LETTER TO THE EDITOR

A question-based recall activity during classroom teaching for improving learning process

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TO THE EDITOR: In India, a student pursuing the Bachelor’s degree in Dental Surgery (BDS) learns Anatomy, Physiology, and Biochemistry during the first year. The session continues for 45 wk from mid-September until July. However, the effective time available for teaching is usually restricted to 25–30 wk, owing to vacation, holidays, examinations, and extracurricular activities.

The teaching schedule of Physiology encompasses 3 h of classroom lectures per week, which add up to 75–90 classroom hours per session. Teaching Physiology within this limited period appears to be a major challenge.

At Himachal Dental College in Sundernagar of Himachal Pradesh, India, we found that, among a total of 60 freshmen, 35% (n = 21) of the students were unable to recollect the answer and explain five questions at the end of the 1-h classroom lecture, 70% (n = 42) agreed that they fail to concentrate after 30 min of teaching, and 30% (n = 18) agreed that “talk-and-chalk” and/or slide presentation was monotonous. These findings were obtained from a viva voce on class topic and a questionnaire study conducted at the end of two cardiovascular physiology lectures, i.e., cardiac cycle, part I and part II. The inability to recall the discussions, becoming inattentive, and feeling bored were considered as a serious threat to the learning process.

With an aim to facilitate recollection, to improve attention, and to reduce class monotonity, a question-based recall activity (QRA) was designed as a new teaching and learning tool. The effectiveness of the tool was assessed from two classroom lectures conducted with a new teaching plan. In accordance, each classroom lecture was subdivided into two 30-min sessions. Each session consisted of a lecture of 20 min, followed by a QRA of 10 min. In the QRA, the students recalled the answers for 10–15 multiple choice questions, both verbally and in writing. The questions focused on must-know points from the preceding lecture. All students submitted their answer sheet at the end of the recall activity.

The activity appeared useful. Responses from two classroom lectures (average attendance 95%) revealed that recollection was improved: only 15% students showed their inability to recall, and the agreed responses on monotony and inability to concentrate were reduced to 19% compared with the previous results. This activity was also agreed upon as interesting (91%) and helpful for learning (93%).

In the context of the limited time available for Physiology teaching to BDS freshmen, the classroom lectures with QRA sessions emphasizing the important points could help the students to learn the Physiology topics in a more effective way. This method can be applied to other subjects as well.

DISCLOSURES
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AUTHOR CONTRIBUTIONS
R.B. conceived and designed research; performed experiments; analyzed data; interpreted results of experiments; drafted manuscript; edited and revised manuscript; approved final version of manuscript.