Clinical Epidemiology – a fast new way to publish important research

When starting a new journal, Clinical Epidemiology, it is important to define some key concepts, our mission, and to delineate our discipline.

The classic concept of epidemiology is an old discipline with centuries-old roots. It is a discipline of central importance for public health and its impact for clinical medicine has increased over the last few decades. Epidemiology can thus be broadly divided into population and clinical epidemiology. Population epidemiology deals with the variation in disease occurrence and reasons for this variation. The description of the variation is the subject of descriptive epidemiology and the study of the causes or correlates of this variation is the subject of analytical epidemiology. Population epidemiology is a core tool for disease prevention and is central to public health.

Clinical epidemiology, which deals with patients in a broad sense, can be divided into a descriptive and an analytic part. The descriptive part focuses on the variation of clinical prognosis, while the analytical part focuses on the reasons for this variation. The main predictors for the prognosis – diagnosis and treatment – are thus key concepts in clinical epidemiology and the practice of clinical medicine. Whereas much of population epidemiology is directed towards the general population, clinical epidemiology is more focused on the individual.

Notably, there are several other ways of classifying epidemiology: for example, according to the disease under study (eg, cardiovascular cancer and psychiatric epidemiology) or according to the exposure of interest (eg, pharmacoepidemiology, environmental epidemiology, occupational epidemiology). These classifications naturally cover both population and clinical aspects of epidemiology.

There is, of course, a substantial overlap between population epidemiology and clinical epidemiology. The two subdisciplines share methods; clinical epidemiology benefits in particular from the impressive developments in the areas of study design and analysis achieved within general epidemiology over the last 40 years.

In 1938, Paul used the term clinical epidemiology for the first time and defined it as a new basic science for preventive medicine, but Paul’s description does not entirely cover the modern description of clinical epidemiology, which concepts have been developed since the mid-1960s in particular, by Sackett, Feinstein, the Fletchers, and Weiss. Clinical epidemiology interfaces with many other areas. Thus, practical application of clinical epidemiology is a key part of evidence-based medicine and clinical decision making. In recent years, clinical epidemiology has become important for the health care system because of the need for assessments in the areas of quality of care, patient safety, health economics, and use of resources, all of which are based on clinical epidemiology thinking. Furthermore, clinical epidemiology supplies data and evidence needed in organization and planning of the health care system. Biostatistics is an important basic tool for clinical epidemiology.
The mission of our new journal, *Clinical Epidemiology*, is to provide fast publication of new scientific knowledge of high quality. The fast spread of new knowledge is a prerequisite for improved diagnosis and treatment of our patients. Our philosophy is to share important new knowledge worldwide. Our aim is to publish high quality papers within the broadly defined area of clinical epidemiology and its related areas as mentioned above.

Papers reporting original research, meta-analyses, authoritative reviews, as well as manuscripts dealing with established and new methods are welcome. In addition, we would like to see descriptions of cohorts and examples of datasets available for clinical epidemiological research, since if there is an important research question, it is essential to find and access the right data and to carry out the study promptly. We also welcome papers demonstrating provocative new thinking and those dealing with ethical issues.

Our aim is to provide a professional editorial process, with peer review of the papers conducted as fast as possible without compromising quality. We would like to promote high research activity and quality as a prerequisite for better clinical care and improved outcome for our patients.

### References

1. Rothman KJ, Greenland S, Lash TL, editors. *Modern Epidemiology*. 3rd ed. Philadelphia, PA: Lippincott Williams and Wilkins; 2008.
2. McMahon B, Trichopoulos D. *Epidemiology. Principles and methods*. 2nd ed. London, UK: Little, Brown and Co.; 1996.
3. Weiss NS. *Clinical Epidemiology. The Study of the Outcome of Illness*, 3rd ed. Oxford, UK: Oxford University Press; 2006.
4. Sackett DL, Straus SE, Richardson WS, Rosenberg W, Haynes RB. *Evidence-based Medicine. How to Practice and Teach EBM*, 2nd ed. Edinburgh, UK: Churchill Livingstone; 2000.
5. Sackett DL, Haynes BR, Guyatt GH, Tugwell P. *Clinical Epidemiology. A Basic Science for Clinical Medicine*. 2nd ed. Boston, MA: Little, Brown and Company; 1991.
6. Paul J. Clinical epidemiology. *J Clin Invest.* 1938;17:539–541.
7. Fletcher RH, Fletcher SW. *Clinical Epidemiology. The Essentials*, 4th ed. Philadelphia, PA: Lippincott Williams and Wilkins; 2005.
8. Feinstein AR. *Clinical Epidemiology. The Architecture of Clinical Research*. Philadelphia, PA: W.B. Saunders Company; 1985.