

The Impact of Negligence Claims Among Certified Registered Nurse Anesthetists

Elvisa Muratovic, SRNA, Meagan LaCour SRNA
Pamela Chambers, DNP, EJD, MSN, CRNA, CPPS, FAANA (Advisor)



Aims of the Project

- Describe the second victim phenomenon.
- Explore the impact of negligence claims on the personal and professional lives of CRNAs involved in negligence claims.
- Identify common themes experienced among participants during the process of a negligence claim

Background

Adverse events often trigger the second victim phenomenon, causing emotional distress among healthcare providers. Negligence claims compound this stress, leading to litigation stress syndrome akin to post-traumatic stress disorder. The repercussions of being named in a claim extend beyond the individual, affecting familial dynamics and professional relationships. There is a notable gap in research concerning the lived experiences of CRNAs named in negligence claims.

Research Question

What is the lived experience of CRNAs (P) who have been named in a negligence claim (I)? The outcome (O) aims to provide insight into the lived experience of the CRNA, potentially identifying common themes, and make recommendations based on results from the study.

Methods

- 11 participants recruited via social media
- Online demographic survey completed
- 30 to 60 minute interviews via Zoom between February 3, and April 6, 2024
- Transcripts and video recordings securely stored on the university server
- Thematic analysis utilized
- Data was coded through in vivo coding

Quotes

- *"It's kind of all-consuming with your life. . . You're not involved in it every single day, but you. . . always think about it"*
- *"I felt that we had done all that we could for this man"*
- *"Going over and over again in my mind what I could've done differently, and honestly, I don't think anything"*
- *"Difficult because you are told not to talk to anyone, and [I] did not want to get [my] spouse involved and have to testify"*
- *"Sort of the other MDAs treated me differently during the claim, but once the claim closed, I was able to talk to them about it"*
- *"It absolutely reduces your willingness or desire to go the extra mile or advocate for patients"*
- *"They were irritated when they had to have someone cover my shift for trial"*
- *"My attorney was my best support . . . it would be nice if there was some way that the AANA could track CRNA lawsuits and have an advocate [for them]"*
- *"I finished court and [when it was done] I went to work at the hospital"*
- *"I've had members of my staff in my current leadership position get named and I think I'm in a much better position now to understand what they're going through. So, I think I can be a little bit more helpful as they go through this process than if I had gone through this."*
- *"It's not career ending"*
- *"Hang in there, it's tough. Keep your head up and continue looking forward. Do the best you can"*

References



Results

- 46% reported experiencing a patient death
- 18% encountered a major event
- 36% faced a minor event
- Range of emotions:** "stressful, angry, suicidal, confident, and fearful."
- 100% were told not to discuss the claim, causing isolation and loneliness.
- None were aware of the resources provided by AANA

Stated Change of Practice

Questions	Yes	No
1. Avoiding unstable patients?	18%	82%
2. Charting more thorough or comprehensive?	64%	36%

- No participants reported a change in quantity of medications administered
- 9% reported a change in their approach to preop tests
- 9% reported hesitation towards care of certain patients

Recommendations

- Improved Resource Accessibility
- Counseling for CRNAs
- Peer Support Groups
- Employee Assistance Programs (EAPs)
- Support Beyond Legal Counsel
- Malpractice Insurance Awareness

Contact Information

elvisa.muratovic@my.rfums.org | meagan.lacour@my.rfums.org
pamela.chambers@rosalindfranklin.edu



- Multidimensional and easily accessible education, including CAs, for emergencies such as OBH has proven beneficial for providers and patients alike in previous studies
- Results on the efficacy of OBH-specific educational modules and CAs regarding provider knowledge and confidence levels in this study were inconclusive. The small sample size captured for this study may have been a factor. The benefits of standardized education materials for low-incidence/high-mortality events should not be disregarded; instead, more time should be allotted for thorough implementation and further research.





Evaluating the Implementation of an Enhanced Recovery After Surgery Protocol for Colorectal Surgery at a Midwestern Community Hospital

Jereme Froehlich, SRNA; Samantha Kirstein, SRNA
Faculty Advisor: Stephen A. Flaherty, CRNA, PhD

Objectives

- Determine the extent of utilization Enhanced Recovery After Surgery (ERAS) protocols compared to current evidence-based recommendations.
- Assess the impact of a colorectal ERAS protocol on hospital length of stay, 30-day readmission rates, and postoperative opioid use using a retrospective review of cohort data.
- Propose recommendations to support protocol compliance.

Background

Colorectal surgery has been associated with significant morbidity and prolonged length of stay. ERAS protocols have demonstrated the ability to improve patient outcomes by:

- Decreased LOS (WMD = -2.28 days [95% CI -3.09 to -1.47]) without an increase in readmission rates
- Decreased total opioid use in MME (63.7 vs. 280.9, $p < 0.0001$)
- Decreased postoperative pain scores on POD #1 (2.6 vs. 3.2, $p = 0.002$)
- Net health system savings of \$1768 (range: \$920-\$2619) per patient

Methods

- Retrospective data collection from 154 colorectal surgery patients at Northwestern Medicine Kishwaukee Hospital from January 2018 to March 2024
 - Non-ERAS (n=60)
 - ERAS (N=94)
- Data collected using existing hospital reports and manual chart review
- Primary outcomes
 - Length of stay
 - 30-day readmission
- Secondary outcomes
 - Protocol compliance
 - Perioperative opioid use
 - Postoperative pain burden
- Statistical analysis using IBM SPSS Statistics, Version 29.0.0.0.
 - Chi-Square test for independence, independent-samples Mann-Whitney U test, and independent samples t-test

Primary Outcomes

	Non-ERAS (n=60)	ERAS (n=94)	p-value
LOS (days)	3.029	2.281	0.006
Readmission within 30 days	5 = (8.3%)	10 = (10.6%)	0.64

Note. LOS: length of stay. Independent-samples Mann-Whitney U & Chi-square test of independence; * $p < 0.05$

Protocol Compliance

	Non-ERAS (n=60)	ERAS (n=94)	p-value
Intraoperative IV fluids (mls)	1,250	1,000	0.009
Preoperative acetaminophen	24 = (40%)	86 = (91.5%)	< 0.001
Preoperative ibuprofen	25 = (41.7%)	84 = (89.4%)	< 0.001
Intraoperative ketamine	10 = (16.7%)	30 = (31.9%)	0.04
Intraoperative ketorolac	17 = (28.3%)	40 = (42.6%)	0.08
Intraoperative acetaminophen	30 = (50%)	45 = (47.9%)	0.80
Sugammadex	1 (1.7%)	25 (26.6%)	< 0.001
TAP block	31 = (51.7%)	83 = (88.3%)	< 0.001
Epidural analgesia	0 = (0%)	0 = (0%)	N/A
Intraoperative lidocaine infusion	0 = (0%)	12 = (12.8%)	0.004
Propofol infusion for PONV	0/2 = (0%)	1/4 = (25%)	0.43

Note. IV = Intravenous; mls = milliliters; post-anesthesia care unit; IQR: interquartile range; TAP = transversus abdominis plane; PONV = post-operative nausea and vomiting. Chi-square test of independence & independent-samples Mann-Whitney U; * $p < 0.05$

Opioid Use

	Non-ERAS (n=60)	ERAS (n=94)	p-value
Intraoperative opioid use (MME)	10.33	10	0.30
PACU opioid use (MME)	2.50	0	0.19
Opioid use in first 24 hours (MME)	1.67	1.67	0.71
Total perioperative opioid use (MME)	22.05	16.60	0.12

Note. IQR: interquartile range; MME: morphine milligram equivalents; PACU = post-anesthesia care unit. Independent-Samples Mann-Whitney U; * $p < 0.05$

Results

- ERAS group had a 25% reduction in median LOS (2.28 days vs. 3.03; $p = 0.006$) without an increase in 30-day readmissions (5 vs 10; $p = 0.64$)
- No statistically significant difference in opioid use or pain burden between the two groups
- ERAS protocol compliance was 55.8%

Discussion

- A shorter hospital stay suggests reduced costs for both the patient and the hospital.
- Low protocol compliance may have been influenced by provider adherence, incomplete documentation of specific protocol components, and limited researcher access to detailed information for all protocol elements.
- The non-traditional method of evaluating pain scores highlights the need for future research to confirm the accuracy of the results.
- A significant amount of data was hard to access, disorganized, and incomplete.

Recommendations

- Promote protocol adherence through ongoing in-service education on the ERAS protocol and its components.
- Engage a multidisciplinary team to promote compliance.
- Assess protocol compliance monthly or semiannually annually by generating detailed data reports to enhance sustainability.

References



Single-Dose Methadone for Perioperative Pain and Opioid Reduction

Hyder Mirza, SRNA, Sunny Rana, SRNA
Michael Ledvina DNAP, CRNA (Advisor)



Objectives

- Review the physiology and pharmacology of methadone therapy
- Distinguish differences in duration and mechanism of action between traditional opioids and methadone
- Describe the impact that methadone use has on multiple outcome variables
- Identify barriers to implementing methadone in the perioperative period

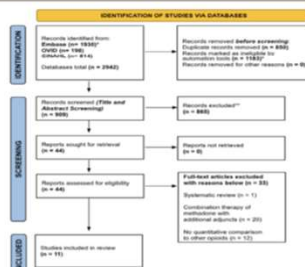
Background & Significance

- Opioid addiction and abuse is a major unintended consequence of surgical procedures.
- Opioids used to manage pain after surgery can lead to a range of adverse effects, including respiratory depression, nausea and vomiting, constipation, and higher healthcare costs.
- Methadone is a long-acting opioid with a reduced risk of adverse effects. The goal is to determine the best effective dosage range and its impact on reducing the total amount of opioids given to patients during surgery.

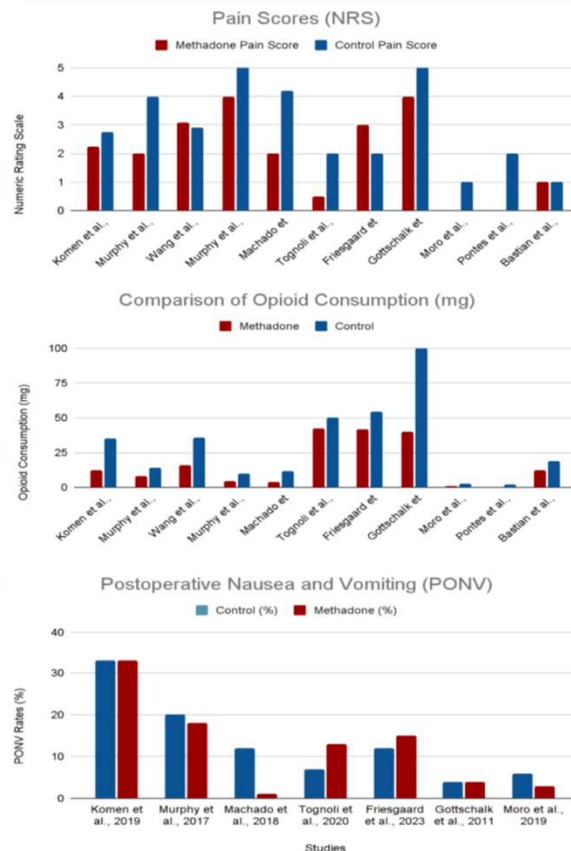
Clinical Question

In adult surgical patients, what is the impact of perioperative methadone administration compared to short-acting opiate on postoperative opioid consumption and pain scores in the first 48 hours?

Methods



Results



Discussion

- Studies using methadone included same-day ambulatory procedures, cardiac bypass, major vascular, complex spine, bariatric, colectomy, various laparoscopic procedures, breast surgery, and orthopedic procedures were all included
- Methadone can attenuate the development of opioid tolerance, hyperalgesia, allodynia, and conversion of acute to chronic postoperative pain
- Results included significant decrease in opioid administration throughout the perioperative period
- Patients who received methadone experienced no increase in length of stay or PONV
- The research demonstrates that methadone can be used for everyday surgical procedures, rather than only those deemed to be high-risk or high-pain.

Practice Recommendations

- Administer a single intravenous dose of methadone (0.15-0.3 mg/kg) given prior to or during surgery
- Patients undergoing routine and complex surgeries should be considered candidates for methadone administration Patients at high risk for QTc prolongation should have baseline ECG studies
- Use with caution in individuals deemed high risk for prolonged postoperative respiratory depression

Conclusion

Synthesis of the best evidence suggests that methadone is a low-cost, low-risk, and safe medication for prolonged analgesia that can decrease perioperative opioid consumption and pain scores and not increase the risk of negative side effects.

References





Academic Entitlement, Personality, and Academic Performance Among Graduate Health Students

Matthew Hunt, SRNA, Emily McCarthy, SRNA

Faculty Advisor: Dr. Jennifer Greenwood, PhD, CRNA, FAANA

Background

- Academic entitlement (AE) is a recently recognized phenomenon characterized by students expecting academic success without assuming personal responsibility.
- In a field that directly impacts patient safety, AE can lead to ill-prepared providers managing care, increasing risks of adverse outcomes. Current AE research centers on undergraduates outside healthcare, highlighting the need to study graduate students to identify trends and potential predictive factors.
- Examples of AE behavior: contesting grades; demanding extensions or special accommodations; disregarding academic integrity; creating a hostile learning environment.

Objectives

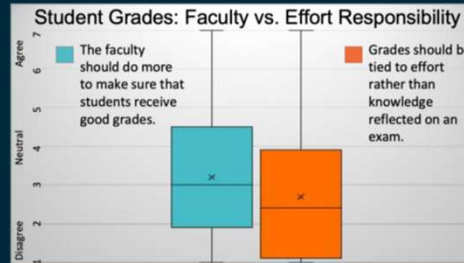
- Measure academic entitlement and differentiate its prevalence, key characteristics, and implications among graduate students.
- Discuss the role that various demographic and personal factors have in the expression of academic entitlement.

Validated Tools of Measurement

- The current literature was examined to identify previously validated tools to measure the desired variables.
- To measure AE:** Academic Entitlement Questionnaire, or AEQ
Consists of 8 Likert scale statements like, "It is the professor's responsibility to make it easy for me to succeed".
- To measure narcissistic personality traits:** Narcissistic Personality Inventory, or NPI
Consists of 8 paired statements in which participants choose which one applies more to them.
"It makes me uncomfortable to be the center of attention" vs. "I really like to be the center of attention".
- To detect social desirability:** BIDR-16
Used to detect under or overreporting of certain characteristics. It consists of 16 Likert statements like, "When I hear people talking privately, I avoid listening".

Methods

- Observational, descriptive cross-sectional study was conducted
- IRB approval as an exempt study obtained
- Email solicitation was sent out to the entire RFU student population
- Data collected using Qualtrics
demographic data; AEQ, NPI, and BIDR tools; and 2 qualitative free-response questions
- Statistical analysis With SPSS to determine predictive demographic factors and possible correlations with AE



Correlations of Attributes

Attributes Examined	Spearman Correlation (r value)	2-Tail Significance (p value)
AEQ:NPI	-0.105	0.230
AEQ:BIDR	-0.127	0.147
AEQ:GPA	-0.044	0.633
NPI:GPA	-0.088	0.358
NPI:BIDR	0.093	0.270
High NPI: BIDR	-0.417	0.034 ★
BIDR:GPA	0.208	0.027 ★

Program-Specific Observations

Academic College Enrolled	AEQ Mean (SD)	NPI Mean (SD)	BIDR Mean (SD)	GPA Mean (SD)
Chicago Medical School	29.93 (13.941)	3.02 (2.074)	72.80 (9.964)	3.635 (0.498)
Health Professions	35.38 (17.052)	2.50 (2.246)	72.54 (9.864)	3.582 (0.390)
Nursing	31.24 (15.388)	2.42 (1.703)	81.05 (9.681)	3.918 (0.157)
Pharmacy	34.75 (12.384)	2.63 (1.188)	69 (5.043)	3.057 (0.365)
Podiatric Medicine	37.11 (11.822)	2.78 (2.016)	73.28 (9.535)	3.399 (0.514)
Graduate Postdoctoral	-	-	-	-
Overall Mean	32.57 (14.679)	2.70 (1.946)	74.96 (10.260)	3.647 (0.439)

Results

- Demographic factors such as age, biological sex, gender, ethnicity, country of origin, education obtained outside the USA, employment status, parental status, marital status, military background, academic college enrolled, years matriculated within each academic program, amount of workforce time before matriculation, and student loans owed after graduation were not significantly correlated with AE, NPI, or socially desirable responding (SDR).
- No significant statistical correlation between AE and NPI or SDR.
- Higher NPI levels were negatively associated with SDR.
- A positive correlation emerged between SDR and self-reported GPA ($p=0.027$).
- Although not statistically significant, program trends included:
AE was reported highest in Podiatric Medicine and Health Professions
NPI was reported highest in Chicago Medical School
NPI was lowest in Nursing
SDR is positively correlated with GPA, peaking in Nursing
- Qualitative analysis showed divided opinions on grading flexibility, with most agreeing that healthcare students should be held to higher academic standards.

Discussion

- Direct comparisons to previous research are challenging because existing data primarily comes from undergraduate students.
- Narcissistic traits were negatively linked to social desirability.
 - Those with narcissistic traits did not care what others thought about them.
- Higher social desirability was positively associated with higher self-reported GPAs.
 - Those who valued others' opinions reported higher GPAs, though whether this reflects actual performance or misreporting is unclear.
- The project underscores the need for further AE research, dismisses narcissism as a predictor, and emphasizes clearer academic expectations to reduce AE and improve student-faculty dynamics.

References





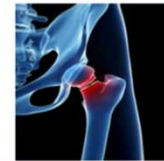
ROSALIND FRANKLIN
UNIVERSITY
of MEDICINE AND SCIENCE

Evaluation of Regional Anesthesia for Hip Fracture Patients

Adam Dryden, RN, SRNA and Rachel Valentino, RN, SRNA

Faculty Advisors: Jennifer Greenwood, PhD, CRNA, FAANA

Michael Jones, DNP, CRNA



Objectives

- Review the recent literature on the relevance of peripheral nerve blocks (PNBs) for the management of traumatic hip fractures
- Complete an evidence-based practice (EBP) project analyzing 60 hip fracture patients at a Level-1 trauma center and report primary and secondary outcomes
- Identify gaps in practice and make recommendations to align with EBP and improve efficiencies in care

Background

The use of peripheral nerve blocks (PNBs) is an important analgesic technique for patients who have suffered from hip fractures and are utilized to improve perioperative outcomes. Each year, there are approximately 150,000 hospitalizations from hip fractures costing the health care system \$10-15 billion dollars annually. EBP shows that the use of PNBs improve patient outcomes by decreasing length of stay (LOS), reducing opioid consumption, reducing pain scores, and decreasing time to ambulation. The aim of this EBP project was to determine the usefulness of PNBs in traumatic hip fractures at a single facility.

Methods

- 60 patients who met inclusion criteria were enrolled for data collection using consecutive sampling technique

- **Inclusion Criteria:** adult and geriatric patients (ASA I, II, III) who presented to the ED with a traumatic hip fracture before Jan 2021 (Group 1) and after Jan 2021 (Group 2), consented for regional anesthesia

- **Exclusion Criteria:** ASA IV or V, multiple fractures, polytrauma, traumatic brain injury, aortic stenosis, coagulopathy, allergy to local anesthetics, distal femur fracture

- **Primary Outcomes:** Pain Scores (NRS), Morphine Milligram Equivalents (MMEs), Length of Stay (LOS)

- **Secondary Outcomes:** Estimated Blood Loss, Fluid Administration, Foley Catheter Rates, Complications (Surgical Site Infection, Pulmonary Infection, Encephalopathy)

- IBM SPSS version 29.0.2.0 was utilized for data analysis

Results

- Mean pain scores between groups did not reach statistical significance, although lower at 3 time periods
- MME consumption were less intraoperatively ($p=0.03$) and 24 hours post operatively ($p=0.037$) in the intervention group
- MMEs 48 hours post-op were also lower ($p=0.127$)
- Patients who received PNBs consumed less opioids while maintaining similar pain scores compared to those who did not receive PNBs
- LOS was slightly higher in the intervention group
- Time to first ambulation, blood loss, vasopressor use, blood administration, and complication rates were similar between groups

Outcome Measurements	Pre-Standing Order Group	Post-Standing Order Group	p-value
Mean Pain Scores 1 hr	2.69	2.38	0.342
Mean Pain Scores 4 hrs	3.9	3.81	0.458
Mean Pain Scores 12 hrs	3.62	3.88	0.333
Mean Pain Scores 24 hrs	3.93	2.73	0.053
Mean Pain Scores 48 hrs	186.8	95.6	0.164
MMEs total	186.8	8.9	0.002
MMEs intra-op (mg)	14.7	27.5	0.019
MMEs 24 hours post-op (mg)	44.1	27.5	0.018
MMEs 48 hours post-op (mg)	38.0	22.1	0.127
LOS (days)	4.3	5.13	0.076

Practice Recommendations

- Current evidence-based practice and the results of this retrospective chart review continue to show the benefit of PNBs in the traumatic hip fracture population
- Creation of a standardized protocol is recommended, including specific blocks for each type of hip fracture and the consistent use of multimodal analgesia
- Streamlined processes for accurate and timely documentation in EMR is advised, specifically time to first ambulation and timely pain score documentation
- Future EBP projects are recommended to exclude patients from study who are not naïve to narcotic use
- Increasing provider knowledge on the benefit of PNBs and type of PNBs for
- Continue use of the following blocks for proximal hip fractures: PENG, Fascia Iliaca, Femoral Nerve Block, Erector Spinae Block
- Increase provider proficiency with PNBs

Conclusion

The use of PNBs in traumatic hip fractures is an evidence-based intervention that improves patient outcomes and optimizes recovery after surgery

PNBs can **lower opioid consumption** while **maintaining low reported pain scores**

Incomplete documentation in EMR, several confounding variables, and small sample size, may have led to a lack of statistical significance

References

