

Clinical Skills Lab: Structure & Role

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A clinical skills laboratory is a facility in which students, physicians, nurses and other health care professionals learn clinical, communication and information technology skills to a specified level of competence prior to or coordinated with direct patient contact. The purpose of the clinical skill laboratory is to support the acquisition, maintenance and enhancement of the clinical skills of students in health care professions. Within this non-threatening environment, patient volunteers, simulated patients, mannequins and information technology are employed to provide hands-on learning experiences for the practice of the essential clinical skills. The skills laboratory helps to ensure that all students have necessary learning opportunities and appropriate assessment and feedback before approaching real patients. As more and more schools integrate skills laboratories into their curricula, it is important to review this new trend, to introduce its nature, factors that led to its development, advantages and problems related to its implementation.

The necessity of learning skills through "integrated skills training" at an undergraduate level has been supported by several studies. The University of Antwerp implemented undergraduate skills training in its renewed curriculum in 1998, after it was demonstrated that Flemish students did not master their medical skills as well as Dutch students who received "integrated skills training" as part of their undergraduate medical course. The aim of this study was to compare the skill outcome levels of two different student populations: students who had been trained in basic clinical skills mainly through clinical internships in year 7 with students who had learned these skills through an integrated longitudinal programme in a special learning environment in years 1-5 prior to their internship experience. Students of the traditional curriculum learned skills through a 75 hour programme in years 4 and 5, through plenary sessions followed by a 12 month period of internships during which skills could be further practiced. We tested this group right after completion of their internships. Students from the renewed curriculum followed a 200 hour intensive small group skills training programme offered in years 1-5. This group was tested before starting their internships. On global OSCE-scores, renewed curriculum students had significantly higher overall scores ($p < 0.001$) and they scored significantly higher at 6 of 15 stations. There was no significant difference at 8 stations, while traditional curriculum students scored better at station 1. 5 years and 200 hours of integrated undergraduate skills training is more effective as a method of learning basic clinical skills, compared to learning these skills through 75 hours of traditional skill training and reinforcement of these skills in 12 month clinical internships, when measured by means of an OSCE.