

# EVALUATION OF TEACHING CURRICULUM OF ANAESTHESIOLOGY BY THE UNDERGRADUATE MEDICAL STUDENTS

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## Abstract

**Introduction:** Students' feedback is a recommended tool to evaluate the merit of a teaching curriculum. Search of literature, however, reveals a very few such attempts on the subject of anaesthesiology in medical undergraduate level.

**Objective:** The reported study was conducted to evaluate the undergraduate course curriculum of medical students from students' feedback.

**Method:** To judge the students' viewpoint, a pertinent and simple questionnaire was designed to collect the feedback from the final year MBBS students of AFMC Dhaka for five consecutive years. Students were asked to fill up the questionnaire on completion of their placement.

**Result:** A total of 253 students had participated in this unbiased and anonymous feedback. While 96.7% students agreed that the posting provided them an insight into the subject of anaesthesiology and critical care but 38.3% found that the duration of posting was inadequate. Though 98.8% students responded that the topics were interesting but only 56.8% found that the practical demonstrations were adequate. The three top ranking topics of interest in decreasing order were cardiopulmonary resuscitation (93.6%), airway maintenance along with endotracheal intubation (55.2%) and spinal anaesthesia (32.5%). Interestingly these three topics were demonstrated practically along with theory sessions. Not surprisingly the three commonest suggestions were prolonging the duration (34.8%) as well as practical demonstrations (31.2%) and more opportunity to 'hands on practice' (24.5%).

**Conclusion:** This little effort may help the curriculum reviewers to think.

**Key words:** Curriculum of anaesthesiology, undergraduate, students feedback

## Introduction

Evaluation of any teaching curriculum by the students is a firmly recommended part of the teaching-learning process. The concept of 'adult learner' further authenticates the utility of a feedback from students to evaluate the teaching curriculum<sup>1</sup>. Indeed, curriculum

evaluation by the learners leads to much desired changes in the objectives, course contents and teaching methods.

Anaesthesiology is a unique specialty in medical practice. It would seem to have parallel aspects to any other specialty, but deeper inspection reveals that it has features which make it singular. Anaesthesiologists administer the most potent drugs and observe the results themselves. They have to monitor the patients' lives from second to second. Every subtle, or dramatic change in patients' parameters produces a series of algorithms in their minds. The physician-patients' interaction is never so close, nor so intense<sup>2</sup>.

The adage that knowledge is power remains incontrovertible - the power to do well, to reduce the morbidity and mortality. Improvement of the physicians those attending the anaesthetic processes will increase the standard, safety and thereby quality of outcome. So, anaesthesiologists must have thorough and extensive knowledge, confident skills and specially, a compassionate attitude and commitment to the patients. To achieve these dimensions, from very undergraduate (UG) level, medical students should come across an optimum spectrum of learning process on anaesthesiology. But the subject of anaesthesiology and critical care as a specialty has not yet received its due credit and importance in UG medical education<sup>3</sup>. So, this study was conducted to evaluate the in vogue teaching curriculum of anaesthesiology by designing a students' feedback assessment.

## Methods and Materials

As per the present curriculum of Bangladesh Medical and Dental Council, on anaesthesiology, 10 lectures and 12 hours ward time is allocated for the UG medical students<sup>4</sup>. In AFMC Dhaka, the students attend the scheduled lectures and are placed in the operation theatres (OTs) of anaesthesia department of Combined Military Hospital (CMH) Dhaka for a week to have an overview on anaesthesia and for another week in intensive care units (ICUs) of CMH Dhaka to have some exposures of managing the critically ill patients.

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The academic sessions are conducted by instructors with a total duration of three hours in the morning and evening daily on those stipulated days. During these periods the objectives of curriculum are to help the students to attain a basic knowledge on the subject, to learn the relevant theory and practical skills of life-saving procedures including establishing an intravenous access, fluid and oxygen therapy, airway maintenance and emergency artificial ventilation. The students are also guided to practice the cardio-pulmonary resuscitation (CPR) including endotracheal intubation on manikins. At the end of the allotted period, the students are assessed by a multiple choice question (MCQ) and viva-voce. To judge the utility of this learning procedure from the students' points of view, this study was designed. A relevant and simple questionnaire was used. The feedback from 253 final year students of AFMC during the five consecutive years (AFMC-1 to 5) was collected. All students were allowed to put their unbiased and anonymous answers to this feedback questionnaire.

**Table-I:** Questionnaire on undergraduate teaching curriculum of anaesthesiology

1. Did you get an insight into the subject of anaesthesiology and critical care ?	Yes/No
2. Did you get interest in topics covered by the lectures and ward demonstrations?	Yes/No
3. Do you consider that practical demonstration are adequate?	Yes/No
4. Was the period allocated for OT and ICU adequate ?	Yes/No
5. Did you get special interest in any topic ?	Yes/No If yes, please narrate
6. Do you suggest any improvement/ alteration in the curriculum?	Yes/No If yes, please narrate

### Results

Seventeen (6.7%) and 24 (9.4%) students chose not to answer the third and fourth questions respectively. Students were asked to express special interest in any topic taught. No limitation in enumerating the number of topics of special interest was imposed. Consequently, the answers varied from listing two to several topics. The three commonest topics which were listed in decreasing order of preference were - CPR (93.6%), airway maintenance along with endotracheal intubation (55.2%) and spinal anaesthesia (32.5%).

Suggestions were invited for improvement/alteration in the curriculum. Forty nine (19.4%) students did not respond to this question.

**Table-II:** Responses of the Final year MBBS students (n=253)

Question	Affirmative	Negative
Did you get an insight into the subject of anaesthesiology and critical care ?	96.7%	03.3%
Did you get interest in topics covered by the lectures and ward demonstrations ?	98.8%	01.2%
Do you consider that the practical demonstrations are adequate ? (n=236)	56.8%	43.2%
Was the period allocated for OT and ICU adequate ?(n=229)	61.7%	38.3%

The three commonest suggestions were to increase the duration of placement (34.8%), to raise the number of practical demonstrations (31.2%) and 24.5% students wanted greater scopes of 'hands on experience'.

### Discussion

Students' evaluation of teaching curriculum appears extremely logical to improve the teaching-learning process. Although the students' feedbacks depend on three major factors: the teaching curriculum, instructor's capabilities to present the topics and abilities to uptake by the recipients (students). Other factors are training aids and appliances, teaching environment and assessment systems<sup>5</sup>.

Three (1.2%) students stated that the topics discussed were not interesting. But the same students have listed three individual interesting topics in the subsequent question. Only 43.4% students agreed that the practical demonstrations were adequate in number. It is important to note that the three commonest topics of special interest listed by the students - CPR, airway maintenance with endotracheal intubation and spinal anaesthesia were practiced on the manikins. This indicates the greater satisfaction and interest generated by the practical demonstrations rather than the theoretical lectures. This was further authenticated by the suggestion of students (31.2%) to increase the number of practical demonstrations and to provide further 'hands on experience' (24.5%). Twelve (4.7%) students had voluntarily written that it was the 'best subject posting' they had ever attended. This is further enforced by the findings that 56.8% students stated the placement period to be inadequate and 28.8% suggested the duration to be increased.

The Medical Council of India have upgraded their UG medical curriculum where the students are allotted for 20 lectures (one hour each) and posted at three different levels - 15 days each in anaesthesia and critical care during third year and then the students get a repeat exposure for the same duration during final year<sup>6</sup>. In the Pakistan Medical and Dental Council UG curriculum, there are 10 lectures and 2 weeks placement in the OT, a ward completion test and submission of a logbook is the prerequisite to appear the final MBBS examination<sup>7</sup>.

### Conclusion

The UG medical curriculum of Bangladesh Medical and Dental Council was published in 2002 which requires to be updated. Although different proposals are submitted and underway to present, a working group should be formed and entrusted to reform the curriculum on anaesthesia and critical care conformed to the contemporary requirements.

Academic councils of the medical colleges also have great roles to play in this area of interest.

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