

Evaluation of Team-based learning and Seminars as Effective Methods of Teaching: Feedback from Medical Students in Najran University

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Abstract:

This study aimed at evaluating the Team-based learning and seminars as methods of teaching for medical students in Najran University. it was a comparative descriptive study in which a questionnaire was designed and sixty-six medical students who studied with both methods participated voluntarily. Results of the study showed, 46 (70%) believed that TBL improved their clinical skills, while 47 (71%) participants believed that TBL had not improved their presentation skills. On the other hand, 49(73%) of participants believed that in TBL there was an interactive discussion with the tutor. Regarding methods of assessments, 48(72%) of participants believed that TBL assessment depends on the group work, and 44(66%) believed that seminars assessment depends on the individual work. 45(67%) of participants recommended TBL, while 27(41%) recommended seminars. We concluded that TBL is a preferable and recommended method for the students, also we concluded that seminars achieved more presentation skills, however, TBL achieved more clinical skills. Regarding assessment methods, most of the participants believed it depend on the group work in TBL, and it is more individualized in seminars.

Keywords: Seminar, Team-based learning, Teaching methods.

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I. Introduction:

The classical teaching methods, particularly in undergraduate programs, have tended to separate knowledge acquisition from knowledge application both between and within courses, thus new methods of teaching have been adopted on revising the medical school curricula.^(1,2) Teaching methods such as lecturing and assessment methods like tests still dominate educational policy and practice in most of the medical school and reports on what has been done in the classroom is still not fully evaluated.⁽³⁾ Medical colleges have long used a variety of approaches to develop hybrid Problem-based learning (PBL) curricula. However, over time, a number of these hybrid PBL models have become less effective, and decreasingly aligned with the intended student-centered learning philosophy.^(4,5,6) Team-based learning (TBL) is a method of teaching groups under a supervisor that provides students with the knowledge and uses various activities including individual work, group work, and feedback score for the works.⁽⁷⁾ TBL activities are built on student to student inter-changing knowledge, engaging them in the process of learning, and increasing their motivation to learn from each other.^(8,9) A seminar is a teaching method in which the participants discuss one topic through presentations. The tutor experience, the students speaking skills, the topic, and the facilities are the main factors in effective seminar delivery.^(10,11) Generally, seminars promote presentation skills, critical reading, and writing skills as participants read a wide range of sources and synthesize data that serves the purpose of the seminars. The positive points in seminars that students may improve their language skills and develop their interactive capabilities. However, there is one negative impression about seminars, that is seminars are a dull method of transferring knowledge at youngsters. The reality that most people could learn things quicker if they are audibly heard rather than read. But unfortunately, if the presenter who is taking the seminar is not doing it the proper way the students cannot interact with it fully.^(3,12)

Objectives:

This study aimed at evaluating the feedback from the students regarding using TBL and seminars as methods of teaching in a preclinical phase in the college of medicine at Najran University.

II. Methodology:

This was a comparative cross-sectional study conducted among medical students in the preclinical phase at Najran University after the college has been adopted Team-Based Learning instead of seminars as a way of teaching in the preclinical phase. A questionnaire was designed to compare TBL versus seminars as an effective way of teaching according to the student's opinions and perceptions. Sixty-six medical students who studied with both methods participated in the study voluntarily. Participants filled a questionnaire containing questions about the degree of covering the topics, the presence of the following: learning outcome, interactive discussion, presentation and clinical skills, also questions about the way of evaluation of the students when taking a seminar or TBL, and which is preferable and recommended way to the participant. Their responses were collected and analyzed using the SPSS program. Finally, the descriptive and comparative data were expressed using frequencies and percentages.

III. Results:

Out of 66 participating 51(77%), and 56(85%) believed that the chosen topics had been covered effectively in TBL, and Seminars methods consecutively. Additionally, 47(71%) of participants' response was (Yes) that the TBL topics containing the learning outcome of the course, and 54(82%) had the same response for the seminars. On the other hand, 47 (71%) participants believed that TBL had not improved their presentation skills, while 55 (84%) believed that seminars had improved their presentation skills. Moreover, 46 (70%) believed that TBL had improved their clinical skills and only 23(35%) responded that seminars had improved their clinical skills, **see table1**. Forty-nine (73%) of participants believed that in TBL they had an interactive discussion with the tutor. while only 14(21%) agreed that in the seminars they had interactive discussions with their tutors, **see figure 1**. Regarding methods of assessments, 48(72%) of participants believed that TBL assessment depends on the group work, and only 5(8%) believed it depends on the individual rather than the group work. Additionally, 44(67%) believed that seminars assessment depends on individual work, and 7(10%) responded it depends on the group work, **see table 2**. Finally, 45(67%) of the participants recommended TBL, while 27(41%) recommended seminars to be used in the teaching process in the future, **see figure 2**.

Figure 1. The response of the participants to the question: the presence of interactive discussion with the tutor in this method of teaching

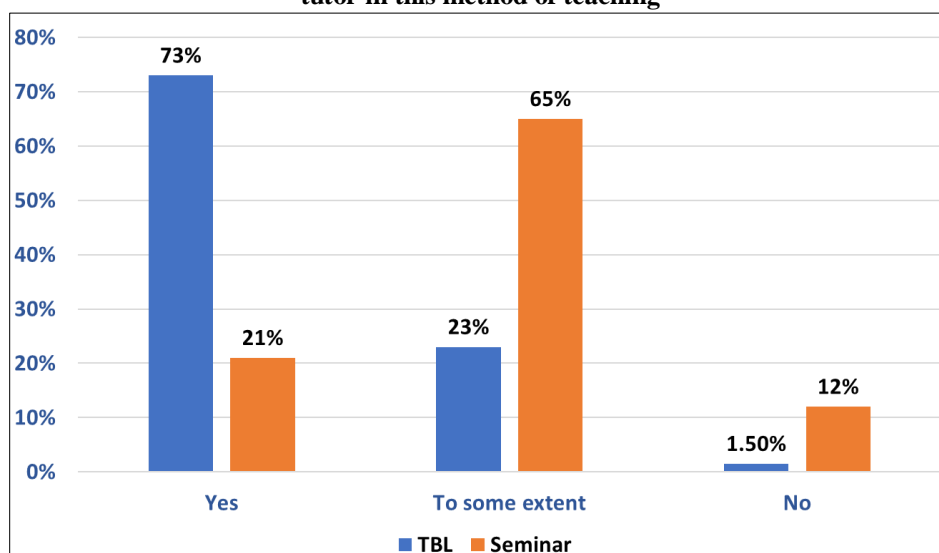


Figure 2. The response of the participants to the question: do you recommend this method of teaching

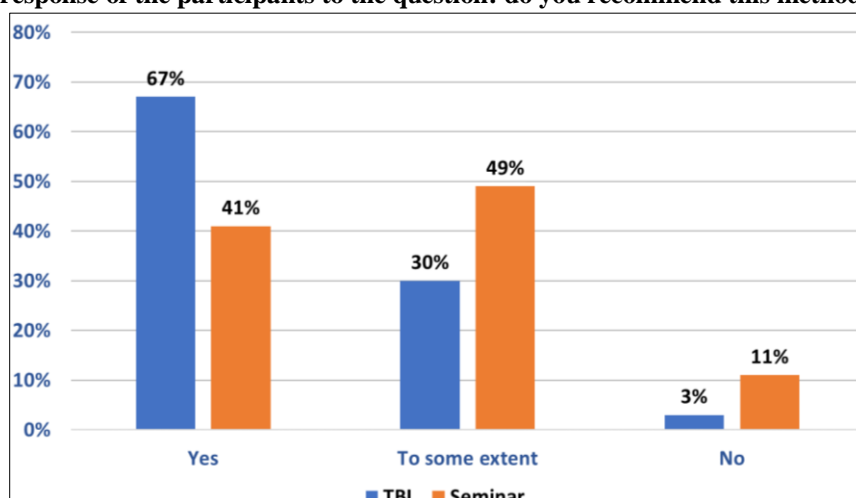


Table1: Comparing TBL and Seminars in achieving skills according to participant response

	TBL			Seminar		
	Yes	To some extent	No	Yes	To some extent	No
Improving presentation Skills	4(6%)	15(23%)	47(71%)	55(83%)	10(15%)	1(1.5%)
Improving Clinical Skills	46(70%)	16(24%)	4(6%)	23(35%)	38(58%)	5(8%)

Table 2: Comparing TBL and Seminars in assessment methods

	TBL			Seminar		
	Yes	To some extent	No	Yes	To some extent	No
Assessment depends on the group work	48(72%)	16(24%)	2(3%)	7(10%)	21(32%)	38(58%)
Assessment depends on the individual work	5(8%)	14(21%)	47(71%)	44(66%)	19(29%)	3(5%)

IV. Discussion:

The main limitation of this study is the small sample size because we could not recruit more participants for participation as few students had the chance of being taught with both seminars and TBL. Most of the participants believed that seminars are better in enhancing presentation skills than TBL, however, most of them believed that TBL could enhance their clinical skills more than seminars, Palappallil *et al* reported the same findings and he recommended using a modified seminar to obtain more clinical skills.⁽¹⁰⁾ On the other hand, 49(73%) of participants believed that the presence of an interactive discussion was more in TBL than in seminars method, this goes with what was concluded in the Echeto *et al*.⁽¹²⁾ So a hybrid approach to utilize the strengths of both TBL and seminars methods should be considered to overcome this issue.

When comparing methods of assessment in both TBL and seminars, 48(72%) of participants believed that assessment in TBL depends on the group work, while 44(66%) believed that in seminars it is more individualized so this is another limitation for TBL, this finding was agreed with what was reported by Parmelee *et al*.⁽⁷⁾ also in a study done by Al'Adawi *et al* recommended to revise the classical methods of assessment for both seminars and TBL.⁽³⁾ Finally, 45(67%) of the participants recommended using the TBL method and 27(41%) recommended using seminars, this percentage was not far away from what was reported by Palappallil *et al* which found that one-third of students recommended using seminars in the teaching process.⁽¹⁰⁾ In our study, it seems that some students recommended both of the methods, which gives the impression that seminars can be accepted if a modification was injected in this method.

V. Conclusion:

The authors concluded that TBL is preferable and recommended method of teaching by the participants in comparison to the seminars, also concluded that seminars achieve more presentation skills and TBL achieved more clinical skills according to the participants' opinions. Regarding the assessment method,

most of the participants believed it depend on the group work in TBL, while it is more individualized in seminars.

VI. Recommendation:

The study recommended using a modified TBL or a hybrid approach to utilize the strengths of both TBL and seminars. However, using TBL instead of seminars is a preferable method for participating students. Additionally, we recommend revising the methods of assessment in TBL to be more individualized than to be depending on the group work. also, we recommended enhancing TBL with presentations to improve this skill.

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