A Word About Evidence: “Rapid reviews” or “restricted reviews”?

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In recent years “rapid reviews” have become increasingly popular. Here members of the Oxford Centre for Evidence Based Medicine suggest that such reviews have been misnamed and should instead be called “restricted reviews”.

The main aim of a conventional systematic review in healthcare is to identify and critically appraise all the available evidence on a particular question and, when possible, to synthesize the data, for example by meta-analysis, to provide evidence that can be used to help inform clinical decisions. Systematic reviews also allow decision makers to assess the results of individual studies in the context of the totality of the evidence, informing clinical decisions, guidelines, and policy.

The first systematic review to be listed as such in PubMed dates, surprisingly, from 1948,[1] although earlier instances can be found. For example, the author of an 1842 review in the *Journal of the Royal Geographical Society of London*, of a book by Dally, *Elémens de l'Histoire du Genre Humain, avec Figures, Plans et Cartes géographiques d'après les Documens les plus récents* (Bruxelles, 1842),[2] wrote that “The third section [of the book] contains a systematic review of the geography of the old world, arranged according to the opinions developed in the second [section].”

The term “meta-analysis” was invented by Gene Glass in 1976.[3,4] However, it was not until the advent of evidence-based medicine in the early 1990s that systematic reviews and meta-analyses started to become the rigorous products with which we are familiar today, with clearly defined methods and associated tools for assessing their rigour. Searching PubMed for “systematic review[s]” as a textword yields nearly 120 000 hits, and searching for the term as a publication type yields over 210 000 hits. Analysing the former, the numbers of systematic reviews published each year since 1990 (Figure 1a) show that the vogue for publishing them started in about 2000.

Figure 1. Annual numbers of publications found in PubMed by searching for “systematic review[s]” as a textword (upper panel) and “rapid review[s]” and its synonyms as textwords (lower panel)

A good-quality, thorough systematic review, which we shall call a full review, can take several months or even years to complete. According to one estimate,[5] the median time taken is 61 (interquartile range 33–87) weeks. For this reason, in recent years, because of insistent demands for information, methods for producing systematic reviews more rapidly have been proposed, and it has been suggested that in such cases it should be possible to complete a review within 8 weeks.[6] Reviews of this kind, in which the processes involved are simplified, can be achieved with fewer resources and in a shorter time-frame, and are therefore appealing, particularly to policy makers.

Because of the rapidity with which such reviews are carried out, they have, not unnaturally, been called “rapid reviews”, although other terms have also been used, including “rapid evidence assessments”, “expedited reviews”, “accelerated reviews”, and “evidence summaries”. Interest in such reviews has burgeoned since 2010 (Figure 1b).

There is no formal definition of rapid reviews, although they have been alluded to as “an accelerated evidence synthesis approach with no universally accepted methodology or definition”.[5]

It is our view, however, that rapidity is not the cardinal feature of such reviews. It would, for example, be possible to carry out a full systematic review within a few weeks if, say, the amount of material to be reviewed was very small or if there were enough researchers to carry out the large amounts of work that are often required; it may also be possible to update a previous full systematic review speedily, by adding new material, without compromising any of its rigour. A systematic reviews factory, producing full reviews very speedily, is not inconceivable. We are not the first to have pointed this out. As others have written,[6] “Rapidity by itself is not a predictor of the quality of a systematic review. The same amount and quality of work can be completed in a shorter or longer time, although sometimes saving in time might be accompanied by compromising in conduct.”

Rather than rapidity, it is the methods that are used in such reviews that mark them out as being different from those used in full systematic reviews. This is reflected in another published description:[7] “a form of knowledge synthesis in which components of the systematic review process are simplified or omitted to produce information in a timely manner”. Timeliness is certainly important, but it is secondary in importance to the simplifications and omissions that are introduced, which affect the quality of the review and the confidence one can have in its results. It is those changes to the more complete form of systematic review that make these reviews less complete, by, for example, introducing biases.

We therefore suggest that it would be more accurate to call these reviews “restricted reviews”, because they are performed by omitting or simplifying some of the components of a full systematic review, increasing the potential for bias in the review process. The amount of time taken is not the crucial factor.

The word “restricted” comes from an IndoEuropean root STREIG, meaning to rub, press, or squeeze, with a connotation of doing so powerfully. The basic root (the so-called e-grade form) has variants—an o-grade form STROIG and a zero-grade form, STRIG. These roots give a range of words, including those that convey the idea of hitting or squeezing and those that convey the overlapping idea of constraining. Among the latter are words that denote linearity, such as streak, stria, striga (a bristle), string, stroke, and strand. The former yields words such as stringent and astringent, strike, strain, which gives you stress and possibly distress, constrain, distract, and restrain, strangling, for which you need to be strong, and of course strict, stricture, constrict, and, afforded by the prefix re-, which in this case implies resistance, restrict.

In Latin, restrictus, the past participle of the verb restringere, meant, among other things, pinched or contracted. It entered English in the 15th century, in the form of the adjectives “restrict” and “restrictive” and the noun “restriction”, describing staunching of blood, after which it came more generally to connote limitation or obstruction. The verb to restrict emerged 100 years later. However, the Latin word restrictus could also mean “rigorously exact”, and there is no reason why a restricted review, if properly performed, should not be as rigorous in its own way as a full-scale review, acknowledging the limitations of such reviews.[8]

In the next article we shall discuss how restricted reviews can be defined and shall outline the methods that we believe should be adopted in performing such reviews.

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