

Opinion of Bangladeshi teachers and undergraduate clinical students regarding the course duration of BDS curriculum

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Abstract

Background: Curriculum planning and designing is not a static process, rather a continuous process done regularly through a system. More than one decade have elapsed since the Centre for Medical Education (CME), in 1988, developed a national Undergraduate Dental Curriculum which was supposed to be community-oriented and competency based. The curriculum was partially implemented with the advancement of dental health science and application of newer techniques in dental practices in developed and developing countries.

Rationale: A healthcare curriculum must be up-to-date, fit for purpose and relevant to the population it serves wherever that population might be, worldwide. It needs to assess the general and dental health needs of our local population and to propose a set of core skills of the dentists will need on graduation and in the future. The Health Science including Oro-dental science is changing with the advancement of health science, educational science & applied technology. Global changes are happening in health science and dental education in accordance and conformity of these advancements and changes. With the application of these knowledge and skills of dental science, future dentists should satisfy their patients with the changing needs of the community. The need to develop a community-oriented and competency-based curriculum was felt by all concerned.

Objectives: The present study was undertaken to identify the Opinion of Bangladeshi teachers and undergraduate clinical students regarding the course duration of BDS curriculum.

Methods: This descriptive type of cross sectional study was conducted in seven public and private dental colleges of Bangladesh after getting written permission from the principal of the respective dental colleges. Voluntary participation of the students was ensured and the names of the students' as well as teachers were kept confidential. The teachers and students of final years from the different dental colleges were the study population; among them four hundred (400) students and one hundred twenty teachers (120) were taken as sample by convenient sampling. Data collection instrument was a semi-structured questionnaire with 5-point Likert scale for final year students' and in depth interview was used for teachers.

Results: The study revealed that the 98% teachers mentioned that the course duration (4 years) in comparison to number of subjects and contents was not adequate and 98% teachers' opinion was that the total course duration should be 5 years. Nearly 75% of students mentioned that the total course duration should be 5 years.

Conclusion: In this study, the students reported that they have acquired greater practical and clinical experiences in few areas from the curriculum of BDS course. The majority of the students were not satisfied on their acquired competencies in most of the areas after their graduation. This was due to shortage of course duration in comparison to number of subjects and contents, improper distributions of the subjects, inadequate duration of community placement, less allocation of hours in practical and clinical classes etc.

Key Words: Teachers opinion, Clinical Students, Assessment system, Learning environment, Students' opinion, BDS curriculum.

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Introduction

The duration of undergraduate training for Bachelor of Dental Surgery (BDS) in Bangladesh is five years, that is, four years of training and one year of compulsory rotatory internship, as prescribed by the Medical and Dental Council of Bangladesh, the statutory body for dental education. The first two years are devoted to the study of subjects in basic medical sciences that include human anatomy, human physiology, biochemistry, pathology, microbiology, pharmacology, dental anatomy, and preclinical dental subjects¹. The third and fourth years are the clinical years, where the students, apart from classes corresponding to courses in the core curriculum that include general medicine, general surgery, and all dental specialties, also complete

rotations in various clinical departments to hone their clinical skills. This clinical rotation will be of one-month duration in each department. At the end of each year of the program, the clinical skills and theoretical knowledge of each student are evaluated through practical patient-based exams, oral exams, and written exams. In the one year of compulsory rotatory internship, the students rotate through various dental specialties, after the completion of the formal four-year coursework. The students learn to plan and treat patients independently, and hence, gain confidence to face the real world challenges². Dental education is at a critical juncture; changes in demographics, advances in biological sciences, fundamental changes in healthcare delivery systems, and modern economy, are forcing the dental educators to question the appropriateness of retaining the current dental curriculum in the twenty-first century³. The Bangladesh Dental Education Sector provides training at the undergraduate and postgraduate levels. The curriculum, prescribed by the Dental Council of Bangladesh, a statutory body comprised of dental health professionals, supports basic training in most major areas of dental care and is also the pre-requisite for further training in residency education⁴.

Methodology

This descriptive type of cross sectional study was conducted in seven public and private dental colleges of Bangladesh after getting written permission from the principal of the respective dental colleges. Voluntary participation of the students was ensured and the names of the students' as well as teachers were kept confidential. The teachers and students of final years from the different dental colleges were the study population; among them four hundred (400) students and one hundred twenty teachers (120) were taken as sample by convenient sampling. Data collection instrument was a self-administered semi structured questionnaire with 5-point Likert scale for final year students' a self-administered semi structured questionnaire was used for the dental teachers and in depth interview was used for teachers. The researcher himself visited selected dental colleges. He was introduced himself to the principal of the dental colleges, course coordinators and the teachers of all departments to conduct the study. The investigator himself collected all the data with prior permission of the principles and heads of the concerned departments. The semi-structured questionnaire was prepared on the basis of variables of the study. The respondents who wish to spent sufficient time were interviewed in-depth interview. All the collected data were checked manually. Data entry, editing, processing and analysis were done by using 19 version of SPSS compute software programme. Interpretations were done subsequently. Data were presented by tables and graphs with necessary description where necessary for easy understanding and interpretation. Results of in-depth interviews were presented by qualitative descriptions. Necessary permissions were taken from all the concerned authorities to conduct the study.

Results

Figure 1 shows out of 100 teachers 45(45.0) were Assistant Professor, 26(26.0) were Associate Professor, 4(4.0) were

Professor, 18(18.0) were Lecturer, 2(2.0) were Registrar, 5(5.0) others (Dental Surgeon).

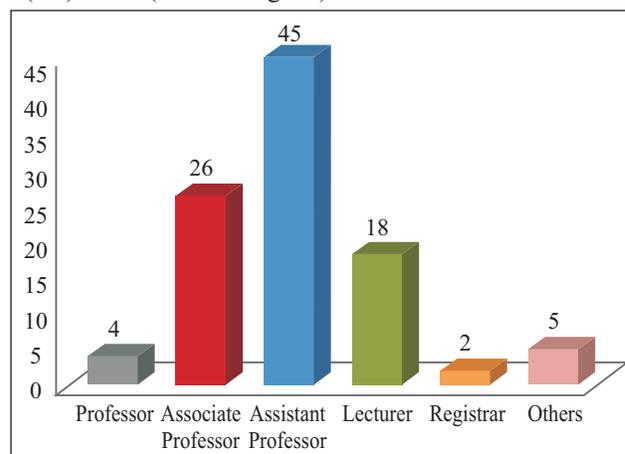


Figure 1: Distribution of the teachers by their designation (n=100)

Table 1 shows out of 100 teachers most of them 98(98.0) mentioned that the course duration (4 years) in comparison to number of subjects and contents were not adequate and very few 2(2.0) mentioned that the course duration (4 years) in comparison to number of subjects and contents were adequate.

Table 1: Distribution of the teachers by their opinion regarding the course duration (4 years) in comparison to number of subjects and contents (n=100)

Opinion about the course duration (4 years) in comparison to number of subjects and contents	Frequency	Percent
Yes	2	2.0
No	98	98.0
Total	100	100.0

Table 2 shows out of 100 teachers most of them 98(98.0) mentioned that the total course duration should be 5 years and 2(2.0) mentioned that the course duration should be 4 years.

Table 2: Distribution of the teachers by their opinion regarding the duration of the course

Opinion about the course duration (4 years) in comparison to number of subjects and contents	Frequency	Percent
5 years	98	98.0
4 years	2	2.0
Total	100	100.0

Table 3 shows out of 400 students most of them 389(97.3) mentioned that the total course duration of undergraduate BDS course 4 years was not adequate and 11(2.8) mentioned that the total course duration of undergraduate BDS course 4 years was adequate.

Table 3: Distribution of the students by their opinion regarding the total course duration of undergraduate BDS course 4 years (n=400)

Opinion about the total course duration of undergraduate BDS course 4 years	Frequency (%)		Total
	Yes	No	
Total duration of undergraduate BDS course 4 years	11 (2.8)	389 (97.3)	2400

Table 4 shows out of 400 students most of them 390(97.2) mentioned that the total course duration should be 5 years and 11(2.8) mentioned that the total course duration should be 4 years

Table 4: Distribution of the students by their opinion regarding the duration of the BDS course (n=400)

Duration of the BDS course according to the students opinion	Frequency	Percent
5 years	389	92.2
4 years	11	2.8
Total	400	100.0

Discussion

The study revealed that the out of 100 teachers most of them 98(98.0) mentioned that the course duration (4 years) in comparison to number of subjects and contents were not adequate and very few 2(2.0) mentioned that the course duration (4 years) in comparison to number of subjects and contents were adequate. (Table 1) and out of 100 teachers most of them 98(98.0) mentioned that the total course duration should be 5 years and 2(2.0) mentioned that the course duration should be 4 years. (Table 2). On the other hand out of 400 students most of them 389(97.3) mentioned that the total course duration of undergraduate BDS course 4 years was not adequate and 11(2.8) mentioned that the total course duration of undergraduate BDS course 4 years was adequate. (table 3) and out of 400 students most of them 390(97.2) mentioned that the total course duration should be 5 years and 11(2.8) mentioned that the total course duration should be 4 years. A study done by Vasanthakumar et al. (2014)⁵ in which a total of 178 students participated in the survey procedure. The response rate was 100% shows the responses and opinion of students toward the revised BDS curriculum. Majority of the students (88%) were aware of the change in curriculum. All the students felt that internship was vital to the BDS course and 98% of them wanted to revert back to the four years and one-year internship system. Almost everyone (98%) wanted a change in curriculum to the four years and one-year internship system. Duration of undergraduate BDS course in different counties are given below^{6,7,8,9} -

Name of the countries	Duration of undergraduate BDS course
In Nepal	5 years
In Pakistan	5 years
Japan	6years
Dundee	5 years
Australia	5 years
Malaysia	5 ½ years
China	5 years

Conclusion

Dental students should practice the art and science of their profession. For this their education should be value-based and the system of five years and one year internship gives them ample time to inculcate these values in patient care. With the rapid advances in oral science during the past few decades, future needs and demands for oral health care are likely to determine the form, function, and size of the dental profession.^{10,11} With the development of an ever-increasing range of new therapies, materials, procedures, and devices, new organizational systems will be needed to support the education and training of dental professionals. Dental education must emphasize the professional ethics and moral responsibility of the graduating professionals to efficiently address community needs. Ethics education is considered important in the current curriculum, as it enables the students to follow principles and codes of ethics not only in their practice, but also in their life. It also helps to keep up the standard of their profession.^{12,13}

References

1. BM & DC curriculum 2007.
2. Ryding HA, Murphy HJ. Assessing outcomes of curricular change: A view from program graduates. *Journal of Dental Education* 2001; vol.65, no.5, pp.422-426.
3. Referen Baum BJ. The dental curriculum: What should be new in the 21 st century? *Journal Public Health Dent* 1996; vol.56, pp.286-290.
4. Mahal AS, Shah N. Implications of the growth of dental education in India. *Journal Dental Education* 2006; vol.70, pp.884-891.
5. How to cite this URL: Vasanthakumar AH, D'Cruz AM. Opinion of Indian undergraduate clinical students regarding the five-year BDS curriculum. *SRM J Res Dent Sci* [serial online] 2014 [cited 2016 Apr 18];5:82-6. Available from: <http://www.srmjrds.in/text.asp?2014/5/2/82/132076>
6. International medical university Malaysia, www.imu.edu.my.

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7. Pmde in 2015 increased duration of undergraduate BDS course. www.daur.com.
 8. The University of Queensland schools of dentistry; www.hotcoureabroad.com
 9. University of Glasgow, Dental school and hospital; www.gla.ac.uk
 10. Hari Parkash. Mathur VP Duggal R, Jhuraney B. Dental Workforce Issues: A Global Concern. Journal Dental Education 2006; vol.70, pp.22-26.
 11. Wilson NH. The future of the dental profession: A personal perspective. Dental Update 2003; vol.30, pp.474-486.
 12. Barry S, Bhan A. Professionalism and challenges in dental education in India. Indian Journal of Medical Ethics 2005; vol.2, no.4, pp.119-121
 13. Syed Kuduruthullah SK, Thubashini M. Dental education in India. J Educ Ethics Dent 2011; vol.1, pp.73-75.