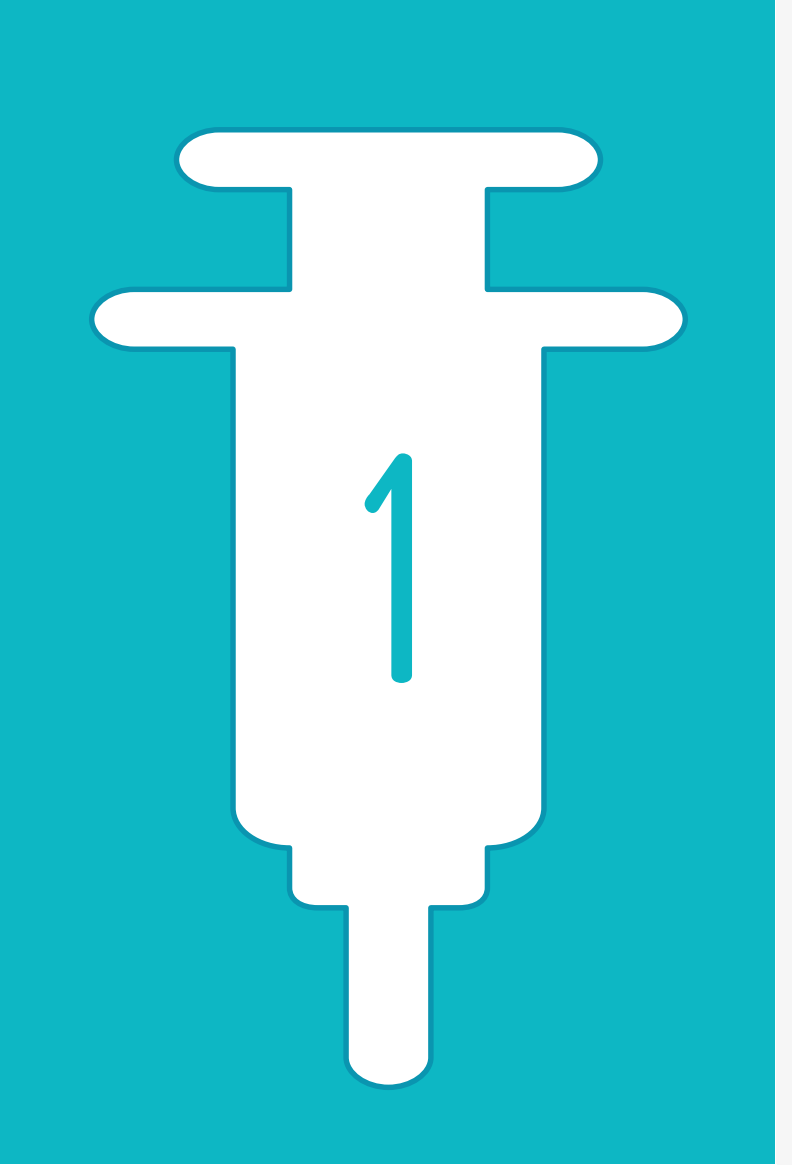




Incidence of oral hydromorphone use after elective cesarean delivery under spinal anesthesia: a clinical audit

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Introduction:

Cesarean Delivery:

- 5-20% of patients experience chronic pain¹
- Breakthrough analgesia: hydromorphone (HM)

Severe Postoperative Pain²:

- Chronic pain / delayed recovery
- Opioid use disorder / post partum depression

Perioperative Pain Management:

- Increased bupivacaine 0.75%: >1.6mL
- Previous HM use = 31-33%
- Pain management: RNs on post-anesthesia care unit (PACU) & floor

Method:

Sample:

- $n = 193$ consecutive retrospective patient files

Data Collected:

- Time of: spinal, PACU admission/discharge, floor admission, HM use
- HM dose

Primary Outcome:

- Incidence of HM use within 6hrs after spinal

Secondary Outcomes:

- (S1) Incidence of HM use in PACU vs. on floor
- (S2) Mean dose of HM: PACU vs. floor
- (S3) Median time from spinal to HM use

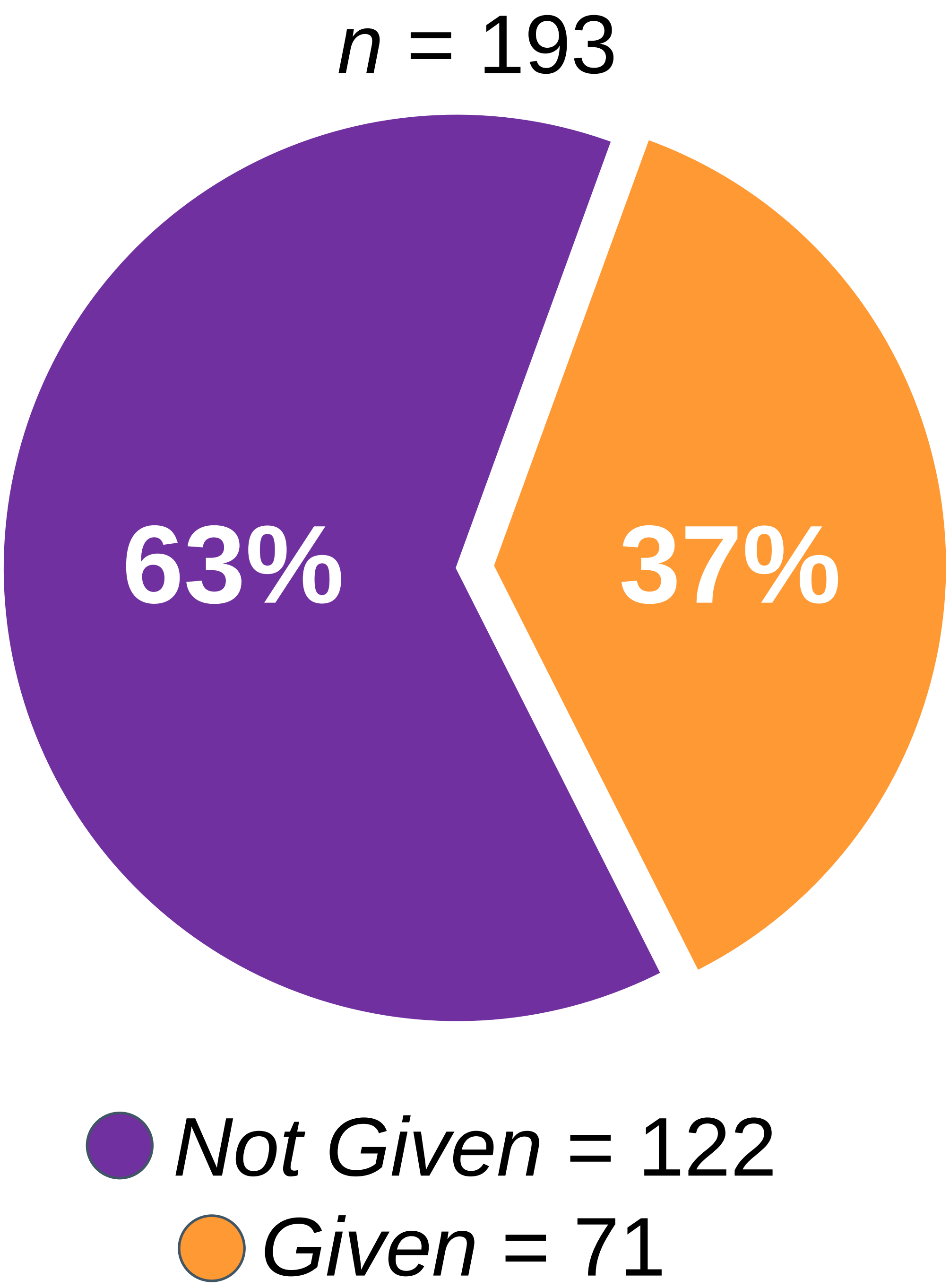


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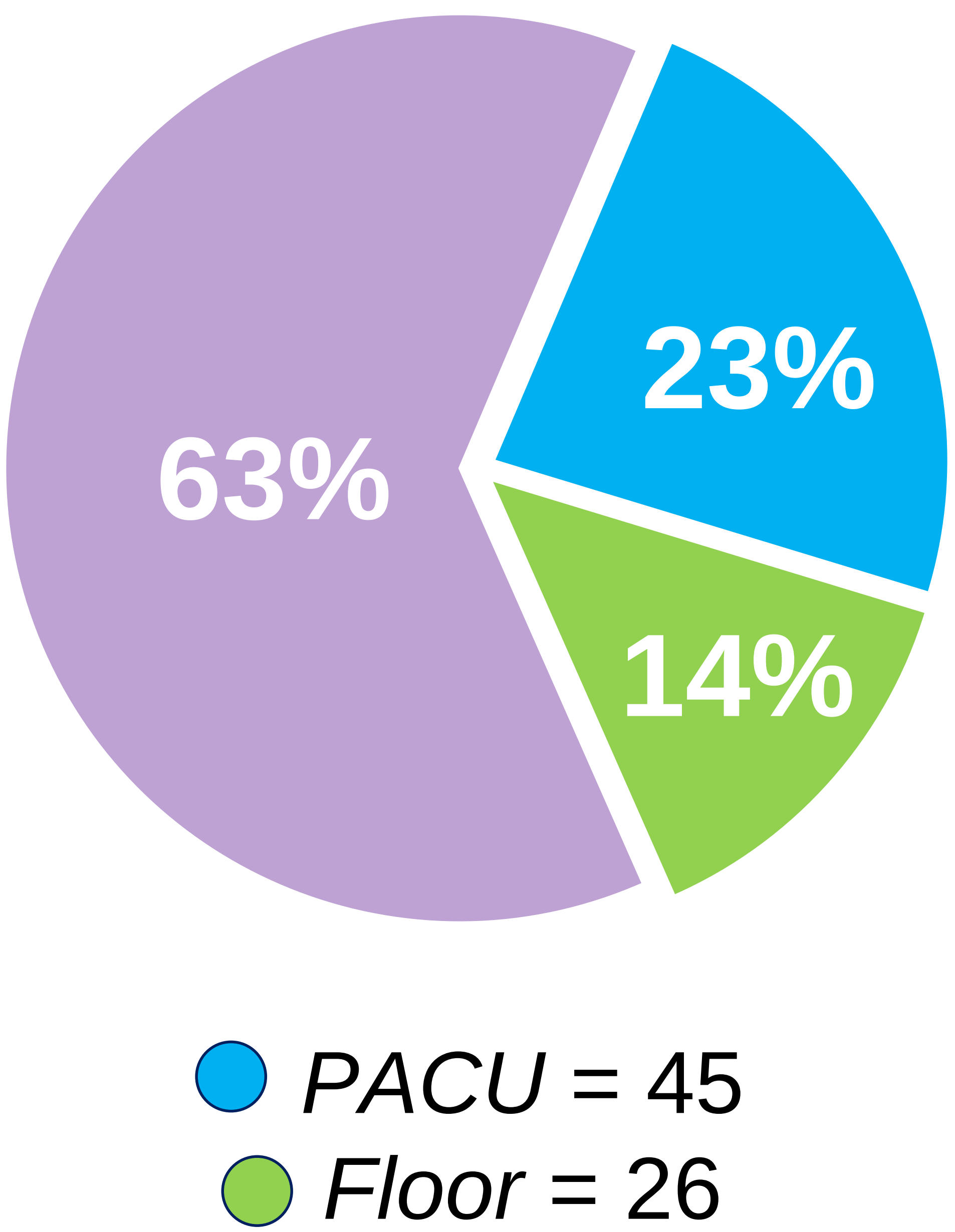
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Results:

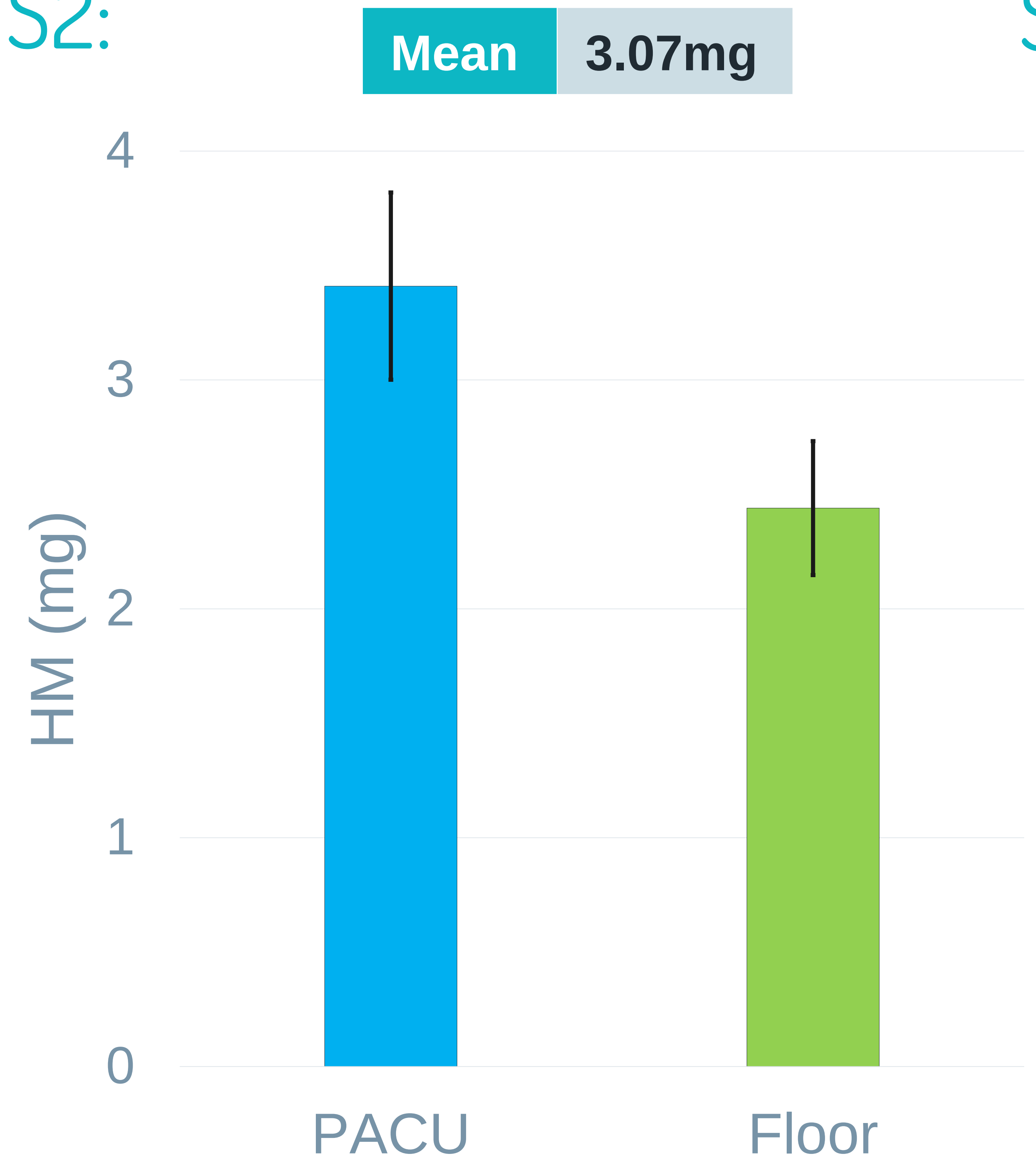
P1:



S1:



S2:



S3:

Median	Minimum	Maximum	SD
2hrs 35mins	1hr 13mins	6hrs 0mins	1hr 12mins

PACU (*M* = 3.41, *SD* = 0.92) & **Floor** (*M* = 2.44, *SD* = 1.08):
t(67) = 3.93, *p* < .001, 95% CI [0.47, 1.46]



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Conclusion:

Primary Outcome:

- >1/3 of patients required breakthrough analgesia

Secondary Outcomes:

- ~2/3 of these patients required analgesia in PACU
- Mean: 3mg - higher amounts in PACU
- Median time to HM: ~2.5hrs, minimum: 1hr 13min

Additional Observations:

- Pain score missing in 56% of HM use cases
- HM dose uncorrelated with pain severity ($p = 0.68$)
- Bupivacaine 0.75%: >1.6mL used in 87% of cases

Recommendations:

- Standardize HM dosing according to pain severity
- Maximize non-opioid multi modal analgesia
- Continue higher bupivacaine dose

References:

1. Sutton, C.D.; Carvalho, B. Anesthesiol Clin. 2017
2. Eisenach et al. Pain. 2008

