

Examining Current Patterns of Opioid Prescribing and Use After Bariatric Surgery

Jordanne Ford, BA, Tammy Kindel, MD, Rana Higgins, MD,
Kathleen Lak, MD, Anna Hausler, PA, Emily Hetzel, BA, Jon Gould, MD
Department of Surgery, Medical College of Wisconsin - Milwaukee, Wisconsin



Introduction

- The over prescription of opioid medications following surgical procedures is a common practice. When surveyed, many patients report having unused opioid medication.¹
- The lack of standardized postoperative opioid prescribing guidelines leads to wide variations in the amount prescribed after surgery.^{2,3} Leftover medications can flow into the community and contribute to opioid abuse and overdose.
- Additionally, the prevalence of new, persistent opioid use in patients after surgery has been shown to be around 6%.⁴
- We sought to determine our current opioid prescribing practices, patient utilization and satisfaction with pain control following elective bariatric surgery.

Methods

- A retrospective chart review and phone survey was conducted of patients that underwent laparoscopic or robotic Roux-en-Y gastric bypass (RYGB) or sleeve gastrectomy (SG) from April 2018 to March 2019 at a single academic medical center.
- Data collected from the medical record and phone survey included demographics, opioid prescriptions and usage, satisfaction with pain control, and knowledge regarding safe opioid practices.
- Patients were considered to be on chronic opioid therapy if they were taking daily opioids at both the initial consult visit and the pre-surgical visit.
- The amount of opioid prescribed was converted to oral morphine milliequivalents (MMEs).
- *P*-values less than 0.05 were considered statistically significant, and all tests were two-sided.

Results

	No chronic opioid therapy	Chronic opioid therapy	p-value	RYGB	SG	p-value	All patients
MME at discharge							
Mean (SD)	312.1 (68.2)	399.8 (201.4)	0.01	310.8 (46.2)	331.6 (123.5)	0.10	324.0 (102.1)
Median (IQR)	300 (300-300)	375 (300-450)		300 (300-300)	300 (300-300)		300 (300-300)
Refills							
0	144 (86.7%)	21 (80.8%)	0.54	54 (76.1%)	111 (91.7%)	0.003	165 (85.9%)
1 or more	22 (13.3%)	5 (19.2%)		17 (23.9%)	10 (8.3%)		27 (14.1%)
How much did you use of the opioid medication prescribed at discharge?							
None	19 (27.1%)	1 (5.8%)	0.34	11 (31.4%)	9 (17.3%)	0.60	20 (23.0%)
Less than half	22 (31.4%)	7 (41.2%)		6 (17.1%)	23 (44.2%)		29 (33.3%)
Half	5 (7.1%)	2 (11.8%)		2 (5.7%)	5 (9.6%)		7 (8.0%)
More than half	8 (11.4%)	0 (0.0%)		3 (8.6%)	5 (9.6%)		8 (9.2%)
All	16 (22.9%)	7 (41.2%)		13 (37.1%)	10 (19.2%)		23 (26.4%)
If you had unused opioid medication, did you dispose of it?							
Yes	35 (64.8%)	7 (58.3%)	0.67	12 (57.1%)	30 (66.7%)	0.45	42 (63.6%)
No	19 (35.2%)	5 (41.7%)		9 (42.9%)	15 (33.3%)		24 (36.4%)

Table 1. Opioid prescribing and reported use by previous opioid use and type of procedure

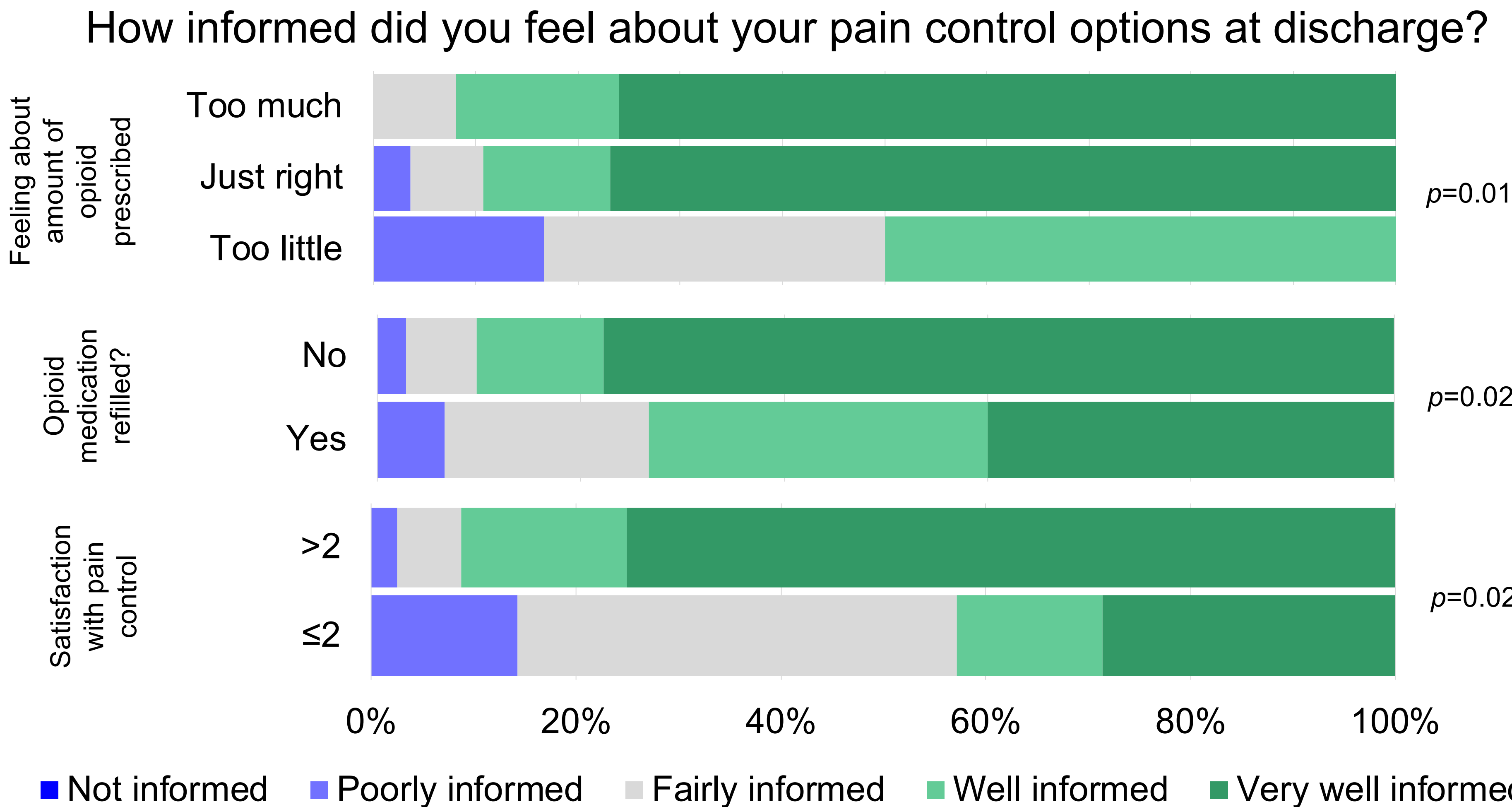


Figure 1. Reported understanding of pain control options

Conclusions

- Currently, there is a gap between the amount of opioid that is prescribed and the amount that is actually taken by most patients following elective bariatric surgery procedures.
- Patients who reported that they felt less informed about their pain control options at discharge also rated their satisfaction with pain control lower than those who felt informed.
- Future work should focus on reducing this gap through the institution of a standard prescribing guideline for opioid medications after bariatric surgery and educational materials for patients.

References

1. Bicket MC, Long JJ, Pronovost PJ, et al. Prescription Opioid Analgesics Commonly Unused After Surgery. JAMA Surg. 2017;152(11):1066-1071. doi:10.1001/jamasurg.2017.0831
2. Linnaus ME, Sheaffer WW, Ali-Mucheru MN, Velazco CS, Neville M, Gray RJ. The Opioid Crisis and Surgeons: National Survey of Prescribing Patterns and the Influence of Motivators, Experience, and Gender. Am J Surg. doi: 10.1016/j.amjsurg.2018.11.032
3. Blay Jr E, Nooromid MJ, Bilimoria KY, Holl JL, Lambert B, Johnson JK, Stulberg JJ. Variation in post-discharge opioid prescriptions among members of a surgical team. Am J Surg. 2018; 216: 25-30. doi:10.1016/j.amjsurg.2017.10.035
4. Brummett CM, Waljee JF, Goesling J, et al. New Persistent Opioid Use After Minor and Major Surgical Procedures in US Adults. JAMA Surg. 2017;152(6):e170504. doi:10.1001/jamasurg.2017.0504

Acknowledgments

Funding provided by the Division of General Surgery, Medical College of Wisconsin