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## REVIEW ARTICLE

# Experiences and perspectives of adults on using opioids for pain management in the postoperative period

## *A scoping review protocol*

Dalia Mohammed Aljohani, Nabat Almalki, Rosalind Adam and Patrice Forget

**OBJECTIVE** To identify and examine the available studies regarding adult perceptions and experiences of postoperative opioid pain management.

**INTRODUCTION** The opioid crisis has been acknowledged as a significant clinical and social problem in many countries. Opioids are often initiated after surgery and may be continued on hospital discharge. There is no consensus on the optimal strategy for integrating patients' views in postoperative opioid prescribing. The aim of this review is to explore the literature on adults' experiences with postoperative opioid pain management.

**INCLUSION CRITERIA** This review will consider all qualitative studies and mixed-method studies with qualitative approaches that explored adults' opinions or concerns on opioids and/or opioid reduction, and adults' satisfaction with pain control in this context. Participants in the studies should be adults who had undertaken any type of surgery and have had opioid prescriptions for pain management.

**METHODS** This scoping review will be carried out in accordance with the Joanna Briggs Institute (JBI) methodology and will utilise the Preferred Reporting Items for Systematic Reviews and Meta Analyses extension for scoping reviews (PRISMA-ScR) reporting guideline and checklist. Searches will be conducted in Ovid MEDLINE, PsycInfo, EMBASE and CINAHL (EBSCO). Studies published in the English language will be included with no time limit. The screening and selection of studies will be carried out independently by three reviewers. Then data extraction process will be conducted by the main reviewer and the reviewer's supervisors independently. A descriptive qualitative content analysis will be utilised for data synthesis. The final report will contain a methodological quality assessment, with the findings being presented, including the knowledge gaps and recommendations for research.

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### KEY POINTS

- This protocol will be used to conduct a scoping review to identify existing literature regarding adult perceptions and experiences of postoperative opioid pain management.
- All qualitative studies and mixed methods-study designs with a qualitative approach will be included in the review.

- The JBI Critical Appraisal Checklist for Qualitative Research will be used to conduct critical appraisals of the methodological quality of the included studies.
- The final report from the data extraction process will be organised into themes and displayed in tabular form accompanied by a narrative summary.

From the Pain AND Opioids after Surgery (PANDOS) European Society of Anaesthesiology and Intensive Care (ESAIC) Research Group (DMA, PF), Epidemiology Group, Institute of Applied Health Sciences, University of Aberdeen, Health Sciences Building, Foresterhill, Aberdeen, UK (DMA, PF), Department of Anesthesia Technology (DMA), Department of Nursing, Prince Sultan Military College of Health Sciences, Dhahran, Saudi Arabia (NA), Academic Primary Care, Institute of Applied Health Sciences, University of Aberdeen (RA), Department of Anaesthesia, Aberdeen Royal Infirmary, NHS Grampian, Aberdeen, UK (PF)

Correspondence to Dalia Mohammed Aljohani, BSc, MSc, Department of Anesthesia Technology, Prince Sultan Military college of Health Sciences, Saudi Arabia, Institute of Applied Health Sciences, University of Aberdeen, Aberdeen, UK.

E-mail: johani.dalia@gmail.com

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## Introduction

Controlling postoperative pain is essential for successful surgical recovery. Opioid prescriptions have been recognised as a significant contributor to the present opioid crisis.<sup>1</sup> Numerous studies conducted in the United Kingdom (UK) indicate an increase in opioid prescriptions and usage in the National Health Services (NHS). There have been many efforts to minimise and limit opioid prescriptions. Although opioid prescriptions guidelines have been published,<sup>2–6</sup> neither their impact nor their rate of adoption have been thoroughly examined.<sup>7</sup> When developing pain management plans, it is important to consider patients' concerns. Patients' ideas and expectations can influence how they experience postoperative pain.<sup>7</sup> If inadequate access to opioid needs to be prevented, over-reliance may also be a problem.<sup>8,9</sup> Recently, amputee patients had significant concerns about over-reliance on opioids for postoperative pain management and potential side effects of opioids.<sup>10</sup> Additionally, patients declared that they were prescribed more opioids than they really needed;<sup>7</sup> hence opioids might be discarded improperly. In light of the efforts of opioid tapering, the literature recommended that pain management could be enhanced by understanding patients' experiences and applying patient-centred care principles to prevent situations when patients endure unnecessary pain while recovering from surgery.<sup>7,10</sup>

In many countries, the opioid crisis is now widely recognised as a problem. In the UK, over the past decade, there has been an estimated 400% increase in the use of prescription opioids.<sup>11</sup> During 2017–2018, 12.8% of people in England received an opioid prescription, with about 50% using them for at least a year.<sup>12</sup> It is currently known that opioids are involved in almost half of drug deaths in England (Office of National Statistics 2021).<sup>13</sup> In Scotland, 89% of the total drug-related deaths were caused by opioids (Drug-related deaths in Scotland in 2020).<sup>14</sup> Scotland has a significantly higher rate of drug use than the rest of the UK.<sup>15</sup> The prevalence and consistency of opioid use (at least in the UK)<sup>16</sup> and the increasing opioid-related deaths, must be balanced against the necessity of adequate pain management after surgery (possibly with opioids), thus it is crucial that researchers explore adults' experiences and wishes regarding postoperative opioid pain management.

A scoping review is a suitable method to identify the current literature and to provide a thorough and comprehensive summary of the evidence that exists regarding this topic.<sup>17</sup> Therefore, this review aims to identify and map the existing evidence related to patients' experiences regarding postoperative opioid pain management. A preliminary search of MEDLINE, the Cochrane Database of Systematic Reviews and JBI Evidence Synthesis revealed no systematic studies or scoping reviews that are currently in progress or that have been published on this topic.

To ensure comprehensive coverage of the topic under review, we have a wide definition of the word 'experiences' in the review questions. It will include patients'

concerns about using opioids, opinions/thoughts on opioids and/or opioid reduction and/or patients' satisfaction with pain control.

## Review questions

- (1) What evidence has been published regarding adult perceptions and experiences of postoperative opioid pain management?
- (2) What are adults' opinions and concerns about postoperative opioid pain management?
- (3) What are the literature gaps related to adult perceptions and experiences of postoperative opioid pain management?

## Eligibility criteria

### Participants

The target population is adults who underwent any type of surgery where they had opioid prescriptions for pain management.

### Concept

Inclusion criteria: qualitative studies and mixed-method studies with a qualitative approach that explored adults' opinions or concerns on opioids and/or opioids reduction, and adults' satisfaction with the use of opioid for pain control. Any opioids available for use in the UK, for example, buprenorphine, codeine, hydrocodone, oxycodone, diamorphine, dihydrocodeine, dipipanone, fentanyl, hydromorphone, morphine, meptazinol, methadone, pentazocine, pethidine, tapentadol or tramadol.

Exclusion criteria: all types of quantitative studies, efficacy and effectiveness studies, RCT studies, and studies investigating the use of opioids for nonpostoperative pain management will be excluded. In addition, studies that explored practitioners' opinions on opioid for pain management will not be considered.

### Context

The review will include all qualitative studies, irrespective of adults' gender, age, race or geographic location.

### Types of sources

This scoping review will consider all qualitative studies, and mixed-methods study designs with a qualitative approach. Efficacy studies and effectiveness studies of analgesic techniques, review and opinion papers will be excluded in this scoping review.

## Methods

The proposed scoping review will be carried out in accordance with the JBI methodology<sup>17</sup> and will utilise the Preferred Reporting Items for Systematic Reviews and Meta Analyses extension for scoping reviews (PRISMA-ScR)<sup>18</sup> reporting guideline and checklist to guarantee that the knowledge synthesis will be carried out rigorously and credibly. Although scoping reviews do not synthesise the results,<sup>19,20</sup> descriptive qualitative

content analysis will be used to organise and synthesise the outcome, thus, addressing the review's objective.

### Keywords

In different databases and using a preformatted search strategy, we will consider the following keywords and their derivatives: Adults' perceptions; adults' experiences; postoperative opioid; pain management; patients.

### Search strategy

The first step was an initial limited search of Ovid MEDLINE, PsycInfo and Google Scholar performed to identify relevant articles, and the index terms used to describe the article and subsequently to develop a full search strategy (see Appendix 1, <http://links.lww.com/EJAIC/A37>). A second search will be undertaken by using all identified keywords and terms via databases included Ovid MEDLINE, PsycInfo, EMBASE and CINAHL (EBSCO). Thirdly, the reference list of included studies will be checked for additional appropriate studies.

As the review aims to provide a thorough overview of the literature on the topic over time, there will be no time restrictions. Studies published in the English language from any geographic context will be included.

### Study/source of evidence selection

Mendeley will be used to upload research records from databases. Duplicates studies will be removed, and the remaining studies will be screened and selected based on predefined inclusion criteria via Rayyan<sup>21</sup> by three reviewers: the main reviewer and her supervisor, and a PhD student. Then, all remaining sources of evidence will be explored in full text form and revised by the reviewer's supervisors. Reasons for exclusion of any full text evidence will be recorded. Any discrepancies that occur between the reviewers about the selection process will be managed through discussion or with the help of another reviewer. To report and represent the inclusion and exclusion process, the PRISMA-ScR flow diagram will be followed.<sup>19</sup>

### Data extraction

The focus of the data extraction and synthesis stage will be on identifying and charting data regarding adults' perceptions and experiences of postoperative opioid pain management. The most appropriate data extraction tool for the scoping review with limited synthesis will be adopted (see Appendix II, <http://links.lww.com/EJAIC/A37>).<sup>22</sup> The data extraction table illustrates the details of data extraction from studies that include study author/location, year of publication, method, aim, participants, studies' main themes, studies' findings appropriate for the review, conclusions, limitations/strengths mentioned by the authors and study recommendations. A descriptive thematic summary of the key findings will be presented in a separate table. The data extraction process will be conducted independently by the main reviewer (DMA) and the reviewer's supervisors (PF,

RA). Any amendments of the data extraction method will be detailed in the scoping review report.

### Assessment of methodological quality

Although no critical appraisal of evidence is required in scoping reviews as per PRISMA-ScR, the reviewers have agreed to include an assessment of methodological quality. The JBI's standardised tools will be used to conduct critical appraisals of the methodological quality of the studies included.<sup>23</sup> For example: the JBI Critical Appraisal Checklist for Qualitative Research (Appendix III, <http://links.lww.com/EJAIC/A37>). The critical appraisal process will offer a comprehensive analysis of the qualities of the evidence pertinent to opinions and experiences of adults regarding postoperative opioid pain management. The critical appraisal will be reported in the results section.

### Data analysis, interpretation and presentation

The final report from data extraction process will be organised into themes and displayed in tabular form accompanied by a narrative summary in an accordance with this scoping review's objective. Interpretation will include concordant and discordant aspects with similar and related literature. Knowledge gaps will be identified, as well as limitations, allowing us to propose recommendations for research before concluding on the main findings.

### Conclusion

The findings of this review will be disseminated through publication and presentations at conferences.

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Conflicts of interest: PF received advisory board/speaker fees from Oncomfort/Grunenthal. The other authors have no other conflict of interest to disclose.

Presentation: none.

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