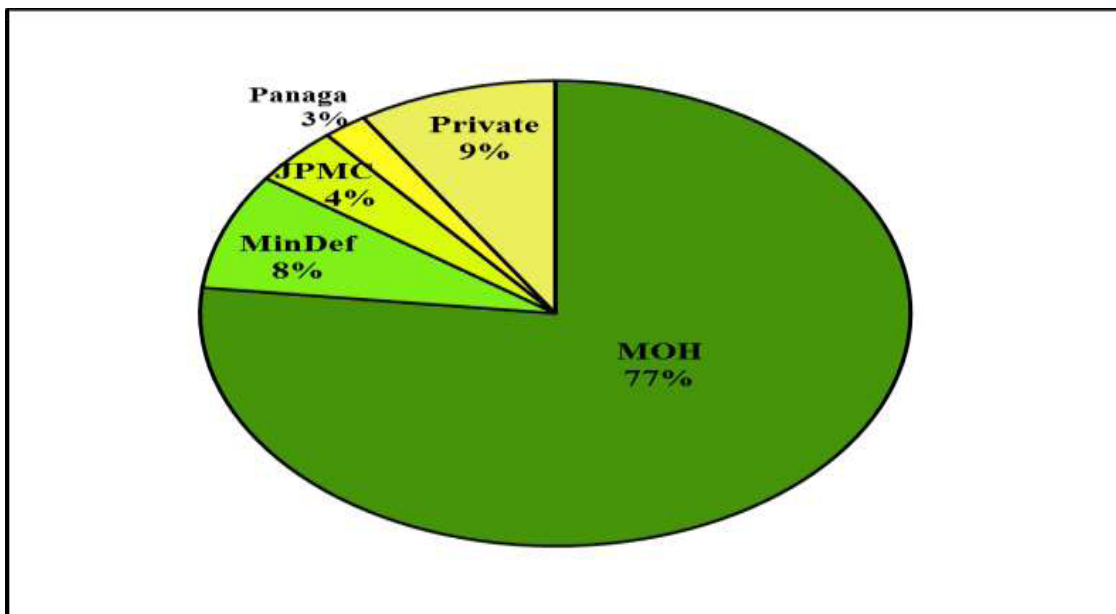


Figure 1.6b Proportion of Dentists in Brunei Darussalam working with the Ministry of Health (MOH), Ministry of Defence (MinDef), Jerudong Park Medical Centre (JPMC), Panaga and Private Clinics (2011)

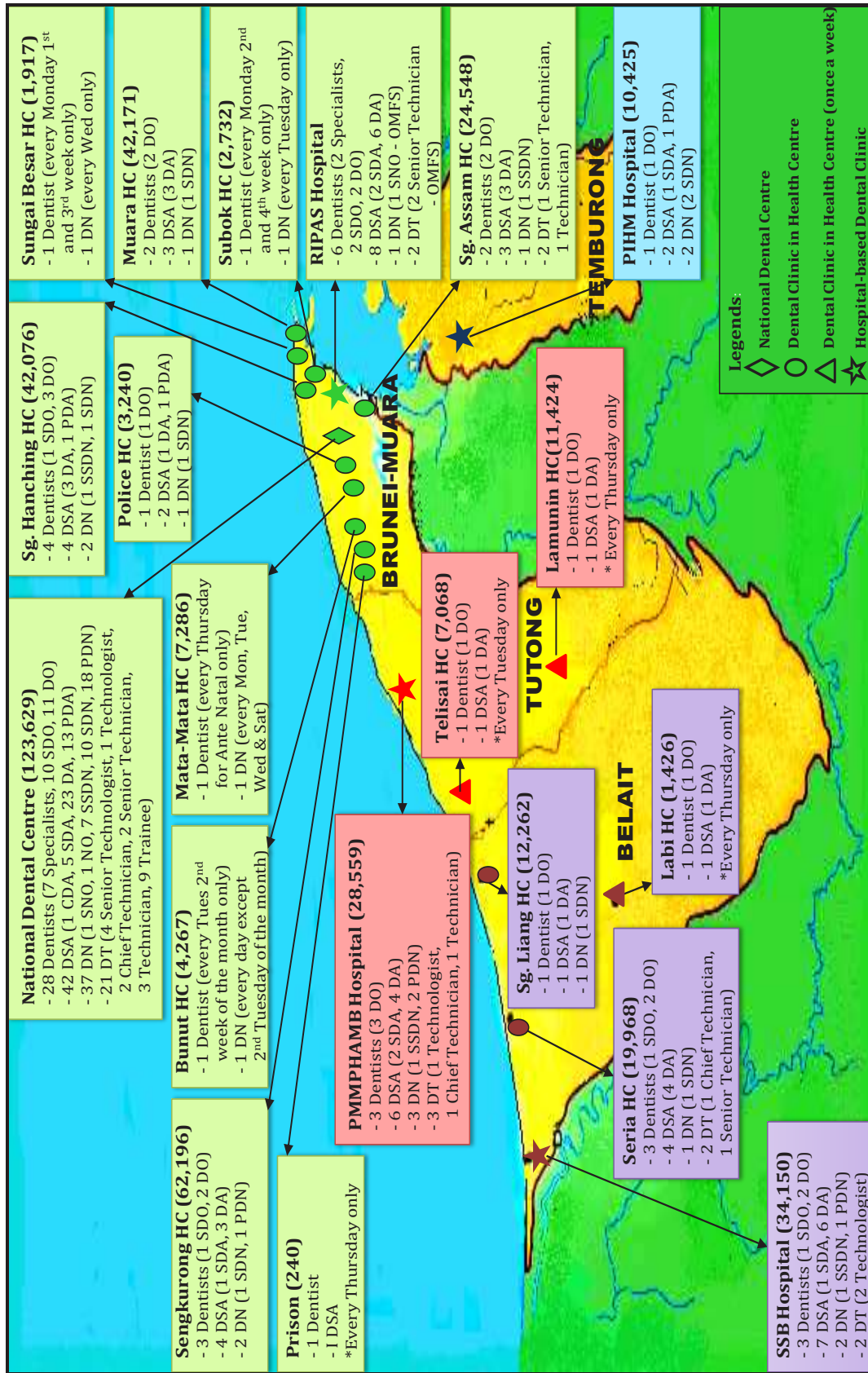


Figure 1.6c Distributions of dental staffs throughout the state (2011)

DISTRIBUTION OF DENTAL CHAIRS

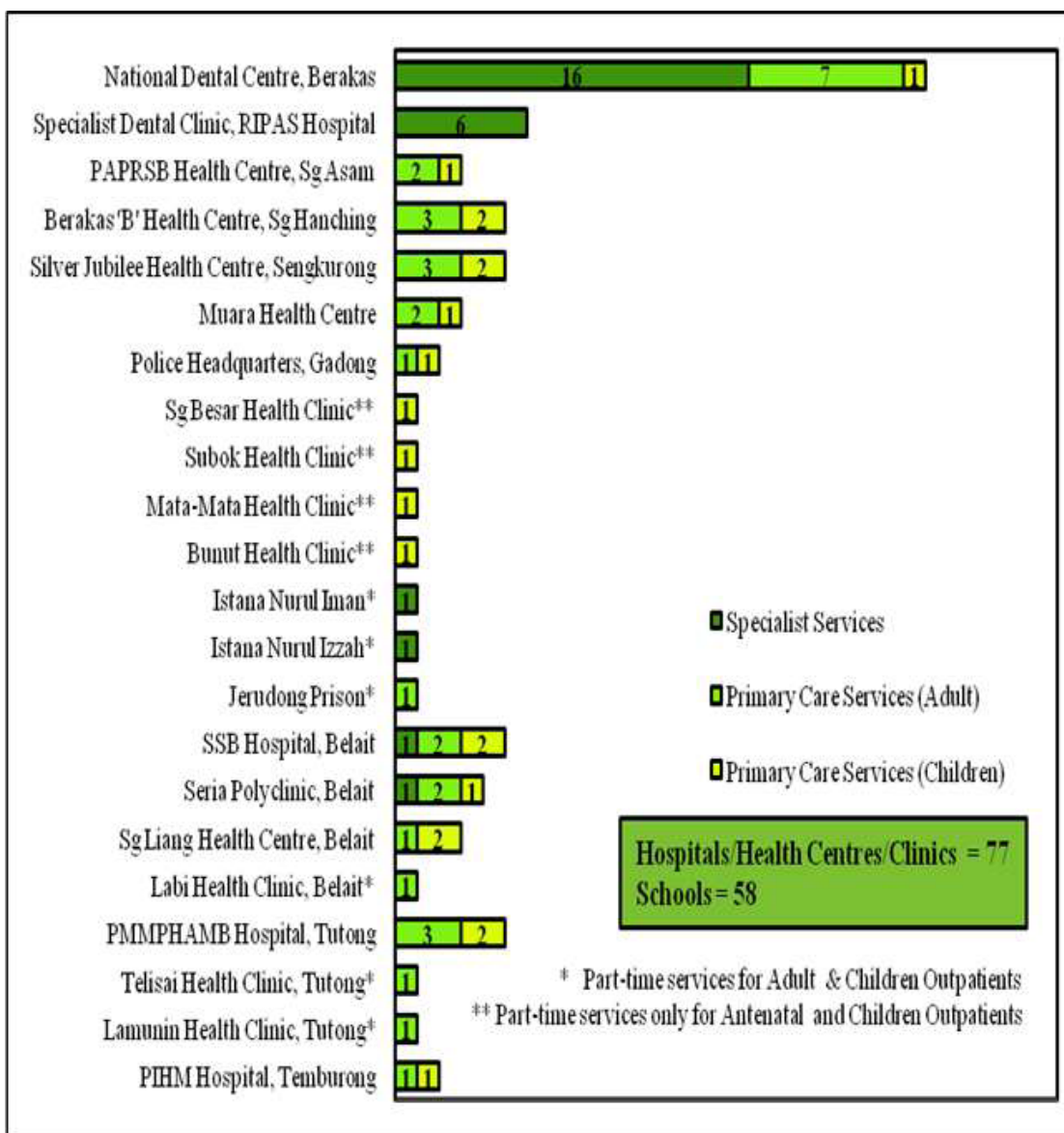


Figure 1.7 Distribution of dental chairs at Hospitals/Health Centres/Clinics and schools

GOVERNMENT DENTAL EXPENDITURES

Table 1.8 Comparison of budget allocation between the Ministry of Health and the Department of Dental Services (2005-2011)

Budget Year	Department of Dental Services (B\$ Millions)	Ministry of Health (B\$ Millions)	Percentage of budget allocation of the Department of Dental Services from the Ministry of Health
2005-2006	8.85	240.86	3.7
2006-2007	8.55	244.33	3.5
2007-2008	10.04	259.72	3.9
2008-2009	10.20	264.44	3.9
2009-2010	11.20	286.82	3.8
2010-2011	10.87	295.41	3.6
2011-2012	13.16	306.85	4.2

UTILISATION OF GOVERNMENT DENTAL SERVICES

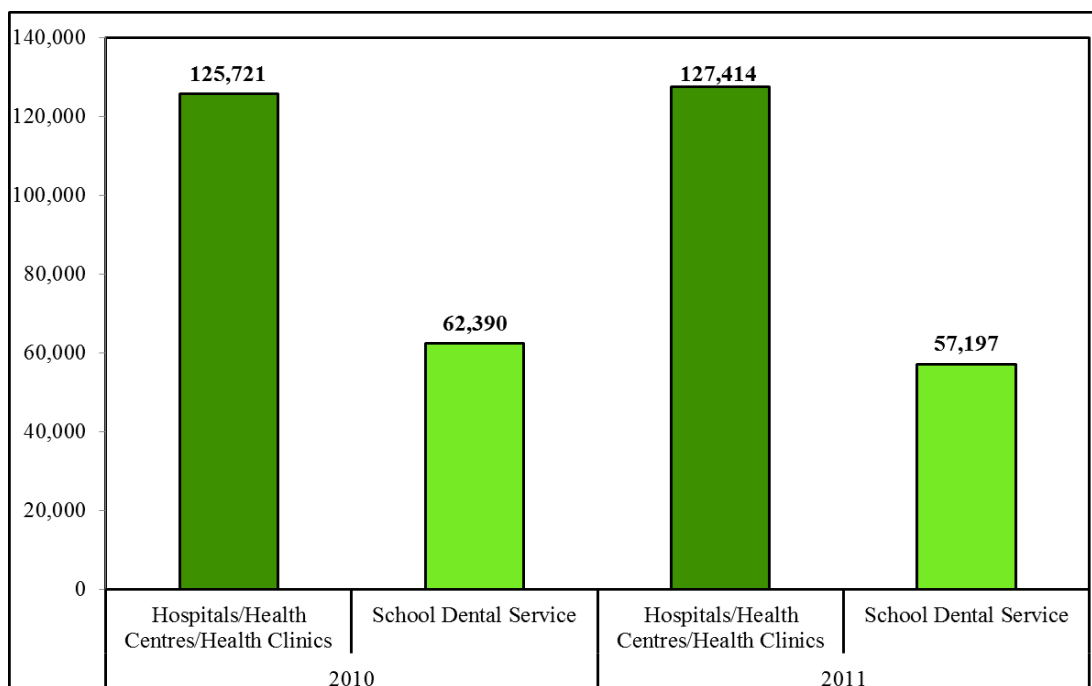


Figure 1.8 Total attendances in Brunei Darussalam (2010-2011)

KEY PERFORMANCE INDICATORS

Table 1.9 WHO and FDI global oral health goals for the year 2000 & 2010

Age (years)	WHO / FDI global oral health goals		Oral health status in Brunei	
	2000	2010	1987	1999
5-6	50% should be caries-free	90% should be caries free	3 % caries free	11.3% caries free
12	3 or fewer DMFT	1 or fewer DMFT	4.91 DMFT	4.82 DMFT
18	85% should retain all their teeth	No loss of teeth to caries or periodontal disease	No data available	82.2% retain all teeth
35-44	50% reduction in 1981 levels of edentulousness	No more than 20% edentulous 90% with a minimum of 20 functional teeth	No data available	14.4 DMFT No data available in level of edentulousness
>65	25% reduction in 1981 level of edentulousness	No more than 5% edentulous 75% with a minimum of 20 functional teeth	No data available	No data available

DMFT - Mean number of untreated Decayed, Missing and Filled Permanent Teeth

WHO - World Health Organization

FDI - International Dental Federation

Table 1.10 Key Performance Indicators for the Department of Dental Services

Goal (FDI, WHO, IADR ^a)	Key Performance Indicators	Baseline	Measurement Indicators	
			2020	2035
Dental Caries				
To increase the proportion of caries free 6-year olds by X%	Percentage caries-free 6-year olds	11.3% (1999)	40%	80%
To reduce the DMFT(Decayed, Missing, Filled Teeth) particularly the D (Decayed) component at age 12 years	DMFT score of 12 year olds	4.82 (1999)	2 or less	1 or less
Periodontal Disease				
To reduce the prevalence of active periodontal infection (with or without loss of attachment) in all ages by X%	Percentage prevalence of active periodontal disease of 10-12 year olds (BPE Code 1) Percentage prevalence of active periodontal disease of 35-44 year olds (BPE Code 1)	76.4% (1999) 43.4% (1999)	50% 30%	10% 10%
To increase the proportion of people in all ages with healthy periodontium (gums & supporting bone structure) by X%	Percentage prevalence of healthy periodontium of 10-12 year olds (BPE Code 0) Percentage prevalence of healthy periodontium of 35-44 year olds (BPE Code 0)	1.3% (1999) 0.0% (1999)	30% 30%	70% 70%
Health Care Services				
To establish evidence-based plans to create human resources that can provide care that are appropriate to the cultural, social, economic and morbidity profiles of all groups within the population	Dentist : Population ratio Nurse : 0-16 yr Population ratio Dentist : Technician ratio Dentist : Dental Assistant ratio	1 : 7,960 (2008) 1 : 1,655 (2008) 2 : 1.4 (2008) 1 : 1.5 (2008)	1 : 5,500 1 : 1,200 2 : 1.8 1 : 1.8	1 : 4,000 1 : 800 2 : 2.5 1 : 2
To increase the proportion of the population with access to adequate oral health care	Percentage of Oral health Care Coverage	21% (2008)	40%	80%

Utilisation of Government Dental Services

UTILISATION OF GOVERNMENT DENTAL SERVICES

COVERAGE

A measure of the extent to which the services rendered cover the potential need for these services in a community.

Formulae: $\frac{\text{Total New Patients}}{\text{Total Population}} \times 100$

OUTPATIENT

A patient who is a walk-in patient (not an inpatient).

APPOINTMENT

An arrangement to meet the doctor for consultation/treatment at a particular time and place.

CATCHMENT AREA

The area from which people are allocated to a particular Hospital or Health Centre.

PRODUCTIVITY

The rate at which dental services are produced especially output per year.

PATIENT COMPLETION

The degree or extent to which a patient follows or completes a prescribed diagnostic treatment of procedures.

Formulae: $\frac{\text{Total Completed Patients}}{\text{Total New Patients}} \times 100$



Table 2.1a Total attendances (outpatients and appointments) by Hospitals/Health Centres/Clinics for each age group in Brunei-Muara district (2011)

Treatment Centre	Age group																																			
	0-5						6-12						13-19						20-55						>55						All combined					
	OP	APPT	OP	APPT	OP	APPT	OP	APPT	OP	APPT	OP	APPT	OP	APPT	OP	APPT	OP	APPT	OP	APPT	OP	APPT	OP	APPT	OP	APPT	OP	APPT								
	DO	DN	DO	DN	DO	DN	DO	DN	DO	DN	DO	DN	DO	DN	DO	DN	DO	DN	DO	DN	DO	DN	DO	DN	DO	DN	DO	DN	DO	DN						
National Dental Centre	199	337	98	228	418	1,401	887	551	1,546	1,102	3,282	851	10,123	17	10,084	2,573	1,509	0	2,171	206	13,795	2,857	16,522	4,409												
Hospital-based																																				
RIPAS	66	7	232	201	60	1	265	159	50	0	283	23	355	10	3,146	35	83	0	551	2	614	18	4,477	420												
Health Centres																																				
Sg Assam	14	562	0	12	35	1,363	2	47	560	574	104	28	3,005	0	558	13	475	1	144	3	4,089	2,500	808	103												
Sg Hanching	39	1,056	1	4	155	2,139	5	89	673	687	52	208	5,531	6	667	42	1,101	0	206	8	7,499	3,888	931	351												
Sengkabung	69	485	0	15	60	1,302	9	46	1,037	515	138	60	6,442	12	900	74	916	0	343	2	8,524	2,314	1,390	197												
Muara	29	300	0	2	32	762	0	45	496	333	62	114	3,030	0	381	0	429	0	111	0	4,016	1,395	554	161												
Police	0	219	0	1	7	438	0	21	83	82	22	8	2,146	0	548	0	0	0	0	0	2,236	739	570	30												
Health Clinics																																				
Sg Besar	0	232	0	3	0	124	0	0	9	0	5	0	106	0	47	0	0	0	0	0	115	356	52	3												
Subok	0	230	0	0	0	130	0	0	1	9	0	0	56	0	49	0	0	0	0	0	57	369	49	0												
Mata-Mata	0	793	0	66	0	1,394	0	184	7	8	5	0	111	0	172	0	0	0	0	0	118	2,195	177	250												
Bunut	0	365	0	10	0	635	0	27	0	310	0	31	38	16	0	0	0	0	0	0	38	1,326	0	68												
Prison	0	0	0	0	0	0	0	0	0	0	0	0	117	0	5	0	4	0	0	0	121	0	5	0												
All combined	416	4,586	331	542	767	9,689	1,168	1,169	4,462	3,620	3,953	1,323	31,060	61	16,557	2,737	4,517	1	3,526	221	41,222	17,957	25,535	5,992												



Table 2.1c Total attendances (outpatients and appointments) by Hospitals/Health Centres/Clinics for each age group in Tutong district (2011)

Treatment Centre	Age group																							
	0-5			6-12			13-19			20-55			>55			All combined								
	OP	DN	APPT	OP	DN	APPT	OP	DN	APPT	OP	DN	APPT	OP	DN	APPT	OP	DN	APPT						
Hospital-based																								
PMMPMHAMB Hospital	39	487	7	37	75	1,324	73	92	581	467	308	24	4,348	34	1,040	0	1,027	0	338	0	6,070	2,312	1,766	153
Health Centres																								
Telisai	4	91	1	0	4	72	0	0	8	7	0	2	58	0	0	11	16	0	0	0	90	170	1	13
Lamunin	1	151	0	0	1	109	0	0	2	4	0	0	29	0	0	11	9	0	0	0	42	264	0	11
Flying Services																								
Mapol	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	0	0	0	3	1	0	0
Supon Besar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
All combined	44	729	8	37	80	1,505	73	92	592	478	308	26	4,435	35	1,040	22	1,055	0	338	0	6,206	2,747	1,767	177

Table 2.1d Total attendances (outpatients and appointments) by Hospitals/Health Centres/Clinics for each age group in Temburong district (2011)

Treatment Centre	Age group																							
	0-5			6-12			13-19			20-55			>55			All combined								
	OP	DN	APPT	OP	DN	APPT	OP	DN	APPT	OP	DN	APPT	OP	DN	APPT	OP	DN	APPT						
Hospital-based																								
PIHM Hospital	22	138	11	42	1	365	0	50	136	295	33	20	1,322	3	325	0	241	0	42	0	1,722	801	411	112
All combined	22	138	11	42	1	365	0	50	136	295	33	20	1,322	3	325	0	241	0	42	0	1,722	801	411	112

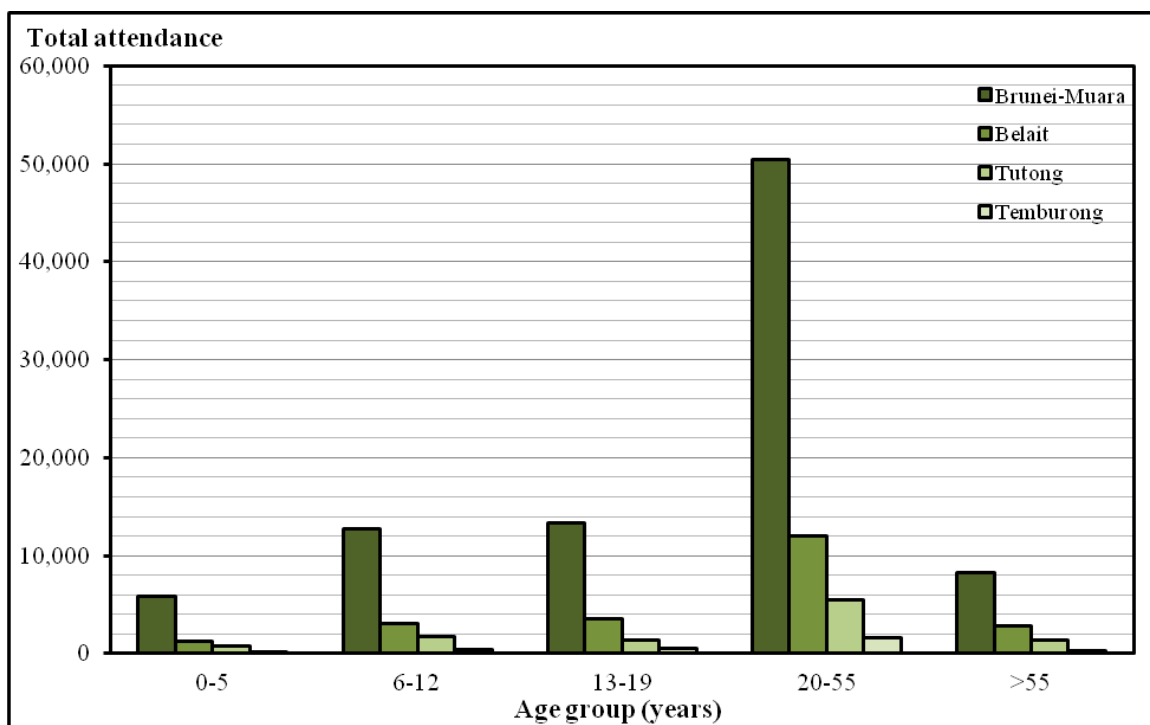


Figure 2.1a Total attendances by age group for each district (2011)

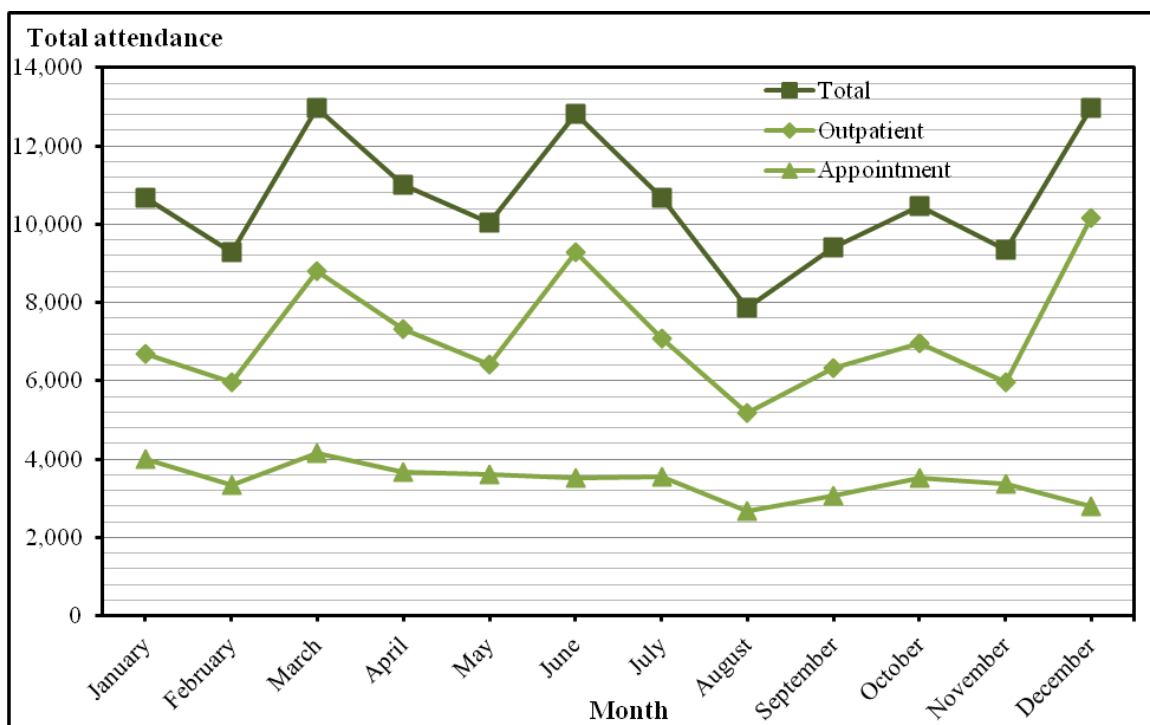


Figure 2.1b Total attendances by month for the whole state (2011)

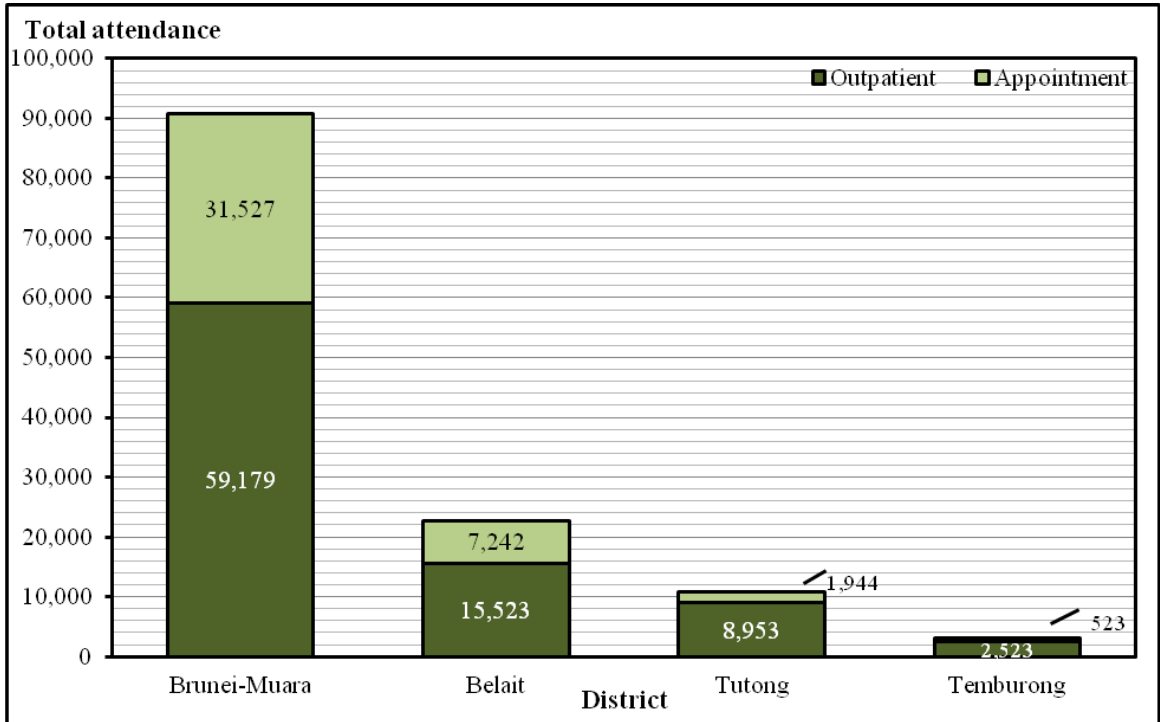


Figure 2.1c Total attendances by district (2011)

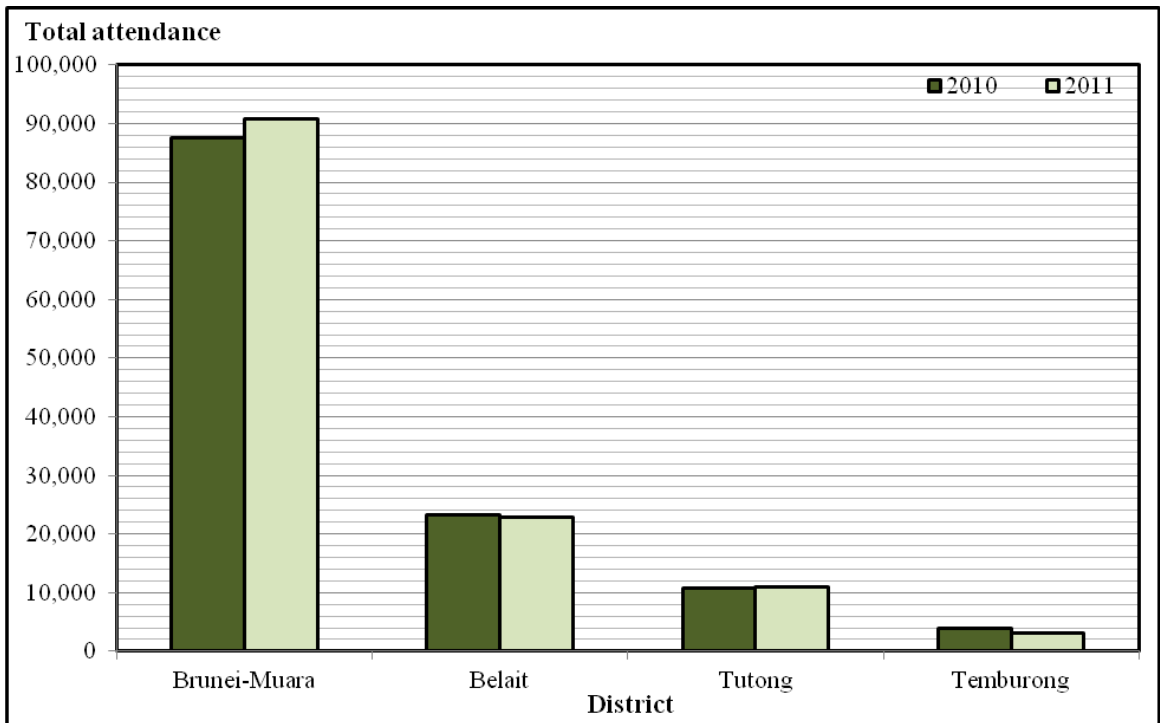
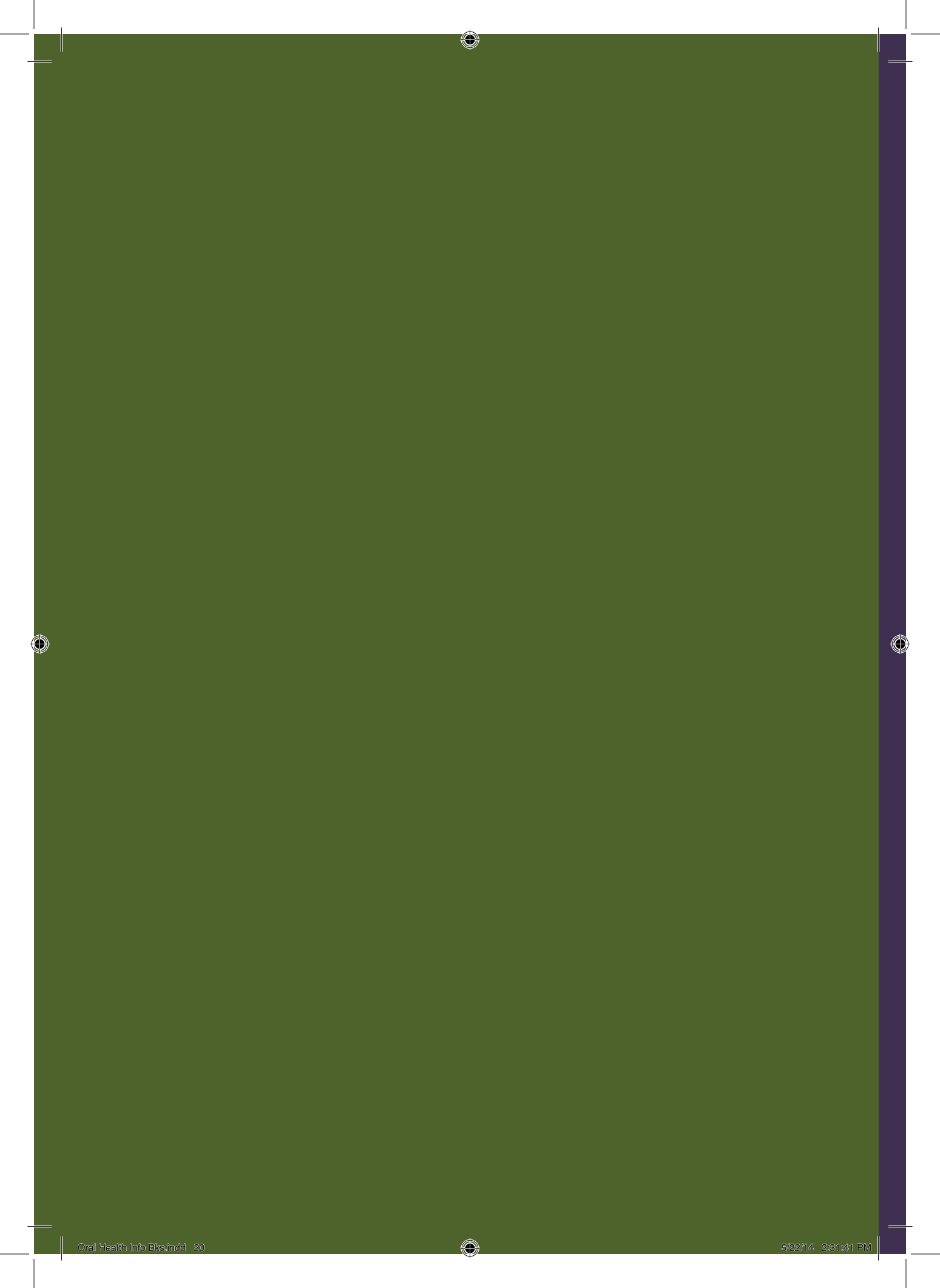


Figure 2.1d Total attendances by district (2010-2011)



School Dental Services

SCHOOL DENTAL SERVICES

School Dental Services provide oral health services to children of Brunei Darussalam, in such a way as to improve and maintain their oral health at an optimal level, through various preventive and promotive means, and by ensuring that the oral health care delivered is appropriate and of the highest quality possible.

This includes:

1. Providing appropriate preventive, curative, restorative and rehabilitative oral health care to these children.
2. Referral of those children who require oral health care that is beyond the competency of the dental nurses, to dental officers and specialists.
3. Promoting the children's oral health through various oral health promotion programmes and activities to these children and in collaboration with the School Authorities, communities and parents / guardians.
4. Collaborating with the Ministry of Education in the Health-Promoting School Programme to promote oral health in schools.

In 2007, the incremental mobile dental squads approach was introduced such that 2 to 6 nurses work in a school, speeding up the work in each school as it involves teamwork. Then, this group of nurses will move to other clinics under their care till all their schools are completed, then to other static clinics and eventually to schools without clinics.

The target group is the whole school and to approach the Primary 1 and Primary 2 then Primary 6, 5, 4, and 3 for dental treatment. The toothbrushing drills will be directed to the Primary 1, and Pre-schoolers.

Table 3.1a Mobile squad teams in Brunei-Muara district (2011)

XCAV8'S (4 Nurses)	K 9 (4 Nurses)	PEARL (5 Nurses)	NASA (4 Nurses)	OMEGA (5 Nurses)
1. SR PPSDSB Mata-Mata 2. SR SUAS Muara 3. SR Dato Marsal 4. SR Kiarong 5. SR DMW Lambak 6. SR Masin * 7. SR Batu Marang * 8. SR Tanah Jambu * 9. SR NAR Menunggu * 10. SR Kapok * 11. SR Dato Basir * 12. SR Mulaut	1. SR Bendahara Lama 2. SR PABP Peramu 3. SR Sg Kebun 4. SR Lumapas 5. SR Pengkalan Batu 6. SR PB Limau Manis 7. SR Saba Darat 8. SR Pintu Malim 9. SR Junjungan * 10. SR Kasat * 11. SR Dato Ahmad * 12. SR Katok *	1. SR Amar Pahlawan 2. SR PDJ Kg Setia 3. SR Anggerek Desa 4. SR Pulaie 5. SR Yayasan SHHB 6. SR Sg Siamas 7. SR Dato Othman * 8. SR SAB Sg Besar * 9. SR HMJM Kiulap * 10. SR Hj Tarif Tamoi*	1. SR Puser Uлак 2. SR Jerudong 3. SR BS Bunut 4. SR Sengkurong 5. SR Mabohai 6. SR Beribi Telanai * 7. SR Rimba Satu * 8. SR AHMY Katimahar * 9. SR Bebuluh * 10. SR OKBI Kilanas*	1. SR Delima Satu 2. SR Serasa 3. SM Chung Hwa 4. Sekolah St Andrew's 5. SR Raja Isteri Fatimah 6. SR Mentiri 7. SR HMS Sg Hanching * 8. SR OKBI Subok * 9. SR Kg Mata-Mata * 10. SR Dato Godam * 11. SR TK Sg Bunga * 12. SR Jln 49 Lambak Kanan *

*Non-Static School Dental Clinics (Schools without a dental surgery)

Table 3.1b Mobile squad teams in other districts (2011)

TUTONG		BELAIT		TEMBURONG	
TOPAZ (3 Nurses)	PRIMAROSA (3 Nurses)	ESMERALDE (2 Nurses)	HEBAT 4 Nurses	TLC (3 Nurses)	DENTEM (4 Nurses)
1. SR Telisai 2. SR OKAWSK Kupang 3. SR Bukit Benuang 4. SR Bakiau * 5. SR Sinaut * 6. SR Ukong * 7. SR Bt Penggal *	1. SR Kiudang 2. SR Keriam 3. SR Birau * 4. SR AR Tg Maya * 5. SR Sengkarai * 6. SR Ukong * 7. SR Bt Penggal *	1. SR Muda Hashim 2. SR Penanjong 3. SR Bukit Udal * 4. SR Lamunin * 5. SR Kuala Tutong*	1. SR Muhd Alam 2. SR PSNPMY Lorong 3 3. SR Panaga 4. SR Sg Liang 5. SR Lumut 6. Sekolah Chung Ching 7. SR Sg Tali II *	1. SR Kuala Belait 2. SR Ahmad Tajudin 3. SR PSJPAM Pandan 4. SR Sg Teraban 5. Sekolah Chung Hwa 6. SR PSB SOAS *	1. SR SH Bangar 2. SR Selangan * 3. SR Kenua * 4. SR Semabat * 5. SR Selapon * 6. SR Batu Apoi * 7. SR Negalang * 8. SR Piasau-piasau * 9. SR Labu Estate * 10. SR Senukoh *

*Non-Static School Dental Clinics (Schools without a dental surgery)

Table 3.2 Percentage coverage (number of new patients) by districts for each age group (2011)

District	School population	Consented	Age group			All combined	% Coverage
			0-5	6-12	13-19		
Brunei-Muara	40,566	18,821	1,034	11,653	10	12,697	31.3
Belait	8,319	4,170	279	3,690	3	3,972	47.7
Tutong	5,665	2,995	316	2,648	0	2,964	52.3
Temburong	1,205	982	70	878	9	957	79.4
All combined	55,755	26,968	1,699	18,869	22	20,590	36.9

Note: All treatments in Schools are done by Dental Nurses/Therapists

Table 3.3 Total attendances (outpatients and appointments) by districts for each age group (2011)

District	School population	Consented	Age group						All combined		
			0-5		6-12		13-19		OP	APPT	TOTAL
			OP	APPT	OP	APPT	OP	APPT			
Brunei-Muara	40,566	18,821	441	939	6,233	8,878	10	0	6,684	9,817	16,501
Belait	8,319	4,170	263	122	3,977	2,273	5	1	4,245	2,396	6,641
Tutong	5,665	2,995	310	214	2,251	1,734	0	0	2,561	1,948	4,509
Temburong	1,205	982	137	2	1,609	1	15	3	1,761	6	1,767
All combined	55,755	26,968	1,151	1,277	14,070	12,886	30	4	15,251	14,167	29,418

Note: All treatments in Schools are done by Dental Nurses/Therapists

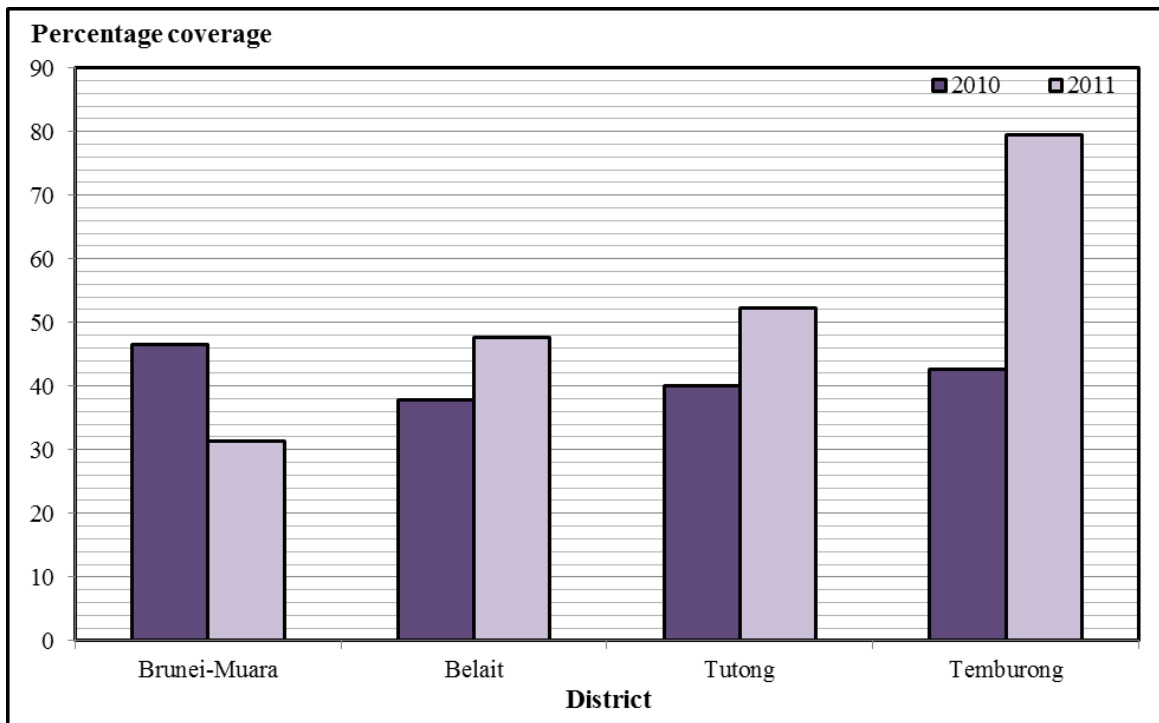


Figure 3.2a Percentage coverage= Number of new patients / school population (2010-2011)

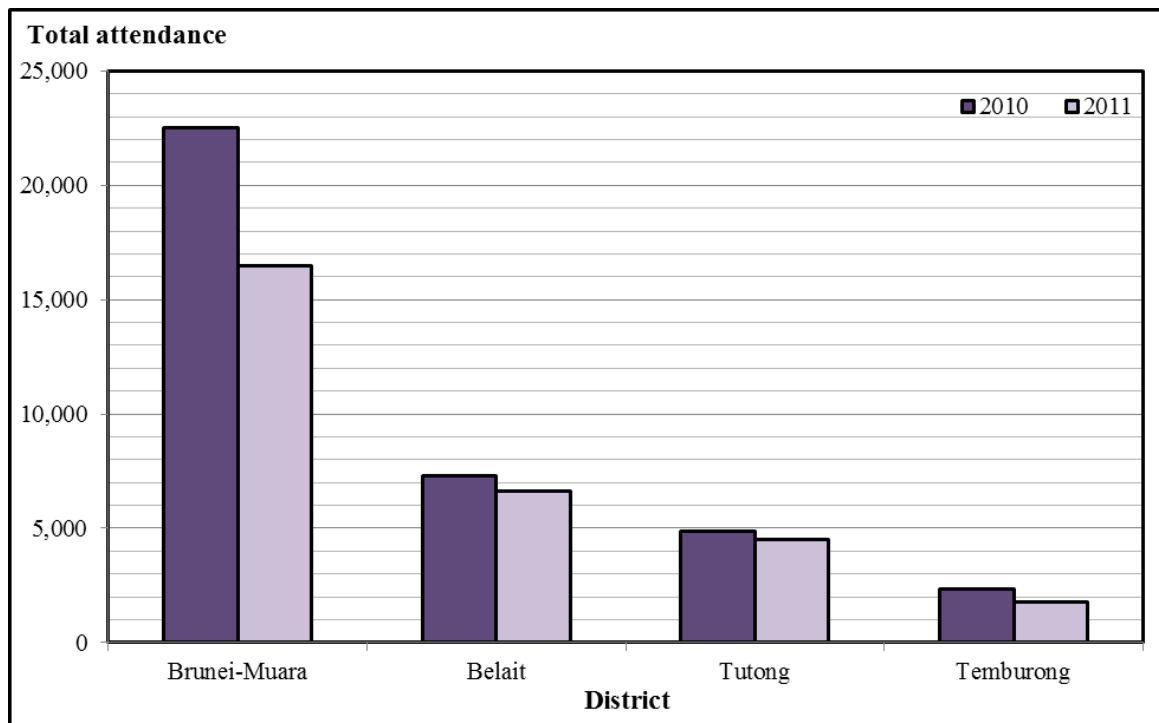


Figure 3.3a Total attendances by district (2010-2011)

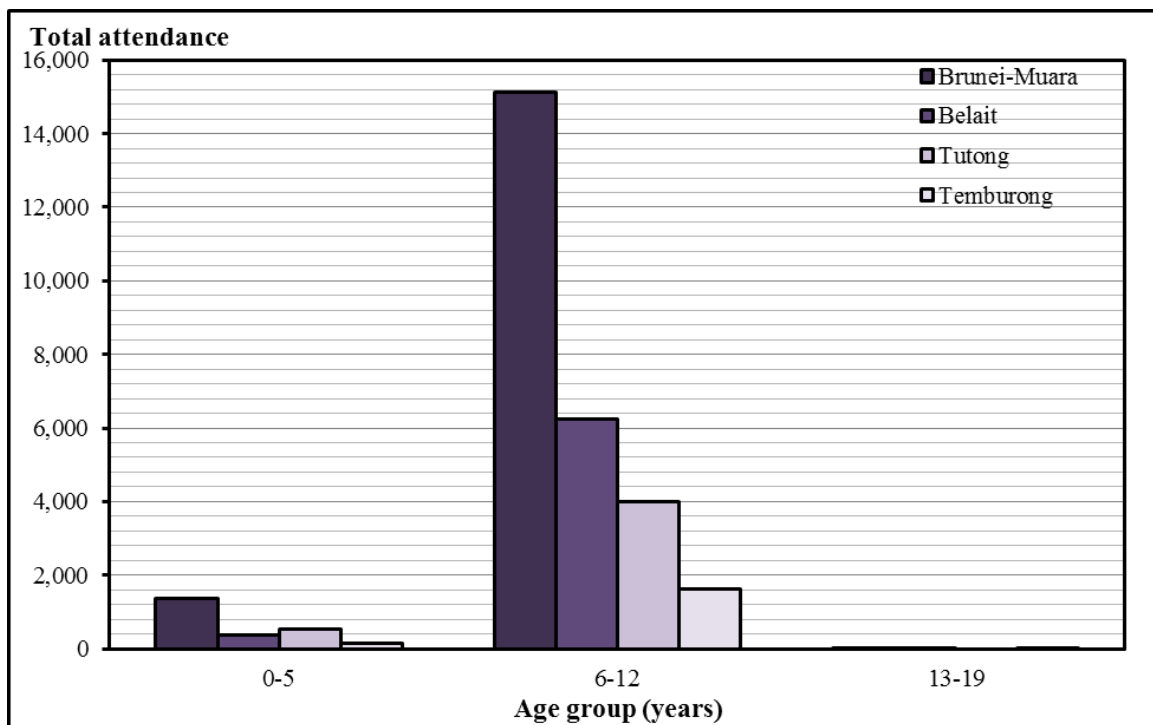


Figure 3.3b Total attendances by age group for each district (2011)

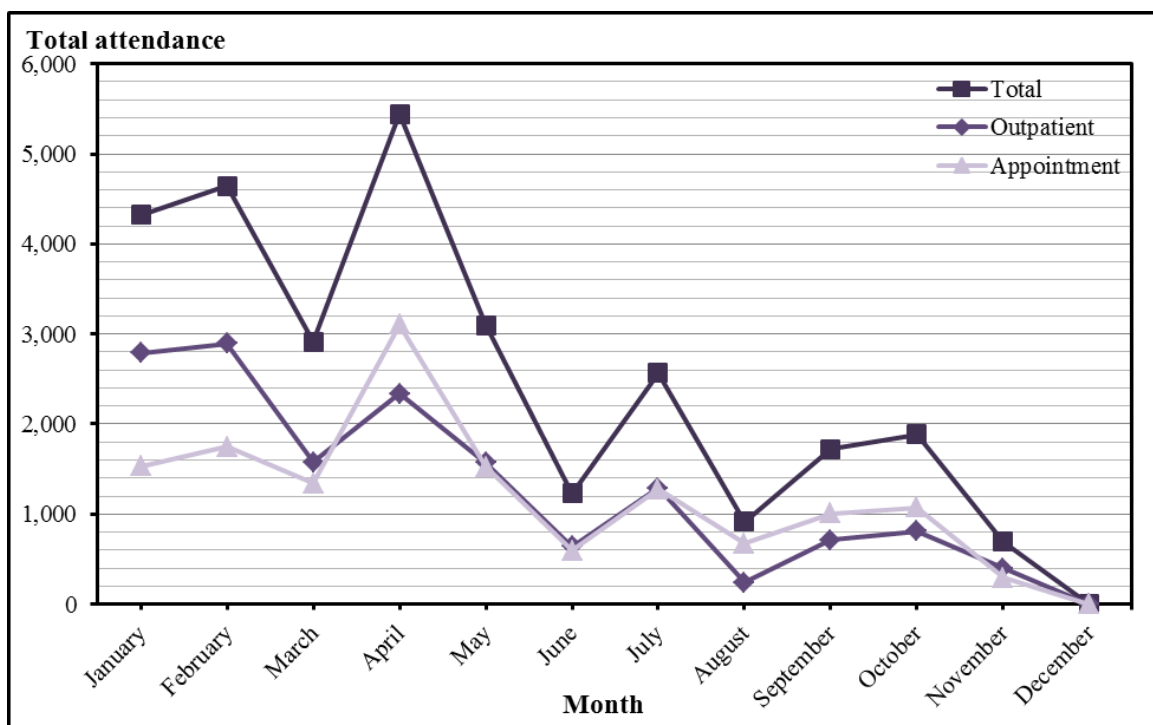


Figure 3.3c Total attendances by month for the whole state (2011)

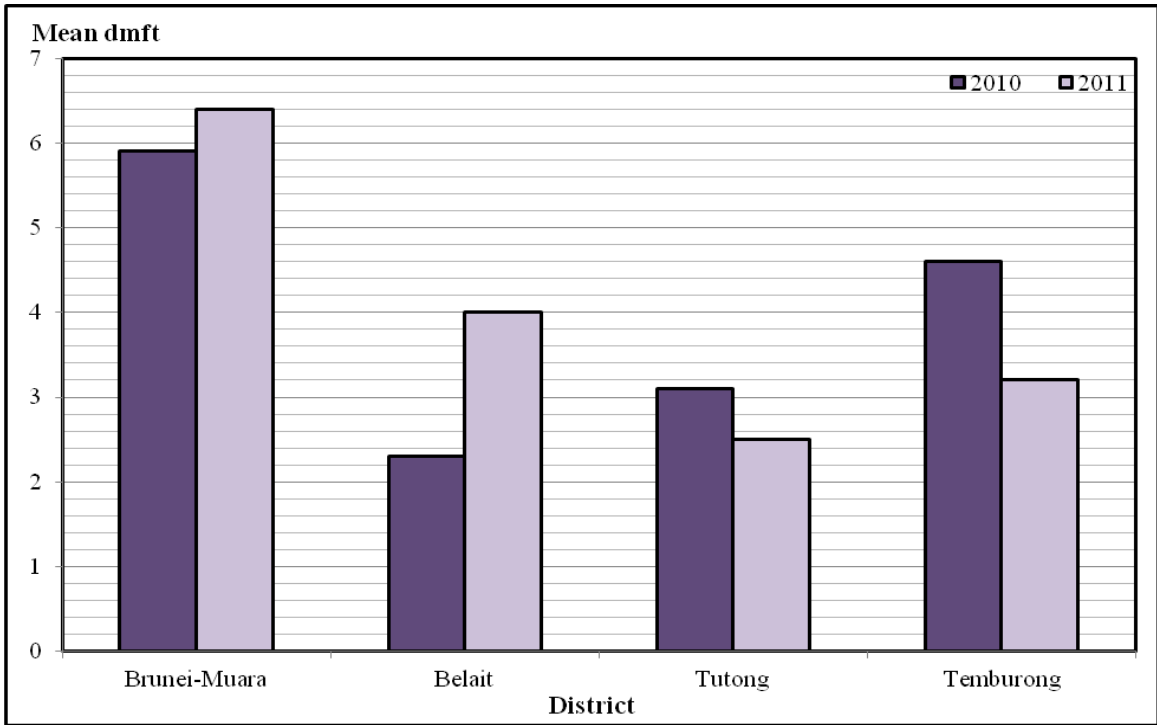


Figure 3.4a Deciduous dentition dental caries experience for 5-year-old school children (2010-2011)

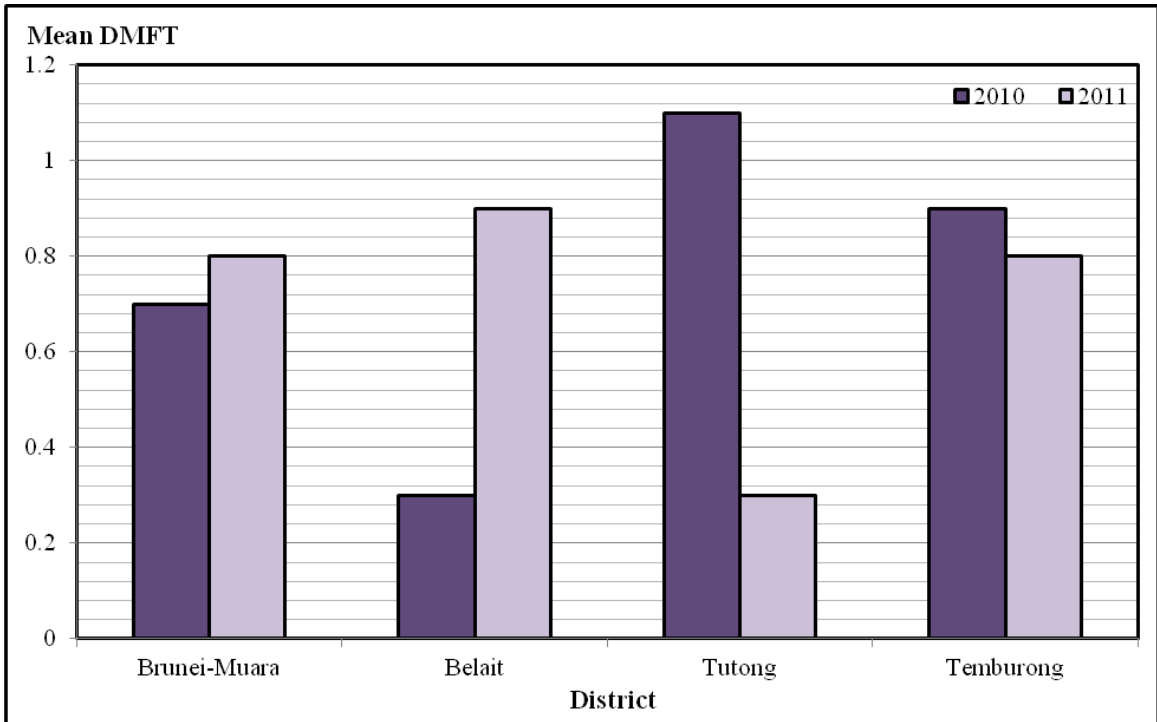
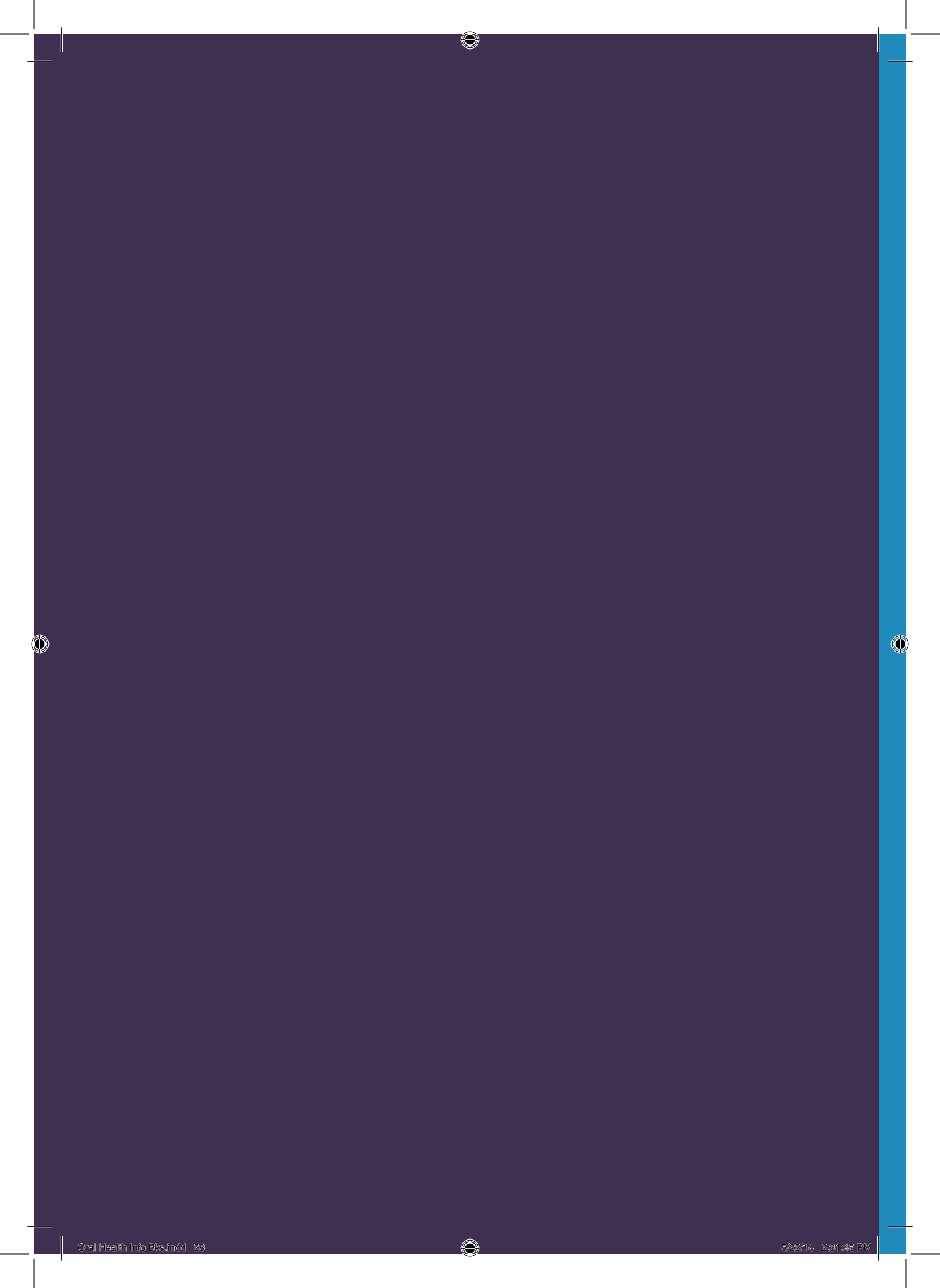


Figure 3.4b Permanent dentition dental caries experience for 12-year-old school children (2010-2011)



Productivity

PRODUCTIVITY – PRIMARY ORAL CARE SERVICE

Primary Oral Care services provide basic curative, corrective and rehabilitative services to render the patient orally fit, control all active diseases and restore acceptable oral function. It is the first line of oral health care, delivering dental education and basic treatment to achieve better oral health.

Services provided include:

- The emergency relief of pain and discomfort and the control of infection of oro-facial origin
- Routine dental check-up
- Dental extractions under local anaesthetic
- Dental scaling and prophylaxis
- Dental fillings
- Simple root canal treatment
- Plastic dentures (Full and partial dentures)
- Chairside Oral Health Education
- Assess complex cases for specialist referrals

Overview of Primary Oral Care Services

Manpower

2 (expatriate) Senior Dental Officers

1 (local) Acting Senior Dental Officer

30 (13 local and 17 expatriate) Dental Officers

Primary Oral Care Services are delivered to the public throughout the country according to their nearest dental clinics, as presented in Figure 5.1a.

Primary Oral Care Services are also delivered to the population through the Flying Doctor Service to rural areas in Tutong and Belait districts (Kampong Sukang, Kampong Belabau, Kampong Mapol, Kampong Melilas and Kampong Supon Besar).

Table 4.1a Number of conservative and prosthetic procedures done in the Primary Oral Care Division (2011)

Age group	Primary care attendance	CONSERVATIVE				PROSTHETIC													
		Amalgam		Tooth-coloured		Dressing		Recontouring of restoration (patient)	Procedure (patient)	Full Denture	Partial Denture	Immediate	Interim	Metal-based partial denture (no of units)	Repairs	Relines	Rebase	Addition	
		No. of teeth	surfaces	No. of teeth	surfaces	No. of teeth	surfaces												
Brunei-Muara																			
0-5	64	2	0	4	5	3	2	0	0	0	0	0	0	0	0	0	0	0	0
6-12	149	0	0	16	20	10	9	0	3	0	0	0	0	0	0	0	0	0	0
13-19	3,724	747	1,083	1,129	1,510	450	558	6	38	2	15	0	0	3	0	0	0	5	5
20-55	29,244	3,642	5,618	8,482	12,159	2,464	3,184	85	937	97	375	32	21	14	176	6	1	38	38
>55	4,441	271	476	1,287	1,840	182	222	20	736	174	263	11	18	4	191	9	0	22	22
Belait																			
0-5	86	0	0	0	0	0	0	12	1	0	0	0	0	0	0	0	0	0	0
6-12	197	0	0	3	4	2	4	12	0	0	0	0	0	0	0	0	1	0	0
13-19	965	48	69	395	506	164	189	29	15	0	5	4	0	0	1	0	0	0	0
20-55	8,181	461	731	2,566	3,330	1,247	1,524	15	420	35	95	22	1	0	114	5	0	18	18
>55	1,777	46	90	416	561	120	157	25	346	55	77	3	1	8	205	15	1	21	21
Tutong																			
0-5	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-12	26	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
13-19	473	74	83	148	164	19	19	0	0	0	0	0	0	0	0	0	0	0	0
20-55	3,589	440	546	1,019	1,179	237	239	10	124	44	65	0	4	0	13	1	0	0	0
>55	890	41	47	131	145	18	18	1	140	71	53	0	9	0	11	2	0	0	0
Temburong																			
0-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-19	128	21	22	63	98	26	28	4	0	0	0	0	0	0	0	0	0	0	0
20-55	1,279	282	495	928	1,330	232	318	5	7	0	4	1	0	0	1	0	0	0	0
>55	183	21	32	75	105	6	7	1	32	4	0	0	0	0	2	0	0	0	0
All combined	55,407	6,096	9,292	16,663	22,957	5,181	6,479	225	2,799	482	952	73	54	26	717	38	3	104	104

Table 4.1b Number of oral surgical procedures done in the Primary Oral Care Division (2011)

Age group	ORAL SURGERY													ORAL MEDICINE (PT)			
	Infection/ Abscess (Pt)	Others (Pt)	Trauma				Patients	LA/TA/SEDATION Minor Oral Surgery						Soft Tissue Lesion (Pt)	Hard Tissue Lesion (Pt)	Other Oral Lesion	Medical Condition
			No of Teeth	Hard Tissue (Pt)	Soft Tissue (Pt)	Splinting		No of teeth extracted			Surgical (permanent)	Other Teeth					
								Non-surgical		3 rd Molar							
p	n	p	n	P	n	p	n										
Brunei-Muara																	
0-5	61	7	0	0	0	0	0	0	0	2	0	0	0	0	0	12	0
6-12	109	15	0	0	0	25	13	1	12	0	0	0	0	0	0	11	0
13-19	166	35	0	1	1	714	24	6	617	73	0	6	6	1	5	53	0
20-55	1,320	245	49	9	12	9,002	27	18	8,994	481	9	15	15	5	5	408	14
>55	151	51	0	4	1	1,859	2	6	1,983	87	3	1	1	1	1	84	5
Belait																	
0-5	44	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
6-12	64	8	0	0	0	11	9	1	3	0	0	0	0	0	0	1	34
13-19	58	14	3	1	0	163	4	2	168	23	1	0	0	0	0	0	30
20-55	598	68	14	1	1	2,274	12	2	2,486	26	6	17	17	4	1	13	325
>55	100	14	0	2	0	695	1	0	791	2	2	5	5	1	1	7	39
Tutong																	
0-5	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-12	4	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
13-19	12	1	0	0	0	55	0	0	104	0	0	0	0	0	0	0	0
20-55	164	5	0	2	0	610	6	0	1,099	66	7	2	2	0	0	0	27
>55	25	0	0	0	0	146	2	0	410	26	2	0	0	0	0	0	2
Temburong																	
0-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-19	0	24	0	0	0	45	5	0	16	4	0	0	0	0	0	0	0
20-55	0	196	0	0	0	674	1	0	496	0	9	18	18	0	0	0	0
>55	0	20	0	0	0	185	0	0	170	18	0	3	3	0	0	0	0
All combined	2,883	718	66	20	16	16,458	106	45	17,351	806	39	67	67	12	13	589	482

D - Deciduous teeth, P - Permanent teeth, p - pathological, n - non-pathological

Table 4.1c Number of Periodontics and Preventive procedures done in the Primary Oral Care Division (2011)

Age group	PERIODONTICS (NON-SURGICAL)											PREVENTIVE individual			REFERRAL OF PATIENTS TO:		PATIENT COMPLETION
	OHI/demonstration	Diet analysis	Review	Scaling & prophylaxis	Root planning (quadrant)	Post RP charting	Removal sutures	Fluoride desensitization	Pocket charting	Infection/Abscess	Others/Misc.	Patient Fissure sealant	Surfaces	Fluoride (prevention) Patient	Dental	Medical	
Brunei-Muara																	
0-5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	30	1	0
6-12	10	0	2	6	0	0	0	0	0	1	0	0	0	1	35	2	10
13-19	1,183	55	31	1,328	0	0	3	2	6	19	34	14	15	14	199	6	691
20-55	7,033	412	134	7,990	14	4	21	41	219	213	153	72	48	200	974	191	2,998
>55	493	27	15	626	2	0	2	8	1	19	37	6	4	22	76	44	260
Belait																	
0-5	30	0	0	0	0	0	0	0	0	0	0	0	0	0	11	1	30
6-12	37	0	2	6	0	0	0	0	0	0	1	0	0	0	24	2	31
13-19	402	6	56	400	10	0	0	2	1	5	5	0	0	0	67	9	261
20-55	2,965	36	304	2,810	3	1	11	120	22	27	38	8	7	13	338	99	1,670
>55	601	3	43	272	0	0	4	25	0	0	5	0	0	3	40	18	239
Tutong																	
0-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
6-12	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0	0
13-19	84	0	0	128	0	0	0	4	0	0	0	3	12	1	6	0	28
20-55	475	8	3	597	0	0	4	69	0	15	20	2	4	4	40	2	147
>55	24	0	4	78	0	0	1	16	0	3	2	1	1	0	0	0	14
Temburong																	
0-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-19	26	0	0	26	0	0	0	0	0	0	0	0	0	0	2	0	28
20-55	253	0	0	253	0	0	3	7	0	0	0	0	0	2	24	1	218
>55	15	0	0	15	0	0	0	2	0	0	0	0	0	0	2	0	17
All combined	13,631	547	594	14,535	29	5	49	296	249	304	295	106	91	260	1,874	376	6,642

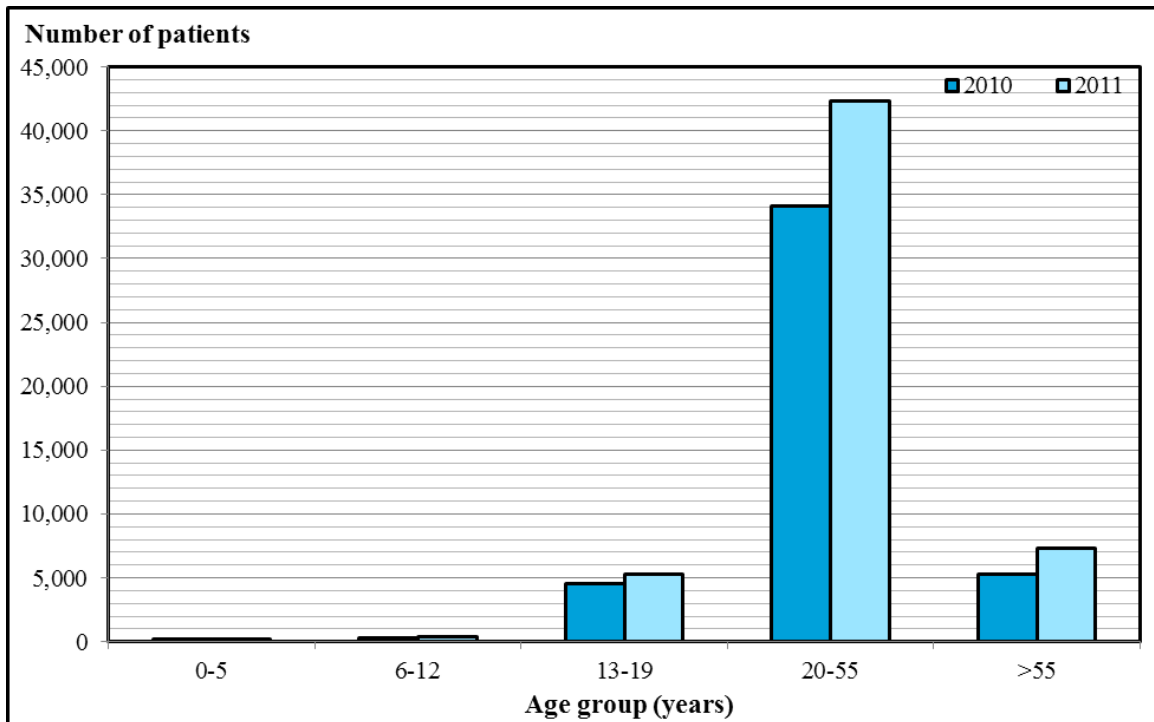


Figure 4.1a Number of patients treated by age group (2010-2011)

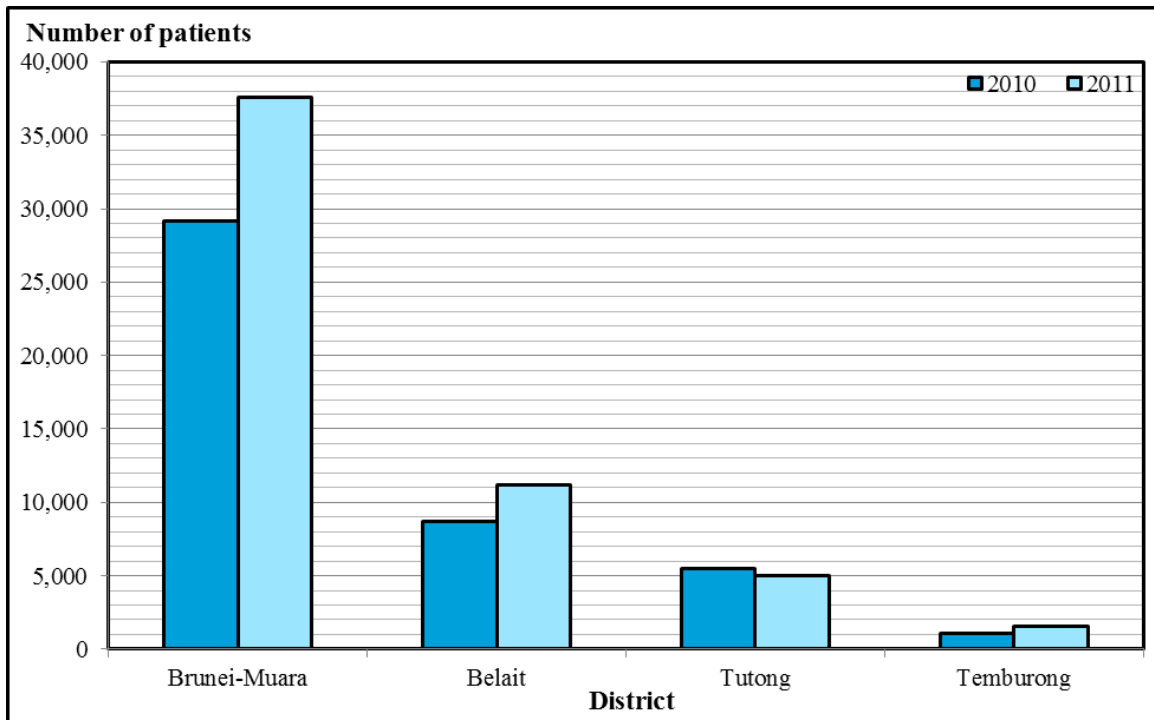


Figure 4.1b Number of patients treated by district (2010-2011)

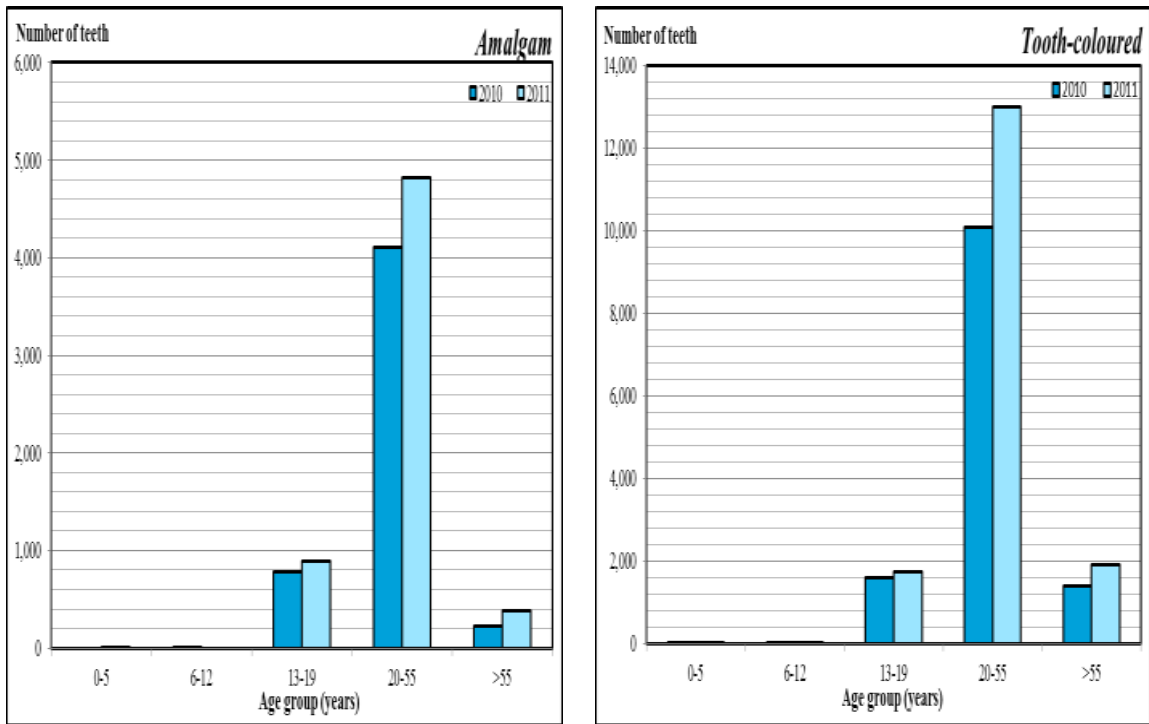


Figure 4.1c Number of teeth restored with Amalgam and tooth-coloured restorations by age group (2010-2011)

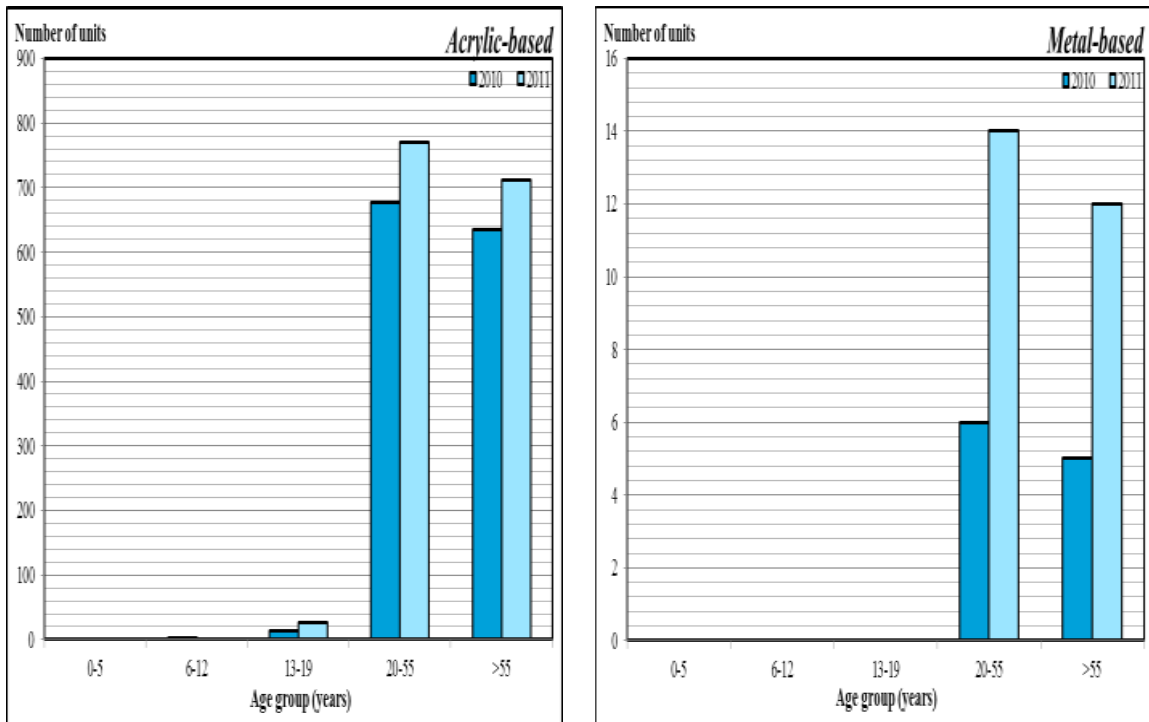


Figure 4.1d Number of acrylic and metal based dentures issued by age group (2010-2011)

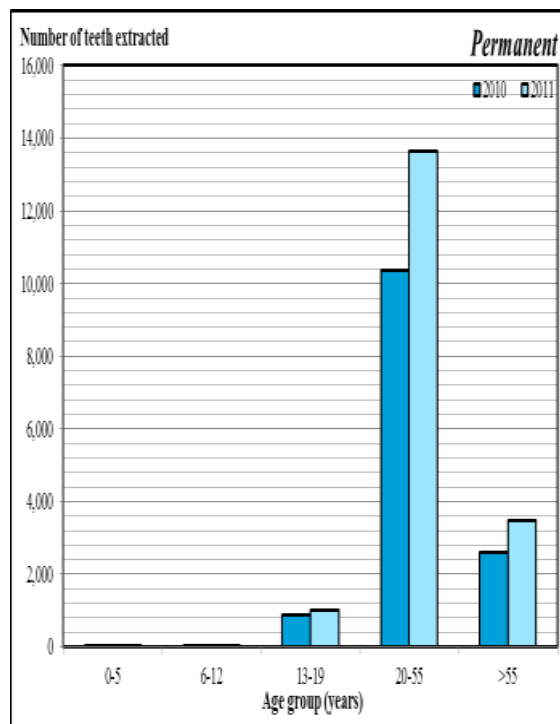
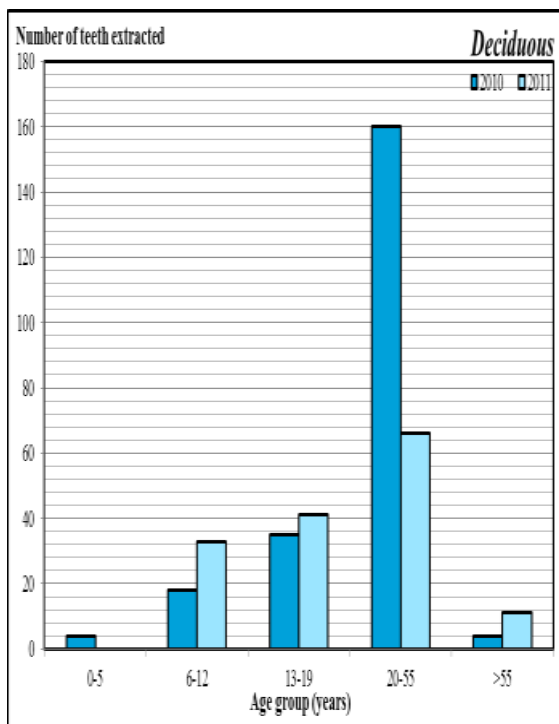


Figure 4.1e Number of non-surgical teeth extraction by age group (2010-2011)

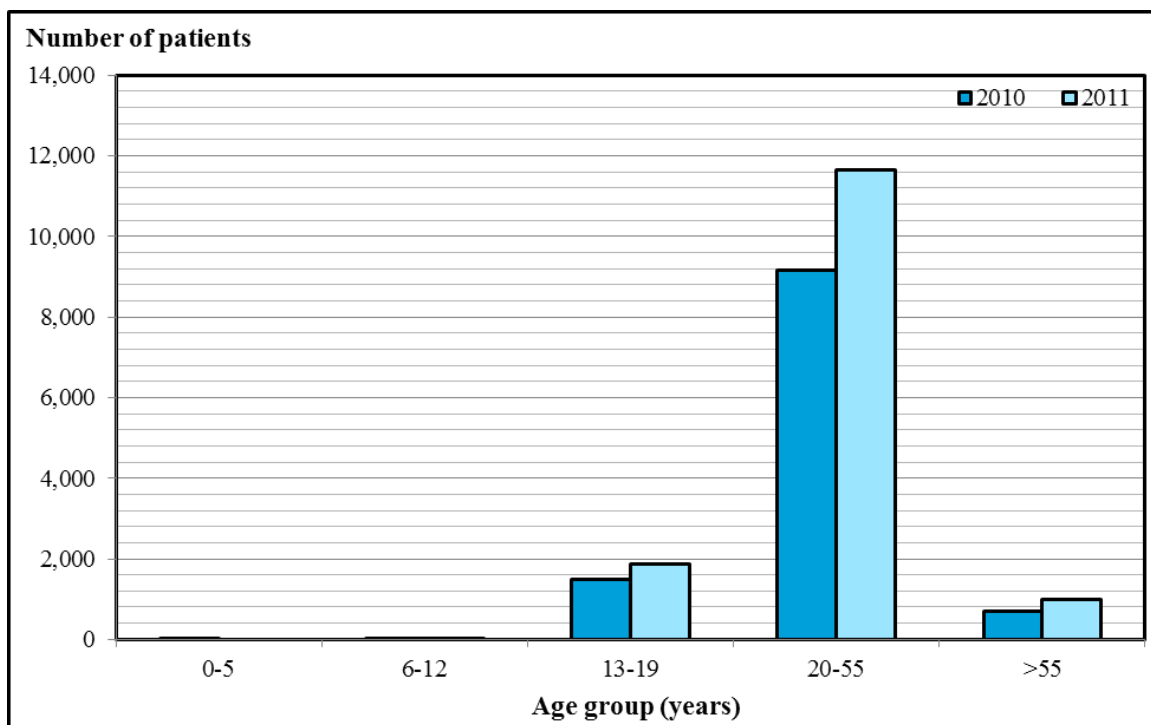


Figure 4.1f Number of scaling by age group (2010-2011)

PRODUCTIVITY – ENDODONTICS

The aim of endodontic treatment is to preserve functional teeth without prejudice to the patient's health. The Endodontic Unit deals with treatment involving the roots of teeth.

Services provided include, but is not limited to:

- The differential diagnosis and treatment of oro-facial pain of pulpal and periradicular origin
- Prevention of pulp disease and vital pulp therapy
- Pulp extirpation and root canal treatment
- Root canal treatment in cases of apical periodontitis
- Root canal retreatment in case of post-treatment apical periodontitis
- Surgical endodontics
- Bleaching of endodontically treated teeth
- Treatment procedures related to coronal restoration by means of a core and/or post involving the root canal space

Overview of Endodontic Specialty Services

Manpower

- 1 (expatriate) Specialist
- 1 (local) Acting Specialist
- 1 (expatriate) Senior Dental Officer

The Endodontic Unit is based at the National Dental Centre, Brunei-Muara and accepts referrals from Government and Private Dental Clinics throughout Brunei Darussalam.

Table 4.2.1a Number of patients and treatment done in the Endodontics Unit (2011)

Age group	ENDODONTICS (includes pulpotomy)		FIXED PROSTHODONTICS												
	Procedures (Patient)	Teeth		Procedures (Patient)	Recementation of crowns/bridge (units)	Temporary crowns/ Bridge (units)	Posts (units)	Crown			Total Units Issued		Bridge Units		
		New	Repeat					Anterior	Posterior	FPC	PBC	New		Repeat	
13-19	94	26	68	4	0	1	0	0	0	3	0	2	0	1	2
20-55	642	258	384	159	17	73	48	3	15	93	2	57	22	2	6
>55	97	45	52	50	4	27	12	0	2	25	1	21	9	3	4
All combined	833	329	504	213	21	101	60	3	17	121	3	80	31	6	12

FPC – Full Porcelain Crown, PBC – Porcelain Bonded Crown

Table 4.2.1b Number of patients and treatment done in the Endodontics Unit (2011)

Age group	PROSTHETIC				CONSERVATIVE		ORAL SURGERY	PERIODONTICS	
	Acrylic-based (number of units issued)		Metal-based	Repairs	Relines	Total number of Teeth & Surfaces Permanently Filled			
	Full denture	Partial denture					Immediate	Teeth	Surfaces
				1 st treatment	Retreatment	New	Repeat		
6-12	0	0	0	0	0	0	4	0	1
13-19	0	0	0	0	0	0	36	158	30
20-55	8	34	5	14	0	0	107	983	363
>55	10	25	3	7	12	0	39	137	94
All combined	18	59	8	21	12	0	186	1,278	488

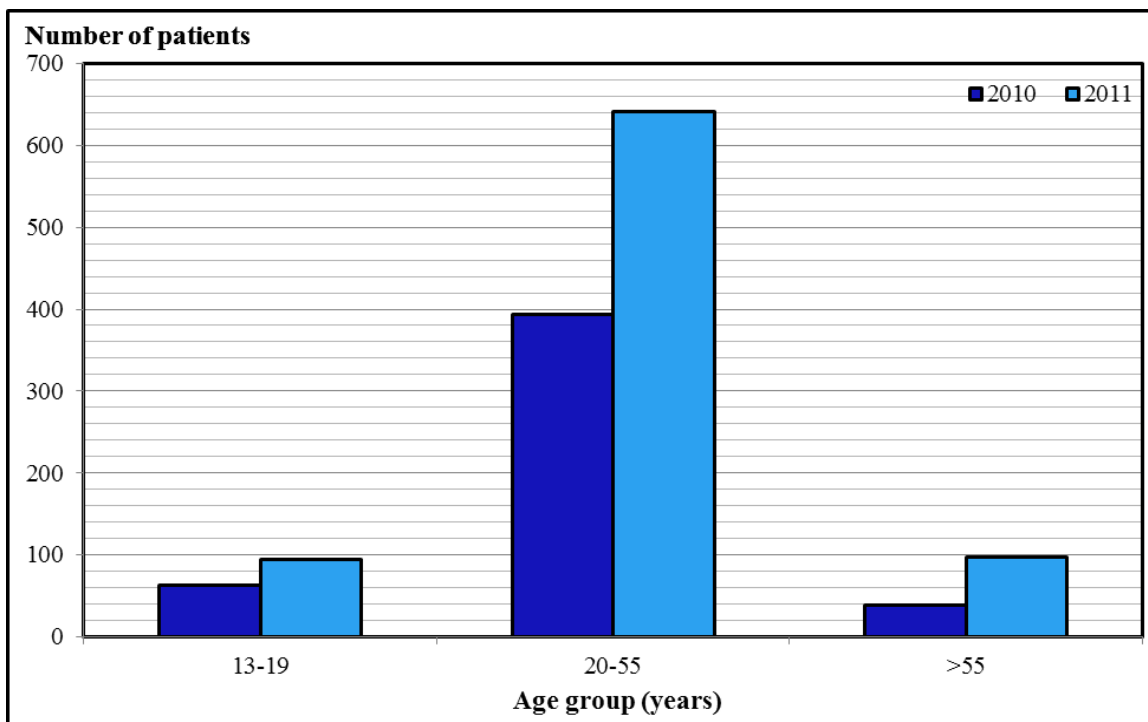


Figure 4.2.1a Number of attendances for endodontic treatment by age group (2010-2011)

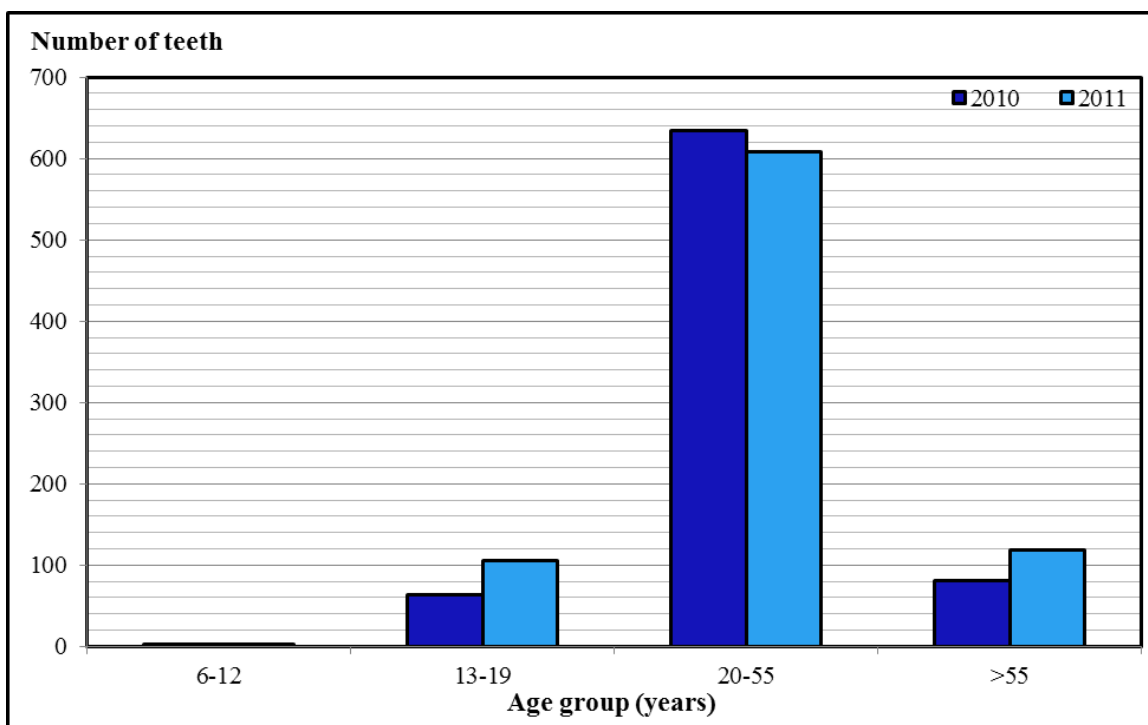


Figure 4.2.1b Number of teeth permanently filled by age group (2010-2011)

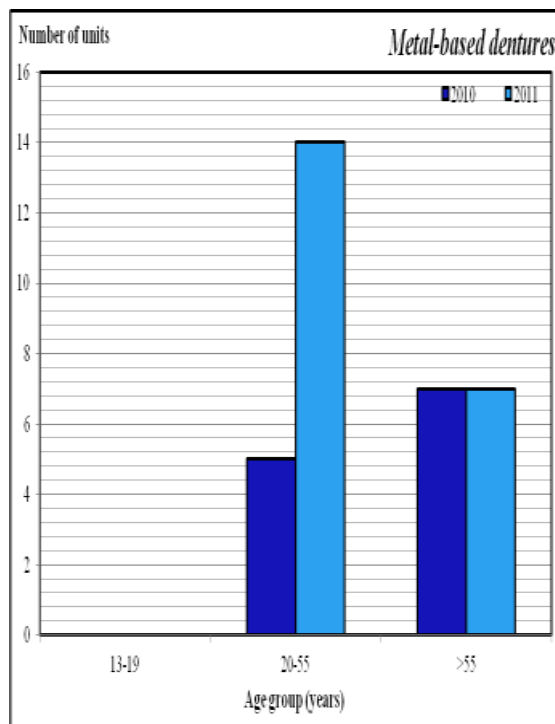
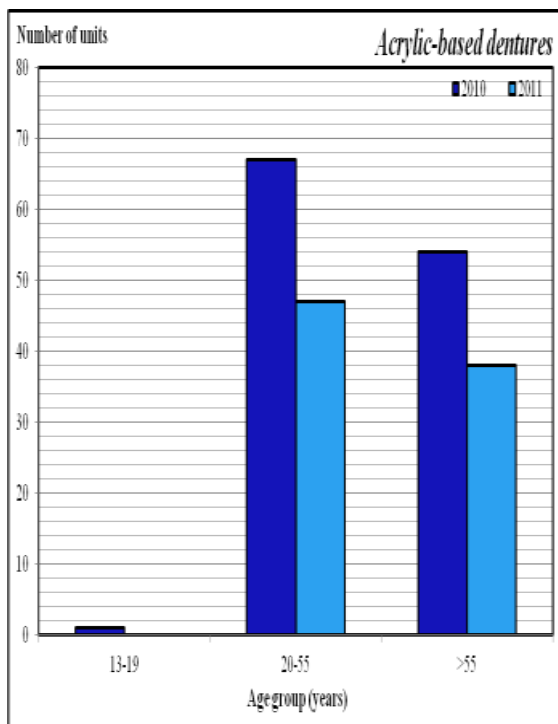


Figure 4.2.1c Number of acrylic- and metal-based dentures issued by age group (2010-2011)

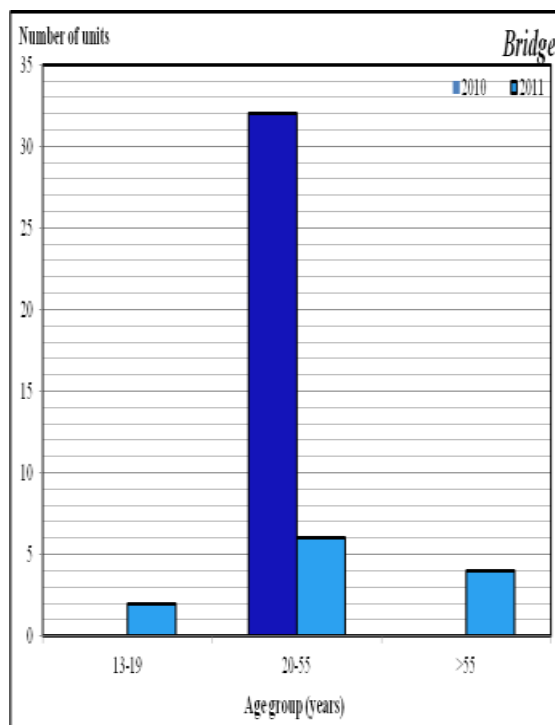
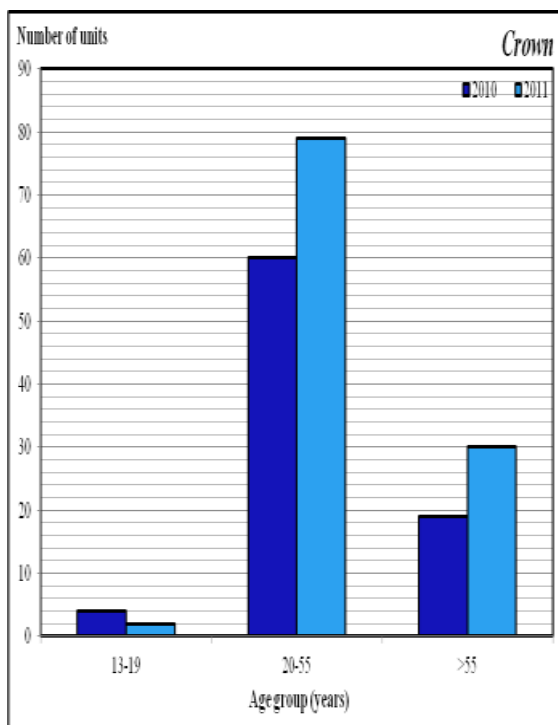


Figure 4.2.1d Number of crowns and bridges issued by age group (2010-2011)

PRODUCTIVITY – ORAL SURGERY

Oral surgery is a branch of medicine, dealing with diagnostics and the surgical treatment of oral diseases.

ORGANISATION

The Specialist Dental Clinic (SDC) was established on 1st December 2000. It is housed on the 3rd floor of the Specialist Block at RIPAS Hospital. It is equipped with 6 dental chairs and operates as a specialist referral clinic. It accepts referrals from dental and medical practitioners from the public sector, private sector and armed services from throughout Brunei Darussalam and in-patients from within the hospital.

Since its inception, the department has attained a reputation as the leading tertiary referral center for hospital dentistry in Brunei. This has been further reinforced by the recognition accorded to it by the Royal College of Surgeons of England as a recognized center for Membership of the Faculty of Dental Surgery (MFDS) training in May 2004. This has been made possible through the efforts and commitment of the pioneer staff towards providing a quality service and a high standard of hospital dentistry.

SERVICES

Services provided include:

- Specialist services in the disciplines of oral surgery, periodontology, oral medicine, and implantology
- Dental management of the medically compromised including children
- Dental management of in-patients
- Hospital Dentistry requiring general anaesthetic and sedation facilities
- Support services for the Oral & Maxillo-facial and Plastic Surgical Unit in the areas of maxillo-facial trauma, cleft lip and palate management and orthognathic surgery
- Support services for the Brunei Cancer Centre for patients undergoing radiotherapy and chemotherapy
- Support services for patients undergoing open heart surgery
- Emergency dental services for hospital personnel

Oral Surgery Procedures performed include:

- Surgical extractions
- Wisdom teeth removal
- Management of complications due to tooth extractions including OAF closure
- Management of dento-alveolar trauma injuries
- Surgical exposure of un-erupted teeth
- Removal of retained roots
- Bone grafting implant sites
- Management of cystic lesions
- Management of acute facial infections
- Biopsy of soft tissue lesions
- Pre-prosthetic surgery e.g. frenectomy, alveolectomy & alveoplasty

Achievements

Since 2001, Day Care Surgery has been introduced for all minor oral surgical procedures. This has made it more convenient for patients, lowered inpatient hospital costs and also freed hospital beds.

MANPOWER

Staffing:	2000	2011
Specialist	1	1
Senior Dental Officer	1	3
Dental Officer	0	1
Hygienist	1	0
Senior Dental Assistant	1	3
Dental Assistant	3	4
Amah	1	2
Attendant	0	1
Clerical Assistant	0	1
Receptionist	0	1
Total	8	17

Table 4.2.2a Number of patients and types of treatment in the Oral Surgery Unit for the whole state (2011)

Month	Patient Attendance			ORAL SURGERY PROCEDURES																	
	New Patients (1st Visit)	Review (Repeat Visit)	Total Attendances	Soft Tissue						Hard Tissue											
				Incision + Drainage	Excision Biopsy	Incision Biopsy	Soft tissue excision	Frenectomy	Gingivectomy	Enucleation + Apicoectomy	Apicoectomy	Alveolectomy	Alveoplasty	Exploration + Curettage	Bone excision	Enucleation	Marsupialisation	Surgical Exposure	Coronectomy		
January	224	394	618	6	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0		
February	191	375	566	3	0	0	1	0	0	0	0	0	1	0	0	2	0	0	0		
March	191	384	575	2	1	0	0	1	0	0	0	1	2	0	0	0	0	0	0		
April	189	445	634	2	5	0	0	0	0	0	0	0	0	1	1	0	1	0	2		
May	267	404	671	0	4	0	1	0	0	0	0	0	0	0	1	2	0	0	2		
June	256	400	656	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2		
July	242	375	617	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
August	229	384	613	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0		
September	218	370	588	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1		
October	255	486	741	3	1	1	1	0	0	0	0	0	0	1	0	1	0	0	1		
November	198	462	660	1	5	1	1	0	0	0	0	1	1	1	0	1	0	0	0		
December	201	359	560	1	3	1	1	0	0	0	0	0	0	0	0	0	0	0	3		
All combined	2,661	4,838	7,499	21	22	3	7	1	0	0	0	2	5	4	2	3	5	3	0	9	2

Table 4.2.2b Number of patients and types of treatment in the Oral Surgery Unit for the whole state (2011)

Month	ORAL SURGERY PROCEDURES																				
	Surgical Removal				Extraction		Dento-alveolar Trauma					Bleeding		Miscellaneous			GA cases	I/V sedation	Case Completion (Discharge)		
	S/R retained roots	S/R Supernumerary	S/R Odontome	S/R Impacted tooth	S/R 3rd molar	Deciduous	Permanent	Composite splint	Arch Bar Splint	Eyilet splint	Pulpectomy	L / W closure	Bleeding socket arrest	Gingival bleed arrest	Scaling	Subgingival scaling	TMJ dislocation reduction	SM Impression			
January	5	0	0	2	82	25	116	0	0	1	2	0	1	0	51	14	32	9	25	1	89
February	10	0	0	5	46	27	94	0	1	0	2	0	0	1	48	5	37	1	21	1	83
March	4	1	0	9	82	1	119	0	0	0	11	0	3	0	38	11	34	0	28	0	53
April	3	1	0	7	79	1	149	1	0	0	2	6	0	1	24	0	27	0	21	0	81
May	8	1	0	8	94	3	208	2	0	0	3	0	0	1	52	11	39	0	27	0	65
June	7	1	0	11	75	1	164	1	0	0	4	0	1	1	53	6	26	0	28	0	80
July	4	0	0	5	75	8	202	0	0	0	6	0	6	1	35	0	27	0	20	0	63
August	8	0	0	1	72	4	186	0	0	0	3	0	0	0	15	11	32	0	15	0	78
September	3	0	0	2	67	4	208	1	0	0	0	0	0	0	21	6	25	0	18	0	41
October	2	1	0	6	73	13	324	1	0	1	1	0	5	10	22	0	38	1	29	0	90
November	5	0	0	2	77	11	242	0	0	0	2	12	1	0	25	22	41	0	24	0	84
December	6	6	1	2	58	7	250	0	0	0	0	0	0	0	16	7	20	0	11	0	55
All combined	65	11	1	60	880	105	2,262	6	1	2	36	18	17	15	400	93	378	11	267	2	862

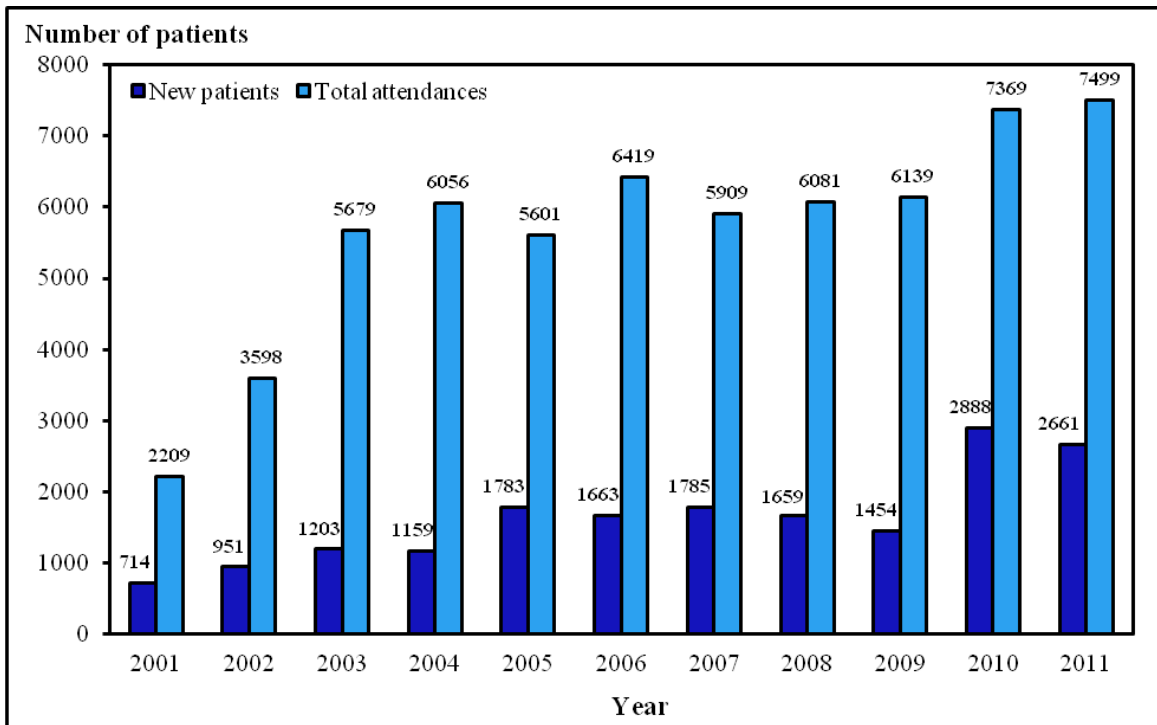


Figure 4.2.2a Annual attendances of Oral Surgery Unit at RIPAS Hospital (2001-2011)

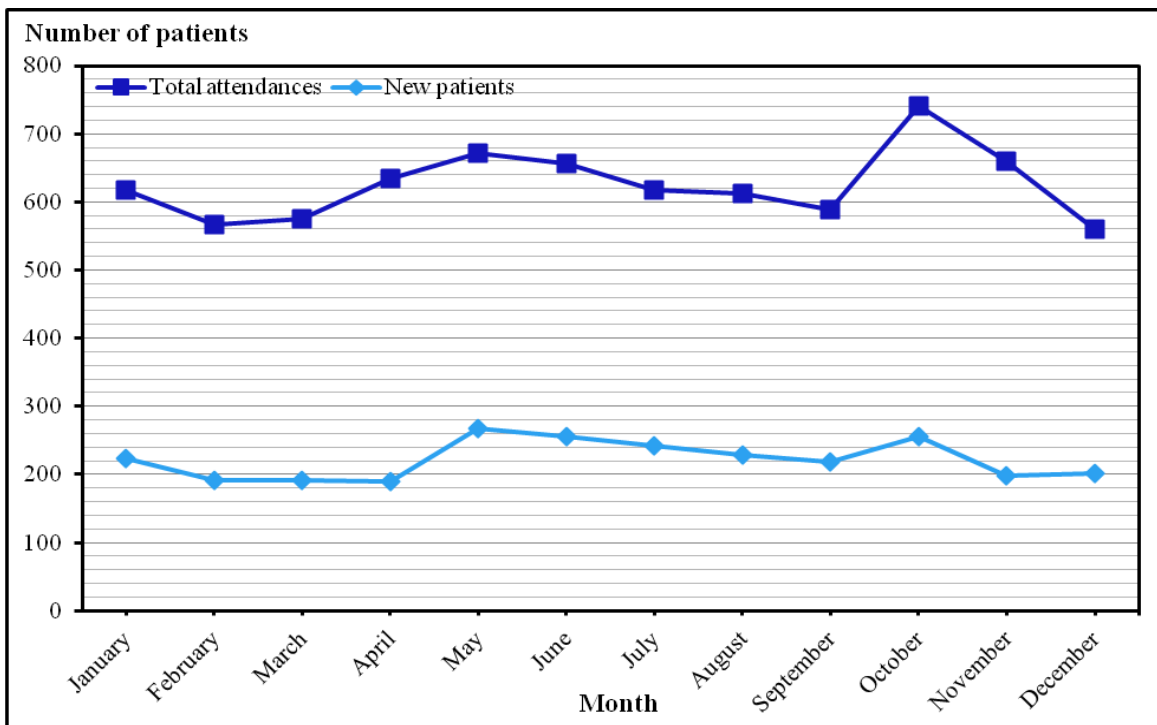


Figure 4.2.2b Number of patients attending Oral Surgery Unit for the whole state by month (2011)

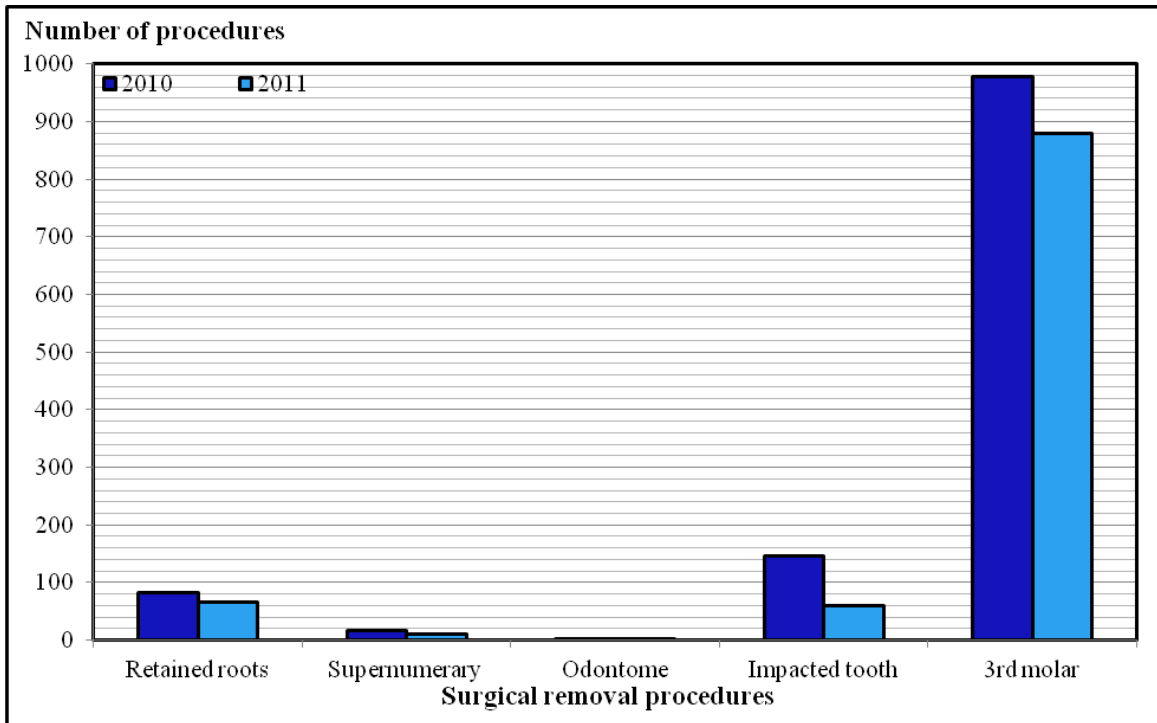


Figure 4.2.2c Number of different surgical removal procedures done for the whole state (2010-2011)

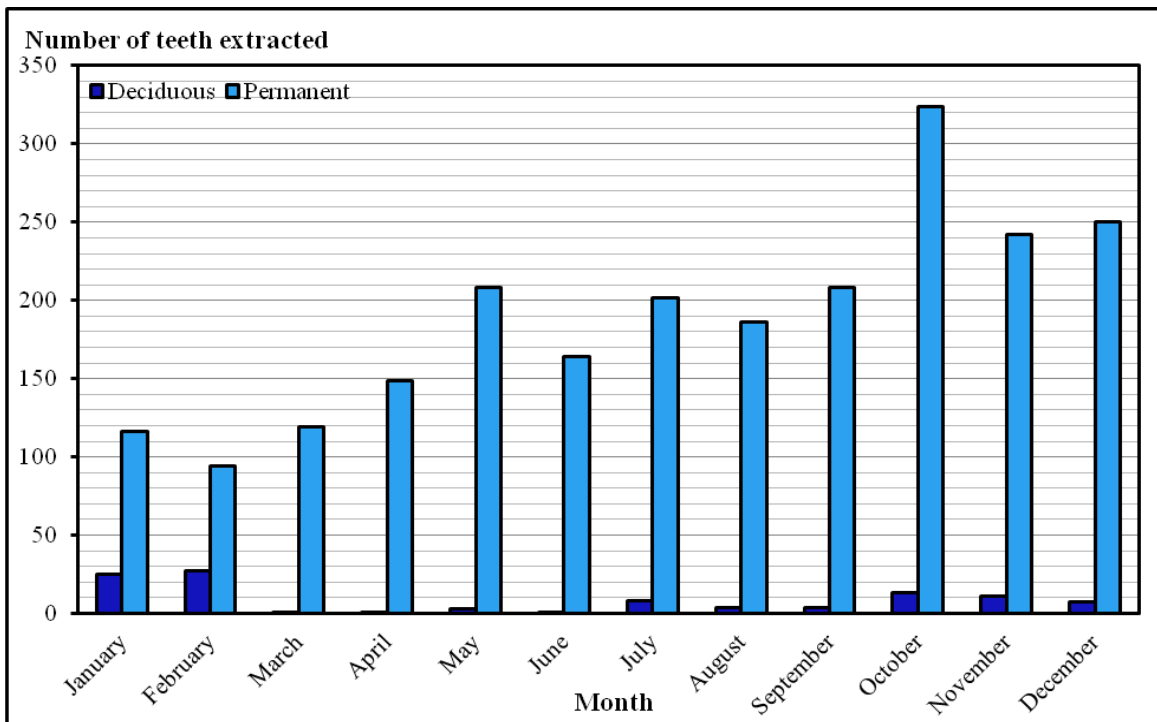


Figure 4.2.2d Number of teeth extraction done by month (2011)

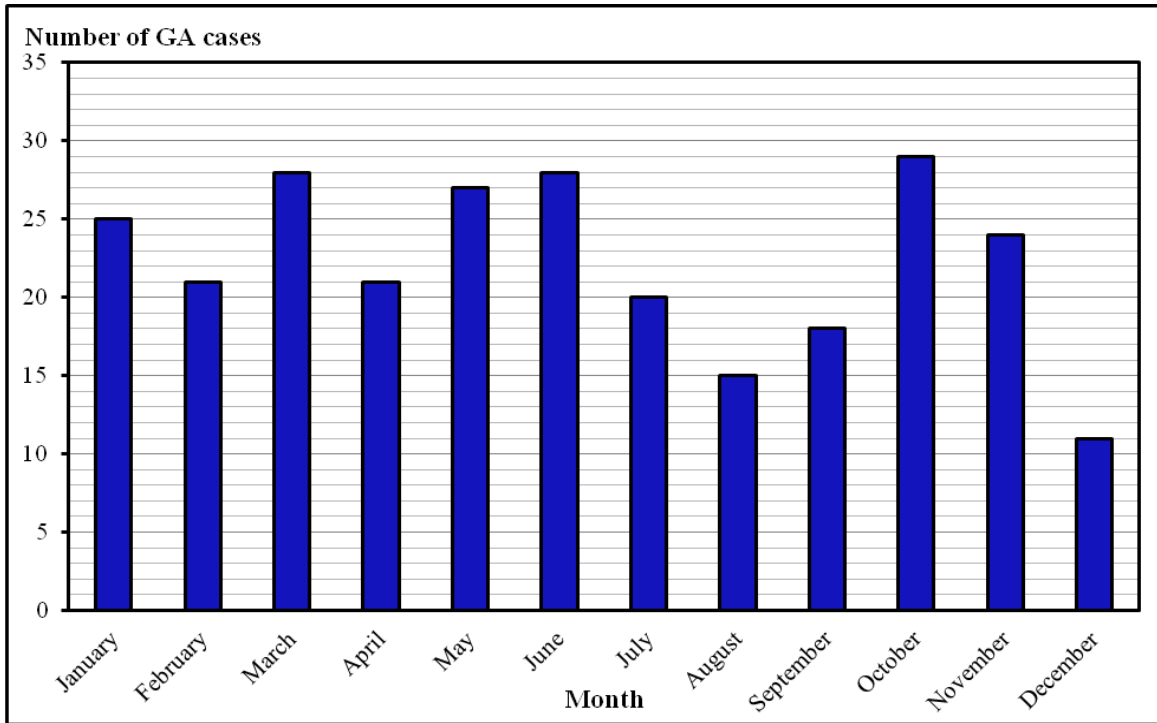


Figure 4.2.2e Number of GA cases done by month (2011)

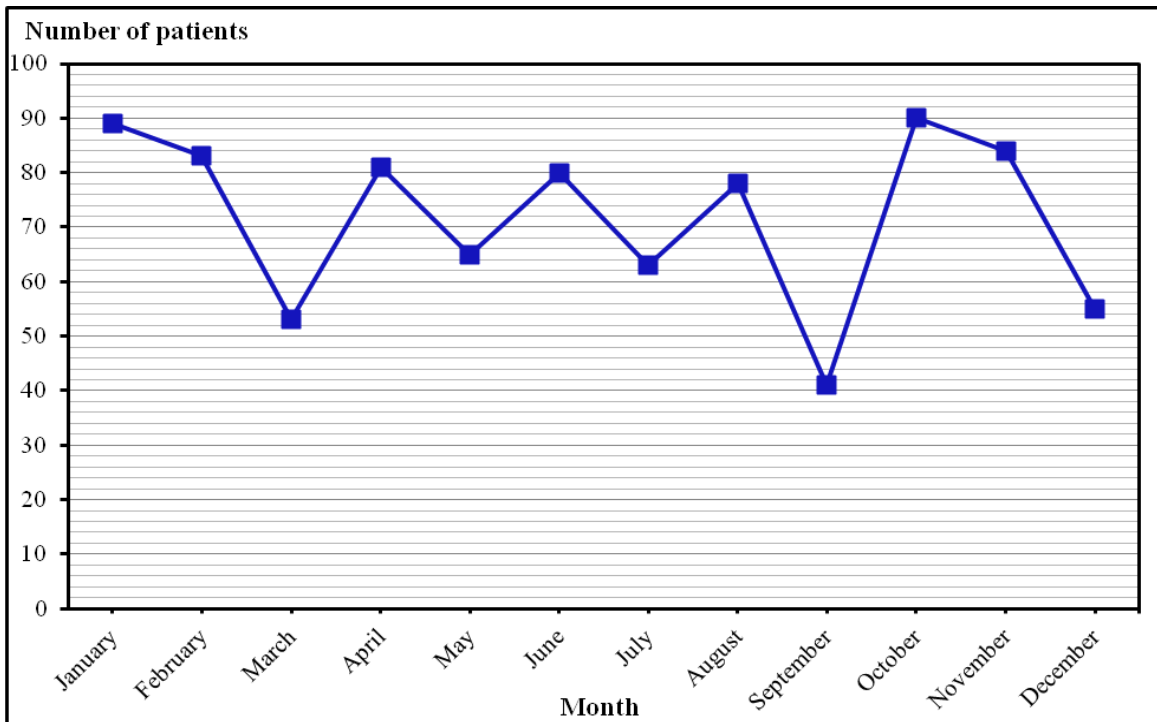


Figure 4.2.2f Number of case completion by month (2011)

PRODUCTIVITY – ORTHODONTICS

Orthodontics is the branch of dentistry that corrects teeth and jaws that are positioned improperly. The benefits of orthodontic treatment include a healthier mouth, a more pleasing appearance, and teeth that are more likely to last a lifetime.

Overview of Orthodontic Specialty Services

Manpower

- 3 (2 local and 1 expatriate) Specialists
- 3 (local) Acting Specialists
- 1 (local) Senior Dental Officer

Distribution of ‘Specialist Orthodontists’ in the districts

Brunei-Muara

5 full-time orthodontists (latest senior dental officer in orthodontics reported in March 2011).

Belait

1 full-time orthodontist & 1 full-time senior dental officer in orthodontics.
Travelling services by a second orthodontist (once a month- winding down clinics).

Tutong

Travelling services provided by 2 orthodontists - 4 days a month (once a week).

Temburong

Travelling services are not currently undertaken at present due to the fact that there are not many ‘orthodontic referrals’ from the district.

Orthodontic Waiting lists at the end of 2011

Patients currently being called off in

- Brunei-Muara - April 2008
- Belait - January 2010
- Tutong - April 2008

Table 4.2.3a Orthodontic patients ‘Attendance statistics’ for 3 districts (2010-2011)

Districts	Patient attendance ^a		Percentage distribution of patient attendance	
	2010	2011	2010	2011
Brunei-Muara	7,194	6,557	72.4	68.7
Belait	2,429	2,470	24.4	25.9
Tutong	320	518	3.2	5.4
All combined	9,943	9,545	100.0	100.0

^aPatient attendance includes patient seen for any orthodontic procedure or review

Discussion

Total patient attendance has reduced in 2011 compared to 2010 due to:

- Orthodontic survey conducted between March to June 2011
- Limited availability of bracket kits to start new patients

Table 4.2.3b Patients ‘Failed to Attend’ (FTA) Orthodontic appointment for 3 districts (2011)

Districts	Total number of appointments given		Patient attendance		Total number of ‘Failed To Attend’ (FTA) ^a		% of FTAs to number of appointments given	
Brunei-Muara	7,931	7,362	7,194	6,557	737	805	9.3	10.9
Belait	2,615	2,554	2,429	2,470	186	84	7.1	3.3
Tutong	341	557	320	518	21	39	6.2	7.0
All combined	10,887	10,473	9,943	9,545	944	928	8.7	8.9

^aThe value of FTA was calculated by the total number of appointments given *minus* the patient attendance

Discussion

The nationwide average of ‘Failed to Attend’ (FTA) has remained consistent. However the most marked reduction is seen in the Belait district.

Table 4.2.3c Orthodontic referrals for 3 districts (2010-2011)

Districts	ORTHODONTIC REFERRALS							
	No orthodontic treatment indicated ^a		Too early for definitive orthodontic treatment		Enter waiting list for fixed appliances treatment		Interceptive treatment ^b	
	2010	2011	2010	2011	2010	2011	2010	2011
Brunei-Muara	74	72	35	33	350	413	91	77
Belait	15	17	11	7	121	96	18	18
Tutong	6	6	6	8	44	46	4	7
All combined	95	95	52	48	515	555	113	102

^aNo orthodontic treatment is indicated if patient is found to have (i) very mild irregularity of teeth and is aesthetically pleasing (ii) the risks outweigh the benefit of orthodontic treatment in cases of patients having poor oral hygiene and/or mutilated dentition (multiple missing teeth, teeth with poor prognosis, heavily filled teeth)

^brefers to treatment provided to young patients having problems with the development and position of jaws

Table 4.2.3d Orthodontic treatment planning for 3 districts (2010-2011)

Districts	TREATMENT PLANNING			
	Fixed appliance treatment for cleft patients ^c		Patients taken off waiting list for fixed appliances treatment ^d	
	2010	2011	2010	2011
Brunei-Muara	8	1	318	184
Belait	0	0	120	9
Tutong	0	0	24	16
All combined	8	1	462	209

^crefers to only treatment planning and not review appointments for ongoing cleft patients. The treatment planning for some cleft patients who required fixed appliances treatment were deferred till 2012. This was attributed to the limited number of bracket kits available.

^dfrom the number of patients taken off from the waiting list for fixed appliance treatment, some opt for delaying treatment till after exams / opt to start treatment after returning to Brunei for good (if studying abroad) or decide not to have treatment as they are not keen to have orthognathic surgery etc.

Discussion

There was an increase in the number of referred patients who entered the orthodontic waiting list particularly in the Brunei-Muara district in 2010. This could be attributed to the Brunei-Muara orthodontic survey.

There was a reduction in the number of patients taken off the waiting list for fixed appliances:

- Limited availability of bracket kits to start new patients
- Orthodontic survey conducted between March to June 2011 (may be a contributory factor)

Table 4.2.3e Summary of various orthodontic procedures for 3 districts (2010-2011)

Districts	Number of appliances fitted ^a @per arch/per unit		Number of appliance adjustments ^b @per arch/ per unit		Number of appliance Repairs ^c @per arch/per unit		Debond of fixed appliances ^d @per arch/per unit	
	2010	2011	2010	2011	2010	2011	2010	2011
Brunei-Muara	992	616	8,193	7,913	410	446	176	216
Belait	300	143	2,470	2,806	143	105	83	42
Tutong	24	71	309	536	17	59	6	18
All combined	1,316	830	10,972	11,255	570	610	268	276

^afitting of orthodontic appliances such as fixed, removable, functional appliances and others

^bincludes adjustments of fixed, removable, functional appliances and others

^cincludes repairs of broken orthodontic appliances such as fixed, removable, functional appliances and others

^dDebond of fixed appliances by arch – removal of fixed appliances from upper/ lower/both arches where each arch is recorded as ‘a unit’

Discussion

There was an increase in the number of appliance adjustments for the Belait district. This could be attributed due to a Senior Dental Officer in Orthodontics who joined in March 2011.

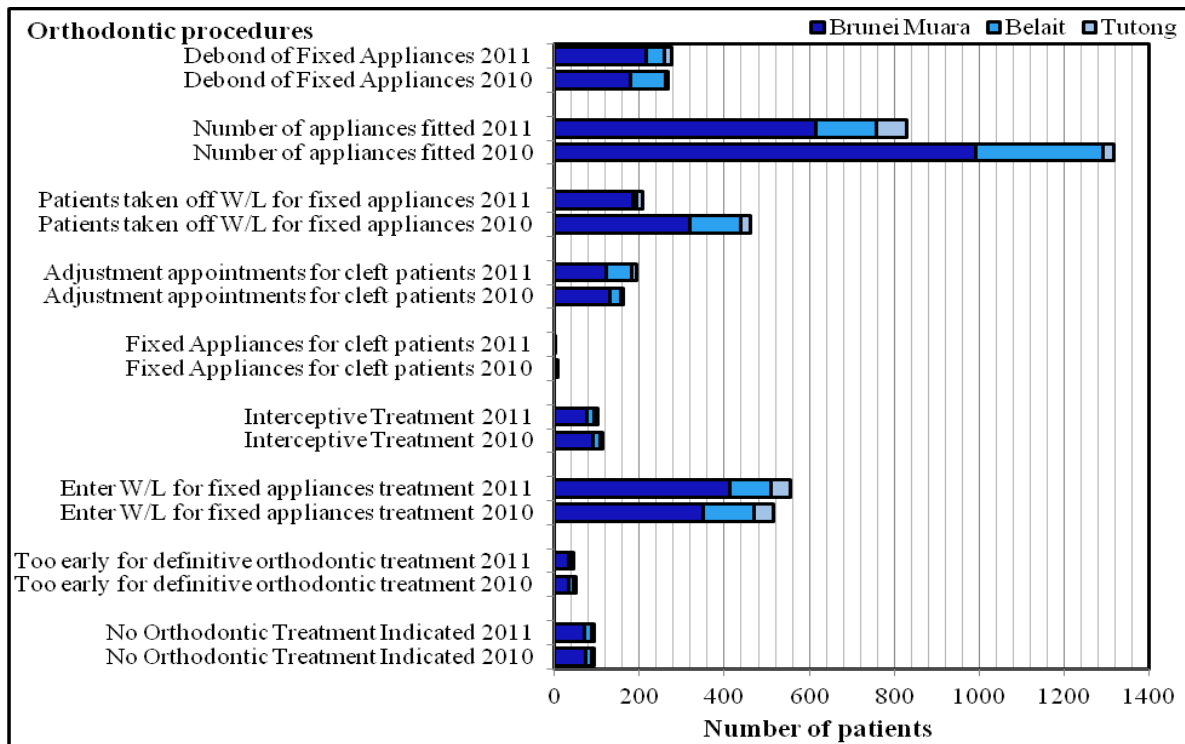


Figure 4.2.3a Comparative summary of orthodontic patient data for 2010-2011

PRODUCTIVITY – PAEDODONTICS

Paediatric Dentistry specialises in provision of oral health care (preventive- and treatment-oriented) to children that are referred to the unit and the management of children with special needs. This includes providing dental care for children with medical, physical and intellectual challenges.

Overview of Paediatric Dental Specialty Services

Manpower

- 3 (2 local and 1 expatriate) Specialists
- 2 (local) Acting Specialists
- 1 (expatriate) Senior Dental Officer
- 5 (local) Paediatric Dental Nurses

Distribution of ‘Paediatric Dental Specialist’ in the districts

Brunei-Muara

- 3 Paediatric Dental Specialists (latest specialist reported in October 2011), 1 Paediatric Senior Dental Officer and 1 Dental Nurse at National Dental Centre.
- 1 Paediatric Specialist and 1 Dental Nurse at RIPAS Hospital.

Belait

Travelling services provided by 1 Acting Paediatric Dental Specialist and 1 Dental Nurse- 3 days a week.

Tutong

Travelling services provided by Paediatric Senior Dental Officer - 3 days a month.

Temburong

Services provided by Paediatric Dental Nurse - 2 days a month. Cases are referred to Paediatric Dental Specialist in Hospital RIPAS when needed.

Table 4.2.4a Number of patients and preventive procedures done in the Paedodontics Unit (2011)

Age group	Attendances			Patient Consultation		PV Attendances	PREVENTIVE					Fissure Sealant			
	1st	Repeat	Self	Referred	OHI		Scaling & Prophylaxis	Diet Counseling	Fluoride Varnish	Patient	Surface	Fissure Sealant			
												Surface	Surface		
Brunei-Muara															
0-5	427	719	73	265	476	637	449	329	55	117	356				
6-12	618	946	212	327	601	742	631	416	41	296	1,140				
13-19	343	436	139	174	296	350	363	224	20	120	553				
Belait															
0-5	89	221	4	59	247	289	166	219	46	8	19				
6-12	87	266	4	44	242	316	207	237	14	23	60				
13-19	35	88	2	11	65	102	58	69	1	2	8				
Tutong															
0-5	40	24	0	7	36	40	24	13	3	1	4				
6-12	69	111	8	22	85	156	132	5	27	58	239				
13-19	9	16	0	2	8	19	5	0	0	16	74				
Temburong															
0-5	3	22	0	0	25	25	25	13	0	2	6				
6-12	4	27	0	0	31	31	31	13	0	7	14				
13-19	0	13	0	0	13	13	13	5	0	4	6				
All combined	1,724	2,889	442	911	2,124	2,720	2,104	1,543	207	654	2,479				

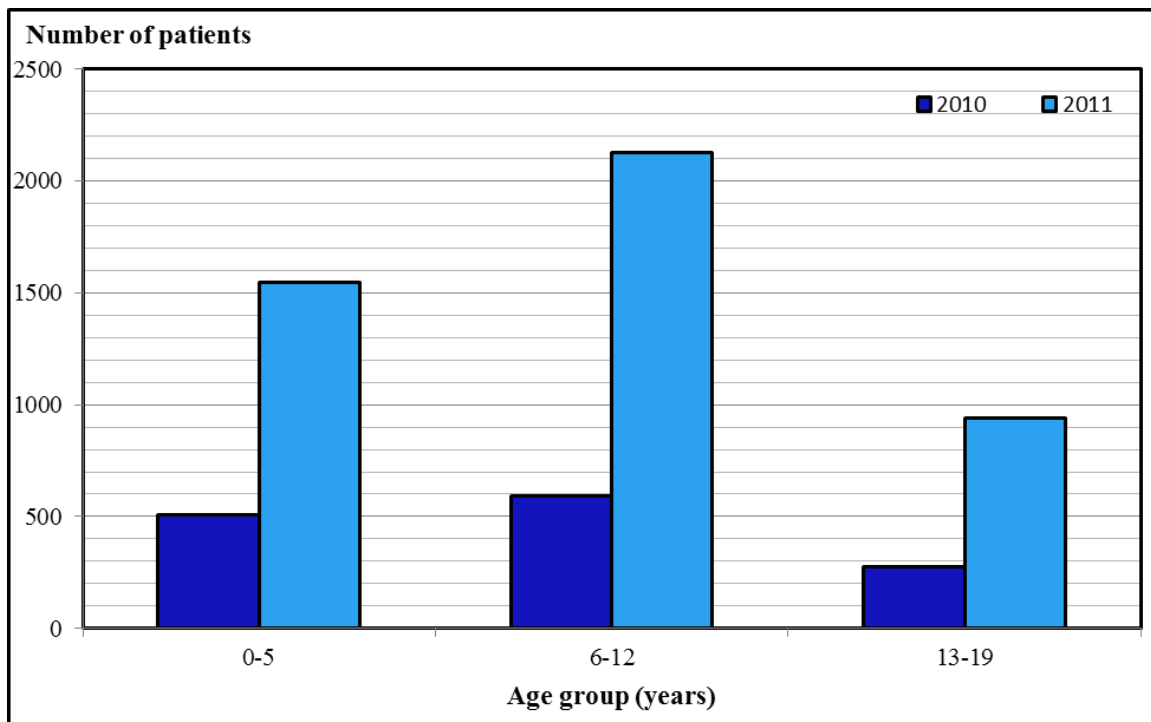


Figure 4.2.4a Number of patients treated by age group (2010-2011)

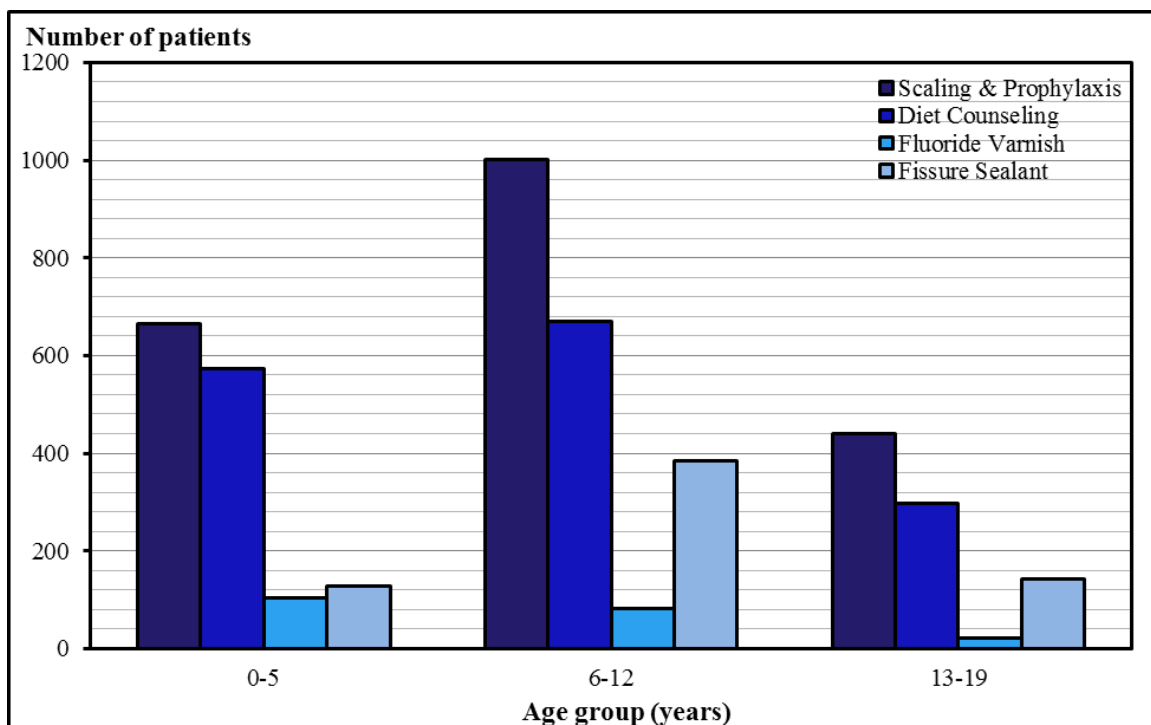


Figure 4.2.4b Number of patients given preventive treatment by age group (2011)

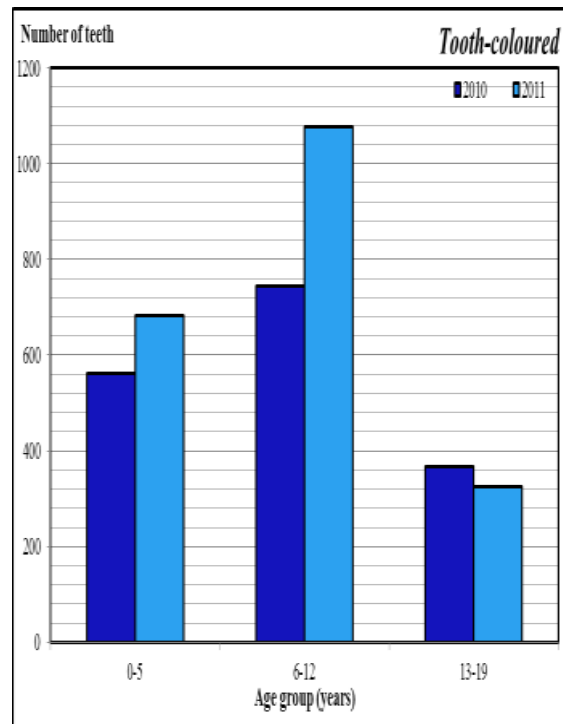
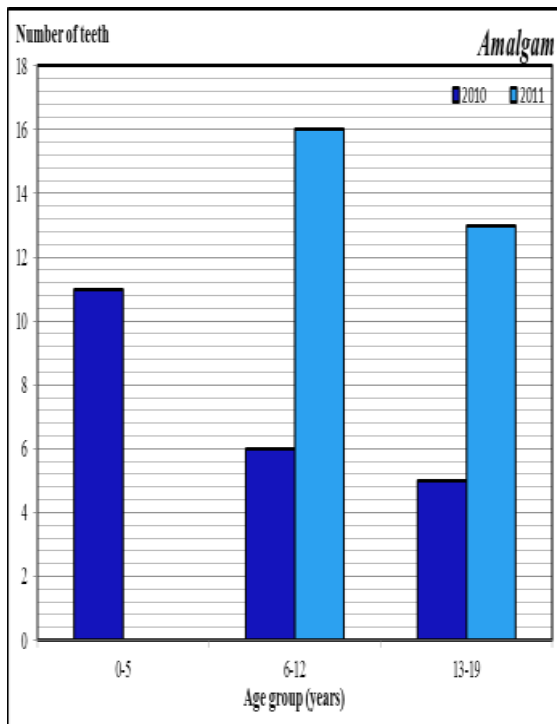


Figure 4.2.4c Number of patients given conservative treatment by age group (2010-2011)

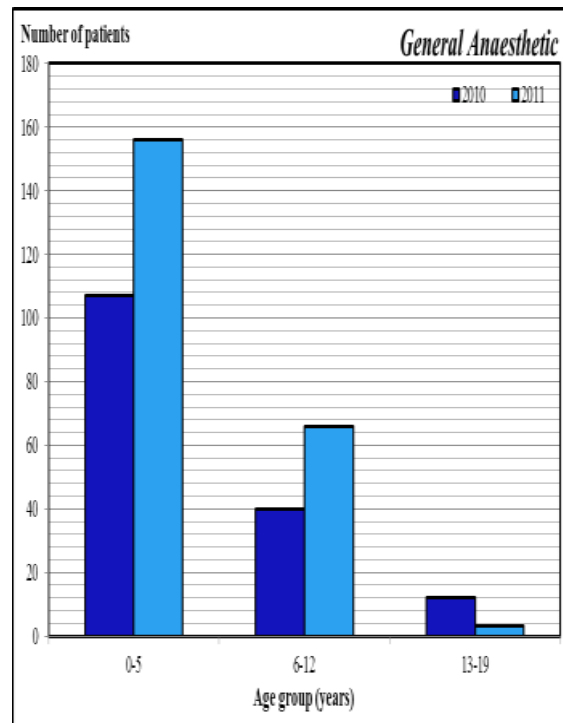
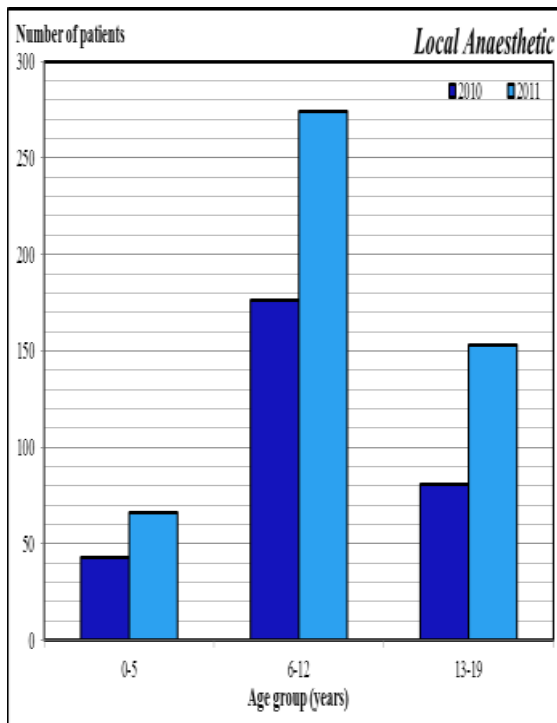


Figure 4.2.4d Number of patients given oral surgical treatment by age group (2010-2011)

PRODUCTIVITY – PERIODONTICS

Periodontics is the branch of dentistry that is concerned with the management and care of the supporting structures of teeth and its substitutes (including implants).

Services provided include:

- Oral hygiene instructions
- Comprehensive periodontal management and care (which may include ‘non-surgical’ and ‘surgical’ treatment)
- Periodontal management care of patients with dental implants (if required)

Overview of Periodontic Specialty Services

Manpower

- 1 (local) Specialist
- 1 (local) Acting Specialist
- 3 (local) Dental Hygienists

Distribution of ‘Specialist Periodontist’ in the districts

Brunei-Muara

2 full-time Periodontists (based in the National Dental Centre, Berakas).

Belait

Travelling services provided by the 2 Periodontists; once a week (4 days a month with the exception of the fasting month).

Tutong & Temburong

Referred cases are seen in the National Dental Centre, Berakas, as the number of referral cases are not sufficient in numbers to justify travelling Periodontic services to the 2 districts (very few referred cases especially from Temburong).

Table 4.2.5 Number of patients and treatment done in Periodontics Unit (2011)

Age group	Attendances			Patient Consultation (Exam & Charting)	Oral Hygiene & Demo	Non-surgical			Surgical	Extraction		Head & Neck Cancer Patients
	Newly Referred Specialist/DO/DN/DH/DT	No. of Patients with Appointments	Failed/Cancelled Appointment			Scaling	Root Planning (Quadrant)	Maintenance		Pathological	Non-pathological	
Brunei-Muara												
6-12	1	9	2	1	9	4	0	4	0	0	0	0
13-19	18	166	2	1	124	115	0	2	1	0	0	0
20-55	254	1,742	763	176	1,175	814	241	337	15	23	5	20
>55	47	392	98	43	247	125	81	139	4	9	0	7
Belait												
6-12	0	0	0	0	0	0	0	0	0	0	0	0
13-19	0	1	1	0	0	0	0	0	0	0	0	0
20-55	16	41	27	16	23	14	8	1	0	0	0	0
>55	4	14	8	4	10	14	4	0	1	0	0	0
All combined	340	2,365	901	241	1,588	1,086	334	483	21	32	5	27

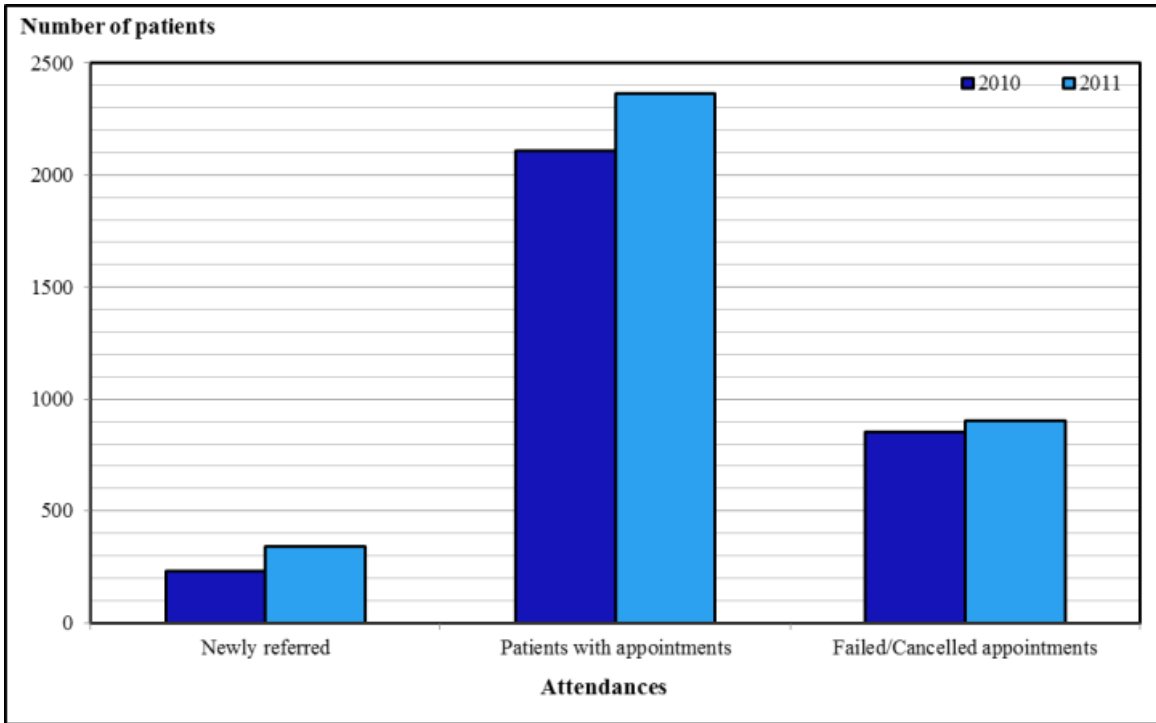


Figure 4.2.5a Number of patients by different categories of attendances (2010-2011)

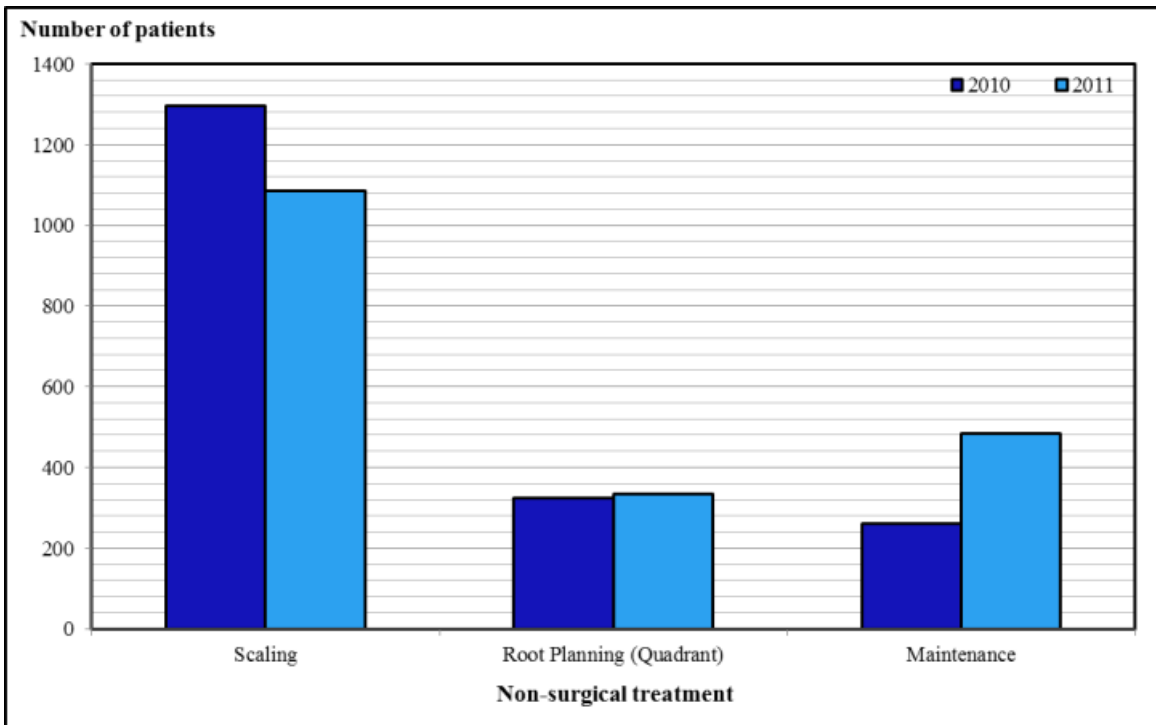


Figure 4.2.5b Number of patients by non-surgical treatments (2010-2011)

PRODUCTIVITY – PROSTHODONTICS

Prosthodontics is the branch of dentistry that specialises in the replacement of missing teeth or other structures of the oral cavity with prostheses in order to restore the patient's appearance, comfort, function and/or health.

Services provided include:

- Consultation and giving second opinions
- Providing comprehensive dental care
- Referral for stabilising treatment such as dental surgery, endodontics, periodontics and orthodontic treatment according to patients' treatment needs
- Complex direct restorative treatments such as amalgam onlays and composite restorations to improve tooth morphology
- Indirect restorative treatment such as inlays, onlays, veneers or crowns
- Replacement of missing teeth with removable prostheses
- Replacement of missing teeth with fixed prostheses such as bridges
- Replacement of missing teeth with fixed or removable prostheses supported by dental implants
- Complex multidisciplinary restorative treatment
- Surgical crown-lengthening prior to provision of dental crowns or bridges
- Providing occlusal bite raising appliances to patients suffering from temporo-mandibular joint dysfunctions (TMJDs) or bruxism, for the relief of associated muscles and joint pain

Overview of Prosthodontics Specialty Services

Manpower

2 (local) Acting Specialists

1 (expatriate) Senior Dental Officer

The Prosthodontic Unit is based at the National Dental Centre, Brunei-Muara. Travelling services to Belait are provided by 2 prosthodontists once a week; while patients from Tutong and Temburong are referred to the National Dental Centre.

Table 4.2.6a Number of patients and treatment done in the Prosthodontics Unit (2011)

Age group	FIXED PROSTHODONTICS										ENDODONTICS (includes pulpotomy)				
	Procedures (Patient)	Recementation of crowns/bridge (units)	Temporary crowns/ Bridge (units)	Posts (units)	Crown				Total Units Issued	Bridge (Total & Units)	Procedures (Patients)	Teeth			
					Anterior		Posterior								
					Veneer	FPC	PBC	FPC					PBC		
6-12	1	0	0	0	0	0	0	0	0	0	0	0			
13-19	4	1	4	1	0	0	1	0	1	0	14	1			
20-55	524	105	549	92	21	19	66	140	14	260	74	250	301	216	85
>55	123	44	150	15	1	0	16	37	6	60	19	73	59	47	12
All combined	651	150	703	108	22	19	82	178	20	321	93	323	375	277	98

FPC – Full Porcelain Crown, PBC – Porcelain Bonded Crown

Table 4.2.6b Number of patients and treatment done in the Prosthodontics Unit (2011)

Age group	PROSTHETIC				CONSERVATIVE			ORAL SURGERY	PERIODONTICS		
	Acrylic-based (number of units issued)		Metal-based	Repairs	Relines	Total number of Teeth & Surfaces Permanently Filled				No. of Teeth Extracted (Surgical)	No. of Scaling & Prophylaxis (Non-Surgical)
	Full denture	Partial denture				Teeth	Surfaces				
6-12	0	0	0	0	0	3	10	0	2		
13-19	0	1	0	1	1	25	24	1	4		
20-55	15	61	32	10	17	484	842	73	77		
>55	39	41	20	16	29	88	111	11	13		
All combined	54	103	52	27	47	600	987	85	96		

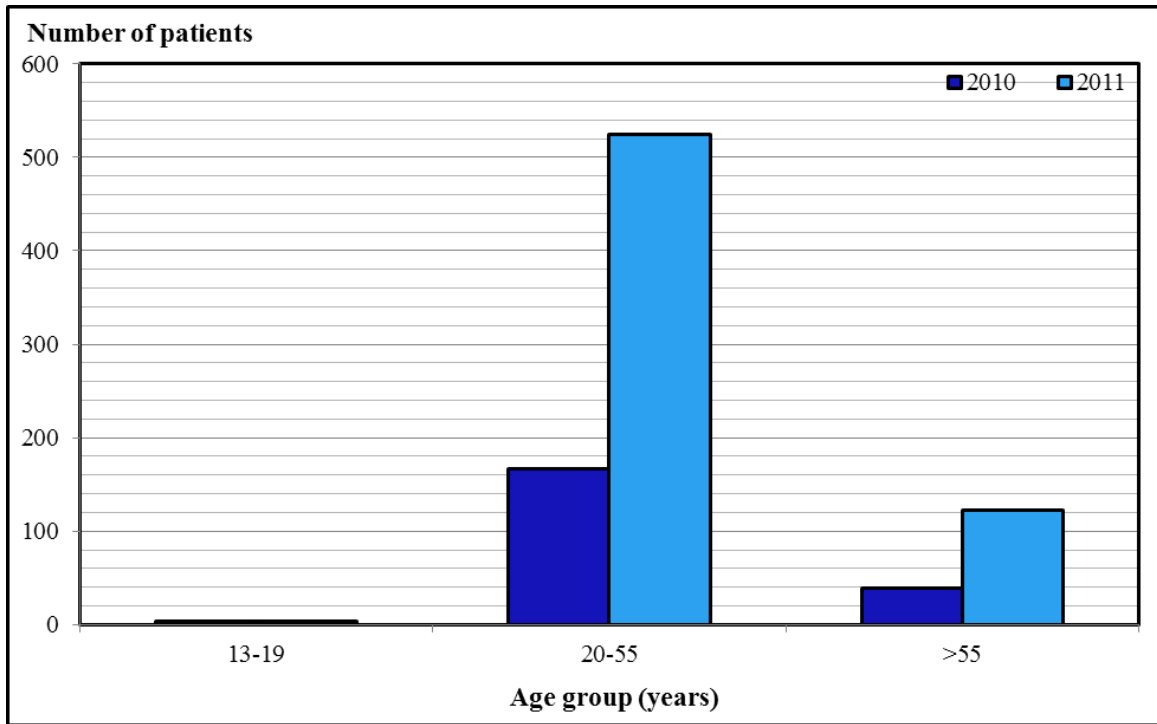


Figure 4.2.6a Number of attendances for prosthodontics treatment by age group (2010-2011)

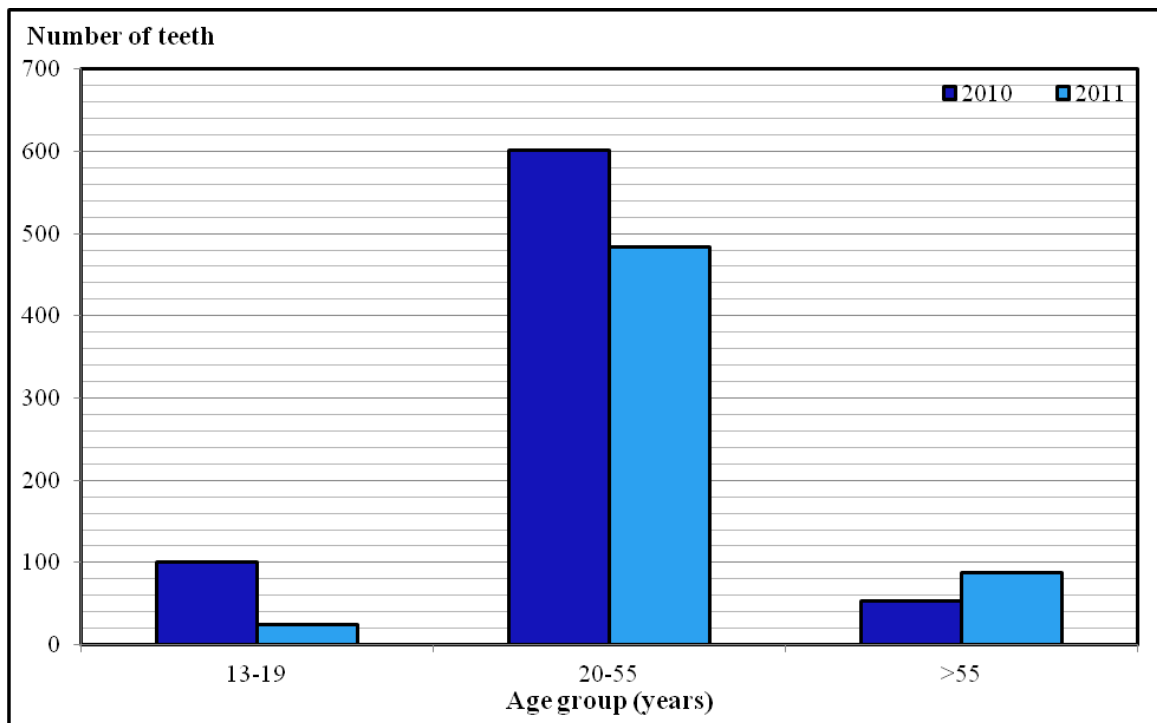


Figure 4.2.6b Number of teeth permanently filled by age group (2010-2011)

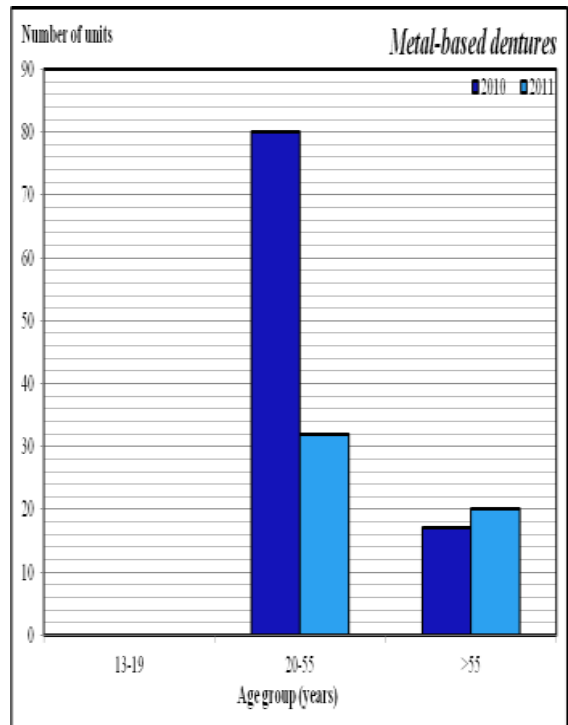
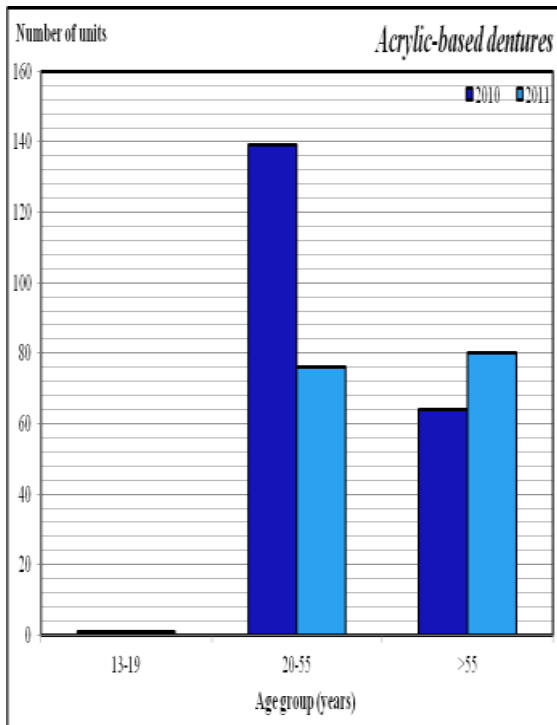


Figure 4.2.6c Number of acrylic- and metal-based dentures issued by age group (2010-2011)

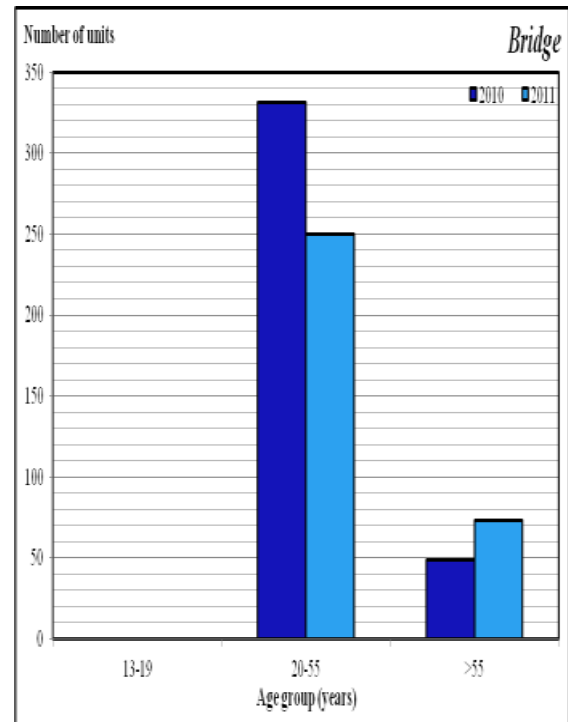
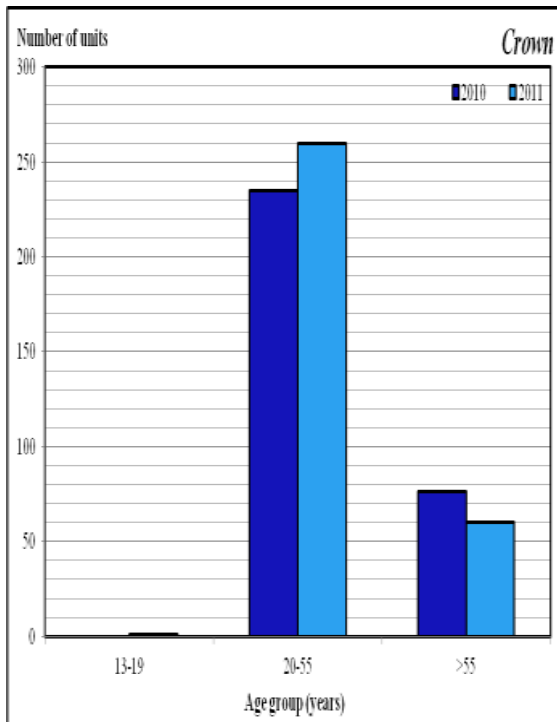


Figure 4.2.6d Number of crowns and bridges issued by age group (2010-2011)

PRODUCTIVITY – RESTORATIVE

The Restorative Unit involves both surgical and restorative aspects of implant dentistry, with special attention to patient care under comprehensive treatment planning.

Services provided include:

- Consultation
- Investigations
- Diagnosis
- Treatment planning and referrals
- Surgery - Routine clinical procedures
- Replacement of missing teeth:
 - Single tooth gap
 - Multiple missing teeth
- Surgery - Advance clinical procedures
- Full mouth rehabilitation
- Ridge augmentation
- Sinus floor elevation

Overview of Restorative Specialty Services

Manpower

1 (local) Specialist

The Restorative Unit is based at the National Dental Centre, Brunei-Muara and accepts referrals from Government and Private Dental Clinics throughout Brunei Darussalam.

Table 4.2.7 Number of patients and treatment done in the Restorative Unit (2011)

Age group	Consultations		Implant Surgery		Procedure (Patients)	Total number of Implants, Crowns, Bridges and Dentures			Removable (Units)	
	Self	Referred	Procedure (Patients)	Units of Implant placed		Implant	Abutment	Pontic	Implant	Upper Full Denture
13-19	0	3	0	0	4	2	2	0	0	0
20-55	11	40	19	46	110	43	43	2	0	0
>55	12	37	16	49	108	36	36	0	0	0
All combined	23	80	35	95	222	81	81	2	0	0

I/O – Intraoral, E/O - Extraoral

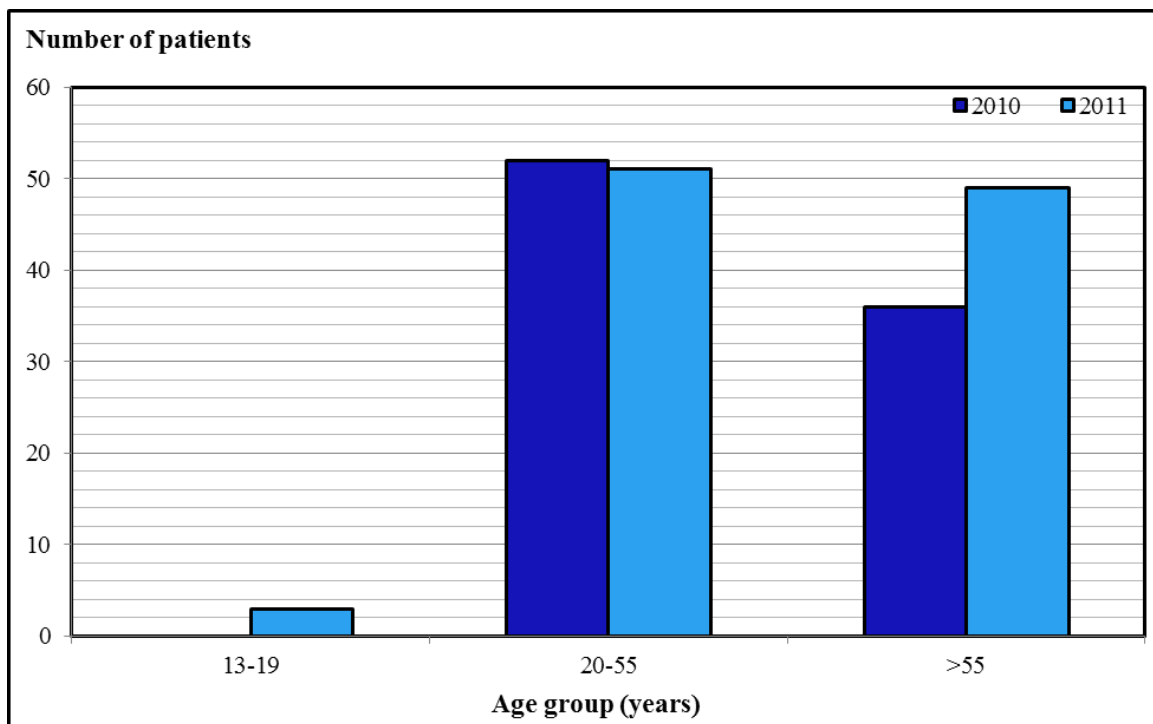


Figure 4.2.7a Number of patients treated by age group (2010-2011)

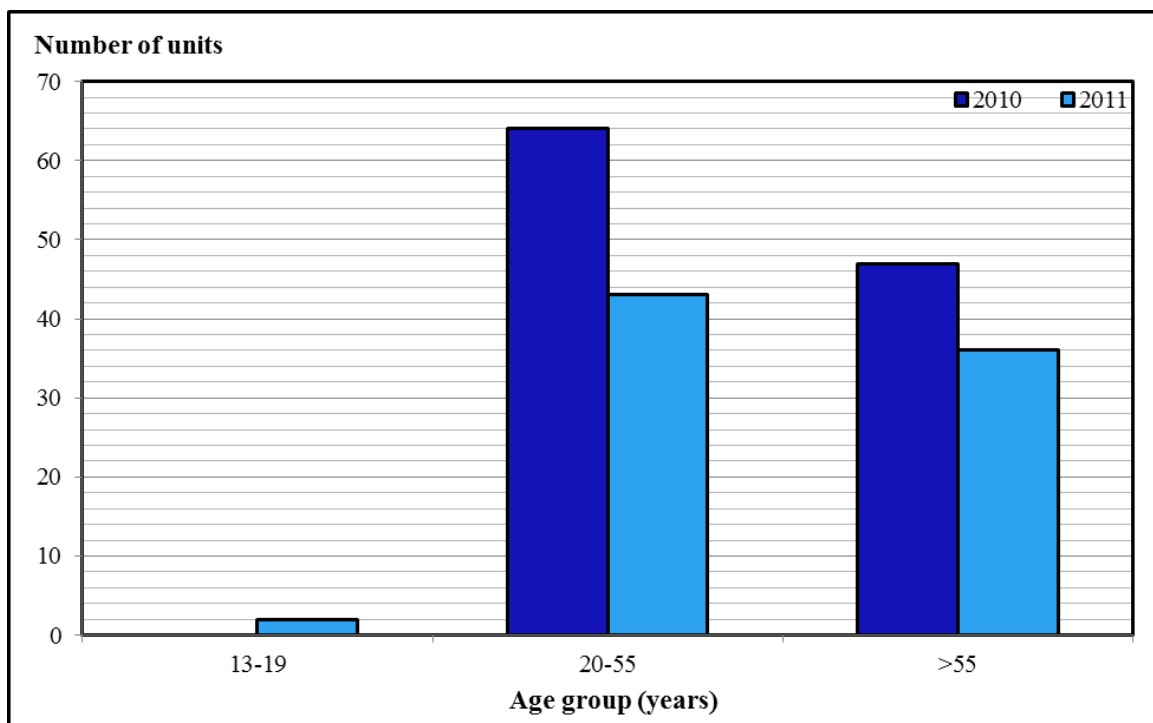


Figure 4.2.7b Number of implants by age group (2010-2011)

PRODUCTIVITY – ORAL HEALTH PROMOTION

Oral Health Promotion is the branch of dentistry which is practiced in relation to population and group, which drives from epidemiology and awareness of service required to organise the application of these services for the benefit of the population.

Goals:

1. To reduce the prevalence of dental caries and periodontal disease in the population.
2. To strengthen the Oral Health Promotion division to oversee all oral health promotion activities.
3. To target population that is at risks to oral diseases and to utilise proven interventions.

Overview of Oral Health Promotion (OHP) Division

Manpower

- 1 (local) Acting Specialist
- 1 (local) Dental Officer
- 2 (expatriate) Dental Officers – 1 part-time
- 1 (local) Acting Senior Dental Nursing Officer – part-time
- 1 (local) Senior Staff Dental Nurse
- 3 (local) Staff Dental Nurse
- 1 (local) Clerk

Services throughout the State

1. Antenatal Oral Health Care Programme

The Antenatal Mother's Oral Health Care Programme was launched in 2006 in Maternal and Child Health (MCH) clinics. The Antenatal Oral Health Care Guide Book was launched by the Minister of Health in 2007.

Definition

Antenatal period is the period between the conception of the foetus and delivery. Antenatal oral health care is defined as specialised oral health care that should be received by all pregnant women.

Aim

The main aim of the programme is to render comprehensive dental treatment and impart oral health education to ante-natal mothers with special emphasis on taking care of their infant's teeth and feeding practices.

The programme aims to empower the expectant mother towards self-care, attaining good oral health for themselves, their infants and their families; thereby, improving their oral health status. It also aims at increasing the utilisation of oral health care services among antenatal mothers and provides them with systematic oral health care and dental health education.

Method

Antenatal dental cards are given to antenatal mothers by community nurses who are supposed to give oral health education to pregnant mothers by referring to the Antenatal Oral Health Care Guide book which were delivered to all MCH clinics. The community nurses then refers the pregnant mothers to dental clinics for oral health care treatment and oral health education.

Dental officers will examine the patients and fill in relevant data on the antenatal card. The data of the patients recorded are: (1) BPE score, (2) DMFT, and (3) details about oral health education given for mothers and child. Then, dental treatment and oral health education are rendered to the antenatal mothers. Oral health care data for antenatal mothers' attendances at all dental clinics throughout the state are collected and analysed by the OHP division. A summary of antenatal attendances is presented in Figure 4.3.

2. Parents and Toddler Programme (PT)

Parents and Toddlers programme is a counseling programme given by the staffs of the OHP division to parents and toddlers (0-5 years) twice a month at MCH clinics in Brunei Darussalam. The PT programme data is presented in Table 4.3a-c.

3. Daily Fluoridated Toothbrushing Programme (DFTB) in Government Primary Schools

The goal of this programme is to reduce the prevalence of dental caries of primary school children through daily toothbrushing in schools using fluoride toothpaste [Polypaste (halal), imported from Philippines, and tested the fluoride (1,450 ppm) in ACTA Netherlands Germany]. Monitoring of DFTB is being conducted by OHP division through monitoring forms, school visits and checklists.

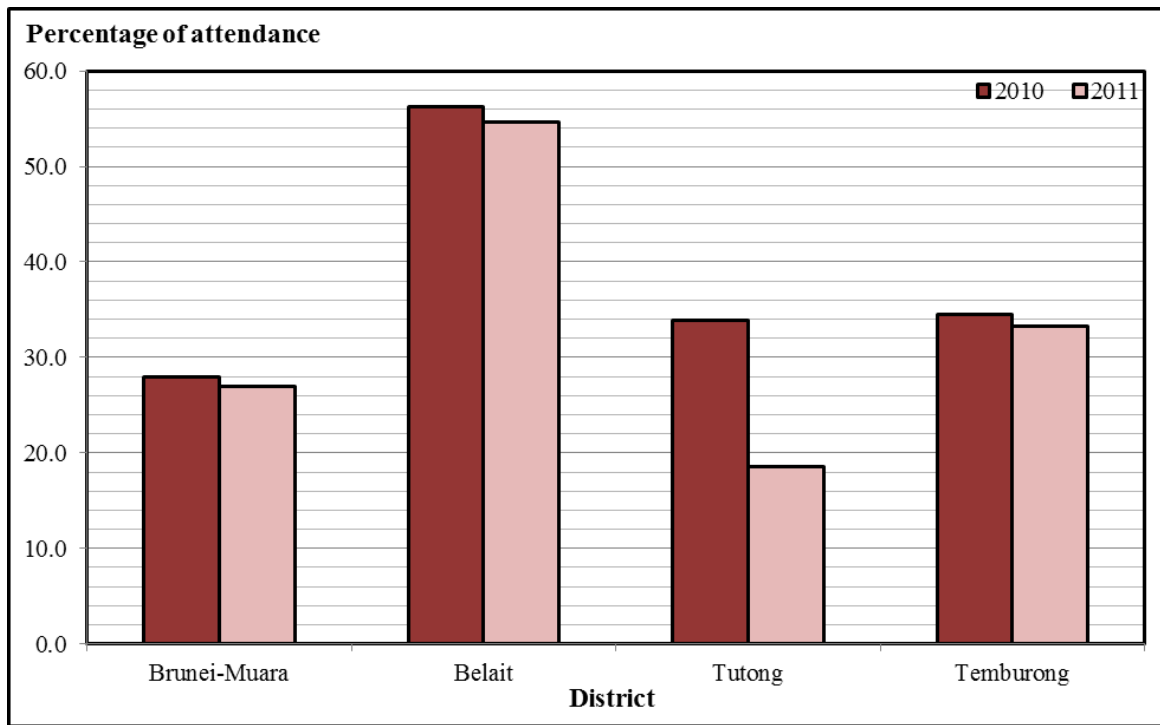


Figure 4.3a Percentage of antenatal patient attendances at dental clinics by districts (2010-2011)

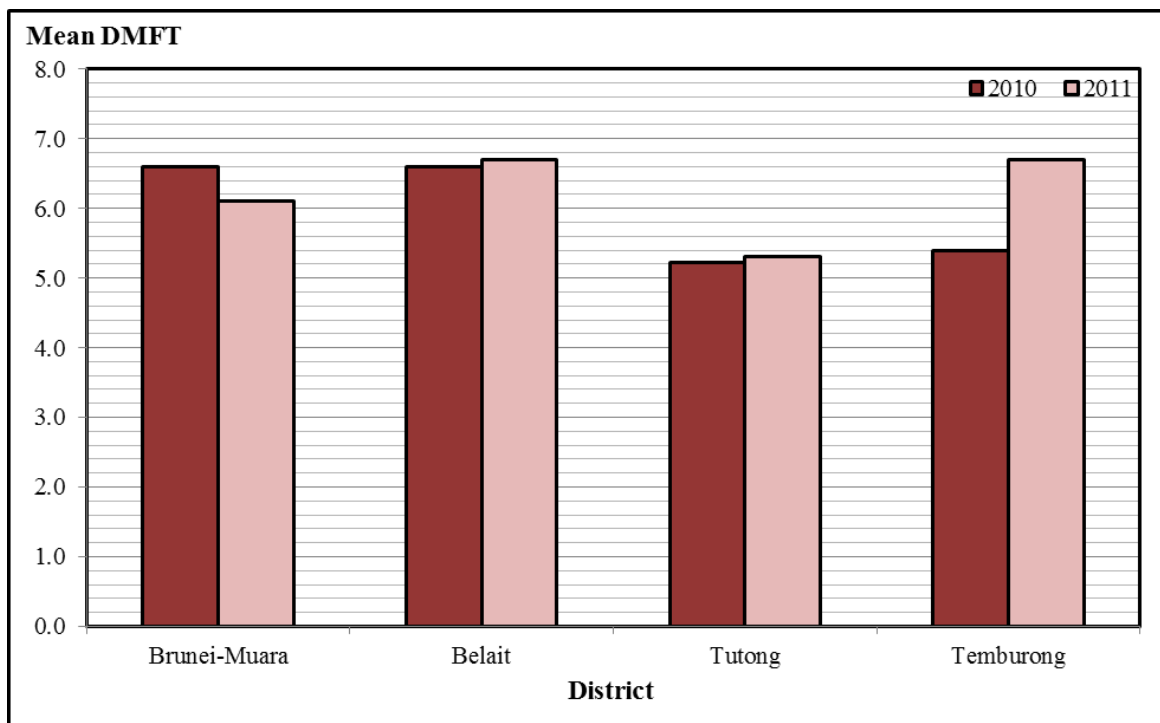


Figure 4.3b Mean DMFT for antenatal patients attending dental clinics by district (2010-2011)

Table 4.3a Parents and Toddlers programme returns from all MCH clinics in Brunei-Muara district (2011)

Health Clinic	No. of patients attended		No. of 0-5 yr old	No. of pts with caries	No. of pts with caries free	No. of counseling		Oral Hygiene Status			No. of parent attendance	
	N	R				N	R	P1	P2	P3	N	R
Sg. Assam	22	0	22	7	14	20	0	14	7	0	20	0
Perpindahan Lambak	75	1	76	29	41	74	1	45	23	3	74	0
Gadong	171	0	171	64	95	179	0	111	41	13	179	0
Subok	12	0	12	5	4	11	0	4	5	0	11	0
Muara	38	0	38	17	18	43	0	18	15	3	43	0
Mata-Mata	4	0	4	0	4	6	0	4	0	0	6	0
Bunut	150	0	150	50	96	154	0	103	41	2	150	0
Sg. Besar	67	0	67	32	35	71	0	31	32	4	70	0
Kiarong	21	0	21	3	18	20	0	20	2	0	20	0
Sg. Hanching	43	0	41	13	42	43	0	31	10	0	43	0
Berakas 'A'	51	0	51	9	38	58	0	43	5	1	51	0
Sg. Kebun	92	1	93	55	34	90	1	44	45	2	90	0
Sengkurong	37	0	37	6	28	33	0	29	5	0	33	0
All combined	783	2	783	290	467	802	2	497	231	28	790	0

N - 1st visit of the year considered as 'New'
R - 2nd visit of the year considered as 'Repeat'
OH Status: P1 - Good, P2 - Fair, P3 - Poor

Table 4.3b Number of schools receiving Polypaste in Brunei-Muara Zone 1 (2011)

Name of schools	Total classes	Polypaste required (Number of students / 8)	No of Students
SR Dato Ahmad	14	30	240
SR Pehin Dato Jamil	20	53	420
SR Pular Ulak	19	52	416
SR Raja Isteri Fatimah	13	29	227
SR Sungai Kebun	11	27	209
SR Haji Tarif	7	21	165
SR Pintu Malim	19	51	402
SR PAP Besar	14	31	243
SR Dato Godam	7	12	94
SR Kg. Bendahara Lama	7	10	73
SR Mabohai	17	52	412
SR Saba Darat	14	36	283
SR Sungai Siamas	14	38	297
TOTAL	176	442	3,481

1 Polypaste is for 8 students

Table 4.3c Number of schools receiving Polypaste in Brunei-Muara Zone 2A (2011)

Name of schools	Total classes	Polypaste required (Number of students / 8)	No of Students
SR Amar Pahlawan	17	47	372
SR Anggerek Desa	22	69	550
SR Berakas Garrison	13	34	270
SR DMW Lambak	18	53	423
SR Pulaie	14	33	257
SR Pantai Berakas	20	51	401
SR Dato Basir	20	67	535
SR Dato Othman	21	77	609
SR Dato Marsal	22	95	753
SR Lambak Kanan Jln 49	27	87	693
TOTAL	194	613	4,863

1 Polypaste is for 8 students

4. Daily Fluoridated Toothbrushing Programme In Ugama Schools (Siwak Programme)

The programme was started in April 2009 in Tutong I, Tutong II and Temburong III. In 2010, the programme was extended to Belait, Brunei I and Brunei IV. The total number of schools participating in the Siwak programme in 2010 was 49 schools. The programme is extended to Brunei II in July 2011 and Brunei III in September 2011. The programme is monitored by the Islamic Studies Department (*Jabatan Pengajian Islam*), Ministry of Religious Affairs.

5. Toddlers, Rolling Toothpaste and Fluoride Varnish Programme (TFRTP)

This is an 'early childhood oral health care programme'. The main objective is to promote and maintain good oral health of toddlers, which can contribute to optimum growth and development. It targets post natal mothers and parents/carers of children under 5 years and below who are seen by the oral health promotion staffs under the dental services in Maternity and Child Health centres. This is a 3-in-1 programme which includes toddler programme, oral health counseling session for parents, and fluoride varnish is applied to all the children at 6 months intervals. The Rolling Toothpaste' Programme involves monitoring the children (0-5 years) through phone calls and review appointments at 6 months intervals. A complimentary bag contains toothpaste, toothbrush, leaflets, and feeder cups as an incentive to parents (9-months-old babies) to replace bottle feeding with feeder cups, at 1 year of age. This programme was started as a Pilot programme in Sg. Asam MCH in May 2011. This programme is now extended to all maternity and child health clinics/centres from September 2011.

6. Release of Oral Health Promotion booklet

Topics included were:

- i. Bottle feeding and breast feeding.
- ii. Diet – eat fresh and balanced diet.
- iii. Oral health care.
- iv. Prevention of cross infection.
- v. Importance of fluoride toothpaste (1,100-1,450 ppm).
- vi. Toothbrushing and flossing technique for adults.
- vii. How parents can examine their child's teeth.
- viii. Healthy teeth for life.

7. Oral Health Education Talks in Kindergarden, Primary and Secondary schools and Public

Oral health education aims to improve health by changing behaviour through information on oral health. Oral health education talks and toothbrushing exercises are conducted in Kindergarden, Primary and Secondary schools (Table 4.3d). Oral health talk and screening for the public includes Launching of Health Promotion Blue Print, *Majlis Ilmu*, World Oral Health Day, Open Day at UBD, Mukim Sihat at Katok, Civil Servants Day, Special Olympics for Special Needs, Brunei-Edutainment Wonderland, Mukim Sihat at Telisai, visiting to specialist dental clinic Miri, and educating the health promotion teachers.

8. Proposal for National Oral Health Survey for School Children in Brunei Darussalam

9. Dental Education Programme for Nurse Education Officers during their 2 day Attachment with Oral Health Promotion Division. Training with Dr Mary Cheong Poh Hua, Head of Oral Health Promotion, on:-

- i. Situation analysis: Educating the nurses on the high caries level in the child and adult population and explaining to them the severity of dental caries in children.
- ii. Establishing the fact that dental caries is a public health problem.
- iii. Providing them with facts that many children undergo extractions under GA- some total extractions. The outcome of this affects not only their nutrition but also their psychology.
- iv. A brief lecture on the importance of maintaining good oral hygiene and various contributing factors in the aetiology of dental caries.

- v. Educating them on the various preventive strategies adopted by OHP- Rolling Toothpaste programme (RTP), Daily Toothbrushing with Fluoride Toothpaste in Schools (DFTB), Toddler Programme, Dental Programme for Antenatal Mothers, Fluoride Varnish Programme in Sg Kebun, and Fluoridation.
- vi. Outline of the School Health Services:
- Charting of the school dental clinics and mobile squads.
 - Services offered by the school health services
 - Challenges faced by the school dental nurses
 - Format of referrals from the nurses to the area dental clinics
- vii. Detailed outline of the DFTB Programme in schools. Methodology in which it is carried out. The Importance of implementing the programme in all Government Schools in all 4 districts.
- viii. Discussion of the programme running in schools in Zone 1 & 2 of Brunei-Muara district.
- ix. Scope of their involvement: to aid in the implementation of the programme. Their key responsibility is to monitor the programme in schools and to ensure that all schools are participating in the programme and that the toothbrushing drills are done on a daily basis in schools.
- x. They have to act as mediators between the schools and the concerned departments to help in the implementation of the programme and problem solving.
- xi. Educate them on the feedback forms used in monitoring DFTB. They have to ensure that these forms are duly filled by relevant personnel and brought back to OHP. To ensure that the questionnaires are duly filled by students and provide help when required.
- xii. One of their key responsibilities is to provide talks in school. The nurse should incorporate oral hygiene with general body hygiene and thereby emphasise among the students the need for daily brushing and maintain good oral hygiene. Educating the children on the role of diet in the causation of dental caries. To instil the knowledge in children that daily brushing with fluoride toothpaste is key in preventing dental caries.
- xiii. To act as mediators and facilitators in establishing health promoting canteens, for example, canteens selling fresh fruits, selling only water in schools and no sweetened or carbonated drinks, and prohibiting/limiting the sale of sugary snacks.
- xiv. Educating the nurses in the management of trauma cases in schools- fractured teeth and avulsed teeth.

10. National Dental Song Competition in Primary Schools of Brunei Darussalam

Ministry of Health has celebrated World Oral Health Day on 12th September 2011 as this country's commitment to prioritise oral health of citizens and residents of Brunei Darussalam. A National Dental Song competition will be conducted in April 2012, as part of the World Oral Health Day Celebration. This competition is for all primary government and private school children at the age of 6-9 years old (Year 1-3). The lyrics are about oral health which includes advice, knowledge and habits for good oral health. The purpose is to utilise songs to instill/influence/impact young children towards good oral health through imparting oral health knowledge through effective "catchy" children dental songs.

11. Water Fluoridation

The first water fluoridation plant was installed in the Layong water treatment plant at Tutong district in 1987. Since then, 3 more water fluoridation plants have been commissioned throughout the country. About 95% of the population receives fluoridated water. All the water samples from these plants are monitored by Ministry of Health and Public Works Department.

Fluoridation plants	Year of commencement	Area supplied	Average Fluoride level (mg/l) in 2011
Layong	1987	Most of Tutong district up to Jln Jerudong, Brunei-Muara District	0.56
Bukit Barun	1996	Most of Brunei-Muara District	0.63
Seria	2000	Most of Kuala Belait District except Labi	0.71
Mengkabau	2000	The whole of Muara area up to Kg. Kapok Kanan in Kota Batu area	N/A
Temburong (Sumbiling I & II)	2008	The whole of Temburong District	N/A

All levels are acceptable (0.45 to 0.75mg acceptable)

12. Banners, Stickers, Posters

These banners were done both in Malay and English. The Malay banners received on 15th February 2011, whereas the English banners on the 14th April 2011.

No.	English banners	Malay banners (15 th April 2011)
1	Good Diet/Bad Diet	Teknik Memberus Gigi Yang Betul
2	Proper toothbrushing techniques	Memberus Gigi Untuk Kanak-Kanak Berumur 6 bulan - 2 Tahun
3	Tooth wear Abrasion	Memberus Gigi Untuk Kanak-Kanak Berumur 2 - 9 Tahun
4	Tooth wear Attrition	Memberus Gigi Untuk Kanak-Kanak Berumur 9 Tahun Keatas
5	Tooth wear Erosion	Kesihatan Mulut Untuk Seumur Hidup
6	Sports Injuries	Tips Gigi Sihat untuk anak Awda
7	Oral Health for life	Tabiat Baik
8	Smoking	Tabiat Buruk
9	Tips for healthy teeth for your children	
10	Toothbrushing for healthy teeth (age recommendations 0-2 years)	
11	Toothbrushing for healthy teeth (age recommendations 2-9 years)	
12	Toothbrushing for healthy teeth (age recommendations 9 years and above)	

13. The Maternal and Child Health Hand Book for 0-5 years old (MCH Book)

The MCH hand book was released by Ministry of Health in 2011. The hand book contains information about dental care for the new borns and toddlers.

Table 4.3d Report of oral health activities (2011)

No.	Date	Schools/Organisation	Class (Total participants)	Venue	Dental Activities
BRUNEI-MUARA DISTRICT					
1	29 / 03 / 2011	SR Pasir Berakas	Pre – Yr 6	SR Pasir Berakas	Monitoring ‘DFTB Programme’
2	30 / 03 / 2011	SU PAP Majeedah Nurul Bolkiah, Kilanas	Pre – Pr 6	SU PAP Majeedah Nurul Bolkiah, Kilanas	Oral Health Talks Question /Answer Toothbrushing drill
3	20 / 04 / 2011 - 09 / 05 / 2011	Ministry of Health Launching ‘Blue Print’	Public	Health Promotion Centre Commonwealth Drive, Berakas Ministry Of Health	Dental Screening (Adult/Children) Posters Dental Counselling Toothbrushing demonstration
4	20 / 04 / 2011	SR Pasir Berakas	Pre – Yr 6	SR Pasir Berakas	Monitoring ‘DFTB Programme’
5	21 / 04 / 2011	SM Sayyidina Umar Al- Khattab, Lumapas	Yr 7 – 8	SM Sayyidina Umar Al- Khattab, Lumapas	Oral Health Talks Toothbrushing demonstration
6	27 / 04 / 2011	SR Jalan 49	Pre – Yr 6	SR Jalan 49	Monitoring ‘DFTB Programme’
7	14 / 05 / 2011	Workshop on TFRTP Program	Dental Nurses	MCH PAP Hajjah Rashidah Sa’adatul Bolkiah Sg Asam	Briefing on TFRTP Programme
8	18 / 05 / 2011	SR Jalan 49	Pre – Yr 6	SR Jalan 49	Monitoring ‘DFTB Programme’
9	25 / 05 / 2011	Ministry of Education ‘Health Promoting School’	Teachers	SM Sayyidina Abu Bakar, Lambak Kanan	Health Promoting School activities with MOE
10	02 / 06 / 2011	Chung Hwa Middle School	Kindergarden 3 a.m. (160) p.m. (140)	Chung Hwa Middle School	Oral Health Talks Question /Answer Toothbrushing drill
11	05 / 07 / 2011	SR Amar Pahlawan	Pre – Yr 6	SR Amar Pahlawan	Monitoring ‘DFTB Programme’
12	12 / 07 / 2011	SR Amar Pahlawan	Teachers (36)	SR Amar Pahlawan	Briefing on ‘DFTB Programme’ Oral Health Talks Question /Answer Toothbrushing exercise
13	20 / 07 / 2011	SR Datu Mahawangsa Lambak	Pre – Yr 6	SR Dato Mahawangsa Lambak	Monitoring ‘DFTB Programme’
14	26 / 07 / 2011 - 30 / 07 / 2011	Ministry of Education ‘Majlis Ilmu’	Public / Students	International Convention Centre, Berakas	Oral Health Talks Question /Answer Posters Toothbrushing demonstration

No.	Date	Schools/Organisation	Class (Total participants)	Venue	Dental Activities
15	07/09/2011	Sekolah Taman Asuhan Pertiwi	Kindergarden 1 – 3 (23)	Sekolah Taman Asuhan Pertiwi	Meeting with MoE staff/ teachers and OHP Staff on 'Health Promoting School' Oral Health Talks Question /Answer Toothbrushing demonstration
16	12/09/2011	Dental Department Services 'Launching on World Oral Health Day'	Public/ Students	National Dental Centre, Berakas	Oral Health Talks Question /Answer Posters
17	20/09/2011	Universiti Brunei Darussalam 'Open Day'	Public/ Students	Universiti Brunei Darussalam	Dental Screening Posters Dental Counselling Toothbrushing demonstration Dental Career Booth
18	25/09/2011	Ministry of Health 'Mukim Kampung Sihat'	Public/ Students	Sixth Form Centre, Kg Katok	Dental Screening (Adult/Children) Posters Dental Counselling
19	01/10/2011	SR Dato Othman, Lambak Kiri	Pre – Yr 5	SR Dato Othman, Lambak Kiri	Monitoring 'DFTB Programme'
20	12/10/2011 - 14/10/2011	Ministry of Health 'Civil Servants Day'	Public/ Students	International Convention Centre, Berakas	Dental Screening (Adult/Children) Posters Dental Counselling Toothbrushing demonstration
21	01/11/2011	Seri Mulia Sarjana International School, Mata-Mata Gadong	Lower Primary School a.m. (180) p.m. (100)	Seri Mulia Sarjana International School, Mata-Mata Gadong	Oral Health Talks Question /Answer Toothbrushing drill
22	02/11/2011	Seri Mulia Sarjana International School, Mata-Mata Gadong	Upper Primary School a.m. (95) p.m. (145)	Seri Mulia Sarjana International School, Mata-Mata Gadong	Oral Health Talks Question /Answer Toothbrushing drill
23	03/11/2011	Seri Mulia Sarjana International School, Mata-Mata Gadong	Pre School a.m. (81) p.m. (54)	Seri Mulia Sarjana International School, Mata-Mata Gadong	Oral Health Talks Question /Answer Toothbrushing drill
24	02/12/2011	Ministry of Health 'Special Olympics'	Special Needs	DPM Al-Muhtadee Billah Gadong College	Dental Screening (Adult/Children) Dental Counselling Toothbrushing demonstration

No.	Date	Schools/Organisation	Class (Total participants)	Venue	Dental Activities
25	16 / 12 / 2011 - 18 / 12 / 2011	Ministry of Health 'Brunei's Enduainment Wonderland'	Public	Riverview Hotel Car Park Area	Dental Screening (Adult/Children) Dental Counselling Toothbrushing demonstration Game
TUTONG DISTRICT					
26	29 / 01 / 2011	SM Tanjong Maya	Pre-Vocational Students (9) Teachers (3)	Dental Clinic, PMMPMHAMB Tutong	Oral Health Talks Question /Answer Toothbrushing demonstration Familiarisation to dental unit
27	30 / 03 / 2011	Ministry of Health	Public	SR Tumpuan Telisai	Mukim Sihat Dental Screening (Adult/Children) Dental Exhibition
28	18 / 04 / 2011	SR Kuala Tutong	Pre – Yr 6 (75)	SR Kuala Tutong	Toothbrushing drill Oral Health Talks
29	19 / 04 / 2011	Bakti Dewa School	Kindergarden (28) Teachers (5)	Dental Clinic, PMMPMHAMB Tutong	Question /Answer Toothbrushing demonstration Familiarisation to dental unit
30	07 / 05 / 2011	SR Ukong	Pre – Yr 6 (90)	SR Ukong	Toothbrushing drill
31	15 / 05 / 2011	SR Bukit Panggal	Pre School (13)	SR Bukit Panggal	Toothbrushing drill
32	21 / 05 / 2011	SR Penapar	Pre – Yr 6 (45)	SR Penapar	Toothbrushing drill
33	02 / 06 / 2011	SR Lamunin	Pre – Yr 6 (153)	SR Lamunin	Toothbrushing drill
34	22 / 06 / 2011	SR Tanjong Maya	Pre – Yr 3 (45)	SR Tanjong Maya	Toothbrushing drill
35	25 / 06 / 2011	SR Danau	Pre – Yr 6 (79)	SR Danau	Toothbrushing drill
36	26 / 10 / 2011	SR Perpindahan Bukit Beruang	Pre – Yr 3 (76)	SR Perpindahan Bukit Beruang	Toothbrushing drill
BELAIT DISTRICT					
37	20 / 01 / 2011	Chung Hwa Middle School	Kindergarden 1 (220) Kindergarden 3 (190)	Chung Hwa Middle School	Oral Health Talks Question /Answer Toothbrushing drill
38	21 / 01 / 2011	Dental Services Ministry of Health	Dental Officers Dental Nurses Dental Assistants Dental Lab	Miri Specialist Dental Clinic	Educational Visit to: Dental Clinic, SJK Chung Hwa Miri, Observing Toothbrushing Exercise by Student of SJK Chung Hwa Miri Innovative Talk on Ezzy Mobile Cabinet & Corneal Seal

No.	Date	Schools/Organisation	Class (Total participants)	Venue	Dental Activities
39	29 / 01 / 2011	Chung Hwa Middle School	Kindergarden Parents / Teachers (200)	Chung Hwa Middle School	Oral Health Talks Question /Answer Toothbrushing demonstration
40	12 / 03 / 2011	Tadika Alif	Kindergarden 1 (87) Kindergarden 3 (6)	Tadika Alif	Oral Health Talks Question /Answer Toothbrushing demonstration
41	17 / 03 / 2011	St Angela's Convent School	Kindergarden Students / Teachers / Parents	SSB, Belait Dental Clinic	Oral Health Talks Question /Answer Toothbrushing demonstration
42	20 / 07 / 2011	St John's School	Yr 1 - Yr 6	St John's School	Toothbrushing demonstration Oral Health Talks
43	23 / 07 / 2011	St John's School	40 Students 5 Teachers	St John's School	Question /Answer Toothbrushing demonstration Puppet Show Familiarisation to dental unit
44	28 / 07 / 2011	St John's School	Kindergarden Students (98)	St John's School	Oral Health Talks Question /Answer Toothbrushing demonstration Toothbrushing drill
45	30 / 07 / 2011	Chung Hwa Primary School	Kindergarden Students (48) Teachers (5)	Chung Hwa Primary School	Oral Health Talks Question /Answer Toothbrushing demonstration Puppet Show Familiarisation to dental unit
46	08 / 08 / 2011	SR Sungai Teraban	Pre - Yr 5 Teachers (6)	SR Sungai Teraban	Oral Health Talks Question /Answer Toothbrushing drill
47	26 / 09 / 2011	St James's School	Kindergarden 1-3 (81)	St James's School	Oral Health Talks Question /Answer Toothbrushing drill

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