Knowledge, use and attitudes towards information and communication technologies among medical students

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As medical education has undergone profound changes due to recent enhancement of Information and Communication Technologies (ICT) availability, both for support of on-site medical education and on-line learning, it becomes increasingly important to map the attitudes students have towards their use.

In 2014, students beginning the first semester of Faculty of Medicine, University of Belgrade were given an online course on Applications of information and communication technologies in medicine. As a part of the tutorials, the students were asked to complete a questionnaire which included questions related to knowledge, use and attitudes towards ICT. For items related to students attitudes toward ICT five level Likert scale was performed.

A total of 446 students (89%) responded. Overall, students reported neutral attitudes towards ICT (3.3±1.0), 401 (90%) respondents have access to the Internet from home, and 397 (89%) of them use the Internet for information search. Of the 446 respondents, 370 (84%) own a Smartphone, and 317 (86%) of them use Smartphone for learning activities. In a multivariate regression model, self-rating of ability in informatics and usage of the Internet in education were significantly associated with the attitudes towards ICT after adjusting for age and gender.

Results from the study indicated that students have neutral attitudes toward ICT. The course in ICT applications in medicine should be designed to introduce the concepts of Web-based learning environments and to identify students without adequate basic knowledge and skills necessary to function effectively in an information-rich environment.

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