In this number

Philosophy and epidemiology

The philosophy of epidemiology and public health in general, and the philosophy of coping with uncertainty in particular, are themes which this number of *JECH* continues. Colleagues from the Netherlands have contributed an Editorial commenting on (and not entirely agreeing with) an original article from London on causation in epidemiology. The similarities in theme between these articles and a recent Editorial in the Journal of Public Health Medicine (September 1993) indicate that critical thinking about epidemiological concepts, methods and meanings is still required.

Cochrane and evidence

The 4th Cochrane lecture also picks up the theme of evidence in epidemiology and clinical medicine, and is complemented by a Comment from Oxford about systematic reviews which itself follows on from an article from the Cochrane Centre which appeared in *JECH* of June 1993. The link is completed by yet another paper in this number on a consensus panel for prostatectomy, a special theme in the Cochrane lecture.

Correspondence and short reports

The enlarged correspondence section in the last two numbers indicates an increasing volume being received, and I hope that authors and readers will continue to question and debate in this way. The next number will begin regular publication of "short reports", which will enable us to get preliminary work, or studies which are original primarily because of where they are conducted, or other brief papers, into print more quickly than more extensive papers. They will be refereed as for other papers – details can be seen in the Instructions to Authors which will appear inside the back cover of each number of *JECH*.

STUART DONNAN, *Editor*

Editorials

The philosophical foundations of public health: an invitation to debate

After the "golden age" of public health in the second half of the 19th and the first half of this century, many people nowadays are speaking of a *crisis in public health*. Medical and epidemiological approaches have been very successful in the detection of causal relationships that apply in the battle against problems such as unhygienic conditions, malnutrition, and infectious diseases. Because of its pioneering avante garde position, medical science is often even considered the doyenne of human sciences. Did not the sociological work of Talcot Parsons,[1] Robert Merton,[2] and George Homans[3] stem from their teacher Lawrence Henderson[4] who was a biophysiologist? How then can this present crisis in public health be interpreted?

Public health is increasingly seen as a complex area in which social conditions such as poverty, the absence of hopes for the future, a popular hedonistic culture, and systemic economic influences play important roles. On one hand, our attention to complex social relationships has increased significantly, and on the other, modern medicine has retreated more and more into its own professional domain. Thanks to modern scientific and technical successes, the medical sector has become a growth sector. Its performance is applauded generally in both the developing and the industrialised world. Investment in medicine has been shown to be big business, as long as the aversion to dying continues to gain strength. But in our generation, *quality of life*, not just *survival* has appeared as a core issue for public health. What we mean by health can be looked at from different perspectives such as disease, sickness, and illness.[5] Medical diagnosis has tended to widen to include social dimensions and personal perceptions.

Our proposition is that most theoretical debates about the pros and cons of public health approaches are confined to the methodological scientific level. Philosophical foundations such as underlying ontological notions are rarely part of public health discussions, but these are always implicit and lie behind the arguments and reasoning of different viewpoints or traditions. The basic question is,

"To what reality does the idea of *public health* refer?"; and the connection between the two words is vital to the question. What precisely do we mean by *public* and by *health*?

"Public" and "health"

In sociological terms *public* refers to the outcome of interactions between individual human beings. According to individualistically oriented social philosophy, the focus is the individual. Therefore the total (the Gestalt) is considered to be the outcome of the actions and motives of distinct individuals (Pareto,[6] Weber[7]). But according to collectivistically oriented social philosophy, the focus is primarily the social constellations of which individuals are part. The Gestalt from this point of view is therefore the collective that is primary to the actions of individuals (Marx,[8] Durkheim[9]). These notions roughly represent two mainstreams of social philosophical thought. They are inevitably reflected in scientific research in some way. For example, in the field of public health, public realities are usually scientifically analysed by economists, sociologists, and political scientists, who may or may not refer to the philosophical tradition to which their perspective belongs. This is also the case in the area of health sciences, for example in epidemiology.

The concept of *health* can also be viewed from two diverging philosophical perspectives. In the natural scientific perspective, which constitutes the foundation of modern medicine, *health* represents the opposite pole to *disease*. Because the focus of medical interpretation is definitely on disease, "health" comes into the picture as "non-disease". This notion of health is therefore intrinsically residual in nature. From this ontological perspective, a human being is a biophysiological and neurophysiological system, and is composed of an unlimited number of subsystems which are all functional parts of the whole. Diseases are considered to be disturbances in one or more subsystems, resulting in somatic, psychological, or social dysfunctions. This particular type of reasoning about disease and health originates from a mechanistic view of the functioning of human beings. From this perspective, because health is seen as non-disease it can only be viewed as a condition brought into being through causal mechanisms.

Within the modern perspective of health promotion there seems to be a renaissance of a different view of health, rather like that of the classical Greeks. In this holistic view, health is seen as an expression of the degree to which an individual is capable of achieving an existential equilibrium. This equilibrium is not static but continuously in motion. Pathological disturbances of the equilibrium must be interpreted from different angles. Thus, we find what we will call the *natural mechanistic* perspective and also the *social systemic* and the *hermeneutic* perspectives entering the health promotion stage. The notion of disease/non-disease now turns out to be insufficient; concepts like *sickness* and *illness* seem to be indispensable to our understanding of health, both as a condition and as an enterprise for human beings.

Public health

The notion of public health refers to *public* as well as *health*. Based upon the previous section, four interpretations are possible, and these can be illustrated in the table. According to the schema in the table, *public* represents plurality. The focus of plurality may then be situated at the individual level (category 1) or at the collective level (category 2). The common view (shown in this schema) is that *health* is expressed on the individual level. The ontological picture commonly in operation in modern medicine and public health is "natural scientific" (category 3). In the perspective of "health promotion" there is a dialectic, with somatic and psychological as well as social aspects (category 4).

Interpretations of "public" and "health"

Public (plurality)	*Health (individuality)*
(1) Gestalt of individuals (dialectic)	(3) Natural scientific (mechanistic)
(2) Gestalt collective with individuals (dialectic)	(4) Health promotion (dialectic)

We would argue that public health work, be it theoretical or practical, basically originates from one or other of the specific combinations of concepts summarised in these four perspectives. The great majority of scientific and other public health work, including epidemiological research and preventive programmes (for example traditional didactic "health education"), is based on the concepts in categories (1) and (3). Most of the policy statements of "health promotion" seem to be founded on perspectives (1) or (2) and (4). According to scholars like Michel Foucault,[10] Paul Feyerabend,[11] and Jürgen Habermas,[12] the specific selection of perspectives is not merely a matter of academic interest. Various social philosophical perspectives have a specific effect on the realisation of social order. The particular focus of health promotion, for example, gives rise to quite different public health priorities than the day to day concern of modern medical practice. The perspectives are, as it were, creating the social reality of health and disease.

The analysis and perspectives presented above, however, seem to be virtually absent in the underpinning of major innovative strategies in public health. How, for instance, should the ideological claim of health promotion policies that are conceptually based in category (2) of the table be interpreted? What is the social meaning of changing academic departments of social (or community) health into departments of epidemiology: and what is the significance of the overload of epidemiological papers in journals of community medicine and public health? Could it be that these tendencies are reflections of important shifts in social philosophical perceptions in the professional world of public health?

In this edition of the *Journal of Epidemiology and Community Health* we are given an interesting exposition of the foundations of a particular interpretation of public health.[13] We are invited to agree with the propositions that the natural sciences constitute the basis of epidemiology as well as of medicine, and that if we follow the natural scientific path we should be able to acquire the cognitive base for public health work. The proposition, as presented, has two dimensions. The conceptualisation of "health", in this case, must be based in category (3) of the table. The notion of "public" is directly linked to this particular interpretation of health. The practical public health consequences are therefore elaborated within the conceptual boundaries of our category (1). Health is residual in its conceptualisation and public health remains confined to individuals participating in a social Gestalt.

Those who speak of the crisis in public health refer to the social complexity of public health issues, modern

leadership, new social relationships, alternative scientific methods, and innovative strategies. We would argue that in the complex modern social world of public health, a better understanding of the philosophical foundations of the professional orientation of the public health expert may help in making the right choices. This editorial is meant to be an invitation to reflective philosophical discussion about these foundations.

HARRY G J NIJHUIS
LAURENT J G VAN DER MAESEN

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Key words and indices

From the first issue in 1994 there will be a change in the method of indexing the subjects of the *Journal of Epidemiology and Community Health* and the author index will no longer include the title of the paper, becoming a list of authors only. Papers will be indexed by a keyword system, and authors will be asked to choose up to three keywords for each paper at manuscript stage. A keyword is a word (or phrase) which will identify the subject matter of a written paper in an index. The keywords selected will be entered by the typesetters and formed into an index at the printers. The index will be published, as usual, at the end of each volume in December. The format will be different, with the title of the paper repeated after each keyword on every entry.

On the surface, choosing index headings may not seem difficult but authors will soon realise that epidemiology has many synonyms, near-equivalent descriptions, use of adjectives as descriptors, assorted lay terms, and also Latin words and syndromes which complicate the picture. Examples of this can be seen in different terminology used in case-control or case-referent studies; whether the words prospective and retrospective are used or excluded; whether diseases are described as relating to the heart or cardiovascular or circulatory system or are cardiac; and whether for communicable diseases the common names or proper names of infectious agents are used.

An index should be consistent. It is not good if half the entries are under "Passive smoking" and half under "Smoking, passive". Further difficulties can arise because authors will not know what other work is being published, or under what titles, in the same volume. The keyword will be chosen at the earliest stage of publication not at the latest as it is now. When using the new index users are therefore advised to look under all possible headings each time.

Authors are advised to scan papers for headings that may not be in the title, and to avoid general terms such as epidemiology, cancer, and heart disease. In general, it is better not to split accepted concepts. For instance, it is better to use "Health promotion" as a keyword, rather than "Promotion, health".

Only a few shortened forms can be accepted. AIDS and HIV are universally known, but mostly the full form should be used as the keyword. There will be no cross references in the keyword index.

This cannot be more than an attempt to guide authors and perhaps to warn of the pitfalls, but it is important to remember that if authors wish to have their work found easily in the index they should consider the keywords carefully.

STUART DONNAN,
Editor