

Preface

Epidemiologists are often thought of as the Sherlock Holmes of public health. They are the sleuths who seek to understand why disease or a specific health-related condition might occur in one population and not another, or why it occurs at differential rates across populations (see Last, 1988). Once concerned primarily with communicable diseases such as malaria, the scope of their investigations has broadened to include chronic disease, and environmental and occupational disease, as well as the effects resulting from a wide range of exposures.

It should come as no surprise, then, that legal systems around the world have taken note of epidemiologists' skills and the potential contribution that these skills may offer in the context of litigation. The epidemiologic methods utilized to assess the level of risk among individuals exposed to a specified exposure compared to those who were not so exposed may help to resolve legal disputes relating to diseases and injuries alleged to have resulted from pharmaceutical, environmental, and occupational exposures. An understanding of epidemiologic methods, their potential use in the courtroom setting, and their limitations has become even more critical due to increasing globalization, through which individuals in one country may be exposed to the industry practices of companies from other nations, with potentially resulting benefit or harms.

Chapter 1 sets the stage for an exploration of how epidemiologic methods may be used in the global context through an examination of the Pfizer trovafloxacin drug trial in Kano, Nigeria. Loue notes the difficulties that accompany efforts to right the wrongs done in one country by actors of another and how the procedural provisions of the US civil law ultimately control the conduct of the legal proceedings and the use or nonuse of epidemiologic methods. Chapter 2, authored by Johnson and colleagues, explores the role of the epidemiologist as an expert, whether consulting or testifying, and the processes for expert testimony that are utilized in the US courts. Claire McIvor addresses in Chap. 3 the use of epidemiology in the UK tort law, arguing that the UK courts, much like many US courts, have failed to understand the basic principles underlying epidemiology and the important contribution that such methods may have in efforts to resolve disputes arising from harms alleged to have been caused by specified exposures.

Bădăraș and Ioan focus in Chap. 4 on the nascent use of epidemiology in the Romanian legal system, exploring the use of epidemiologic methods to determine liability arising from long-term neurological injury due to an occupational exposure. Chapter 5 focuses on injuries and environmental damage in Ecuador, alleged to have resulted from exposures caused by the actions of the American company Texaco. Loue again illustrates the difficulties that attend efforts to rectify harms in one country that result from the actions of those of another nation.

The final chapter appropriately explores human right violations and the role that can be played by forensic epidemiology. Loff and Cordner focus on how modern forensic medicine in Australia has integrated an epidemiological function as a fundamental aspect of its contribution to both justice and public health. They also explore the role of forensic pathology and related disciplines in the resolution of mass deaths in war, internal conflict, and disaster.

Forensic epidemiology is an ever-growing field, one that allows epidemiologists to truly serve as detectives seeking the cause of disease and injury. As such, the field offers the potential to contribute to the attainment of justice.

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Reference

Last, J. M. (1988). *Dictionary of epidemiology*, 2nd ed. New York: Oxford University Press.

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