

Patients' Experience with Education vs. Sedation during Regional Anesthesia Procedures: A Qualitative Analysis

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Background:

- Regional anesthesia (RA) is a central component of multimodal perioperative pain management
- Biological, psychological, and social/cultural factors may influence how much procedural discomfort a given patient experiences
- Pain catastrophizing - an individual's tendency to ruminate, magnify, and feel helpless in the face of painful experiences, is associated with greater procedural pain and anxiety. It can be measured using the Pain Catastrophizing Scale (PCS; 0-52).
- Sedation is often used to allay the anxiety associated with procedural discomfort. One might expect that sedation would be particularly important for patients with high PCS scores. Distraction has been shown to be effective for some individuals with higher PCS scores.

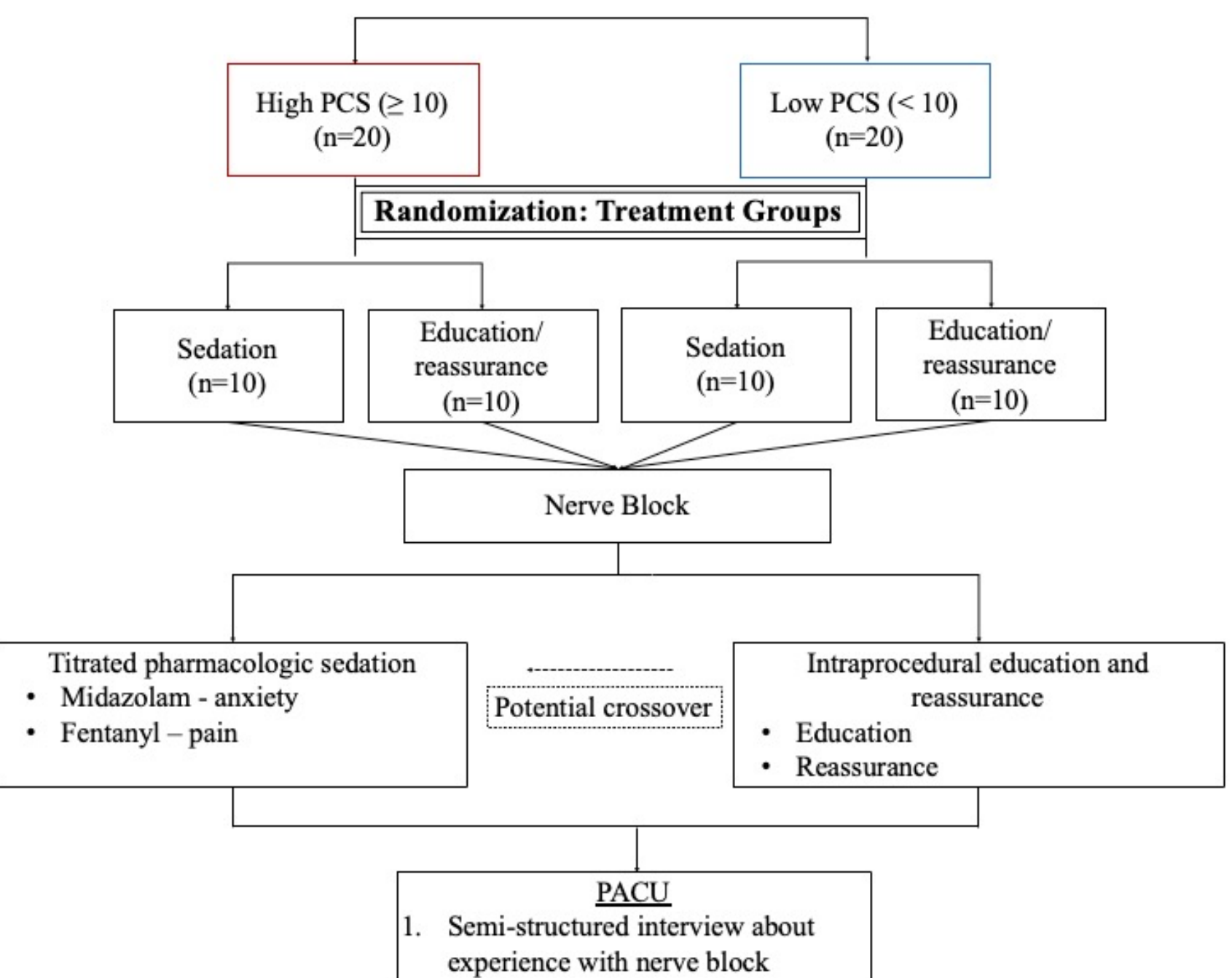


Aims:

- To systematically evaluate patients' experiences with receiving either titrated sedation or enhanced education and reassurance during preoperative Regional Anesthesia.
- To explore differences in how patients with higher or lower pain catastrophizing experienced sedation and enhanced education

Methods/ Participants:

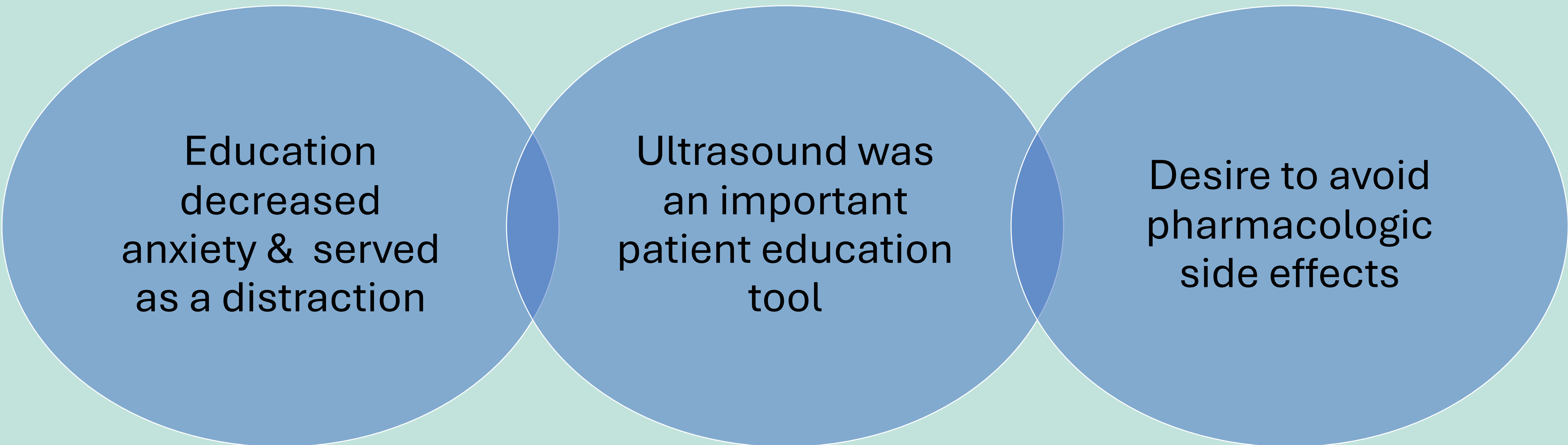
- Day of Surgery Randomization:



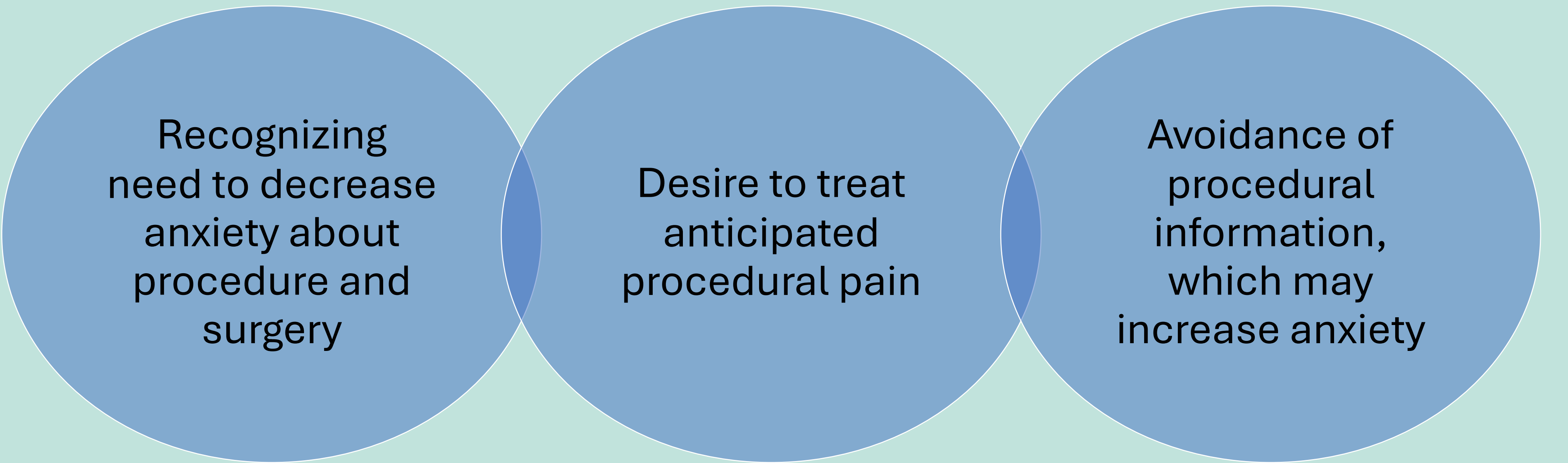
- Semi-structured interviews with patients about their experience during RA were audio-recorded. Recordings were dual-coded inductively at the semantic level to iteratively categorize and identify major themes.

Table 1. Demographics		
	Low PCS (< 10)	High PCS (≥ 10)
Number of subjects (n)	20	20
Age (mean $\pm$ SD)	65.40 $\pm$ 10.425	61.65 $\pm$ 11.690
Gender		
Male	14	10
Female	6	9
Non-Binary	0	1
PCS (mean $\pm$ SD)	4.75 $\pm$ 2.314	16.95 $\pm$ 5.735
Race/Ethnicity		
African American	2	1
Caucasian	18	18
Native American	0	1

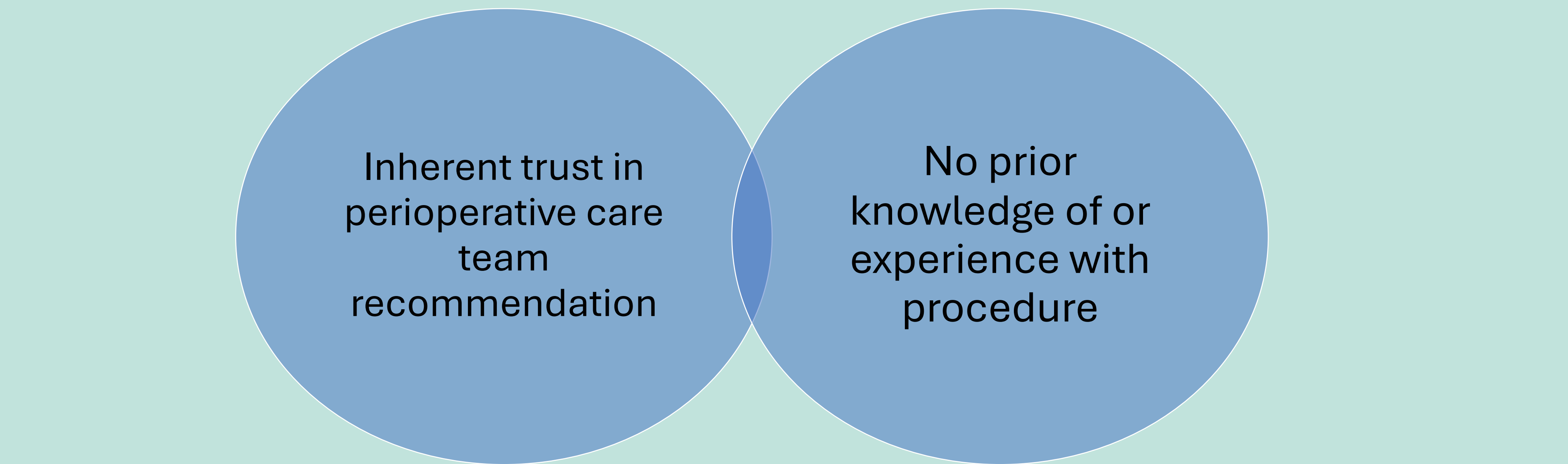
Education/Reassurance cohort: Reasons cited for preferring Education over Sedation



Sedation cohort: Reasons cited for preferring Sedation over Education



Reasons cited for no preference of Education or Sedation



Representative Quotes:

- Notable Experiences of High PCS Patients in Education cohort:

- "I really liked like having someone [with me] looking at the screen saying that's the fascia, that's - this is the muscle, you're gonna see the needle coming in. Here's the artery and the nerve. And that's where they wanted to deliver the space.... even if I was feeling uncomfortable...I knew what was happening as it was." [E_11, High PCS]
- "I felt more comfortable... It [SSNB] didn't feel as bad as it was... just thinking about it and not knowing. At least I knew the ins and outs. Knowledge helps." [E_23, High PCS]
- "You feel confident that it's going to be done properly because they are using the ultrasound" [E_42, High PCS]
- "I didn't wanna see...I just wanted to be like sedated a little bit..[so] that I wake up and it's all done." [E_13, High PCS]

- Notable Experiences of High PCS Patients in Sedation cohort:

- "I'm kind of glad I got the sedation. Just kind of make me feel at ease, because I'm anxious to go in surgery, so any extra meds to calm, helped." [S_19, High PCS]
- "I know what I was going to go through...I had multiple surgeries..." [S_20, High PCS]

- Notable Experiences of Low PCS Patients in Education cohort:

- "I think I was a little nervous so when you were talking to me, it made me feel better because it kind of took my mind off whatever they were doing down there." [E_S7, Low PCS]
- "I just didn't want the side effects of having sedation. I'd rather have - less drugs to me is better, less side effects... I'm more awake at the end of the procedure than if I had more sedation." [E_32, Low PCS]

- Notable Experiences of Low PCS Patients in Sedation cohort:

- "But I was just thinking [SSNB] was part of the process ... it really went as I had thought and very routinely and as described... [SSNB was] beneficial because I was able to avoid general anesthesia. [S_1, Low PCS]

- Notable Experiences of Patients who felt neutral:

- "I knew I'd be good in either case. Again, I have just a lot of confidence in the doctors and nurses here." [S_30, High PCS]
- "I wasn't sure what to expect, like if - what the sedation would feel like, and so I was thinking that they were both pretty reasonable" [S_9, Low PCS]

Conclusions:

- PCS may be a useful pre-operative tool in understanding patient pain phenotype and personalizing the delivery of RA.
- Education helped to make patients feel empowered, and decrease anxiety by serving as a distraction from procedural pain.
- Some patients may prefer sedation to decrease anxiety, while others may want to avoid medications
- Tailored communication, education about anatomy, use of ultrasound, and reassurance can build a patients' trust, increase confidence in their providers and the procedure.

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