

Huebner M, Vach W, le Cessie S, Schmidt CO, Lusa L on behalf of the Topic Group 'Initial Data Analysis' of the STRATOS Initiative (2020): Hidden analyses: a review of reporting practice and recommendations for more transparent reporting of initial data analyses. BMC Medical Research Methodology, 20(1), 1-10.

Short summary

This paper focuses on the reporting practice of initial data analyses (IDA) in observational studies and provides recommendations for more transparent reporting. The authors highlight the importance of reporting IDA activities, including data cleaning, data screening, and updating or refining the statistical analysis plan, for transparency and reproducibility. They conducted a review of 25 articles on observational studies from five highly ranked medical journals published in 2018. The review found that IDA statements were reported in various sections of the articles, including methods, results, discussion, and supplements. However, the reporting of IDA was sparse and lacked systematic approaches. Data cleaning statements were included in 40% of the papers, while data screening statements were included in all articles. Reporting of item missingness and unit missingness was lacking in some of the papers. Changes in the analysis plan related to handling missing data or unexpected values, population heterogeneity, and variable distributions. The paper concludes with recommendations for reporting of IDA in observational studies.