## **REVIEW**

# Advocacy in public health: roles and challenges

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Most public health researchers aspire to have their work published in high impact journals, reasoning that this is a key measure of their work's importance and influence. Publication in these journals accords peer recognition, enhances promotion and can attract media and hopefully public and political attention to research and its implications for public health. Currently, the epidemiology journal with the highest impact factor is the *American Journal of Epidemiology* with 3.870. The journal you are now reading scores 1.892. In wider public health, the peak journal is the *Annual Review of Public Health* with 4.524. Sixty-three per cent of the Institute of Scientific Information's indexed journals have impact factors below or equal to one, meaning that in these the average paper is cited less than once in the 2 years after publication.

These depressingly modest numbers that define high impact in our field together with the global circulations of the journals themselves (*Int J Epidemiol* 2434, *Tobacco Control*, the international journal I edit, 980); the size of the audience that might hear a paper at a main session of the world's largest public health conference (the American Public Health Association with recent attendances of around 12 000); and library shelf use studies (20% of journals are responsible for 80% of borrowings, with many bound volumes of scholarly journals being never opened in a survey year<sup>6</sup>) all make salutary contrast with the audience size of even low rating late evening national news programmes or the readerships of provincial newspapers. While epidemiological research should provide the foundation for public health advocacy, only a tiny fraction of often high quality research ever percolates out of academic circles to inform advocacy efforts.

In most research environments, it is *de rigeur* to rehearse a conference presentation that might be heard by 30 people at a specialized session. Yet a radio or television interview heard by millions including key decision makers is often undertaken with a casualness that contrasts with the unparalleled opportunities it presents to promote change. If a public health research report is selected as newsworthy by international news syndicates, its salient features in the eyes of journalists will be broadcast to hundreds of millions, and sometimes billions of people. People repeatedly nominate news media as their leading source of information on health issues, and there are few examples of major legislative or funding reforms in public health that have not been preceded by protracted periods of news coverage involving advocacy by those both promoting and opposing change.

I assume epidemiologists aspiring to be influential understand that the goals of epidemiology and public health lie well beyond the pursuit of growing scientific publications that will be read by few and cited by even fewer. They want their research to influence political or institutional policy and practice, or the personal agendas of large numbers of people, and so hope that there can be a continuum or partnership between epidemiological research and advocacy. They will frequently find the journalistic compression of their often voluminous research reports into 200 words or a popularized radio sound bite to be a traumatic experience that tramples on most of the heavily qualified conventions of scientific writing. Yet they will recognize that without such attention to their work, it may never influence any policy or practice.

However, few postgraduate courses in public health place anything but passing attention on how to advance or advocate the policy implications of research. Public health advocacy remains barely a sub-discipline within our field. Unlike medical psychology, education, sociology, anthropology, economics, biostatistics or epidemiology, advocacy has no journals dedicated to critical analysis of its methods, wins and losses. It has few textbooks<sup>7–11</sup> and even fewer recognized training programmes, although in recent years an impressive body of scholarship has been published (see http://www.health.usyd.edu.au/resources/mchbib/index.html). Against the time and attention devoted to planning, implementing, and writing up research, the relative neglect of both the skills and analysis of advocacy is remarkable given its achievements.

Every branch of public health can point to the critical role of advocacy in translating research into policy, practice and sea changes in supportive public opinion. In Australia, examples abound in areas such as tobacco control, <sup>12</sup> injury prevention, <sup>13</sup> and HIV/AIDS control. 14 So why does the study and teaching of advocacy remain so neglected? Having worked in public health advocacy for over 20 years, I have come to see this as a reflection of advocacy's perceived incompatibility with the reductionist epistemology that underscores most public health enterprise. Academic public health has been most comfortable with those branches which go closest to satisfying criteria as science. While there are aspects of the advocacy process that are emerging as almost fail-safe ingredients in predicting the course of campaigns, much in the day-to-day practice of advocacy draws more on the less replicable truths of political science, and particularly on framing strategy.<sup>15</sup> Epidemiology, with its aspirations to define nailed down notions of reality, demands precision in its specification of agent, host and environmental factors to satisfy these ambitions. Advocacy, by contrast, recognizes the dynamic interplay of a myriad of factors and influences which often lie well beyond the reach of the evaluator's desire for control.

Many epidemiological findings with potential to improve health are welcomed by the public and decision makers alike. To generalize, in cases where there are no vested interest groups who stand to lose by policy or legislative changes; where these changes require little resource investment or might be

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commodified into profit making solutions; or where there is already overwhelming community support for implementing change, publicity rather than advocacy may be all that is required. Our emerging understanding of risk reduction in sudden infant death syndrome<sup>16</sup> and of ways of reducing hip fracture in the aged and of folate in preventing neural tube defects<sup>17</sup> are good examples of red carpet receptions being given to epidemiology.

Advocacy seeks to change upstream factors like laws, regulations, policies and institutional practices, prices, and product standards that influence the personal health choices of often millions of individuals and the environments in which these are made. Advocacy shares strategies with public relations, but differs in that it invariably involves *contested* definitions of what is at issue. Advocates therefore often find themselves engaged in public conflict with sometimes powerful interest groups or governments determined to resist change. For the faint hearted, advocacy can take on the spectre of a fraught, politicized activity, threatening to make enemies particularly of retributive government figures and litigious industries. I have even received death threats over my gun control advocacy. This can seem a far cry from the mannered and often inconsequential exchanges in letters pages of journals.

In the space available, I will examine three recurrent concerns about public health advocacy which seem to inhibit greater engagement by those in public health and epidemiology. The first of these is the often heated debate about when state regulation of the liberty of individuals is justified. While the Millean principle of preventing harm to others 18 provides broad guidance in obvious examples like arguing the case for road rules and food safety laws, the principle is often contested by interest groups disputing the evidence on harm and/or the assumed primacy of health concerns over other values. This is particularly the case of interventions where Rose's prevention paradox applies (little benefit to individuals, but predicted benefits to whole populations). <sup>19</sup> I will consider this problem through two case studies that illustrate different nuances: efforts to advance legislative reforms in gun control and reduce motor vehicle injury.

The second problem is summed up in a question I am often asked by an uncomfortable person in an otherwise supportive audience: 'do you believe that with advocacy it's a case of "anything goes" ... that the end justifies the means?'. This question goes to the heart of the motivated intent of advocacy and its core strategies: of the way that advocacy sets out to be effective and the extent to which this can sometimes generate controversy about the ethical boundaries between information and persuasion. The core issue here concerns the ways in which problems are defined or framed and the naivete of assumptions that there is some 'correct' way of defining a problem. In this respect, epidemiological assumptions about the 'reality' of problems can again differ from those acknowledged as legitimate in advocacy.

The third concern to be discussed is typically expressed through the question 'what evidence have you that advocacy actually *works?*'. The attribution of effects to interventions in public health is subject to hierarchical models with the double blind randomized controlled trial enthroned as the emperor of evidence. By contrast, efforts to attribute causal effects from advocacy processes to their outcome objectives are fraught with problems, and therefore implicitly denigrated as soft or weak.

This tends to mean that the most robust 'truths' about public health interventions tend to cluster around highly defined and controllable interventions such as the efficacy of therapeutics and vaccines. Efforts to influence political decision making over years or even decades are about as far as one can get from such circumscribed interventions. Unless one takes the rather dismal view that in public health, the only things that count should be those that can be comprehensively and unambiguously counted, many case histories of important public health successes would be relegated to the dustbin of inconsequentiality. Here, I will review the history of banning smoking in workplaces as a case study.

# When is Advocacy for Change Justified?

Epidemiology is the bedrock on which advocacy should rest. When public health advocates articulate their goals, they seldom attract dissent: few decent people are willing to publicly disagree that deaths from heroin overdose are tragic, that work environments should be safer, or that it would be good if fewer people were killed on the roads. Where advocacy becomes contentious is when it spells out its strategies for achieving these ends. Safe injecting rooms and heroin trials for illicit drug users, <sup>20</sup> smoking bans in pubs and restaurants and further restrictions or imposts on the liberties of motorists, for example, all attract protracted debate. These strategies will often reflect a concern to reach ever further toward a generally implicit zero risk goal: if more lives can be saved and morbidity reduced, practitioners in most fields of public health feel they should be able to do better and advocate for the means to do so.

The two case studies below illustrate that unavoidable questions arise about the economic and social costs of such pursuits. In disputes about these, all analyses of both advocates' and opponents' positions must eventually arrive at the values that inform these. While there are coherent moral and ethical bases for public health interventions<sup>21–24</sup> disputes are seldom settled by explicit reference to these. An intervention will be deemed justifiable or not depending on the way these values are assessed by participants and observers to these disputes.

## Case 1: Gun control

On 26 April 1996, at Port Arthur, Tasmania, a man with no criminal or psychiatric record and using semi-automatic military style weapons killed 35 and injured 18 people, the largest death toll ever recorded in peace time involving a single gunman.<sup>25</sup> Starting with the massacre, the decade before had seen 101 people killed in 11 incidents in Australia where four or more people were shot, often with rapid fire semi-automatic weapons. Following the Hungerford and Dunblane massacres in the UK, and a steady news diet of gun massacres from the US, a 'tipping point' 26 appeared to have been reached and the Australian government moved quickly to ban private possession of semi-automatic rifles and pump action shot guns, to introduce national gun registration and require all gun owners to demonstrate legitimate purpose for owing a gun (target shooting and hunting, but not self defence). The law reform package included a time-limited gun buy-back for semi-automatic weapons funded from levy on personal income tax that raised \$A500 million (£180.9m) to compensate gun owners for the full market price of their now banned weapons. As there was no

national gun registration or shooter licensing scheme, there were no national data on the number of individuals who owned the proscribed category of guns, nor on the number of guns they owned. However the gun lobby, the police and gun control advocates all agreed that it was likely there were well over a million semi-automatic weapons in the community. In all, 640 401 guns were surrendered from an adult population of about 14.8 million leaving an unknown number of illegal guns in circulation.

Massacres and sieges generally require rapid fire weapons to effect large-scale killing and to keep police at bay. By removing this huge number of such guns from the community the hope was that such incidents would reduce. In the 63 months since the massacre, not one such incident has occurred. As each month passes, the view that the gun law reforms made Australia a safer nation gains increasing support.

In the 65 months prior to the massacre, and in the months between the incident and the implementation of the laws, huge advocacy efforts were mounted by those both promoting and opposed to the tougher gun laws. With hundreds of thousands of angered shooters marching in city streets, the gun lobby sought to frame the proposed laws as unjust and dangerous using several stock arguments. Here I will discuss two of these: the (correct) claim that the overwhelming number of gun owners were law abiding, had not and would not represent any danger to the community; and the argument that Australia's gun death rate was insufficiently high to warrant restrictions on the liberty of these law abiding shooters. The gun lobby also argued—incorrectly—that the perpetrators of these mass shooting incidents were either mad (had records of mental illness) or bad (those with criminal records) and that both groups were incapable or unwilling to be law abiding. In fact, the majority of perpetrators had been hitherto 'law abiding citizens'. In summary, those resisting the gun laws argued that the probability of any gun owner running amok was infinitesimally small and that therefore the government 'gun grab' was like using a sledgehammer to crack a walnut and besmirched the character of law abiding shooters by implying they were not to be trusted with these guns.

The gun lobby spent much energy on creatively demonstrating that gun deaths were uncommon next to dozens of other preventable causes that claimed far more lives, 27 and that government priorities in allegedly seeking to make the community safer were therefore capricious and driven by wider political agenda bound up with notions of shooters being somehow inherently suspect citizens. 'When so many problems that claimed more lives and effected more people existed, why was the government devoting such attention to gun control' they argued. They argued that the solution to reducing gun violence like Port Arthur lay in greater vigilance by doctors and police in identifying those at risk of future gun violence. Psychiatrists and general practitioners repeatedly denounced this as naïve folly.

While the number of gun owners and guns was not known, they were both indisputably high. Equally indisputable, was that the average (typically male) gun owner would never use his gun maliciously, and that there was very poor ability to predict those who would. Just as random breath testing and airport security checks assume that all citizens are of equal risk to the community, reducing gun violence required populationwide solutions which would inevitably involve restrictions and impositions on a large number of entirely law-abiding citizens. For many shooters, these impositions were never going to be acceptable and so gun control continues as a highly contested

This case illustrates a core challenge for advocacy. The momentum for action of the advocacy campaign for gun control did not depend on any central calculus determined by multidisciplinary teams of health economists, epidemiologists and biostatisticians showing from league tables that this was a priority issue when measured against all other health issues. As with many low probability risks, such a calculation would have relegated gun control to low priority, which gun control advocates argued would allow US style gun culture to steadily foment in the absence of far-sighted political will to prevent it developing in Australia. The preventive theme of 'not going down the American road' became the single most expressed reference point to justify the new laws. This drew on a kind of lay epidemiological understanding that a nation with a high rate of gun ownership and minimalist gun laws was more likely to have a high rate of gun violence than one where guns were less accessible. Claims drawn from Lott's contentious work<sup>28,29</sup> that US states with 'right to carry' gun laws had lower rates of gun homicide than those which did not were dismissed by analogy that this was like arguing that wartime Rwanda was safer than Kosovo.

For gun control advocates, the principal challenge became one of framing the debate to ensure the public outrage at these massacres was maintained and translated into law reform before the community's memory faded. A principal objective became one of defining the solution to the problem as one involving gun control, rather than the gun lobby's preferred option of high-risk individual policies based on their dichotomy of 'good' and 'bad' gun owners ('Guns don't kill people. People kill people').

Much of the impetus for gun control rested with promoting the common-sense premise that citizens with malicious intent armed with rapid semi-automatic firepower could kill many people quickly. The question for society was whether it was sensible to allow virtually open access to these, or as with restrictions on civilian access to armoured vehicles, dynamite, anti-aircraft and anti-tank weapons, rapid fire weapons should be framed as anti-social. The answer to such a question will always be finally resolved by value judgements, not epidemiology. For example, the gun lobby referred to occasional massacres as the unfortunate 'blood price' that a gun-owning community needed to pay to defend it's right to bear arms. The overwhelming support for the new laws by Australians showed that such a price, while rare, was deemed unacceptable. The contested nature of gun control advocacy will thus always lie beyond epidemiological resolution.

## Case 2: An ever downward spiralling road toll?

Among 28 mainly OECD countries, Australia's rate of road deaths ranks seventh, at 9.4/100 000 population, having fallen by 46% from 17.5/100 000 in 1988, a rate higher than for any other nation.<sup>30</sup> Over the 2000–2001 Christmas holiday period, 80 Australians died in motor vehicle crashes, the highest number in that period in four years. The Australian news media became preoccupied with what it framed as an unacceptable death toll. Among apparently serious responses debated was one for all cars capable of speeds at more than 120 km/h to be prohibited (in effect, this would probably have meant all cars).<sup>31</sup>

This debate occurred in the absence of any discussion about the fundamental matter of what level of road toll should be considered too high, and its indelicate corollary of what annual road carnage the community would be willing to accept. The idea that the road toll will inexorably inch closer toward zero seems implicit in most outrage about road deaths, with Sweden having adopted a 'Vision Zero' tolerance policy for road deaths. 32

The logic of extending the argument for compulsory motor cycle helmets to car occupants seems obvious as a strategy that would save many lives from head injury each year. Just as injury conscious motor racing has long required drivers to wear helmets, and some nations have made cycle helmets compulsory,<sup>33</sup> for our purpose here in exploring problems in advocacy, one might ask why not require helmets to be worn in cars on roads too? Acting from wholly paternalistic precepts, we inconvenience motorcyclists, arguing that the decision to risk one's head being slammed against a road obstacle at high speed cannot be a rational and informed decision. The state therefore makes the decision for motorcyclists by making helmets mandatory.

Plainly, such a proposal today would invite massive public opposition marshalled around passionate concerns over repeated inconvenience, discomfort and aesthetics. Libertarians would argue that those who choose to insure themselves for injury should be as free as they wish to take such risks. However, it is wise to reflect that similar opposition has also been seen when car seat belts were made mandatory, and speed cameras and random breath testing introduced. These ideas that were once greeted by civil libertarians as emblematic of unwarranted paternalism, today attract minimal opposition. Public health strategies are as socially constructed as any other cultural phenomenon. They are not inherently good or bad, but take on their meaning through the discourses that accompany them.

Advocacy often requires its practitioners to be unpopular vanguards. While the Swedish Vision Zero road injury policy does not yet appear to have embraced the car helmets idea, it can surely only be a matter of time before the idea gains currency. Those who first propose it will be first framed by the media as eccentric, just as those restaurants which first banned smoking were considered faddish and preciously risk averse. This 'ahead of the community's comfort zone' reputation can retard the ability of advocates to have their concerns taken seriously.

This example illustrates perfectly the tension that can often exist between the pursuit of preventive health goals and other social agenda. Aside from a policy commitment to attract more motorists to use public transport, the recipe for further improvements to the road toll will be drawn from added doses of driver education, threats and disincentives, and harm reduction through car and road engineering. Each increment in such policy should be properly debated by the community. While such debates are always generated by reference to the road toll, they are often resolved by the ascendancy of other values that reveal plainly that for all the public anguish about road carnage, the community often has higher priorities.

Those motivated either professionally or from more personal concerns (for example, Mothers Against Drunk Drivers<sup>34</sup>) to further reduce their nations' road tolls are of course expected to place these concerns ahead of other competing considerations. but as with the previous gun control example, the contested nature of advocacy is seldom resolved by some rational assessment of facts.

There is now a vast science of road injury prevention, resplendent with controlled experimental trials of different strategies, international comparisons, and instructive longitudinal data. While the conclusions of this continue to be debated at the margin, the road toll will not fall further without further impositions on all of us. As with gun control, the road toll debate draws heavily on the insult and resentment felt by those who like to drive fast or own lethal weapons, but who have impeccable safety records. The real questions that remain all come back to the values determining the balance that must always be struck between the cost of saving further lives and the price we are willing to pay to do so. Again, epidemiology has little to offer in resolving such disputes.

## Information or Persuasion?

Advocacy is unashamedly purposive in its intent. Its participants' objectives are not merely to place their concerns on the public table, retreat and wait expectantly to hear if the ensuing community or political debate and the decisions reached are favourable. Once committed to an objective, advocates set out to maximize support by strategic planning of the ways they will argue their case, including special attention to counteracting or reframing any strengths of their opponents' arguments. Discourse in academic public health circles is disciplined by principles of evidence and critical appraisal. By contrast, the currency of advocacy is metaphor, analogy, symbol and efforts to present data in ways that are resonant and memorable to often inexpert target audiences. The apposite sound bite that 'a non-smoking section of a restaurant is about as useless as a non-urinating section of a swimming pool' probably conveys more to the average person than the earnest pronouncements of hundreds of scientists at indoor air conferences could ever hope achieve with the same broad communicative purpose. Above all, debate in advocacy needs to invoke sub-texts or value bases which have widespread support ('this issue is like that issue') so that the solutions proposed to problems are seen as consonant with solutions demanded for problems with parallel value issues underlying them.

The motivated intent of advocacy gives rise to some interesting debates about whether there are meaningful ethical distinctions to be drawn between information and persuasion. I have often noticed criticism of advocacy efforts that imply that there are fairly narrow established or acceptable ways of talking about problems, and in my opening remarks noted the concern that is sometimes expressed that 'anything goes' in advocacy. Obviously advocacy that is ethical must never promote claims that are known to be incorrect. But few areas in public health present morally convenient, undisputed 'truths'. More often than not, opponents of public health policies will seek to inflate often marginal disputes among experts or—as with the tobacco industry-manufacture dissent through 'cash for comment' tame scientists commissioned to produce preordained reports designed to wreck consensus.35

The challenge for advocacy here is to avoid being entrapped by carefully engineered attempts by such opponents to frame

debate in interminable 'more research is needed' policy bogs, while at the same time never going beyond the science that underpins sound public health policy. With lay and press cultures often demanding unequivocal assurances about inherently complex epidemiological matters, this can be continually challenging.

More commonly though, concerns are expressed about the introduction of argument into advocacy that is said to be irrelevant or 'emotional'. Communication always involves choices about how we select, assemble and express the information that we deem relevant to others' reception of what we are wanting to say. We decide that fact X is relevant, but that fact Y is not and in doing so, begin to frame a definition or closure around what we are claiming to be at issue. If it is inevitable that we steer others' considerations by this process of selection, then it is self-delusional to pretend that we are not nearly always hoping that when we give people information that they will find it motivating in the ways we had planned. If advocates find the ways their target audiences receive this information are unmotivating, they try to present it differently in the hope that another way works better. To pretend that there is some neutral, value-free way of presenting information is naïve—the process is inevitably governed by communicative expectations on the part of the sender.<sup>36</sup>

If, as I have argued, what is ultimately being debated in public health disputes are the primacy of certain values over others, then it is wholly appropriate that the rhetoric of advocacy should seek to highlight those values. This means that it will often need to remind its audiences of what is fundamentally at stake in a debate. What an epidemiologist deems fundamental and relevant may well underscore why an issue is the subject of advocacy in the first place. Epidemiologists' currency in debate is probabilistic data on risk, but this is not how communities define problems, nor why they can become outraged about lowrisk issues, remain indifferent to some high-risk exposures or support some policy responses and not others. While the drama of public advocacy played out on television news regularly features venerable scientists in laboratory settings or filmed against the cinematic cliché of a wall of books, news genres in public health also routinely feature distraught victims personifying injustices, corporate villains defending venality over community health, formerly faceless bureaucrats smarting under the arc lights of public scrutiny and whistleblowers speaking out at risk to their careers.

All these news conventions work to frame the meaning of public health issues, and advocates wishing to be looked over, rather than overlooked (as Mae West put it) need to have an instinctive understanding of the popular subtexts of their issues, as much as the overt surface factual dimensions of the debates in which they engage. Many health issues where advocacy debates occur involve consequences that are highly emotional. An infant drowned or brain damaged in a backyard swimming pool that had no mandatory childproof fence is tragic, and any advocate who communicates that they have little emotional rapport with such tragedy effectively disqualifies themselves from being an effective advocate.

Accidental drownings are a major cause of death in children aged under five in Australia.<sup>37</sup> Those politicians who have opposed the incorporation of these fences into pool building standards have played a part in such children's deaths, as have

those from the garden aesthetics lobby who for years actively opposed law reform.<sup>38</sup> Paediatricians and child safety advocates involved in these reforms had volumes of data on the epidemiology of drowning, on the health economics of care for life long care for children brain damaged from near drowning, and on the efficacy of fences in reducing the incidence of drowning.<sup>39</sup> This material was published and distributed widely. But for years the 'facts alone' were insufficient to persuade legislators to make the fences mandatory.

When legislation was eventually passed, it was preceded by many instances of parents of drowned children pleading the case for fences; by dramatic and sometimes ad hominem public exchanges that invited TV audiences to identify heroes and villains; and by the cultivation of news sound bites ('a pool fence is like compulsory third party car insurance ... if you can't afford the insurance, you can't afford the car').

Successful advocates cannot avoid engaging in politics and the core problem of politics has been described as being one of the struggle for ascendancy among multiple definitions of the same events. 40 To the tobacco industry, a tobacco advertisement might be defended as a legitimate means of a legal industry to inform its customers about its products. To someone trying to have tobacco advertising banned, the same advertisement is merely another effort by modern day Pied Pipers to beguile adolescents with benign images of an addictive, carcinogenic product. The interest group that succeeds in having its definition of these same events or issues adopted by those able to implement legislative or policy changes will generally be the group that wins.

## The Attribution Problem in Advocacy

A third problem besetting advocacy in having its academic status elevated within public health concerns the attribution of effects. How do we know that advocacy 'works'? There are two major challenges inherent here. The first involves problems in specifying what advocacy is, and the second concerns the development of meaningful ways of measuring its influence. Interventions in clinical trials are discrete and designed to be wholly replicable. Everything possible is done to remove or account for confounders. By contrast, advocacy seldom if ever operates in such pristine environments, but seeks to penetrate and repeatedly respond to decision making environments that can change by the hour. While the appellation 'opportunist' is generally pejorative, in advocacy it is high praise and an essential quality in responding to the many twists and turns that arise in every extended effort to promote change. Whenever necessary, advocates do not hesitate to introduce new strategies not initially planned out of some reverence for the inviolate sanctity of the independent variable or 'black box'. Such indiscipline in epidemiology would border on profanity. For advocates, public health evaluators often seem to be preoccupied by relatively trivial interventions selected because of funder interest ('did our television campaign change behaviour?') or the ease of bolting on evaluation instruments.

While studies abound of the influence of the successes of advocacy (laws and regulation, tax changes, policies) there are few efforts at critical evaluation of the advocacy processes that lead to the adoption of these. The chaotic reality of the advocacy process finds its counterpart in efforts to describe, quantify and evaluate it. I described this previously as trying to 'unravel gossamer wearing boxing gloves'41 and commended more qualitative approaches as likely to be productive in critical analysis of how advocacy works. These would include approaches that tracked the changing perceptions over time of key gatekeepers (politicians, senior bureaucrats, editors, reporters) and crosssections of the community to change; discourse analysis of media reportage and commentary in efforts to map changing frames placed around the same issues; and critically reflective accounts of the advocacy process written by those involved.

#### Case Study: Banning smoking in workplaces

Today in Australia, 71% of indoor workers are employed in settings where smoking is banned indoors by management decree. 42 This figure has risen on each occasion that the research question has been asked. Smoking is banned by law on all public transport, in all cinemas and public halls, and in most states, in indoor eating areas of restaurants. Several states will ban smoking in pubs and bars later in 2001. About 61% of Australian homes discourage visitors from smoking indoors. 43 Cigarettes foregone due to workplace bans have been estimated to have reduced overall consumption in the community by 12.7% between 1988 and 1994.44 The tobacco industry's own internal estimates are consonant with this, 45 and a recent report<sup>46</sup> suggests that workplace restrictions on smoking have done more to reduce tobacco consumption in the US than any other strategy. The virulence and endurance of tobacco industry efforts to discredit the science of environmental tobacco smoke risk<sup>47,48</sup> suggest this assessment is almost certainly accurate.

Early epidemiological reports on the elevated health risks faced by non-smokers living with smokers<sup>49,50</sup> added a public health dimension to a growing community discourse that cigarette smoking 'stank'51 and that non-smokers' amenity was being unfairly effected by laissez faire smoking policies. During the 1980s and 1990s, most observers would agree that several milestones 'raised the stakes' for employers who were reluctant to introduce workplace smoking bans. These included publicity surrounding expert reports, <sup>52,53</sup> successful litigation by workers over adverse health effects from passive smoking,<sup>54</sup> publicity given to vanguard bans by the civil service dating from December 1986, a major legal case where the tobacco industry was found guilty of having mislead the public on passive smoking<sup>55</sup> and repeated polls showing large majorities of workers supported smoke-free workplaces.

Advocacy for smoke-free workplaces was not orchestrated by any central public health group, who driven by evaluation imperatives, marshalled the firing of orchestrated salvos into the media or the mailbags of politicians. For each of the memorable milestones listed above there were literally countless instances of long forgotten letters written to editors, people calling up discussion programmes on radio, minor news items in newspapers and radio, individuals speaking up in staff and trade union meetings, people expressing their emboldened preferences when booking a restaurant or airline seat, and causal conversations about passive smoking being unpleasant and unhealthy carried out in innumerable settings. Each and every advocacy foray into the mass media was not recorded, quantified or evaluated, although content analysis of news reportage on smoking shows passive smoking to be the single most reported issue in tobacco control. 56 Tobacco control advocates were frequent participants in all of these and often acted as catalysts or spark plugs for a flurry of activity.

Accounts that claim to attribute the evolving climate supporting smoke-free indoor air to specific events and which fail to factor in the immense generally unmonitored 'background' influences<sup>57</sup> to which advocacy contributes unduly privilege the role of these more prominent events.

## **Concluding Remarks**

The strategies of advocacy are of course put to good use by interests determined to oppose public health initiatives as well as by risk phobics set on spreading community anxiety about agents that any rational assessment would conclude to pose exquisitely miniscule risk. The ability to recognize and productively reframe the subtexts of such communication rather than simply engaging in epidemiological trumping ('our study is better than your study') is perhaps a cardinal skill of effective advocacy. As I have argued, discourses in advocacy are almost always not about the surface issues being debated or about who has got the best data or evidence. They are more about values bound up in issues such as perceived injustice, disempowered communities symbolically lashing out at power elites, the mistrust of science and authority, back-to-nature idylls and future shock, and money bulldozing human rights and dignity. The on-going debate about high voltage power lines and cancer is only at one level a debate between epidemiologists. The speed with which those opposed to power lines grasp at even the imaginary scent of risk in a report, reveals a far deeper meaning to the debate bound up with several of the subtexts I have just

Epidemiologists too often misread these debates and act as if they can be settled solely with data. Without partnerships with skilled advocates, epidemiology can be a bit player in debates, rather than able to effectively usher to centre stage evidencebased policies that we would all hope public health policy could be properly built on. Equally, without advocacy the efforts of longitudinal epidemiological efforts can languish in obscure and inward looking academic ghettoes and fail to be translated into reforms that can benefit the public health. The historical hesitancy of academic public health to embrace advocacy as a core discipline will hopefully erode with the growing acceptance of the importance of multi-disciplinary analysis in reducing health problems and a growing recognition of advocacy as a core skill needed in public health practitioners trying to play productive roles in building safer and healthier communities.

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