

Study among dentists on the need for a practice management course in the undergraduate dental curriculum – A cross-sectional study

M. Meenapriya, Marian Anand Bennis*

ABSTRACT

Background: Technological advances, the emergence of new knowledge, greater expectations of the patients about standards of dental care, and economic factors are bringing challenges to a dental profession which require producing future dentists with the knowledge of management and leadership through improved curriculum. **Aim:** The aim of the study was to do a survey of dentists on the need for practice management course in the undergraduate dental curriculum. **Materials and Methods:** A survey was conducted among practicing dentists. An online questionnaire will be distributed among dentists to obtain their responses about the need for practice management course. The questionnaire includes time management, patient management, teamwork, dental staff management, inventory systems, and so on. The results were analyzed. **Results:** The results showed that majority of the dentists agreed that the practice management curriculum should include the topics of teamwork, time management, patient management, office design, clinical setups, inventory systems, staff management, and so on. **Conclusion:** Most dentists agreed that the practice management curriculum is necessary for the successful dental practice. The development of such a course should be based on the feedback from the dentists.

KEY WORDS: Dentists, Patient management, Practice management curriculum, Teamwork, Undergraduate dental students

INTRODUCTION

The commission on dental accreditation requires dental students to acquire knowledge and skills of practice management to become a successful leader of the dental team. Leadership training can be provided by teaching communication skills, staff management, patient management, teamwork, conflict management, and financial resource management through a practice management course. However, dental curriculum lacks the content that emphasizes the principles of practice administration and effective management of patients, and a large body of evidence reports that students feel not well prepared to run a private dental practice, particularly at the start of their careers.^[1]

In response to the changing needs of the community, dental practice is subjected to constant changes.

These changes, in turn, influence patient expectations from dentists. To successfully serve the community as a health-care professional, dentists must be competent not only in their clinical practice but also in some non-clinical aspects of their practice.

The previous studies in the United States, France, the Netherlands, and Mexico have shown deficiencies in non-clinical competencies including legal and financial performance, time and quality management, and occupational health and practice organization among dentists and dental students. To improve non-clinical competencies of dentists, various approaches have been implemented such as holding educational courses for dental students, revision of dental curriculum, and holding continuing education programs for dentists.^[2]

Evidence in the literature reveals that undergraduate dental students do not regard the development of management skills to be as important as the attainment of clinical skills. Dental practice management is likely to be relevant to those who aspire to become dental practice owners or managers in the private or

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public sector.^[3] The dental committee on the future of dental education had highlighted the need for careful recruitment and continued development of students and faculty as essential to the educational changes for future. In many countries, to qualify as a dental practitioner, a student must complete the required academic and clinical training in an accredited educational environment for 5 years.

To embark on a career as a practitioner, graduating students are expected to be competent in providing quality holistic patient care and should also be prepared to adapt to the needs of the society and be competent in the practice management. Educational principles of the dental schools should facilitate the student's primary objective of integration into dental practice, while ensuring that students gain essential competency in providing quality holistic patient care.

The association for dental education in Europe and the American Dental Association recommended that curriculum restructuring should focus on evidence-based patient care as the fundamental part of the clinical education, along with highlighting the need for teamwork, practice management, and knowledge of information technology.^[4]

It is argued that the dental curriculum should prepare the dental student for efficient practice in the workplace since the training environment simulates the actual practice environment and offers a start to healthy work-based practices.^[5]

Therefore, this study emphasizes on the need for practice management curriculum among the undergraduate dental students.

MATERIALS AND METHODS

A cross-sectional study was conducted among the practicing dentists. An online questionnaire was distributed among the dentists to obtain their responses about the need for practice management course. The questionnaire includes,

1. Your profession?
2. Have you attended practice management course?
3. Do you agree that the general concepts of management and leadership should be included in the course?
4. Do you agree that principles of patient management should be included in the practice management course?
5. Do you agree that the principles of dental staff management should be included in the course?
6. Do you agree that the conflicts management should be taught in the course?
7. Do you agree that the time management skills should be included in the course?

8. Do you agree that the students should be trained in the verbal and written communication skills in the course?
9. Do you agree that the students should be given knowledge of the health-care systems in India?
10. Do you agree that the students should be given knowledge of the regulatory requirements to establish a private dental office in India?
11. Do you agree that the students should be given knowledge of the employability skills in the course?
12. Do you agree that teamwork skills should be educated in the undergraduate dental students?
13. Do you agree that the students should be taught with the factors affecting office design in the course?
14. Do you agree that the principles of inventory systems should be discussed in the course?
15. Do you agree that the principles of record management should be included in the course?
16. Do you agree that the principles of appointment management should be discussed in the course?
17. Do you agree that the students should be familiar with the use of IT in dental office?
18. Do you agree that the students should learn about the management of financial systems in dental office in the course?
19. Do you agree that the principles of quality assurance, control, and improvement should be discussed in the course?
20. Do you agree that the students should learn about the principles of accreditation in dentistry in the course?
21. Do you agree that the students should be given knowledge of the current oral health programs and career opportunities for the graduating dentists in the government sector in India?
22. Do you agree that the students should be given knowledge of the challenges and opportunities for graduating dentists in the private sector in India?
23. Do you agree that the students should learn about the principles of marketing in dentistry?

The results were analyzed.

RESULTS

The data obtained from the practicing dentists were analyzed. About 51.2% of the participants who took part in the survey work both as academician and clinician. About 37.2% practices clinical work. About 11.6% of the participants works as an academician [Figure 1].

The survey revealed that out of all the participants who took part in the survey, 48.8% has 1 year of experience as a practitioner and 18.6% has 2 years of experience as a practitioner. Similarly, 9.3% of the participants has 3 years of experience, 2.3% has 4 years of experience, 4.7% has 5 years of experience,

2.3% has 6 years of experience, 2.3% has 10 years of experience, and 2.3% of the participants has more than 10 years of experience [Figure 2].

Out of all the participants who took part in the study, the percentage of people who has attended practice management course in their undergraduate dental curriculum was about 60.5%. About 37.2% of the participants have not attended the practice management course in their undergraduate dental curriculum [Figure 3].

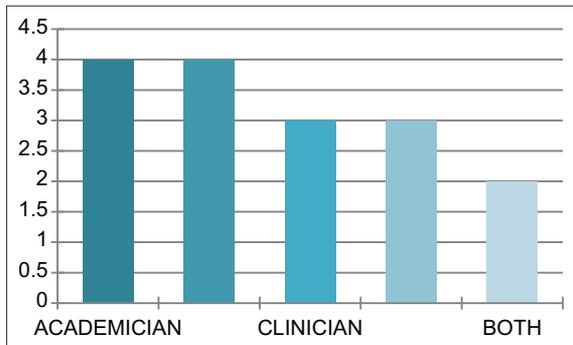


Figure 1: Profession

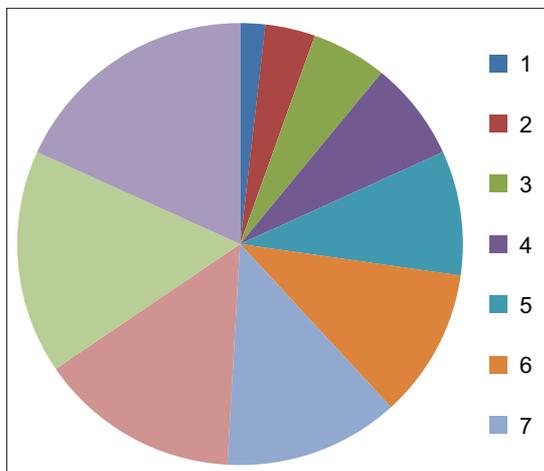


Figure 2: Years of experience

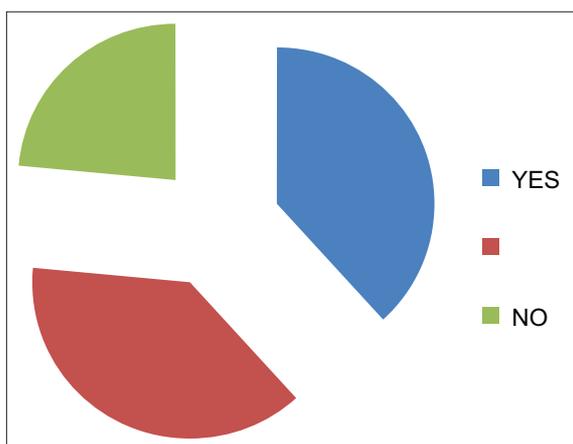


Figure 3: Practice management course

The results of the survey show that 100% of the participants who took part in the survey agree that the following should be included in the practice management course. They are general concepts of management and leadership, principles of patient management, dental staff management and conflicts management, time management skills, verbal and communication skills, knowledge of the health-care systems and inventory systems, employability skills, and teamwork skills [Figure 4].

The questionnaire also included the knowledge of the regulatory requirements, factors affecting office design, principles of record management and appointment management, principles of accreditation, and principles of marketing in dentistry. About 95.3% of the participants agree that these should be included in the practice management course in the undergraduate dental curriculum [Figure 5].

About 100% of the participants agree that the students should be given knowledge of the current oral health programs and career opportunities for the graduating

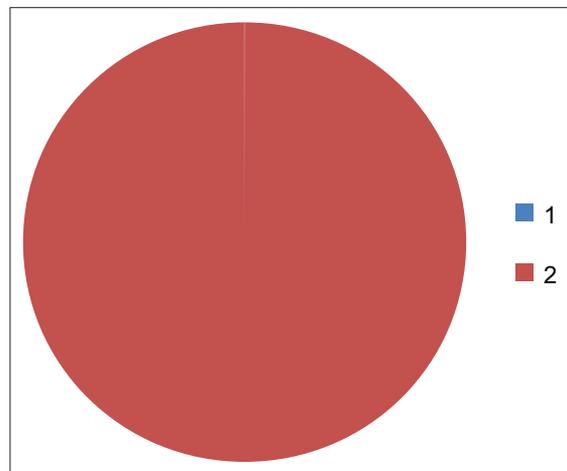


Figure 4: About 100% agreed that the concepts to be included in the curriculum

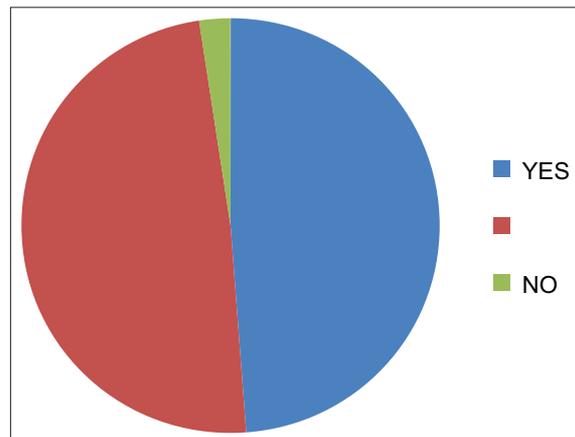


Figure 5: About 95.3% agreed that the concepts to be included in the curriculum

dentists in the government sector in India. Similarly, 100% of the participants agree that the students should be given knowledge of the challenges and opportunities for graduating dentists in the private sector in India [Figure 6].

About 97.7% of the participants who took part in the survey agree that the students should learn about the management of financial systems in the dental office. About 97.7% of the participants also agree that the principles of quality assurance, control, and improvement should be discussed in the course [Figure 7].

DISCUSSION

In this cross-sectional study, 90% and above of the participants agree that the practice management course plays a very important role in the undergraduate dental curriculum. The participants agreed that the practice management course should be included with the principles of patient management, time management, conflicts management, staff management, knowledge of the individual about the regulatory requirements,

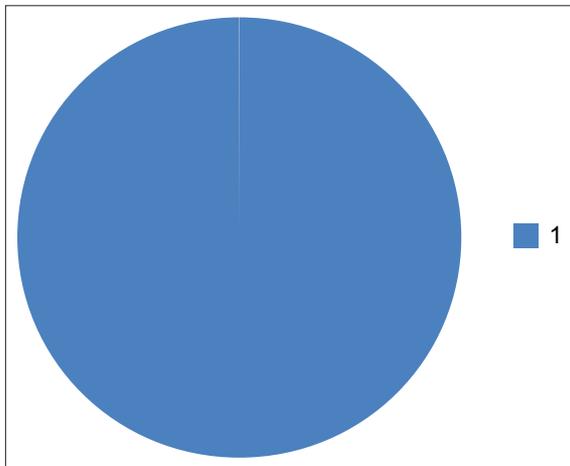


Figure 6: Knowledge of oral health programs

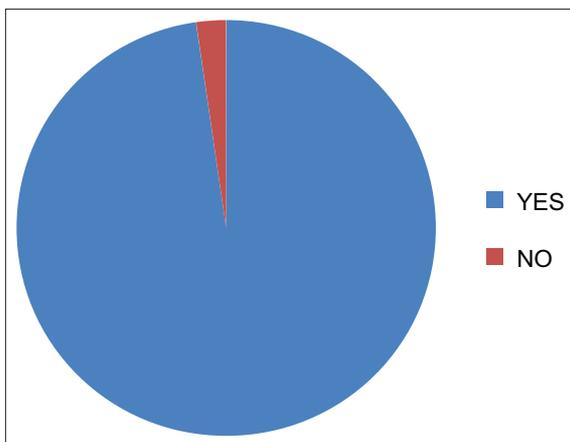


Figure 7: About 97.7% agreed that the concepts to be included in the curriculum

inventory systems, health-care systems, financial management, quality assurance, principles of accreditation and the knowledge of the students about the current oral health-care programs and career opportunities, knowledge of the challenges, and opportunities for graduating dentists in the private sector in India [Table 1].

A study was conducted by Elsbeth *et al.* reveals that variety of reasons supports the inclusion and implementation of leadership skills in the dental practice management course. The students should understand about the leadership skills, to define their importance in dentistry, and to develop a distinction that leadership skills, such as the technical skills of a clinician, needs to be nurtured, and developed over a lifetime.^[6]

Table 1: Participants response about the content in practice management course

Response	Yes (%)	No (%)
Have you attended practice management course	60.5	37.2
General concepts of management and leadership	100	
“Principles of patient management” should be discussed in the course	100	
“Principles of dental staff management” should be included in the course	100	
“Conflicts management” should be taught in the course	100	
“Importance of Teamwork” should be discussed in the course	100	
“Time management skills” should be included in the course	100	
Students should be trained in “Verbal and written communication skills”	100	
Knowledge of “Health Care Systems in India”	100	
Knowledge of “the regulatory requirements to establish a private dental clinic”	95.3	
Employability skills	100	
“Factors affecting office design” should be included in the course	95.3	4.7
“Principles of records management system”	95.3	4.7
“Principles of appointment management system”	95.3	4.7
“Principles of inventory systems” should be discussed in the course	100	
The students should be familiar with “Use of IT in dental office”	100	
The students should learn “Management of Financial systems”	97.7	2.3
“Principles of Quality assurance, control, and improvement”	97.7	2.3
Students should learn about “Principles of accreditation in dentistry”	95.3	4.7
Knowledge of “the current oral health programs and career opportunities”	100	
Students should learn “Principles of Marketing in Dentistry” in the course	95.3	4.7

In the study conducted by Dao *et al.* and Hajer *et al.*, the dental education and the special needs of the patient were discussed. The majority of the respondents agreed that the knowledge of the special need patients should be included in the dental course. The dentists were more likely to provide services for the patients with special needs and to treat the pediatric special need patients. The question of how well dental and dental hygiene education prepares the future dental care providers needs to be revisited. The quality of this education impacts future provider's professional behavior, practice characteristics, attitudes, and confidence when treating these patients.^[7-9]

Ohoud *et al.* conducted a study on the knowledge of the basic life support among the undergraduate dental students. The result revealed that the students had inadequate knowledge of the BLS but has a positive attitude toward it.^[10] To improve the quality of learning experience, a survey was conducted by Moshabab which revealed that the dental students prefer the use of multimodal and unimodal learning styles.^[11]

The survey conducted by Regina *et al.*^[12] and Atherton *et al.*^[13] emphasized on the medical emergencies in the dental practice. The results of the study confirm that undergraduate dental students perceive a need for more intensive education in medical emergencies and they strongly desire to obtain this knowledge. The study also supports the finding that Brazilian dentists usually have a theoretical knowledge of issues related to medical emergency management, but lack practical cardiopulmonary resuscitation training. This fact is worrisome since inadequate basic training can result in professionals who are incapable of steering an emergency to a successful outcome. The importance of effective undergraduate training in the management of medical emergencies, bearing in mind the many demands of the undergraduate curriculum, must be emphasized, as this appears to be of long-term benefit to practicing dentists.

Although stress coping strategies for dental students have been recommended, the development of emotional intelligence (EI) to enable them to cope better has not been proposed. During undergraduate training, dental students often come into contact with their fellow students, tutors, and patients. In this environment, managing the stressors in the dental environment, certain skills and behaviors are associated with different levels of EI. The results of this study conducted by Pau *et al.* indicate that reflection and appraisal, social and interpersonal, and organization and time management skills are associated with high EI students, whereas health-damaging behaviors are associated with low EI students.^[14]

A study conducted by Sanjeev *et al.* emphasized on the biomedical waste management in the dental colleges. Hospitals and other health-care establishments have a "duty of care" for the environment and for public health and have particular responsibilities in relation to the waste they produce. Today, hospitals/clinics use a wide variety of drugs including antibiotics, cytotoxics, corrosive chemicals, and radioactive substances, which ultimately become a part of hospital waste. The introduction of disposables in hospitals has brought in its wake many ills such as inappropriate recycling, unauthorized and illegal reuse, and an increase in the quantity of waste.^[15]

Harold *et al.* found that student dentists are not prepared to fully meet the communication and dental care needs of their pediatric patients with developmental disabilities. Providing student dentists with adequate training in this area is important, yet it is not always possible to ensure that students will receive the required clinical experiences to learn how to effectively accommodate the needs of patients with developmental disabilities.^[16] Graduating students are increasingly being challenged with rapid development in the field of dentistry; this makes it essential that graduating students are well prepared with not only essential knowledge and skills but also patient and practice management skills.^[17,18] Clearly written policies, procedures, and guidelines can help ensure consistency, efficiency, and effective coordination of activities. The course content, duration, teaching, learning, and assessment methods needed to be designed for each of these three activities call for active collaboration among the stakeholders.^[19,20]

CONCLUSION

Therefore, this study emphasizes on the need for practice management course in the undergraduate dental curriculum. Most dentists believed that a practice management course is required for a successful dental practice. The development and implementation of such a course should be based on the feedback from dentists to ensure evidence-based approaches.

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