

Search & Browse

- Simple Search
- Advanced Search
- Browse by Subject
- Browse by Year
- Browse by Conferences/Volumes
- Latest Additions

Information

- Home
- About the Archive
- Archive Policy
- History
- Help
- FAQ
- Journal Eprint Policies
- Register
- Contact Us

News

- Guide to new PhilSci-Archive features.

History and Philosophy of Modern Epidemiology

Andersen, Hanne (2007) *History and Philosophy of Modern Epidemiology*. In: [\[2007\] &HPS1: Integrated History and Philosophy of Science 1](#).



PDF
[Download \(315Kb\)](#) | [Preview](#)

Abstract

Epidemiological studies of chronic diseases began around the mid-20th century. Contrary to the infectious disease epidemiology which had prevailed at the beginning of the 20th century and which had focused on single agents causing individual diseases, the chronic disease epidemiology which emerged at the end of World War II was a much more complex enterprise that investigated a multiplicity of risk factors for each disease. Involved in the development of chronic disease epidemiology were therefore fundamental discussions on the notion of causality, especially the question when causal inferences could be justified. In this paper, I shall analyze the implicit normativity of these debates. First, I shall give a brief overview of the historical background on which chronic disease epidemiology emerged and describe how the pioneer studies on smoking and lung cancer became icon of the major challenge that the emerging chronic disease epidemiology was facing: the impossibility of proving that statistical associations reflected causal relations. Next, I shall describe how the development from the monocausal enterprise of infectious disease epidemiology to the multicausal enterprise of chronic disease epidemiology gave rise to intense discussions of the possible criteria by which to establish causal relationships between a given factor and a particular disease. I shall show how the necessary and sufficient conditions expressed in the so-called Henle-Koch criteria that had proved useful for the 19th century investigations of infectious diseases remained an ideal, although clearly an unobtainable one. Thus, I shall show how 20th century chronic disease epidemiologists on the one hand were searching for a new set of general principles which would provide a logical framework for their investigations, but on the other hand admitted that they would have to accept something more "pragmatic". I shall analyze the various positions in this debate, arguing that the implacability of the debate was due to unrecognized normative issues. I shall argue that many insisted on a distinction between science and application that was untenable, but that due to this distinction the values involved in deciding whether or not to act on the basis of a hypothesis were rarely explicitly discussed and the decision therefore continued to appear as a matter of taste rather than the result of a cogent normative analysis.

Export/Citation: [EndNote](#) | [BibTeX](#) | [Dublin Core](#) | [ASCII \(Chicago style\)](#) | [HTML Citation](#) | [OpenURL](#)
Social Networking: [Share](#) |

Item Type: Conference or Workshop Item (UNSPECIFIED)

Keywords: History of epidemiology; implicit normativity; causality in epidemiology

Subjects: [Specific Sciences > Medicine](#)
[General Issues > Values In Science](#)

Conferences and Volumes: [\[2007\] &HPS1: Integrated History and Philosophy of Science 1](#)

Depositing User: [Hanne Andersen](#)

Date Deposited: 16 Aug 2008

Last Modified: 07 Oct 2010 11:16

Item ID: 4159

URI: <http://philsci-archive.pitt.edu/id/eprint/4159>

Actions (login required)



View Item

ULS D-Scribe



This site is hosted by the [University Library System](#) of the [University of Pittsburgh](#) as part of its [D-Scribe Digital Publishing Program](#)

E-Prints



Philsici Archive is powered by [EPrints 3](#) which is developed by the [School of Electronics and Computer Science](#) at the University of Southampton. [More information and software credits.](#)

Share

Feeds



Atom



RSS 1.0



RSS 2.0