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Narrative and systematic reviews Characteristics and their role in contemporary scientific research

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Αφηγηματικές και συστηματικές ανασκοπήσεις: Χαρακτηριστικά και ο ρόλος τους στη σύγχρονη επιστημονική έρευνα

Περίληψη στο τέλος του άρθρου

Key words: Narrative reviews, Reviews, Scientific research, Systematic reviews

1. INTRODUCTION

In order to be effective in their work, scientists must prioritize staying up-to-date with the latest knowledge. Considering the vast amount of information published each year, staying updated on new data is a challenging endeavor.¹

Updating knowledge can be easily accomplished through the study of literature reviews. These facilitate the task of updating knowledge, as readers not only are provided with a concise access to the key references without the need to scrutinize the entire literature on a specific subject, but also benefit from a synthesis from an expert's viewpoint.²

In scientific literature, it is common to come across two distinct types of review articles, each with its own set of characteristics and objectives. These types are systematic

Submitted 7.12.2023 Accepted 23.12.2023 reviews and narrative reviews (also referred to as expert or traditional reviews).⁷ The aim of the present article is to provide a description of the main characteristics of systematic and narrative reviews and to delineate their position and role in current scientific research.

2. NARRATIVE REVIEW

Publications known as narrative, expert, or traditional literature reviews provide a theoretical and contextual examination of the current state of scientific knowledge on a specific topic or issue. For an extended period, the narrative review has been the preferred form of summarizing research published on a specific subject. The process of selecting articles does not encompass all possibilities and does not adhere to a standard scientific protocol. The data is subject to qualitative analysis, with the subsequent presentation of results adopting a narrative format, accompanied by a critique of the current situation.³

The definition of a narrative review entails a scholarly report that incorporates interpretation and critique of a body of literature.² Consequently, the narrative review offers a comprehensive overview of the literature pertaining to a particular subject, serving as a valuable tool for obtaining a comprehensive understanding of the topic. It resembles the chapters of a textbook that encompass a particular subject. The literature suggests the following objectives for narrative reviews: theory development, theory evaluation, topic knowledge review, problem identification, and historical research object review.² Scholars who are recognized as experts in a specific field typically undertake narrative literature reviews and they offer readers expert insights and knowledge.¹

Narrative reviews prove to be valuable in situations where topics demand the synthesis of complex or broad research evidence, as well as nuanced description and interpretation.⁴ They are employed to address questions in emerging fields that cannot be quantitatively analyzed, lack clear hypotheses, or have insufficient data sources.⁵ As per the views of others, they serve as a useful tool for less-explored subjects, as well as for innovative concepts or alternative approaches within well-established, researched domains.⁶ Furthermore, they prompt further investigation, outline future research trajectories, and encapsulate the shortcomings of previous research.⁷ They play a crucial role in continuing education by summarizing existing knowledge, particularly in subjects of a descriptive nature.⁷

Narrative reviews have certain drawbacks. One of these is the lack of standardization, reproducibility, and transparency. Due to its inherent subjectivity, the evaluative comments provided by the author often present significant challenges when the underlying evidence is closely examined.⁷ The validity of these depends primarily on the integrity of the authors, as well as the diligence of the reviewers and editors.⁷ Some argue that in order to enhance objectivity, the publication of narrative reviews should be standardized.⁸

In conclusion, this type of review is hindered by a lack of transparency and is particularly susceptible to bias. Authors may incorporate personal opinions into their writing and merge them with evidence.⁹

3. SYSTEMATIC REVIEW

It is significant to point out that there is no prevailing definition of a systematic review. Nevertheless, it can be stated that a systematic review is a concise synthesis of the literature that employs transparent and replicable methods to search for, critically evaluate, and synthesize a particular subject and implements strategies aimed at reducing bias and random errors.⁹

According to the Cochrane Handbook for Systematic Reviews of Interventions, a systematic review aims to gather all empirical evidence that meets predetermined eligibility criteria in order to address a specific research question. It is distinguished by a well-defined set of objectives, a methodology that can be reproduced, a comprehensive search, an evaluation of the validity of the findings, and a systematic presentation.⁷⁰

Systematic reviews are based on evidence-based practice and, together with meta-analyses, constitute the "gold standard" of research reviews.¹¹ The utilization of systematic reviews presents particular benefits, including the ability to obtain reliable and accurate conclusions, reduce bias, and enhance the generalizability, consistency, and precision of results.¹² They prove to be especially valuable in cases where there exist robust studies on a clinically pertinent inquiry, yet the response remains contentious due to divergent study findings.¹³ Through the process of systematically searching the literature, one can consolidate evidence, generate new ideas, and highlight areas where knowledge is lacking.¹⁴

Systematic reviews have faced criticism, with reports suggesting that their prevalence has reached epidemic levels. The literature has raised concerns about the mass production of systematic reviews, as they are often perceived as vehicles for easy publication or marketing purposes.¹⁵

4. COMPARISON

Systematic reviews offer distinct benefits because of employing rigorous methods that mitigate bias, establish dependable conclusions, expedite the translation of research findings into practice, enhance the generalizability of outcomes, generate novel hypotheses, and ultimately augment the accuracy of results.¹⁶ Conversely, narrative reviews possess the advantages of critical analysis, the ability to draw conclusions, and the identification of gaps and inconsistencies within a body of literature (tab. 1).¹⁷ In addition, they demonstrate flexibility and practicality.6 Narrative reviews are inherently limited in terms of objectivity, comprehensiveness of the literature search, and interpretation of findings.8 They are commonly subject to author biases and, in general, lack systematicity and reproducibility, which is not the case with systematic reviews. Consequently, they are positioned beneath other forms of reviews.4

Despite the potential limitations of limited scope and time-consuming preparation, systematic reviews are widely recognized as the epitome of evidence synthesis. Although systematic reviews are not intrinsically superior articles, and despite recent criticism towards certain systematic reviews, narrative reviews have gained a reputation for being unreliable.⁷⁸

Certain forms of reviews, such as hermeneutic, realist, and meta-narrative, possess well-defined methodologies and recognized standards for evaluating their quality. Consequently, certain scholars categorize them as systematic reviews, while others hold opposing views and regard them as non-systematic. Thus, the boundaries between systematic and narrative reviews are both blurred and contested.⁴

In summary, systematic reviews serve the purpose of identifying, critically evaluating, and synthesizing the findings of primary research studies through a well-defined methodological approach.⁷ The narrative review is con-

	Systematic reviews	Narrative reviews
Review question formulation	They begin with a clear question that needs to be answered or a hypothesis that needs to be tested	It is possible to initiate with a specific question to be addressed; however, more frequently they consist of a general discussion on a topic without a stated hypothesis
	Usually, information of population, intervention, comparison and outcome (PICO) is provided	
Searching for relevant studies	An effort is made to find all applicable studies to decrease bias. An explicit search strategy is employed and fully documented	It is not common practice to attempt to find all relevant literature. Usually not specifically mentioned, potentially biased
Deciding which studies to include and exclude	In order to minimize selection bias, the reviewer should provide detailed descriptions of the specific types of studies to be included. Inclusion and exclusion criteria for primary studies are clearly defined	Typically, the information about including articles is not explicitly stated and many have a bias
Assessing study quality	The methodology employed in the primary articles is evaluated	Rarely documented and when documented, typically lacking in systematic approach
Synthesizing study	Sometimes a meta-analysis is conducted, resulting in an estimation of the effectiveness of the intervention	On many occasions, a summary of qualitative nature is provided

Table 1. Differences between a systematic review and a narrative review.¹⁷

sidered to be of lesser quality compared to the systematic review, resulting in a lower likelihood of publication. However, there is an opposing viewpoint asserting that narrative review should not be considered a lesser form of scholarship compared to systematic review, but rather as a separate and potentially complementary approach.⁴ Despite the limitations and lower validity concerning evidence, narrative reviews have a significant role within the framework of the modern scientific approach, as they provide a convenient reference for current and comprehensive information in a specific area of interest.⁴ For specific purposes, systematic reviews are preferable, whereas narrative reviews are more appropriate for other objectives. Both types serve the purpose of helping readers stay up-to-date with the literature.

ПЕРІЛНѰН

Αφηγηματικές και συστηματικές ανασκοπήσεις: Χαρακτηριστικά και ο ρόλος τους στη σύγχρονη επιστημονική έρευνα

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Οι αφηγηματικές ανασκοπήσεις χρησιμοποιούνταν παλαιότερα κατά κόρον για τη σύνοψη της γνώσης που είχε δημοσιευτεί σε έναν τομέα. Οι ανασκοπήσεις αυτές δεν ακολουθούν μια συνεπή μέθοδο και η έλλειψη τυποποίησης, αναπαραγωγιμότητας και διαφάνειας περιορίζει την εγκυρότητά τους. Αντίθετα, οι συστηματικές ανασκοπήσεις χρησιμοποιούν αυστηρή μεθοδολογία, που μετριάζει τη μεροληψία και ενισχύει την ακρίβεια των αποτελεσμάτων. Έτσι, θεωρούνται το χρυσό πρότυπο των ανασκοπήσεων. Η εμφάνιση νέων τύπων ανασκοπήσεων φαίνεται να καθιστά δυσδιάκριτη τη διαφορά μεταξύ συστηματικών και αφηγηματικών ανασκοπήσεων. Η κριτική που ασκείται στις συστηματικές ανασκοπήσεις έχει μερικώς αμαυρώσει το κύρος τους. Επί πλέον, η αντίληψη ότι οι αφηγηματικές ανασκοπήσεις έχουν μικρότερη σημασία σε σύγκριση με τις συστηματικές ανασκοπήσεις συνιστά αντικείμενο συζήτησης, με ορισμένους να τις θεωρούν ως ξεχωριστή και δυνητικά συμπληρωματική μέθοδο.

Λέξεις ευρετηρίου: Ανασκοπήσεις, Αφηγηματικές ανασκοπήσεις, Επιστημονική έρευνα, Συστηματικές ανασκοπήσεις

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