



Incidence and Risk Factors of Nonsteroidal Anti-Inflammatory Drug (NSAID) Use in Post-Operative Patients after the Oklahoma Senate Bill 1446 Limiting the Prescription of Narcotics for Acute Pain

Mahum Nadeem MD¹, Karl Mareth MD², Jiteshwar S. Pannu MD¹, Mohammad Madhoun MD², Hussein Bitar MD²

1. Department of Internal Medicine, University of Oklahoma Health Science Center, Oklahoma City, Oklahoma

2. Department of Gastroenterology, University of Oklahoma Health Science Center, Oklahoma City, Oklahoma



INTRODUCTION

- NSAIDs and opioids are the two most commonly prescribed medications for adequate pain control.
- In November 2018, Oklahoma Senate Bill 1446 went into effect, implementing a 7 day restriction for opioid prescription for acute pain.
- **Given the new restrictions, we proposed that limiting patient's access to opioids in the post-operative period leads to an increased utilization of OTC NSAIDs and thus can contribute to the burden of GI bleeding.**

METHODS

- Study : Retrospective, IRB approved
- Study population : Randomly selected 500 post-surgical patients at the University of Oklahoma
- The data was collected via phone survey and included information regarding opioid/NSAID prescription, over the counter (OTC) use of pain meds, reason for use, degree of pain control and 30-day refills.
- Demographic data was collected via the EMR including age, sex, ethnicity, and zip code. Descriptive analysis was used to analyse the results.

RESULTS

- Telephone survey response was 33%
- Statistical analysis showed no significant difference between > OTC NSAID use between patients who were prescribed (38/45,84%) and not prescribed narcotics (66/90, 73%) : (p 0.14)
- > OTC NSAID use between patients who did (15.6%) or did not contact their provider within 30 days of discharge : (p 0.56)
- The sub-analysis was not significant when stratified for gender (p 0.81), race (p 0.9), ethnicity (p 0.54) or residential status (p 0.13).
- An increased tendency for NSAID use was noted for younger patients (p 0.06)



Does Restricting Opioid Use for Acute Pain Increase OTC NSAID Use, posing an increased risk of GI complications ?`

Variables	NSAID use (n=45)	No NSAID use (n=90)	P value
Age, mean ± SD	51.9 ± 16.4	57.9 ± 18.1	0.06
Female, n (%)	21/45 (46.7)	4/90 (4.44)	0.81
White race, n (%)	38/45 (84.4)	71/90 (78.9)	0.9
Non-Hispanic ethnicity, n (%)	44/45 (97.8)	87/90 (96.7)	0.54
Urban resident, n (%)	32/45 (71.1)	52/90 (57.8)	0.13
Narcotic Rx at discharge, n (%)	38/45 (84.4)	66/90 (73.3)	0.14
Attempt to reach provider, n (%)	8/44 (18.2)	12/84 (14.3)	0.56

Table : Comparison of demographics and Narcotic treatment of patients who used and did not use NSAIDs.

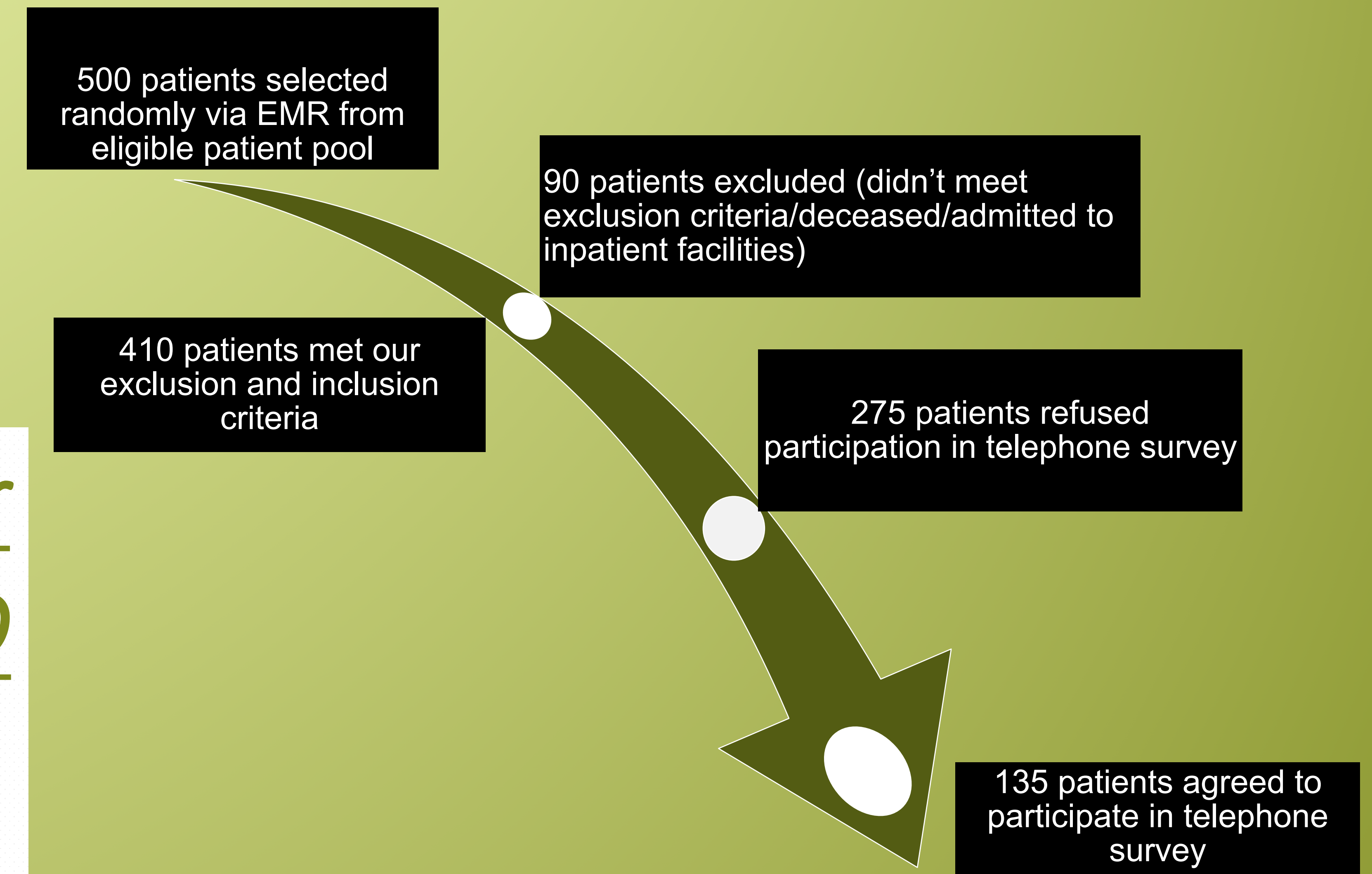


FIGURE A : PRISMA diagram depicting the selection process

CONCLUSION

- **Based on these findings, we conclude that the increased regulations introduced by Bill 1446 for narcotic dosing and duration for acute pain did not impact the utilization of OTC NSAIDs in the post-surgical setting.**
- Would likely command larger scale studies to better elucidate the results, it remains to be seen if this trend changes in the future.