

EDITORIAL

Can Clinical Skill Laboratories (CSLs) be Online?

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Clinical skill laboratories (CSLs) are integrated community, objective, and outcome-based learning processes that integrate basic knowledge with clinical skills. CSLs are hospital or medical school-based teaching which includes self-directed, student-centred and problem-based learning. CSLs can be taught in the procedural room, out-patient department, primary healthcare centre, casualty department, and simulation settings (Al-Elq, 2007). Experienced clinician, a small group of self-motivated students, cooperative patients, adequate and reliable instruments, enough time to practice, and a comfortable room with adequate ventilation are factors for effective CSLs (Ramani & Leinster, 2008). The teaching activities and learning can be face-to-face or blended learning, e-learning and online learning. Nowadays, blended and online learning is gaining more popularity. Blended learning combines face-to-face and online learning that supports creative, critical thinking skills (Garrison & Kanuka, 2004). Synchronous and asynchronous learning is the part of online learning where teachers use video and audio technologies (Gormley et al., 2009).

The world has changed a lot due to the pandemic of COVID-19. The education sector, especially skill-based education, faced difficulties during the pandemic. Universities had to run the programme, and all teaching modalities were converted online during that pandemic time. Faculty of Medicine and Health Sciences, Universiti Malaysia Sabah

was no exception, and CSLs for undergraduate students had to be conducted online. It was a great challenge for the lecturers and the students to adjust to these new strategies. Prior to the session, lecturers posted videos and PowerPoints to the online platform. During the day of the session, lecturers demonstrated the procedure online by synchronous learning methods. Students observed the skills and practised at home. The advantages of online CSL sessions during a pandemic were that the students could attend a session from any part of the country; the programme ran without interruption, engaged students throughout a session, and COVID-19 spread could be prevented among students, teachers, and simulated subjects. However, interruption of internet connections, inadequate internet coverage, failure to observe the steps of the procedure, unavailability of proper instruments, and absence of hands-on training were the main disadvantages of many more during the pandemic. Therefore, the Faculty arranged hands-on revision sessions to overcome these pitfalls and re-inforced the students' skills.

CSLs combine different theories and mixed teaching and learning methods and activities that can be implemented to achieve the teaching and learning goals. Early exposure to clinical skills for preclinical students gains attention to fulfil the aim. Therefore, the students can correlate their basic science knowledge with clinical skills (Sahu et al., 2019). In addition, CSLs motivate the students and increase their self-esteem and self-confidence. For the CSL session, teachers need to know the level of students (undergraduate/graduate), time allocation, and venue. They should prepare the lesson plan and learning objectives before the session. Gormley et al. (2009) researched blended clinical skill learning where students practised on simulation, virtual patients, actual patients, accessing the online videos, patient cases, and checklist for OSCE.

Harrmann-Werner et al. (2013) stated that for clinical skills teaching, the "Best practice" model (BPSL) is better for students' outcomes than a traditional "see one, do one" teaching approach (TRAD). Without practising in CSLs, the students will forget the procedure during OSCEs or practice on other patients. In addition, from the preclinical year, exposing the students to clinical skills through simulation or simulated patients will build their confidence, motivation, and less fear of touching the patients. Therefore, for CSLs, hands-on sessions are mandatory to link cognitive and applied knowledge where students correlate their concepts with clinical science and know-how to apply their knowledge to clinical practices.

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