

A PILOT STUDY: TO EXAMINE THE OPIOID PRESCRIBING PRACTICES OF RESIDENTS

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ABSTRACT

Medical students in the beginning of their training are required to take the Hippocratic oath promising to “*primum non nocere*,” meaning to first, do no harm. In the world today, prescription opioid abuse has become a major health problem across the United States with deaths due to opioid overdose increasing from 3,442 deaths in 1999 to 17,029 deaths in 2018.¹ This is a significant burden on physicians who are expected to manage pain with the ultimate goal of committing no harm to their patients. The goal of our pilot study was to assess opioid prescribing training and confidence levels of residents in the following programs: General Surgery, Internal Medicine, Family medicine, and Psychiatry. This is in order to shed light on the current efficacy of opioid prescribing education. We developed a short survey to gauge a resident’s level of opioid training during two stages of their medical career, in medical school and in residency to determine if training differs by year in residency and across different specialties. Generally speaking, a majority of students do not believe that their medical school provided enough education for the prescribing of opioids. In contrast, a majority of residents believed that their residency programs provided sufficient training. Most residents were either “somewhat confident” to “confident” in their ability to prescribe opioids. Studies are underway to determine if the differences we observed in training differ by year and specialty among residents. Such findings will likely provide a better understanding of the influence of training on the prescribing of opioids and potentially opioid abuse.

OBJECTIVE

To determine the prescribing practices in resident’s opioid prescribing practices, such as indications for prescription and confidence to prescribe, are correlated with medical school training, residency training, different specialties, and year in residency.

INTRODUCTION

Medical students in the beginning of their training are required to take the Hippocratic oath promising to “*primum non nocere*,” meaning to first, do no harm. In the world today, prescription opioid abuse has become a major health problem across the United States with deaths due to opioid overdose increasing from 3,442 deaths in 1999 to 17,029 deaths in 2018. This is a significant burden on physicians who are expected to manage pain with the ultimate goal of committing no harm to their patients. The goal of our pilot study was to assess opioid prescribing training and confidence levels of residents in the following programs: General Surgery, Internal Medicine, Family medicine, and Psychiatry. This will hopefully allow us to begin determining the effectiveness of opioid prescribing education for physicians.

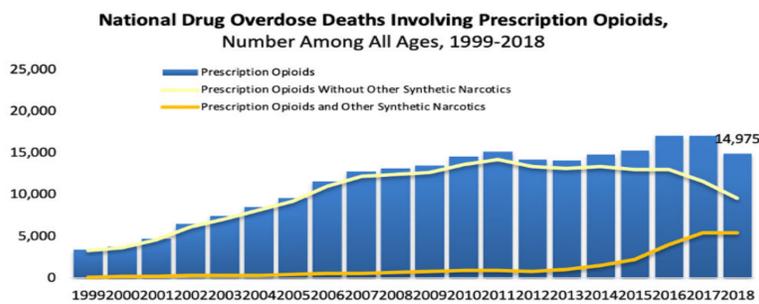


Figure 1: Rates among the nation for prescription opioid overdose deaths from 1999 to 2018. ¹

STUDY DESIGN

An 11 question Qualtrics survey was emailed by education program directors at two residency programs to residents in the following specialties: internal medicine, general surgery, family medicine, psychiatry, and orthopedic surgery. The survey was open for two weeks and each residency program had one reminder email prior to the survey close. The questions were multiple choice and contained questions regarding demographics, perceived level of training in medical school and in residency, and level of confidence in prescribing opioids.

Demographics

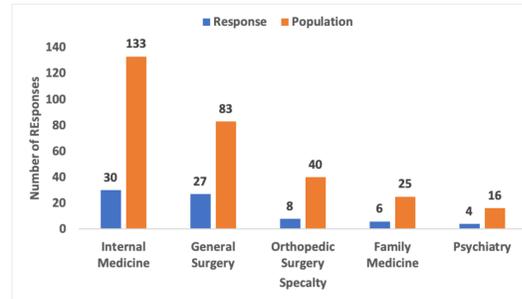


Figure 2: Number of residents in each specialty that were surveyed at the two programs.

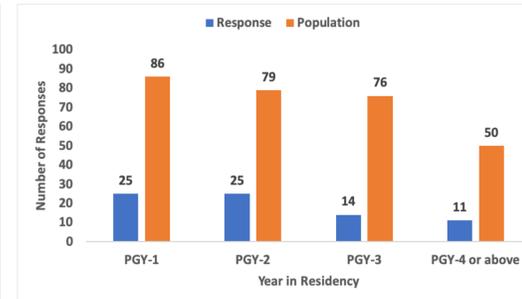


Figure 3: Number of residents by year of training that were surveyed at the two programs.

Raw Survey Data

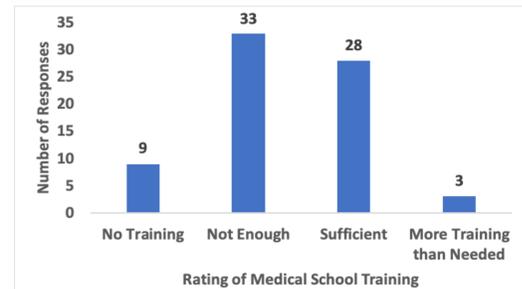


Figure 4: Response to the question: How would you rate your medical school training regarding prescribing opioids?

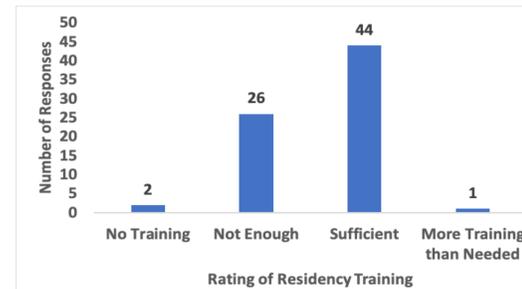


Figure 5: Response to the question: How would you rate your residency training regarding prescribing opioids?

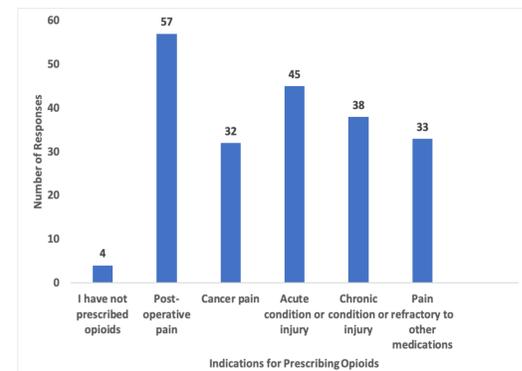


Figure 6: Response to the following question: What indications have you prescribed opioids for?

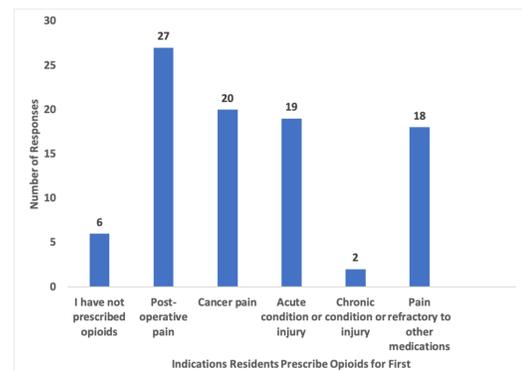


Figure 7: Response to the following question: Do you feel your patients receive adequate management of their pain with opioids?

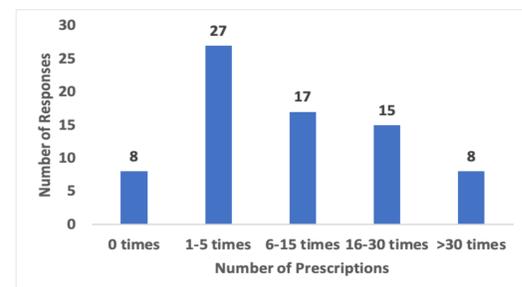


Figure 8: Response to the question: How often did you prescribe opioids in the past month?

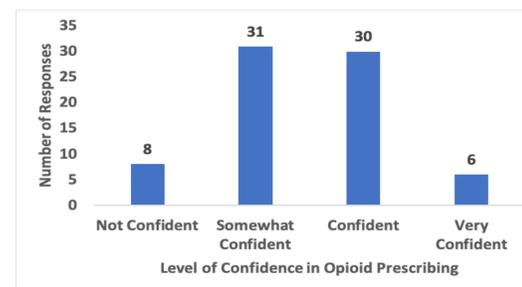


Figure 9: Response to the question: What is your level of confidence in your ability to prescribe opioids?

SUMMARY

- Most respondents were in the specialties of internal medicine and general surgery and in either PGY-1 or PGY-2. Early on in training residents may have not had the same exposures as PGY-3 and above.
- Large number of residents (44%) indicated that they had not received enough opioid training during medical school while only 12% stated they had no training.
- Majority of respondents (58%) indicated that they received enough opioid training during residency.
- Postoperative pain was the most common indication (76%) by residents to prescribe opioids for patients and was also a first indication (36%). Chronic pain is also a common indication (51%) for prescribing opioids, but fewer residents (3%) consider it as a first line treatment.
- The prescribing practices of opioids by residents varied widely.
- Majority of residents indicated that they were “somewhat confident” (41%) or “confident” (40%) in their ability to prescribe opioids.

CONCLUSION

- More training needs to be implemented during medical school.
- Early years of residency is when training was considered sufficient to prescribe opioids.
- Postoperative pain is considered the most common indication for overprescribing opioids.³ Thus, the level of training maybe an important factor that attributes to the overprescribing opioids.
- The primary objective of all physicians in training is to be very confident in their ability to prescribe opioids and ultimately “*primum non nocere*”.

REFERENCES

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