

Editorial

In no uncertain terms: the importance of a defined objective in scoping reviews

Since publication of the first key paper outlining a clear methodological framework for the conduct of scoping studies (hereafter referred to as scoping reviews),¹ authors have sought to clearly distinguish the differences between scoping reviews and their more familiar cousins, literature reviews and systematic reviews.^{2,3}

In 2010, Danielle Levac and colleagues highlighted that despite the increasing popularity of scoping reviews across a number of fields of enquiry including health research, a universally understood definition of and purpose for scoping reviews had yet to be delineated.² Six years later, it appears that a consensus is still yet to be reached, and the great variety of approaches to the conduct and purpose of scoping reviews is most evident in a recent scoping review of scoping reviews.⁴ As Pham and colleagues point out, scoping reviews are an emerging and increasingly popular approach for mapping existing literature in a given field, reporting that 344 scoping reviews using a range of approaches were published between 1999 and October 2012, with almost three quarters of these addressing health topics.⁴ Since mid-2015 when the Joanna Briggs Institute developed its own definition and methodological approach to the conduct of scoping reviews,^{5,6} five protocols have been published in the *JBI Database of Systematic Reviews and Implementation* reports, with a number more on the way.⁷⁻¹¹ It is apparent that many of our authors are keen to conduct scoping reviews, and as such, this editorial focuses on an important consideration to bear in mind when developing this work.

In the JBI guidance for authors embarking on scoping reviews, we highlight the importance of clearly identifying the objective/s and specific review question/s of a scoping review. As scoping reviews tend to be, by their very nature, broader in scope than a systematic review, for example, the effectiveness of an intervention in terms of a specified set of outcomes, this will be reflected in the objective/s and question/s posed by the scoping review. It is here is where authors can run into some difficulty.

Put simply, scoping reviews seek to “map the evidence”, but just as a systematic review may synthesize evidence to answer a specific question in terms of the effectiveness of a particular intervention with particular outcomes, a scoping review should also be designed to map the evidence it identifies *in terms of* something. What this specific “something” is (there may also be multiple things to map evidence against), is up to the authors and should be clearly identifiable in the objective/s and question/s detailed in the Inclusion Criteria and justified in the Background of the protocol. To improve the utility of scoping reviews and provide a clear explanation to readers, it is critical that authors identify and detail the scoping review’s objective/s as well as how their question/s align with and are expected to meet these objective/s. As with systematic reviews, linked to this is the importance of ensuring that the Inclusion Criteria are congruent with both the objective/s and question/s – will they allow the authors to correctly identify the evidence they need to answer their question/s and meet their objective/s? How authors decide on what evidence to map evidence in terms of may be based on a range of factors which should ideally be significant issues or considerations for the field within which they are conducting the scoping review. For example, one recently

published scoping review protocol has the objective of identifying and describing the characteristics of primary healthcare models of service delivery for Indigenous people.⁹ This review has identified that it will seek to map the available evidence in terms of a range of factors which are clearly detailed in the Inclusion Criteria and will likely seek to extract relevant data, for example, details of the workforce organization, and map that data in terms of salient factors such as the geographic setting, client population and focus of the service delivery model. Mapping the evidence this way may allow the authors to discuss the ways that different types of workforce organizations have been described and examined in the literature in terms of where the primary healthcare models have been utilized, who they have targeted, and what types of diseases or conditions they have focussed on. Ideally, decisions regarding what a scoping review should seek to map the evidence in terms of should be based on a detailed understanding of the topic or field of interest. This is where it can be very helpful to include a topic expert who is knowledgeable in the field to ensure that the objective/s, question/s, inclusion criteria are relevant and meaningful within the particular field of enquiry. Authors can then be confident that the parameters of their Inclusion Criteria (which in turn identify the kinds of data that might be extracted from included studies) will be an appropriate fit for meeting their specified objective/s and answering their review question/s. At the protocol stage for any scoping review, it should be clear in the Background why the objective/s has been chosen and why the particular question/s have been asked; to simply “map the available literature” is not enough!

Mapping the evidence can be a challenge in and of itself, but having a clear preliminary understanding of what evidence is required to answer the particular question/s of the scoping review can help reviewers greatly. For example, if a scoping review has an objective of examining how different research designs have been used over time and in different healthcare settings, data regarding when the included studies were conducted and where will be important to extract. This data may then be tabulated (or even graphed) in relation to data pertaining to the different research designs used to demonstrate how things have either changed or remained the same over time, as well as what research designs are used where. A benefit of the scoping review is that this process can be somewhat more flexible and iterative in comparison to a traditional systematic review; as authors examine the studies that they have identified, they may notice other important data or factors that could be useful to extract and map. For example, in a recent scoping review on the extent and range of qualitative evidence regarding people’s views and experiences of delivering and participating in microfinance programs in order to identify potential topics for a future systematic review, the protocol stated that data would be sought, extracted and mapped in terms of factors such as country, region and type of microfinance program.¹² As the project unfolded, it became clear that data from the perspective of microfinance providers was largely absent, while there was rich and detailed data around aspects of how women experience participation in terms of gender empowerment. These new forms of data could then be extracted, tabulated and mapped in order to provide a strong evidence base for a systematic review on the qualitative experiences of women who participate in microfinance interventions.

This editorial has highlighted a number of important considerations for prospective authors of scoping reviews to keep in mind as they are planning, writing and conducting their reviews. Scoping reviews may be broader and less specific in terms of the questions they ask and the evidence they seek in comparison to systematic reviews. However, they must be focused and precise, especially in terms of their objectives and questions. It is also critical that they clearly describe what data they intend to extract and how this data is to be mapped. Because scoping reviews can be more iterative, authors can adjust and refine the kinds

of data they extract in order to meet their objective/s and question/s as well as how it is to be mapped and presented even after the protocol has been published – but as with a systematic review, any changes must be clearly explained. It is hoped that this additional clarification can aid authors in planning and conducting scoping reviews in order to advance the cause of evidence-based healthcare and better understand the evidence across numerous fields in both healthcare and beyond.

Micah D J Peters

Research Fellow, The Joanna Briggs Institute

Associate Editor, JBI Database of Systematic Reviews and Implementation Reports

Convenor, JBI Scoping Reviews Methodology Group

References

1. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005; 8(1): 19-32.
2. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implement Sci* 2010; 5(1): 1-9.
3. Armstrong R, Hall BJ, Doyle J, Waters E. 'Scoping the scope' of a cochrane review. *J Public Health* 2011; 33(1): 147-50.
4. Pham MT, Rajić A, Greig JD, Sargeant JM, Papadopoulos A, McEwen SA. A scoping review of scoping reviews: advancing the approach and enhancing the consistency. *Res Synth Methods* 2014; 5(4): 371-85.
5. Peters MDJ, Godfrey CM, McInerney P, Baldini Soares C, Khalil H, Parker D. Methodology for JBI Scoping Reviews. The Joanna Briggs Institute Reviewers' Manual 2015. Adelaide, South Australia: The Joanna Briggs Institute; 2015.
6. Peters MD, Godfrey CM, Khalil H, McInerney P, Parker D, Soares CB. Guidance for conducting systematic scoping reviews. *Int J Evid Based Healthc* 2015; 13(3): 141-6.
7. Hakonsen SJ, Pedersen PU, Bjerrum M, Bygholm A, Peters MD. A nursing minimum dataset for documenting nutritional care for adults in primary healthcare: a scoping review protocol. *JBI Database System Rev Implement Rep* 2015; 13(8): 92-100.
8. Cordeiro L, Rittenmeyer L, Soares CB. Action research methodology in the health care field: a scoping review protocol. *JBI Database System Rev Implement Rep* 2015; 13(8): 70-8.
9. Harfield S, Davy C, Kite E, et al. Characteristics of Indigenous primary health care models of service delivery: a scoping review protocol. *JBI Database System Rev Implement Rep* 2015; 13(11): 43-51.
10. Singh A, Harford J, Watt RG, Peres MA. The role of theories in explaining the association between social inequalities and population oral health: a scoping review protocol. *JBI Database System Rev Implement Rep* 2015; 13(4): 30-40.
11. Wilson R, Godfrey CM, Sears K, Medves J, Ross-White A, Lambert N. Exploring conceptual and theoretical frameworks for nurse practitioner education: a scoping review protocol. *JBI Database System Rev Implement Rep* 2015; 13(10): 146-55.

12. Peters MDJ, Lockwood C, Munn Z, Moola S, Mishra RK. What are people's views and experiences of delivering and participating in microfinance interventions? A systematic review of qualitative evidence from South Asia (Protocol): the Joanna Briggs Institute, University of Adelaide, 2015.