Narrative Reviews: Flexible, Rigorous, and Practical

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Introduction

Narrative reviews are a type of knowledge synthesis grounded in a distinct research tradition. They are often framed as non-systematic, which implies that there is a hierarchy of evidence placing narrative reviews below other review forms.[1] However, narrative reviews are highly useful to medical educators and researchers. While a systematic review often focuses on a narrow question in a specific context, with a prespecified method to synthesize findings from similar studies, a narrative review can include a wide variety of studies and provide an overall summary, with interpretation and critique.[1] Examples of narrative review types include state-of-the-art, critical, and integrative reviews, among many others.

Foundations

Narrative reviews are situated within diverse disciplines in the social sciences and humanities. Most forms of narrative reviews align with subjectivist and interpretivist paradigms. These worldviews emphasize that reality is subjective and dynamic. They contrast with the positivist and post-positivist worldviews that are the foundations of systematic reviews: a single reality can be known through experimental research. Unlike systematic reviews, narrative reviews offer researchers the ability to synthesize multiple points of view and harness unique review team perspectives, which will shape the analysis. Therefore, insights gained from a narrative review will vary depending on the individual, organizational, or historical contexts in which the review was conducted.[1-5]

Why Choose a Narrative Review?

Narrative reviews allow researchers to describe what is known on a topic while conducting a subjective examination and critique of an entire body of literature. Authors can describe the topic's current status while providing insights on advancing the field, new theories, or current evidence viewed from different or unusual perspectives.[3] Therefore, such reviews can be useful by exploring topics that are under-researched as well as for new insights or ways of thinking regarding well-developed, robustly researched fields.

Narrative reviews are often useful for topics that require a meaningful synthesis of research evidence that may be complex or broad and that require detailed, nuanced description and interpretation.[1] See BOXES 1 and 2 for resources on writing a narrative review as well as a case example of a program director's use of a narrative review for an interprofessional education experience. This *Journal of Graduate Medical Education* (JGME) special review series will continue to use the Case of Dr. Smith to consider the same question using different review methodologies.

Process and Rigor

While each type of narrative review has its own associated markers of rigor, the following guidelines are broadly applicable to narrative reviews and can help readers critically appraise their quality. These principles may also guide researchers who wish to conduct narrative reviews. When engaging with a narrative review as a reader or a researcher, scholars are advised to be conversant with the following 5 foundational elements of narrative reviews.

Rationale for a Narrative Review

First, scholars should consider the framing of the research question. Does the topic being studied align with the type of knowledge synthesis performed through a narrative review? Authors should have a clear research question and a specific audience target. Authors should also provide a rationale for why a narrative review method was chosen.[6] The manuscript should include the initial research question as well as details about any iterative refinements to the question.

Clarity of Boundaries, Scope, and Definitions

Second, although narrative reviews do not typically involve strict predetermined inclusion or exclusion criteria, scholars should explicitly demarcate the boundaries and scope of their topic. They should also clearly define key terms related to the topic and

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BOX 1 The Case of Dr. Smith

Dr. Smith, a program director, has been tasked to develop an interprofessional education (IPE) experience for the residency program. Dr. Smith decides that conducting a literature review would be a savvy way to examine the existing evidence and generate a publication useful to others. Using PubMed and a general subject search with "interprofessional education," Dr. Smith identifies 24 000 matches. Dr. Smith begins to randomly sample the papers and notes the huge diversity of types and approaches: randomized trials, qualitative investigations, critical perspectives, and more.

Dr. Smith decides to do a meta-narrative review, because she notes that there are tensions and contradictions in the ways in which IPE is discussed by different health professions education communities, such as in nursing literature vs in medical journals.

BOX 2 Resources

Ferrari R. Writing narrative style literature reviews. *Med Writing*. 2015;24(4):230-235. doi:10.1179/2047480615Z.000000000329

Green BN, Johnson CD, Adams A. Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. *J Chiropr Med*. 2006;5(3):101-117. doi:10.1016/S0899-3467(07)60142-6

Gregory AT, Denniss AR. An introduction to writing narrative and systematic reviews—tasks, tips and traps for aspiring authors. *Heart Lung Circ*. 2018;27(7):893-898. doi:10.1016/j.hlc.2018.03.027

Murphy CM. Writing an effective review article. *J Med Toxicol*. 2012;8(2):89-90. doi:10.1007/s13181-012-0234-2

research question and any definitions used. Authors should elaborate why they chose a particular definition if others were available. As narrative reviews are flexible, the initial scope may change through the review process. In such circumstances, authors should provide reasonable justification for the evolution of inclusion and exclusion criteria and a description of how this affected the literature search.

Justification for Inclusion and Exclusion Criteria

Third, authors of narrative reviews should explain which search terms and databases were included in the synthesis and why. For example, did authors include research studies from a particular database, time frame, or study design? Did they include commentaries or empirical articles? Did they include grey literature such as trade publications, reports, or digital media? Each of the authors' choices should be outlined with appropriate reasoning.[7] Narrative reviews tend to be iterative and involve multiple cycles of searching, analysis, and interpretation. High-quality narrative reviews usually include pivotal or seminal papers that address the phenomenon of interest and other manuscripts that are relevant to the research question.

Reflexivity and a Saturation/Sufficiency Statement

Fourth, narrative reviews should clearly specify any factors that may have shaped the authors' interpretations and analysis. One fundamental distinction between narrative and non-narrative reviews is that narrative reviews explicitly recognize that they may not include all relevant literature on a topic. Since narrative reviews do not aim to be inclusive of all literature addressing the phenomenon of interest, a justification for the selection of manuscripts must be included. Authors should carefully outline how researchers conducted analyses and how they determined that sufficient analysis and interpretation was achieved. This latter concept is similar to considerations of saturation or thematic sufficiency in primary qualitative research.[8]

Details on Analysis and Interpretation

Lastly, since several different categories of reviews fall under the narrative review umbrella, the analysis conducted in a narrative review varies by type. Regardless of the type of narrative review carried out, authors should clearly describe how analyses were conducted and provide justification for their approach. Narrative reviews are enhanced when researchers are explicit about how their perspectives and experiences informed problem identification, interpretation, and analysis. Given that authors' unique perspectives shape the selection of literature and its interpretation, narrative reviews may be reproduced, but different authors will likely yield different insights and interpretations.

Distinctive Methods and Subtypes

The narrative review has been commonly framed as an umbrella term that includes several different subtypes of reviews. These narrative medicine subtypes share the goals of deepening an understanding of a topic, while describing why researchers chose to explore and analyze the topic in a specific way.

There are several subtypes of narrative reviews with distinctive methodologies; each offers a unique way of approaching the research question and analyzing and interpreting the literature. This article will describe some common narrative review types that will also be discussed in upcoming JGME special articles on reviews: *state-of-the-art*, *meta-ethnographic*, *critical*, and *theory integration* reviews.

A *state-of-the-art review* attempts to summarize the research concerning a specific topic along a timeline of significant changes in understanding or research orientations. By focusing on such turning points in the history of evolving understandings of a phenomenon, state-of-the-art reviews offer a summary of the current state of understanding, how such an understanding was developed, and an idea of future directions. A state-of-the art review seeks to offer a 3-part description: where are we now in our understanding, how did we get here, and where should we go next?

A *meta-ethnographic review* involves choosing and interpreting qualitative research evidence about a specific topic. Working exclusively with qualitative data, this type of knowledge synthesis aims to generate new insights or new conclusions about a topic. It draws together insights and analyses from existing publications of qualitative research to construct new knowledge that spans across these individual, and often small scale, studies.

A *meta-narrative review* seeks to explore and make sense of contradictions and tensions within the literature. A meta-narrative review maps how a certain topic is understood in distinct ways, conducts a focused search to describe and compare narratives, and then seeks to make sense of how such narratives are interpreted across different disciplines or historical contexts, as part of the analysis.[9]

A *critical review* is a narrative synthesis of literature that brings an interpretative lens: the review is shaped by a theory, a critical point of view, or perspectives from other domains to inform the literature analysis. Critical reviews involve an interpretative process that combines the reviewer's theoretical premise with existing theories and models to allow for synthesis and interpretation of diverse studies. First, reviewers develop and outline their interpretive theoretical position, which is informed by individual knowledge and experience. Next, a non-comprehensive search is completed to capture and identify dominant themes focused on a research question.[8,10]

An *integrative review* typically has 1 of 2 different orientations. *Empirical integrative reviews* analyze and synthesize publications of evidence-based studies with diverse methodologies. In contrast, *theoretical integrative reviews* conduct an analysis of the available theories addressing a phenomenon, critically appraise those theories, and propose an advancement in the development of those theories. Both types of integrative reviews follow a multistage approach including problem identification, searching, evaluation, analysis, and presentation.[11]

Strengths and Weaknesses

Narrative reviews have many strengths. They are flexible and practical, and ideally provide a readable, relevant synthesis of a diverse literature. Narrative reviews are often helpful for teaching or learning about a topic because they deliver a general overview. They are also useful for setting the stage for future research, as they offer an interpretation of the literature, note gaps, and critique research to date.

Such reviews may be useful for providing general background; however, a more comprehensive form of review may be necessary. Narrative reviews do not offer an evidence-based synthesis for focused questions, nor do they offer definitive guideline statements. All types of narrative reviews offer interpretations that are open to critique and will vary depending on the author team or context of the review.

Conclusions

Well-done narrative reviews provide a readable, thoughtful, and practical synthesis on a topic. They allow review authors to advance new ideas while describing and interpreting literature in the field. Narrative reviews do not aim to be systematic syntheses that answer a specific, highly focused question; instead, they offer carefully thought out and rigorous interpretations of a body of knowledge. Such reviews will not provide an exhaustive, comprehensive review of the literature; however, they are useful for a rich and meaningful summary of a topic.

References

1. Greenhalgh T, Thorne S, Malterud K. Time to challenge the spurious hierarchy of systematic over narrative reviews? *Eur J Clin Invest*. 2018;48(6):e12931. doi:10.1111/eci.12931
2. Varpio L, Martimianikis MAT, Mylopoulous M. Qualitative Research Methodologies: Embracing Methodological Borrowing, Shifting, and Importing. In: *Researching Medical Education*. Cleland J, Durning SJ, eds. Hoboken, NJ: Wiley; 2015.
3. Rumrill P, Fitzgerald S. Using narrative literature reviews to build a scientific knowledge base. *Work*. 2001;16(2):165-170.
4. Aaron M, Webb A, Luhanga U. A narrative review of strategies to increase patient safety event reporting by residents. *J Grad Med Educ*. 2020;12(4):415-424. doi:10.4300/JGME-D-19-00649.1
5. Fabricant PD, Dy CJ, Dare DM, Bostrom MP. A narrative review of surgical resident duty hour limits: where do we go from here? *J Grad Med Educ*. 2013;5(1):19-24. doi:10.4300/JGME-D-12-00081.1

6. Horsley T. Tips for improving the writing and reporting quality of systematic, scoping, and narrative reviews. *J Contin Educ Health Prof*. 2019;39(1):54-57. doi:10.1097/CEH.0000000000000241
7. Wong G. Literature Reviews: Who is the Audience? In: *Researching Medical Education*. Cleland J, Durning SJ, eds. Hoboken, NJ: Wiley; 2015.
8. Saunders MNK, Rojon C. On the attributes of a critical literature review. *Coaching*. 2011;4(2):158-162. doi:10.1080/17521882.2011.596485
9. Wong G, Greenhalgh T, Westhorp G, Buckingham J, Pawson R. RAMESES publication standards: meta-narrative reviews. *BMC Med*. 2013;11:20. doi:10.1186/1741-7015-11-20
10. Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Info Libr J*. 2009;26(2):91-108. doi:10.1111/j.1471-1842.2009.00848.x
11. Whittemore R, Knafl K. The integrative review: updated methodology. *J Adv Nurs*. 2005;52(5):546-553. doi:10.1111/j.1365-2648.2005.03621.x

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