



Not Another Opioid Crisis: Assessing Pharmacists' Knowledge and Attitudes About Opioid Use for Pain Management and Palliative Care

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Background

- Although pain is one of the most common reasons for seeking healthcare, few health care professionals report adequate training on appropriate pain management.¹⁻³
- Many pharmacists, especially in the community setting, express low confidence in promoting safe opioid use due to lack of time and training.
- Limited literature has been published assessing these same parameters for hospital-based pharmacists.²
- Our health-system uses opioid comfort orders are based on pharmacokinetic properties, such as half-life and time to peak serum concentration (effect).

Research Question

Will targeted education regarding safe opioid prescribing practices and pharmacokinetics increase knowledge and confidence among hospital pharmacists?

Objectives

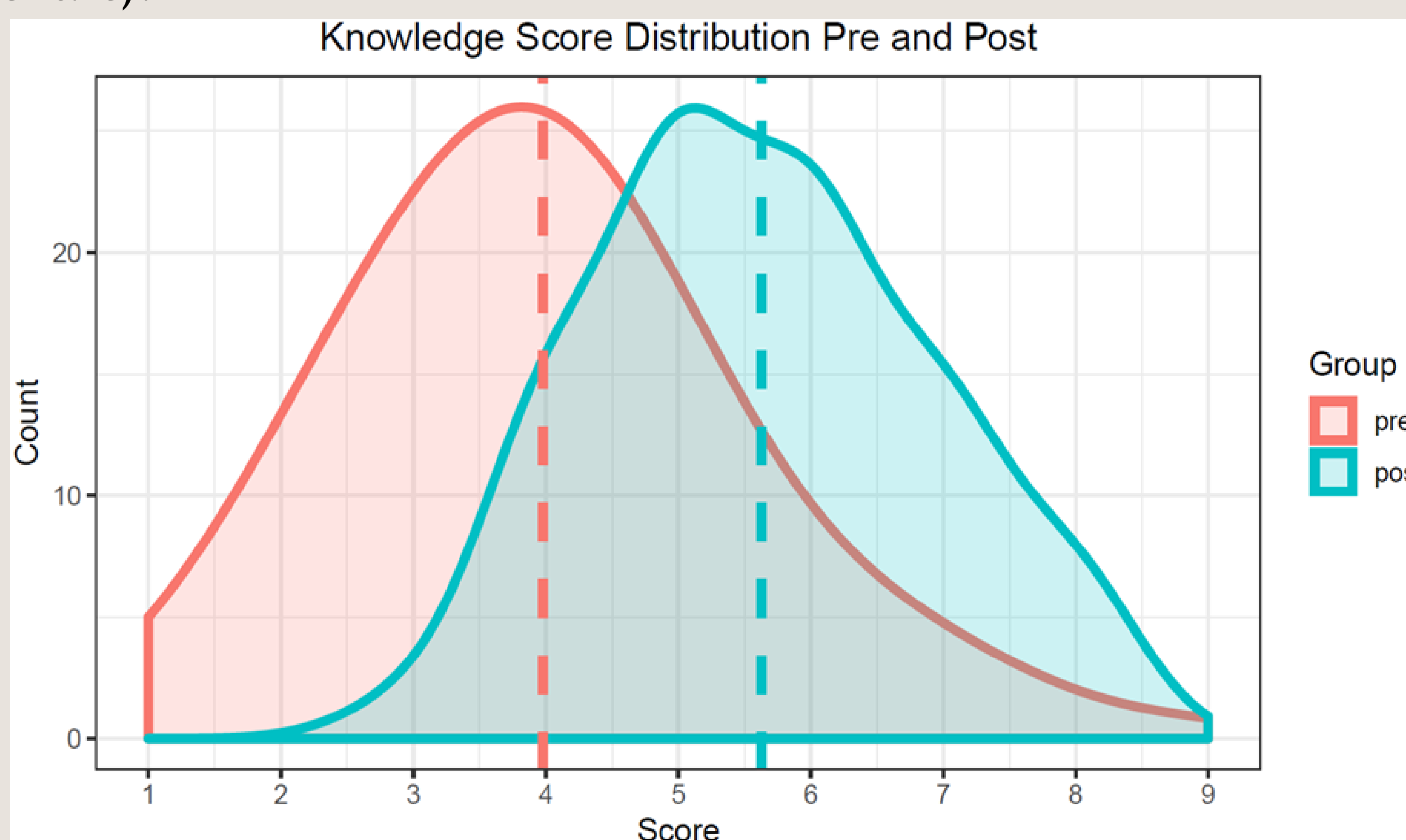
- Assess health-system pharmacists' baseline knowledge and attitude scores regarding opioid medications and prescribing habits.
- Determine if education about opioids improves knowledge and attitude scores.

Methods

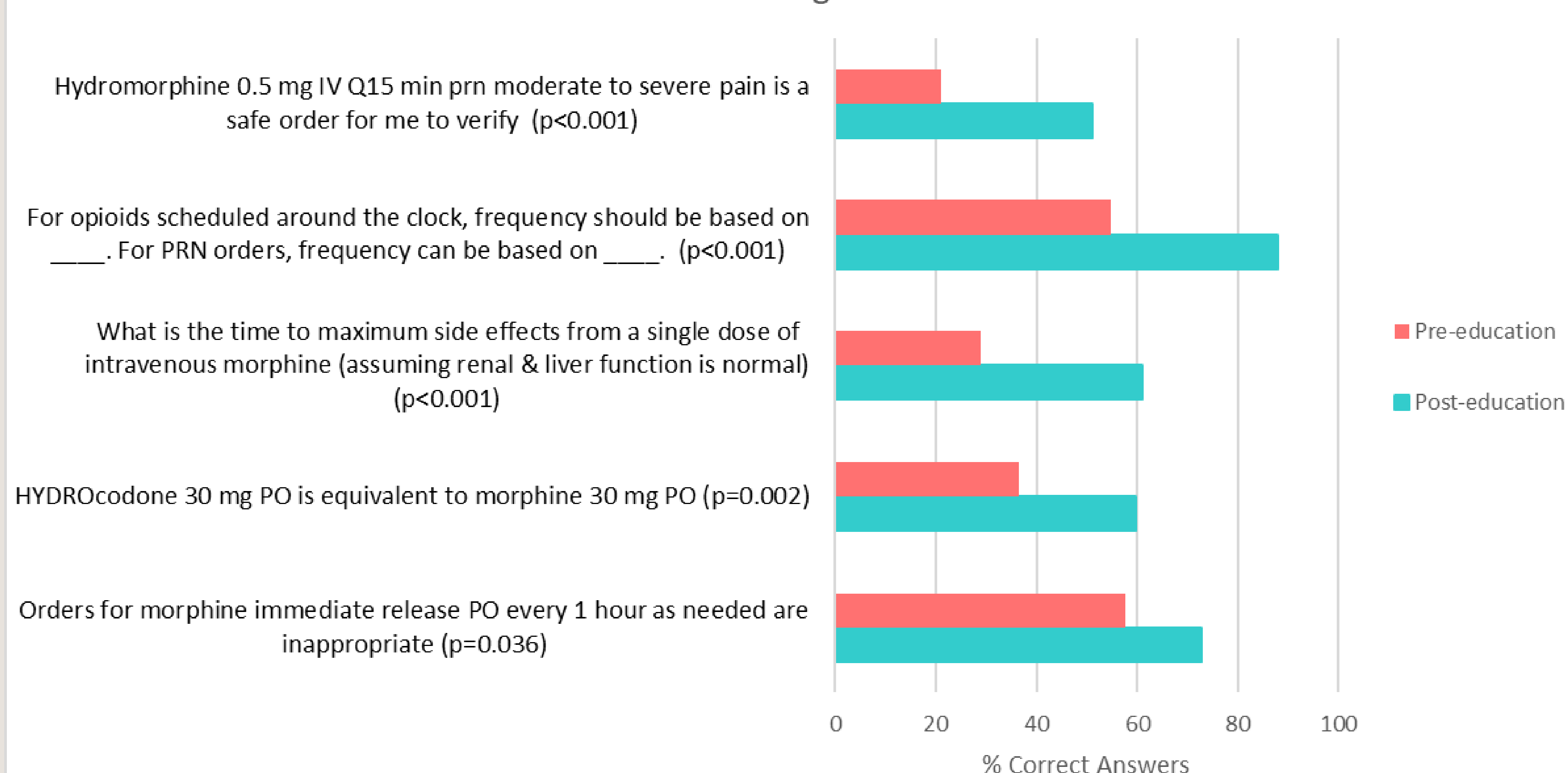
- Pre/post observational study evaluating change in pharmacists' knowledge and comfort with opioid verification and opioid recommendations to providers
- An anonymous, knowledge and attitudes survey was sent to all OhioHealth Pharmacists pre/post a mandatory, one hour, virtual opioid competency program (see QR code for questions).
- Survey questions were developed both from the literature and through a collaboration of OhioHealth pharmacists.³
- Competency program reviewed pharmacology of opioids, opioid equivalency tables and conversions, and definition of opioid tolerance and naïve.

Results

- Overall knowledge scores increased significantly from the pre-education group (M = 3.98 ± 1.51) to the post-education group (M = 5.63 ± 1.26; p < 0.001).
- A significantly smaller proportion of participants in the post-education group disagreed with the question "I feel I have received adequate training regarding opioids and pain management throughout my career" (p = 0.007).
- A significantly larger proportion of participants in the post-education group gave a correct answer for 5 of the 9 knowledge questions (see chart).



Knowledge Questions



Discussion

- A virtual education program increased health-system pharmacist knowledge about the pharmacology of opioids
- Attitudes towards common prescribing practices surrounding opioids also changed.
- Opioids are a high risk medication and the education provided surrounding this project will be turned into an annual competency for pharmacists at OhioHealth to enhance their knowledge of the pharmacology of the medications.

Future Directions

- Evaluate knowledge and attitudes of new pharmacy graduates regarding opioids as well as their exposure to education on opioid medications.
- Continue to include opioid education in the annual pharmacist competency and reassess knowledge post-competency.

Disclosures

The authors of this research study have nothing to disclose

References

1. Fishman SM, Young HM, Arwood EL, Chou R, Herr K, *et al.* Core competencies for pain management: results of an interprofessional consensus summit. *Pain Medicine*. 2013 Jul 15;14(7):971-981. doi: 10.1111/pme.12107.
2. Thakur T, Frey, M, Chewning B. Pharmacist services in the opioid crisis: current practices and scope in the United States. *Pharmacy (Basel)*. 2019 Jun; 7(2):60. doi: 10.3390/pharmacy7020060.
3. Borgsteede SD, Rhodius CA, De Smet PAGM, Pasman, HRW, Onwuteaka-Philipsen BD, Rurup ML. The use of opioids at the end of life: knowledge level of pharmacists and cooperation with physicians. *Eur J Clin Pharmacol*. 2011 May 25; 67:79-89. doi: 10.1007/s00228-010-0901-7.
4. O'Connor M, Hewitt LY, Tuffin PHR. Community pharmacists' attitudes toward palliative care: an Australian nationwide survey. *J Palliat Med*. 2013; 16(12):1575-1581. doi:10.1089/jpm.2013.0171
5. Wolfert MZ, Gilson AM, Dahl JL, Cleary JF. Opioid analgesics for pain control: Wisconsin physicians' knowledge, beliefs, attitudes, and prescribing practices. *Pain Medicine*. 2010;11:425-434. doi:10.1111/j.1526-4637.2009.00761.x
6. Singh RM, Wyant SL. Pain management content in curricula of U.S. schools of pharmacy. *J Am Pharm Assoc (Wash)*. 2003 Jan;43(1):34-40. doi: 10.1331/10865800360467024.
7. Sourial M, Lese MD. The pharmacist's role in pain management during transitions of care. *US Pharm*. 2017;42(8):HS17-HS28.