Building a Web-based e-Learning Model for Preventing Club Drug Abuse

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Abstract

According to the statistical analysis, the rate of seizing Club Drugs has been increasing these years. It is very important to find ways for preventing drug abuse. From the point of view of harm reduction, traditional propaganda and education methods become more and more inefficient and ineffective. Although there are some web pages that provide information related to drug abuse, most of them are based on passive learning model. In this study, we will combine drug abuse information system and digital e-learning technology to implement an internet-based learning model for preventing abuse of club drugs. An interactive on-line e-learning model will be created, which is based on a very distinctive design called Virtual Drug Abuse Scenario Simulation (VDASS). The model will simulate many scenarios of drug abuse including the feeling, symptoms, behaviors, side effects, sequela, and the ways of preventing or solving those problems. Multimedia materials and learning activity will be implemented on a knowledge management platform. The learners should be more interested in and will have higher motive on the learning model. We expect that this system can reach the purpose of harm reduction of drug abuse. The idea of virtual scenario simulation were adopted in this project to create the material and activities for the on-line e-learning system. The content was advised and contributed by many experts who have practical medicine experiences. Incorporated with multimedia knowledge database, the system management platform was established to provide the information about drug abuse and the education resources for medicine development, and become a portal web page for the education and information retrieval of drug abuse. The evaluation of the project was performed in both the effectiveness of the learning model and the web page itself. The evaluation was conducted by selected students. The evaluation includes the comparison of the difference of learning effects between traditional learners and those who use VDASS e-learning method. The satisfaction score was also evaluated by questionnaire to test the suitability and feasibility of the system. In this project, we have successfully built a Virtual Drug Abuse Scenario Simulation for MDMA (MDMA VDASS). The portal web page of “The education and prevention of drug abuse” contains several functions including the Virtual Drug Abuse Scenario

Simulation, knowledge for experts/general population, on-line e-learning resources, self-evaluations, and learning/discussion community. The evaluation results show that the outcomes (test scores) of the traditional learners and the VDASS learners have no differences. The test scores of both of them are higher than the subjects without reading any materials. And, the VDASS learners have a better performance than the traditional learner and the students without any learning process. Therefore, the results supports our expectancy that the effect of using VDASS is the same as that of using the traditional materials, but the memory maintenance duration of VDASS is longer than the traditional learner. The users are also satisfied with the website structure, content, and the helpfulness for arranging learning schedules.