Hearing Voices: The Experience of Associate Degree Nursing Students to an Auditory Hallucinations Simulation

Sylvia Stevens
Nursing Program, Montgomery College, Silver Spring, Maryland, USA

Abstract

Background: Associate degree nursing students (ADNS) have limited exposure to persons experiencing the full range of alterations in cognition of psychiatric illness during their psychiatric mental health nursing rotation.

Objective: This qualitative study examines the experience reported by second semester ADNS after completing an auditory hallucinations simulation in the nursing skills and simulation lab at a community college in the mid-Atlantic.

Design: The study was reviewed and approved by the college Institutional Review Board. Guided by Grounded Theory, investigators analyzed the data from written reflective debriefing reports of the simulation in which students, working in pairs, one as the patient wearing headphones while listening to a streaming of auditory hallucinations, and the other as the nurse conducting a psychiatric nursing assessment of the patient. Students consented to have their written reports included in the study. Responses were reviewed for conceptual and thematic content using the constant comparative analysis method of Corbin and Strauss.

Results: Concepts identified included fear, distraction, frustration, empathy, patience, and understanding. Themes included attitude changes from skepticism about auditory hallucinations to acceptance of symptoms, therapeutic use of self, and keeping patient safe.

Conclusions: The auditory hallucinations assignment gives nursing students the opportunity to learn from a brief simulation experience about psychotic symptoms and assists in attaining knowledge, skills, and attitudes (KSAs) necessary for planning and providing care to patients with serious mental illness.

Introduction

Associate degree nursing students have limited exposure to persons experiencing the full range of cognitive distortions of psychiatric illness. Lack of acute care clinical placements, reduced dedicated psychiatric-mental health clinical hours in ADN programs result in limited opportunities to interact with patients during acute episodes of illness. Many concept-based curriculums create courses of related specialties e.g. geriatrics and PMHN, or pediatrics and maternal child nursing to give students more clinical experience but for shorter duration. Concept-based curriculums use clinical simulation to teach and then evaluate students' mastery of essential skills for working with the populations. Yet, despite using integrated concept models, it is impossible to expose students to every clinical syndrome in every specialty in a seven-week or even fourteen-week clinical rotation [1]. Yet psychosis, specifically the symptoms associated with acute cognitive distortions i.e. auditory hallucinations, is a common admitting diagnosis in the inpatient psychiatric care setting.

The majority of ADNS students as well as their BSN counterparts, are young adults who may know about people with mental illness only through media reports which tend to focus on the rare but extreme patients who commit violent crimes, and films portraying the mentally ill as bizarre and unapproachable [2,3]. This lack of real life exposure to people with mental illness contributes to stigma that generates negative feelings and attitudes.

Review of the Literature

When students complete their ADNS and attain licensure, they commonly are employed in acute care medical settings. Lacking real life or virtual experiences in caring for people with serious mental illness, acute psychosis specifically, nurses inadvertently contribute to poor health outcomes of this population [4,5].

"These inequalities have been attributed to a combination of factors including systemic issues, such as the separation of mental health services from other medical services, healthcare provider issues including the pervasive stigma associated with mental illness, and consequences of mental illness and side effects of its treatment." [5].

Virtual simulation can enhance student learning of mental health clinical syndromes and these scenarios may be designed and modified to offset limitations in clinical experiences [1,6]. Stigma among health professionals of patients with mental illness is an important issue relating to barriers of accessing care that clinical simulations can address.

Nursing educators, while embracing virtual simulation experiences in medical-surgical specialties, are less enthusiastic to develop and implement mental health scenarios for clinical learning. Reasons cited are lack of standard measures to evaluate how students implement the nursing process in PMHN simulations, and uncertainty about how to realistically portray patients with mental illness [1,7].

Nursing students, after spending four to seven weeks in mental health settings report having greater understanding of and improved attitudes toward patients who are mentally ill; the students are better equipped to provide care in a standard therapeutic milieu and

Corresponding Author: Dr. Sylvia Stevens, PhD, APRN, Nursing Program, Montgomery College, Silver Spring, Maryland, USA; E-mail: sylviarstevens@gmail.com


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one-to-one basis. Some students express relief even after one day on a psychiatric unit seeing and hearing with their own eyes and ears that people with mental illness are just like “us.” But the leadup to starting the rotation is fraught with misconceptions, fear, and apprehension [8]. Standard preparation includes classroom learning, lecture, case studies, post clinical conferences, and practicing one-to-one interactions with other students. While these measures provide some preparation, they are inadequate for the novice. For many students, reading and hearing about schizophrenia or bipolar mania and other PMHN concepts is difficult to transfer to real-life situations. Understanding the challenges of preparing students for PMHN clinical, nursing educators have developed and promoted realistic simulation scenarios to expose ADNS to the symptoms of mental illness that cannot be readily seen or heard e.g. sensory hallucinations, and symptoms of post-traumatic stress disorder. Using Deegan’s “Hearing Voices Curriculum” [9], Orr, Kellehear, Armani, Pearson, & Holmes [10], invited students to participate in a 45-minute simulation of wearing headphones playing simulations of auditory hallucinations while completing a set of required tasks of cognitive skills, and then going about their everyday activities until the recording ended. During the post simulation debriefing students were invited to discuss their reactions to the experience.

“The value of the experience was apparent in the students’ responses, particularly in expanding their understanding, personal insight and empathy towards voice hearers.” [10, p. 534]. Student evaluations indicated that, “the use of the voice-hearing simulation gave the students a glimpse into the experience of voice-hearing and provoked them to begin to consider the communication skills required in the future as practicing nurses.” (p. 534).

Similarly, Chaffin & Adams [11], found that after participating in the Deegan curriculum [9] of hearing voices in advance of their clinical experiences in traditional psychiatric settings, students were prepared to interact with patients with acute psychotic illness with more confidence. “While students were initially resistant to one-on-one interactions with psychiatric patients, the Hearing Voices simulation empowered them to overcome their own anxiety and focus on the patient.” [11, p. e302].

Other simulations models for teaching PMHN clinical concepts and skills include the use of standard patients (SP) to provide nursing students with opportunities to practice applying the nursing process in true-life situations with actors portraying patients with common psychiatric illnesses [1,7]. Standard patient PMHN scenarios give students an opportunity to apply the nursing process, and practice therapeutic communication techniques. The SP is a trained actor playing a role created around clinical situations that require students to respond, apply the nursing process, and demonstrate use of therapeutic communication skills. These SP simulations may be observed by peers and instructors who, during the debriefing part of the experience, offer feedback, ask questions, and encourage all participants to reflect on what occurred. It is the instructor’s role and responsibility to create a learning environment, especially in PMHN simulations, that is open, and nonjudgmental [12,13]. Participants, including the SP, are encouraged to reflect on what occurred, the goal of encouraging students to consider the aspects of their interaction that were successful and those that can be improved, and to confront preconceived impressions of people with mental illness based on stereotypes. Ultimately, sensitively guided debriefing carries the best opportunity for learning and skill acquisition [13]. During the debriefing process, regardless of the simulation format, students are encouraged to reflect on the experience of caring for a person with mental illness and how personal beliefs, fears, and assumptions become challenged and, possibly, modified in a safe, learning environment.

“...students overwhelmingly identified the post-interview group discussion as an important component of their overall learning about therapeutic communication.” [1, p. 110]. The debriefing process is considered the most essential aspect of learning, and what sets clinical simulations apart from traditional experiences [12,13].

Still some students may be intimidated by the close scrutiny of instructors and peers viewing a simulation in which they are the nurse. Another debriefing approach is the written reflection using open-ended questions and prompts to reduce a student’s anxiety, and to encourage more inward assessment of the experience. Just as with group discussions used in debriefing, no specific evaluative measures should be applied. Ulrich, Gillespie, Boesch, Bateman, and Grubb [14] used a reflective response debriefing format in a multi-site study of nursing students’ responses to a nurse-on-nurse bullying simulation. Students responded to a series of open ended prompts to elicit their experience of how they reacted to the simulated bullying situation. The researchers found that written reflections were effective in determining the many ways that students used assessment, taking an emotional inventory of their own and the subjects’ reactions presented in the scenario, and what possible interventions they would choose to address the problem [14]. Reflective writing debriefings encourage students to think about and respond from their own perspectives. The student chooses what to divulge from what they learned, and how, if at all, their attitudes, fears, and assumptions are challenged [13].

The purpose of this investigation, using a qualitative research approach, was to understand the experience of ADNS to an AH simulation from reflective debriefing reports.

Similar research using AH simulations have used quantitative data, supplemented by qualitative responses, but have been more focused on reenacting the experience of the patient trying to tackle everyday tasks while wearing headphones streaming the simulated AH [9,11,6,10]. With this design, the investigators sought to create a common post-acute care PMHN clinical situation to enhance student knowledge, skills, and attitudes (KSAs) toward the patient and the nurse engaging a patient with AH. The goal was to learn from the students’ reflective debriefing responses how they experienced the simulation, particularly how, if at all, their prior views of patients experiencing alterations in cognition were modified.

Method

Grounded Theory (GT), as described by Corbin and Strauss [15], was selected to provide the framework for the investigation. Grounded Theory is commonly employed in qualitative studies as a means to guide the investigator’s approach to the research question with a clear, unadulterated perspective and to be open to what the population of interest will reveal about the concepts. A qualitative study using GT allows the investigator to approach the area of concern with open-ended questions to learn from those who are living the experience.

The researchers requested and received approval for the study from the college Institutional Review Board. Using a convenience sample, second semester ADNS (N=70) at a mid-Atlantic community college with a concept-based curriculum, enrolled in a course-the
geriatric and adult psychiatric patient were invited to participate in the study. Although no demographic data was collected for the study, the student population is diverse along racial, age, and socioeconomic measures. Prior to releasing the assignment, all sections of the course received textbook readings, lecture, and video content on the patient with alterations in cognitions which included material related to sensory hallucinations. Students gave consent to have their written responses reviewed and included in the study (Figure 1). Students accessed the AH simulation in the program’s nursing skills and simulation center, starting with a printed pre-briefing packet (Figure 2).

Working in pairs, students alternated roles of the patient and the nurse. As the patient, presenting for a first post-hospitalization appointment, the student wore headphones and listened to prerecorded statements simulating AH. While the other student in the role of the nurse was attempting to interview the patient as part of the follow up visit after hospitalization.

![Figure 1: Students response to the auditory hallucinations simulation.](image1)

![Figure 2: Students accessed the AH simulation in the program's nursing skills and simulation center.](image2)
As the nurse, the student attempted to interview and conduct a psychiatric nursing assessment, using a standard tool from the course syllabus, of the partner who was wearing the headphones streaming the AH content. After the streaming of the AH completed one cycle (approximately 10-15 minutes), students switched roles and repeated the assignment.

While in the simulation setting, course faculty and/or lab staff were present to provide guidance and, if necessary, comfort students who experienced distress during the assignment. One student completed the assignment, but after leaving the nursing simulation lab, became emotionally distraught requiring lab staff assistance to process the experience before leaving campus. The student referenced this episode in the debriefing report.

Each of the pair of students completed a written debriefing report after the simulation which they submitted on the course Blackboard site, through SafeAssign technology.

Students responded to open-ended questions and prompts on the debriefing assignment which encouraged them to consider their personal reflections, identification of barriers to effective communication (as the patient and as the nurse), and how the simulation altered, if at all, KSAs about the patient with auditory hallucinations (Figure 3).

Review for conceptual and thematic content was conducted using the constant comparative analysis method of Corbin and Strauss [15] to understand how ADNS experience this starkly realistic simulation of psychosis. Course faculty shared the responsibility of reading and giving pass/fail credit for submitting the reports. One investigator was responsible for the coding and sharing her analysis with the other investigator.

The data was coded using the multi-level analysis method of Corbin and Strauss [15]. The analysis began with the first reflective debriefing report submitted with a line by line review of the written debriefings. Using the same review technique, each successive debriefing was compared and contrasted with the previous ones which eventually led to identification of concepts and themes of the experience of the AH simulation. As the process continued, the comparison of debriefing reports yielded similarities that were saved as first level concepts; this process of reading, comparing, and identifying new concepts continued until no new data or concepts emerged. The primary investigator determined that saturation of data had occurred after reviewing 37 debriefings.

Findings

The reflective debriefing analysis yielded data consistent with other studies of AH simulations with pre-licensure nursing students [11,6,16,17].

However, this study did not use the Deegan Hearing Voices Curriculum [6] with students completing a series of tasks at stations while wearing headphones streaming the AH simulations. Rather, this study sought to create a clinical situation with students role-playing a patient and a nurse during a follow-up visit after acute care treatment. The investigators wanted to design the simulation to replicate a typical clinical encounter to understand how each person in the scenario experienced the challenge.

Concepts identified in the reflective debriefings from students as the patient were fear, distraction, and frustration, and, as the nurse, empathy, patience, and understanding. Themes included attitude changes from skepticism about auditory hallucinations to acceptance of symptoms and patient, therapeutic use of self, and keeping patient safe.

NURS 126 Auditory Hallucinations Simulation
Debriefing Guidelines

The assignment is a simulation experience in the nursing lab. You must attend with another student and work together. Bring your own headphones and copy of this document to the lab. Finally, bring your lab tracking form to be validated by NSSC staff.

(Do not wait until the final days of class to complete as the NSSC resources are strained at the end of the semester).

Write a brief summary of your impressions of the experience and address all prompts on this debriefing guide. Include any cognitive, emotional, physical and social challenges you encountered while participating in the simulation either as the patient or nurse. This is a reflective writing assignment; write only about how you reacted to the simulation.

1. Identify 2 barriers to effective communication you experienced during the simulation. How did you try to overcome these while acting as the patient? The nurse?
2. How, if at all, did this simulation experience alter your understanding of the patient experiencing auditory hallucinations?
3. How will you apply this understanding in your work with patients experiencing auditory hallucinations?
4. Report should be written in APA format, typed and submitted to the course Blackboard site no later than (see due date on reading guide)

Student #1 ___________________ Student #2 ___________________
(Each student submits own report)

Figure 3: Knowledge, skills and attitudes about the patient with auditory hallucinations.
AH simulation, as the reflective responses indicate, is an effective way to promote empathy. As one student wrote, "The simulation made me empathize with the patient that has this simulation as their reality. I now know that the patient has no control over the voices in their head, unlike me who could just hit stop or pause."

**Patience**

The students reflected on the importance of patience when working with an individual experiencing AH. Like empathy, patience cannot be taught through traditional methods and is acquired by a nurse through life and clinical experiences. But as inpatient psychiatric settings are increasingly reserved for the most acutely ill patients, even the experienced nurses may have their patience eroded. Patients with acute psychosis are particularly aware of being dismissed or ignored because they require more time and attention to convey their needs. The AH simulation is a beginning learning experience to underscore the need for the nurse to use patience during the assessment process to promote individualized patient care. "When doing an interview or assessment on a patient I will have to make sure I stay calm and supportive of the patient by being relaxed and patient. Allowing them to answer the questions when they are able to. I also realized that I will need to repeat questions multiple times in order for the patient to hear what I am saying over the hallucinations."

**Understanding**

The AH simulation promoted students' understanding of schizophrenia and mental illness in general as indicated by the reflective responses. "It has opened my eyes to the fears and discomfort associated with dealing with any kind of condition. Auditory hallucinations, visual hallucinations, can make simple tasks such as an interview very difficult for the patient. It is important that nurses are compassionate and learn to be patient, so they are better able to treat and calm the patient." Understanding that patients with mental illness have symptoms that cannot be palpated, visualized or measured through a diagnostic lab test is essential for nurses to deliver effective patient care. Playing the role of the patient having the symptoms and then being the nurse conducting the interview, enhanced understanding of the challenges and the need for the nurse to apply this knowledge when implementing care. "I think the simulation was very important because it changed my understanding of people with auditory hallucinations, not that I thought they were pretending to hear voices, but it was hard to put myself in their situation. So, the major point that changed for me is that even though I do not hear voices, for the patients they are very present."

**Themes**

**Attitude changes from skepticism about auditory hallucinations to acceptance of symptoms and patient**

In the majority of the reflective responses, students commented about how their attitudes about people who ‘claim’ to hear voices changed from skepticism and disbelief to acceptance. This finding underscores the importance of simulation scenarios that are realistic presentations of what actual consumers describe. "Just because they have mental illness does not make them bad people, and I need to keep that in mind. I also want to make sure that I get them in a quiet place so that the voices do not get louder, and the person can try to focus on me. I can understand why they have outbursts and talk to the voices in their heads." Attitudinal changes are significant to the student's understanding of people with auditory hallucinations.
nurse's willingness to interact with patients during acute episodes of mental illness. Accepting the patient and their symptoms contributes to the reduction of stigma and stereotyping of patients as bizarre and dangerous. "This experience made me have a different view for patients experiencing auditory hallucinations. I thought that maybe these voices could be stopped at any point, and that the patient is in control of what is going on during hallucination. I thought that it takes will power to overcome these voices, but I was wrong." And one student admitted, "This exercise helped to break down a particular stereotype in my head, which is all patients with schizophrenia are just simply crazy. They are not crazy. They are people just like you and me suffering with, at times, a very debilitating disorder."

Therapeutic use of self

The AH simulation reinforced the importance of the nurse-patient relationship through the therapeutic use of self as defined by Travelbee [18], "the ability to use one's personality consciously and in full awareness in an attempt to establish relatedness and to structure nursing interventions" (p 19). Similar to empathy and patience, therapeutic use of self is acquired through life and clinical experience. In nursing using self is done almost unconsciously when responding to patient discomfort and suffering. In PMHN use of self is promoted through examination of and awareness of one's own biases, fears, and assumptions. The AH simulation caused many students to be aware of how important it is to be genuine, empathic, and understanding of the patient having AH in order to convey interest and caring. One student related a personal experience that had influenced her view of people with mental illness which, unfortunately, ended with the person's suicide. In the reflective debriefing, the student incorporated this self-awareness and the importance of not letting personal biases influence the nurse in the moment with the patient. "Acknowledge what they tell me. Not being judgmental. Hearing voices is beyond their power. I'm determined to be there for the patients who hear voices, acknowledge and understand them, accommodate with quiet and relaxing sanctuary, listen to them, if possible distract them tactfully, engage them, and bring them to reality." Using self therapeutically as a tool fostered a connection with the patient that can promote trust and cooperation. "Also understanding that there may be a fear or shame that comes with these voices is important to remember. This will help me to treat and care for this patient as someone who is suffering with schizophrenia, and has more dimensions than just that aspect, not simply labeled schizophrenic."

Keeping patient safe

A common consideration of the nurse was patient safety as a priority nursing assessment.

After the first-hand experience of AH through the simulation, the students became aware of how frightening it is for the patients plagued by these symptoms. The simulation broadened their understanding of how patients who have AH are at risk for self or other inflicted harm, and how they are distracted from attending to potential environmental hazards. Students also reflected on assessing adherence to medication as a measure to improve patient safety. "In the future if I am working with a patient with auditory hallucination, I would probably try not to bombard them with a million questions because they already have a lot of information to process. My primary goal would be to aid them in getting the right type of medication/treatments to relieve the hallucinations as I would think the longer they remain having them the higher their risk for suicide." Some students began to plan strategies to reduce the barriers to communication by suggesting moving the patient to a less stimulating environment, using brief and to the point statements, allowing more time for the patient to respond, and discovering the benefits of silence to convey acceptance and patience. Of great importance to their work as nurses in any setting, is that students learned to ask about the content of the AH i.e. what are the voices saying, to assess for commands of self-harm, which is key to patient safety. "If I ever take care of patients with schizophrenia, I will be very patient in communicating with them. If the patient doesn't answer my question, I will repeat it to them. I will ask them about what they are hearing, what are they telling him/her to do. I will ask them if the voice is telling him to hurt himself."

Discussion

The AH simulation and written reflective debriefing were effective tools to promote the KSAs of caring for patients with mental illness. Participating in a modified version of Deegan's curriculum [9], in which students alternated roles as the patient and the nurse during a hypothetical post-acute appointment, students had what may be their only exposure in nursing school to the most severe and debilitating symptoms of mental illness. The simulation scenario is starkly realistic but when presented in the safety of the nursing skills and simulation lab, allowed students to briefly enter the world of a patient with schizophrenia as well as that of the nurse seeking to provide care. Using written reflective debriefing in place of instructor mediated led group discussion provided a non-threatening method for students to consider the impact of the experience on their learning. Students demonstrated that they accepted the patients' symptoms as real, when before the simulation they were skeptical or disbelieving. This is consistent with reports of other studies which used virtual simulation including role-playing and standard patients [1,7,11,6,10,2,16,17].

In their reflective debriefings, students made connections between being in the role of the patient and what they observed as the nurse of the patient's sensory disturbances and communication difficulties. This experience promoted a key skill of the psychiatric nurse as described by Hildegard Peplau (a psychiatric nursing trailblazer), the participant observer [19], a key element of the nurse-patient relationship. While in the role of the nurse, students described being acutely aware of the patient's level of distress, how that was impacting the interview, and what tools and capacities they had to engage the patient. Simultaneously, and in confirmation of Peplau's concept, the students were aware of themselves, their reactions, and how they would convey respect and caring to a patient no matter how extreme their statements or experience. Finally, by gaining necessary KSAs for working with acutely ill psychiatric patients, the students expressed confidence in their ability to engage and care effectively for them.

Alterations in the nurse's KSAs occurs over time through life and clinical experiences. Henderson, Happell, & Martin [20] demonstrated that positive clinical experiences in mental health settings contribute to students gaining KSAs, as does quantity of theoretical learning. Nursing is a humane, interactive profession which incorporates these three essential components in every patient interaction. Nursing educators should seize opportunities to maximize student preparation to competently and compassionately care for people with mental illness through realistic scenarios which promote and assess student learning in a safe and sensitively managed environment. Despite the brevity of the assignment, student reflective debriefing comments...
indicated how significant the AH simulation assignment was to their learning about people with alterations in cognition. Future research may include a pre and post assignment survey to determine how, if at all, students applied the acquired KSAs in the acute care setting. Additionally, the assignment may be incorporated into continuing education or competency curriculums in medical surgical settings to reacquaint nurses, many years removed from their prelicensure education, to the assessment process, communication techniques, and application of the nursing process with patients experiencing alterations in cognition. As one student stated succinctly, "Even though I learned, read about and heard about auditory hallucinations before this simulation experience, I never thought that patients are possibly going through this kind of horrifying experience. Listening to the auditory hallucination was quite an eye-opening experience.”

Conclusions

Virtual simulation is an effective tool that is increasingly incorporated into clinical learning in ADNS programs. Psychiatric-mental health faculty lag behind their colleagues in medical-surgical specialties in developing clinical simulations to teach and assess the necessary skills of caring for psychiatric patients. As this study demonstrated, using role-playing with an AH simulation promotes important understanding, interpersonal empathy, and patience so necessary for functioning with this patient population, not only in PMHN settings, but in medical settings as well.

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Competing Interests

The author declares that no competing interest exists.

References
