

## Patients' assessment of the professional and business aspects of dental practice

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إن طب الأسنان هو مهنة تعتمد في استمرار تواجدها على الحضور المنتظم للمرضى الملتزمين . وكما تعتمد هذه المهنة أيضا على انطباع المرضى عن طبيعة و أجواء عمل الأطباء التي من خلالها يتحكم المرضى على الأطباء. إن الكثير من أطباء الأسنان يفضل أن يتجنب النظر إلى مهنة طب الأسنان على أنها عمل تجارى مثل تقديم الوجبات السريعة وتصفيف الشعر والعمل في تجارة الخاسب الألى. اهتمت هذه الدراسة بالبحث في العوامل التي من خلالها يتحكم المرضى على مستوى العمل بمهنة طب الأسنان وكذلك البحث في كيفية تأثير تلك العوامل التي من خلالها يتحكم المرضى على مستوى المعيشة المهنية . هذا بالإضافة إلى البحث في كيفية تأثير تلك العوامل على التوازن بين الممارسة المهنية والعمل التجارى في الممارسة العامة لطب الأسنان. أجريت هذه الدراسة بمركز طب الأسنان بالأحساء بالمنطقة الشرقية بالملكة العربية السعودية . وقد قسمت هذه الدراسة إلى مرحلتين : المرحلة الأولى اشتملت على مجموعة من الخصائص الواجب توفرها في الممارسة الجيدة لطب الأسنان . في هذا القسم من الدراسة تم استبيان رأى أربعين طبيباً للأسنان . أما في المرحلة الثانية فتم عرض تلك الخصائص للتقييم من خلال عينة مكونة من 378 مريضاً ( 215 من الذكور و 163 من الإناث) حيث طلب من هؤلاء المرضى تقييم 16 خاصية هي خلاصة العناصر التي تم استخلاصها من المرحلة الأولى للدراسة. أظهرت الدراسة أن الذكور مهتمون بصورة أكبر من الإناث بالسمعة الجيدة للعيادة . كما وأوضحت الدراسة أيضا أن الذين يحملون المؤهلات العلمية العالية يفضلون الطبيب الذي يعطيهم توجيهات مابعد المعالجة السنية وكذلك نصائح خاصة بصحة الفم والأسنان أكثر ممن هم أقل منهم درجة علمية. كما أوضحت نتائج الدراسة أيضا أن مهارة الطبيب هي المعيار الذي يوليه المرضى صغار السن (9,03 ± 2,41) أهمية أكثر من المرضى الأكبر منهم سناً (2,74 ± 3,05) وأظهرت هذه الدراسة أيضا أن الاختلاف في حسنات المرضى لم يكن له تأثير في تقييمهم للعناصر المختلفة التي تم عرضها عليهم.

Dentistry may be described as a profession which depends for its continued existence on loyal patients regularly attending the dental clinics. This existence depends on the impression of work and working environment that patients have about dentist. Many dental practitioners would wish to avoid recognizing the fact that dentistry is a business like any other. This study was designed to look for the factors that patients or if you will, customers used to judge the standard of dental practice, and how these factors affect the balance between professionalism and business in general dental practice. The study was conducted in Al-Ahsa area, Eastern region of the Kingdom of Saudi Arabia. It was done in two phases: the first phase was the generation of criteria which defined a good dental practice in the eyes of the general dental practitioner. In this phase, 40 general dental practitioners were interviewed. The second phase dealt with the evaluation of these criteria by a sample of 378 patients (215 males and 163 females) who were asked to evaluate 16 criteria created in the first phase by dentists. The study revealed that males were significantly more interested in dental practice with a good image than females. The study has also showed that the highly educated patients preferred to be treated by a dentist who gave them postoperative and oral hygiene instructions. Dentist skill was considered more important by young patients (24.1 years ± 9.03) than the older patients (30.5 years ± 2.7 years). No significant difference was found among patients about the studied variables based on the patient's ethnic background.

### Introduction

Dentistry may be said to be a profession which depends largely for its existence on loyal patients regularly attending the dental clinics. This existence depends on the impression of work and working environment that the patients have about the practicing dentist. In a survey of Norwegian dental attendees<sup>1</sup> one-third of the patients said that the most important characteristic of their dentist was that he/she was understanding and kind, and performed treatment without pain, and 26% of them indicated that the dentist took his/her time to listen and to discuss health problems, and to explain how dental diseases could be

prevented. Another study, in the USA<sup>2</sup> has indicated the importance of good communication. In the study, 97% of the patients favored a dentist who explained what was involved in the treatment procedures which they required. These findings suggest that dental patients respect dentists as members of a certain profession rather than a business people and value professional explanations, communications and skills. Nevertheless, the fact cannot be avoided that

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dentistry does have to have a business angle. The practice is responsible for the salaries of the staff and other financial commitments.

It has recently been suggested that many dentists want to avoid recognizing the fact that dentistry is a kind of business outfit. Based on this comment Burke<sup>3</sup> raised two questions: is this the way ahead for dentistry? Is this how our patients want us to be?

However, this study was designed to look for the factors that dental patients use to judge the standard of dental practice, and how these factors could affect the balance between perceived professionalism and business aspect in our general dental practice.

### Materials and Methods

The study was conducted in Al-Ahsa area, Eastern region of KSA. The study was divided into two phases: the first phase was the generation of criteria which defined good dental practice in the eyes of the general dental practitioners, while the second phase dealt with the evaluation of these criteria by the patients.

A sample of 40 general dental practitioners who attended one of Al-Ahsa Dental Center Continuing Education meetings was asked to suggest at most 10 important criteria of a good dental practice.

They gave 258 answers which were summarized in 16 statements. The criteria were categorized into two groups: professionalism and business matters (Table 1).

A questionnaire was then designed in English and Arabic to assess which criteria were considered more important for dental patients. The questionnaire forms were left at the reception desk of each of the 25 general dental practices of Al-Ahsa area. When the patients checked-in for their appointments, the receptionist explained the study and invited them to participate. Three hundred seventy-eight patients out of five hundred responded during a period of three months.

To analyze the opinion of the subjects according to the patient's age, the means and the standard deviation of the age of the respondents in each of the 16 criteria were first calculated. Then the t-test was used to examine the subject's age in regard to their responses to the employed 16 criteria.

To facilitate data analysis the responses were grouped into two. The very important and important group responses were pulled as important, while the least important and not important group responses were pulled as not important. The education levels were categorized into three groups, the elementary and intermediate levels as one group while the secondary and university levels were considered as separate groups.

**Table 1.** Dentists' criteria for perceiving a dental practice as a business or as a health professional establishment

Business Criteria		Professional Criteria	
Criteria	No. of doctors	Criteria	No. of doctors
1. Caring dentist	40	1. Up to date equipment and materials	30
2. Pleasant decor and comfortable surroundings	22	2. High standard of cleanliness and hygienic procedure	27
3. Appointment system	16	3. Giving oral hygiene and postoperative instructions	23
4. Good practice image	14	4. Dentist qualification	19
5. friendly staff	13	5. Dentist skills	19
6. Good administration	11	6. Pain-free dentistry	6
7. Accessible location of the clinic	4	7. Explanation of the procedure	6
8. Reasonable cost of treatment	3	8. Readiness to see any emergency situation	5

N.B. c/o General Dental Practitioners gave 258 answers

The data were entered into microcomputer using Foxpro (version 2.6 window). Statistical Package for Social Sciences (SPSS version 10.0) was utilized to generate one- and two-way frequency tables and to find statistical significance for relationship of demographic variables with the responses.

**Results**

Out of 378 patients, 215 (56.9%) were males. The mean age of the patients was 33.82 + 8.80 years with almost 80% of the patients aged between 20 to 40 years. Three hundred and one patients (79.65%) were Saudi nationals and all the subjects were literate. Ninety-one of the responding patients had finished elementary and intermediate schools. One hundred and twenty respondents (31.7%) had secondary level education, while 167 (44.2%) had university degrees.

Analyses of subject's gender, education and nationality in regards to the 16 criteria showed the following: significantly more male than female patients stated that the dentist skills, good practice image and friendly staff were important criteria in their opinion (P<0.05, Table 2). Table 3 showed the relationship of education level of the subjects and the responses. Significantly university-educated patients indicated that giving oral hygiene and postoperative instructions were more important criteria for good dental practice (P<0.05). No significant difference was observed between Saudi and non-Saudi subjects (Table 4).

Younger patients gave significantly higher importance to dentist skills, appointment system and explanation of the procedure of the clinics compared to older patients (P<0.05, Table 5).

**Discussion**

The higher percentage of male participants in this study (215 out of 378) could be explained by cultural background rather than by a higher rate of male attendance in the general dental practice. In Islamic societies, women tend to be more conservative and hence would delegate most of their official papers processing to their guardians.

The study showed that males were significantly more interested than females on the practice of good image and friendly staff (Table 2) depending most likely on what their friends, relatives and other people tell them in their choice of dental clinic. However, these criteria were related more to business advertisement and publicity. Again in

Table 2. The response of male and female dental patients to sixteen variables.

Serial Variable	Male (%)	Female (%)	P value
1. Caring dentist	217 (99.1)	153 (96.9)	0.123
2. Up to date equipment	205 (95.3)	151 (96.6)	0.133
3. High standard of cleanliness and hygienic procedure	208 (97.7)	155 (96.8)	0.315
4. Pleasant decor and comfortable	187 (89.3)	135 (83.9)	0.493
5. Reasonable cost of procedure	202 (95.3)	150 (92.6)	0.273
6. Readiness to see any emergency situation	187 (89.3)	138 (90.0)	0.462
7. Reasonable cost of procedure	192 (91.5)	141 (90.5)	0.285
8. Accessible location of the clinic	135 (63.7)	109 (66.8)	0.520
9. Friendly staff	219 (98.5)	159 (94.1)	0.048
10. Good administration	187 (89.0)	138 (90.0)	0.462
11. Fair fee dentist	192 (91.5)	141 (90.5)	0.285
12. Reasonable cost of procedure	202 (95.3)	150 (92.6)	0.273
13. Readiness to see any emergency situation	187 (89.3)	138 (90.0)	0.462
14. Accessible location of the clinic	135 (63.7)	109 (66.8)	0.520
15. Friendly staff	219 (98.5)	159 (94.1)	0.048
16. Good administration	187 (89.0)	138 (90.0)	0.462

Table 2, males showed preference for dentist skill more than females, which was a criterion of professionalism. Data in Table 3 imply that highly educated subjects preferred to visit dental practices where dentists gave professional oral hygiene instructions. Interestingly, Ramkin and Harris<sup>11</sup> in a study conducted in U.S.A. indicated that most of their respondents did not like to be scolded for poor oral hygiene. However, some other studies<sup>5,6</sup> have also suggested that the younger patients who did not mind being scolded or were not certain about it may feel more comfortable with more authoritarian dentists. Table 5 shows that the dentist's skill, which is a professional criterion, was more important for young patients (24.1 ± 0.03 years) than for the older patients (30.5 ± 2.7 years). Burke and Croucher<sup>7</sup> in a study of patients' preferences for dentists<sup>5,6</sup> behaviors indicated that patients ranked dentists' skills together with explanation of procedure and caring dentist as the most important criteria of a good dental practice. The most interesting finding in the present study was that it didn't show any significant differences between Saudi and non-Saudi patients concerning their perception of the studied variables (Table 4).

**Table 3.** Educational level of patients who responded to the sixteen variables

Studied Variables	Up to Intermediate <sup>+</sup>	Secondary <sup>+</sup>	University <sup>+</sup>	P value
	n (%)	n (%)	n (%)	
1. Caring dentist	86 (96.6)	115(97.5)	148(99.3)	0.300
2. Up to date equipment and materials	83 (93.3)	113(94.2)	142(95.3)	0.794
3. High standard of cleanliness and hygienic procedure	7 (96.7)	113(94.2)	146(99.3)	0.052
4. Giving oral hygiene and post operative instructions	76 (84.4)	110(86.3)	139(95.2)	0.012*
5. Pleasant decor and comfortable surrounding	80 (89.9)	104(86.7)	120(81.6)	0.196
6. Dentist qualification	81 (91.0)	107(89.2)	134(89.9)	0.908
7. Dentist skills	88(98.9)	112 (94.9)	141 (97.2)	0.254
8. Appointment system	85 (94.4)	109(93.2)	139(93.9)	0.928
9. Good practice image	82(92.1)	108(90.0)	131(88.5)	0.669
10. Friendly staff	82(93.2)	115 (96.6)	145 (98.0)	0.794
11. Good administration	77 (85.6)	102(85.7)	130(87.2)	0.909
12. Pain-free dentistry	80 (90.9)	105(88.2)	130(88.4)	0.800
13. Explanation of the procedure	82(92.1)	106(89.1)	130(89.7)	0.747
14. Readiness to see any emergency situation	85 (95.5)	112(94.9)	137(91.9)	0.453
15. Reasonable cost of treatment	77 (86.5)	98(83.8)	116(79.5)	0.355
16. Accessible location of the clinic	62 (68.9)	77 (64.7)	94 (63.5)	0.691

\* Significant  $P < 0.05$ **Table 4.** Saudi and non-Saudi patients' response

Studied Variables	Saudi <sup>+</sup>	Non Saudi <sup>+</sup>	P value
		n (%)	n (%)
1. Carina dentist	291(98.0)	76 (98.7)	1.00%
2. Up to date equipment and materials	282 (94.3)	74(96.1)	0.776%
3. High standard of cleanliness and hygienic procedure	291 (97.0)	72 (97.3)	1.00%
4. Giving oral hygiene and post operative instructions	267 (89.6)	64 (88.9)	0.861
5. Pleasant decor and comfortable surrounding	251 (89.5)	68 (89.5)	0.249
6. Dentist qualification	268 (89.9)	70 (90.9)	0.798
7. Dentist skills	282 (96.6)	76 (98.7)	0.471 <sup>f</sup>
8. Appointment system	282 (94.9)	67 (89.3)	0.071
9. Good practice image	267 (89.3)	72 (94.7)	0.151
10. Friendly staff	284 (95.9)	76 (98.7)	0.482 <sup>f</sup>
11. Good administration	258(86.6)	67 (87.0)	0.920
12. Pain-free dentistry	266 (89.9)	67 (88.2)	0.665
13. Explanation of the procedure	264(89.5)	69 (92.0)	0.518
14. Readiness to see any emergency situation	277 (93.0)	9(8.7)	0.059 <sup>f</sup>
15. Reasonable cost of treatment	240 (82.2)	64(83.1)	0.850
16. Accessible location of the clinic	191 (64.1)	53 (68.8)	0.437

<sup>f</sup> Fisher exact test<sup>+</sup>Positive (important) responses

Table 5. Descriptive statistics of age according to the opinion

Studied Variable	Important		Not Important		P value
	No.	$\bar{X} \pm SD$	No.	$\bar{X} \pm SD$	
1. Caring dentist	367	29.7 $\pm$ 9.3	7	30.7 $\pm$ 12.7	0.978
2. Up to date equipment and materials	356	30.0 $\pm$ 8.4	20	31.0 $\pm$ 8.8	0.61
3. High standard of cleanliness and hygienic procedure	363	29.9 $\pm$ 8.3	11	32.3 $\pm$ 10.1	0.39
4. Giving oral hygiene and postoperative instructions	331	29.9 $\pm$ 8.19	39	28.8 $\pm$ 16.6	0.652
5. Pleasant decor and comfortable surrounding	319	80.0 $\pm$ 8.4	55	27.0 $\pm$ 14.0	0.794
6. Dentist qualification	338	29.9 $\pm$ 16.1	37	31.5 $\pm$ 6.3	0.734
7. Dentist skills	358	24.1 $\pm$ 9.03	11	30.5 $\pm$ 2.7	0.0001*
8. Appointment system	349	28.7 $\pm$ 11.6	23	32.8 $\pm$ 15.0	0.009*
9. Good practice image	339	30.1 $\pm$ 18.1	36	30.0 $\pm$ 09.4	0.992
10. Friendly staff	360	30.0 $\pm$ 8.4	13	31.2 $\pm$ 8.7	0.636
11. Good administration	325	29.9 $\pm$ 8.3	50	30.4 $\pm$ 35.4	0.968
12. Pain-free dentistry	333	30.1 $\pm$ 8.4	39	28.9 $\pm$ 8.5	0.912
13. Explanation of the procedure	333	29.7 $\pm$ 7.4	37	31.8 $\pm$ 12.8	0.03*
14. Readiness to see and emergency situation	352	30.0 $\pm$ 8.4	22	30.5 $\pm$ 8.6	1.000
15. Reasonable cost of treatment	304	29.6 $\pm$ 8.3	65	32.1 $\pm$ 19.2	0.051
16. Accessible location of the clinic	244	30.0 $\pm$ 8.3	131	30.0 $\pm$ 8.6	1.000

\* Significant P < 0.05

As can be observed in this study only six variables showed significant results, three of them were categorized business criteria: good practice image, friendly staff (Table 2) and good appointment system (Table 5), while the other three fell under professional criteria: dentist skills (Table 2 and 5), giving oral hygiene and postoperative instructions (Table 3) and explanation of dental procedure (Table 5).

These findings made it difficult to decide which direction the results of this study were pointing. This difficulty was well put by Burke<sup>3</sup>, who stated that the difficulty which faced the dental profession came with the marrying of business, where volume and profit are paramount with the moral and professional obligations to patients, where quality and care are the watch word. However, this balance between professionalism and business in dentistry depends on practicing dentists who should combine quality professional services with improving and

welcoming friendly environment in dental practices.

Corporate group dental practice gradually continues to replace single-doctor surgery in general dental practice nowadays. The potential impact of this in the profession should be studied more thoroughly since these corporate dental groups take into consideration the rules and practices of the market.

The effect of corporate groups on general dental practice can be looked at from two perspectives.<sup>2</sup> One is the fact that the dentists employed by such organizations might lose their independence because they would likely have monthly targets to meet. The other viewpoint is that the dentist so employed would be freed from much of the administration surrounding everyday general practice and would therefore be more able to concentrate on the clinical aspect of dentistry and hence increase the quality of professional performance.

### Conclusions

1. Ethnic differences between the patients in this study did not result in significant difference concerning their perception of the studied variables.
2. Patient's assessment of professional and business criteria in the study showed significant difference in six variables. Three of these criteria were categorized as business (good practice image, friendly staff and good appointment system), while the other three were put under professionalism (dentist skills, explanation of the procedure and giving oral hygiene and postoperative instructions).
3. The results of this study suggested that success in general dental practice might be through a combination of business practices with ethnical professional obligations to the patients.

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