

D2040

IS THERE A PLACE FOR E-LEARNING IN CLINICAL SKILLS? AN ASSESSMENT OF THE PERCEIVED LEVEL OF COMPUTER LITERACY AND THE ATTITUDES TOWARDS E-LEARNING IN CLINICAL SKILLS AMONG MEDICAL STUDENTS IN A DEVELOPING COUNTRY IN SOUTH ASIA

¹Lakmal C, ²Ratnatunga K, ²Chanaka N, ³Gamage B

¹Department of Surgery, Faculty of Medical Sciences, University of Sri Jayawardenapura, Colombo South Teaching Hospital, Sri Lanka, ²Department of Surgery, University of Sri Jayawardenapura, Colombo South Teaching Hospital, Sri Lanka, ³Department of Surgery, University of Sri Jayawardenapura, Sri Lanka

Aims

E-learning is defined as learning utilising electronic technologies to access educational material outside of a traditional classroom typically on the internet. It is widely used in medical education systems globally, both as a teaching aid as well as a self-learning tool. A study done among medical students in UK has shown that e-learning was rated as high as other traditional methods of clinical skills training and they had largely positive attitudes towards e-learning. In Sri Lanka, information technology (IT) though well established, computer literacy is still limited in comparison to developed countries. Even though e-learning curricula are not widely available to Sri Lankan medical students, development of such facilities are in progress. It is necessary therefore, to assess the computer literacy and overall readiness of medical students to integrate e-learning into their formal education.

Methods

Medical students from the third, fourth and final year batches (clinical stream) from the University of Sri Jayawardenapura were selected. A modified version of a self-administered questionnaire used in UK was applied after pre-tested among Sri Lankan students. It included questions on demographics, perceived level of computer literacy, experiences and attitudes towards e-learning in clinical skills and attitudes towards to e-learning compared to other methods of learning clinical skills. Analysis was done using SPSS version 23.

Results

A total of 324 (84% response rate) students of clinical stream (third, fourth, fifth years) completed the questionnaire. The majority were females (70%). Mean age was 24.24 years (range 22-29). 74.6% strongly agreed or agreed that they have a satisfactory computer access in the faculty and 89% has a computer at their accommodation. 86% were confident in using a computer. 83.6% strongly agreed or agreed that e-learning is useful in learning clinical skills and students from all three batches showed a similar trend of responses. 60% believed that e-learning encouraged them to examine real patients. However, only 28.1% reviewed e-learning material prior to their learning sessions. The most popular mediums of e-learning used to learn clinical skills were demonstration videos (91.5%), descriptive texts (84.8%) and images (76.4%). Online assessments were used only by 44% of students. With regard to learning clinical skills, the perceived usefulness of the different methods were as follows. E-learning 86%, hospital clinical attachments 89%, use of simulated patients 80%, clinical skills laboratory 81%. Only 58% considered textbooks useful in skills learning. However, when the three batches were considered, individually, a greater percentage of third year students believed that simulated patients (88%) and skills laboratory (85%) were useful than the final years (70%, 68% respectively). No change of responses to usefulness of e-learning was seen. No difference between males and females regarding the use of e-learning was observed ($p=0.24$).

Conclusion

Perceived level of computer literacy among the study population was satisfactory. A vast majority of students valued the use of e-learning in clinical skills. But online assessments and reviewing e-learning material prior to sessions were less popular among Sri Lankan students. The positive attitude towards e-learning and high perceived computer literacy rate suggest that formal integration of e-learning into clinical skills curricula would be beneficial.