## **VO-21** The Clinical Longevity of 239 cantilever resin-bonded prostheses. MG Botelho\*, K Leung, K Chan, H.C. Chan, H Ng, Faculty of Dentistry, Prince Philip Dental Hospital, Hong Kong

This clinical study retrospectively reviewed two-unit cantilevered resin-bonded fixed partial dentures (RBFPDs) provided at the Prince Philip Dental Hospital. Patients were identified from the hospital computer record system who had received treatment at least 2 years previous. All prostheses would have had the fitting surface of nickel chrome framework sandblasted prior to cementation with Panavia 21 (Kuraray, Japan) luting cement. Tooth preparation may have included opposing interproximal grooves on anterior abutments and lingual grooves on posteriors and lowering of the survey line of the abutment to maximize the surface area for bonding. 190 patients were clinically examined and asked a series of questions about their prosthesis. Thirtyfive patients were not examined either because they could not be contacted, refused, were sick or had died. 112 female and 78 male patients received 239 two-unit cantilever RBFPDs. Sixty-eight prostheses replaced missing incisors, 30 canines, 87 premolars and 54 molars. 126 were placed by staff, 109 by undergraduate students and 4 by postgraduates. The age range of the patient group was 14 to 82 years old (mean 50.4 y). On examination 12 RBBs had debonded between 1 and 8 times giving a retention rate of 96.8%. Five of these debonded RBFPDs were still functioning and the remainder were either remade with another prosthesis, extracted or had no further treatment. The service life of all the clinically examined RBFPDs ranged from 1.1 to 11.8 years with a mean of 4.2 years (SD 1.4y). No obvious rotation, drifting or tipping was observed with any of the abutments. Twenty three patients commented that the appearance of the metal framework concerned them and 98 said they avoided biting on the prosthesis hard to "protect it" and expected the prosthesis to last 7.9 years and gave a mean satisfaction rating of 8.5 (range 2-10). Two-unit RBFPDs appear to be a successful restoration in the short to medium term

## VO-22 Tooth loss, denture wearing and oral health-related quality of life. M.C.M. Wong\*, A.S. McMillan (The University of Hong Kong)

AIM: To investigate the relationship between tooth loss, denture wearing and oral healthrelated quality of life (OHRQOL) among the community-dwelling elderly in Hong Kong. METHODS: A questionnaire study involving 233 (168 dentate and 65 edentulous) elderly subjects (60-80 years) recruited and interviewed at 13 social centers for the elderly. The questionnaire included the 12-item GOHAI to measure OHRQOL and questions about tooth number and denture wearing, RESULTS: The mean GOHAI score was 50.8 (SD 7.0). All the edentulous elderly wore dentures. 95 partially dentate elderly wore dentures and had a mean number of natural teeth of 11.0 (SD 7.6, range 1-28). The other 73 partially dentate elderly had a mean number of natural teeth of 22.2 (SD 6.0, range 1-31). The mean GOHAI score among the edentulous elderly (53.0) was similar to the partially dentate elderly without dentures (50.8) but significantly higher than the partially dentate elderly with dentures (49.1, p=0.002). No significant correlation was found between the number of natural teeth present and the GOHAI score (rs=0.136, p=0.079). However, a significant negative correlation was found between the number of loose teeth and the GOHAI score ( $r_s$ =-0.409, p<0.001). Furthermore, satisfied denture wearers had a higher mean GOHAI score (52.8) than dissatisfied denture wearers (48.7, p<0.001). Significantly more edentulous elderly were satisfied with their dentures (69%) compared to the partially dentate with dentures (37%, p<0.001). CONCLUSION: Generally, tooth loss and denture wearing did not have a major impact on OHRQOL. There was a greater negative impact in partially dentate denture wearers most probably due to less satisfaction with dentures and discomfort associated with loose teeth. (Research supported by CRCG-HKU)

## **VO-23** Geographic Tongue: A Clinical Evaluation of 150 Cases. A. JAINKITTIVONG\* and RP. LANGLAIS (Chulalongkorn University, and the University of Texas Health Science Center at San Antonio)

The purpose of this study was to investigate the clinical characteristics and assess the associated factors within geographic tongue. One bundred and fifty Thais with geographic tongue and 150 controls were interviewed regarding their medical and family histories, symptoms, and the nature and migratory pattern of the lesions. Variations in the clinical appearance, location of the lesions and any associated tongue fissures were recorded. Eighty-four percents of subjects who have geographic tongue were in the range of 11-39 years, whereas the highest incidence (36%) occurred in the 20-29 years age range. Women were affected more than men (3:2). The most leading medical problems were allergy-related conditions, however, the incidence of these conditions among the subjects with geographic tongue and controls were not significantly different (21% vs. 17%). Our results found a significant co-existence of geographic tongue and fissured tongue (Pe 0.001). Most of the geographic tongue lesions manifested a typical appearance consisting of a central atrophic area bounded by a raised white circinate line (69%), with multiple tongue sites affected (63%). The most common locations were at the lateral margins and tip of tongue. Majority subjects with geographic tongue lesions (72%) were asymptomatic. The results of this study correspond with the findings in previous studies of geographic tongue in other populations

## VO-24 Betel Quid chewing habit in a Bajau community. TAHIR SZ\*, DOSS JD and JAAFAR N. (Faculty of Dentistry, University Malaya, 50603 Kuala Lumpur, Malaysia)

The indigenous people of Sabah were identified with a high prevalence of pre cancer and oral cancer that has been linked to the practice of betel quid chewing habit. This study was conducted to investigate whether and to what extent this high-risk habit is practiced, to elicit reasons for practicing and to assess knowledge and perception about the risk of oral cancer among the Bajaus (Indigenous people) in Kampong Siasai, Kota Belud in Sabah, East Malaysia. A cross sectional household survey was conducted using a structured questionnaire in a face-to-face interview and also through observation. A total of 330 adults age 20 years and above with 94 males and 236 females were involved in this survey. The overall prevalence of betel quid chewing habit was 53%. Majority (69.1%) of the females chewed betel quid compared to (12.8%) males. The majority of betel quid chewers are older adults 41-60 years old (66.1%) and elderly adults 60 years old (66.1%). The chewing habit was acquired during the teenage years. Majority (54.3%) of chewers used 5 - 10 preparations per day chewing. The practice of betel quid chewing is perceived mainly as a cultural norm and because of the medicinal effects of the quid. Only 27.6% of the subjects were aware of oral cancer whereas 17.3% felt susceptible to oral cancer. The association between betel quid chewing with age group and gender was statistically significant (p<0.01). The high prevalence of this high-risk habit is easily sustained as the substances are cheap, locally produced and its use is socially accepted. Informational and educational campaigns relating to this issue should be directed at individuals and communities taking into account the gaps in awareness of the effects of these habits.

# VO-25 Cross-cultural comparison of Australasian TMD patients: A distributed framework approach. AUJ Yap<sup>1\*</sup>, I Klineberg<sup>2</sup>, EK Chua<sup>3</sup>, T Whittle<sup>2</sup> and GL Borromeo<sup>4</sup>. (<sup>1</sup>National University of Singapore, <sup>2</sup>University of Sydney, Australia, <sup>3</sup>National Dental Centre, Singapore, <sup>4</sup>Barbara Walker Centre, Melbourne, Australia)

This study compared the physical diagnoses, psychological distress and psychosocial dysfunction in Australian [AL] and Singaporean [SP] TMD patients using the Research Diagnostic Criteria for Temporomandibular Disorders (RDC/TMD). Four hundred and fifty-five patients (166 AL and 289 SP) referred to four Orofacial Pain clinics in Australia and Singapore were enrolled in this study. The mean age of the patients was  $37.5 \pm 13.3$  years. RDC/TMD history questionnaire and clinical examination were fed into a computerized diagnostic system (NUS TMDv1.1). Axis I and II findings were generated on-line based on RDC/TMD rule engines and automatically archived in SPSS. Data collected from individual centres were stripped of unique patient identifiers and exported to a central depository as electronic attachments. Results were analyzed using Mann-Whitney test at significance level 0.05. The female:male ratio was 3.7:1 and 2.6:1 for AL and SP TMD patients respectively. While women of child-bearing age represented the majority of SP patients, this was not the case for the AL cohort. Significant differences in the prevalence of muscle disorders, other joint conditions (arthralgia, osteoarthritis and osteoarthrosis), depression and somatization were observed between the two TMD cohorts. The prevalence of these Axis I and II parameters were higher in the AL cohort. Muscle disorders were the most common type of TMD in both groups (68.7% AL and 32.2% SP). Axis II assessment showed that 60.2% of AL patients experienced moderate to severe depression and 71.1% had moderate to severe somatization. The prevalence of depression and somatization in the SP cohort was 43.9% and 50.5% respectively. As the disparities observed do not arise from variation in study methodology, further research is needed to explore how differences in culture, ethnicity and related variations in health care provision can influence the differential expression of TMD in patients.

# **VO-26** Tooth colour of Hong Kong people - their satisfaction and preference. O.D. TSE\*, S.T.W. CHAU, T.W. LEUNG, Y.Y.F. TSANG, H.Y. YIP, E.C.M. LO. (Faculty of Dentistry, University of Hong Kong)

This study aimed to collect information about Hong Kong people's idea of the most desirable tooth colour, their satisfaction with their own tooth colour, and the influence of some selected factors. To collect the required information, a face-to-face interview using a structured questionnaire was carried out on a purposive sample of adults. The subjects were also asked to indicate their desirable tooth colour on a set of standard (VITA) tooth shades. A total of 297 subjects (age 16-60 years) were interviewed, among whom 131 (44%) were men and 166 (56%) were women. On being asked to indicate the most desirable colour for their own teeth, 60% of the subjects chose shade B1, 34% chose shade A1, and only 6% chose other darker shades. Their choices were related to their age, education level and attitude on dental treatment and aesthetics (Chi-square tests, p<0.05). About half of the subjects (52%) were satisfied with their own tooth colour and among the factors studied, subject's age, gender, and perceived own tooth colour were found to be related to their satisfaction level (Chi-square tests, p<0.05). It is concluded that most Hong Kong adults would like their own teeth to have light shades and a number of demographic and attitude factors have an influence on their preference and satisfaction with their own tooth colour.

#### VO-27 Professional image of dentists in Hong Kong. J.T.M. Chan\*, V.C.F. Leung, J.M.W. Yuk, M.C.M. Wong. (The University of Hong Kong)

AIM: To evaluate the professional image (professionalisms and other components) of dentists as perceived by the general public and compare the professionalisms of dentists with other professionals. METHODS: A telephone survey was conducted through a structured questionnaire. Respondents were asked to score the nine selected elements of professionalisms using a scale of 1 to 10 (highest) for each of the five selected professional groups (dentists, physicians, lawyers, accountants, and Chinese medicine practitioners). They were also asked to express their opinions on the statements concerning the other nine components of professional image of dentists from strongly disagree to strongly agree. Both positive and negative statements were constructed. RESULTS: Altogether 404 questionnaires were completed (response rate 63%). Dentists ranked highest/second highest in the scoring of the nine selected elements of professionalisms except for "Reasonable service charge" and the overall mean score ranked the second highest (6.4). Positive opinions were found on the other nine components of professional image of dentists. Generally respondents showed agreement on positive statements 52% - 92%) and disagreement on negative statements (76% - 86%). Younger respondents, those with higher education level and those who were working were found to give higher scores and more positive responses (p<0.05). CONCLUSION: The professional image of dentists in Hong Kong perceived by the general public was generally good. Significant relationships were found between the respondents' background and their views on professional image of dentists

### VO-28 Views of sex workers on oral transmission of STDs. Chow G\* and McGrath C. Faulty of Dentistry, University of Hong Kong, Hong Kong

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Objective: To assess knowledge, attitudes and behaviour of female commercial sex workers (FCSW) about the transmission of sexually transmitted diseases (STDs) through the oral cavity. Methods: Employing a 'snowball' sampling approach, 178 FCSW were invited to complete a questionnaire relating to oral health and STDs. Results: 79% (140/178) participated in the study. Approximately half (53%, 74/140) were aware that STDs could manifest themselves in the mouth. Most perceived (74%, 104/140) the oral cavity as a route for the transmission of STDs. The FCSW attributed varying risk to the transmission of STDs through the oral cavity for different oral health states (mouth ulcers, bleeding gums, open mouth wounds). Most reported using some method of oral protection when engaging in oro-genital sex (71%, 99/140). Those who in the past had received information about oral health and sexual health were more likely to be aware of oral manifestations of STDs (P<0.05), were more likely to perceive oral health status as a risk factor in transmission of STDs (P<0.001) and were more likely to use some method of protection against oral transmission of STDs, (P<0.001). Conclusion: FCSW are frequently unaware of the oral manifestations of STDs, aften do not perceive their oral health status as a risk factor in transmission of STDs, and few protect themselves against the oral transmission of STDs. Knowledge, attitudes and behaviour of FCSW in relation to oral transmission of STDs is associated with previous information about oral health and sexual health that they have received.