

# INPLASY

INPLASY202540062

doi: 10.37766/inplasy2025.4.0062

Received: 18 April 2025

Published: 18 April 2025

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## Intervention: “Clinical Practice Guidelines for the Comprehensive Management of Acute Pain in the Critically Adult Patient: An Umbrella Review”

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## ADMINISTRATIVE INFORMATION

**Support** - The author did not get any financial support during the protocol stage and no conflict of interest.

**Review Stage at time of this submission** - Data analysis.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202540062

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 18 April 2025 and was last updated on 18 April 2025.

## INTRODUCTION

**Review question / Objective** The objective of this umbrella review will be to synthesize evidence of clinical practice guidelines for the comprehensive pain assessment in the critically ill adult patient.

### Review Questions

1. How can pain effectively and comprehensively be assessed and managed among critically ill adult patients?
2. What methods/tools/scales are used to assess pain in critically adult patients?
3. What is the outcome of effective pain assessment and management in critically ill patients?

### Inclusion Criteria

The art retrieval will be conducted following the inclusion criteria based on the PICO principle. Thus:-

1. Population - The population in this review will be systematic reviews conducted on critically ill adult patients (18 years and above) in adult ICUs

2. Intervention - The interventions of interest will be pain assessment protocols, tools or methods employed in the guidelines of management of the critically ill adult patients' pain. This will also include interventions of pain assessment and patient's education on pain.

3. Comparison -This describes what the intervention is being compared with (e.g. placebo, standard care, another therapy or no treatment). According to JBI, for reviews of effectiveness, the comparator is the one element of the PICO mnemonic that can be either left out of the question/s, or posited as a generalized statement (JBI, 2014:55). Therefore, comparison in this study will be replaced with study design or method. In this case systematic reviews

4. Outcome(s) - The study must report on conducting pain assessment, pain assessment methods, scales or tools or effective pain assessment with clear guidelines to guide comprehensive pain management and the outcome.

**Rationale** An umbrella review was preferred because the author found that there are a number of systematic reviews already conducted therefore rather than conduct a systematic review and exclude them we instead excluded the other studies and conducted an umbrella review. Given that systematic review gives the highest level of evidence hence the umbrella review to avoid re-inventing the wheel.

Recent systematic reviews have highlighted that pain assessment is necessary in the critically ill patient and requires harmonization of the guidelines available. This umbrella review intends to put in place a clinical guideline for the comprehensive management of pain in the critically ill adult patient. An initial search of JBI evidence synthesis, Cochrane database, JBI library, Prospero was conducted and no current or in progress umbrella reviews on the topic were identified.

**Condition being studied** The condition being studied is Pain which is not a condition as such but a symptom that is experienced by all critically ill adult patients. Nursing interventions are deliberative, cognitive, physical or verbal activities performed with or on behalf of individuals and their families that are directed towards accomplishing particular therapeutic objectives relative to individuals' health and well - being (Aranda, 2008). Intervention studies bridge the gap between knowledge and practice which can be achieved by effective pain assessment using pain assessment tools, scales, guidelines or protocols that have been established. This enhances comprehensive pain management and evidence - based practice.

## METHODS

**Search strategy** The condition being studied is Pain which is not a condition as such but a symptom that is experienced by all critically ill adult patients. Nursing interventions are deliberative, cognitive, physical or verbal activities performed with or on behalf of individuals and their families that are directed towards accomplishing particular therapeutic objectives relative to individuals' health and well - being (Aranda, 2008). Intervention studies bridge the gap between knowledge and practice which can be achieved by effective pain assessment using pain assessment tools, scales, guidelines or protocols that have been established. This enhances comprehensive pain management and evidence - based practice.

**Participant or population** Adult critically patients over the age of 18.

**Intervention** -The interventions of interest will be pain assessment protocols, tools or methods employed in the guidelines of management of the critically ill adult patients' pain. This also includes interventions in pain assessment and patient's education on pain.

**Comparator** -This describes what the intervention is being compared with (e.g. placebo, standard care, another therapy or no treatment). According to JBI, for reviews of effectiveness, the comparator is the one element of the PICO mnemonic that can be either left out of the question/s, or posited as a generalized statement (JBI, 2014:55). Therefore, comparison in this study will be replaced with study design or method. In this case systematic reviews.

**Study designs to be included** Only systematic Reviews; qualitative, quantitative or mixed systematic reviews.

**Eligibility criteria** The studies that will be included in the study are as described in the PICO above, in addition should be in English or translated reviews will be included.

**Information sources** The sources that will be used include; MEDLINE, CINAHL PubMed, SCOPUS, MEDLINEplus, LILACS and Cochrane databases, & Grey Literature through Google and Google Scholar.

**Main outcome(s)** The systematic reviews that will be selected must report on conducting pain assessment, pain assessment methods utilized, pain assessment scales or pain assessment tools or effective pain assessment techniques used with clear guidelines to comprehensive pain management and the outcome.

**Additional outcome(s)** Any guidelines or protocols of comprehensive pain management thus a step by step of assessment effort in the critically ill patient's pain level.

## Data management

### Study selection

Following the search, all identified citations will be collated and uploaded into Mendeley reference management system and duplicates will be removed. Following a pilot test, titles and abstracts will then be screened by two or more independent reviewers for assessment against the inclusion criteria for review. Potentially relevant studies will be retrieved in full and their citation details imported into the JBI SUMARI. The full text of selected citations will be assessed in detail against

the inclusion criteria by two or more independent reviewers. The reviewers will be JBI certified systematic reviewers including the research supervisor: Prof. Shelly Schmollgruber. Reasons for exclusion of papers that do not meet the inclusion criteria will be recorded and reported in the systematic review. Any disagreements that arise between the reviewers at each stage of the selection process will be resolved through discussion, or with an additional reviewer. The results of the search and the study inclusion process will be reported in full in the final systematic review and presented in a Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) flow diagram (Moher et al., 2019) (Appendix B).

#### Data collection

Data will be extracted from studies included in the review by two independent reviewers using the standardized data extraction tool (Appendix D). The data extracted will include specific details of the systematic reviews thus the title, first author, country, year of publication, database and details of journal. A summary of the authors' primary interpretation of findings will be extracted for all the reviews. The populations, study methods, interventions, and outcomes will also be considered.

**Quality assessment / Risk of bias analysis** The systematic reviews retrieved will be assessed by two independent reviewers using the JBI critical appraisal checklist for systematic reviews. Eligible studies will be critically appraised by two independent reviewers using the appropriate JBI critical appraisal tool for the type of study (see Appendix C for JBI critical appraisal checklist). Authors of papers will be contacted to request missing or additional data for clarification, where required. Any disagreements that arise will be resolved through discussion, or with a third reviewer. The results of critical appraisal will be reported in the narrative form and in a table. All studies, regardless of the results of their methodological quality, will undergo data extraction and synthesis (where possible).

**Strategy of data synthesis** The extracted data will be synthesized manually and findings will be presented in form of table/s with narrative descriptions accompanying the results in the tables. Where possible findings will be stratified or classified and provide narrative synthesis on the same.

**Subgroup analysis** The Umbrella will include qualitative systematic reviews on comprehensive pain management, quantitative systematic reviews

on comprehensive pain management, and any mixed systematic reviews on comprehensive pain management.

**Sensitivity analysis** Tables will be used to assess the quality of the studies whether low or high quality.

**Language restriction** Only English or translated to English systematic Reviews will be included in the umbrella review.

**Country(ies) involved** Kenya and South Africa.

**Keywords** Pain; Pain assessment; Pain assessment tools/scales/protocols/guidelines; systematic review.

**Dissemination plans** The umbrella review results will be published.

#### Contributions of each author

Author 1 - Indrah Onwonga - Conceiving the review hence main author of the whole review.

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Author 2 - Shelley Schmollgruber - Supervisor - reviewing the write up.

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