BMJ Open Study protocol for an integrative theory review of the concept of unidentified pain

Todd B Monroe,¹ Alison Anderson ^(D), ¹ Michelle Failla,^{1,2} MIchael Carter ^(D) ³

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¹College of Nursing, The Ohio State University, Columbus, Ohio, USA ²Nisonger Center UCEDD, The Ohio State University, Columbus, Ohio, USA ³College of Nursing, The University of Tennessee Health Science Center, Memphis, Tennessee, USA

Correspondence to Dr Michael Carter; mcarter@uthsc.edu

ABSTRACT

Introduction Most definitions of pain require individuals experiencing pain to report their pain. There are three groups who may not always report pain including those who: (1) lack the cognitive ability to verbally communicate their pain and also lack a proxy/surrogate to report pain for them; (2) lack the cognitive ability to verbally communicate their pain but have a proxy to report the pain; and (3) have the cognitive ability to verbally report pain but are unable or unwilling to do so. Clinicians may not be able to determine which patients are at risk for unidentified pain. Therefore, in this study, we present a protocol for an integrative review with the aim of identifying existing theoretical approaches to understanding unidentified pain. Methods and analysis We propose a systematic overview of the existing theoretical approaches to understanding 'unidentified pain'. We will use Campbell and colleagues' criteria for systematic reviews of theory and the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols guidelines. Our search will be broad to cover theoretical approaches to 'unidentified pain' using MEDLINE, CINAHL, Embase and Google Scholar. Covidence systematic review software will be used for data extraction and analysis. Then, qualitative content analysis will take place. The content analysis will be presented as a narrative.

Ethics and dissemination No human or animal subjects will be involved. The results are to be published in peerreviewed journals and presented at conferences in the USA and internationally.

INTRODUCTION

In 1968, Margo McCaffery transformed the way nurses and other healthcare professionals viewed pain with her position that 'All pain is real regardless of its cause, pain is whatever the person experiencing it says it is and exists where he says it does' (McCaffery, p95).¹ Prior to McCaffery's work, clinicians used various ways to determine whether an individual was at risk for or experiencing pain. Following McCaffery's work, the International Association for the Study of Pain (IASP) published their definition of pain in 1979 and in 2020 expanded the definition to 'An unpleasant sensory and emotional experience associated with, or resembling that associated with,

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ Novel assessment of theoretical approaches to understanding 'unidentified pain'.
- ⇒ The inclusion of 'gray literature' will help this integrative review to be as comprehensive as possible.
- ⇒ This study will be limited by the current literature and theoretical published works on unidentified pain.

actual or potential tissue damage'.² They also added six notes for further context. Both the McCaffery and IASP definitions require individuals experiencing pain to have an understanding and willingness to report their pain. However, this scenario is not always the case and led the IASP to their revised 2020 definition, noting in their six specifics that the inability to communicate pain does not mean that pain is not experienced.

We propose that three groups of people comprise those who may not report pain: (1) people who lack the cognitive or physical ability to verbally communicate their pain and also lack a care provider who could serve as a proxy to report the pain for them; (2) people who lack the cognitive or physical ability to verbally communicate their pain but have a care provider who can serve as a proxy to report the pain; and (3) people who have the cognitive and physical ability to verbally report pain but are unable or unwilling for whatever reason to do so. For this third group, the person likely has the ability to self-report, which means that a proxy may not be appropriate. We have included this third group as there could be many barriers to pain-reporting that are beyond cognitive or physical abilities. This group could include patients that are concerned that they may be viewed as drug seeking or who wish to avoid being treated are concerned that they may be treated with addicting medications when that is a concern for them. Still others could avoid reporting pain due to anxiety about treatments, social interactions or healthcare interactions. Additionally, others may not report pain as they fear they will not be believed,³ while others may consider the cost of treatment in their decision to report pain accurately.

Substantial literature indicates that potential harm can result from untreated pain.⁴ Untreated pain can lead to decreased mobility, impaired immunity, decreased concentration, anorexia, sleep disturbances and increased suffering.^{5 6} In this protocol, we seek to distinguish the assessment and management of pain from that of screening for the risk of unidentified pain. We believe most patients can and will report their pain, but there are other individuals who lack the cognitive or physical abilities, appropriate proxies or willingness to report their pain. Clinicians use their education and training to identify and treat pain. However, clinicians may not be aware of how to determine which patients have unidentified pain. We believe understanding which patients experience unidentified pain will facilitate better pain assessment and management. Therefore, we propose an integrative review with the aim of identifying existing theoretical approaches to understanding unidentified pain. We believe this aim can be achieved by investigating the following research question: What are the theoretical approaches to the concept of 'unidentified pain' that have been published?

METHOD

We have chosen to conduct an integrative review on the theoretical approaches to understanding 'unidentified pain'. Russell created a five-stage model to guide integrative reviews: (1) problem formation, (2) data collection/literature search, (3) evaluation of data, (4) data analysis and (5) interpretation and presentation of results.' Campbell et al noted that systematic reviews of theory have generally used methods, such as Russell's model, that focus on empirical data.⁸ However, challenges may occur when using an empirical data approach for theory reviews. This means that the traditional population, intervention, control and outcomes framework may need modification to better fit integrated theory reviews.⁹ Campbell *et al* suggested that the criteria for theory reviews should include the following steps: (1) developing the research question, (2) assembling the team, (3) having flexible a priori inclusion criteria, (4) searching, (5) extracting data, (6) appraising quality and (7) synthesising.⁷ We have chosen to follow the Campbell et al model where appropriate since we are proposing to conduct a theory review.⁴

We chose to follow the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRIS-MA-P) guidelines where appropriate.¹⁰ We intend to use the PRISMA-P 2015 checklist of recommended items, which is available under a Creative Commons Attribution License 4.0.

Literature search

Inclusion criteria

The inclusion criterion will be based on our research question. We will include any published work we can identify in the English language that reports theoretical approaches to 'unidentified pain'. We will not have a time limitation on any of these published works.

Search strategies

We will conduct a literature search for theoretical approaches of 'unidentified pain' using the following electronic databases: MEDLINE, CINAHL, Embase and Google Scholar. The search term 'unidentified pain' was derived from our research question. Our search strategy will be simple. For example, PubMed Draft Search Strategy:

"unidentified pain"[Title/Abstract] OR (unidentified[Title/Abstract] AND pain[Title/Abstract]) OR ("unidentified"[Title/Abstract] AND "pain"[MeSH].

Additionally, we will seek ways to find theoretical works that are not produced in commercial publications and may not have gone through peer review for abstract or manuscript publication. These types of works are commonly called grey literature¹¹ and appear more often in databases, such as Google Scholar, or in dissertation and thesis repositories, such as ProQuest Dissertations and Theses Global, EBSCO Open Dissertations and Open Access Theses and Dissertations.¹¹ We plan to use each of these databases and use the Authority, Accuracy, Coverage, Objectivity, Date and Significance (AACODS) checklist from Flinders University to assess quality of the findings.¹²

We will also carefully review reference lists in identified works that may have not been identified in our specified searches. We do not have any limit as to the date of publication or presentation.

Screening, eligibility and selection processes

One researcher will select all records identified with a focus on 'unidentified pain' in the title. These will then be moved to a reference manager, EndNote V.20 (https://endnote.com). All records will be checked by the researcher for duplicates and duplicates removed. At least two reviewers will independently screen all nonduplicated titles and abstracts according to the inclusion criterion of 'unidentified pain'. We will resolve any lack of consensus between the two reviewers through discussion.

The same reviewers will perform a full-text screening of all records that potentially meet inclusion criteria. We will record all exclusions of the full-text articles and resolve through discussion any disagreements between the reviewers. We do not anticipate many articles even though our inclusion criteria are very flexible. Therefore, we do not anticipate many disagreements. Should that occur, we will engage other reviewers from the research team to achieve consensus.

Data evaluation

We do not plan to undertake a methodological quality analysis of the records, as this is not important to this type of review. This is because we are searching for published theoretical understandings of the concept of 'unidentified pain'. We intended to integrate all agreed records into the data analysis and therefore do not intend to assess the relevance of the records, as recommended by Whittemore and Knafl.¹³ Instead, we intend to merge any individual theoretical approaches for the research question prior to extraction, as our interest rests on the robustness of the theory rather than any single report.

Data extraction and analysis

Data extraction and analysis will be separate steps. First, we will identify selected information from the articles and record the references into Covidence systematic review software (www.covidence.org). This will include (1) authors, (2) year of publication or creation, (3) type of publication and (4) name of the theoretical approach in the publication. One researcher will extract the data, then a second researcher will randomly check the data. We will resolve any disagreements by discussion.

The second step will consist of a qualitative content analysis. Two researchers working together will perform this step by merging any individual theoretical approaches into a single theory aligned with the research question. Once again, the team will resolve any concerns, such as lack of consensus, through discussion.

Data synthesis and presentation

Our team will create a Data Extraction Template to demonstrate the screening process. We have provided our results in table 1. In addition, we intend to create an AACODS checklist for critical appraisal of grey literature suggested by Tyndall.¹²

We will present the content analysis as a narrative and include figures and tables if appropriate. This review will comprise an integrative and critical overview of the existing theoretical approaches to understanding the concept of 'unidentified pain'. Researchers can implement these analyses to further develop the identified theoretical approach to understanding unidentified pain. Of note, we will be able to specify a theoretical model that is most likely to result in a simple, valid and reliable screening instrument for determining the risk of unidentified pain.

Patient and public involvement

None

Table 1	Data extraction template		
Authors	Year	Type of publication	Theoretical approaches
Autions	Tear	publication	approacties

ETHICS AND DISSEMINATION

This proposal seeks to conduct an integrative review that will not involve human or animal subjects. Therefore, review by an ethics committee is not required. We aim to publish the results in peer-reviewed journals and presentations at conferences in the USA and internationally.

Contributors TBM drafted the overall research idea. TBM and MC wrote the initial draft of the protocol. AA and MF contributed content and edited the content. All authors revised and approved the final manuscript.

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ORCID iDs

Alison Anderson http://orcid.org/0000-0002-1834-128X MIchael Carter http://orcid.org/0000-0002-1291-1050

REFERENCES

- 1 McCaffery M. Nursing practice theories related to cognition, bodily pain, and man-environment interactions. University of California Print. Office, 1968.
- 2 International Association for the Study of Pain [Internet]. IASP announces revised definition of pain. ISAP news, 2022. Available: https://www.iasp-pain.org/publications/iasp-news/iasp-announcesrevised-definition-of-pain/
- 3 Hoffman KM, Trawalter S, Axt JR, et al. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. Proc Natl Acad Sci U S A 2016;113:4296–301.
- 4 King NB, Fraser V. Untreated pain, narcotics regulation, and global health ideologies. *PLoS Med* 2013;10:e1001411.
- 5 Brennan F, Lohman D, Gwyther L. Access to pain management as a human right. *Am J Public Health* 2019;109:61–5.
- 6 Lipman AG. Pain as a human right: the 2004 global day against pain. J Pain Palliat Care Pharmacother 2005;19:85–100.
- 7 Russell CL. An overview of the integrative research review. Prog Transplant 2005;15:8–13.
- 8 Campbell M, Egan M, Lorenc T, et al. Considering methodological options for reviews of theory: illustrated by a review of theories linking income and health. Syst Rev 2014;3:114.
- 9 Aslam S, Emmanuel P. Formulating a researchable question: a critical step for facilitating good clinical research. *Indian J Sex Transm Dis AIDS* 2010;31:47–50.
- 10 Moher D, Shamseer L, Clarke M, et al. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. Syst Rev 2015;4:1–9.
- 11 Paez A. Gray literature: an important resource in systematic reviews. *J Evid Based Med* 2017;10:233–40.
- 12 Tyndall J. AACODS checklist. Flinders University, 2010. Available: http://dspace.flinders.edu.au/dspace/
- 13 Whittemore R, Knafl K. The integrative review: updated methodology. J Adv Nurs 2005;52:546–53.