



VIRTUAL CASES IN INTERNAL MEDICINE EDUCATION

Tachecí Ilja, Ryška Aleš, Uhrin Marek

Faculty of Medicine in Hradec Králové, Charles University in Prague

D2.3 SERIOUS GAMES, SIMULATION AND MODELS FOR MEDICAL EDUCATION

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Organization of practical training in medical schools faces specific problems (limited spectrum of patients). Simulation of clinical cases using information technologies is an excellent option how to overcome it.

The project E-KAZUISTIKY is an interactive problem-based learning system, generating a set of virtual patients. The spectrum of diagnoses, number of patients and criteria for passing the course can be predefined. Personal data, medical history symptoms, etc. are pseudorandomly generated for each patient. Student must suggest an optimal diagnostic algorithm and determine correct diagnosis. Clinical findings and results of diagnostic tests are presented in multimedial manner.

The evaluation of students' performance is based on correct sequence of suggested diagnostic steps and assessment of the financial costs of each test.

The program is used in the undergraduate curriculum at the Medical Faculty in Hradec Králové. The users' hands-on experience was evaluated through anonymous questionnaires. The most appreciated attribute of the system is the game-like involvement and multimedia-supporting environment (for students) and possibility of detailed analysis of each student's performance and clear identification of weakest areas (for tutors).

The project represents a useful tool for undergraduate medical education with positive feedback from both students and teachers. The advantages are flexibility, potential for expansion into other clinical disciplines and no restrictions regarding particular disease, clinical specialty, diagnostic procedure, etc.

TAKE HOME MESSAGE

Virtual cases allow overcoming limitations of practical education in medicine and arousing a positive response by users.

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