

To Study How Meta-Analysis Contributes to Evidence-Based Practice

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Abstract: *This research paper looks into the critical role that meta-analysis plays in evidence-based practices of all disciplines, from healthcare to social sciences. This aggregation of results from several studies mainly presents the in-depth understanding of treatment effects, informs clinical guidelines, and helps clarify conflicting evidence. Here, the authors have reviewed earlier meta-analyses qualitatively as they analyze the impact made upon decision-making or policy formulation. Important findings include the increasing statistical power of studies performed by meta-analysis, which enables the identification of small clinical effects. Furthermore, through meta-analysis, issues of publication bias and study heterogeneity must be placed right on the table so the outcome of meta-analytic conclusions may be credible. And thus the research question is in the following order: How can meta-analysis enhance evidence-based practice? The results confirm that, indeed, meta-analysis contributes a lot to EBP by making available high-quality aggregated evidence meant to inform clinical decisions as well as to inform policy development. Conclusion In a nutshell, the article emphasizes the continued evolution of meta-analytic methodologies and recommends training professionals in the interpretation of such analyses to bridge further the gap between research and practice in pursuit of improving outcomes across a variety of sectors.*

Keywords: Meta-analysis, evidence-based practice, clinical guidelines, publication bias, study heterogeneity, systematic review, healthcare, statistical power