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

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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 2018, 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 missed 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 questionnaires 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
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 Other—Acute Pain

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

Table 6. E-FORCSE Use on Patients 50 Years Old or Older—Chronic Pain

Table 7. Preferred Medium of Information to be given to Patients

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 overdose.

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).

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References