

# Putting the 'public' back in public health research

Don Nutbeam<sup>a,b,c</sup>

<sup>a</sup> Editor-in-Chief, *Public Health Research & Practice*

<sup>b</sup> Sax Institute, Sydney, NSW, Australia

<sup>c</sup> Corresponding author: [don.nutbeam@saxinstitute.org.au](mailto:don.nutbeam@saxinstitute.org.au)

## Article history

Publication date: June 2018

Citation: Nutbeam D. Putting the 'public' back in public health research. *Public Health Res Pract.* 2018;28(2):e2821808. <https://doi.org/10.17061/phrp2821808>

Previous studies of what gets funded and what gets published in public health reveal that the great majority of public health research is descriptive and observational.<sup>1</sup> This is research that helps us to understand the nature and causes of health and ill health in populations, often making optimal use of available epidemiological and social data. This work is important and is the foundation on which modern public health has been built over the past 150 years. It allows us to observe and understand change over time, and variations between groups in key measures of health in populations. It has enabled us to examine potential causal relationships between environmental, behavioural and social variables, and subsequent health outcomes. This research, in turn, helps to identify and develop potential responses to current and emerging public health challenges.

Far fewer published papers – generally about 15% of all papers – report on the evaluation of public health interventions.<sup>1,2,3</sup> Of these, most are efficacy and implementation trials (translation stage 2–3); very few are studies that examine how changing public health practice leads to changes in health in populations (including policy and impact research; translation stage 4).<sup>1</sup>

It is not hard to understand why the number is so low. Improving public health is a complex process. A comprehensive program might consist of multiple interventions working synergistically to achieve several outcomes – think of all the different fiscal, regulatory, health service and public education interventions that were required to reduce smoking rates in the population. Reducing an integrated set of interventions to the component parts for the purposes of evaluation almost invariably results in an irretrievable loss of the 'whole', providing good answers to the wrong question.

Evaluation designs have to be tailored to suit the nature of the intervention and the context into which programs are introduced. Because of their multifaceted nature and dependence on context, most public health interventions require adaptations during implementation. Our evaluation designs and methods need to accommodate this.

Evaluating public health interventions is messy and time-consuming. It involves human subjects and real-world environments, both of which are difficult to 'control' and measure. The word 'evaluation' has at its core the concept of 'value'. Values are contested. Scientists, health practitioners, politicians and the wider community may all have different views on what represents value from public investment in research. Currently, most research grant funding systems, especially in health and medicine, favour narrowly

defined, methodologically pure applications. As a consequence, many research questions of great public health significance remain unanswered – we are becoming masters of learning more and more about less and less.

By contrast, communities place great value on whether or not research provides opportunity for engagement and enables shared decision making around priorities that the community itself has identified. These values may be at odds with what research scientists and funding bodies consider to be optimal.

Greater benefits would flow if more researchers were encouraged and supported to put the 'public' into public health research – to work with their communities, and with policy makers who respond to community priorities, to understand more clearly the types of questions that need answering, and to deploy the research methods that deliver the best possible answers to the questions of greatest public importance. This is more likely to happen if the incentives are right.

This edition of *Public Health Research & Practice* contains a collection of proffered papers and provides good examples of the full spectrum of public health research. The paper by [Moore and Blyth](#)<sup>4</sup>, for example, illustrates the continuing need to optimise the use of available information to improve infectious diseases research.

Importantly, there are some excellent original research papers that individually and collectively contribute to our understanding of the 'messy' evaluation process, and the practicalities of valuing community priorities and preferences. The paper by [Passey and Stirling](#)<sup>5</sup> describes a study of the feasibility of an innovative, culturally tailored smoking cessation program for Indigenous women. Other papers report on a range of approaches to engaging communities effectively in the research process, reflecting the views of participants in a lifestyle coaching program ([McGill et al.](#)<sup>6</sup>) and older people in a falls prevention program ([Tiedemann et al.](#)<sup>7</sup>), and parents' views of a high school vaccination program ([Nicholl et al.](#)<sup>8</sup>). [Farnbach and colleagues](#)<sup>9</sup> provide a review of values-based research in Australian Indigenous primary health care. They found that incorporating established principles in values and ethics into research improved implementation in the studies they reviewed. Finally, the paper by [Todd and Nutbeam](#)<sup>10</sup> describes the expectations of subjects and participants in health research for respect, honesty and integrity in their interactions with researchers.

All of the contributions in [this issue](#) not only bring original ideas and research findings into the public domain, but also strengthen confidence in the feasibility of conducting quality research that embraces the priorities and preferences of identified communities.

## Peer review and provenance

Internally peer reviewed, commissioned

## Competing interests

None declared

## Author contributions

DN is the sole author.

## References

1. Wolfenden L, Milat AJ, Lecathelinais C, Sanson-Fisher RW, Carey ML, Bryant J, et al. What is generated and what is used: a description of public health research output and citation. *Eur J Public Health*. 2016;26(3):523–5.
2. Milat AJ, Bauman AE, Redman S, Curac N. Public health research outputs from efficacy to dissemination: a bibliometric analysis. *BMC Public Health*. 2011;11:934.
3. Sanson-Fisher RW, Campbell EM, Htun AT, Bailey LJ, Millar CJ. We are what we do: research outputs of public health. *Am J Prev Med*. 2008;35(4):380–5.
4. Moore HC, Blyth CC. Optimising the use of linked administrative data for infectious diseases research in Australia. *Public Health Res Pract*. 2018;28(2):e2821810.
5. Passey ME, Stirling JM. Evaluation of 'Stop Smoking in its Tracks': an intensive smoking cessation program for pregnant Aboriginal women incorporating contingency-based financial rewards. *Public Health Res Pract*. 2018;28(2):e28011804.
6. McGill B, O'Hara BJ, Phongsavan P. Participant perspectives of a 6-month telephone-based lifestyle coaching program. *Public Health Res Pract*. 2018;28(2):e27451705.
7. Tiedemann A, O'Rourke S, Sherrington C. Is a yoga-based program with potential to decrease falls perceived to be acceptable to community-dwelling people older than 60? *Public Health Res Pract*. 2018;28(2):e28011801.
8. Nicholl S, Seale H, Campbell-Lloyd S. Measles high school vaccination program, 2014–2015: online survey of parents in NSW, Australia. *Public Health Res Pract*. 2018;28(2):e2821812.
9. Farnbach S, Eades AM, Gwynn JD, Glozier N, Hackett ML. The conduct of Australian Indigenous primary health care research focusing on social and emotional wellbeing: a systematic review. *Public Health Res Pract*. 2018;28(2):e27451704.
10. Todd AL, Nutbeam D. Involving consumers in health research: what do consumers say? *Public Health Res Pract*. 2018;28(2):e2821813.

Copyright: 

© 2018 Nutbeam. This article is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Licence, which allows others to redistribute, adapt and share this work non-commercially provided they attribute the work and any adapted version of it is distributed under the same Creative Commons licence terms. See: [www.creativecommons.org/licenses/by-nc-sa/4.0/](http://www.creativecommons.org/licenses/by-nc-sa/4.0/)