Feasibility of introducing information technology-based activities into medical curricula in developing countries

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Editor - Knowledge of information technology (IT) among medical undergraduates and health care workers is higher in developed countries¹ than in developing countries.^{2,3} In developing countries, IT-based activities in medical curricula are not popular, mainly because of limited facilities in terms of the availability of computers and Internet connections.^{4,5} In Sri Lanka, like most developing countries, IT-based components are not common in medical curricula and experience in IT-based activities in medical schools is limited. We describe our experience in adding a new IT-based assignment to the curriculum of a Sri Lankan medical school.

We assessed certain basic IT capabilities before the assignment and found that the capability of using Microsoft wORD, e-mail and the Internet was limited to 68.3%, 62.0% and 49.2% of students, respectively, with 48.8% of students having some other IT capabilities. Abilities in IT were compared between different groups of students who had entered the

Department of Physiology, Faculty of Medicine, University of Ruhuna, Galle, Sri Lanka medical school from different geographical areas. There were significant differences between students in terms of their ability to use Microsoft word, but no significant difference in e-mail use, Internet use and other IT abilities emerged between students from particular geographical areas. Scores in IT skills were calculated according to all the parameters tested. Scores for IT skills did not show any difference in terms of geographical area categories or gender. Scores for IT skills were significantly higher in the group of students who had studied IT in school than among those who had not. The study also showed that only 40.9% of students had studied IT at school. Females had had significantly less exposure to IT at school: only 29.4% of females had studied IT at school, whereas 57.1% of males had. No significant difference between genders emerged for any of the tested IT components or IT scores. The most frequently cited single source of IT knowledge was the introductory IT course at medical school; the least cited source was IT training at school.

Response to the IT-based assignment was very poor. The reasons for poor participation include lack of time because of parallel assignments in other subjects, poor IT knowledge and poor IT resource availability. We believe that improved IT knowledge among undergraduates and improved IT facilities in medical schools in developing countries, such as Sri Lanka, will enrich medical curricula with more interactive and active IT-based learning activities which will help students to acquire medical knowledge more efficiently and effectively.

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