

Present Status of Clinical Teaching in Bachelor of Dental Surgery Course of Bangladesh

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Abstract

Objective: To explore present status of clinical teaching in Bachelor of Dental Surgery course of Bangladesh.

Methods: This study was conducted from July 2007 to June 2008 upon conveniently selected teachers (n=49) of clinical departments and students of 3rd year (n=83) and 4th year (n=111) of two government and two private dental institutes of Bachelor of Dental Surgery course. Data were collected using one semi-structured self-administered questionnaires.

Result: It was found that most of the clinical classes are conducted by lecturers, assistant professors. These classes were held mostly in morning which extended occasionally up to afternoon. Majority of teachers followed the curriculum to conduct clinical classes. They agreed that the students are benefited through these clinical classes and they learn how to examine a patient and take patients' history and other clinical skills. They informed that inadequate number of teachers and patients are important barriers for clinical teaching. They suggested that clinical classes should be taken by the senior teachers and sufficient materials and instruments should be available for this purpose. It was also proposed that sufficient number of patients and increased number of teachers should be ensured.

Discussion and recommendations: The barriers should be minimized and necessary actions should be taken as per suggestions given the teachers and students.

Key words: Clinical teaching learning, Bedside teaching learning, Bachelor of Dental Surgery Course Bangladesh.

Introduction:

Clinical teaching that is, teaching and learning focused on, and usually directly involving, patients and that lies at the heart of medical education¹. At undergraduate level, medical and dental schools strive to give students as much clinical exposure as possible². For postgraduates, "on the job" clinical teaching is the core of their professional development³. Learning in the clinical environment is focused on real problems in the context of professional practice. Learners are motivated through active participation. Professional thinking, behaviour, and attitudes are modeled by teachers

in clinical teaching⁴. It is the only setting in which the skills of history taking, physical examination, clinical reasoning, decision making, empathy, and professionalism can be taught⁵⁻⁸. Only few teachers in clinical disciplines receive any formal training in teaching skills, and in the past there has been an assumption that if a person simply knows a lot about their subject, they will be able to teach clinical competencies. In reality, of course, although subject expertise is important, it is not sufficient for effective clinical teaching^{5, 7, 9-12}. Most clinical teaching takes place in the context of busy practice. Many studies have shown that a disproportionate amount of time in teaching sessions may be spent on regurgitation of facts, with relatively little on checking, probing, and developing understanding. Teaching during consultations is organisationally appealing and minimally disruptive; it is limited in what it can achieve if students remain passive observers. Teaching during consultations has been much criticised for not actively involving learners^{4, 13}.

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The exact situation of clinical teaching in Bachelor of Dental Surgery (BDS) of Bangladesh was not explored. The present study made an attempt to explore the situation.

Methodology:

This cross-sectional descriptive study was conducted from June 2007 to July 2008 among teachers and students of four conveniently selected dental institutes of the country. Among the institutes two were government e.g. Dhaka Dental college (n = 75) and Dental Unit of Chittagong Medical College (n= 48) and two were non-government e.g. Bangladesh Dental college (n= 57) and Rangpur Dental College (n= 63). Of the respondents 49 were teachers of seven clinical dental departments (e.g. Periodontics, Conservative Dentistry, Prosthodontics, Oral Surgery, Orthodontics, and 83 were third year and 111 were fourth year dental students. The respondents were also conveniently selected and their views were explored using one semi-structured self-administered questionnaire. The instrument was developed and finalized after pretest in another two dental institutes. After getting permission from the principals of the institutes the researcher himself motivated the teachers and students to response in the study.

Results:

Table-I has shown that the clinical classes were mostly conducted by lecturers, assistant professors. Associate professors, dental surgeons, professors and assistant registrars some time took the classes.

Table-I

Distribution of respondents by their opinion regarding who conduct the clinical classes n=234

Designation of teacher who conduct classes	f (%)
Professor	23 (9.8)
Associate Professor	66 (28.2)
Assistant Professor	142 (60.7)
Lecturer	186 (79.5)
Assistant Registrar	14 (6.0)
Dental Surgeon	33 (14.1)

Table-II has shown that the clinical classes are held mostly in the morning. It is sometimes held in afternoon and rarely at night.

Table-II

Distribution of respondents by their opinion regarding usually when the clinical classes are held n=241

Period of clinical classes	f (%)
Morning	190 (78.8)
Afternoon	64 (25.5)
Night	3 (1.2)

Table-III has shown that majority of teachers and students viewed that the students are highly benefited from clinical classes. Whereas some of them viewed that they are just benefited and very few of them opined the students are slightly benefited.

Table-III

Distribution of respondents by their opinion regarding how much benefit they get from the clinical classes

Level of benefit the teachers and students get	Student n=194 f (%)	Teacher n=49 f (%)
Highly benefited	109(56.2)	24(87.5)
Benefited	75(38.7)	21(42.9)
Slight benefited	10(5.2)	4(8.2)

Table-IV has shown that majority of the teachers follow the dental curriculum to conduct clinical classes. The teachers also consider availability of the patient, academic calendar and decision from head of the department before the classes. Only few of them integrate their class with other departments.

Table-V has shown that the respondents viewed that the most important areas the students learn through clinical teaching are 'how to examine a patient, 'diagnosis of diseases', 'history taking'. They also opined students learn 'how to counseling of patients, 'planning treatment', 'writing investigation',

'operative procedure', 'prescription writing', 'differential diagnosis' and 'interpretation of investigation'.

Table-IV

Distribution of teachers by their opinion regarding the topic they consider to conduct clinical teaching n=49

Topic considered	f (%)
Curriculum	38 (79.6)
Academic Calendar	14 (28.6)
Decision from Head of the department	14 (28.6)
Availability of the Patient	23 (46.9)
Integration with other department	3 (6.1)

Table-V

Distribution of students and teachers by their opinion regarding the skills the students learn through the clinical classes

The skills students learn	Respondents category	
	Student n=194 f (%)	Teacher n=48 f (%)
History taking	164(84.5)	35(73.0)
Writing investigation	111(57.2)	25(52.0)
Diagnosis of disease	159(82.0)	45(93.8)
Prescription writing	98(50.5)	25(52.0)
Counseling of patient / attendant	126(65.0)	31(64.6)
Differential diagnosis	73(37.7)	20(41.7)
Patient examination	178(91.8)	44(91.7)
Interpretation of Investigations	56(28.9)	18(37.5)
Planning of treatment	121(62.4)	33(68.8)
Operative procedures	92(47.4)	35(73.0)
Integration of theory with practice	48(24.7)	18(37.5)

The table-VI has shown that 'inadequacy of instruments /materials', 'inadequate number of teachers', 'inadequate number of patient', 'unavailability of patients according to syllabus', 'more emphasis on theories than practical issue', 'excess number of students' act as barriers of the clinical teaching learning. Some of them also viewed that 'sometimes patient /attendant do not allow to examine the patient', 'less co-operation of the staff of the institutes', 'most of the time class are not held'. Only few of them expressed that 'teachers cannot instruct properly', 'classes are not held in time', 'repetition of same topic unnecessarily' contribute negatively against clinic education.

Table-VI

Distribution of students and teachers by their opinion regarding the barriers that hamper the clinical training

Barriers of clinical training	Respondents category	
	Student n=193 f (%)	Teacher n=48 f (%)
Inadequate number of patients	99(51.3)	19(39.6)
Inadequate number of teachers	108(56.0)	33(68.8)
Most of the time classes is not held	40(20.7)	9(16.7)
Theories are taught more	57(29.5)	13(27.0)
Excess number of students	59(30.6)	9(16.7)
Unavailability of patients of some diseases	75(38.9)	14(29.2)
Inadequacy of instruments /materials	134(69.4)	37(77.0)
Teachers cannot instruct properly	29(15.0)	9(16.7)
Classes are not held in time	27(14.0)	9(16.7)
Repetition of same topic unnecessarily	15(7.8)	5(10.4)
Sometimes patients /attendants do not allow to examine them	53(27.5)	7(14.6)
Less co-operation of hospital staffs and nurses	46(23.8)	9(16.7)

Table-VII
Distribution of students and teachers by their suggestion for the improvement of clinical teaching

Suggestion for improvement of clinical	Respondents category	
	Student n=193 f (%)	Teacher n=48 f (%)
Sufficient instruments should be available	169(87.6)	46(95.8)
Sufficient materials should be available	147(76.2)	39(81.3)
Sufficient bed should be available	106(55.0)	16(33.3)
All patients should be available included in the syllabus	115(59.6)	19(39.6)
Number of teachers should be increased	96(49.7)	34(70.8)
Sufficient number of patients should be available	108(56.0)	25(52.1)
Senior teacher should take more class	122(63.2)	29(60.4)
Class should be aim at benefit of the students	134(69.4)	31(64.6)
Student should get the opportunity to examine the patient	115(69.6)	26(54.2)
Number of students should be limited in each clinical class	95(49.2)	22(48.3)
Clinical & non clinical classes should integrate so that students can relate theories with practical issues	134(69.4)	36(75.0)

Discussion and recommendations:

Most of the teachers and students suggested 'senior teacher should take the classes'. Some of them suggested that steps should be taken for ensuring 'sufficient materials', 'sufficient instrument', 'sufficient patient', 'increase number teacher', 'availability of the patients included in the syllabus' and 'clinical & non clinical classes should by integrated'. Few of them have demand for 'sufficient bed', 'teachers should aim at benefit of the students', 'students should get opportunity to examine the patients' and 'number of student should be limited in each clinical class'.

It was observed that most (80%) of the clinical classes conducted by the lecturers. The reason for this is the post of lecturer was highest in the dental institutes. The dental surgeons conduct clinical classes occasionally, because they are engaged in managing the patients and they are not responsible for routine clinical classes.

Majorities (79%) respondents viewed that most of the clinical classes are held in morning. Most of the dental patients come as outpatient basis and they are not available in the later part of the day.

Probably this is the reason for the clinical classes are not usually held in the afternoon or night.

Most of the teachers and students viewed that the students are highly benefited from clinical teaching but some had different opinion regarding this issue. This finding indicates that there is a further area of improvement to make the clinical teaching beneficial.

Majority of the teachers considered curriculum and availability of patient to conduct clinical class. These findings suggest that dental teachers are trying to cover the course content following the curriculum. The teachers arrange their clinical classes based on available patient, because suitable patients of every disease are not always available.

The respondent of this study also have mentioned the different benefit of clinical teaching. The available literatures on Dental /Medical education also mentioned similar benefit of clinical teaching. ^{2,5,6-9, 12,14,16}

The respondents have mentioned a number of barriers existing in their institute that hampered

clinical teaching. There is no doubt all these negative influences seriously interfere with skill acquisition by dental students. All these barriers should be minimised to make clinical education more effective.

The respondents have also mentioned a number of suggestions for the development of clinical teaching. All these suggestions should be considered for further improvement of clinical dental education in the BDS course of Bangladesh.

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