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Thinking Critically and Problem Solving Experiential Style

Elizabeth Smith

Middle Tennessee State University (MTSU), USA

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Corresponding author: **Elizabeth Smith**
Middle Tennessee State University (MTSU) USA
Email: Elizabeth. Ann.Smith@mtsu.edu

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Introduction

As a newly hired Assistant Professor assigned to teach Medical Nutrition Therapy 1 & 2 and Coaching and Counseling for senior dietetic students, I immediately began generating my vision and goals. They included providing hands-on learning experiences that allow students to confidently transition towards their dietetic internships after graduation.

I was extremely fortunate that the dietetic program incorporates experiential learning in their senior level courses. This type of learning perfectly aligns with my teaching philosophy and style. Additionally, I was fortunate that the previous instructor had developed an excellent curriculum as a foundation. This curriculum included using the university's School of Nursing high-fidelity simulation laboratory to complete case studies all taken from the Nelm's Medical Nutrition Therapy a case study approach, 5th ed.

The 16 students participated in three simulations during the fall and spring semesters. This brief seeks to summarize the simulation process and include a description of the third case study which was implemented in a novel and unique method. During the first two simulations, the students were assigned the role of Registered Dietitian (RD) or patient approximately 10 minutes prior to the start of the simulation. Students were assigned a specific case study one week before the simulation date allowing students ample time to prepare to play either role. All of these experiences allowed the students to work through and within the Nutrition Care Process including: assessment, diagnosis, intervention, monitoring, and evaluation.

These first two simulations included: a Non-Alcohol Fatty Liver Disease patient and a patient status post Myocardial Infarction (MI). The students were assigned one of the two roles for their first simulation and then this was reversed and they took on the opposite role the second simulation. The students had very positive feedback and comments following these simulations, which included a debrief following the enactment with the instructor of the course.

The third simulation, which had not previously been offered in this format, was a pilot approach of a case study that included a severe gunshot wound (GSW) victim. This patient was critically ill with a GSW to the abdomen (case study title- Metabolic Stress and Trauma: Open Abdomen). As opposed to one student acting as a RD and one as the patient, I asked one student to act as the RD and one was a dietetic intern. I then acted as a Physician Assistant (PA), who had recently started a Gastroenterology rotation. As the PA I was seeking detailed information about the nutrition support protocol that the patient had been prescribed.

During this simulation the students were provided with the topic in the Nelm's case study book one week prior to the simulation and both the RD and dietetic intern were provided with a chart note that the RD had previously written concerning the nutrition prescription for the patient. During this simulation, as opposed to the others which involved educating the patient, the students were forced to use critical thinking and problem solving skills to answer my questions about the total parental nutrition formula, the enteral nutrition formula and method used to feed the patient. Additionally, the students were asked questions regarding the caloric needs, how calorie needs were calculated, protein needs, ways the feeding could inhibit or expedite weaning from the ventilator and future plans for modifying the patient's feeding.

Following this case study simulation, the students responded with excitement and a feeling of accomplishment. Most students were aware that they would see similar situations in their internships and in the working world and truly appreciated this challenge.

This type of experiential learning took the senior level undergraduate students one step beyond their normal comfort level. Forced to work interdisciplinary and as a member of the health care team involved with total patient care, the students were put in a real life collaborative situation. Following this simulation, as with all experiences in the experiential course, feedback was solicited to continue to make improvements in the context and direction of the content and experience.

Reference

Nelms, MN. Medical Nutrition Therapy A case study approach, 5th ed.; Wadsworth: Belmont, CA, 2017; pp 325-336.