Conventional vs. e-learning in medical education

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Abstract

The totality of educational methods in which a computer connected to the Internet is using refers to e-learning. More and more e-books, video and audio recordings have been appeared, which create an attractive environment for students and medical professionals educational needs. Various scientific articles, recent research results, and textbooks can be translated into etextbooks, meaning a printed page can be viewed on computer screen. The content of these texts, in the virtual format, can be improved by adding hyperlinks which forwards to another section where some concepts and terms are explained. Textbooks can be enhanced in the virtual environment by adding a link to a movie which is showing a patient with a certain pathology (e.g., a patient with epilepsy crisis), a movie of a cellular process, an x-ray which highlights the pathology at the presence of mouse cursor. A new aspect that has raised the interest of medical professionals is "the virtual patient", a clinical case that includes a video with a consultation, a written case with pictures (e.g., to highlight the appearance of rashes). Thus, the use of technology plays an important role in the learning of clinical judgment of a student outside the consulting room or when contact with a particular pathology is limited (e.g., a student who will follow the pediatric module in the summer will have little chance of seeing a patient admitted with bronchiolitis). There are numerous studies that have attempted to demonstrate the beneficial effects of e-learning in comparison with classical education, but the results are not conclusive because interaction with the patient cannot be replaced. E-learning in the medical field appears to be a bit more effective than traditional education, generating a false impression that it would be far above traditional education. We emphasize the literature data which are focused on e-learning methods used in clinical practice or used for medical knowledge achievements by medical students and doctors.

Keywords:

E-learning; Educational Methods; Medical Education; Virtual Learning