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# Addressing perioperative anxiety in surgical patients

Perioperative anxiety is a common yet often underestimated psychological response to surgery that can significantly impact patient outcomes and overall health care experiences. As perioperative nurses we witness first-hand how fear and apprehension can affect our patients before surgery whether it's an elective or emergency procedure.

Anxiety can present itself in many forms – psychological symptoms like fear and excessive worry or physical symptoms such as increased heart rate high blood pressure and nausea<sup>1</sup>. A recent study also found that the nearly one third (32.4%) of adult patients undergoing elective surgery experienced pre-operative anxiety<sup>2</sup>. Despite its prevalence, pre-operative anxiety often goes undiagnosed and untreated leading to adverse effects on recovery and patient satisfaction. As surgical care moves towards a more holistic patient-centred approach it's essential for us to understand the causes, adverse effects and effective management strategies for perioperative anxiety. As perioperative nurses we play a key role in recognising, managing and reducing anxiety in our patients.

There are several causes of perioperative anxiety including fear of the unknown, concerns about anaesthesia, fear of pain and worries about the surgical outcome<sup>3</sup>. Many patients feel anxious because they perceive a loss of control, especially when general anaesthesia is involved. Anxiety may be further intensified in patients who have had negative past surgical experiences or heard about the bad experiences of others. Factors related to the surgery itself – such as the complexity of the procedure or the risk of severe

outcomes – can also increase anxiety levels<sup>4</sup>.

Perioperative anxiety can affect anyone, but certain groups are more vulnerable. Younger patients, for example, tend to report higher levels of anxiety compared to older adults<sup>5</sup>. Women are also more prone to experiencing perioperative anxiety due to a combination of biological and psychosocial factors<sup>6</sup>. Additionally, patients with limited information about their upcoming procedure those with previous negative experiences and individuals with pre-existing mental health conditions, such as anxiety or depression, are at greater risk<sup>7</sup>.

Untreated perioperative anxiety extends beyond psychological discomfort. High levels of anxiety are linked to negative physiological outcomes such as increased anaesthetic requirements and intra-operative complications<sup>8</sup>. Post-operatively anxious patients often experience more intense pain, require larger doses of pain medication and have longer recovery times<sup>7</sup>. Anxiety can also delay wound healing, increase the risk of infections and lead to extended hospital stays<sup>3</sup>. Additionally, the emotional toll of anxiety can decrease patient satisfaction with their overall surgical experience potentially leading to negative long-term perceptions of health care.

To manage perioperative anxiety effectively we need to use a combination of pharmacological and non-pharmacological strategies. Medications like anxiolytics are commonly used to reduce anxiety before surgery but they carry risks such as drowsiness, respiratory depression and interactions with other anaesthetic agents<sup>9</sup>. Due to these side effects non-pharmacological interventions are becoming more popular as safer holistic options for anxiety management.

Some effective non-pharmacological strategies include patient education, music therapy and virtual reality (VR). Patient education is one of the most powerful strategies for reducing anxiety as it addresses the fear of the unknown. It helps patients feel more in control by providing them with knowledge about the surgical procedure, anaesthesia and what they can expect in terms of outcomes<sup>8</sup>. Music therapy and VR are also gaining attention as effective tools for creating a calming environment, distracting patients from their anxiety and, ultimately, improving patient satisfaction<sup>10,11</sup>.

Despite how common perioperative anxiety is, it is often underdiagnosed and undertreated. A recent study conducted in a major metropolitan hospital in Australia found that the prevalence of clinically significant pre-operative anxiety was 32.4 per cent among adult patients undergoing elective surgery<sup>1,2</sup>. One of the biggest barriers to effective management is the lack of routine screening for anxiety during pre-operative assessments. Too often health care providers focus only on the physical aspects of surgical preparation neglecting the psychological needs of patients. Even when anxiety is identified

treatment often relies too heavily on pharmacological solutions despite growing evidence supporting non-pharmacological interventions<sup>9,11</sup>. The absence of standardised protocols for identifying and managing perioperative anxiety leaves many patients without the support they need.

As perioperative nurses we are uniquely positioned to address perioperative anxiety because of our close relationships with patients throughout their surgical journey. We are often the first to recognise signs of anxiety and are in the best position to provide education and support. It is crucial that we incorporate routine screening for anxiety into our pre-operative assessments using validated tools like the Amsterdam pre-operative anxiety and information scale (APAIS) to identify patients at risk<sup>8</sup>.

Beyond screening we can implement and advocate for non-pharmacological interventions. Techniques such as guided relaxation, breathing exercises and music therapy are simple yet effective and can easily be incorporated into routine pre-operative care. Educating our patients about the surgical process also helps demystify the experience and alleviate their fears<sup>5</sup>. By collaborating closely with anaesthetists and other health care professionals we can ensure that anxiety management is holistic, addressing both the psychological and physical needs of our patients.

Perioperative anxiety is a significant but often overlooked issue that can have serious consequences for surgical outcomes and patient satisfaction. As health care continues to evolve towards a more patient-centred approach,

addressing perioperative anxiety must be a priority. As perioperative nurses, we are in the best position to take the lead in recognising and treating anxiety. By integrating routine assessments, advocating for evidence-based interventions and providing compassionate patient-centred care we can help reduce the negative impacts of perioperative anxiety and improve outcomes for our patients.

## References

1. Pritchard MJ. Identifying and assessing anxiety in pre-operative patients [Internet]. Nurs Stand. 2009[cited 2024 October 11];23(51):35–40. DOI:10.7748/ns2009.08.23.51.35.c7222
2. Asiri S, Duff J, Currie J, Guilhermino M. (2024). Prevalence of pre-operative anxiety among adult patients undergoing elective surgery: A prospective observational single-centre study [Internet]. Journal of Perioperative Nursing. 2024[cited 2024 October 11];37(3):e-5–e-12. DOI: 10.26550/2209-1092.1270
3. Rosiek A, Kornatowski T, Rosiek-Kryszewska A, Leksowski Ł, Leksowski K. Evaluation of stress intensity and anxiety level in preoperative period of cardiac patients [Internet]. Biomed Res Int. 2016[cited 2024 October 11];1248396. DOI: 10.1155/2016/1248396
4. Pritchard MJ. Managing anxiety in the elective surgical patient [Internet]. Br J Nurs. 2009[cited 2024 October 11];18(7):416–9. DOI: 10.12968/bjon.2009.18.7.41655
5. Alanazi AA. Reducing anxiety in preoperative patients: A systematic review [Internet]. Br J Nurs. 2014[cited 2024 October 11];23(7):387–93. DOI: 10.12968/bjon.2014.23.7.387
6. Erci B, Sezgin S, Kaçmaz Z. The impact of therapeutic relationship on preoperative and postoperative patient anxiety [Internet]. Aust J Adv Nur. 2008[cited 2024 October 11]; 26(1):59–66. DOI: 10.37464/2008.261.1793
7. Vaughn F, Wichowski H, Bosworth G. Does preoperative anxiety level predict postoperative pain? [Internet]. AORN J. 2007[cited 2024 October 11];85(3):589–604. DOI: 10.1016/S0001-2092(07)60130-6

8. Granziera E, Guglieri I, Del Bianco P, Bucci R, Cadorn C, Minuzzo P. A multidisciplinary approach to improve preoperative understanding and reduce anxiety: A randomised study [Internet]. *Eur J Anaesthesiol*. 2013[cited 2024 October 11];30(12):734–42. DOI: 10.1097/EJA.0b013e3283652c0c
9. Kain ZN, Caldwell-Andrews AA, Mayes LC, Weinberg ME, Wang SM, MacLaren JE. Family-centered preparation for surgery improves perioperative outcomes in children: A randomized controlled trial [Internet]. *Anesthesiology*. 2007[cited 2024 October 11];106(1):65–74. DOI: 10.1097/00000542-200701000-00013
10. Soltner C, Giquello JA, Monrigal-Martin C, Beydon L. Continuous care and empathic anaesthesiologist attitude in the preoperative period: Impact on patient anxiety and satisfaction [Internet]. *Br J Anaesth*. 2011[cited 2024 October 11];106(5):680–6. DOI: 10.1093/bja/aer034
11. Asiri S, Duff J, Guilhermino M. The effectiveness of using virtual reality technology for perioperative anxiety among adults undergoing elective surgery: A randomised controlled trial [Internet]. *Trials*. 2022[cited 2024 October 11];23(1):972. DOI: 10.1186/s13063-022-06908-3