

Focus on Methods Key for Advancing Population Health Intervention Research

Dear Editor:

I would like to thank the CJPH for their commitment to population health intervention research (PHIR). Publication of the special issue "Population Health Intervention Research: Advancing the Field" (CJPH, Vol. 103, Supplement 1, September/October 2012) sheds light on elements in need of clarification and debate among population health intervention researchers.

Despite a high level of conceptual discussion within the special issue about what is and is not a population health intervention, I am concerned with the limited focus on methods. Dr. Louise Potvin points to the need for defining "what methods are recognized as valid by the community of population health intervention researchers?"¹ p.563 Reading the quantitative studies in the special issue, it is clear that PHIR is lagging behind methodologically compared to other overlapping research areas examining policies or programs operating outside of the health sector, including social epidemiology and economics.^{2,3} These areas have traditions of applying methods able to control for confounding and of open methodological debate.^{4,5} In many cases in the special issue, better methods could have been applied to the available data and were not. For example, Cushon et al.⁶ pooled 2003-2007 data into a pre-intervention time period and compared this to the post-intervention years (2008-2009) to examine the effect of their vaccination intervention. The authors recognized the need to control moving averages and seasonal effects, but did not do so. Interrupted time series analysis using the available monthly data would have controlled potential confounders and improved the plausibility of the effect estimate.⁷

AUTHOR'S REPLY

Let's Talk About PHIR

Dear Editor:

I wholeheartedly concur with Dr. Fuller's comment about the need for PHIR to pay more attention to methods that can control for potential confounders when researching questions related to intervention outcomes.¹ However, it takes time to build a field and the creation of a special issue can only accomplish a limited number of objectives. We have made the argument that PHIR is more than outcome research and should be addressing the whole range of relevant questions for developing effective, equitable and sustainable interventions to address the population distribution of the entire spectrum of determinants of health.² As mentioned in the conclusion section of my article,³ I believe that the contributions that were selected for the recent CJPH special issue⁴ were illustrative of the issues and debates that need to be raised when dealing with what constitutes PHIR. I agree with Dr. Fuller that the papers collected for that special issue may not constitute the best examples of the methodological innovations needed to strengthen the field.

I can only reiterate that debating what constitute valid methods and exploring methodological innovations are fundamental steps in the establishment of a scientific field. In this respect, we need to

The questions posed by population health intervention researchers are important and require evaluation. However, I am concerned that conceptual debate surrounding PHIR will sink into rhetoric and dominate our discussions, while the methods used in quantitative evaluations of population health interventions will languish and be so easily critiqued that the findings will have little influence on policies that can "reduc[e] risk exposure in successive cohorts of people within the setting(s) under investigation."⁸ p.19 Evaluation methods must be at the forefront of discussion and debate if population health intervention research is to flourish as a field.

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acknowledge methodological developments in related fields such as social epidemiology and political science, but also in applied sociology, evaluation, ethnography and many other relevant sciences. This can only be achieved through the publication of and public debate about current research. In this sense, the CJPH special issue has at least partially achieved its objective: triggering the interest of researchers and feeding a discussion about fundamental dimensions of PHIR. I can only hope that more researchers will raise comparable issues and will be willing to discuss them publicly and contribute to their solution.

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