

The perception of dental esthetics assessed by prosthodontic residents and UAE recognized specialists in prosthodontics- Department of Prosthodontics -UAE

Noura M Alhassani and Moosa Abuzayda

Mohammed Bin Rashid University of Medicine and Health Sciences, UAE,

Email id : dr.no.ura@ hotmail.com

Abstract

A perfect smile improves the self-confidence, personality; social life and psychology by improving self-image with enhanced self-esteem of the patient. While not every person is born with a perfect and attractive smile, qualities such as straightness, cleanliness or whiteness of teeth may come to mind. Thanks to developments in the field of cosmetic dentistry, people can change the smile they were born with into a smile they love. Several treatment modalities have been proposed to restore the aesthetic appearance of the dentition such as chemical bleaching or full crowns which was considered the most predictable and durable aesthetic correction of anterior teeth. However, this approach is undoubtedly most invasive with substantial removal of large amounts of sound tooth substance and possible adverse effects on pulp and periodontal tissues. Smiles can be improved by veneering teeth using a relatively conservative technique. The appearance of veneers and smile design has not been previously investigated in the UAE. This study aimed to assess the aesthetic preferences of different smile designs rated by a group of prosthodontics residents and specialists.

A questionnaire was devised asking about demographic details such as age and gender of the participant, educational country as well as clinical experience before and after graduation. Images of ten cases that had ceramic veneers fitted on their anterior teeth were included in the questionnaires. There were two images for each case: smiling with lips shown and close-up with retracted lips and cheeks. Each case had 7 questions and the respondents were asked to evaluate and compare the dental aesthetics patterns of porcelain laminate veneer for each case. Each question had a 5 point Likert rating scale from poor to excellent. Images of veneers were

taken from patients treated in Ministry of Health Centers in UAE and private dental clinics in Sharjah and Dubai. All patients were over 18 years old and had a minimum of two and up to a maximum of ten porcelain laminate veneers in the maxillary and/or mandibular anterior region placed more than 6 months previously. Patients were not included if any of the following conditions were present, teeth indicated for restoration (for example with a crown) and the presence of advanced dental caries. A questionnaire was distributed among 25 clinicians, they were selected from UAE recognized Specialists in prosthodontics and prosthodontics residents from Hamdan Bin Mohamed College of Dental Medicine. The specialists were recruited from the DHA/ MOH/CPQ database. The participants were therefore not a random sample but a convenience sample and not representative of the residents or specialist prosthodontics' in Dubai or in the UAE. A Total of 10 Cases Were Evaluated by Each Clinician. The Different Clinical Situations Were as Follows: Figure 1: A, case1, Gummy smile with visible lower teeth; B, case2, Flat incisal plane not following the lower lip line; C, case3, Square teeth with flat incisal plane; D, case4, Half-crowns visible; E, case5, Midline discrepancy, case6, Incisal plane following lower lip line; B, case7, Good incisal curvature following the lower lip line with very white teeth; C, case8, visible papillae following the lower lip curvature and no contact with lower lip; D, case9, Long teeth contacting the lower lip; E, case10, Gingivitis. The participants evaluated the appearance of the patient smile, veneer shape, contour and shade, the length/width ratio of the teeth, the relationship of incisal edges to the lower lip, the relationship of the soft tissue around the teeth and the tooth display and lip position when smiling.

A Total of 10 Cases Were Evaluated by Each Clinician. The Different Clinical Situations Were as Follows:



A, case1, Gummy smile with visible lower teeth; B, case2, Flat incisal plane not following the lower lip line; C, case3, Square teeth with flat incisal plane; D, case4, Half-crowns visible; E, case5, Midline discrepancy

Result: A total of 25 dentists rated the 10 cases. There were 12 residents and 13 specialists, 40% were from the UAE and 60% from other countries. The residents were significantly younger than the specialists with mean ages of 29.4 years and 43.0 years respectively ($p < 0.001$). Ten raters were male and 15 female. An overall amalgamated mean score was calculated for each case by summing all 7 individual scores for the 7 questions by rater. Males rated case 8, visible papillae following lip contour, significantly more highly than females ($p < 0.004$). The overall ranking of the 10 cases was determined by gaining a mean % score for each case by summing the Likert scores for all seven questions and dividing by the maximum score of 35 per case. Both the residents and specialists agreed that case 9 (long teeth contacting the lower lip) was the most pleasant (68%) and that case 5 (midline discrepancy) was the most unattractive (39%). Overall, cases 9 and 6 were the most pleasing and cases 5 and 10 were the most displeasing.

Conclusion In this study the prosthodontic residents and the UAE recognized specialists in prosthodontics were mostly in agreement with the case ratings. Case 9 (Long teeth contacting the lower lip) was rated as the most pleasant smile while case 5 (Midline discrepancy) was rated as the worst smile by both specialists and residents. These results were expected since case 9 represented the recommended aesthetics guidelines and case 5

represented a clear deviation from the recommended aesthetics guidelines.

Biography

Noura Mohamed AlHassani has completed his Master of Science degree in Prosthodontics from Mohammed Bin Rashid University of Medicine and Health Sciences. She is the Director of Prosthodontics Department in Ministry of Health in United Arab Emirates, Sharjah.

Note : This work is partly presented at 22nd International Conference on Dental Education During April 09-10, 2018 held at Amsterdam, Netherlands