Ian Prior and epidemiology in New Zealand

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ABSTRACT

Ian Prior was born in Masterton, New Zealand, in 1923, and died in Wellington, New Zealand, in 2009. In 1959 Ian became the Director of the Medical Unit at Wellington Hospital, and in the early 1960s he established the Epidemiology Unit. Without doubt he is the founder of epidemiology in New Zealand, and has also had a major influence in Australia and further afield. His contribution is celebrated in the Ian Prior Oration, which is presented at the Annual Meeting of the Australasian Epidemiology Association.

Ian’s early work focused on Māori health, but he also turned his attention to the Pacific, and in 1964 he conducted the first epidemiological research in Rarotonga. In 1967, he established the Tokelau Island Migrant Study, which became his most famous work.4

I am not going to review Ian’s epidemiological work in detail. If education is what is left once everything that we learnt at school is forgotten, research is what is left when individual studies and publications are forgotten, or languish uncited in the Medline deep archive. Many of Ian’s studies are classics and will be cited for many years to come. However, I want to discuss two more general, and more profound, lessons from Ian’s work.

First, Ian showed that the “lifestyle-related” diseases such as diabetes and heart disease were caused by social and environmental changes such as migration, which produced changes in individual-level risk factors such as diet. This work is as relevant today as it was back in the 1960s. In particular, it is this recognition of the population context that is the key feature of the developing “global epidemiology” in the 21st century.5 Even if one is focusing on specific risk factors, it is crucial to recognise that every population has its own history, culture, and economic and social divisions that influence how and why people are exposed to specific risk factors. The Tokelau Study is one of the most prominent examples of this during the “modern epidemiology” era, in that individual lifestyle factors such as diet, and individual health measures such as blood pressure, were studied in the social context of immigration using a multidisciplinary approach.4 Ian had an amazing ability to break through the “silos” between research disciplines, and to bring together a wide variety of researchers to address a common problem. He was able to do this because he took a “problem-based” approach, and adopted appropriate multidisciplinary methodology to address the problem (eg, the health effects of immigration) rather than letting the methodology determine the questions that were to be asked.5

These issues are likely to become more important because not only is epidemiology changing, but the world that epidemiologists study is also rapidly changing. We are “migrating” to a new world that is likely to appear just as alien and strange to us as New Zealand must have appeared to Tokelau Islanders when they migrated from their remote atolls in the 1960s. The last few
decades have seen the occurrence of the “information revolution”,
which is having effects as great as the previous agricultural and
industrial revolutions. These are being accompanied by the effects
of economic globalisation, structural adjustment, climate change
and economic recession (or depression). All of these factors have
the potential to swamp the relatively minor effects of the changes
in individual lifestyle that have been the focus of “risk factor”
epidemiology. Thus, epidemiology is inevitably entangled with
society and it is not feasible or desirable to study the causes of
disease in the abstract. 8 To understand the causation of disease in
a population, it is essential to understand the historical and social
context, and to emphasise the importance of diversity and local
knowledge rather than only searching for universal relationships.
This requires a quite different approach to epidemiological
methods and epidemiological practice from the one that has been
followed in recent decades. 9 If we are to go “back to the future”
and rediscover the population perspective in epidemiology, then
Ian Prior’s work provides an important reference point.

Second, Ian showed that physicians should be concerned
about all of the determinants of health, including macro-level
factors. As well as his epidemiological research, Ian campaigned
tirelessly for a wide range of social and political causes. He was
one of the first environmentalists in New Zealand, and headed
the successful campaign in the 1960s and 1970s to stop the
raising of Lake Manapouri, one of New Zealand’s most beautiful
lakes, for a hydroelectric scheme for an aluminium smelter. In
1976 he was prominent in the movement to protest against
“dawn raids” against “overstayers” from the Pacific. He was
involved in the movement to oppose apartheid, including the
protests against the South African rugby tour in 1981, which
saw some of the largest and most lengthy civil disturbances in
New Zealand’s history, and which resulted in a virtually
complete international sporting boycott of South Africa,
hastening the end of the apartheid regime. In 1982 he
established the New Zealand Branch of International
Physicians for the Prevention of Nuclear War. It rapidly became
the most successful National Branch in the world, with about
one-half of all New Zealand medical doctors being members. As
noted above, in his later years he worked in prisons, and with
gang members, many of who became frequent visitors to his
house in the upper class Wellington suburb of Wadestown.
While doing all of this, and his day job as an epidemiologist, he
and his wife Elespie were major sponsors of the arts in New
Zealand, nurturing the careers of many singers, musicians and
painters, and establishing the Wellington Sculpture Trust,
which has raised funds for more than 20 sculptures now
located throughout the city.

Ian Prior’s work represents not only an important historical
legacy, but also an important guide to the future of
epidemiology. This includes his work on the role of social and
environmental changes and the wider social context on
individual “lifestyle”, his willingness to work collaboratively
with researchers from other disciplines including social scienti-
sts, his insistence on seeing quantitative biomedical phenom-
ena (such as blood pressure) in the wider social context, and
perhaps most of all his insistence that epidemiologists cannot
hide from the wider realities of the world in which they live.
Thus, epidemiologists owe Ian a great debt for his work, and
its continuing influence. I want to finish by commenting on
two particular aspects of that debt.

First, we are indebted to Ian for doing this work in New
Zealand. Too often, leading New Zealand researchers go
overseas and the “all poppy” syndrome means that anyone
who stays here is often considered to be “not good enough” to go
overseas. Ian has always been a New Zealander and has always
been devoted to “making a difference” in this country. In doing so,
he, perhaps paradoxically, did scientific work which is of universal
interest and is perhaps better recognised overseas than it is here.

Second, we are indebted to Ian for the way that he did this
work. It is easy nowadays to look back and to see that Ian has
published a few papers and done a few studies, and to imagine
that it was not all that difficult. In practice, Ian had huge
barriers to overcome to get epidemiology and public health
accepted and to do the sort of community-based research that
he saw was necessary. As his obituary in the Wellington daily
newspaper noted, when Ian Prior first established epidemiology
as a field in New Zealand “within senior echelons of the medical
fraternity, there were doubts as to whether prodding Māori,
checking their blood and measuring fat rolls constituted real
research. Even the Medical Research Council at the time would
do not give Dr Prior … the stamp of approval. In the end they did,
but only after Dr Prior authored a flood of learned papers, and
had them published abroad.”

Almost everyone who enters public health research, like Ian,
has some aspirations to “helping people” and achieving social
change. However, most people rapidly get “beaten” and settle
down to a nice career with aspirations of a good salary, and a
steady accumulation of frequent flyer miles (hence the joke
about epidemiology being “the art of turning death rates into
frequent flyer miles”). Alternatively, it is easy to be “beaten” in
another way, to settle into a “grievance mode” and to spend
your career complaining about real or imagined grievances and
shortcomings of “the system” without seriously working to
overcome these. What both of these approaches have in
common is that they (in different ways) benefit (and empower)
the individual researchers, but do not benefit public health.

What is much more difficult is, as Ian has done, to move
forward in a way that makes sensible compromises and gets
things done, but that does not compromise public health
principles and keeps public health goals to the forefront. As he
frequently used to say “when in doubt, do the courageous
thing”1. In doing the courageous thing, time after time, Ian
tackled the problems of his time, in the context of his time, and
overcame them in a way that cleared the path for those who
followed. If we can continue this work, in the current context,
with a fraction of the spirit and the love (of people and of
knowledge) with which Ian approached his work, we will be
doing very well indeed.

My favourite story about Ian was when a friend of mine was
trying to get a new policy on South Africa established at the
Annual General Meeting of the Public Health Association. He
was having great problems with colleagues who were older,
more senior and more conservative. There were the usual
arguments (for the day) about public health researchers
“sticking to the science” and not getting involved in politics,
even if the politics had a direct effect on health. Ian had just
received a special award from the Association, and was having
to leave early while the debate was still continuing. As he was
leaving, he very publicly thumped my friend (who subsequently
won the debate) on the back and said “I’ve fought these guys all
my life. Don’t let the bastards beat you”.

And he never did.

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written on Ian Prior’s life and work.1 1

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REFERENCES


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