

# Evidence-based practice?

**Colin Binns, Jonine Jancey, Peter Howat and Stacy Carter**

*Editors, Health Promotion Journal of Australia*

In 1948, the world of health and medical research changed forever with the publication of the Medical Research Council's randomised controlled trial (RCT) on the use of streptomycin in the treatment of tuberculosis (TB).<sup>1,2</sup> In that year, there were 341 papers on Streptomycin and TB published in the medical literature, but only one RCT, and this was the paper that defined a generation of TB treatment. The process of undertaking RCTs was quickly developed to include health promotion.

In 1972, Prof Archie Cochrane published his definitive monograph on evaluation that eventually led to the establishment of the Cochrane Collaboration and the subsequent elevation of systematic reviews to their present position as the gold standard for health prevention, management and knowledge.<sup>3</sup> Cochrane's legacy is best summarised in his quotation: "It is surely a great criticism of our profession that we have not organised a critical summary, by specialty or subspecialty, updated periodically, of all relevant randomised controlled trials."<sup>4</sup>

Since the introduction of the RCT, there have been further developments in meta-analyses of RCTs and Cochrane reviews, and pooled data analyses. Pooled data analyses, such as the Oxford ovarian cancer collaboration, are more difficult to undertake as they require considerable effort to acquire data from all previous studies in a standardised format, but represent the highest level of science and knowledge.<sup>5</sup>

The Cochrane Collaboration has expanded rapidly and as we write this editorial there are now in excess of 5,000 reviews in their database. A total of 220 of the reviews include the key words 'health promotion' or 'health education', signalling that the RCT and systematic reviews have become powerful tools in health promotion.

However, with the advent of such a powerful research tool comes responsibility. It is now the responsibility of health promotion researchers to register all RCTs with an appropriate registration authority. This is to ensure quality in studies, adherence to protocol and the availability of information for future replication. To support and maintain health promotion rigour, the Editors of this journal will encourage authors to register RCTs before commencement with an appropriate body, such as the Australian New Zealand Clinical Trials Registry ([www.anzctr.org.au](http://www.anzctr.org.au)).

While RCTs have become almost the only research model in many fields, some things cannot be tested using a RCT, particularly in health promotion. In other fields, we are defeated by time. In the area of nutrition, for example, it would be informative to undertake an 80-year trial of the lifetime effects of diet on life expectancy. Obviously, this could never be undertaken, but even if it could, it would be of no practical value as the composition of food supplies change. Also, given that eating a varied diet is one of the great joys of life (as well as protection against nutrient deficiency and toxicity), compliance would be impossible. In other cases our commitment to ethical research practices prevents a true RCT. For example, the evidence of

the benefits of breastfeeding to infants is so strong that it would be unethical for infants to be randomised to a non-breastfeeding group. It means that allocation in any breastfeeding trial is never random and the spectre of unaccounted residual confounding always remains.

Because in many areas of health promotion and public health it is likely that most policy decisions will be made without the benefit of RCTs, other options and approaches to research will be used.<sup>5</sup> For that reason, we must strive to improve the quality of other types of studies, including cohort, case-control studies and qualitative approaches.

Even when we have achieved an evidence base for health promotion and have successfully advocated for action, we now are faced with a further challenge. We have a new phenomenon in politics that declares that health promotion, public health and prevention are no longer frontline health care. This has been demonstrated by the recent workforce cutbacks in Queensland where all health promotion and public health nutrition positions within the Corporate Office and Regional Services of Public Health are to be made redundant (email communication AHPA QLD Branch President Elisha McGuinness 17/9/2912). The only thing that seems to matter is being able to deliver treatment to patients, taking us back to a definition of health from the first half of the 20<sup>th</sup> century pre-WHO 1947 and pre-Ottawa Charter Declaration for Health Promotion.<sup>7</sup>

Traditionally the cycle of health promotion has been:

Evidence → Advocacy → Implementation → Evaluation

Over the past few decades, health departments, universities and various health councils have developed expertise in producing evidence-based health promotion guidelines, implementing community-wide strategies and undertaking evaluations.<sup>8</sup> Compared to many other countries, Australia has maintained a very high standard of health promotion practice and a continuously growing workforce. However, now we have examples of newly elected governments ignoring evidence when setting health priorities and establishing different priorities determined by political ideology.

The cycle of health promotion has become:

Evidence → Advocacy → Implementation → Evaluation → Defence

Governments can destroy in weeks the health promotion infrastructure built up over decades. Marginalised groups that were being provided with services for the first time and given a sense of pride are once again being disadvantaged by the lack of targeted services.

Defence has become difficult as experienced health promotion workers have suddenly been retrenched or transferred to other positions. Unfortunately, the impact of reducing health promotion and public health may not be felt for some time, even years. Smoking is a good example – it takes some years after a population stops smoking before health improves. The present health promotion community needs to vigorously advocate for reinstatement and expansion of health promotion in Australia.

This journal is concerned about the sudden changes that have occurred in the Australian political landscape as it relates to health promotion. We are looking for papers that document the extent of retrenchments and their effects. More importantly, we are seeking to improve the quality of the evidence base for health promotion, including assessments of impact.

## Changing of the guard

This issue also represents a changing of the guard at the *Health Promotion Journal of Australia*. Your new Editors will continue to follow the mandate given to us to publish a top quality health promotion journal. In particular we will emphasise rigor in methodology and analysis. Health promotion is under siege and to mount an effective counter attack we need information of quality. Please continue to submit your articles that will help in the evaluation and strengthening of the implementation of health promotion programs in Australia.

## References

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## Authors

Colin Binns and Jonine M. Jancey, School of Public Health, Curtin University, Bentley, WA 6845

Peter Howat, Centre for Research in Cancer Control, Curtin University, Bentley, WA 6845

Stacy Carter, Centre for Values, Ethics & Law in Medicine, Medical Foundation Building, University of Sydney, Sydney NSW 2006

## Ray James Award 2012 awarded to Justine Leavy, Jane Heyworth, Aves Middleton, Michael Rosenberg and Magdalene Woloszyn

**James Smith**

*Chair, Health Promotion Journal of Australia Committee*

In 2009, the Australian Health Promotion Association (AHPA) established the Ray James Memorial Award.

Ray, pictured, contributed to health promotion at a local, national and international level, while being based in Western Australia. He was founder of the *Health Promotion Journal of Australia*; awarded Life Membership of AHPA; an advocate for health promotion action; a key driver of research for health promotion competencies, and a mentor to new and seasoned health promoters alike. He was an inspirational leader loved by all.



The Ray James Award is presented to an AHPA member for excellent and innovative health promotion research that has been published during the previous year in the *Health Promotion Journal of Australia*. The award includes a cheque for \$1,000.00 to be used to reinvest in further health promotion research.

This year the Ray James Memorial Award was presented at the 2<sup>nd</sup> National Population Congress held in Adelaide. The deserving recipients were Justine Leavy, Jane Heyworth, Aves Middleton, Michael Rosenberg and Magdalene Woloszyn for their article entitled *Tap into Good teeth – a Western Australian pilot study of children's drinking patterns*. Justine Leavy accepted the award on behalf of the authorship team. A special commendation was also awarded to Chris Rissel and colleagues for their article entitled *Research to practice: Application of an evidence building framework to a childhood obesity prevention initiative in New South Wales, Australia*.

The HPJA Committee and AHPA Board extend hearty congratulations to Justine, Chris and their respective authorship teams.