Chapter 16
Learner Acceptance of Using Virtual Patient Encounters to Train Foreign Healthcare Professionals in Swedish

Uno G. H. Fors
Stockholm University, Sweden

Olivier Courteille
Stockholm University, Sweden

ABSTRACT

Healthcare professionals need good communication skills to be able to communicate with patients. In such provider-patient communication, the professional needs to be well understood by the patient, but also be able to understand subtle parts of a medical history taking dialogue with worried, sick or mentally affected patients. Virtual Patients (VPs) – learning environments that simulate encounters between a patient and a physician – were used to prepare 26 immigrating professionals in Swedish for healthcare practitioners. The professionals were speaking nine different foreign languages and used two different VP systems to train patient communication. Almost all participants welcomed the use of VPs for training communication in healthcare Swedish and 19 of the 26 users indicated that they considered that VPs should be mandatory to use in future courses. Targeted individual training in provider-patient communication with Virtual Patients seems to be of great educational value and well accepted by immigrating healthcare professionals.

DOI: 10.4018/978-1-5225-2237-9.ch016

INTRODUCTION

Language Learning for Healthcare Professionals

Healthcare professionals like physicians, nurses, physiotherapists, dentists, etc. use their language and communication skills as a central tool in their profession. However, professionals that immigrate to a new country often face problems when meeting patients in their new home country, where they need to communicate in a new language. They also face challenges in understanding new cultural aspects of both the language and their profession. Further on, healthcare professionals not only need to be well understood by the patient, but also be able to understand and grasp very subtle parts of an illness history discussion with sometimes worried, sick and/or mentally affected patients (Berbyuk, Allwood, & Edebäck, 2005). It has also been found that healthcare professionals that have been trained in a new language often still cannot master to communicate with their patients (Burbano-O'Leary, Federico, & Hampers, 2003). This fact indicates the importance of that the professionals have good communication skills not only in everyday language, but also in healthcare specific terms and expressions. Additionally, learning to accurately interpret non-verbal behaviors in patients and conversely to exhibit appropriate behaviors is necessary to achieve efficient interpersonal communication (Hall, Roter, & Katz, 1988; Roter & Hall, 1989). Further, learning health communication in a new language and a new cultural context is even more challenging for adult learners and might require targeted individual training (Brown, Crawford, & Carter, 2006). During the recent years, computer-assisted learning tools have also been introduced for language learning (Lamy, 2012; Loucky & JoGakuin, 2012), some of them featuring so called pedagogical agents or virtual tutors to assist the learner (Hong, Chen, & Lan, 2012; Morton & Jack, 2005). Recently, there have been a number of studies published concerning also using virtual scenarios and/or virtual characters, where the learner might interact with, and "talk to" a virtual person to train language and communication skills (Johnson et al., 2004; Morton, Gunson, & Jack, 2012; Wauters et al., 2012). However, there seem to be few reports on the use of virtual characters to train healthcare communication skills using virtual cases or characters.

Virtual Patients for Learning

Virtual Patients (VPs) are learning systems designed to simulate clinical encounters between a patient and a healthcare professional in a realistic manner. VPs have successfully been applied in medical and healthcare education for a number of years (Devitt & Palmer, 1998; Ellaway, Poulton, Fors, McGee, & Albright, 2008). During the years, a variety of authoring and playback tools for VPs have been introduced, where most systems have a number of common features such as medical history taking (patient interview), physical examinations (inspection, palpation etc.), diagnostic tests (incl. X-ray and other imaging techniques), as well as features for suggesting an appropriate diagnosis and treatment (Bergin & Fors, 2003; Ellaway et al., 2008; Zary & Fors, 2003). Almost all VP systems are devoted to problem-based learning pedagogy, where the learner receives an initial short description of the actual patient case (like "a 40-year old woman with stomach pain"), but then is supposed to freely and actively select appropriate actions (ask questions, perform physical exams, order lab tests etc.) to receive enough information to be able to decide on diagnosis and suggest proper treatment. To promote learning, most systems also provide feedback to the user concerning the correctness and efficiency of the performed interactions as well as on suggested diagnosis and treatment (Zary, Johnson, Boberg, & Fors, 2006; Zary, Johnson,