2018

The Effect of an Interprofessional Registered Nurse-Physical Therapist Team on Reducing Prescribed Opioid Dependence in Patients with Chronic Lower Back Pain

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Recommended Citation

Chesney, Amber; Jan, Stephanie; Pedrazoli, Amanda; Simmons, Brandon; Woods, Kaylene; and Yeats, Nicole (2018) "The Effect of an Interprofessional Registered Nurse-Physical Therapist Team on Reducing Prescribed Opioid Dependence in Patients with Chronic Lower Back Pain," *OUR Journal: ODU Undergraduate Research Journal*: Vol. 4 , Article 17.

Available at: https://digitalcommons.odu.edu/ourj/vol4/iss1/17
The Effect of an Interprofessional Registered Nurse-Physical Therapist Team on Reducing Prescribed Opioid Dependence in Patients with Chronic Lower Back Pain

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Abstract
Long-term prescribed opioid use for chronic pain is shown to reduce recovery potential and increase risk for dependence, which is contributing to the nationwide opioid crisis. There is a need for an innovative, multidisciplinary approach to address prescription opioid dependence. We propose implementation of a community-based interprofessional registered nurse-physical therapist team (IRNPTT) focused on reduction of opioid dependence in adult patients with chronic lower back pain.

Methods and Materials

Design:
- Quasi-experimental, non-randomized one-group pretest-posttest
- Evaluate effect of dose monitoring, PT and NE
- Pretest: baseline assessment and closed and open-ended questionnaire
- Posttest: closed and open-ended questionnaire

Sample
- Working adults 18-50 prescribed opioids for CLBP
- 12 Sentara facilities in Hampton Roads
- N=30, convenience sampling
- Recruited during 2 month period
- CLBP, prescribed opioids without PT, working full time in manual labor, permanent residence in Hampton Roads, literate, 18-50 years old
- Exclusion Criteria: neck pain or other pain, cognitive deficit due to neurological disorder, mental illness or brain injury

Procedure
- 6 month study
- Baseline assessment = pain level, dosage and frequency of opioid, other problems, prior condition, related education, and baseline PT assessment
- Baseline PT assessment = evaluate exercises and movements, degree of completion of exercises/movements, and pain level before and after completion
- Neuroscience Education
- RN and physical therapist visit participant’s house twice a week and assess pain, dose and frequency of opioid, and pain after PT
- NE theme once a month
- Info evaluated weekly and then as whole after 6 months.

Hypothesis
It is hypothesized that an IRNPTT that conducts home visits for the quasi-experimental group using prescription opioid dose monitoring, neuroscience education, and maintained pain reduction at rest and with exercise will prompt recovery, thus reducing the likelihood of opioid dependence.

Discussion / Conclusions
- We expect to find a reduction in pain at rest and with exercise, an increase in neuroscience knowledge, and a reduction in opioid dosage resulting in decrease of opioid dependence.
- Inferential statistics for Pre- and Post Evaluation Test Questionnaire and Routine Interprofessional Intervention Check-up
- Expect a decrease in the mean pain and dosage of opioid prescription
- Expect an increase in the mean of neuroscience knowledge

Interprofessional Roles and Responsibilities
Proposed Interprofessional Team:
- Interprofessional team of a registered nurse and physical therapist
  - Registered nurse educates patient, assesses patient’s pain and opioid medication, and administers pre- and post questionnaire
  - Physical therapist assists & monitors patient physical therapy exercises

Positive outcomes of interprofessional treatment:
- Return to work, decreased pain levels, improved mood, lowered risk of substance abuse, and reduced health-care utilization
- Provide tools needed to enhance functioning and cope with pain

A Counseling Prospective:
- Switch the client’s focus from problems, hopelessness, and powerlessness to goals, control, and choice
- Two major goals:
  - Changing the client’s pain behaviors
  - Reducing maladaptive coping strategies
- Maximize the client’s psychological and psychosocial functioning
  - Focusing and mindfulness, CBT, exposure, monitored self-help strategies, and brief educational sessions for clients experiencing chronic pain

Acknowledgments
Special thanks to:
- Emily Bura, counseling student
- Stephanie Duffney, MA
- Robert Laibstain, MD
- Jamela Martin, PhD, RN, CPNP
- Johana Rocha, counseling student

Number of All Fatal Drug* Overdoses in Virginia Cities and Counties, CY2007-2014

[Map of Virginia showing overdose locations]

Methods and Materials

Discussion / Conclusions

Interprofessional Roles and Responsibilities

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