

Interprofessional Collaboration Promotes Parkinson's Medication Safety

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Background

- Parkinson's Disease (PD) is a chronic and degenerative neurological disorder associated with decreased dopamine levels
- PD effects over one million people in the U.S., with 60,000 new cases each year
- It is the second most common neurodegenerative disorder among adults
- Alterations in medication timing or complete omissions lead to poor outcomes

Purpose

- Aims to increase the interprofessional health care team's knowledge regarding the unique needs of individuals living with PD during a care transition in the acute care setting as it relates to missed, omitted, and delayed (MOD) medications
- Strives to increase competency, educate and increase comfortability, communication and collaboration among the following disciplines: Undergraduate Baccalaureate Nursing Students, Doctor of Nurse Anesthesia Students at Villanova University, Fitzpatrick College of Nursing (VUFCN); Doctor of Osteopathic Medicine and Doctor of Psychology Students from the Philadelphia College of Osteopathic Medicine (PCOM)

Results

Four out of the ten questions given in the pre and post test were considered

- 1) When is it acceptable to hold medications for a patient with PD? (correct: never)
- 2) Which of the following medications is only administered orally? (correct: Levodopa/Carbidopa (Sinemet)).
- 3) At the present time, how comfortable are you working with an interprofessional team?
- 4) At the present time, rate your competency to participate as a member of an interprofessional team.

Undergraduate BSN Students (n = 76) knowledge was increased regarding:

- When it is acceptable to hold medications for a patient with Parkinson's Disease
- Correct methods for administering PD medications

Doctor of Osteopathic Medicine Students (n=24) knowledge was increased regarding:

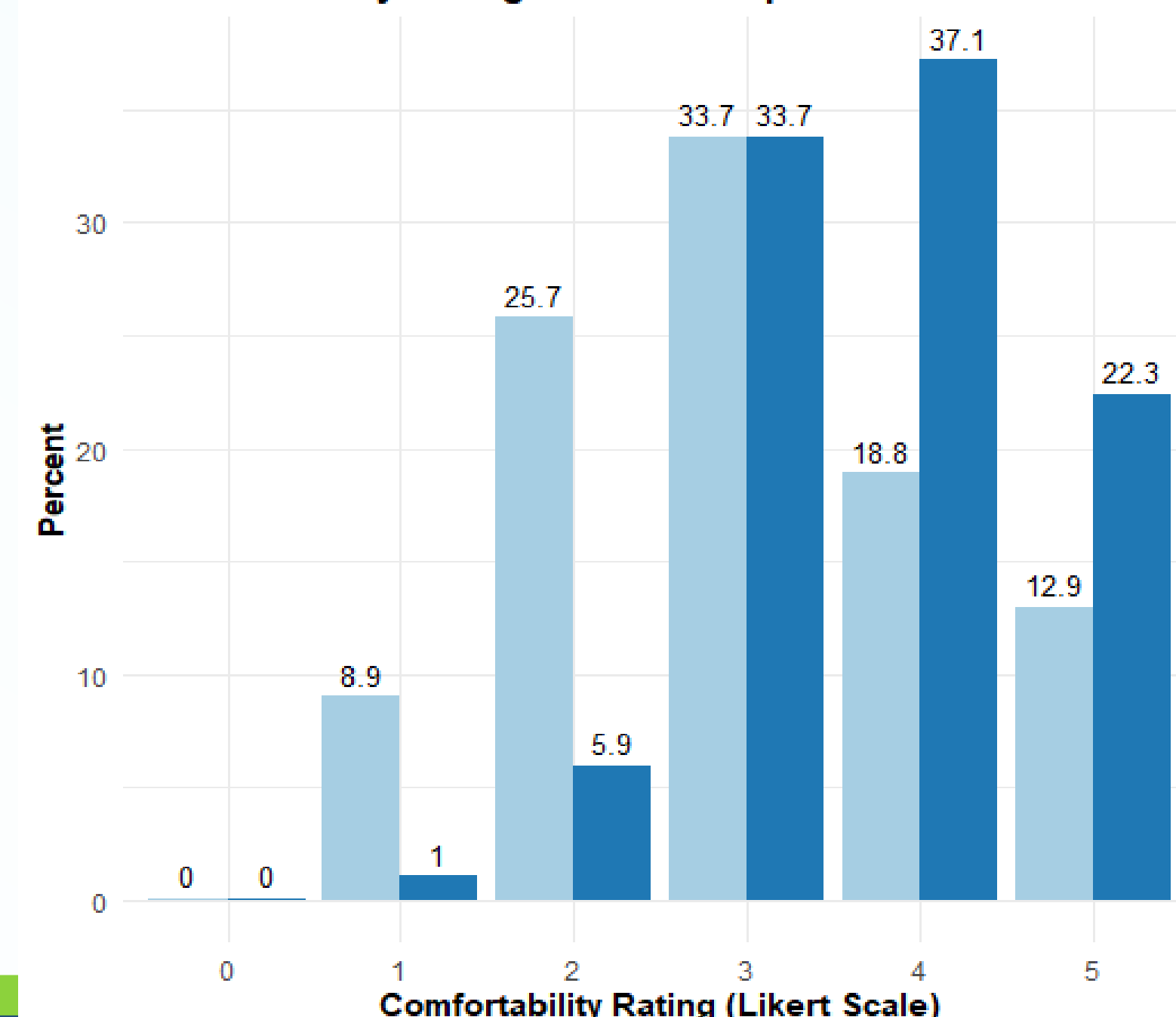
- Understanding of when to provide medications to PD patients

The graph and table shown below demonstrates the overall improvement in comfort and perceived competency for each of the four student groups and all the student groups combined

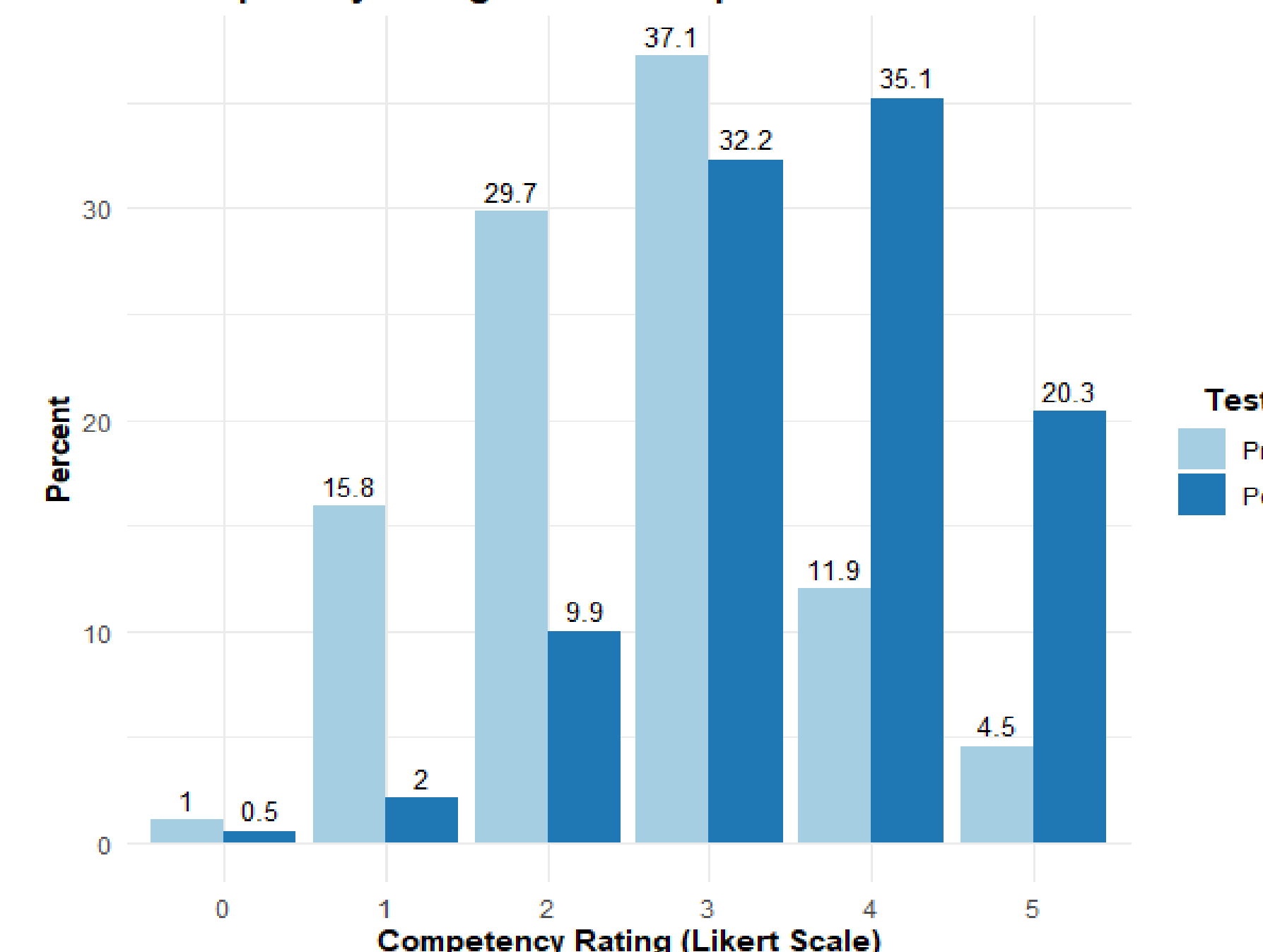
Student Group	Pre-Test	Post-Test	Percentage Change	p-value
Undergraduate Nursing	2.53	3.55	40.2	<0.001
Master's Level Nurse Anesthesia	4.06	4.57	12.7	<0.001
Doctor of Psychology	3.45	3.59	3.9	0.328
Doctor of Osteopathic Medicine	3.25	3.59	10.6	0.039
All groups combined	3.01	3.74	24.3	<0.001

Student Group	Pre-Test	Post-Test	Percentage Change	p-value
Undergraduate Nursing	2.22	3.40	53.0	<0.001
Master's Level Nurse Anesthesia	3.57	4.46	24.8	<0.001
Doctor of Psychology	2.86	3.45	20.6	0.001
Doctor of Osteopathic Medicine	2.47	3.50	41.8	<0.001
All groups combined	2.56	3.60	41.8	<0.001

Comfortability Ratings for All Groups Pre/Post Simulation



Competency Ratings for All Groups Pre/Post Simulation



Methods & Designs

The study was conducted in five steps:

- 1) participants read and signed an informed consent
 - 2) a pre-test questionnaire was administered
 - 3) students participated in a simulated unfolding case study
 - 4) students participated in a debriefing session following the simulation
 - 5) participants completed a post-test questionnaire. A study team member administered the pre- and post-test to participants.
- Learning by doing and then reflecting on the experience constructs knowledge
 - Reflection offers the opportunity to enhance clinical reasoning

Conclusion

Many health care professionals are unfamiliar, uneducated, and/or ill informed as to the time sensitivity and importance of PD medication. This study helped to educate the interprofessional healthcare team across four different professions as to the importance and individuality of PD medication administration. While also promoting interprofessional collaboration, communication and comfortability during a mock code among these disciplines