A Game-Based Strategy for the Staff Development of Home Health Care Nurses

Home health care is growing as the lengths of hospital stays shorten, patients with chronic diseases live longer, and more people live into the eighth and ninth decades of life. This rapid growth has placed a demand on home care agencies to hire, train, and retain qualified nurses. Home care nurses see patients in home settings, which requires them to function independently, think critically, prioritize care, and make important decisions to improve patients’ outcomes while containing costs. In an effort to ensure that home care nurses are adequately prepared and trained, staff educators seek interactive methods of education delivery that attract and maintain the interest of adult learners. Some interactive teaching methods are simulation, case studies, group discussions, and games. This article focuses on gaming as one such teaching strategy that promotes active learning, develops critical thinking, and makes learning more exciting (Royse & Newton, 2007).

GAMES AS TEACHING STRATEGIES

Games are learner centered and interactive, and they create excitement and enjoyment. They have been used often and successfully as icebreakers in training sessions (Baid & Lambert, 2010). Research has shown that games can be effective for improving learning outcomes for nursing students and nurses in various health care settings (Boctor, 2013; Speers, 1993). Games have been found to improve knowledge retention, promote problem-based learning, and engage nursing students in their learning (Royse & Newton, 2007). Furthermore, the use of games in education has been shown to reduce stress and anxiety, increase engagement, and improve retention (Sealover & Henderson, 2005).

In Canada, a virtual serious game for community health nursing was developed based on the recognition that simulation technology had not addressed the learning needs of community care nursing students (Hogan, Kapralos, Cristancho, Finney, & Dubrowski, 2011). That virtual computerized game is interactive and can be played by multiple users. It incorporates a variety of community health problems and allows students to test their community health nursing skills and to reflect on various solutions to the presented problems (Hogan et al., 2011).

However, the use of gaming in education is not without challenges. Investing in the purchase of gaming software and the associated training in the use of the technology may be costly. In addition, games do not suit all learning styles; some participants may choose not to participate, whereas others become overly competitive, which can interfere with their learning (Boctor, 2013). Also, time constraints and logistics may be involved with distribution and...
execution of a particular gaming strategy.

**PERSPECTIVES OF HEALTH EDUCATORS ON EDUCATIONAL GAMES**

In the United Kingdom, Blakely, Skirton, Cooper, Allum, and Nelmes (2010) conducted a study using interviews (N = 13) and an online survey (N = 97) that examined the attitudes of health professions educators toward games. Thirteen participants were recruited from the University of Plymouth and 97 from the higher education sector via e-mail distribution lists and advertisements on websites (Blakely et al., 2010). The findings indicated that the perceived benefits of using games were the enhancement of student learning, enjoyment, and interest (62.3%) and interaction and participation among students (44.2%).

The following factors were identified as disadvantages of games as an educational strategy: the potential negative reaction of students, unwillingness to participate, and skepticism toward games (43.8%) and time constraints for the preparation and administration of the games (27.4%). Despite the positive perception of games by educators, the study emphasized that the use of games remains limited (Blakely et al., 2010).

**HOME HEALTH CARE CHALLENGES**

Nurses who join home health care agencies are faced with the need to adjust to and understand the home care environment, which is different from that of the acute care hospital. Home health care nurses care for patients with multiple comorbidities and polypharmacy. In addition, many patients live in poor socioeconomic conditions and face environmental, social, and financial challenges. A patient- or family-centered holistic approach is required when assessing and developing a plan of care for home care patients. A patient assessment is the key in collecting valuable information about a patient’s physical, psychological, social, financial, and environmental health. The initial assessment is the foundation for the plan of care developed and the services to be provided by the home health care agency. The challenge faced by staff educators is finding tools that are flexible and effective in training nurses who come from different clinical and educational backgrounds and have different skill sets.

**AN EDUCATIONAL GAME TESTED BY HOME HEALTH CARE NURSES**

This article describes an evaluation study that tested the feasibility of using the game Patient Assessment 1 as a teaching tool for home health care nurses. The study also evaluated learning outcomes and the learners’ levels of engagement and satisfaction with games as a teaching method. Fifteen home health care nurses who worked at a home health agency in the northeastern United States volunteered to participate in the 3-month study. Exempt status for the study was approved by the organization’s institutional review board.

First, a presurvey and focus group questions were developed. A 20-item survey was administered before the activity to assess learners’ knowledge of the material presented, as well as their knowledge and perception of games as a teaching–learning tool. After all the presurvey responses were collected, the nurses were directed to the online game (http://www.learningnurse.org/index.php/assessment/games). Both authors had previously tested the game to ensure the appropriateness of its content and difficulty level and found it to be free, simple, and easily accessible. The game produced computer-generated questions, with four multiple choice answers on health assessment. The questions were presented randomly so that each time the game was played, the player was not asked the same questions. There were 20 questions to answer per session, and one question was presented at a time. Players had 30 seconds to answer each question and received immediate feedback regarding whether the answer was right or wrong. If a question was answered incorrectly, the right answer and the explanation were presented.

At the end of the session, the players received a score (players’ scores were not recorded or disclosed for this study). The nurses were encouraged to play as many times as they wanted, with the goal of increasing their knowledge of the topic (patient assessment) and obtaining their opinions about the use of games for staff education. After completing the game, the participants completed the postsurvey.

The postsurvey tested knowledge of the material presented, as well as participants’ feelings toward games as a teaching and learning tool. A focus group discussion further examined learners’ feelings about games as a teaching method and the ease of learning by using games and sought recommendations for further use of games as a learning tool. The analysis was performed by comparing pre- and postsurvey results, and focus group responses were reviewed and summarized.

The authors acknowledge the study’s limitations of a small sample size, the use of one game, and the inability to electronically record how many times the game was played by each participant.

**SURVEY RESULTS**

In the postsurvey, 60% of participants found games to be very effec-
tive in nursing education, compared with 30% in the presurvey. Similarly, 60% chose games as their preferred learning method in the postsurvey, compared with 15% in the presurvey. Other preferred teaching methods identified were presentations, self-learning modules, and simulation. The average knowledge test score increased from 78% before playing the game to 89% after playing the game. Of the 17 knowledge questions, 11 were correctly answered during the postsurvey, compared with only four in the presurvey.

**FOCUS GROUP SUMMARY**

During the focus group discussion, participants stated that they found the game to be an enjoyable way to learn and that they learned without having to study. The participants also described the website as difficult to navigate and learn from initially, and they said that they would have preferred a more detailed rationale for the correct answers that were provided with the game. They also indicated that they would have liked a variety of games, including crossword puzzles and fill-in-the-blank items.

**CONCLUSION**

The educational game was positively received as a teaching method for home health care nurses. The nurses expressed their enjoyment of the educational game as a teaching tool, and there was an increase in their knowledge, as evidenced by increased knowledge scores on the postsurvey. Their attitudes toward games as an education strategy improved significantly.

The literature review and the results of this study suggest that games are a viable method of staff development for home care nurses. Educators and staff developers are urged to explore and implement interactive teaching strategies, including games. Further research is needed to create a game that is specific to the learning needs of home care nurses.

**REFERENCES**


