In another of his frequent criticisms of the current state of the discipline of epidemiology, Pearce comments on backsliding in two areas: (1) change in the ‘scope and content’ of the discipline and (2) an ‘internal culprit’, being the increasing role of ‘corporate influences’ in the field.\(^1\)

Pearce does not define what he means by scope and content but one gathers that he believes that both should be broad and that in this respect the field has ‘markedly narrowed’ in ‘recent decades’. What nonsense! The last three decades have seen remarkable increases in the breadth of both methodology and substance in the field. Large research units and disease registries have been established for the study of cardiovascular disease, cancer, congenital malformations and other chronic diseases—beyond those that already existed and are dedicated to the study of infectious disease. They are well funded and productive. Pearce claims that ‘all that noise’ has been stripped away from ‘practical approaches (that) started from the standpoint of populations, which involved...context, culture and socioeconomic status’. Yet the International Agency for Research on Cancer alone maintains a file that, as of 2007, included data from close to 200 cancer registries world-wide, publishes extensive analyses of the file periodically and makes the file available electronically for use by individual investigators. Statistical linkages between registries of population, deaths, births and diseases in the Nordic countries have furnished epidemiologic information of a breadth that has never been seen before.

In terms of subject content, the last two decades have seen clarification of the roles of occupation hazards in general and cancer specifically, clarification of the roles of exogenous hormones in the risk of cancer of the breast, documentation of the role of obesity in the aetiology of cardiovascular and other chronic diseases, and identification of the principal agent of one of the major congenital malformations—folic acid deficiency. How much should one expect in 30 years?

As for the increasing role of the corporate world, I do not doubt that funding from this source is increasing in epidemiology, although it is still very small relative to that of national governments. I see this as a positive development, not a drawback. It provides funds and resources for research in areas that governments sometimes do not support, and it gives easier access to individuals and records than would otherwise be obtained.

Certainly, there are examples of scientists, including epidemiologists, who, paid by vested interests, have offered interpretations of evidence that seem swayed in favour of those interests. Such is life. We have all heard of scientists (and others) in the public domain offering opinions that favour their own interests, and there are few individuals of good repute who have not in their lives offered opinions that seem aberrant. We should not throw out the baby with the bath-water by rejecting the serious efforts of some corporations to support improvements in the amount and quality of epidemiological research. As has often been said, an opinion should be evaluated on the basis of its content, not on the interests or credentials of the individuals who hold it.

Pearce bemoans the fact that today’s epidemiology pays inadequate attention to such things as poverty, climate change and agricultural policy. Epidemiology should certainly expect to play a role in society’s debates about such matters, for it has provided information on health that is relevant. But if we were to allow the discipline’s concern for these problems to distract it from its primary mission of identifying the causes of disease, we would be short-changing the people and governments who have provided support with the latter in mind.

To judge by repeated references to him in Pearce’s comment, Kenneth Rothman bears much of the responsibility for the present state of epidemiology. This is indeed a back-handed compliment. Rothman, a highly respected epidemiologist, is the principal author of one of the few textbooks on epidemiology that is both comprehensive and understandable: he has written extensively on both the practicalities and philosophy of the discipline. Pearce would do well to applaud these contributions rather than attempt to discredit them.
I thank Professor MacMahon for his comments. I was asked to write my commentary\(^1\) as part of a series of commentaries on a reprint of a paper by Ken Rothman.\(^2\) This is why I specifically refer to Ken’s work several times in my commentary. I had expected that all of these papers would be published together and that therefore any subsequent correspondence would relate to the whole set. Instead, my piece was finished and posted first, and MacMahon’s letter refers just to this piece. In fact, Cesar Victora’s commentary,\(^3\) which was posted a week later, makes essentially the same points as mine.

MacMahon’s letter provides an excellent example of the narrowing of epidemiology’s vision to which I refer. When I first trained in epidemiology, I learnt from MacMahon’s excellent textbook\(^4\) which defined epidemiology as ‘the study of the distribution and determinants of disease in human populations’. At the time, it was widely recognized that the determinants of disease (and injury) included both proximal (downstream) causes such as tobacco smoking and distal (upstream) causes such as socioeconomic factors. As I have said many times, the point is not to criticize studies of proximal factors, including those listed by MacMahon (I spend most of my time studying them myself), but to take a balanced approach in which upstream determinants of disease are also considered. The issue is not whether epidemiologists should be activists about the upstream determinants of disease, such as poverty, but whether they should study them.\(^1\) However, as MacMahon’s letter illustrates, the vision of epidemiology has narrowed so that upstream factors such as poverty and climate change are no longer considered (by some) to be causes of disease (or injury). This is undoubtedly news to the victims of Hurricane Katrina. But fortunately things are changing, as indicated by the publications referenced in my commentary.

References
\(^1\) Pearce N. Commentary: The rise and fall of corporate epidemiology and the narrowing of epidemiology’s vision. Int J Epidemiol 2007;\(^\text{36}\):713–17.


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