Nursing Solutions:
Living with Parkinson’s Disease During Transitions in Care

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Chronic Conditions and Care Transitions

- Among older adults, 85% have at least one chronic condition; 60% have at least 2 chronic conditions (National Institute on Aging, 2017).
- Parkinson’s disease (PD) is a chronic condition.
- Those with chronic conditions register more physician visits, ER visits and hospitalizations with number increasing proportionally to number of chronic conditions. (Anderson, 2010; Berenson et al 2002)
Care Transitions

- Broadly defined, care transitions are “movement across and within settings of care and/or between providers (e.g. home to ER, home to hospital, hospital to SCF, rehabilitation center to home, etc)

- Care transitions are vulnerable times for older adults with chronic conditions

- Poor outcomes, fragmented care not uncommon
Nursing role in essential features of transitional care (Naylor et al, 2017)

- Engagement
- Accountability
- Older adult and family
- Well-being
- Education
- Managing complex care
- Continuity of care
- Well-being
Objectives for Today

- Define transitional care concepts and elements as they pertain to Parkinson’s disease patients
- Discuss key vulnerabilities of those with PD across care transitions
- Describe nursing research and education in transitional care stimulation for Parkinson’s disease
- Contemplate nursing care avenues to improve transitional care for those with PD
Today’s Presenters

- Diane M. Ellis, MSN, RN, CCRN (PI)
- Shelley Hickey, MSN, RN (Co-I)
- Melissa O’Connor, PhD, MBA, RN (Co-I)
Ten million people worldwide suffer from Parkinson’s disease (PD)- estimated that nearly one million people will be living with PD in the U.S by 2020 which is greater than M.S, M.D and ALS combined (Parkinson's disease Foundation, 2018)

Missed or omitted medication occurs frequently in hospitalized patients with PD which increases length of stay (Martinez-Ramirez et al., 2015)
Prior research indicates only **33%** of hospitalized patients with PD in the US return home- **63%** are **discharged to some type of facility** and **3.9%** die (Mahajan et al., 2016)

**Missed, late, omitted or inappropriate medication** can also cause significant comorbidity during hospitalization including falls, aspiration (DiBartolo, 2017)

**Hospitalized patients with PD do not receive their medications on time, experience an abrupt stoppage, and medications omitted or inappropriately prescribed** (Parkinson’s Foundation, 2016)
Patients who experience a transition in care are vulnerable for poor and costly outcomes (Anderson, 2010; Naylor, Aiken, Kurtzman, Olds & Hirschman, 2011)

Sixty-one percent of PD patients who experience an interruption in medication timing or omissions suffer poor outcomes

Leading to reduced ADLs along with loss of the ability to move, talk, swallow and participate in therapy

Cost of inpatient care for PD patients has risen from $25,491 per hospitalization in 2002 to $40,802 in 2011 (Mahajan et al., 2016)
The purpose of this study was to:

- Increase awareness and educate undergraduate faculty and nursing students regarding the importance of missed/omitted/delayed (MOD) PD medications during care transition.

- **Inclusion criteria** – Senior nursing students and their clinical faculty in an Accelerated Bachelor’s degree program enrolled in *Care of Adults and Older Adults with Complex Health Problems Course* (Spring 2018).
The purpose of this study was to:

- Increase awareness and educate undergraduate/graduate faculty and nursing students regarding the importance of missed/omitted/delayed (MOD) PD medications during care transition and promote *intra*professional comfortability

- **Inclusion criteria** – Senior nursing students and their clinical faculty in a Bachelor’s degree program enrolled in *Care of Adults and Older Adults with Complex Health Problems* Course and Graduate Senior MSN Nurse Anesthesia Students *(Fall 2018 study)*
Conducted in five steps:

1) Informed consent
2) Pre-test
3) Simulated unfolding case study
4) Debriefing session
5) Post-test
Nursing School Faculty Results:

- Seventy percent of nursing faculty responsible for PD content *did not feel comfortable or confident in their knowledge of the material*; 33% of those surveyed had no PD content in their curricula; and 46% had no clinical mentored experience with patients suffering from PD (Vernon, Bunting-Perry, & Dunlop, 2012)

- PD experts reviewed the readings and lecture materials supplied by the participating schools and found that more than 97% of the materials submitted were out of date, misleading, or irrelevant (Vernon, Bunting-Perry, & Dunlop, 2012)
AIMS

The purpose of these studies were to:

- Increase awareness and educate undergraduate/graduate faculty and nursing students regarding the importance of missed or omitted PD medications during care transitions.

- **Inclusion criteria** – Senior nursing students and their clinical faculty in an accelerated Bachelor’s degree program enrolled in *Care of Adults and Older Adults with Complex Health Problems Course* and senior MSN nursing education students.
METHODS- BOTH STUDIES

- No grade associated with the pre- or post-test
- Participation voluntary
  - lack of participation not reflected in the students’ grade
- Participants assigned a number an identifier when completing the pre- and post-test
INITIAL STUDY RESULTS (STUDENTS N=94)
Aim = increase knowledge about PD medication safety
Goal = retention of knowledge to promote safety

- 53.6% increase in student’s knowledge importance of PD medication timing
- 54.3% increase in student knowledge best practices to prevent missed or omitted PD medications
- 71.3% increase in student knowledge side effects and complications of missed or omitted PD medications
- 46.8% increase in student knowledge priority nursing care practices for patients with PD
INITIAL STUDY RESULTS (Faculty N=7)
Aim = increase knowledge about PD medication safety
Goal = retention of knowledge to promote safety

- **71.4%** increase in faculty knowledge importance of PD medication timing
- **57.1%** increase in faculty knowledge best practices to prevent missed or omitted PD medications
- **85.7%** increase in faculty knowledge side effects and complications of missed or omitted PD medications
- **57.0%** increase in faculty knowledge priority nursing care practices for patients with PD
Second Study: AIM= increase PD medication safety/knowledge
GOALS= retention knowledge/ promote safety/ increase intraprofessionally comfortability

**RESULTS** - Students (N=94 UG) (N=24 SRNA)

Quasi-experimental design- following the intraprofessional mock code simulation

- **BSN UG** increased knowledge - Carbidopa/Levodopa administration route *(percent increase 27.7%)*
- **SRNA** showed no change in knowledge *(0%)*
- **BSN UG** *(percent increase 74%)*
- **SRNA** *(percent increase 27.8%)* - knowledge related acceptable to miss/omit/delay PD medication administration.
RESULTS - (Faculty/Students)

- Clinical faculty \((N=4)\) demonstrated no change in knowledge.

- \(57.4\%\) undergraduate students reported minimal to no comfort level in working with anesthesia personnel pre-simulation.

- *Post-simulation* 94\% of the students who reported minimal to no comfort indicated a response of moderate to extreme comfort.
**BENEFITS OF:**

**Problem-Based Learning (PBL)**
- PBL is more effective for long-term knowledge retention, performance or skill-based assessment and mixed knowledge and skills (Strobel & van Barneveld, 2009)

**Reflective Practice**
- Reflection has the opportunity to enhance clinical reasoning while having a positive impact on patient care (Oluwatoyin, 2015)

**Case Based Learning (CBL)**
- Learning that goes beyond simple identification of correct answers and is more aligned with either evidence of critical thinking or changes in behavior and generalizability of learning to new cases. (McLean, 2016)
Unfolding Case Study Simulation – utilizing PBL, CBL and Reflective Practice

- Integrate knowledge
- Promote higher level thinking
- Instill best practice
- Present clinical situations not encountered in practice but are “need to know” situations
- Link theory to practice
- Allow some preparation prior to simulation
- Instructor guided reflection during debriefing
PATIENT SAFETY IMPLICATIONS

- Three out of 4 people with Parkinson’s disease do not get their medication on time in the hospital.
- People with Parkinson’s are hospitalized 50% more than their peers without the condition.
- People with Parkinson’s suffer avoidable complications at a higher rate than people without Parkinson’s, resulting in longer hospital stays and a higher risk of mortality.

CALL TO ACTION

- Integrate simulation as *yearly a competency* in health care settings

- Encourage institutions of nursing education to implement *teaching strategies* that permit retention of knowledge about timing of PD medications

- Partner with *transitional care* teams to integrate processes that prevent missed or omitted PD medications
CARE TRANSITIONS

• “Transitions, or ‘handoffs,’ are vulnerable exchange points that contribute to unnecessarily high rates of health services use and health care spending, and they expose chronically ill people to lapses in quality and safety.” (Naylor et al., 2011)
While many chronically ill older adults experiencing a care transition are vulnerable for poor outcomes, PD patients are at particularly high risk especially when admitted.

Non-adherence to at-home schedules and delays in obtaining medication can cause re-emergence of severe disease symptoms and dopamine withdrawal syndrome.

Goal is to “promote the safe and timely transfer of patients from one level of care to another or from one type of setting to another” (Naylor et al., 2011)
IDENTIFYING TRANSITIONAL CARE NEEDS

• Health care providers – particularly nurses, can help mitigate risk among hospitalized patients with PD

• Most often it is the patients and their caregivers who are best informed about their needs

• Critical that inpatient nurses listen carefully, investigate home routines, conduct a thorough medication reconciliation, and encourage patient and/or family involvement while understanding that PD medication routines are unique in this population and individually titrated
FUTURE PROJECT

➢ An Interprofessional Mock Code-Parkinson’s Missed/Omitted/Delayed (MOD) Medication Simulation- Philadelphia College of Osteopathic Medicine (PCOM)

➢ Medical Students (Fourth Year)
➢ Doctorate of Psychology Students
➢ Senior Nursing Students
➢ Senior Nurse Anesthesia Students
References


References


ANY QUESTIONS?
Nursing Educational Programs

Nurse Faculty Program

Apply to the Edmond J. Safra Visiting Nurse Faculty Program to help us prepare the next generation of nurses to care for the growing population of people with PD.

http://parkinson.org/edmondjsafranursing

New! Online Nurse Course Available

Designed by leading Parkinson’s nurse specialists, the course, now revamped from its previous 2010 version, incorporates updated information on medical management, palliative care and novel team based approach care models through its redesigned curriculum.

parkinson.org/nursecourse

This course is available for CEUs from AANN for a nominal fee or can be viewed for free without any CEUs.
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- Physical Therapists
- Occupational Therapists
- Speech and Language Pathologists
Educational Resources

Order Materials
Information about Parkinson’s symptoms, medications, resources and more.
parkinson.org/books

Aware in Care Kit
Includes tools and information for people with PD to share with hospital staff during a planned or emergency hospital stay.
parkinson.org/awareincare

National Helpline
Available at 1-800-4PD-INFO or helpline@parkinson.org
Monday through Friday 9:00 AM – 8:00 PM ET.

Podcast: Substantial Matters
New episodes every other Tuesday featuring Parkinson’s experts highlighting treatments, techniques and research.
parkinson.org/podcast