

## Review report

**BSMMUJ-17.4 – 76220**

The spectrum of knowledge synthesis methods: From big picture overview to targeted deep dive  
Turin TC *et al.* ([turin.chowdhury@ucalgary.ca](mailto:turin.chowdhury@ucalgary.ca))

### REVIEW COMMENTS

### AUTHOR RESPONSE

#### A. Technical review

#### ROUND 1

Reviewer's name: Md. Atiqul Haque	
ORCID: <b>0000-0002-7598-2550</b>	
Date assigned: <b>19-Sep-24</b>	
Date submitted: <b>24-Sep-24</b>	
Do you have any conflict of interest with the author/s? <b>No</b>	
Do you wish to be disclosed to the author? <b>Yes</b>	
Comments sent to author ( <b>Date: 10-Oct-24</b> )	Date: <b>18-Oct-24</b>
Knowledge synthesis involves analyzing previously published findings from various empirical articles. This commentary effectively addresses the process and offers guidance on how to conduct such reviews. It outlines the key methodological steps, enabling readers to replicate the approach in their own reviews. By encouraging prospective researchers to engage in this type of work, the commentary contributes to the scientific community by expanding the understanding of this crucial methodology.	Thank you very much for making time to review our manuscript. We have made the appropriate changes and have provided the details below.

Reviewer's name: <b>Shahjahan Khan</b>	
ORCID: <b>0000-0002-0446-086X</b>	
Date assigned: <b>19-Sep-24</b>	
Date submitted: <b>10-Oct-24</b>	
Do you have any conflict of interest with the author/s? <b>No</b>	
Do you wish to be disclosed to the author? <b>Yes</b>	
Comments sent to author ( <b>Date: 10-Oct-24</b> )	Date: <b>18-Oct-24</b>
2. Is the title appropriate? = <b>No</b> 2a. The first part of the title is ok, but the second part is ambiguous.	We appreciate the reviewer's feedback on our title "The Spectrum of Knowledge Synthesis Methods: From Big Picture Overview to Targeted Deep Dive." We respectfully would like to keep the current title and would like to offer our rationale for retaining the current title. As a commentary, our article aims to present a conceptual overview of knowledge synthesis methods, highlighting the range from broad, high-level approaches to more focused, in-depth analyses. The title is intentionally crafted to achieve several purposes: <ul style="list-style-type: none"> <li>• Conceptual framing: It succinctly conveys the main concept of our commentary - that knowledge synthesis methods exist on a spectrum of breadth and depth.</li> </ul>

	<ul style="list-style-type: none"> <li>• Accessibility: The use of relatable terms makes the concept more accessible to a broader audience, including those who may not be familiar with specific methodological terminology.</li> <li>• Reflection of content: The title accurately reflects the content of our commentary, which discusses the range from mapping and scoping reviews to meta-analyses and realist syntheses.</li> <li>• Engaging: The metaphorical language of "Big Picture Overview" and "Targeted Deep Dive" is designed to capture readers' attention and pique their interest in the content.</li> </ul> <p>While we acknowledge that the language is metaphorical rather than technical, we believe this approach is appropriate and effective for a commentary piece. The purpose of a commentary is not only to inform but also to engage readers and stimulate further learning. Our title achieves this by presenting a clear, memorable framing of the concept we explore in the article. Furthermore, the use of such language in titles is not uncommon in academic publishing, particularly for commentaries and perspective pieces that aim to present concepts in an engaging manner. We believe that the current title strikes an appropriate balance between academic rigor and reader engagement, which is crucial for a commentary.</p>
<p>3. Does the abstract provide a complete and accurate description of the content of the article? = <b>No</b> 3a. The paper doesn't have any abstract. Instead, it uses highlight. Not sure why?</p>	<p>As this is a commentary article, we did not include any abstract based on the guideline.</p>
<p>7. Is the study design robust and appropriate to the stated objective(s)? = <b>No</b> 7a. Study design is discussed but important components of systematic reviews such as inclusion/exclusion criteria, study time period etc. are not mentioned.</p>	<p>As this is a commentary article, we did not include any methodological description on how to do a systematic review.</p> <p>We will be happy to write a methodology paper with greater details on how to do a systematic review if the Editor commissions us to write that. In that piece we can include all the aspects of doing a systematic review including inclusion/exclusion criteria, study time period etc.</p>
<p>8. Are statistics used appropriately and described fully? = <b>No</b> 8a. The use of the phrases 'meta-analysis' and 'meta-regression' were presented as two different methods, whereas the later is a part of the former, especially used if the studies included in the systematic review are heterogeneous.</p>	<p>Thank you for the comment. We totally agree with you and have modified the manuscript to make this issue clear. Please see lines 100-102 of page 5 of the revised manuscript.</p>
<p>12. Are the references appropriate in number and up-to-date? = <b>No</b> 12a. Some key references are missing. The authors may review and include the following references. Khan, S., Doi, S A R., and Memon, M A. (2016). Evidence-based decision and meta-analysis with applications in cancer research studies, Journal of</p>	<p>Thank you so much for providing the list of your papers for citations. These excellent papers will be quite helpful to write an extensive methodology paper. We will be happy to write a methodology paper with greater details on how to do a systematic review if the Editor commissions us to write that.</p>

<p>Applied Mathematics and Information Science, Vol. 10 (3), 815-822</p> <p>Khan, S. and Memon, M A. (2019). Meta-analysis: a critical appraisal of the methodology, benefits and drawbacks. British Journal of Hospital Medicine, November Vol 80, No 11, pp. 646-641.</p> <p>Khan, S. (2020). Meta-Analysis Methods for Health and Experimental Studies. Singapore: Springer Nature.</p> <p>Khan, S. and Memon, M A. (2021). Systematic Reviews: Understanding the Best Evidence for Clinical Decision-making in Health Care: Pros and Cons. Surg Laparosc Endosc Percutan Tech. Vol 31, pp. 234–240.</p>	
<p>15. Is the overall length of the article appropriate? = <b>No</b></p> <p>15a. Should have included more relevant discussion. For example, Systematic reviews are the foundation of evidence-based decision-making. Evidences from different sources on a specific research question or topic of interest is gathered and analysed by using systematic review techniques. It allows us to combine study outcomes from independent studies to find a synthesized outcome representing all the studies. The strict implementation, assessment and monitoring of the underlying selection and exclusion criteria, study protocol and quality assessment ensure that the results of systematic reviews are reproducible. Systematic review is the first step to identify studies that satisfy the predetermined inclusion criteria and extract the relevant summary statistics from the selected studies adhering to agreed review criteria, procedures and protocols and summarise the results of independent studies. However, the quality of the results produced by systematic reviews depends on the quality of the study design. If the selected studies are of high quality, the criteria of the systematic reviews are satisfied and the systematic reviews are appropriately conducted then the results constitute the highest level of evidence. However, there are genuine issues related to systematic reviews that directly impact on the quality of the final results.</p>	<p>Thank you for the comment.</p> <p>As this is a commentary article, we could not focus on the details of the methodology of conducting a systematic review.</p> <p>We will be happy to write a methodology paper with greater details on how to do a systematic review if the Editor commissions us to write that. In that piece we can include all the aspects of doing a systematic review including the suggestions you have provided in this comment as well as the citations in the previous comment.</p>
<p>18. This is a very important topic. Systematic review and meta-analysis are frequently used in health and clinical studies.</p> <p>I want to see more papers on this topic from the authors.</p>	<p>Thank you for your encouraging comment.</p> <p>We totally agree with you that this is a very important topic.</p> <p>We hope to continue our effort to share the methodological knowledge of this topic with our fellow researchers.</p>
<p>Reviewer's recommendation: <b>Resubmit for Review</b></p>	
<p><b>B. Editorial decision</b></p>	<p>Date: <b>18-Oct-24</b></p>
<p>Final decision: <b>Accepted</b> subject to editorial clarifications.</p>	