Continuing Education and the Malaysian Dentists.

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ABSTRACT

A 73.1 percent response rate was obtained in a postal questionnaire survey conducted among Malaysian dentists to assess their attitudes and needs for continuing dental education. It appeared that on an average the Malaysian dentist spent very little time on continuing education, reading journals and participation in professional dental meetings. The need for continuing education was strongly evident as almost all dentists indicated that such activities be further developed in Malaysia. Crown and Bridge work, Oral Surgery and Orthodontic appeared to be areas in which more continuing education were required.

Key Words: Dental education, continuing education, dentist.

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INTRODUCTION

According to the Dental Act of Malaysia (1) a dentist on qualification is presumed by law to be competent to carry out dental practice but is under no obligation to seek any form of updating of knowledge, skills or techniques. He or she could even reach retirement after a lifetime of practice without ever having attended a refresher course or kept up with the literature.

However, the importance of continuing education in providing an opportunity for both the maintenance of competence and a search for excellence has often been reiterated by the dental profession (2,3) Throughout the professional life the dentists will need the judgement and capacity to adapt to changes in the patterns of health and diseases, medications, new technologies, improved equipments and materials, more effective team management and more demanding public expectation. This can only be attained through on-going learning throughout their professional lifes and not only until they are qualified to practise their chosen profession. This is particularly important because "all professionals forget much of what is taught in school" (4). A number of studies have also contended that about half of what a dentist knows becomes outmoded within 11 years after dental school (5).

As both the profession and society scrutinize the dental profession and its needs for quality assurance and competence, this has resulted in legislation mandating continuing dental education in a number of countries (6).

The present study was undertaken to assess the attitudes and needs for continuing dental education among Malaysian dentists.

MATERIALS AND METHOD

According to the Gorverment Gazette of 1990 (7) there were 1371 professionally trained dentists who were

granted Annual Practising Certificate to practice dentistry in Malaysia in 1990. Information concerning the dentists' addresses, ethnic origins, sex, employment status, and their main location of practice were also obtained from the government gazette.

This study forms part of a larger questionnaire survey on the role of the professional care provider in the Malaysian oral health care delivery system. The portion of questionnaire for this study was designed to assess the past practice as well as the overall and specific needs concerning continuing dental education among the Malaysian dentists. Prior to the start of the survey the questionnaire was pretested.

A covering letter explaining the objective of the study, a letter of assurance on confidentiality and the questionnaire together with a stamped addressed return envelope were sent to all the dentists. Supporting letters from the Director of Dental Services, Malaysia as well as the President of the Malaysian Dental Association were also included to enhance the response rate. Three reminders were sent at monthly intervals appealing to the dentists to respond to the questionaire.

The analysis of variance and the Chi-square test were applied for statistical significance of differences between groups and the level of probability p<0.05 was accepted as significant.

RESULTS

After the first mailing, the first, second and third reminders, 972 answered questionnaire out of the total 1371 sent were received. A total of 41 dentists had either moved, were retired or deceased. Thus the adjusted response rate obtained at the end of the study period was 73.1 percent (972/1330). When compared to the actual dentist population enumerated from the Government Gazette, no statistically significant differences were found in the distribution of the respondents by ethnic group, by gender or by geographic

distribution. Information concerning the age of the dentists was not available from the Government Gazette.

When queried about the number of days spent on continuing dental education courses during the last 12 months, about one-third of the dentists indicated that they had not attended any (Table 1). About one-third reported that they had spent between one to four days. The attendance rate at continuing dental education courses was significantly lower among the youngest age-group, those with the shortest career in practice, among males and among Malays.

sector dentists.

DISCUSSION

Contrasting the data given in Table 1 with Table 4 and Table 5 it becomes clear that on an average the Malaysian dentist spent very little time on continuing education, reading journals and participation in professional dental meetings. The following-up on scientific and professional advances and developments which can now be

Table 1 Attendance at continuing education courses during the past 12 months by dentist characteristics.

Dentist	Number of days					
characteristics	None	1-4	5–8	9-12	13+	
	%	%	%	%	%	
All subjects	35.1	33.3	15.2	5.8	10.6	
Age - group (p<0.01)						
25-34 years	36.5	33.6	14.5	6.0	9.4	
35-44 years	33.6	34.1	15.1	4.6	12.6	
>44years	34.8	29.5	18.2	8.3	9.1	
Ethnic origin (p<0.01)				, , , , ,	0.1	
Malay	38.7	31.8	12.3	6.5	10.6	
Chinese	30.0	36.9	16.7	6.4	9.9	
Indian	37.2	30.2	16.7	4.7	12.2	
Sex (p<0.05)						
Male	35.3	30.5	15.6	6.3	12.3	
Female	34.9	36.8	14.8	5.2	8.4	
Years in practice (p<0.01)					0, .	
(Seniority)						
0-10 years	39.3	32.7	13.0	5.9	9.1	
11-20 years	30.5	34.5	17.7	4.8	12.5	
>20 years	27.2	32.1	19.8	8.6	12.3	
Service sector						
Public sector	34.2	33.6	13.8	5.3	13.0	
Private sector	36.0	32.9	16.7	6.3	8.1	

Almost all deptists indicated a need for continuing dental education activities be further developed in Malaysia (Table 2). Crown and Bridge work, Oral Surgery and Orthodontics appeared to be the areas in which more continuing education were required (Table 3). The area least mentioned was Pediatric Dentistry.

About 96 percent of the dentists spent time reading dental journals and other related matters in a month (Table 4). The majority (55%) spent between one to five hours a month. It appeared that the senior dental practitioners did not spend much time reading professional journals. Significantly more males spent more time reading journals than females. Likewise more Indians reported having spent more time reading journals than either Malays or Chinese.

Table 5 indicates that on average the dentists attended about two professional dental meetings during the last year. When attendance was analysed by dentist characteristics it was found that attendance increased with age and career seniority. Attendance appeared to be more frequent among Indians as compared to Chinese or Malays. Likewise attendance was more frequent among males as compared to females. Private practitioners attended more meetings than the public

Table 2 Need to develop continuing education by dentist characteristics.

Dentist	Yes
characteristics	(%)
All subject	99.2
Age - group	
25-34 years	99.6
35-44 years	99.0
> 44 years	98.5
Ethnic origin	
Malay	99.7
Chinese	98.5
Indian	99.5
Sex	
Male	99.1
Female	99.3
Years in practice	
(Seniority)	
0-10 years	99.6
11-20 years	98.9
>20 years	97.5
Service sector	
Public sector	99.2
Private sector	99.2

characterized as being in a rapidly moving phase was rather weak and sporadic. In comparison with colleagues practising in the technologically advanced countries such as the United States, North-Western Europe including the Scandinavian countries the Malaysian dentist is at risk of falling seriously behind. A cursory examination of the continuing education courses made available to the Malaysian dentists during the last couple of years clearly indicates that action need to be taken to improve the situation. Not only was there a dearth of such courses which comprised mainly of sporadic lectures but also most lacked a participatory component.

The report of the American Dental Association's Special Committee on the Future of Dentistry (8) had suggested that sporadic attendance at unrelated, short courses may be ineffective in achieving specific educational goals. Chapko et al. (9) found that a course

Table 3 Areas in which more extensive continuing education were required among positive respondents.

Area	%
Crown & Bridge	55.8
Oral Surgery	48.8
Orthodontics	47.0
Oral Pathology/Oral Medicine	40.4
Periodontics	38.7
Public Health	27.7
Removable Prosthesis	25.5
Pediatric Dentistry	22.9
Other	9.0

Table 4 Number of hours a month spent reading journal by dentist characteristics.

Dentist			Hours	1
characteristics	None	1-5	6-14	>14
	%	%	%	%
All subjects	3.7	54.8	28.0	13.6
Age - group (p<0.01)				
25-34 years	3.2	59.1	23.9	13.9
35-44 years	2.1	50.4	34.3	13.2
>44years	10.0	53.1	23.1	13.8
Ethnic origin (p<0.01)				
Malay	4.6	58.7	23.7	13.1
Chinese	4.2	58.1	24.7	13.0
Indian	1.4	45.1	36.6	16.9
Sex (p<0.01)				
Male	3.9	49.9	30.4	15.8
Female	3.3	61.1	24.9	10.8
Years in practice (p<0.01) (Seniority)				
0-10 years	3.2	57.9	25.8	13.0
11-20 years	2.0	50.6	33.2	14.2
>20 years	13.9	51.9	19.0	15.2
Service sector				
Public sector	3.8	56.5	25.8	14.0
Private sector	3.6	53.1	30.1	13.3

in practice management which was individualized and required active participation of both dentist and staff, produced significant change in the utilization of auxiliaries in some offices. Ryan's (10) summary of studies on dentists' needs and opinions about continuing

education indicated a preference for demonstration and participation courses over lectures and other method of delivery.

Crown and bridgework represented the most commonly cited area in which more extensive continuing dental education was required. Oral Surgery, Orthodontics and Oral Pathology/Oral Medicine were also felt important. The interpretation of the data presented in Table 3 was difficult simply because the underlying motives for the selection of the issue or area of dentistry to be upgraded through continuing education were unknown. Were these continuing education courses required because of a felt need to upgrade dentistry towards a role as a future oral physician or were they just the acknowledgement of deficiencies in the undergraduate curriculum? Another explanation could be that these choices reflected the traditional disease-orientation inculcated during the undergraduate schooling. The low percentages of dentists requiring continuing education in Pediatric Dentistry and Public Health, both disciplines heavily involved in prevention of diseases, health education and health promotion appear to support the hunch that traditional, therapy-orientated dentistry was still the main interest of the Malaysian dentists. If, however, the felt need for Crown and bridge, Oral Surgery, Oral Medicine etc. was a genuine felt need to upgrade and enrich the therapeutic spectrum towards a more medicine-biology concept then this would very much promote the process predicted by Barmes (11) that the changing oral health the status of the population will force dentists working at the moderate technology/ intervention level to shift to either extremes - in this case logically more towards the high technology/ intervention level. This would be more in line with a future status as oral physicians.

Table 5 Number of professional dental meetings attended during the last year by dentist characteristics.

Dentist		Llauma	524	
characteristics	Mean	Hours	SD	
All subjects	1.9		2.3	
Age - group		p<0.01)		
25-34 years	1.6		2.3	
35-44 years	2.2		2.4	
>44years	2.3		2.3	
Ethnic origin		p<0.01		
Malay	1.4		2.1	
Chinese	2.2		2.3	
Indian	2.3		2.4	
Sex		p<0.01		
Male	2.2		2.5	
Female	1.6		2.1	
Years in practice (Seniority)		p<0.01		
0-10 years	1.6		2.3	
11-20 years	2.2		2.3	
>20 years	2.5		2.4	
Service sector		p<0.01		
Public sector	1.5	P	1.9	
Private sector	2.4		2.6	

It appears that the need for continuing education in Malaysia should be subjected to further in-depth studies aiming at establishing a solid basis for decisions relative to the format, the issues, the organization and the administration of such activities. In some countries effective and systematic continuing education was planned and evaluated on the basis of modern consumer surveys.

A system 'compelling' dental practitioners to participate in continuing education throughout their professional lifes could be considered. One such system is the periodic relicensing system which is dependent upon evidence of attendance at a stated number of approved sessions of continuing education which is now operational in parts of North America. It should be noted however that it is difficult to legislate learning and that mere attendance at continuing education courses cannot quarantee learning or behaviour change. However, non-attendance or non-participation makes the learning process that much more difficult. A systematic approach to continuing education which is founded on the enthusiasm and motivation of the practitioners is to be preferred. Attitudes must be developed in the profession so that the desire for learning exists because of the benefits to the individual, the dental practice and the public that dentists serve. Through a consumer-orientated survey methodology, information and proposals can be elicited from the practitioners about desirable courses and workshops etc followed-up by constructive feed-back from practitioners on the preferred contents and methodologies. Such an approach has been proven to lead to a high participation rate in Western Europe, Scandinavia and the United States.

It is thus recommended that a Committee of Continuing Education for Malaysian Dentists be established under the joint auspices of the Faculty of Dentistry, University of Malaya, the Dental Division, Ministry of Health, Malaysia and the Malaysian Dental

Association. Among the terms of reference for such a committee should be to:

- review the existing continuing education activities,
- consider the launch of consumer-orientated surveys for the identification of needs for continuing education,
- formulate educational goals and instructional objectives for a future system of courses, workshop etc..
- define specific areas and or disciplines that may not be sufficiently covered in the undergraduate curriculum such as:
 - Practice Management,
 - Social and Behavioural Sciences, .
 - Communication,
 - Team-building, Leadership,
 - Geriatric Dentistry, and
 - Clinical Hygiene,
- arrange a system of assessing the quality of continuing education courses and workshops for continuous improvement,
- report regularly on the progress and development attained.

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