Reviews, systematic reviews, and essays in public health

For the first time in the history of Cadernos de Saúde Pública/Reports in Public Health, the journal has recently designated a specific Associate Editor to receive and handle review and essay articles.

The clash between “traditional” and systematic reviews is now at the center of an intriguing debate. Two quite recent articles conducting reviews of reviews (Annu Rev Public Health 2006; 27:81-102 and BMC Med Res Methodol 2006; 6:35) question the supposedly unequivocal advantages of systematic over traditional reviews, basically in the following terms: that the former do not necessarily confirm their self-ascribed rigor (almost as if it were an intrinsic attribute of the systematic review process itself); that on many occasions systematic reviews have lost their critical perspective; and finally that they fail to deal adequately with the gap between evidence and its translation into public policies.

The above critiques sound pertinent, but in my view they stem from the uncomfortable coexistence of reviews, systematic reviews, and essays in public health, as if the undeniable rise of systematic reviews in recent years (especially in the field of epidemiology) must necessarily have taken place at the expense of traditional reviews and essays.

In my point of view, such a clash is artificial. The mistakes have arisen from simplistic historical readings and conceptual views, as in a purported linear order between the application of statistical methods to public health and the emergence of clinical epidemiology and evidence-based medicine, and the subsequent translation into a view that public policies should likewise be based strictly on evidence. As Stephen Senn contends in Dicing with Death: Chance, Risk and Health, the historical facts do not precisely follow this sequence. British statistician Archie Cochrane (immortalized in the Cochrane Library, including the Database of Systematic Reviews by the same name) was initially commissioned to apply statistical analysis methods to evaluate the British National Health System, with a view towards reducing waste in the NHS and increasing its effectiveness and case-resolving capacity. The Cochrane Database was thus born from the initial systematization of randomized trials, where observational studies display what is considered second-order evidence, serving as the empirical basis for evidence-based medicine. However, the methods and techniques developed by Cochrane and his original group are not tributaries of the emergence of clinical epidemiology, which took place decades later, but converse very closely with the daily operation of the NHS.

To some quantitative researchers, essays in public health sound like the “ugly duckling” of reviews. Therein lies another conceptual error, in my view. Epidemiology has much to gain from encouragement for systematic reviews, but much to lose if it foregoes critical reviews and essays. An example is the seminal essay by Stephen J. Gould on the interface between public health, statistics, and psychology (The Mismeasure of Man). Few realize that in parallel with this essay, Gould published an article reanalyzing empirical data through factor analysis, in Science (1978; 200:503-9). Thus, there is nothing strange or bad about combining essays and the application of quantitative methods.

In short, different watersheds for the review of findings and concepts all have their place. Bring on new reviews, systematic reviews, and essays, as long as they are based on quality and readability! All three are more than welcome!

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