

SOUVENIR PROGRAMME  
EMBRACING ORTHODONTIC DISCOVERY

9<sup>th</sup> APOC & 20<sup>th</sup> MAOISCTE  
17<sup>th</sup> - 20<sup>th</sup> October, 2014 Kuching, Sarawak, Borneo, Malaysia



9<sup>TH</sup> ASIAN PACIFIC ORTHODONTIC CONGRESS  
&  
20<sup>TH</sup> MALAYSIAN ASSOCIATION OF ORTHODONTISTS  
INTERNATIONAL SCIENTIFIC CONFERENCE  
AND TRADE EXHIBITION

17<sup>TH</sup> - 20<sup>TH</sup> OCTOBER 2014

KUCHING, SARAWAK BORNEO, MALAYSIA

## Roziana Mohd Razi

BDS (Malaya), MClintDent (Orthodontics) (Sheffield),  
MOrth RCSEd



Dr Roziana graduated with a Bachelor in Dental Surgery from University of Malaya, Malaysia. She started her career in dentistry as Dental Officer in the Ministry of Health, Malaysia. In 2007, she pursued further studies at the University of Sheffield, United Kingdom and was awarded a Masters in Clinical Dentistry in Orthodontics. She went on to pursue Membership of the Royal College of Dental Surgeons Edinburgh.

Currently, Dr Roziana is Senior Lecturer in Department of Paediatric Dentistry and Orthodontics, University of Malaya since 2010. Her research interest includes Quality of Life in Orthodontics, 3D soft tissue imaging, tissue expansion and stem cells study.

### **Adult Orthodontics In Malaysia**

[Monday; 20.10.2014; 1210-1230hrs]-Room 14

The purpose of this study was to investigate the routine practice of specialist orthodontist in Malaysia registered with the Oral Health Division (OHD), Malaysian Association of Orthodontist (MAO) and National Specialist Register (NSR).

The study was divided into three stages; data acquisition, data selection and data collection. Descriptive analysis was undertaken with SPSS version 12.0.

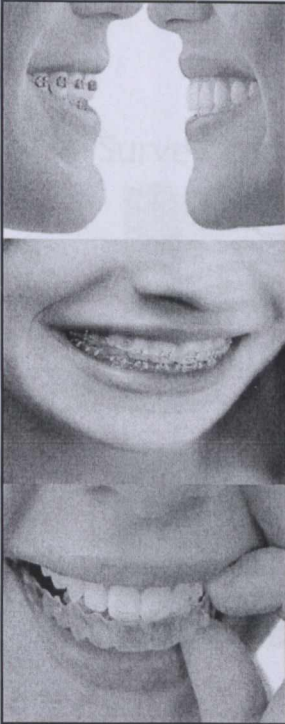
The aims were to determine the management, age range and source of referral of adult orthodontic patients. The results of this study will be presented.

# MONDAY

20<sup>TH</sup> OCTOBER 2014

Time (hrs)	Event			Venue	Notes
0800-1700	Registration			BCKK	
1100-1500	APOS Executive Council Meeting			Hall C	
	Plenary Hall Session				
0900-1000	William Proffit - "New Appliances: Mythology and Reality"			Hall D	
1000-1100	APOS Forum -Towards a Common Universal Orthodontic Training Pathway				
1100-1130	Tea - break				
	Room 12 & 13	Hall D	Room 14		
1130-1150	<b>Somchai Satravaha</b> - "Early Class III Treatment, A Complex Challenge!"	<b>Peter Fowler</b> - A New And Engaging Public Health Initiative From New Zealand	<b>Wan Nurazreena Wan Hassan</b> - Embracing Digital Study Models in Clinical Practice		
1150-1210	<b>Ratnakumara Dissanayake</b> - Orthodontics A Sri Lankan Experience	<b>Mohammad Zakir Hossain</b> - Vertical and Antero-posterior Control by Combining Activator Appliance in Class III Treatment- A few Case Report	<b>Sung Hoon Lim</b> - Efficient use of orthodontic mini implants placed in the palate		
1210-1230	<b>Benny Soegiharto</b> - "Clinical Applications of the Damon Passive Self-Ligating System - A Personal Learning Curve"	<b>Dashrath Kafle</b> - Comparison of Anticipated Pain and Experienced Pain Among Patients Undergoing Comprehensive Orthodontic Therapy.	<b>Roziana Mohd Razi</b> - Adult Orthodontics In Malaysia		
1250-1400	Lunch				
	Room 12 & 13	Hall D	Room 14		
1400-1420	<b>Mark Cordato</b> - Tolerances, Play And How They Make Straightwire An Unrealisable Hope	<b>Shalene Kereshanan</b> - "Adults - An Increasing Challenge"	<b>Tseng Chen Wen</b> - Novel Pliers for SOS Invisible Braces		
1420-1440	<b>Ajit Kalia</b> - Aesthetic Considerations in Orthodontics	<b>Girish Karandikar</b> - "The Riding Pontic-An Aesthetic Option for Missing Incisors"	<b>Christopher Lawrence Tan</b> Informed Consent: What's the Standard?		
1440-1500	<b>Chiew Sinn Chang</b> - An Assessment of the Effectiveness of Mechanical and Chemical Cleaning of Essix Orthodontic Retainer	<b>Wey Mang Chek</b> - "An Overview of Cleft Patient Management at University of Malaya Cleft Centre"	<b>Poh Chi -Lin</b> - Vertical Ridge Augmentation of Upper Incisors by slow Dental Extrusion with Orthodontic Mini-screw for implantation		
1500-1520	<b>Priscilla Lu</b> - Using Three-Dimensional Stereophotogrammetry To Assess Upper Lip Posture Changes Following Removal Of Labial Appliance	<b>Chetan Jayade</b> - Finite Element Method and its applications in Orthodontics	<b>Saraswathy Devi Sinniah</b> - Bond Strengths Of Composite Resins Used For The Attachment Of Bonded Retainers		
1520-1600	Closing Ceremony			Hall D	Award Ceremony for FP & FC
1600-1630	Tea Break				

cancel the programme without prior notice if circumstance dictates.




# ADULT ORTHODONTICS IN MALAYSIA

DR ROZIANA MOHD RAZI  
DEPARTMENT OF PAEDIATRIC DENTISTRY &  
ORTHODONTICS  
FACULTY OF DENTISTRY  
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MALAYSIA


APOC 2014  
KUCHING , SARAWAK  
MALAYSIA

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Medical problems

Demanding



Aesthetics

Complex cases



- Survey conducted in

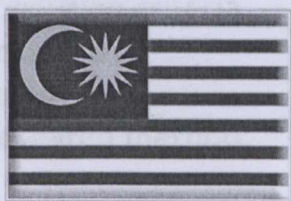


(Keim et al., 2008)



(Banks et al., 2010)

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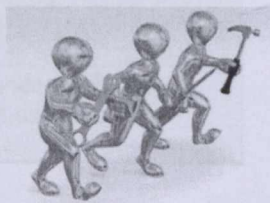
## AIMS

- To investigate the routine practice of **specialist orthodontists in Malaysia** registered with the Oral Health Division (OHD), Malaysian Association of Orthodontists (MAO) and National Specialist Register (NSR).
- The aims were to determine the management, age range and source of referral of adult orthodontic patients (excluding orthognathic patients)



## MATERIALS AND METHODS

- Ethical Approval
- Study design
  - Qualitative and quantitative cross-sectional study
- Study Population
  - Inclusion criteria
  - Exclusion criteria
- Location
- Tools
- Research method



## Study Population

Inclusion Criteria	
<b>Age</b>	≥ 27 years old
<b>Gender</b>	Either
<b>Location of practice</b>	1) Private dental practice 2) Ministry of Health 3) University 4) Or both of the above in Malaysia
<b>Consent</b>	-Demonstrates understanding of the study and willingness to participate
<b>Compliance</b>	-Able and likely to comply with all study procedures and restrictions



Exclusion Criteria	
<b>Registration</b>	-practices orthodontic treatment but not registered as specialist under: 1) Oral Health Division(OHD), Ministry of Health <b>OR</b> 2) Malaysia Association of Orthodontist (MAO) <b>OR</b> 3) National Specialist Register (NSR)
<b>Location of practice</b>	-register under MAO but practice in overseas





## Tools



- ◉ Postal and e-mail self-completed questionnaire
- ◉ Combination of Survey Monkey and Microsoft Word
- ◉ Keim et al., 2008 and Banks et al., 2010



**DEPARTMENT OF CHILDREN'S DENTISTRY  
AND  
ORTHODONTICS  
FACULTY OF DENTISTRY, UNIVERSITY OF MALAYA  
ORTHODONTIC TREATMENT IN MALAYSIA:  
WHO'S DOING WHAT?**

**What is this survey about?**

Orthodontic treatment and practice in Malaysia has developed enormously in the last 15 years. These included the evolution of fixed appliance and improvement in orthodontic materials. Trends in clinical practice have been reported in surveys conducted in the United States' area and the United Kingdoms' but currently no data have been published from Malaysia.

A Malaysia survey on the use and practice of fixed appliance would be of interest to clinicians. The results would enable clinicians to compare their practice with their peers and for the betterment of orthodontic practice in Malaysia. This investigation explains on clinical, with no attempt to assess detailed financial or economic factors for clinicians or types of practice.

**References:**


1) 46th IADR, Section 41, Section 41A, Venice 05, 2006 / CO study of orthodontic diagnosis and treatment procedures part I: results and trends. J Clin Orthod 2006; 42: 325-46  
 2) 46th IADR, Section 41, Section 41A, Venice 05, 2006 / CO study of orthodontic diagnosis and treatment procedures part II: the use of fixed appliance in the UK: a survey of specialist orthodontists. J Clin Orthod 2006; 40: 37-43

**Guarantee of Confidentiality**

All information provided by you will remain strictly private and confidential. Taking part in this survey will NOT affect your future practice in any way. Your FULL co-operation by answering all the questions provided is very much appreciated.

Dr Roziana Mohd Raz  
Lim Jia Sheng  
Young Mia Yee

QUESTIONNAIRE



# Research Method

1<sup>st</sup> Phase

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Data Acquisition

2<sup>nd</sup> Phase


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Data Selection

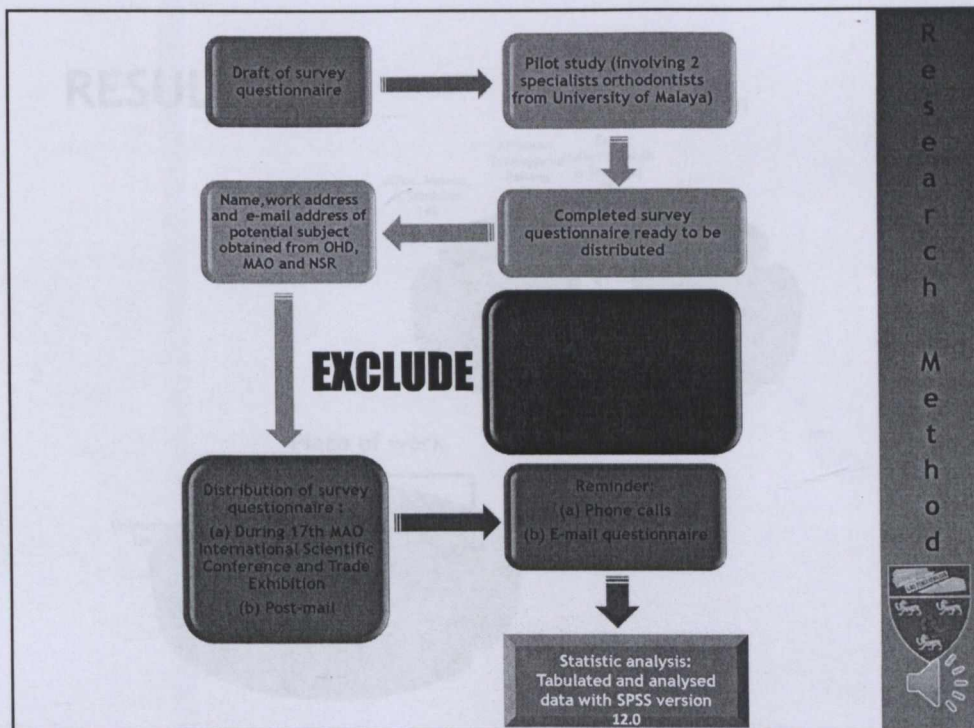
3<sup>rd</sup> Phase

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Data Collection



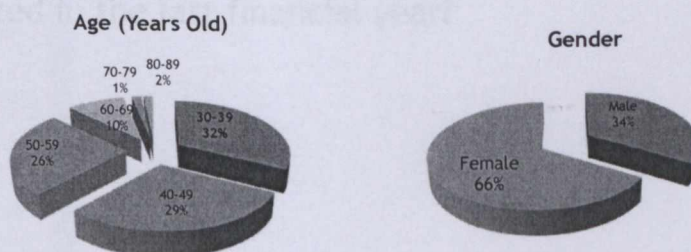




## RESULTS

### General findings

- 108 specialist orthodontists
- 57.4% of response rate (62 respondent)

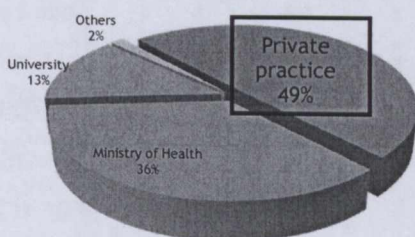


# RESULTS

### Geographic region



### Place of work



What is the estimated or actual (if known) number of new adult orthodontic cases you started in the last financial year?



## Management of Adult Orthodontics

Number of new adult cases started by specialist orthodontists

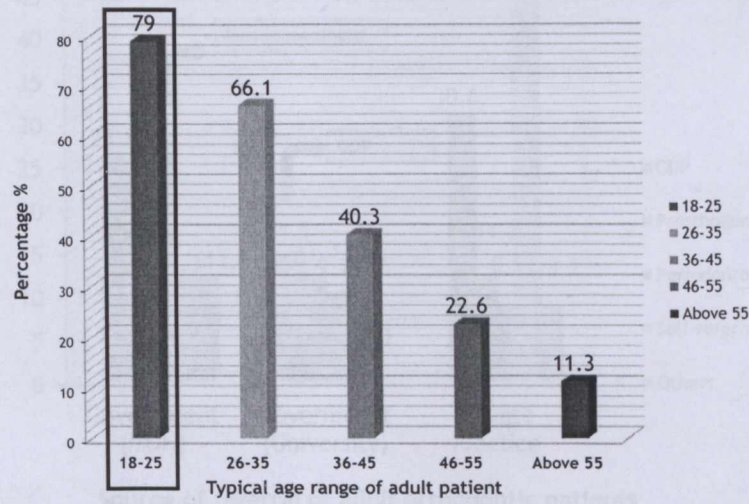
No. of New Adult Orthodontic Cases	Government (MOH)		Government (University)		Private practice	
	No.	%	No.	%	No.	%
51-100	4	6.5	1	1.6	10	16.1
101-150	1	1.6	1	1.6	0	0
151-200	1	1.6	1	1.6	0	0
201-250	2	3.2	0	0	1	1.6
251-300	1	1.6	0	0	2	3.2



What is the typical age range of the adult patients you treated?

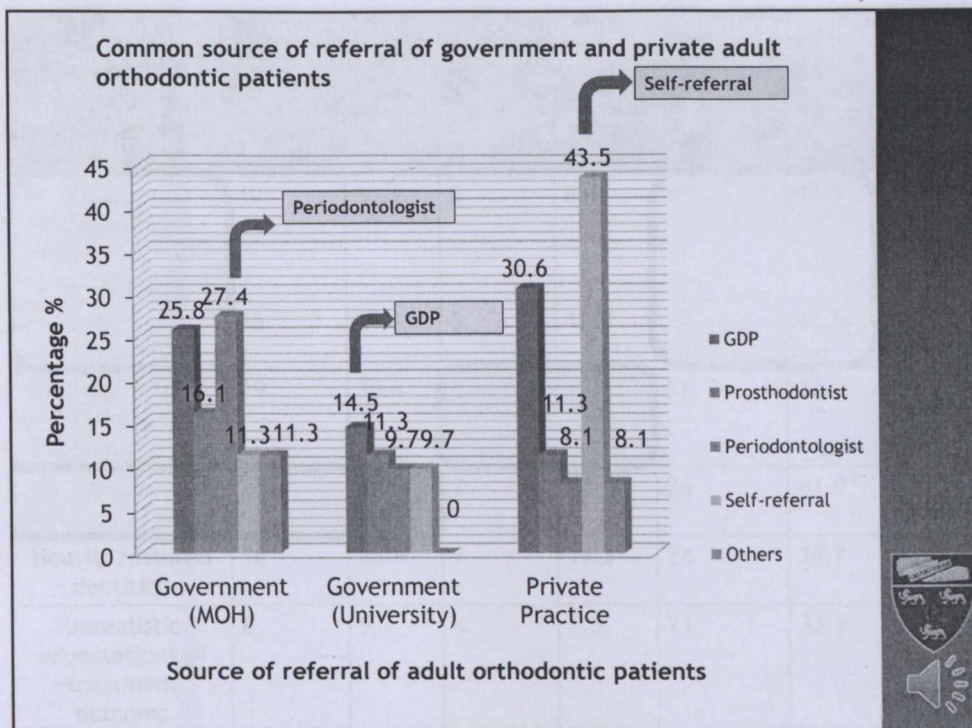


Age range of adult patients treated orthodontically



What is the common source of referral of your government & private adult orthodontic patients?





### FREQUENCY OF THE USE OF APPLIANCE TYPES IN DIFFERENT SECTORS

• Straight wire (stainless steel) was the most frequently used appliance in MOH

In your opinion, which factors most commonly complicate government & private adult orthodontic treatment?

• Tip-edge (stainless steel) was commonly used in MOH (27.4%) and university (14.5%).

• Aesthetic brackets (any appliance system) (13.9%), lingual orthodontics (6.1%) and aligners (4.8%) had gained popularity in private practice.

Factors Commonly Complicating Adult Orthodontic Treatment	Government (MOH)		Government (University)		Private practice	
	No	%	No	%	No	%
Concerns regarding appearance of appliance	10	16.1	5	8.1	27	43.5
Length of treatment	15	24.2	8	12.9	27	43.5
Problems relating to timing of appointments	19	30.6	11	17.7	21	33.9
Missing teeth and periodontal status	20	32.3	7	11.3	26	41.9
Heavily restored dentition	16	25.8	7	11.3	24	38.7
Unrealistic expectations of treatment outcome	6	9.7	4	6.5	21	33.9

## FREQUENCY OF THE USE OF APPLIANCE TYPES IN DIFFERENT SECTORS

- ◎ Straight wire (stainless steel) was the most frequently used appliance in MOH (40.3%), university (19.4%) and private practice (46.8%).
- ◎ Tip-edge (stainless steel) was commonly used in MOH (27.4%) and university (14.5%).
- ◎ Aesthetic brackets (any appliance system) (33.9%), lingual orthodontics (8.1%) and aligners (4.8%) had gained popularity in private practice.

## Adult orthodontics (excluding orthognathic patients)

★ Most orthodontic specialist:



0-50 new adult orthodontic cases

✓ Cedro, M.K. et al., 2010. Adult orthodontics-who's doing what?. *Journal of Orthodontics*, 37: 107-117.

(...mean 28.2)

- ✓ Showed an increase in adult orthodontics from 1992 to 2004 (increase of 250%) and 1981 to 2007 (increase from 15.4% to 20%) Keim et al (2008).



## Adult orthodontics (excluding orthognathic patients)



18-25 is dominant age range

✓ Cedro, M.K. et al., 2010. Adult orthodontics-who's doing what?. *Journal of Orthodontics*, 37: 107-117.

(...majority fall into 18-30 age )



## Adult orthodontics (excluding orthognathic patients)

★ The most common source referral of adult patients



In MOH:

GDP's and periodontologist

✓ Cedro, M.K. et al., 2010. Adult orthodontics-who's doing what?. *Journal of Orthodontics*, 37: 107-117.



## Adult orthodontics (excluding orthognathic patients)



In private practice:

GDP's and self-referral

✓ Cedro, M.K. et al., 2010. Adult orthodontics-who's doing what?. *Journal of Orthodontics*, 37: 107-117.

GDP's - the main source of referral for both NHS (55.1%) and private (61.3%)





## Adult orthodontics (excluding orthognathic patients)

★ Factors most complicating adult orthodontics



**MOH:**

Missing teeth and periodontal status  
-most patient undergone extraction as part of  
orthodontic treatment

✓ Cedro, M.K. et al., 2010. Adult orthodontics-who's doing what?. *Journal of Orthodontics*, 37: 107-117.



**University:**

Timing of appointments  
-long patient waiting list and limited number  
of specialist



## Adult orthodontics (excluding orthognathic patients)



**Private Practice:**

Appearance of appliance and length of treatment

✓ Cedro, M.K. et al., 2010. Adult orthodontics-who's doing what?. *Journal of Orthodontics*, 37: 107-117.

-development of aesthetic appliance  
has an impact on the number of adult patients



