

BRIEF COMMUNICATION

Students' Perception of One Year Experience with the Clinical Skills Laboratory at King Saud University Medical College

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Abstract

Objective

The clinical skills laboratory is an educational facility where clinical skills could be obtained and practiced in a protected safe environment. The present study evaluated one year experience with the new clinical skills laboratory that was opened at the college of Medicine, King Saud University in 2004.

Methods

We surveyed 123 students in their clinical years at the end of the surgery course for evaluation of one year experience at the clinical skills laboratory at King Saud University Medical College.

Results

More than two thirds of the students (n=102, 82.26%) found the skills lab useful for the course and think that learning in the clinical skills lab is more useful before dealing with real students (n= 112, 90.32%). While only 11 students (8.87%) think that it is more useful after. Around two thirds of the students (n= 101, 82.11%) considered the instructors to be friendly and helpful. More than half of the students (n=73, 58.9%) found the duration of the sessions not enough and more than two thirds of the students (n=102, 82.3%) think that more sessions are needed. Although the clinical skills lab was started in a temporary location, 86 students (69.4%) found the location of the skills lab to be appropriate. Despite the short experience, more than half of the students (n=79, 64.23%) found the organization of the sessions appropriate.

Conclusion

These findings suggest that the clinical skills lab is providing a satisfactory and useful way of learning for the medical students in their clinical years after one year of being opened.

Key words: Clinical skills laboratory, students, medical learning.

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Introduction

The clinical skills laboratory is an educational facility in which training of many kinds of skills takes place in a wide variety of formats, ranging from history taking skills, physical examination skills, procedural skills, laboratory skills and communication skills¹⁻⁴. Furthermore, students are provided with simulated patients to practice their clinical skills⁵⁻⁸. The clinical skills laboratory encourages self-directed learning⁹, as well as peer teaching and learning. Furthermore, the clinical skills laboratory provide a suitable place for clinical assessment as the students' competence can be assessed in a simulated situation¹⁰⁻¹¹.

The first clinical skills laboratory was opened in the University of Maastricht, Netherlands in 1974. In 1988, the first clinical skills laboratory was opened in the Gulf region in the United Arab Emirates. In 2004, a new clinical skills training center was introduced in the College of Medicine at King Saud University in Riyadh, Saudi Arabia within the context of comprehensive changes in the medical curriculum. The King Saud University medical school, founded in 1966, has a traditional 5-year undergraduate medical course of which the first 2 years are devoted to the basic sciences, and the last 3 years to the clinical practice. Skills teaching staff was appointed, and the clinical skills lab was started as an independent unit, where the clinical skills laboratory is utilized by students in all clinical years (starting from the third year). The skills lab is visited by students during working hours throughout the week which allows the students to practice and acquire different skills in a supervised sessions and at their own pace and teacher-independent. The clinical skills lab is composed of 2 large halls and 2 rooms. This is a temporary lab as there is a new building with a new skills lab, highly equipped that will be open soon. The lab is used for teaching clinical skills by different courses throughout the clinical years. Third year medical students are taught the principles of breast examination, scrotal and inguinal examination and rectal

examination on the mannequins during their surgical courses. Fifth year medical students are taught, in addition to the previous skills, simple intervention procedures such as insertion of naso-gastric tubes, intra-venous lines, etc. The clinical skills are taught by the clinical skills lab staff, which includes two full time consultants assisted by two technicians, as well as tutors from different departments.

We conducted an evaluation of the usefulness of the clinical training center in King Saud University medical school in order to improve the quality of service provided by the laboratory.

Materials and Methods

The subjects were male medical students enrolled in the surgery course in third and fifth clinical year of medical school. Of the 150 students who received the questionnaires, 123 were completed and returned with a response rate of 82%.

The questionnaire consisted of 8 structured closed ended questions. It was designed to provide information on the usefulness of the clinical skills training center, the frequency and the duration of the sessions, the attitudes of the instructors, the location of the skills lab and the quality of organization. The questionnaire was analyzed by the computer using the SPSS statistical package, version 11.5.

Results

Usefulness of clinical skills lab

While more than two third of the students (n=102, 82.26%) found the skills lab very useful, 12 students (9.68%) found it moderately useful (Figure 1). A small number of students had negative evaluation of the usefulness of the lab (n=9, 7.26%).

Students' evaluation of timing of skills lab sessions

More than two thirds of the students (n=112, 90.32%) prefer to take the sessions in the skills lab and practice before dealing with real patients, the remaining (n=11, 8.87%)



prefer to take the sessions afterwards (Figure 2).

Attitudes of instructors

We also assessed students' perceptions of the attitudes of the clinical skills instructors (Figure 3). 65 students considered the instructors to be friendly and helpful (n=101, 82.11%). Only 3 students found the instructors not helpful and lacking friendly attitude.

Duration and frequency of the sessions

Regarding the duration and frequency of the clinical skills sessions (Figures 4 A and B), two thirds of the students found the

frequency of the sessions not enough (n=102, 82.3%) (Figure 4 A). More than half of the students (n=73, 58.9%) thought they require more time for each session.

Location of the clinical skills lab

More than half the students (n=86, 70.73%) are satisfied with the location, while the remaining (n=36, 29.03%) found the location inappropriate (Figure 5).

Students' evaluation of the organization of skills lab sessions

More than half of the students (n=78, 64.23%) found the organization of the sessions appropriate (Figure 6).

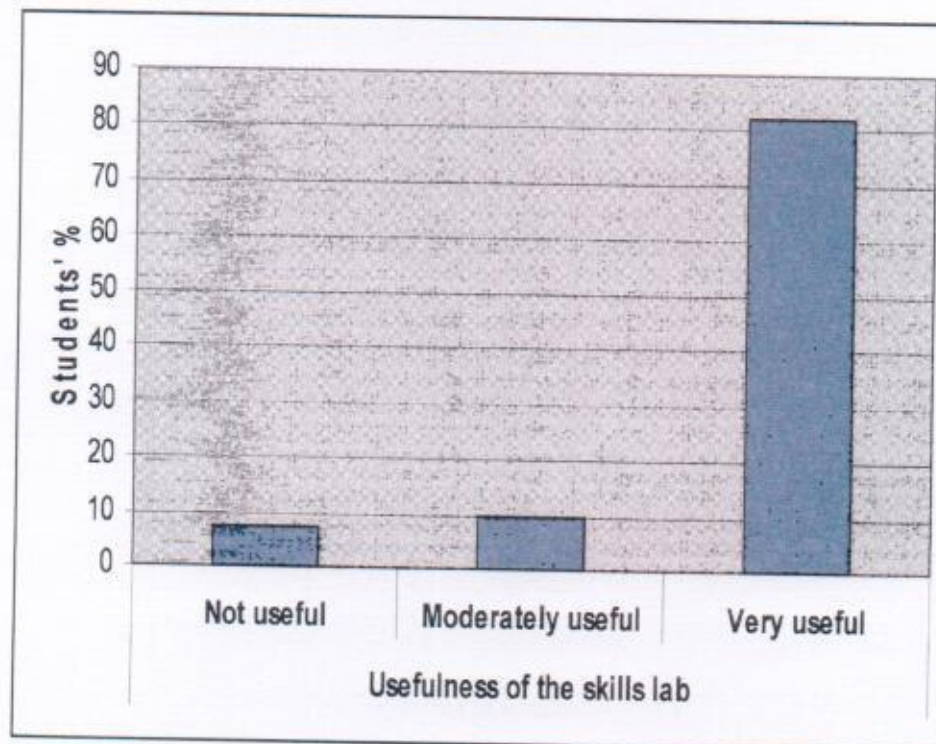


Figure1: Student's perception of the usefulness of the clinical skills laboratory.

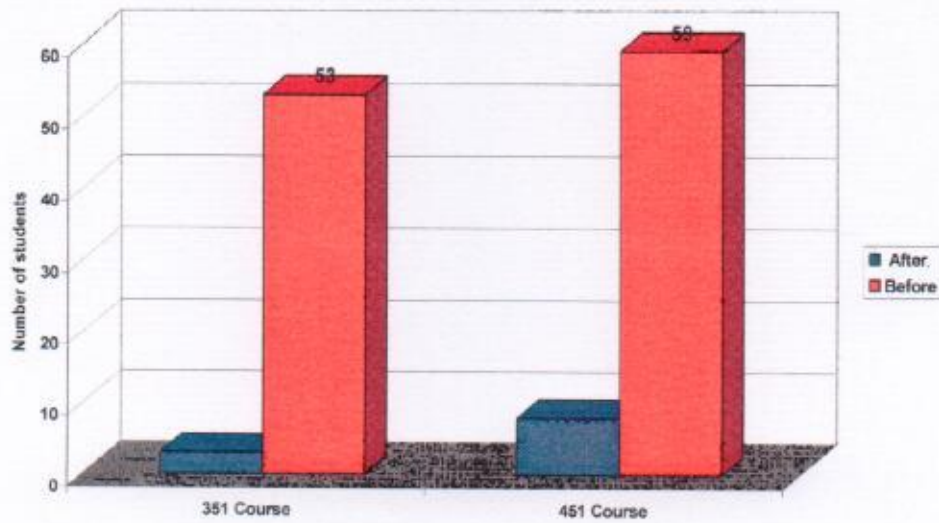


Figure 2: Students' perception of timing of skills lab sessions in relation with dealing with real patients. (351 course in third year, 461 course in fifth year)

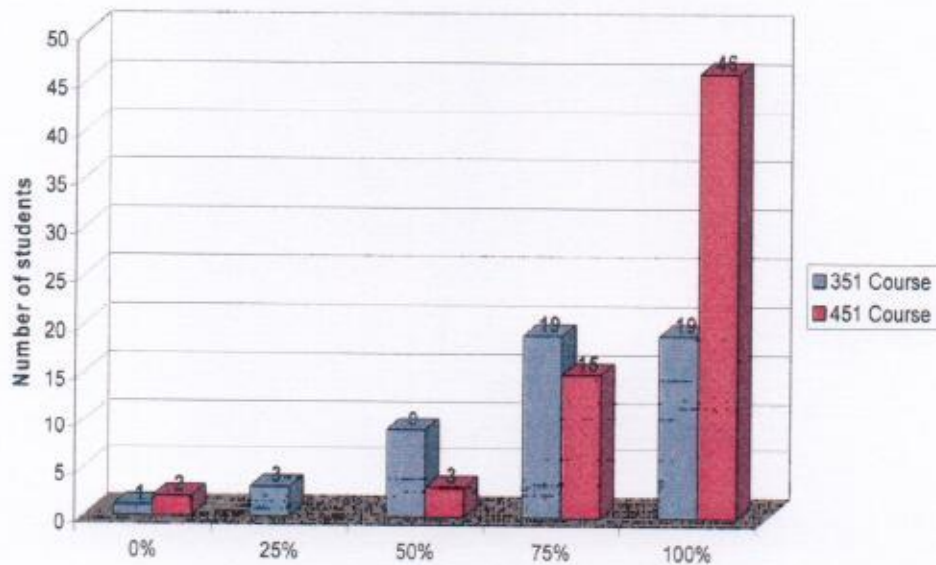


Figure 3: Students' perception of tutors' attitudes in clinical skills laboratory (0% not helpful, 100% helpful).

Students' perception of clinical skills laboratory

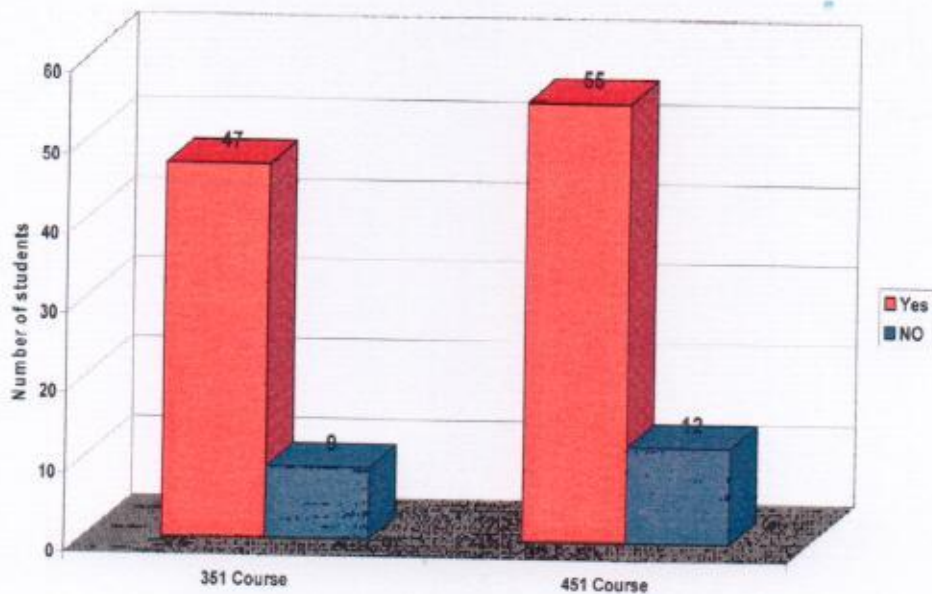


Figure 4 A: Students' perception of the frequency (Do you think more sessions are needed?).

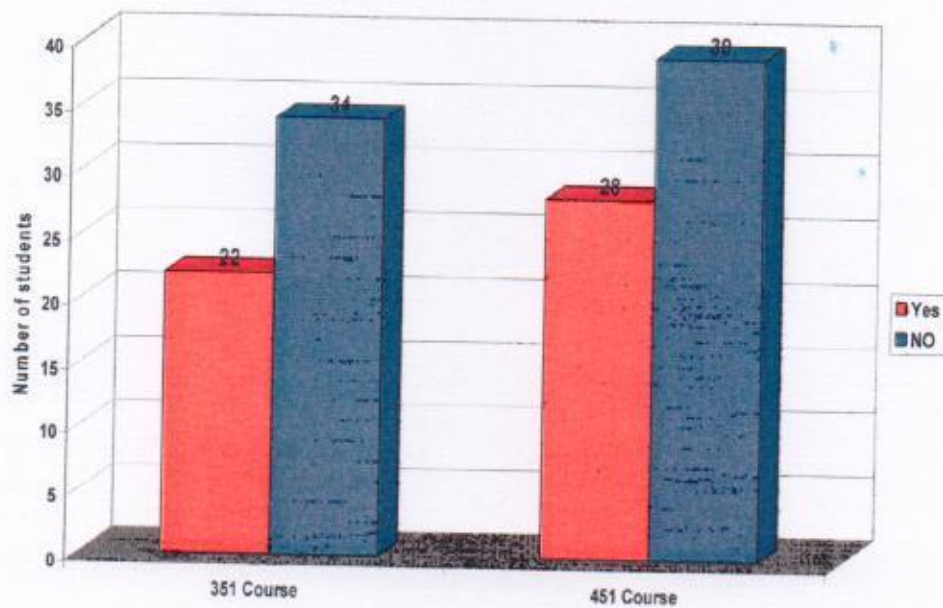


Figure 4 B: Students' perception of the duration of the clinical skills laboratory sessions (Do you think more time is needed for sessions?).

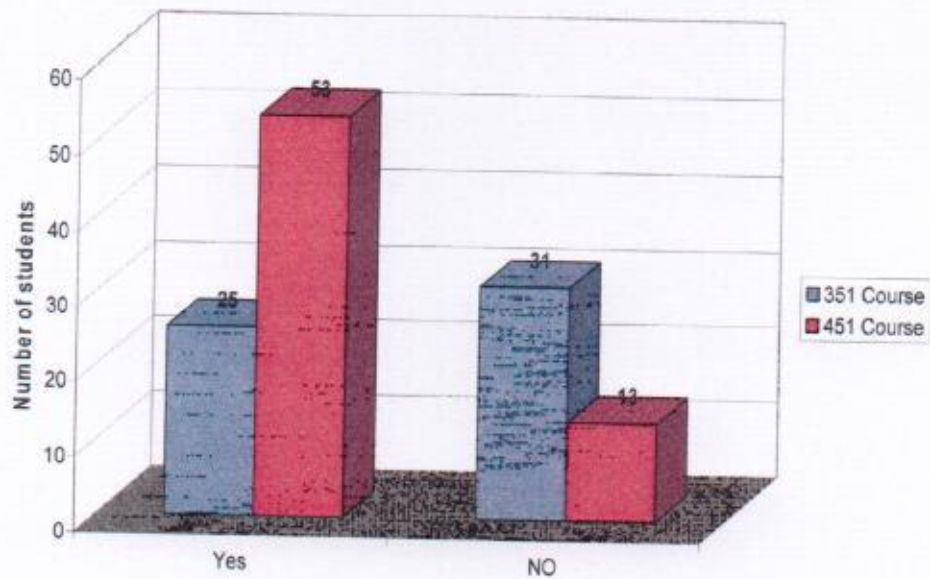


Figure 5: Students' perception of the organization of the sessions (Was the organization of the sessions appropriate?)

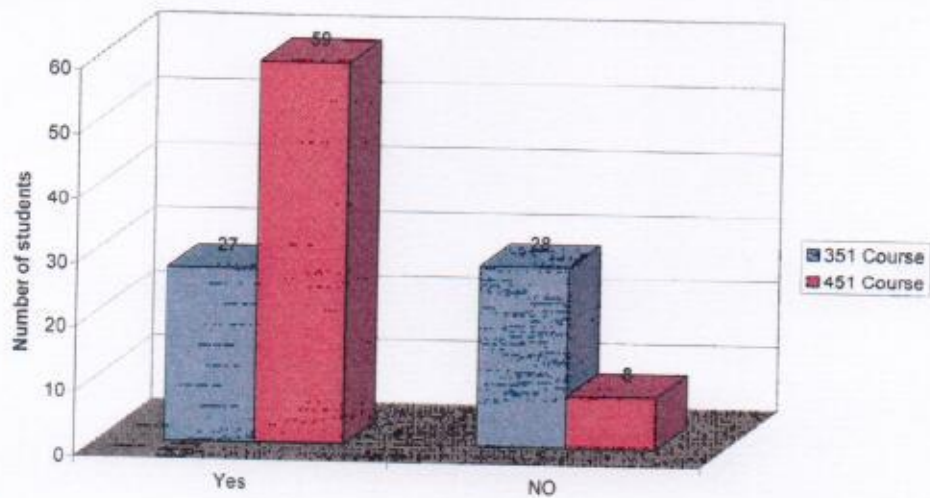


Figure 6: Students' perception of the location of the clinical skills lab (Was the location of the clinical skills lab appropriate?).

Discussion

The clinical skills laboratory provide a safe and stimulating environment for teaching and learning clinical skills for both undergraduates and postgraduates students which is supportive, student centered and simulates the hospital clinical learning environment. Furthermore, the clinical skills laboratory protects patients from novices, and provides the opportunity for safe and supportive practice.

The results of the present study at King Saud University Medical College, a medical school with traditional curriculum, shows that positive features are found in the evaluation of one year experience with the clinical skills laboratory despite the very short experience. The majority of students think that the clinical skills laboratory is useful, the instructors are helpful and the organization is satisfactory. The majority of the students think that the clinical skills laboratory sessions are more useful before clinical teaching sessions. These findings provide some comfort about the quality of service provided by the clinical skills laboratory. The results of the present study also show that most of the students ask for more sessions and more time during each session which strongly indicates the students' perception of the usefulness of the clinical skills laboratory as a way of practicing and acquiring different skills. Furthermore, the results of the present study showed that the majority of the instructors were friendly and helpful despite the short experience.

The results of this and other studies suggest that the clinical skills laboratory is an effective and safe environment for practicing clinical skills¹²⁻¹³. More efforts are needed to increase the effectiveness of the clinical skills laboratory especially with the implementation of the new curriculum. There are simple solutions to increase the frequency and duration of the sessions. The new location of the clinical skills center will help to accommodate more number of students. More staff will be hired which will definitely improve the quality of service provided by the lab.

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