

Appendix 4

Clinical Skills Laboratory: results of the monitoring process

The primary objective of the Clinical Skills Laboratory (CSL) of the School of Health Sciences is to provide students with opportunities for training and improving clinical skills under supervision, in conditions that safeguard the patients. The CSL is equipped with technology in medical and clinical simulation. It was inaugurated in January 2008 and, since then, has maintained a daily offer of extra-curricular activities that focus on the practice of specific clinical gestures, patient interviews and physical examination.

At the completion of the first year of activity, the menu of the CSL featured 21 different sessions. Monthly calendars were prepared so training sessions would be scheduled daily, after the end of classes. Students (n=4-8) are invited to register voluntarily for the opportunity to practice skills under supervision by a physician and obtain feedback on performance. Sessions are invariably directed by clinicians in two different formats: (1) training of specific clinical gestures – students practice on one another under supervision; (8) – clinical encounter – practice of interview/physical exam with a Standardized patient.

The quality of the CSL program is being currently monitored in every session through student self-assessments with a questionnaire (pre and post design). The completion of the questionnaire is optional. Analysis of the answers' evolution from pre- to post-session is useful for obtaining information on the impact of the CSL. The information is used to provide immediate feedback of program achievements and thus assisting in the monitoring of the project. A synthesis of the results is prepared bimonthly and submitted to the Director of CSL and to the individual faculty (on the sessions for which she/he was responsible).

During the first 6 months a total of 393 voluntary clinical training sessions with students were registered at the CSL, corresponding to a participation of 21% of the whole School's undergraduate student population (N=388) in at least one training session. As a result of the monitoring process, 362 questionnaires were collected (92% of the total number of training sessions).

ANALYSIS OF ANSWERS

PRE-TEST

At the beginning of each session, the students answered the question "Why did you register for this session?". The results showed that: (1) most students in the clinical years (85%) reported knowing about the gesture but either having had insufficient opportunities for training (40%) or low confidence in performance (45%); (2) overall, only 2% of the students were confident in their good performance and attended with the aim of increasing their practice; (3) as expected, when compared to more advanced colleagues, students of curricular years 1-3 are less likely to know about or having practiced the gesture.

POST-TEST

At the end of the session, students are asked about aspects of the session's organization (ex. adequate instruments, sufficient time, etc.). They are also asked "Do you intend to participate in future sessions?" and "Do you recommend this session to your colleagues.?"

EVOLUTION: PRE- TO POST -TEST

The level of self-confidence in the performance of the gesture increases dramatically for the substantial majority of the training sessions (as measured by the item "I am confident I can perform this gesture correctly" (7 positions Likert scale: 1 - poorly confident; 7 - strongly confident). This is direct evidence of achievement of one of the CSL objectives.

FUTURE CHALLENGES

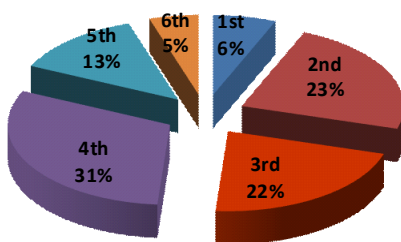
Even though the monitoring process succeeded in demonstrating gains in student's confidence in performing, the available process is unsuitable to measure short-term or long-term learning gains of the students related to the CSL Pilot projects to do this are already under way involving an interdisciplinary collaboration between physicians and the Medical Education Unit and some have been presented internationally.

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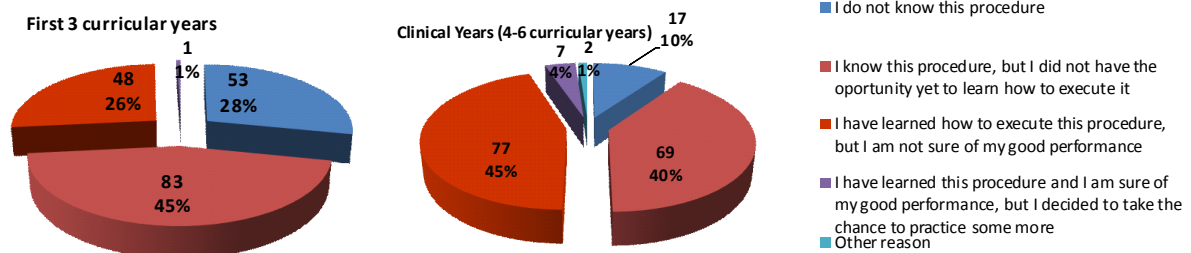
Annual Meeting of the Association for Medical Education in Europe. Prague, Czech Republic.
 "The educational purpose of a clinical skills center: filling the learning gaps"
 Salgueira, A. P., Cerqueira, J., Sousa, N., Costa, M. J.
 "The importance of peripheral venous access training early in the course"
 Pêgo, J. M., Salgueira, A., Sousa, N., Costa, M. J.
 "Monitoring and improving neurological examination learning"
 Cerqueira, J. J., Salgueira, A., Taipa, R., Sousa, N., Costa, M. J.

RESULTS

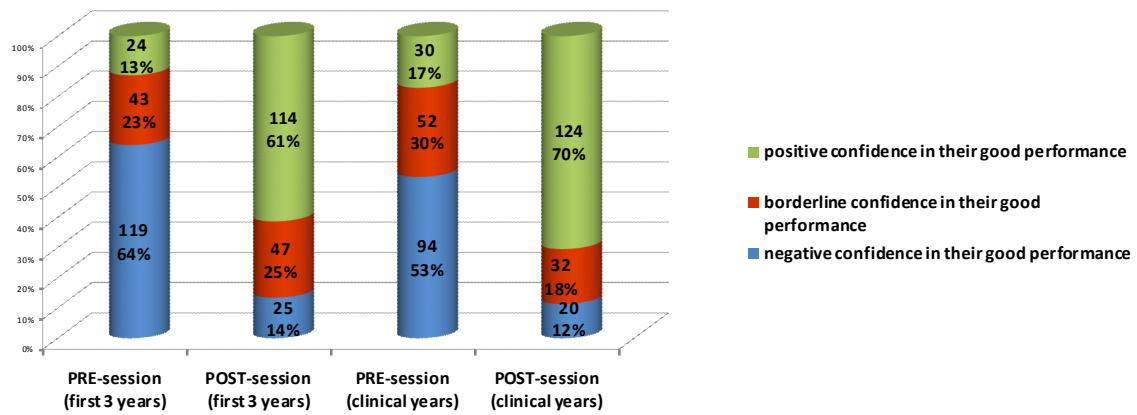
curricular year: students distribution



"Why did you register for this session?"

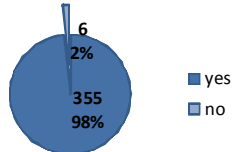


Student's self-confidence in performance

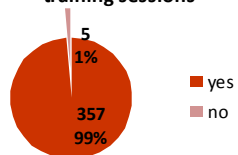


Students overall opinion about the sessions

I learned how to distinguish good and bad practices



I intend to enrol in other training sessions



I recommend this training session to my colleagues

