

## The proof is in the policy pudding

Evidence based public health policy are the latest buzz words, promising rational and objective ways to inform decision-makers. Evidence has become increasingly important in gaining support for public health programs. It is timely therefore to reflect on how evidence influences practice, policy and politics.

A recent PHAA (Vic Branch) forum discussed "Evaluating the effectiveness of public health interventions: getting the numbers and getting them noticed". The forum addressed two important issues in the current debate about evidence-based public health: (i) can you get good evidence of effectiveness of public health interventions from designs other than randomised trials? and (ii) is this evidence convincing/useful for decision-makers?

Three so-called "storytellers" presented case studies about getting their evidence noticed. Lawrence Green, Damien Jolly and Max Cameron told tales about their experiences with policy-making. They spoke about US tobacco control, back pain campaigns, and road trauma countermeasures respectively. They began by plotting their numbers in bar graphs and pie charts. Soon, the plot thickened as they told stories of getting their evidence onto the political stage (and trying to keep it there).

At first, the storytellers focussed on the "science" of using evidence in the policy-making process. Each storyteller provided evidence of the effectiveness of specific public health interventions. This evidence, however was not based on randomised controlled trials. As such many evidence based practitioners, such as Cochrane, do not consider it "evidence". But do decision makers take notice of evidence that is not based on randomised controlled trials?

Public health and medical interventions have brought about reductions in the death rate from Coronary Heart Disease (CHD). Yet with Cochrane and others' narrow view of "evidence", it is difficult to prove to them the effectiveness of public health interventions. A reliance on RCTs as evidence clearly favours medical interventions. There is a heartfelt need to widen the view of what constitutes "evidence".

In keeping with the science of using evidence in the policy-making process, Max Green told his story of bicycle helmets (after government made wearing helmets compulsory). At first, it appeared as a straight forward evaluation story. Yet it turned out that the evidence supporting the legislation was based on false assumptions and incorrect methods. The data showed that the number of head injuries fell with the introduction of compulsory helmet legislation. This was "evidence" that the government wanted to hear. Yet another set of data in the same period showed that teenagers and women were riding bikes less often (possibly due to "helmet hair"). Data for the same time period also shows that head injuries for pedestrians fell in same way as cyclists. Max's story is a reminder not to confuse rigor with method. It is also a pertinent reminder not to confuse evidence with how evidence will be used by decision makers.

At the forum the storytellers glossed over the "art" of using evidence in the policy-making process. Reading between the lines, the 'art of using evidence' was present in all three stories. Damien Jolley demonstrated the importance of gaining bilateral political support when implementing public health campaigns. His evidence of the effectiveness of a back pain awareness campaign (based on population surveys) had to compete with a myriad of other influences, including a change of government. While the Liberal government supported the campaign, Damien's evidence was just another faction in Labor's back rooms.

The story of speed cameras was a similarly political yarn. Max told how Canadian research on the effectiveness of speed cameras to reduce road deaths had been published in peer reviewed journals. Despite this strong evidence of its effectiveness, a newly elected Canadian government removed speed cameras to fulfill an election promise.

Lawrence's story was not party-political. However, the criticisms he received when he chose to give a document the title "Best Practice" (when evidence in the document was not based on Random Control Trials) were political. So too is his political decision to always keep a human element in his economic stories. He believes that lives lost is a more compelling "bottom line" than dollars spent/saved. Keeping this message on the decision makers agenda is not always easy.

This forum was a reminder that researchers must be aware of the multiple ways evidence can be used and misused in the policy-making process. While evidence may be used as a tool to improve the integrity of policy-making, it may just as easily be used to conceal the political nature of policy-making. To change public policy, researchers need greater understandings about the political processes and a willingness to work collaboratively with decision makers. This forum reminded the audience never to assume that evidence will speak for itself.