Introduction

- There are numerous procedures performed in the emergency department (ED) which cause pain and anxiety in patients.
- To relieve patients from this pain, emergency physicians commonly perform procedural sedation and analgesia (PSA).
- A number of potential anaesthetics and analgesics can be administered in the ED, each with their own benefits and risks.
- In urban centres, propofol + fentanyl has become the dominant medication of choice. Not much is known about the preferences in rural and community emergency departments.

Objectives

Physicians staffing non tertiary emergency departments (EDs) in Southwestern Ontario were surveyed to determine the agents commonly used for PSA, to ascertain the familiarity with newer agents and protocols, and to assess knowledge of the side effects of these agents.

Methods

- A confidential survey was distributed to emergency medicine physicians working in 9 rural EDs throughout Southwestern Ontario during October, 2011.
- Using a 5-point Likert scale, physicians were asked to rate their use and familiarity with various drugs used for procedural sedations in the emergency department, as well as their side effects.
- Demographic and practice characteristics were collected to accurately represent the participating centers and physicians.

Results

- Of the 55 respondents, 49.1% were CCFP trained, 35.5% were CCFP-EM and the rest were CCFP-Anaesthesia.
- Majority of respondents had up to 15 years of ED practice and had performed 11 or more procedural sedations to date.
- Only 18.5% of respondents performed PSA alone while the rest utilized auxiliary personnel.
- The most commonly used drugs overall in the non-tertiary ED were Fentanyl (66.0%), Propofol+Fentanyl (59.2%) and Midazolam (44.9%).
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- (Graph 1)

Conclusions

- Differences existed when comparing CCFP to CCFP-EM trained physicians:
  - CCFP were more likely to use Midazolam and Midazolam + Fentanyl. (Mean Likert Score of 3.35 and 3.62 respectively) while CCFP-EM were more likely to select Propofol+Fentanyl (Mean of 3.82).
- CCFP were much less comfortable administering Etomidate, Ketofol, Ketamine and Propofol+Fentanyl compared to CCFP-EM.

Drug Side Effects

- Physician’s comfort level correlated with their knowledge of the drug’s side effects as 63% of respondents were able to correctly identify Midazolam + Fentanyl’s side effects like hypoxia, apnea and respiratory depression.
- Only approximately 19% were able to identify etomidate’s potential side effects such as myoclonus, nausea and respiratory depression (30%).