

Quality Improvement Project to Address the Opioid Crisis: Assessment of Student Nurse Practitioner's Knowledge

Jan Michelle L. Roflo DNP, APRN, A-GNP-C

Purpose

The objectives of this quality improvement project are to assess the level of understanding, to identify the educational needs of the nurse practitioner students, and to provide materials to better prepare the future prescribers to be safe opioid prescribers.

Background

- 42,249 opioid-related deaths in 2016, which has been considered the highest death toll when compared to the previous years.
- Over two million people had opioid use disorder while the same amount of people misused prescription opioid for the first time in that same year.
- Economic burden costing 504 billion dollars (U.S. Department of Health and Human Services, 2018).
- Opioid use has led to increased incidence of neonatal abstinence syndrome, utilization of the emergency rooms with expected increased incidence of overdose mortality among those who misuse the drug.

Methods

Setting:

This quality improvement project was based out of the University of South Florida (USF) Tampa campus and was implemented in the College of Nursing.

Population:

Nurse practitioner students in the adult-gerontology concentration who were currently enrolled in Health Management Adults and Older Adults II were recruited to participate in the Opioid Battle quality improvement project.

Sampling Strategy

Convenience sampling strategy was employed in The Opioid Battle quality improvement project.

Phase 1

Pre-intervention survey questionnaire were collected to evaluate the stakeholders' knowledge and confidence in opioid prescribing were given during a live class.

Phase 2

A twelve-page printed presentation of the USF Health opioid prescribing guidelines was provided to the nurse practitioner students.

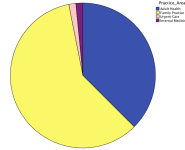
Phase 3

A post-survey questionnaire was then performed to determine the students' knowledge after provision of opioid education material.

Results

Practice Area of Participants

59.4% - Family Practice
37.5% - Adult Health
1.6% - Urgent Care
1.6% - Internal Medicine



Gender

4.69% - Male
95.31% - Female

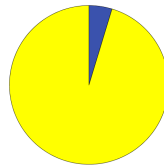


Table 1. Opioid Risk Assessment on Patients 50 Years Old or Younger

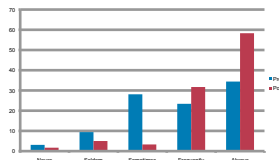


Table 2. Opioid Risk Assessment on Patients 50 Years Old or Older

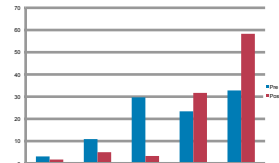


Table 3. E-FORCSE Use on Patients 50 Years Old or Younger - Acute Pain

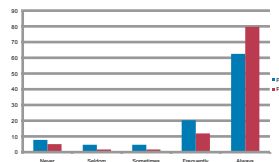


Table 4. E-FORCSE Use on Patients 50 Years Old or Older - Acute Pain

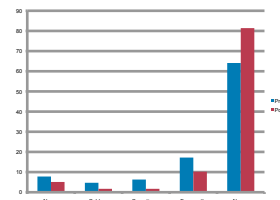
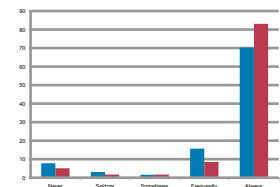


Table 5. E-FORCSE Use on Patients 50 Years Old or Older - Chronic Pain



Discussions

This performance improvement project showed that the educational intervention provided to the nurse practitioner students has improved their practice knowledge in safe opioid prescribing. The future prescribers' increased knowledge in safe opioid prescribing will hopefully decrease opioid misuse and overuse.

Based on this analysis, preferred medium of information and education when prescribing opioids to patients are printed media and one-on-one interaction. It is always good to have a printed education tool to give out to patients, as one-on-one interaction may create additional workflow for the future prescribers and may not always be applicable in a fast-paced clinical setting.

Limitations

- Nurse practitioner students in the family concentration program who were currently enrolled in Health Management of Families: Special Topic were excluded from the project due to receiving the opioid prescribing education prior to project implementation.
- There were only 60 participants in the post-intervention survey.

Implications

- Integrating safe opioid prescribing methods not only in the Advanced Pharmacology curriculum but also throughout the Masters or DNP program curriculum
- Include E-FORCSE orientation in health diagnostics class
- Discussion of appropriate utilization of opioid misuse or abuse risk assessment tools in Advanced Health assessment course
- Case studies on patients with Acute Pain and Opioid Use
- Case studies on patients with Chronic Pain and Opioid Use
- Include student evaluation of safe opioid prescribing methods during clinical evaluation and when performing an objective structured clinical examination (OSCE)

Acknowledgements

I would like to acknowledge the support from the USF College of Nursing Faculties, Dr. Elizabeth Remo and Dr. Debra Friedrich, for allowing me to conduct this performance improvement project in their Health Management Adults and Older Adults II Class.

My gratitude to the Adult-Gerontology Concentration nurse practitioner students who participated in this project.

To my brother, Dr. Francis V. Lomanta for proofreading my work and for providing feedback, thank you.

I would also like to thank my husband, Ryan Roflo for reviewing my project and for your tireless support.

Most importantly, to Dr. Candace Burns, my DNP project supervisor and the brains behind The Opioid Battle Performance Improvement Project, thank you. My gratitude for the commitment and for guiding me throughout this journey.

References

- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention. (2017). CDC guideline for prescribing opioids for chronic pain. Retrieved from <https://www.cdc.gov/drugoverdose/prescribing/guideline.html>
- Kolodny, A., Courtwright, D., Hwang, C., Kreiner, P., Eadie, J., Clark, T., Alexander G. (2015). The prescription opioid and heroin crisis: A public health approach to an epidemic addiction. Annual Review of Public Health, 36, 559-574. doi: 10.1146/annurev-pubhealth-031914-122957
- U.S. Department of Health and Human Services. (2018). About the U.S. opioid epidemic. Retrieved from <https://www.hhs.gov/opioids/about-the-epidemic/>
- USF Health. (2018). College overview. Retrieved from <http://health.usf.edu/nursing/college-overview>
- USF Health Care Chief Medical Officer, USF Health College of Pharmacy Dean. (2018). Opioid prescribing guidelines for USF Health. Retrieved from <https://hscweb3.hsc.usf.edu/wp-content/uploads/2018/01/Opioid-Guidelines-2018.pdf>

