

Issues of method and commitment

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In this issue, we continue our discussion of research methods in public health. We have also taken the opportunity of suspending the usual format of the Journal to respond to the World Health Organization World Report on Violence and Health due for release on 3 October. As our contribution to this international effort, we present six editorials summarising the views of a range of public health researchers who have shown a long-time commitment to the field.

Methodological issues V: precise and concise writing

The editorials in recent issues that dealt with methodological issues have not addressed the problems of analysing data. Researchers in all the disciplines that constitute public health undergo training in the skills of data analysis. The variety of methods used is too great for us to produce a convincing overview. Instead, we concentrate in this issue on the way in which we report our research, arguing that the emphasis should fall on precise and concise reporting, whatever the research method used.

Editors concerned with fitting articles into limited space are focused on limiting the word length of articles and researchers are sometimes asked to reduce the length of a paper. There are two ways in which researchers commonly reduce word lengths. The first, seductive option is to remove sections of the paper, sometimes then publishing these sections separately. A separately published detailed description of research methods is certainly essential in those studies using complex and innovative methods. In other papers, the removal of an essential part of the paper can mean the loss of continuity as we search for the methods paper in a different issue of the Journal or even in a different journal. We do not usually recommend excision as a first option.

What we do recommend is the much more difficult task of painstakingly editing the paper, removing unnecessary words in one paragraph after the other, substituting clear and concise descriptions for those that may be oblique and wordy. An important aspect of being clear and concise is the need to be precise about the contribution of each step of the research process.

The need to be precise and concise is not just an editorial pre-occupation. Philosophers from Wittgenstein to Popper have seen the pursuit of science as involving a passionate pursuit of truth, but communicated in clear and simple language. Popper warned that this can only be achieved through hard work.¹ There are two aspects to this work: the task of communication and the task of thinking clearly about the research that we have done.

Social scientists using textual analysis have taught us that text

is an active social phenomenon, involving first creation and then interpretation. In specialist disciplinary areas such as public health, we can limit the interpretive flights of our readers by relying on shared concepts with precise meaning. Given the multidisciplinary nature of public health, key conceptual or methodological devices may need to be outlined but, if we are not to bore those with the skills, we need to be concise and specific in these descriptions. The special terms and concepts that we use are key markers in the conceptual map that we then draw. The map has to guide the reader from problem through research to conclusion. As with any map, we include essential landmarks, crossroads and directions. Recognising that the reader will interpret and misinterpret obscure details, the map is concise and precise in its delineation of an area. There is a shared responsibility. The drawer of the map has to be clear and precise in the way in which an area is represented; the user of the map has to be meticulous in following the direction indicated.

Writing in this way requires hard work for many of us who have received little or no training in these arts. A sometimes unrecognised benefit of the Journal's review process that good reviewers provide detailed feedback on those aspects of a study that are obscure or open to misinterpretation. As Editors, we are well aware of the improvement that results when an article is well reviewed and where the authors go about the task of revision in a painstaking manner.

If we are to communicate our passion for the resolution of public health problems, and do so in a precise and concise manner, a prerequisite is that we should be clear about our own research processes. Sometimes, when we enter a new and complex field, it takes time to build up this expertise. Again, submitting a paper for publication in an important step in the development of this skill. We see it as an important educative role of the Journal to help researchers develop the twin skills of thinking clearly about research and communicating it in a precise and concise way.

Recognising violence

Research into violence faces unusual problems. It is certainly a significant public health problem and the issues of method outlined in editorials in earlier issues of this Journal all apply to this research field. The additional problem is that all but the most obvious effects of violence can be very hard to see. The first problem then is to see violence as a problem for research.

One of us (JD) lived in Johannesburg, South Africa. It is only when one returns to such a place after an absence of many years that the subtle effects of high levels of institutional and community violence become clear. People walk purposefully, disengaged, avoid eye contact, lock car doors and hide the money they carry. Clearly, violence is to be avoided but the debate on what one should do in the event of an attack is an undertone of conversation. Usually the conclusion is that it is foolhardy to fight back. These are debates that are mostly foreign to Australians.

In Australia, violence is not evident on the streets and in the community in the same way. The worst of it occurred in the past;

in the present much of it occurs behind closed doors. The changes that demonstrate that people are living with the effects of violence are there but they are subtle and sometimes very difficult to read. Very few people fight back. It is to the credit of Australian public health researchers that they have read the subtle signs and committed themselves to making public the health effects of living with violence. They deserve a special accolade for both their perceptiveness and commitment to a difficult area of research.

In this issue

The theme of violence and health continues in the report of a cross-sectional survey carried out by Kelsey Hegarty and Robert Bush describing the prevalence and associations of partner abuse in women attending general practices in Queensland.

Four papers take up another difficult challenge, the critical evaluation of health services. Christine Mincham, Donna Mak and Aileen Plant report a clinical audit of the management of rheumatic fever and rheumatic heart disease in the Kimberley region against accepted medical practice. They make no judgements on the reasons why care was or was not received and the degree of difficulty in providing care is immediately apparent in their description of the setting. This paper is enhanced by their explicit description of the study's limitations and by the actions taken as a result of the study. Desley Harvey and colleagues describe the evaluation of a pilot project providing brief interventions to reduce tobacco use in Indigenous health care settings. What is particularly interesting in this paper is the detailed description of the pre-training interviews, the training program and the follow-up six months later. Carolyn Nickson and colleagues use claims data from the Medicare Benefits Schedule to measure terminations of pregnancy by place of residence and place of service provision over a five-year period. The pattern of 'surplus' and 'deficit' claims confirms their hypothesis that the legal and political climate in some States is related to the use of services interstate. Katherine Hogg and colleagues use serum samples from the Royal Children's Hospital Serum Bank in Melbourne, and from two population and areas-based cluster samples in Victoria to assess the extent of immunity to poliomyelitis in the community and to discuss the

implications of the findings for future decisions about Australia's poliomyelitis immunisation program.

Tanya Chikritzhs and colleagues argue the case for a standardised methodology for estimating alcohol-caused death, injury and illness in Australia, including the use of low-risk drinkers rather than abstainers as the reference group. We expect this to be debated in later issues. Natalie Walker and colleagues in New Zealand add the relatively unusual method of capture-recapture analysis to traditional forms of measurement, finding that the former method results in a dramatic increase in the incidence and prevalence estimates of leg ulcers in Auckland. Ying Chen and colleagues use geospatial analysis to map pertussis vaccination and childhood pertussis notifications. An important incidental finding was that of problems in accuracy, completeness, timeliness and quality of the available datasets. The fourth methodology paper, from Caroline Finch and colleagues, describes the strengths, limitations and findings of a prospective cohort study of sports injuries in non-professional, community-level players from four of the six highest-ranked sports in Western Australia over two consecutive winter seasons.

Size *is* important – the next three papers all agree – but its measurement and interpretation remains a challenge. Rob McGee and colleagues call for a more rigorous program of monitoring and prosecution of retailers selling cigarettes to under-age smokers in New Zealand, arguing that this strategy may be more effective there than it has been in other places. Finally, Susan Donath and Lisa Amir analyse evidence from the 1995 National Health Survey on the introduction of breast milk substitutes and solid foods, and propose the inclusion of better indicators in future surveys.

Book reviews and Letters to the Editor, displaced by the sustained reflections on Violence and Health in Australia, will return in the December issue.

Reference

1. Popper KR. Reason or revolution. In TW Adorno, J Habermas, H Albert, R Dahrendorf, H Pilot and KR Popper, *The positivist dispute in German Sociology*, translated by G Adey, D Frisby, London, Heinemann Educational Books, p 292, 1976

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