Abstract

Introduction: Evidence based practice guidelines are recommended by the Center for Advance Palliative Care related to the management of palliative care patients. A systematic review of literature was conducted to analyze the evidence supporting the implementation of evidence based guidelines for the improvement of pain management in hospice and palliative care patients.

Methods: CINAHL, PubMed, and Medline were utilized to search keywords palliative, pain, nurse practitioner, training, guidelines, and education. Inclusion criteria included studies that focused on nurse practitioner, physician, or provider education. One study was nurse focused only, but was included because it demonstrated benefits of implementing evidence based guidelines and its focus was on improvement of pain. Articles that did not focus on the implementation of practice guidelines in efforts to improve pain were excluded.

Results: Nine studies were included. Studies were classified according to the John Hopkins evidence appraisal tools and quality ratings. From the included studies, there were six quality A studies and three quality B studies. The literature review supported that educating nursing about pain management could improve nursing management of pain.

Pre-assessment work that was conducted includes a pre-survey Likert scale to determine which modules to use for the study, an informal survey to determine the populations of selected patients served, and a chart audit to examine NPs documentation in regard to pain management. The pre survey results indicated that 40% of the NPs did not feel comfortable with managing patients’ at risk for substance use disorder and 30% of the NPs did not feel comfortable managing patients using patient controlled analgesia or those considered as special populations (elderly or dementia patients). The results of the informal survey concluded that NPs see on average 15 to 80% of patients at risk for substance abuse, which averages to about 38% of patients at risk. Twenty charts were pre-audited: twelve were patients that had cognitive impairment and eight were patients over 65 years of age without cognitive impairment. Thirty percent of the charts were in full compliance with the NPs fully assessing for risk for substance use disorder, asking patients for history of alcohol, tobacco, and illicit drug use. In contrast, 70% of charts did not fully assess risk for substance abuse. Ten percent of the
twenty charts included prescription for opioid and NP did not check NC the prescribers website for multiple prescribers for that patient. Only 10% of the charts had modifications for physiological changes in aging, e.g. creatine level to document renal function. Seventy-five percent of the charts had documentation of functional status such as functional assessment staging (FAST score). None of the charts of the Dementia patients had documentation for reliable caregivers to administer medications but 10% of the charts for patient over 65 years old without Dementia had documentation for reliable caregivers. Forty-two percent of the Dementia charts had appropriate documentation of pain using the numerical pain scale or PAID-AD scale.

The implementation of this project included introduction of the modules, course 4: Assessing risk for opioid substance use disorder and Course 12: Special populations and patient-controlled analgesia. These modules were discussed one of the community based palliative care meeting. At the end of the discussion, the NPs will be given post Likert scale survey and a 10 question knowledge test, in addition post chart audit.

The post-test consisted of ten multiple choice questions derived from the CAPCs educational module that was presented. The average score for the quiz was 77 (highest possible score is 100), with no one scoring less than 70.

Eighty percent of the NPs strongly agreed they understood the importance of assessing patients at risk for substance use disorder and 20% agreed. Overall, no one disagreed to having not understood the importance. Seventy percent of the NPs strongly agreed they felt comfortable monitoring for opioid efficacy, side effects, and substance use disorder, 20% agreed, and 1 NP felt neutral about the topic. All of the NPs felt comfortable managing pain in elderly patients, with 70% strongly agreeing and 30% agreeing. Sixty percent of the NPs strongly felt comfortable managing patients with cognitive impairment, 20% agreed, 10% neutral. In managing patients with patient-controlled analgesia the results widely varied, 10% percent of the NPs were not comfortable managing this population, 20% were neutral, 40% agreed, and 30% strongly agreed. The majority of the NPs did not feel comfortable managing pediatric pain. Thirty percent strongly disagreed to being comfortable, 30% disagreed, 10% of the NPs did not answer this question, 20% agreed to having felt comfortable and 10% strongly agreed.
One to 2 weeks after the module review, 20 charts were audited to examine the results of the practice change. Twelve of the charts were patients with cognitive impairment and 8 were patients over 65 years of age. In 40% (n=20) of the charts, the NPs checked for North Carolina (NC) prescribing website for opioid use, while 60% of the NPs did not. These NPs did not prescribe opioids to these patients. Some of these patients resided in skilled nursing facilities and some of the patients did not have pain as a symptom to manage, thus those NPs did not have reasons to check. In ninety-five percent of the charts, the NPs assessed for risk for substance use disorder, while 5% were not in compliance. Six-five percent of the charts plan of care notes indicated modifications for physiological changes in aging and co-morbid disease in the assessment and plan of care and included lab values, such as kidney function tests. Thirty-five percent were not in compliance with modifications for physiological changes. Of the dementia charts, 75% of them had documentation of functional status such as functional assessment staging (FAST score), while 25% were not in compliance. Forty-two percent of the dementia charts had documentation of reliable caregivers, 33% had documentation that patient resided in a skilled nursing facility (by default it can be assumed the nursing staff administer medications). The remaining 25% were not in compliance with providing documentation of reliable caregivers. Finally, 92% of the dementia charts had documented pain assessment, either using numeric pain scale or PAINAD.

Compliance: The literature review demonstrated no significant cost restraints to initiating the quality improvement project. Literature supports the training and education of providers in efforts to improve management of pain. No specific teaching methods were favored, methods discussed included seminars or group discussions.

Implications for practice:

Education about pain management, specifically assessment of substance abuse risk and special populations improved the nurse practitioners’ knowledge and adherence to pain management guidelines, thus will be implemented as a requirement for new hire NPs in the future.