

Providing Authentic Learning Experiences About Parkinson's Disease: Bringing Humanity into the Classroom

Margaret J. McCormick, MS, RN, CNE
Towson University, Maryland

Ingrid Pretzer-Aboff, PhD, RN 
Virginia Commonwealth University, Virginia

Donna Hood, PhD, RN 
Louisiana Tech University, Louisiana

Gwyn Vernon, MSN, RN, CRNP
University of Pennsylvania, Philadelphia

Abstract: Nursing faculty adjust teaching strategies to create best practices while balancing individual needs of students. They attempt to incorporate compassionate care for persons with Parkinson's disease into their curricula, yet no studies were found on meaningful strategies. A study was done with four universities in which students participated in in-class interviews, assigned readings, and guided, reflective journals. Broad themes emerged: lack of clinical exposure to persons with Parkinson's disease, shattering stereotypes, and the importance and power of a positive mindset of persons with Parkinson's disease. This study illustrates an approach of incorporating the patient human experience into meaningful teaching experiences for students.

Keywords: Parkinson's disease; flipped classroom; empathy; caring; nursing education

Advances in medicine have allowed people with Parkinson's disease (PD) to live longer while increasing the need for complex health care. PD is a chronic progressive neurological disease that affects approximately one million Americans each year and is estimated to affect 6.2 million people worldwide by 2040. (Dorsey & Bloem, 2017; Global Burden of Disease 2016 Neurology Collaborators, 2017). Global and country-specific data show that

neurological disorders are an important cause of disability and death (Dorsey & Bloem, 2017). The increasing number of people diagnosed with PD are exacting an enormous human toll not only on individuals living with the disease, but their caregivers (Bunting-Perry & Vernon, 2007). This creates a priority condition for nurses to gain expertise in PD care and improve the allocation of resources for patients and their families.

PD often causes a decline in the quality of life as patients gradually lose their ability to maintain safe gait and balance, dress, feed, or care for themselves. Most often the motor difficulties are compounded by the non-motor features affecting one or more areas of function, including sleep, cognition, neuropsychiatric, autonomic, vision, or olfaction (Vernon, Bunting-Perry, & Dunlop, 2012).

People with PD have increasingly complex medication and nursing regimens as the disease progresses. The medications help prevent complications of immobility and dysphagia and therefore require careful and prompt timing. Magdalinou et al. (2007) found that medications used to control PD symptoms were abruptly stopped in the hospital 74% of the time, administered incorrectly 55% of the time, and that hospital staff followed the at home prescribed regimen only 20% of the time. This resulted in longer hospitalizations and more complications such as freezing, falling, and choking (Aminoff et al., 2011).

Nurses in every health-care setting will be called upon to care for those with PD due to its high prevalence. However, little attention has been focused in nursing curriculum on the topic of Parkinson's and more specifically there has not been research to determine how to best teach this content. This paper will present a novel method to teach nursing students how to recognize PD care issues, prepare for clinical practice, and communicate clearly while understanding the human experience of people who are living with PD.

Background

The Edmond J. Safra Visiting Nurse Faculty (EJSVNF) Program at the Parkinson's Foundation, is an experiential immersion course for nursing professors specifically addressing the complex nursing care PD requires. Despite the high incidence and prevalence of PD, a 2007 study by Vernon & Bunting-Perry (2010) reported that up-to-date, evidenced-based content on PD was not commonly included in nursing school curricula. The EJSVNF was developed to educate faculty and encourage curricula development on PD. Faculty professors participating in *the scholars program* became advocates for curricular change upon completing the program. Although 70% of surveyed faculty felt a lack of knowledge about PD and confidence in teaching about PD prior to participating in the EJSVNF, 100% stated that they left the program with a heightened sense of the complex care of the person with PD and confidence to

implement curricula change (Vernon & Bunting-Perry, 2010).

The authors of this article, graduate scholars of the EJSVNF program, were interested in studying the effectiveness of a rarely used educational technique in classroom settings, that is, an interview of a person living with PD. A pilot study by one of the authors preceded this current multisite study. Funding was granted through the EJSVNF at the Parkinson's Foundation for both the pilot project and current study.

This article describes the study's method, processes, data analysis, and discusses the reflections of students, faculty, and patient interviewees. It presents a model for teaching nursing students about other chronic disorders and the human experience.

Literature Review

Nurse educators face the challenge of effectively transitioning students from classroom and supervised clinical activities to professionals who provide direct patient-centered care. (Dariel et al., 2013). They are also finding a need to rethink their pedagogy and consider how teaching and learning strategies can affect the classroom environment in relation to the current generation and a diverse student population (Dariel et al., 2013). Today's student nurses may be not only culturally diverse, but many are older or second-career students. Conventional teaching strategies such as lectures and PowerPoint presentations often fail to engage the individual learner by silencing the student's voice. This generation prefers interactive processes which are more compatible with the way they receive information, such as with computer technology and YouTube videos. Today's students also need to gain collaborative skills to practice in an ever-present interprofessional environment (Gunaldo, 2015; Pretzer-Aboff & Prettyman, 2015).

Education theory describes active learning and collaborative learning as principles of good teaching (Chickering & Gamson, 1987). Active and collaborative learning styles have been shown to change the attention span of the learner, engage the learner into the experience, and provide learning stimuli that meets the needs of the student in today's generation (Fitzpatrick 2017; Wang & Geale, 2015; Zori, 2016). Active learning strategies can attempt to mimic reality, help link theory to practice (Galloway, 2009; Nehring & Lashley, 2010), and assist in developing interpersonal skills,

a competency necessary for readiness to practice. Importantly, it can be adapted to online learning with the right planning.

Reflective journaling is a teaching strategy used to gain insight into student thinking (Lasater & Neilson 2009; Tanner, 2006). Journaling can reinforce learning beyond the educational domain and influence professional development (Lasater & Nielson, 2009). A reflective assignment can accommodate students with different clinical reasoning skills and helps them develop while gaining feedback on their skills (Dimitroff, 2018; Dimitroff et al., 2017; Fitzpatrick et al., 2019; Lasater & Nielsen, 2009; Raterink, 2016). Humanistic and altruistic values can be promoted by nurse educators when they encourage the extension of self and the use of holistic nursing care. The development of a *helping-trust relationship* between the nurse and patient is critical for personal caring according to Watson (Neil & Tomey, 2006).

Flipping the classroom, described by Walvoord and Anderson (1998), proposes the students gain exposure to material prior to class. Then during class their focus is on processing activities, synthesizing and problem-solving. Considering the lack of evidence-based curriculum on PD, and today's student needs for active, collaborative education to improve their interpersonal and clinical reasoning skills, this study utilized many education principles in this unique experience for the student.

Method

Design, Sample, and Setting

A pilot study was completed at Towson University Department of Nursing in Baltimore, Maryland. Incorporating lessons learned during the pilot study, an additional grant was awarded by the EJSVNF at the Parkinson's Foundation to expand and replicate this qualitative research study to include nursing programs with undergraduate and graduate level students from different geographic areas within the United States.

Following the pilot study which included a cohort of a total of 120 students at the undergraduate level, a committee of authors gathered and discussed adapting the pilot teaching protocol for use in a multisite study. The goal of this study was to find a student-centered approach to improving PD education. A qualitative, descriptive research approach was chosen. Four nursing education sites were recruited and agreed to participate.

In the multistate study, cohort sizes ranged from 20 to 40 students in a class plus the interviewee and faculty. The mean cohort was 35, with a total of 150 nursing students at four different universities within the United States. One program had 20 students in their classroom while the remaining students were in another room and listened and watched on a monitor. The reason for this approach was so not to overwhelm the interviewee. Students were currently enrolled in associate and baccalaureate nursing programs as well as advanced programs that prepared nurse practitioners for practice in adult gerontology.

Protocol

Preparatory steps in the protocol were followed by each of the sites (Appendix). For faculty, a guide of readings, and access to national resources for patients available to use for the interview. SMART objectives included: (a) Exploration of a teaching method that would facilitate a student-centered educational program for developing expertise in PD nursing care; (b) Standardized protocols to create a successful in-class interview experience for nursing students; (c) Data analysis of multilevel nursing programs and the impact of the in-class interview on student learners, faculty, and people living with PD; (d) Quality improvement assessments to provide improved educational outcomes through active investigation, reflection, and discussion with a person living with PD in appearance, behavior, and language.

Ethical Considerations

All sites obtained their university institutional review board's permission to proceed. Nursing students agreed to participate. There were no exclusions based on age, gender, race, or ethnic origin. Students, faculty, and interviewees signed letters of participation and understood that their involvement in this research was voluntary.

Instrumentation

In the current program, students were given a preparatory reading assignment prior to participating in the patient interview process (Appendix). They were asked to construct between two and four interview-style questions for patient visitor(s) from a PD registry. The faculty analyzed the pilot interviews and categorized the student-patient questions and selected conversational and open-ended

queries that focused on the interviewee's initial diagnosis, challenges, care issues, medications, and patient preferred learning style.

On the day of the in-person patient interview, faculty arranged chairs in a circle for the interview and met the patient upon arrival, attentive to his/her safety and comfort. One hour was allotted for the process which consisted of a brief introduction, the patient experience (30 minutes) and the student interview. This was followed by 20 minutes for faculty-led debriefing to give student and guest patient an opportunity to discuss the process. Key points for the debriefing included were: importance of medications given on time, stages of disease process and patient care, care partner strain, and challenges and barriers to care across the disease progression. Changes in family dynamics and the importance of nursing leadership in advocating for patient services and provision of education for patients and families were discussed.

Following the in-person interview, students completed the reflection assignment. Reflection prompts were based on the work by Lasater and Nielson (2009) which incorporates Tanner's 2006 Clinical Judgement Model (Appendix). Student participants, faculty facilitators, and the person with PD completed the reflections which were pre-numbered to ensure confidentiality.

Data Analysis

A qualitative, descriptive approach was used to analyze student, faculty, and PD disease participant reflections and produced a rich, multi-angled description of the classroom interview experience (Ghorbani & Matourypour, 2020). This allowed the research team to develop an understanding of the experience through the lens of the students, faculty facilitators, and the persons living with PD.

Using a process of reading and re-reading student written reflections, the responses were coded by one reviewer and grouped with the analysis staying as close to the data as recorded by the participants. Concurrently, the student reflections were analyzed by a second investigator. Dialogue between reviewers continued until consensus was reached.

Data were examined from within and across four different nursing education programs—ADN, BSN, accelerated BSN, and graduate. Nursing students from all levels, associate degree, baccalaureate as well as graduate level, expressed an overall lack of exposure in acute care setting with caring for people living with PD. A few students

had personal experiences from family members or acquaintances. Several referenced that their primary exposure with individuals living with PD were in the media.

Results

The investigators identified pertinent findings from the data and organized it into three broad themes to describe the interview experience from the perspective of the nursing students, faculty, and interviewees with PD: lack of clinical exposure to those with PD, shattering of stereotypes, and the importance and power of a positive mindset of those living with PD. Additionally, students provided feedback on their experience and provided recommendations for the future.

Lack of Clinical Exposure

Most people with PD are cared for in the outpatient setting, and if admitted to acute care, the PD is a secondary diagnosis. Students from all levels of nursing education spoke of an overall lack of exposure, although a few students had personal experiences with family members or acquaintances. Several students referenced their primary exposure to individuals with PD being in the media. This lack of clinical exposure and limited time covering PD in the nursing curriculum led to more of a generalized *textbook* understanding of the disease. However, when pre-interview reading was followed by the interview experience with a person living with PD, students were able to experience "having the person's story come to life." Students were able to augment what they read or heard in the classroom with "real life experience to attach to the information." The face-to-face interview time was "a personalized learning experience" that "helps me remember . . . because I can see [their] face in my mind." One student's connection to this experience was described as feeling "emotionally engaged."

Shattered Stereotypes

Despite preparatory readings, seeing and talking with a person diagnosed with PD outside of a clinical setting revealed prior erroneous assumptions and "shattered the stereotypes." The range of differences and "the uniqueness of each Parkinson's patient" was clearly demonstrated and able to be compared to "textbook and articles about PD." These interview experiences opened the eyes of students to a "new level of humanness that we

don't usually get in lecture." There was the realization that everyone's experience with PD can be vastly different. The experience provided a glimpse into the impact of PD on daily life and real-life challenges. There was the reminder that "these are more than patients with a diagnosis, but humans with life-changing diseases."

Positive Mindset

Many students reflected on the "positive mindset" of individuals with PD interviewed and commented on the individual's willingness to be incredibly open and transparent about their struggles. Personal stories had a powerful impact on the nursing students learning and understanding of the PD experience. One student retold a particularly moving story and shared her thoughts:

The personal interviewee related a story about being in the grocery store and having a bad day. He said "he was having difficulty getting his money out of his pocket. The line was building up behind him, he was nervous, and a man in line made a rude remark about him taking too long. The patient told us that it is important to keep an open mind and be nice in life, because you never know what the guy in front of you is experiencing. For me, I think that this was the main takeaway from the interview. Being a nurse, you need to enter each situation with a positive open mind because you never know what that person is going through regardless if it is PD or any other disease/disorder.

Several students spoke of this story and how it impacted them on a personal level. The transparency of daily struggles was evident and relatable through the story of this interviewee. Through storytelling, the students learned the importance of patience and kindness. One expressed, "This interview changed my outlook going forward with nursing."

Students were surprised to hear the difference a nurse can make in the life of a patient with a disease such as Parkinson's, and the respect the interviewee had for nurses. This brought to light the importance of each aspect of nursing: the knowledge, the skills, and very importantly, attitude or the nurse's personal approach to each individual's human experience.

Description of Interviewees' Reflections

A common finding from the interviewees with PD was their desire to give back by telling their story

and helping nurses "understand the challenges and joys of taking care of us old "Parkies." They had an important message to share with "any individual who will listen." Many interviewees felt that they "learned from each other too."

Although they were "honored" and eager to be involved in this interview experience, several were nervous with concerns of "shaking too much," not projecting their voice, and not speaking clearly. However, at the conclusion, they were happy with the results of the interview experience and were pleased to get to tell their story. In reflection, the interviewees expressed a desire to participate in this activity again and allow more time because there were "so many things not mentioned that are critical to day to day living."

Description of Faculty Reflections

Faculty facilitators were pleased with the overall experience of their students and the PD visitors. All students were prepared through reading about the disease, but this experience drove home to many of the students what it is like to live with a chronic neurodegenerative disease. One faculty shared that, "People with PD were able to paint a picture of their experiences living with this disease, better than I could in a lecture." Faculty noticed that, "Students were very caring and attentive and respectful," and "they were riveted and interested while the person with PD spoke."

In order to create an authentic learning experience in the classroom, preplanning should be conducted. PD registries can connect a nursing faculty with a participant/participants who are willing to share their lived experience with students. Advanced notice and sufficient time must be given to the participant in order to plan for the visit. Faculty should explain what will happen during the class, including the number of students and length of time for the interview so that the participant feels at ease with the experience. Anxiety and stress can worsen tremors (Vernon & Bunting-Perry, 2010) therefore, faculty should take steps to reduce this risk. For example, faculty can meet the participant in the parking garage of the university and walk them into the classroom so that they do not get lost or fall. It is extremely important that safety is included in the pre-planning of this educational experience.

Nursing faculty described their experience of anticipating potential needs of their study participants with PD that ranged from directions and parking to concerns about possible falls to

potentially “inappropriate/overly personal questions” from the students. Faculty reflected on practical considerations to think about when planning a future event, including making sure that they “use microphones for each of the speakers” and “being a little more insistent that the speaker uses it,” providing water and comfortable seating and reassuring the person with PD that if they feel uncomfortable to let them know promptly.

Due to the uncertain nature of PD, one facilitator suggested having “a backup plan in case your speaker cannot make it.” For interviewees, who have never presented to students before, one faculty facilitator suggested “giving them a list of questions ahead of time” could help them “feel more prepared and confident in their answers.”

Discussion

Nursing faculty are constantly challenged to develop meaningful learning experiences for a diverse group of students, while incorporating the changing landscape of medical care. Also, in trying to balance the science and technology of nursing, it is important that the “caring” and empathy toward patients not be overlooked. Empathy is a fundamental component of the personality of health professionals because it allows them to establish an effective therapeutic and helping relationship with people (Percy & Richardson, 2018; Petrucci et al., 2016; Sarmiento et al., 2017). According to Hood et al. (2018), “understanding an experience from a patient’s perspective is the hallmark of empathy” (p. 235).

In this study of an educational strategy, that is, the personal patient interview and reflection assignment, students remarked on the emotional engagement, personalized learning experience, uniqueness of each patient, and a “new humanness we don’t get in lecture.” They shared the powerful impact the interview had on not only their understanding of the daily challenges of PD but reported an enhancement of their patience and kindness. Students developed increased self-awareness and strengthened connections with their colleagues during the discussion process. They experienced faculty and student colleague feedback which allowed for self-reflection.

This learning experience bridged the gap between the student, learning experience and the person living with PD. It helped dispel stereotypes and allowed students to engage in effective reasoning in managing the emotional aspects of PD care

delivery by developing fundamental knowledge about the disease, medications, and emotional issues. Students reported that: “It opened my eyes and I gained a new perspective about what it is like to live with the disease.” Students noted that PD affects two-way communication because of hypophonia (diminished volume), festination (shortened or accelerated speech pattern), muscle rigidity resulting in masked expression, and loss of social gestures and body language. In addition, bradyphrenia (slowness of thinking) and micrographia (smallness of handwriting) are commonly reported symptoms.

The personal interviewee taught the students that nurses can make a difference in someone with PD and students felt empowered to help patients take charge of their own health. The interviewees felt honored to participate in this activity and faculty were pleased with the activity and its outcomes for students. While there were some challenges, all can be reasonably addressed, modified, and in the future anticipated.

This educational strategy highlights the need to understand the social, mental, and physical effects of a disease. The stories provided the students with the ability to gain empathy about what it was like to be newly diagnosed” and “see the whole picture of living with a chronic disease.” Too many courses made their learning about PD “a mile wide, but an inch deep.” Students stated that they gained an increased awareness and sensitivity to the daily struggles of the disease and understood the critical importance of timing for medications.

Students were queried about recommendations for improvement for this experience. One suggestion was to offer this type of experience and include a panel of individuals with different neurological diagnosis or different chronic diseases to compare patients’ experiences. A group of students who were in the large class felt that the experience of being in the room with the interviewee rather than next door on a screen was more valuable.

The experiences were greatly valued by both the nurse practitioner students and undergraduate students. However, there was more of a focus on cost of care and management of medications in the nurse practitioner cohort. After hearing about the importance of exercise classes in the patient’s life, one nurse practitioner student wanted to know whether Medicaid or Medicare covers any portion of these classes. Another graduate student reflected on how this experience would inform her

management of PD patients in her future practice and wrote, "I think this will change my practice as a Nurse Practitioner by allowing me to have more awareness about symptoms, which patients are at risk for falls, and how crucial is it to administer medications properly and order them at the correct time."

Limitations

For the most part, the challenges can be easily addressed and easily modified in further work using sound pedagogy. Commonly, students remarked on the low voice volume of patients, yet realized that it made the hypophonia of PD memorable. This challenge in the classroom could be modified perhaps by displaying the voice with and without the microphone for highlighting the important feature of communication in the care of patients. Since bradyphrenia (slowness of thought) is often a feature of the disease, students learned to give the interviewee time to gather their thoughts and not rush them or "put words into their mouth."

Some students felt challenged by the fear of asking a question that would make the patient uncomfortable even though the questions were analyzed from the pilot experience. This did not seem to be related to student level as one might expect, but perhaps fear of embarrassing a patient in front of a group. Some voiced concern that they felt like they were "staring" as they observed the interviewee and watched for signs of PD. Fear of embarrassment and staring may be modifiable by careful preplanning and even comments during the time the patient is being introduced to class by the faculty. Some students felt uncomfortable with the level of emotional engagement they felt with the interviewee as they candidly describing their struggles. One student shared that: "Due to some personal things going on, some topics were very emotional for me so I would tune out on the speaker until that topic was over I wish I could have kept listening and heard the message on topic." While emotional engagement can be a challenge for even experienced nurses at any given time, this acknowledgement does present further opportunity for faculty to work with students on engaging with patients professionally and compassionately.

Limitations of the study include the sample selection, size, geography, and variety of stages of the disease of the people interviewed who were living with PD. The sample of students was

a convenience sample of 150 students, all having faculty vested in having PD present in the curriculum. Faculty were given the contact information for the patient advocate registry at the Parkinson's Foundation. This registry has patients who are available and prepared for education, advocacy, and research interviews. Yet different patients were interviewed at each of the sites. In one large class of nursing students, the patient requested to be interviewed by a small group with the remainder of the students watching on a screen in the next room. The data analysis did not separate out the small group in person versus the larger group watching a live interview on a screen. Geographically, student groups included one from Louisiana, one from Virginia, and two from the northeast (Pennsylvania and Maryland). One wonders if these results would be similar if patients and students were participating on the west coast and mid-central United States, and in rural versus more urban sites than were chosen.

Conclusion

By analyzing data and developing emerging themes from student reflections, educators can now begin formulating best practices in nursing education in PD. By combining the *time-tested* use of reflective journaling and the use of *emerging* educational techniques, such as patient interviews as part of the flipped classroom, students were able to formulate meaningful questions and identify patient care issues. This experience highlights the trend that tomorrow's nurses need to learn to listen to patient concerns as they become partners in their care.

This educational approach has several deliverable consequences. It can be used as a model or guide for nursing students at the pre-licensure or advanced practice level of education in order to understand the humanness of a chronic disease, such as PD, while developing expertise in PD nursing care. Applying Watson's theoretical concepts about caring, this research project highlights the use of self, patient identified needs and the caring process (Neil & Tomey, 2006). The in-class interview experience with a person living with PD will help future nurses create a healing environment in today's increasing complex and challenging world.

Furthermore, since much of the clinical time students spend is in acute care settings, this educational strategy could easily be adapted to teaching about other chronic disorders which are commonly managed in the community setting.

References

- Aminoff, M. J., Christine, C. W., Friedman, J. H., Chou, K. L., Lyons, K. E., Pahwa, R., Bloem, B. R., Parashos, S. A., Price, C. C., Malaty, I. A., Iansek, R., Bodis-Wollner, I., Suchowersky, O., Oertel, W. H., Zamudio, J., Oberdorf, J., Schmidt, P., Okun, M. S., & National Parkinson Foundation Working Group on Hospitalization in Parkinson's Disease. (2011). Management of the hospitalized patient with Parkinson's disease: Current state of the field and need for guidelines. *Parkinsonism Related Disorders*, 17(3), 139–145. <https://doi.org/10.1016/j.parkreldis.2010.11.009>
- Bunting-Perry, L., & Vernon, G. M. (2007). *Comprehensive nursing care for Parkinson's disease*. Springer Publishing Company.
- Chickering, A., & Gamson. (1987). Seven principles of good practice in undergraduate education. *AAHE Bulletin*, 39(7), 5–10.
- Dariel, O. P., Wharrad, H., & Windle, R. (2013). Exploring the underlying factors influencing e-learning adoption in nurse education. *Journal of Advanced Nursing*, 69(6), 1289–1300.
- Dimitroff, L. J. (2018). Journaling: A valuable tool for registered nurses. *American Nurse Today*, 13(11), 1–7. <https://doi.org/10.5430/jnep.v7n2p90>
- Dimitroff, L. J., Slinoski, L., O'Brien, S., & Nichols, L. (2017). Change your life through journaling: The benefit of journaling for registered nurses. *Journal of Nursing Education and Practice*, 7(2), 90–98. <https://doi.org/10.1111/j.1365-2648.2012.06120.x>
- Dorsey, E. R., & Bloem, B. R. (2017). The Parkinson's pandemic—A call to action. *JAMA Neurology*, 75(1), 9–10. <https://doi.org/10.1001/jamaneurol.2017.3299>
- Fitzpatrick, J. (2017). Narrative nursing: Applications in practice, education and research. *Applied Nursing Research*, 37, 67. <https://doi.org/10.1016/j.apnr.2017.08.005>
- Fitzpatrick, J., Rivera, R., Walsh, L., & Byers, O. (2019). Narrative nursing: Inspiring a shared vision among clinical nurses. *Nurse Leader*, 17(2), 77–78. <https://doi.org/10.1016/j.mnl.2018.12.002>
- Galloway, S. J. (2009). Simulation techniques to bridge the gap between novice and competent healthcare professionals. *Online Journal of Issues in Nursing*, 14(2), Article 3.
- Ghorbani, A., & Matourypour, P. (2020). Comparison of interpretive description and qualitative description in the nursing scope. *Revisita Brasileira Enfermagem*, 73(1), e20190339. <https://doi.org/10.1590/0034-7167-2019-0339>. https://www.scielo.br/scielo.php?pid=S0034-71672020000100100&script=sci_arttext
- Global Burden of Disease 2016 Neurology Collaborators Neurological Collaboration. (2017). Global, regional, and national burden of neurological disorders during 1990–2016: A systematic analysis for the global burden of disease study. *Lancet Neurology*, 8, 459–480.
- Gunaldo, T. P., Andrieu, S. C., Garbee, D., Giovingo, L. K., Mercante, D. E., Tortu, S., & English, R. (2015). Student perceptions about inter professional education after an elective course. *Journal of Interprofessional Care*, 29(4), 370–371. <https://doi.org/10.3109/13561820.2014.969836>
- Hood, D., Haskins, T., & Roberson, S. (2018). Stepping into their shoes: The ostomy experience. *Journal of Nursing Education*, 57(4), 233–236. <https://doi.org/10.3928/01484834-20180322-08>
- Lasater, K., & Nielsen, A. (2009). Reflective journaling for clinical judgment development and evaluation. *Journal of Nursing Education*, 48(1), 40–44. <https://doi.org/10.3928/01484834-20090101-06>
- Magdalino, K. N., Martin, A., & Kessel, B. (2007). Prescribing medications in Parkinson's disease patients during acute admission to a District General Hospital. *Parkinsonism Related Disorder*, 13(8), 539–40. <https://doi.org/10.1016/j.parkreldis.2006.11.006>
- Nehring, W. M., & Lashley, F. R. (2010). *High-fidelity patient simulation in nursing education*. Jones & Bartlett Publishers.
- Neil, R., & Tomey, A. M. (2006). Philosophy and the science of caring. In A. M. Tomey, & M. R. Allgood (Eds.), *Nursing theorists and their work* (6th ed., pp. 91–115). Mosby Elsevier.
- Percy, M., & Richardson, C. (2018). Introducing nursing practice to student nurses: How can we promote care, compassion, and empathy? *Nursing Education in Practice*, 29, 200–205. <https://doi.org/10.1016/j.nepr.2018.01.008>
- Petrucci, C., La Cerra, C., Aloisio, F., Montanari, P., & Lancia, L. (2016). Empathy in health professional students: A comparative cross-sectional study. *Nurse Education Today*, 41, 1–5. <https://doi.org/10.1016/j.nedt.2016.03.022>
- Pretzer-Aboff, I., & Prettyman, A. (2015). Implementation of an integrative holistic healthcare model for people living with Parkinson's disease. *Gerontologist*, 55, 146–153. <https://doi.org/10.1093/geront/gnv004>
- Raterink, G. (2016). Reflective journaling for critical thinking development in advanced practice registered nurse students. *Journal of Nursing Education*, 55(2), 101–104. <https://doi.org/10.3928/01484834-20160114-08>
- Sarmiento, P. B., Fernandez-Gutierrez, M., Banos, M.B., & Romero-Sanchez, J. M. (2017). Efficacy of empathy training in nursing students: A quasi-experimental study. *Nurse Education Today*, 59, 59–65. <https://doi.org/10.1016/j.nedt.2017.08.012>
- Tanner, C. (2006). Thinking like a nurse: A research based model of clinical judgment in nursing. *Journal of Nursing Education*, 45(6), 204–211. <https://doi.org/10.3928/01484834-20060601-04>
- Vernon, G. M., & Bunting-Perry, L. (2010). *The visiting nurse faculty program*. 2nd World Parkinson's Congress.
- Vernon, G. M., Bunting-Perry, L., & Dunlop, R. (2012). Edmond J. Safra visiting nurse faculty program: An innovative strategy to advance Parkinson's disease patient care. *Movement Disorders*, 27(Suppl. 1), 942.
- Walvoord, B., & Johnson-Anderson, V. (1998). *Effective grading: A tool for learning and assessment*. Jossey-Bass.
- Wang, C. C., & Geale, S. (2015). The power of story: Narrative inquiry as a methodology for nursing research. *International Journal of Nursing Science*, 2, 195–198. <https://doi.org/10.1016/j.ijnss.2015.04.014>
- Zori, S. (2016). Teaching critical thinking using reflective journaling in a nursing fellowship program. *Journal of Continuing Education in Nursing*, 47(4), 321–329. <https://doi.org/10.3928/00220124-20160616-09>

Disclosure. The authors have no relevant financial interest or affiliations with any commercial interests related to the subjects discussed within this article.

Acknowledgments. Supported in full by Grant No PF-NGA-1901 from the Parkinson's Foundation.

Funding. This research was supported by the Edmond J Safra Visiting Nurse Faculty Program at the Parkinson Foundation. The authors would like to thank Tara Haskins,

DNP, MSN, RN (Louisiana Tech University), Shelley Hickey, MSN, RN (formerly of Villanova University) and Carrie Dougherty, MSN, RN, CRNP (University of PA) for their collaboration on this project.

Correspondence regarding this article should be directed to Margaret J. McCormick MS, RN, CNE, Clinical Associate Professor, Department of Nursing, Towson University, 8000 York Road, Towson, MD 21252. E-mail: mamccormick@towson.edu

Appendix

Part I: The Teaching Protocol

A. Preparation

1. Students will be assigned selected brief pre-readings (Part II) provided by research team to sites to introduce them to key concepts of PD.
2. Students were asked to write at least two questions they would like to ask the patient visitor. Faculty will review these questions with students and provide pilot study questions as additional questions if key issues were not covered by the student's questions.

Faculty should arrange one or more people with PD to visit the class and talk to the students about their journey with PD from early diagnosis to current status including the challenges faced through the disease trajectory. Patient volunteers are available through local support groups, or the Parkinson's Foundation Research Advocate Program <https://www.Parkinson.org>.

B. Day of Patient Visit to Classroom

Arrange chairs in circle with faculty serving as facilitator. Arrange to meet and greet the guest speaker, provide water and comfortable seating. Introductions between faculty, interviewee, and students.

C. Time Allotment for the Interview/Discussion/Debriefing

One hour should be scheduled. The patient(s) should speak for about 30 minutes, followed by question and answer by the students for 20 minutes.

The last 5 minutes should be utilized for debriefing led by the faculty to give students and guest patient opportunity to discuss the experience. *Key points to include during debriefing session:* (a) Importance of giving medications for PD on time; (b) Identification of stages of disease process and how to care for patients; (c) Early recognition and identification of care partner strain; and (d) Leadership role of nurse in finding community

services, resource and support groups for patients and families living with PD.

Part II: Pre-Reading for Faculty to Assign to Students

Roth, K. (2017, February-April). Parkinson's disease: What nurses need to know. *North Dakota Nurse*, 9.

Caregiving Issues:

Berger, S., Chen, T., Eldridge, J., Thomas, C. A., Habermann, B., & Tickle-Dengen, L. (2017). The self-management balancing act of spousal care partners in the case of Parkinson's disease. *Disability and Rehabilitation*. <https://doi.org/10.1080/09638288.2017.1413427>

Shin, J. Y., Pohlig, R., & Habermann, B. (2018). Self-reported health status of individuals with advanced Parkinson's disease and their caregivers: A pilot study. *Research in Gerontological Nursing*. <https://doi.org/10.3928/19404921-20180329-01>

Course and Progression of Parkinson's Disease:

Vernon, G. M., Carty, A., Salemno, C., Siskind, M., & Thomas, C. (2015). Understanding Parkinson's disease: An evolving case study. *Nurse Practitioner*, 39(10), 1-10. <https://doi.org/10.1097/01.NPR.0000453646.44157.83>

Non-Motor Symptoms

Panagiotis, A., Erro, R., Walton, C. C., Suarbie, A., & Chaudhuri, K. R. (2015). The range and nature of non-motor symptoms in drug naïve Parkinson's disease patients: A state of the art systematic review. *Nature Partner Journals/Parkinson's Disease*, 1, 15013. <https://doi.org/10.1038/npparkd.2015.13>

Gunnery, S. D., Haberman, B., Saint-Hilaire, M., Thomas, C. A., & Tickle-Dengen, L. (2016). The relationship between the experience of hypomimia and social wellbeing in people with Parkinson's disease and their care partners. *Journal of Parkinson's Disease*, 6(3), 625-630. <https://doi.org/10.3233/JPD-160782>

Nursing Care and Medications

DiBartolo, M. (2016). Comorbidities Matter: A call to improve care for hospitalized patients with Alzheimer's and Parkinson's disease. *Journal of Gerontological Nursing*, 42(2), 4-5. <https://doi.org/10.3928/00989134-20160113-01>

Gasparro, A. M. K. (2016). Update on medication management for PD. *Journal for Nurse Practitioners*, 12(3), e81-e8. <https://doi.org/10.1016/j.nurpra.2015.10.020>

Part III: Guided Reflection: Thoughts to Ponder (Based on Tanner, 2006)

Guided Reflective Prompts

- 1) Relate any experiences or lack of experiences with individuals who have PD?
- 2) What goals, if any, did you personally have for this interview experience?

Noticing:

- 3) What did you notice about the people being interviewed?

Noticing:

- 4) What prior knowledge did you have of Parkinson's that was validated through this experience?

Interpreting:

- 5) Did anything surprise you about this experience? Describe any "a-ha" moments.

Responding:

- 6) Describe any challenges during the interview process that you noticed for yourself or others.

Reflection:

- 7) Do you anticipate that the experience will change your future practice as a nursing student/future RN? Please describe.

Reflection:

- 8) What feedback would you like to give your faculty or other students about improving this experience? Was this experience valuable to you?
-