

LETTER TO THE EDITOR

Identification of surveys in major biomedical bibliographic databases



1. Introduction

The word survey is used most often to describe a method of gathering information from a sample of individuals with the sample usually being a fraction of the population [1]. This allows the surveyor to obtain insights and information on various topics of interest. Not only do surveys have a large variety of purposes, they can be conducted in many ways—telephone, mail, or in person.

The science of searching for randomized trials has evolved considerably across time [2], and although skill is still needed for comprehensive acquisition [3], the process of identification has been greatly improved by specific indexing [4] and better recognition of the importance of highlighting the methodology in titles or abstracts [5]. This evolution applies to other methodologies such as cohort and case–control studies. It does not seem to apply to the identification of the foundation stone methodology of epidemiology—the survey.

2. Problem

As part of PhD research, J.E.D. wished to systematically review surveys of the management of people who are acutely aggressive because of serious mental illness [6]. Such surveys of treatments used during aggression are rare but important. From the starting point of five already known surveys, J.E.D. identified all their electronic records in three major bibliographic databases (EMBASE, MEDLINE, and PsycINFO). He noted any methodological words used as indexing terms or as free text. Then the words/phrases were used to create a Boolean search phrase tailored to each of the three databases, which would be assured of identifying all five of the original studies and—hopefully—many more as yet unknown similar surveys. The resulting methodology-specific search results were added to an aggression-specific phrase using the Boolean connector “AND” to increase the specificity of results.

The result was a disaster. The methodology-specific phrases had to be so generic (one of the benchmark surveys did not use the word “survey” nor did indexers use an appropriate term that was available) as to make it impractical to use. Initial generic phrases identified all five surveys as well as 36% of EMBASE (10.8 million articles), 23% of PsycINFO (0.9 million articles), and 15% of MEDLINE (3.6 million articles). Refinement of the search did not help much. Probably—and only probably—the best way of finding surveys is to use the free text “survey”—and by doing so it is likely that many relevant studies fail to be identified with the ensuring risk of imprecision and systematic bias.

3. Potential solutions

In health science, many dissertations start with a literature review. Currently, these reviews are often expected to be conducted systematically with some recourse to reproducible science. So many of these reviews are of surveys of some sort. Currently, to be confident of comprehensive and systematic identification of surveys is impossible. Conducting a systematic review of surveys is a dispiriting procedure, often leads to inevitable corner-cutting and the erosion of the scientific credibility of literature reviewing in the mind of the student and future leader in health care.

Authors should be clear about the methods they are using in their own study. Adding “survey” to the title or abstract would help ensure their work is not lost. Editors need to ensure that titles or abstracts are explicit about the methods used and those indexing for bibliographic databases need to have terms available to them to cover survey methods and then use them consistently.

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References

- [1] Scheuren F. What is a survey?. Alexandria: American Statistical Association; 2004.
- [2] Schulz KF, Altman DG, Moher D. CONSORT 2010 Statement: updated guidelines for reporting parallel group randomised trials. *BMJ* 2010;340:c332.
- [3] Lefebvre C, Eisinga A, McDonald S, Paul N. Enhancing access to reports of randomized trials published world-wide—the contribution of EMBASE records to the Cochrane Central Register of Controlled Trials (CENTRAL) in the Cochrane Library. *Emerg Themes Epidemiol* 2008;5:13.
- [4] Shokraneh F, Adams CE. Study-based registers of randomized controlled trials: starting a systematic review with data extraction or meta-analysis. *Bioimpacts* 2017;7(4):209–17.
- [5] Lefebvre C, Glanville J, Wieland LS, Coles B, Weightman AL. Methodological developments in searching for studies for systematic reviews: past, present and future? *Syst Rev* 2013;2(1):78.
- [6] Dib J. TREC-LEBANON – Rapid tranquilisation of patients at risk of an aggressive episode in the emergency psychiatry setting (PhD). University of Nottingham. 2020. Available at: <http://eprints.nottingham.ac.uk/>. Accessed December 11, 2020.

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