

Editorial



The umbrella review: a useful strategy in the rain of evidence

Geun Joo Choi and Hyun Kang

Department of Anesthesiology and Pain Medicine, Chung-Ang University College of Medicine, Seoul, Korea

Received February 14, 2022, Revised March 14, 2022, Accepted March 14, 2022

Handling Editor: Francis S. Nahm

Correspondence

Hyun Kang

Department of Anaesthesiology and Pain Medicine, Chung-Ang University College of Medicine, 84 Heukseok-ro, Dongjak-gu, Seoul 06911, Korea
Tel: +82-2-6299-2571, 2579, 2586, Fax: +82-2-6299-2585, E-mail: roman00@naver.com

Systematic reviews, which rank high in the evidence hierarchy, are essential components of evidence-based medicine [1]. A well-conducted systematic review can be a viable solution for keeping health care providers current in evidence-based medicine [2]. These reviews employ a robust methodical approach that will assist decision-makers with identifying the best available evidence [3,4]. Over the last two decades, there has been an exponential rise in the number of systematic reviews published in almost every field. However, this increase cannot be viewed solely in a positive light [5]. When systematic reviews and meta-analyses on the same topic are published in the same year, the results can be inconclusive, leaving decision-makers uncertain about where to base their conclusions. Thus, decision-makers should be critical and thoroughly evaluate the confidence and quality of evidence derived from the findings of systematic reviews. Because of the need for a comprehensive approach, an additional step in synthesizing existing systematic reviews has been established [4].

Umbrella reviews, which are systematic reviews of previous ones, provide an overall assessment of the information available on a specific topic [1]. Umbrella reviews reach intuitive conclusions by conducting systematic reviews with a consistent approach to variables, allowing for comprehensive analysis integrating previously published

systematic reviews or meta-analyses. An umbrella review can also be used to quickly assess a large amount of evidence and compare the findings of previous systematic reviews. Typically, the umbrella review imposes overall coherence by dividing a broad issue into targeted populations, interventions, or both. Umbrella reviews are likely to be useful for the evaluation of human health technology, which aims to influence the establishment of guidelines. Another example is human health management, including medication, food, lifestyle, and exercise. In this case, before making the final decision, every managerial option must be considered. Thus, when wide-ranging questions arise, such as when the investigation of multiple interventions on a specific issue are required, or when evidence is required to establish a new policy or practice, we should consider conducting an umbrella review. We may conclude that individual systematic reviews are more focused on a specific set of outcomes in this regard.

Umbrella reviews obviously suffer from a lack of quality or available data in the included studies and reviews. The concept of umbrella reviews is rather new and relatively unexplored. It raises the issue of heterogeneity when combining systematic reviews with different conditions, indicating that the quality of each systematic review remains a concern. Nonetheless, umbrella reviews are useful and

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Author contributions: Geun Joo Choi: Concept/writing/manuscript preparation; Hyun Kang: Concept/writing/manuscript preparation.

necessary in the field of human health care. As the next logical step beyond systematic reviews, it is time to take a serious look at the practical steps required to create robust umbrella reviews in the medical field.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

FUNDING

No funding to declare.

ORCID

Geun Joo Choi, <https://orcid.org/0000-0002-4653-4193>

Hyun Kang, <https://orcid.org/0000-0003-2844-5880>

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