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PREFACE

Bismillahirrahmanirrahim.

In 2008, the release of the document 'Oral Health Agenda 2008-2012' outlined the four key action areas that would be the focus of the Department of Dental Services oral health policy work over the next 5 years. The vision is 'Together Towards a Healthy Nation.' The document also highlighted the overall objectives of the department in optimising accessibility, enhancing oral health promotion and disease prevention, expanding education and training, as well as in the allocation of funds for oral health services. To be able to monitor and evaluate the progress and achievements of this Agenda, the Department of Dental Services set up the Research and Development Division in 2008 to collect, analyse, manage and disseminate the relevant oral health and other data.

Oral Health Information Booklet (OHIB) 2010 is the first publication by the Research and Development Division. These data are essential for us to plan our services and determine the effectiveness of our various interventions. I hope that OHIB will be an annual publication by this department as this will contribute immensely to the better management of oral health and other relevant data for planning, monitoring and evaluation purposes.

I would like to take this opportunity to express my sincere appreciation to the Statistics Unit, Department of Policy and Planning, and Budget Unit, Department of Administration and Finance under the Ministry of Health in providing the information to this publication. Finally, allow me to congratulate those who are involved in the production of this booklet, especially all the dental staffs in the Research and Development Division who have sacrificed so much of their time, effort and energy to come out with this publication.

Together Towards A Healthy Nation

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Director of Dental Services

Ministry of Health

Brunei Darussalam

Vision

Together towards a Healthy Nation

Mission

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

ORGANISATIONAL STRUCTURE

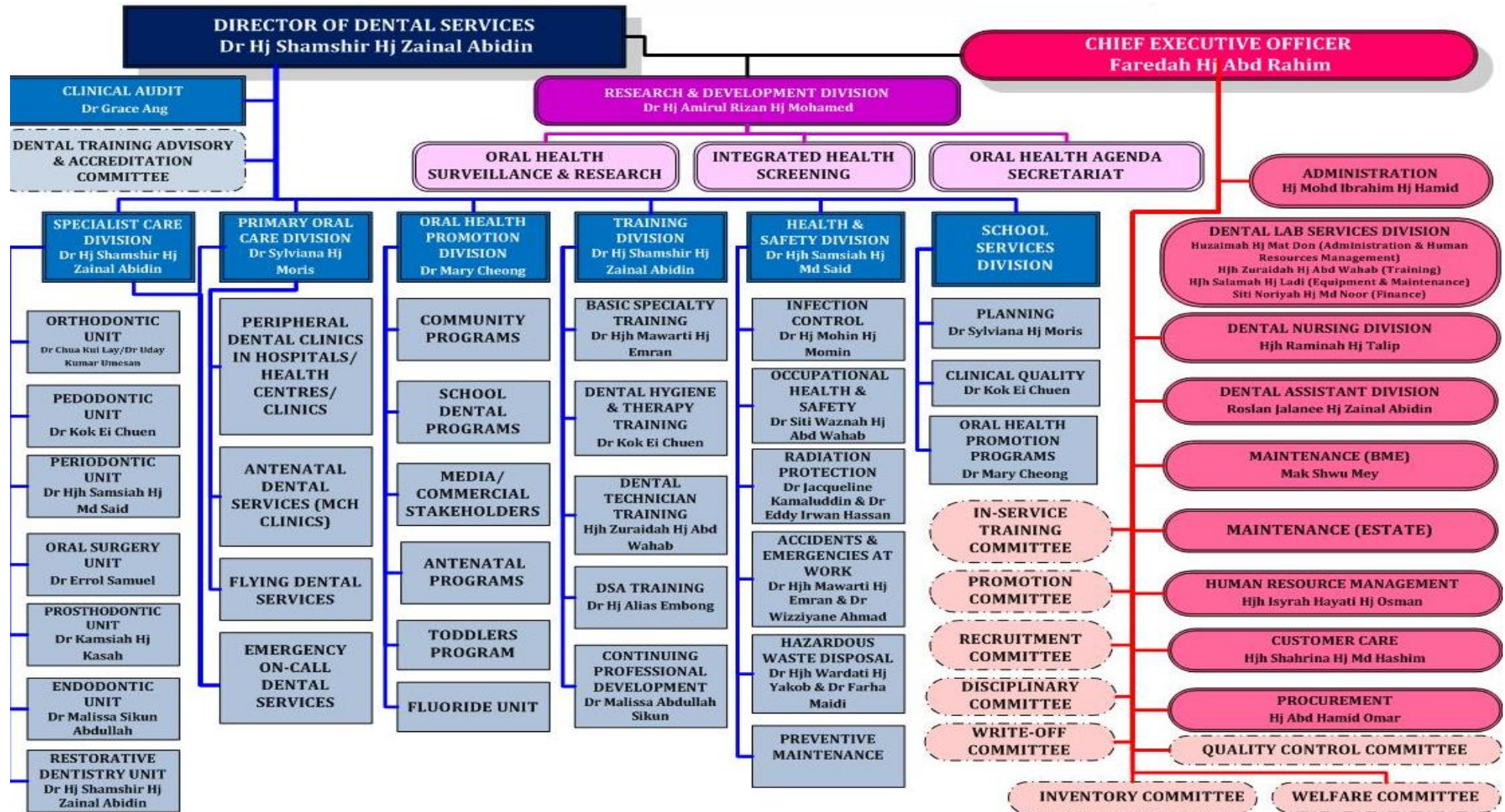


Figure 2.1 Department of Dental Services Organisational Structure

GEOGRAPHY

Brunei Darussalam is located in South-East Asia on the northwest coast of the island of Borneo facing the South China Sea and lies about 443km north of the equator. With a land area of 5,765 square kilometres, Brunei Darussalam is bounded on all sides by the Malaysian state of Sarawak which splits Brunei into two parts; the western part consisting of Brunei-Muara, Tutong and Belait districts while the eastern part is the Temburong district.

CAPITAL	:	BANDAR SERI BEGAWAN
AREA	:	5,765 sq. km
DISTRICTS	:	4
MUKIMS	:	39
KAMPONGS / LOCALITY	:	430
HOUSEHOLDS	:	55,696 (2001 Census)
AV. NO. PERSONS PER HOUSEHOLD	:	6.0



Figure 2.2 Map of Brunei

DEMOGRAPHY

Brunei Darussalam conducts population census every 10 years. The latest census was done in 2001.

Estimated Population (2010) :

Total	:	414.4 Thousands
Male	:	219.1 Thousands
Female	:	195.3 Thousands
Sex Ratio (M / 100F)	:	112
Persons / sq.km	:	72
Annual rate of increase	:	2.0%

Age Structure :

0 - 4	:	8.5%
5 - 19	:	25.7%
20 - 54	:	57.4%
55 - 64	:	4.9%
65 & Over	:	3.5%

Race :

Malay *	:	66.0%
Chinese	:	11.0%
Others	:	23.0%

District :

Brunei-Muara	:	70.0%
Belait	:	16.5%
Tutong	:	11.0%
Temburong	:	2.5%

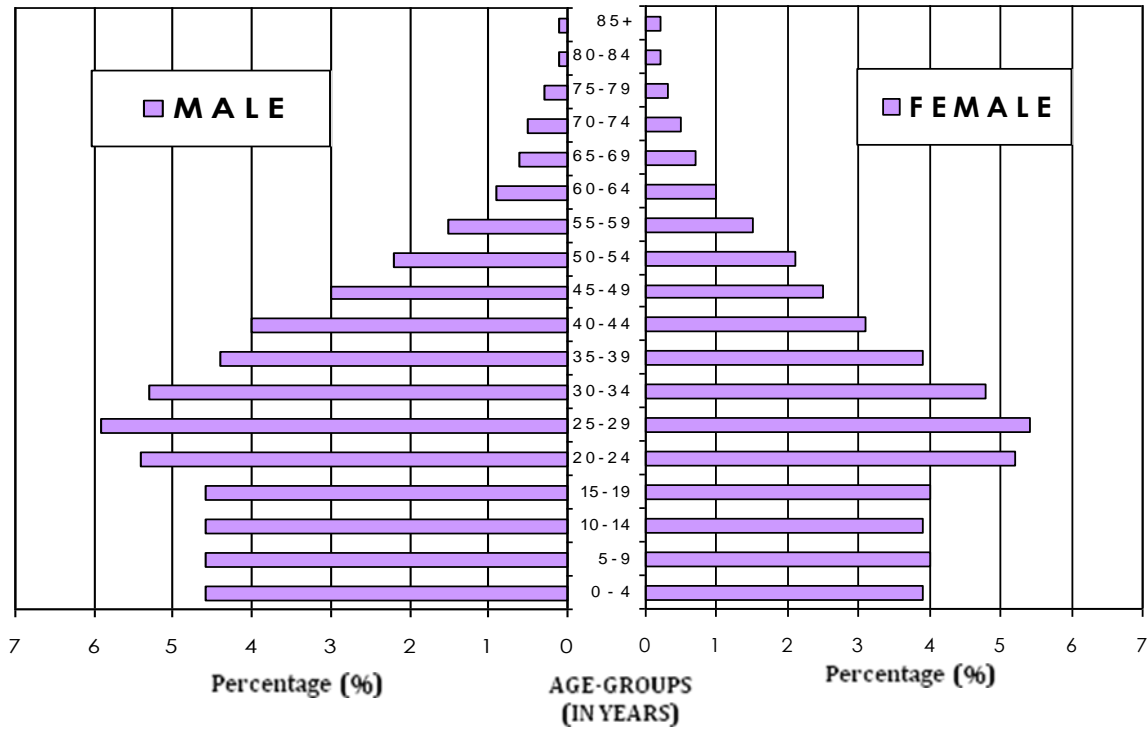
Note :

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

Source :

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

POPULATION PYRAMID



Note:
 Population pyramid shows a percentage distribution of population by gender and age-groups.
 For example, (0 - 4) age-group is represented with 8.6% of total population in which 4.6% and 4.0% are made up of males and female population respectively.

Figure 2.3 Population Pyramid (2010)

POPULATION TREND OF BRUNEI DARUSSALAM (1911-2010)

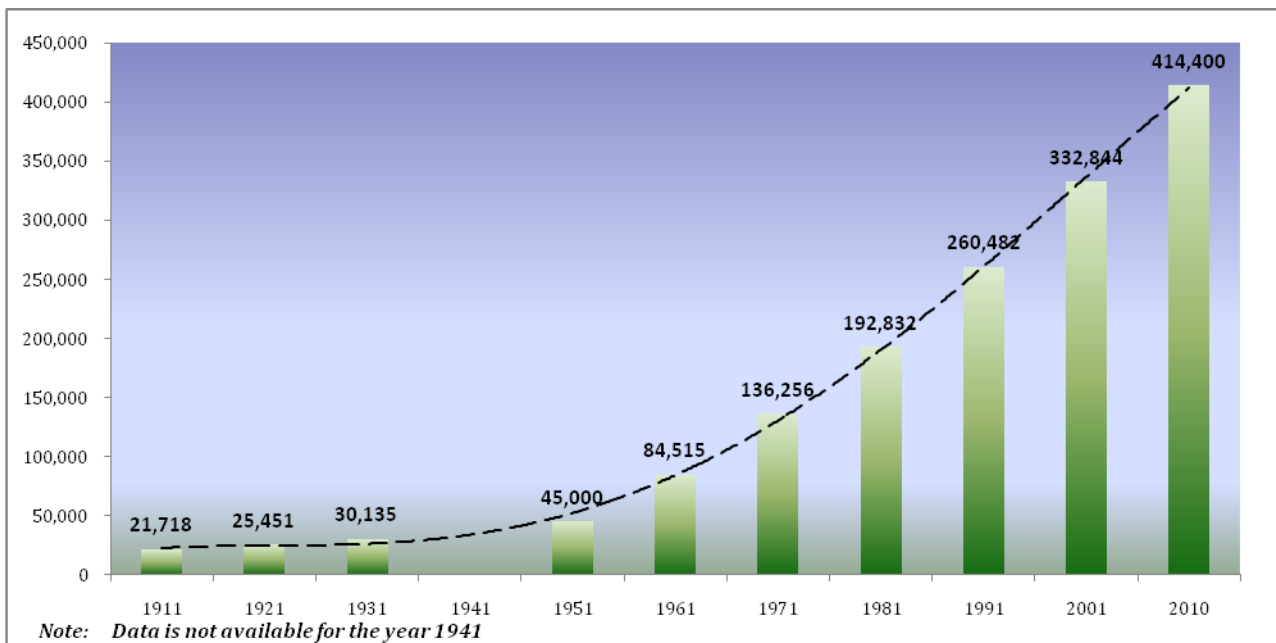


Figure 2.4 Population Trend of Brunei Darussalam (1911-2010)

HUMAN RESOURCES

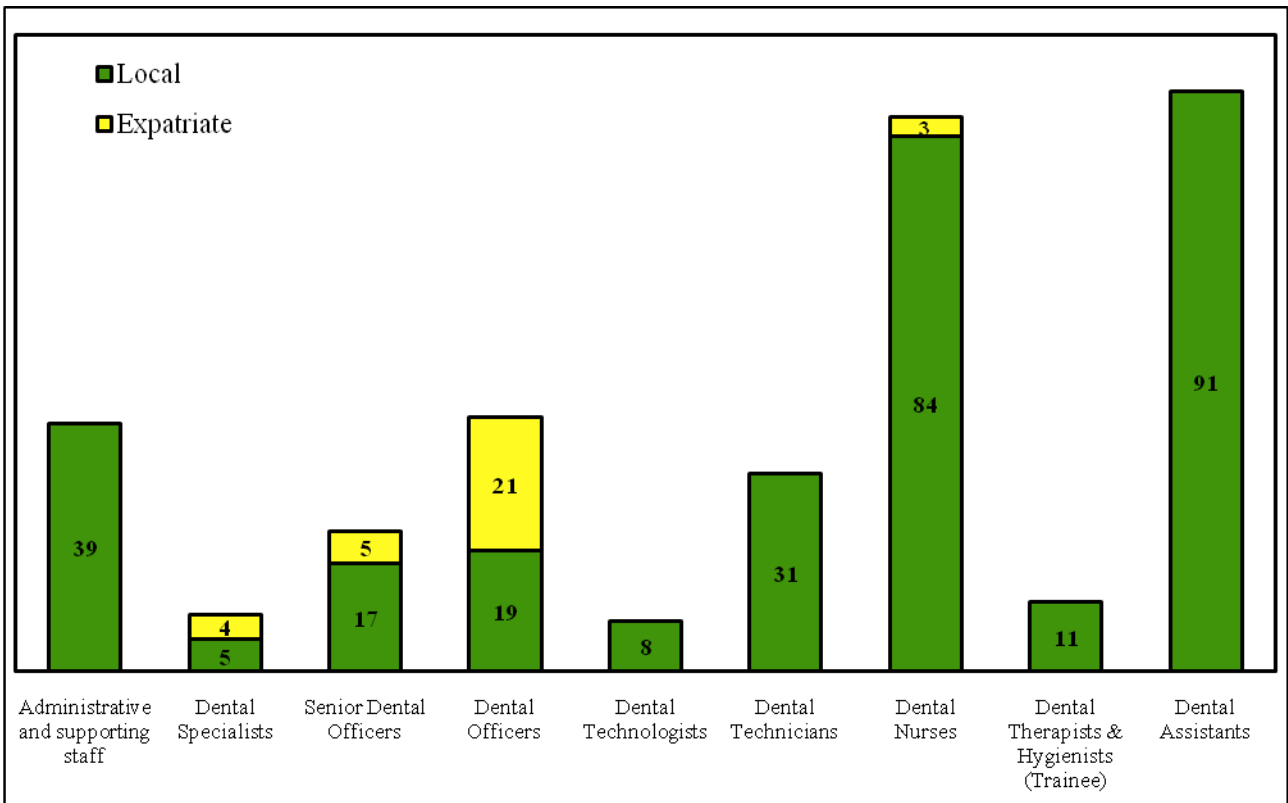


Figure 2.5 Number of human resources in the Department of Dental Services by each discipline (2010)

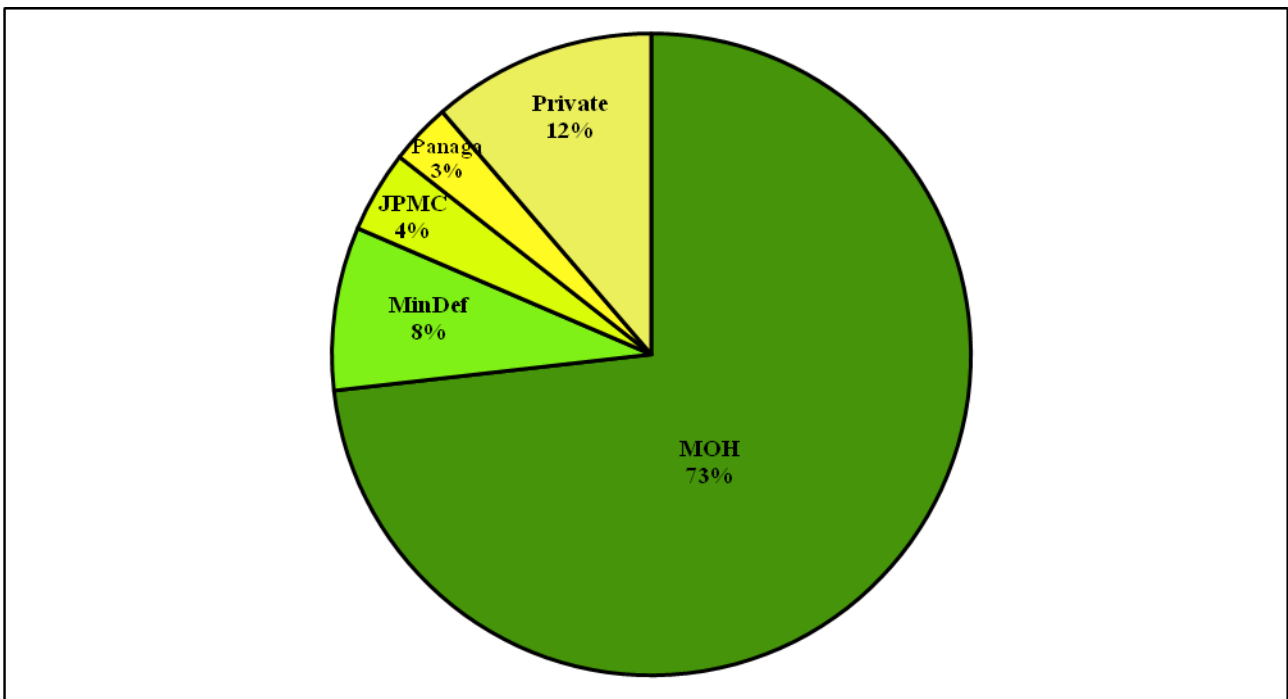


Figure 2.6 Proportion of Dentists in Brunei Darussalam working with the Ministry of Health (MOH), Ministry of Defence (MinDef), Jerudong Park Medical Centre (JPMC), Panaga Clinic and private clinics (2010)

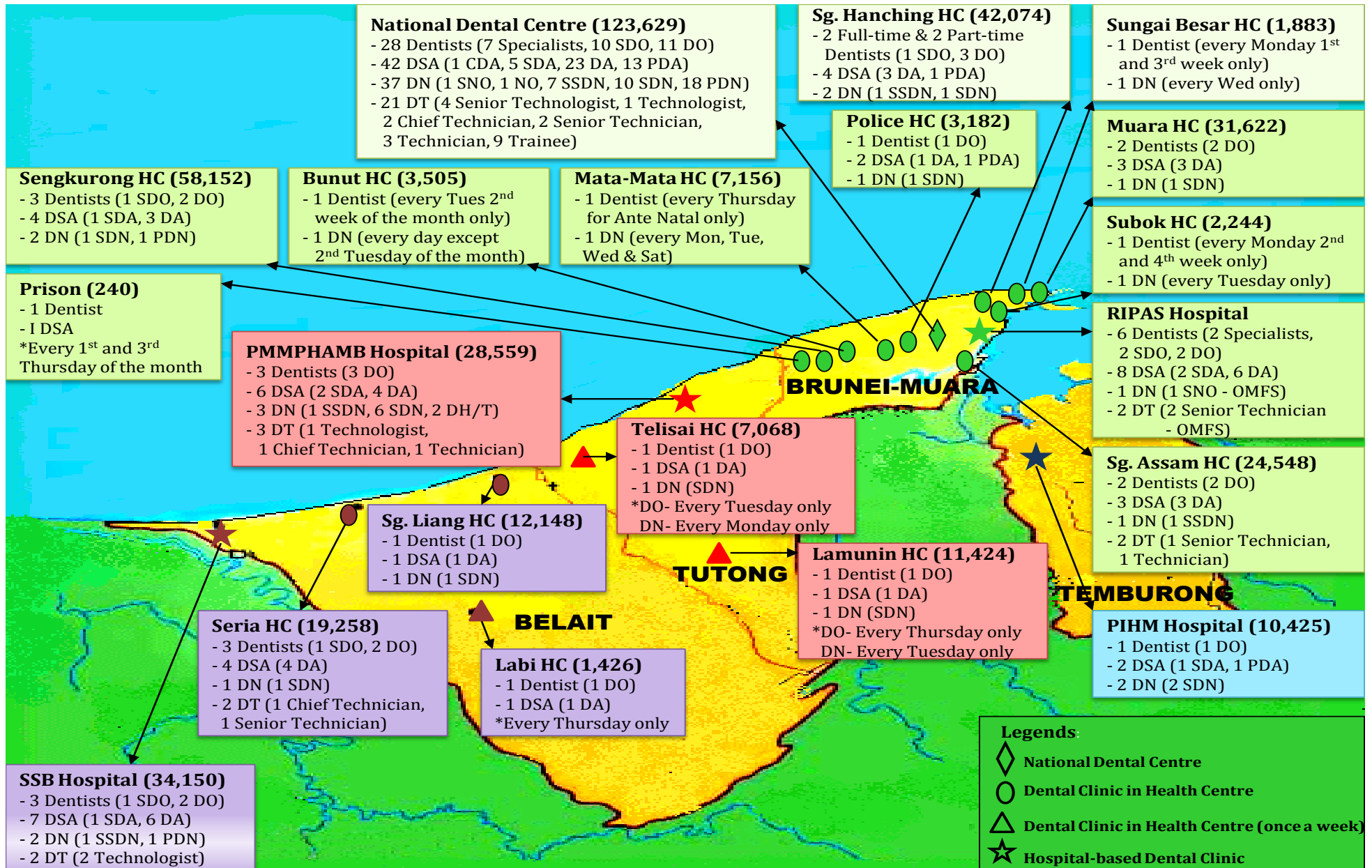


Figure 2.7 Distributions of dental staff throughout the state (2010)

DISTRIBUTION OF DENTAL CHAIRS

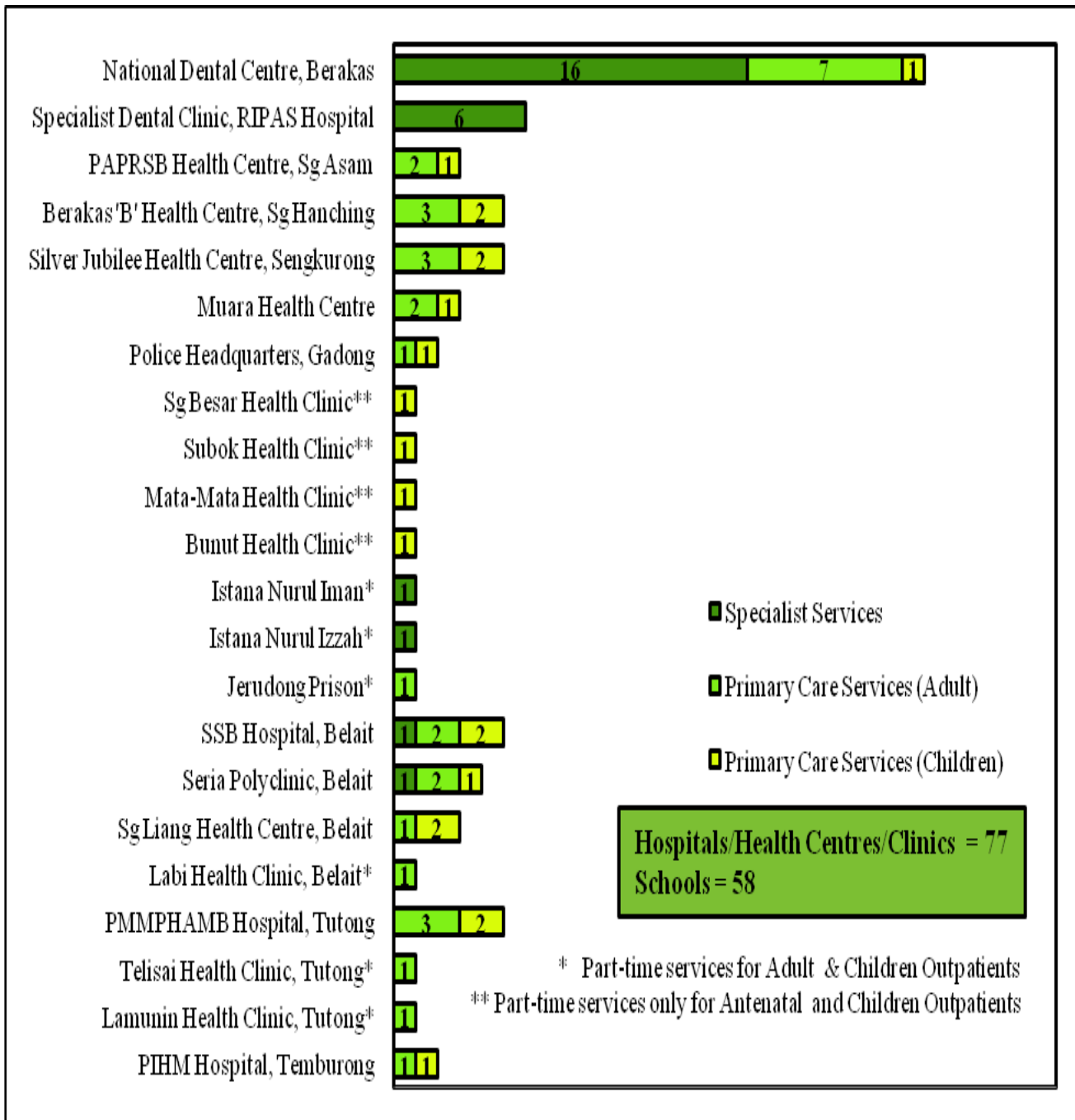


Figure 2.8 Distribution of dental chairs at Hospitals/Health Centres/Clinics and Schools

GOVERNMENT DENTAL EXPENDITURES

Table 2.1 Comparison of budget allocation between the Ministry of Health and the Department of Dental Services (2005-2010)

Budget Year	Department of Dental Services	Ministry of Health	Percentage of budget allocation of the Department of Dental Services from the Ministry of Health
2005-2006	\$8.85 million	\$240.86 million	3.7
2006-2007	\$8.55 million	\$244.33 million	3.5
2007-2008	\$10.04 million	\$259.72 million	3.9
2008-2009	\$10.20 million	\$264.44 million	3.9
2009-2010	\$10.92 million	\$286.82 million	3.8
2010-2011	\$10.69 million	\$295.41 million	3.6

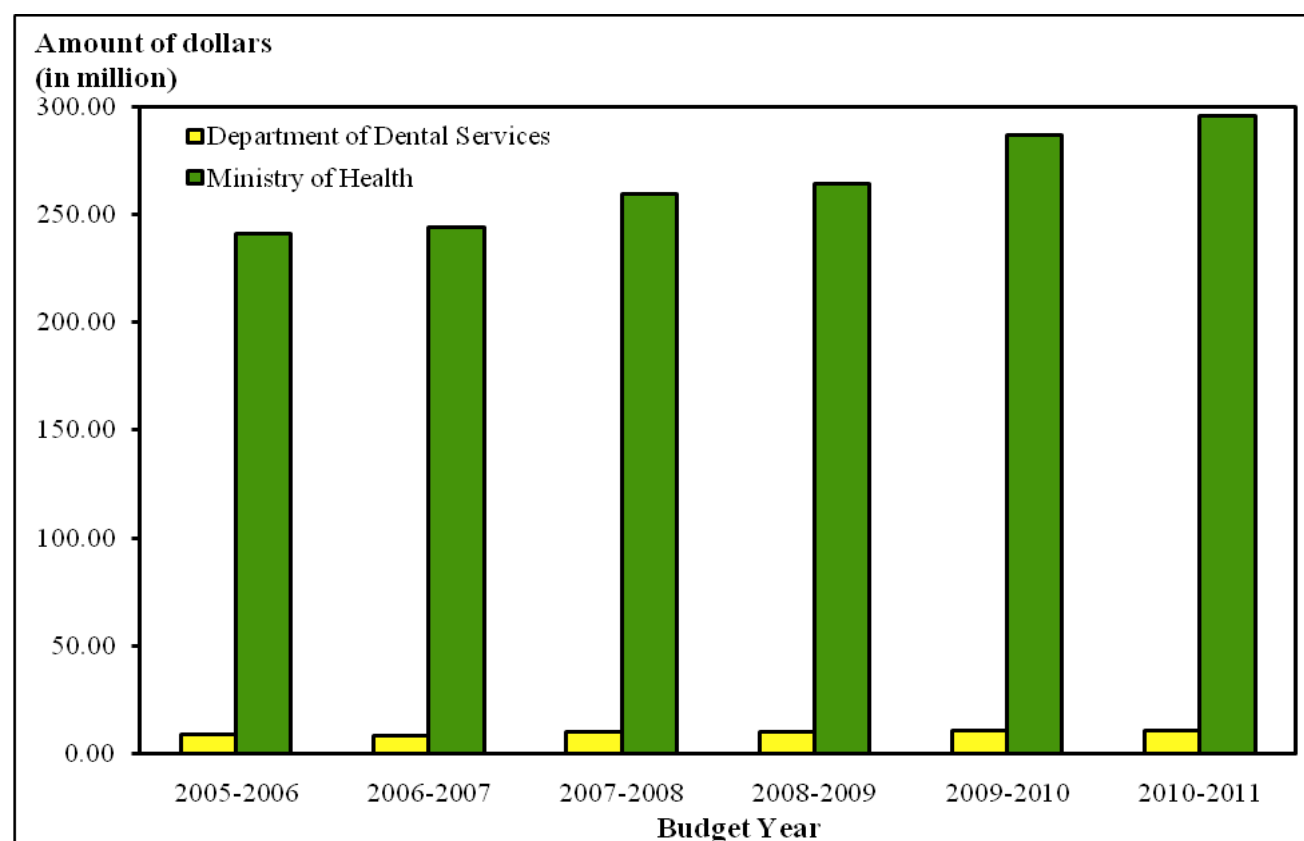


Figure 2.9 Percentage of budget allocation of the Department of Dental Services from the Ministry of Health

UTILISATION OF GOVERNMENT DENTAL SERVICES

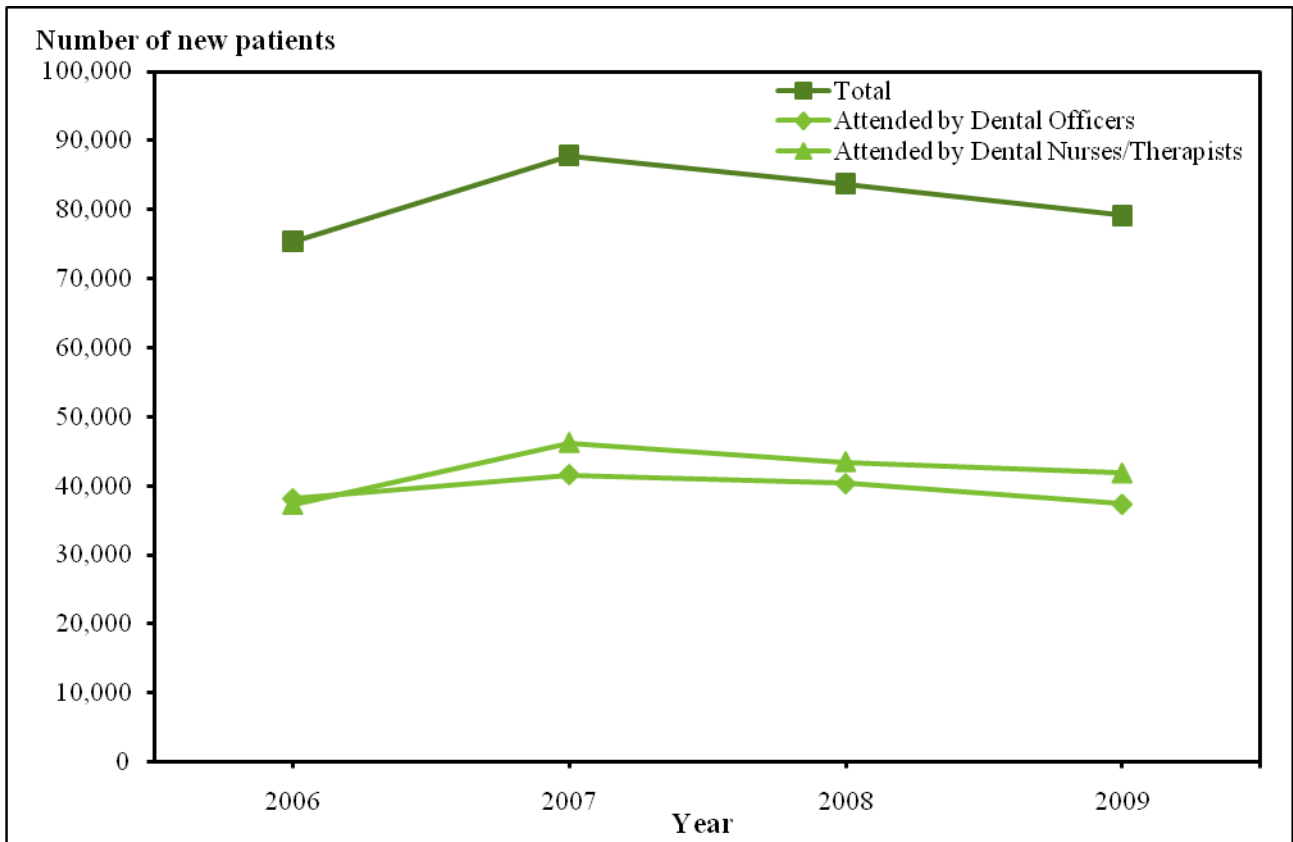


Figure 2.10 Total number of new patients in Brunei Darussalam (2006-2009)

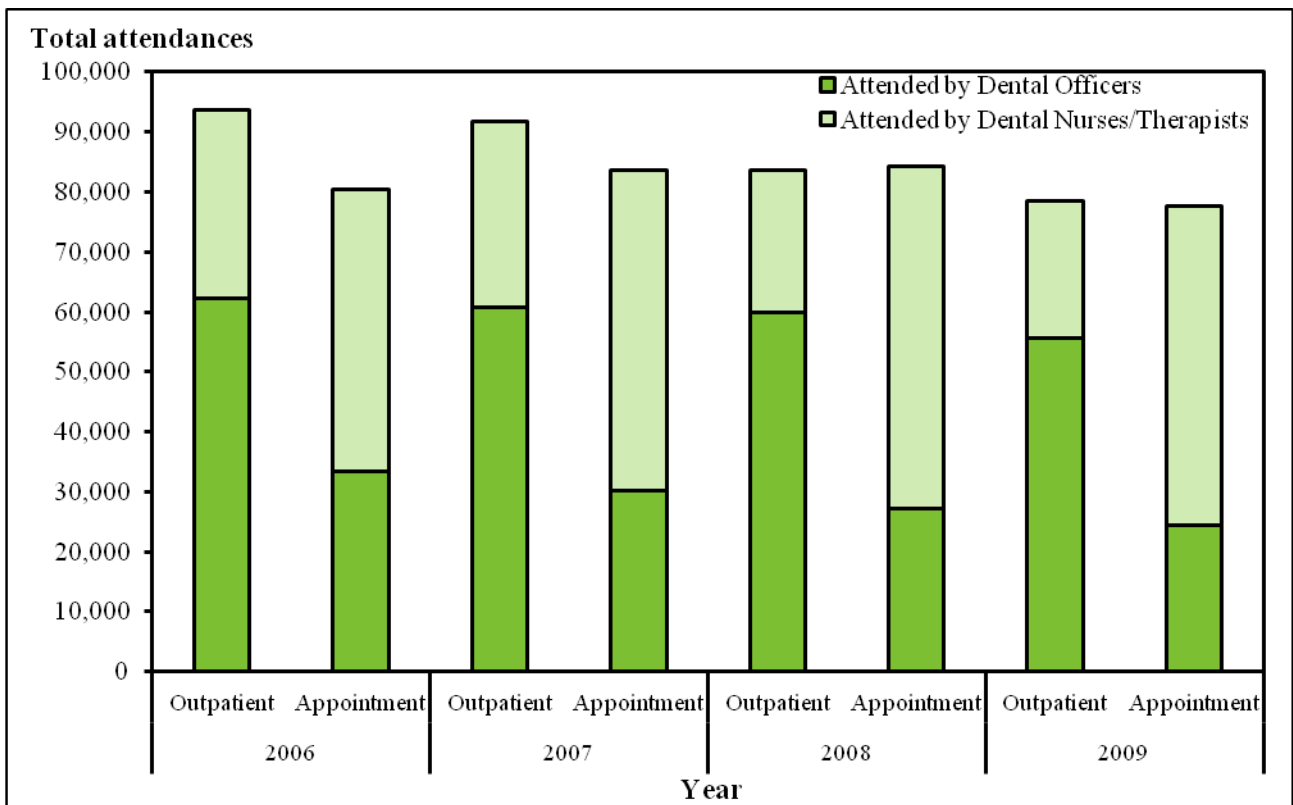


Figure 2.11 Total number of attendances in Brunei Darussalam (2006-2009)

MEASUREMENT INDICATORS

Table 2.2 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 2.3 Measurement 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)	76.4% (1999)	50%	10%
	Percentage prevalence of active periodontal disease of 35-44 year olds (BPE Code 1)	43.4% (1999)	30%	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)	1.3% (1999)	30%	70%
	Percentage prevalence of healthy periodontium of 35-44 year olds (BPE Code 0)	0.0% (1999)	30%	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	1 : 7,960 (2008)	1 : 5,500	1 : 4,000
	Nurse : 0 -16 yr Population ratio	1 : 1,655 (2008)	1 : 1,200	1 : 800
	Dentist : Technician ratio	2 : 1.4 (2008)	2 : 1.8	2 : 2.5
	Dentist : Dental Assistant ratio	1 : 1.5 (2008)	1 : 1.8	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%

^aHobdell M, Petersen PE, Clarkson J, Johnson N (2003). Global goals for oral health 2020. *International Dental Journal*. 53:285-288