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Fifty years of JN Morris's *Uses of Epidemiology*

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Much that health researchers take for granted today has a recent intellectual history. Despite the incursions of people such as William Farr and John Snow into the murky provenance of vital statistics, the promise of ecological studies of disease, clinical medicine and the infant study of health and illness in their social context were firmly divided occupations until the 1940s in Britain. Doctors practiced medicine, and other people (social workers? sociologists? socialists?—anything with a 'soc' in it) dabbled in the much softer business of relating the behaviour of human bodies to their social environments. The emerging art of social medicine, later, medical sociology and, later still, the sociology of health and illness, depended heavily on another cinderella discipline—that of epidemiology.

In his classic *Uses of Epidemiology*, first published in 1957, Jerry Morris set out to demonstrate to those working in the health professions how epidemiology could act as a bridge between clinical and 'preventive' medicine. It was, he said, 'the only way of asking some questions', 'one way of asking others (and no way at all to ask many) (p. 96)'.¹ Epidemiology was a method: a systematic set of procedures for examining this perplexing dual role of human bodies as both biological machines and social subjects. Thus, epidemiology had to be the main method of social–medical study.

Uses of Epidemiology, whose main arguments were summarized in a paper published in the *British Medical Journal* 2 years earlier (reprinted in this volume),² represented the flowering of a substantial and visionary post-war social medicine project.³ Morris was among many star figures in this project. These were

the years which saw the founding of the Committee for the Study of Social Medicine (1939),⁴ the Oxford Institute for Social Medicine (1942), the Social and Preventive Medicine Committee (1942), the MRC's Social Medicine Research Unit (1948) and the Keppel Club (1953).⁵ In all these enterprises, groups of clinicians, public health doctors, sociologists and policy analysts got together to discuss and research the influences which necessarily lie beyond the domain of the individual doctor–patient encounter—the contribution of social and economic factors to patterns of health, illness and death.

The intellectual climate in which *Uses of Epidemiology* was gestated and born was also that of the brave new world of the new National Health Service. The promise of health services for all uncovered the reality of persisting material inequalities that would inevitably dilute the health-promoting potential of the new service. Another impetus for a new approach to understanding the social determinants of differences in bodily behaviour was a direct legacy of the war: eugenic explanations, a strong ideological current in Britain, could never recover from their association with National Socialism, which added weight to the need for a newly robust science of environmental influences.⁶

My copy of *Uses of Epidemiology* was inscribed by Morris to my father, Richard Titmuss, with whom he had a long collaboration in the field of social medicine. Theirs was an ambitious and imaginative enterprise, part of the larger social medicine project, a true collaboration between doctoring, public health medicine and hard-hitting social analysis. *Uses of Epidemiology* draws on the research Morris and Titmuss did which produced three classic papers on juvenile rheumatism,⁷ rheumatic heart disease⁸ and peptic ulcer.⁹ Most of the work for these was

accomplished in the densely packed texts of aerographs dispatched to and from India where Morris was on Army war service.¹⁰ Like many of the examples cited in the book, the subject matter of these Morris–Titmuss investigations seems outdated today, but Morris’s interest in rheumatic heart disease dated from his days in clinical medicine, and the social geography of this disease and that of juvenile rheumatism, to which it was linked, highlighted the importance of poverty. The social class distribution of peptic ulcer was more complex, but Morris and Titmuss’s work on this exemplified the same careful analysis of vital statistics in relation to geography and environment which underlay the new systematic analysis of health, illness and premature death. Particularly notable innovations in the approach which Morris built on in *Uses of Epidemiology* were the idea of a dynamic interaction between social and disease factors; building into statistical models the very reasonable assumption that there would often be important time lags involved; and a thoughtful and flexible approach to the measurement of key concepts such as poverty.¹¹ Morris and Titmuss went on to work together in the new MRC Social Medicine Research Unit, whose early work Morris also draws on heavily in the book.

Uses of Epidemiology is economic in its claims: its subject matter is ‘uses’ not ‘the uses’; it is not intended to be comprehensive; and it focuses on non-infectious diseases (‘...a more accurate title would be *Some Uses of Epidemiology in the Study of Non-communicable Diseases*’ notes Morris¹ p. 396). There are, he argues, seven main uses for the science of epidemiology: in historical study; in ‘community diagnosis’ or population studies; in the calculation of individual risks; for health services research; as an aid to clinical understanding; in the identification and labelling of disease; and, lastly and surprisingly modestly, to suggest possible causes.

Epidemiology and its component techniques have got much more sophisticated since 1957, but the basic framework outlined by Morris still stands. There is remarkable prescience in his comments about the public health impact of the rising volume of motor cars; ‘bodily sloth’; people’s exposure to multiple physical and chemical hazards; power stations; and school examinations.² (p. 396) (Less relevant today, but an interesting sign of the times then, are the focus on the social problem of married women going out to work, and questions about the use of regular ‘potting’ at 1 month as a method for studying social class differences in childcare practices.)

‘It is the flagrant inequalities in the distribution of disease which make medicine so obviously a *social science*’,¹² wrote Maurice Backett, another participant in the social medicine

project, in 1960. This is the same vision that produced *Uses of Epidemiology*, though in the book it is couched in a more cautious and clinically acceptable language. A few years later, Morris himself was to write optimistically in *The Journal of Medical Education* that epidemiology had now become fashionable, and everybody wanted it.¹³ But was this really Morris’s kind of epidemiology? His kind of epidemiology, an almost moral duty to observe the impact on the people’s health of contemporary social customs and movements—the central intelligence behind all public health-work shines out from the pages of *Uses of Epidemiology* as a very modern inspiration.

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