Integrating the Classroom, Clinic, and Use of Simulation to Prepare Students for Working with Individuals with SCI

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Background Information

- Students learn best through active engagement. Although experiences vary, practicing skills in clinical situations have proven to be an effective method.
- Practicing skills in a simulated controlled environment provides opportunities for students to receive feedback on their skills.
- Standardized patient experiences provide students with a safe environment to practice clinical skills in challenging situations. These experiences have been shown to have a positive impact on learning.

Course Description

- OT552 Interventions: Enhancing Human Occupational Performance is designed for second year OT students. Didactic classroom learning, practice with student peers and instructors, Fieldwork I, and standardized patient experiences are utilized to teach treatment planning and intervention skills.
- Individuals who have a spinal cord injury pose unique challenges for students from intervention planning to implementation. Students need to have a solid understanding of the symptoms and precautions. In addition, this population’s demographics include similar age ranges to current students and a higher percentage of males than females; these factors may pose unique psychosocial challenges to the student therapist.

SCI Lab Design: Integrating Class, Clinic, and High Fidelity Simulation

Class Lecture
- 2 hour lecture with OT from Magee Rehab Hospital, specializing in working with individuals with SCI

Magee Rehabilitation Hospital: SCI Unit
- Session is approximately 1 hour.
- 8 students observe an OT who is working with an individual with a SCI during an OT treatment session. Session includes an occupational task, and if possible, a functional mobility task.
- Students are encouraged to ask questions and interact with the patient and therapist during the session.

Lab Module
- 3.5 hour Lab Session
  - Practice with adapted equipment, analyzing use and possible client
  - Standardized Patient Experiences
  - 2 cases, followed by debriefing session led by faculty

Standardized Patient Scenarios

Lauren Nickelson: 30 year-old female who was diagnosed with a C6 spinal tumor. Her goals for this session include practice self-feeding/drinking using tenodesis. During the “activity” she will have an episode of autonomic dysreflexia, and students will respond to the emergency situation.

Jamie Sans: 25 year-old male who loves hockey and his girlfriend. He presents with a T10 spinal cord injury after being “checked” in a hockey game. Jamie’s goals for this session include dressing himself in bed in order to go to the gym; he requires assistance to transfer into the wheelchair. During the session, Jamie will ask questions about his sexual health; he is receiving IV antibiotics.

Summary

- Students’ desire to work with people with SCI changed after experiencing clinic and simulated experiences.
- Students reported being more satisfied with their teaching skills and assisting a person with an SCI in self-dressing, transferring to wheelchair, and assisting with self-feeding skills.
- Students’ perception of their communication skills, ability to provide client education and flexibility changed after simulated experience.
- Collaborating with clinic setting provides students with additional information that may impact the lab experience.

Pre/Post-Lab Survey Results (N=70)

- Students’ Satisfaction with Their Performance in Teaching and Assisting With…

Post-Lab Survey Results (N=132)

- Students’ Impression of Working With Individuals with SCI Prior to Lab (N=132)

- Students’ Perceived Comfort With His/Her Ability to Work With Patient with IV Attached to Pole

- Post-Lab Survey Results (N=132)

- 45% want to work with individuals with SCI as a career choice.
- 40% consider working with individuals with SCI as a career choice.
- 70% agree/strongly agree the clinic observation helped with their preparation for the standardized patient experience.
- 54% agree/strongly agree the lecture (alone) helped them prepared for the Magee Rehabilitation Hospital and SP encounter.

- 70% agree/strongly agree the clinic observation helped with their preparation for the standardized patient experience.

- 25% agree/strongly agree the lecture (alone) helped them prepared for the Magee Rehabilitation Hospital and SP encounter.

- 40% want to work with individuals with SCI as a career choice.

- 70% agree/strongly agree the clinic observation helped with their preparation for the standardized patient experience.

- 54% agree/strongly agree the lecture (alone) helped them prepared for the Magee Rehabilitation Hospital and SP encounter.