

Supplementary File S1

Complete Database Search Strategies

Review Title:

Effectiveness and Implementation Barriers of Preoperative Education on Surgical Patient Outcomes: A Scoping Review

Search Date:

4-6 March 2026

1. SCOPUS

Database:

Scopus

Search Date:

4 March 2026

Search Field:

Title, Abstract, Keywords (TITLE-ABS-KEY)

Search String:

TITLE-ABS-KEY

(

("preoperative education" OR "perioperative education")

AND

("surgical patient" OR "preoperative patient")

AND

("patient outcome" OR recovery OR complication OR pain OR anxiety)

AND

(barrier OR challenge OR limitation)

)

Filters Applied:

- *Publication date: 2022–2026*
- *Document type: Article*
- *Language: English*
- *Open access: All Open Access*

2. SPRINGERLINK

Database:

SpringerLink

Search Date:
5 March 2026

Search Field:
Full-text search

Search String:

(
("preoperative education" OR "perioperative education")
AND
("patient outcome" OR recovery OR complication OR pain)
AND
(barrier OR challenge)
)

Filters Applied:

- Content type: Article
- Publishing model: Open Access
- Publication year: 2022–2026
- Language: English

3. PUBMED

Database:
PubMed

Search Date:
5 March 2026

Search Fields:
MeSH Terms and Title/Abstract

Search String:

(
(
"Preoperative Education"[Title/Abstract]
OR
"Perioperative Education"[Title/Abstract]
)
AND
(
"Treatment Outcome"[Title/Abstract]
OR
"Patient Outcome"[Title/Abstract]

OR
Recovery[Title/Abstract]
OR
"Postoperative Recovery"[Title/Abstract]
)
AND
(
Barrier[Title/Abstract]
OR
Challenge[Title/Abstract]
OR
Limitation[Title/Abstract]
)
)

Filters Applied:

- *Publication year: 2022–2026*
- *Text availability: Free full text*
- *Article type: Research article*
- *Language: English*

4. SCIENCEDIRECT

Database:
ScienceDirect

Search Date:
6 March 2026

Search Fields:
Title, Abstract, Keywords

Search String:

(
("preoperative education" OR "perioperative education")
AND
("patient outcome" OR recovery OR complication OR pain)
AND
(barrier OR challenge)
)

Filters Applied:

- *Publication year: 2022–2026*
- *Subject area: Nursing and Health Professions*
- *Language: English*

SEARCH MANAGEMENT AND SCREENING

The search strategy was developed using a combination of controlled vocabulary and free-text keywords related to preoperative education, surgical patients, patient outcomes, and implementation barriers. Boolean operators (“AND” and “OR”) were used to combine search terms across databases.

Database-specific search syntax and filters were adapted according to the indexing structure and retrieval functions of each database. All searches were conducted on 4-6 March 2026. Retrieved records were exported for screening, duplicate removal, title and abstract screening, and full-text eligibility assessment according to the predefined inclusion and exclusion criteria. Manual screening of reference lists and citation tracking of relevant studies were also performed to identify potentially eligible articles not captured through database searches.