Does Educating Nurses about Pain Management with Opioid Tolerant Patients Improve Pain Control Knowledge about these Patients in the Immediate Postoperative Period?

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Background

- It is not uncommon to have a large number of a patient population that is opioid dependent, which can complicate pain control significantly
- Traditionally, pain management after surgery has relied heavily, if not solely, on opioid medications, which is becoming increasingly less effective especially in opioid dependent population
- By assessing and providing increased education to nursing staff regarding nonpharmacologic pain management, a multimodal pain management approach pain management and overall patient satisfaction will improve

Practice Change

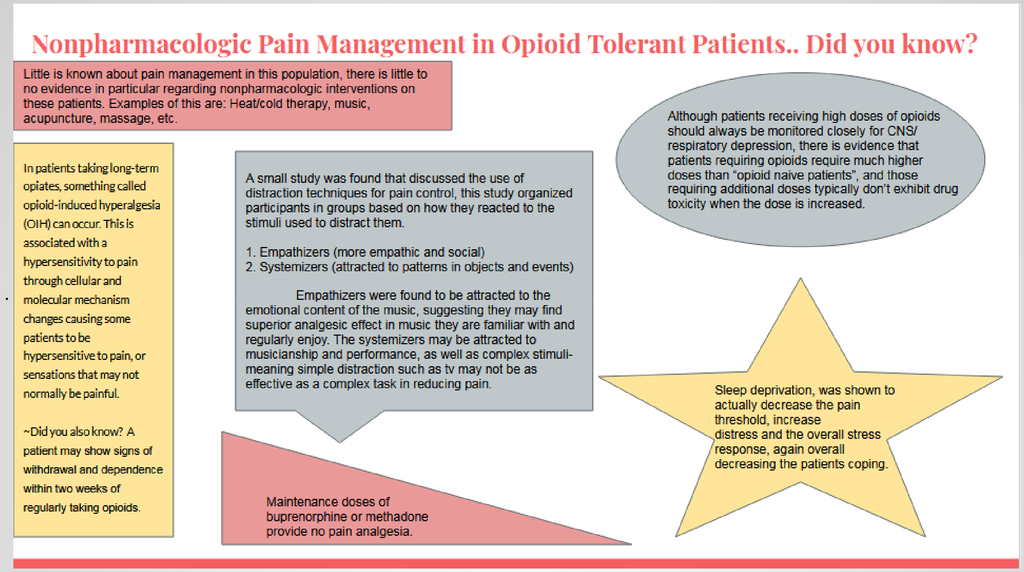
Assess knowledge of RN's working with post-surgical patients who have opioid tolerance and the RN's use of non-pharmacological interventions for pain control before and after providing education on alternative therapies
Observations were compared for non-pharmacological therapy use prior to and following education

Methods

- **1. Pre Education-** Provide a survey to RN's working with a post-surgical population to assess their knowledge and use of non-pharmacological interventions for pain control in patients with opioid tolerance
- **2. Provide education** on non-pharmacological therapies for pain control to RN's via flyers on their unit
- **3. Post Education -** Repeat survey to the same group of RN's to assess knowledge post education tool

Measures and Results

Educational Handout



Results

Pre-Survey

Questions	True	False	Unknown
Maintenance therapy with buprenorphine and methadone provides some analgesia to patients with postoperative pain	45%	45%	10%
Additional opioids (above what may be typically prescribed) for analgesia in patients receiving maintenance therapy is likely to cause respiratory and CNS depression	79%	25%	0%
Patients who have been on high doses of weak opioids or strong opioids for two weeks can have physical dependance and physical withdrawal	45%	45%	10%
When implementing distractional therapy for pain management, choosing calming sounds, such as nature sounds, provides superior analgesic effect to patients rather than their choice of music	50%	45%	5%
Evidence based practice has shown that when treating acute pain in opioid dependent patients nonpharmacologic methods have little to no efficacy	55%	40%	5%
While sleep deprivation has been shown to increase stress which may have an indirect correlation to pain, it has not been shown to directly affect the patient's pain threshold	60%	30%	10%
There have been several studies done to evaluate nonpharmacologic pain management in patients with opioid dependence.	20%	35%	45%

Post-Survey

Questions	True	False	Unknown
Maintenance therapy with buprenorphine and methadone provides some analgesia to patients with postoperative pain	0%	100%	0%
Additional opioids (above what may be typically prescribed) for analgesia in patients receiving maintenance therapy is likely to cause respiratory and CNS depression	85%	15%	0%
Patients who have been on high doses of weak opioids or strong opioid for two weeks can have physical dependance and physical withdrawal	100%	0%	0%
When implementing distractional therapy for pain management, choosing calming sounds, such as nature sounds, provides superior analgesic effect to patients rather than their choice of music	90%	10%	0%
Evidence based practice has shown that when treating acute pain in opioid dependent patients nonpharmacologic methods have little to no efficacy	50%	50%	0%
While sleep deprivation has been shown to increase stress which may have an indirect correlation to pain, it has not been shown to directly affect the patient's pain threshold	0%	80%	20%
There have been several studies done to evaluate nonpharmacologic pain management in patients with opioid dependence.	0%	80%	20%

Summary/Discussion

Our work was the first step, but in order for the information from the educational handout to be successfully implemented we need to next:

- Assess the knowledge of the nurses who we were planning on educating (pre-survey)
- Supply them with the educational handout, and answer any questions they might have
- Repeat survey with same group of nurses, and reassess for any increase in knowledge or possible barriers to learning

Some feedback we heard during our education for the staff was:

- "I can't believe that there isn't much research on this specific topic".
- "I didn't realize it could only take two weeks of low dose opioid use to begin to have dependence".
- "I find that distractional therapy works better for those who aren't opioid dependent then for those that are".

Lessons learned:

- Limited available time during the nurses shift to complete the surveys
- Due to the inability to have the same nurses working together, pre and post surveys had to be done in the same shift rather than a week apart.

Conclusion

- Nurses that participated in the surveys and read the educational tool stated that they learned something new from the information that was provided
- This was confirmed with better scores on the post-survey in comparison to the initial survey that was passed out

We are hopeful that by educating nurses with various career backgrounds and years of experience the information can be put to use, and in turn help the pain of the patient's we care for be better controlled.

References

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