

# Issues and challenges for systematic reviews in indigenous health

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## ABSTRACT

This essay outlines key issues raised during a project that aimed to (1) identify the gaps in the international evidence base of systematic reviews of intervention effectiveness relevant to public health decision making to address health inequalities experienced by indigenous people, and (2) identify priority areas and topics for future reviews. A number of indigenous researchers and clinicians invited to participate in the project expressed reservations about the appropriateness and value of conventional systematic reviews of intervention evidence to indigenous health. Ensuring that systematic review methods for indigenous health research meet the needs of those that use them, including indigenous communities themselves, needs to be a key area of ongoing work. The public health group within the Cochrane Collaboration has recognised this as a priority area and initiated exploration of these issues.

A project was recently conducted between the public health group within the Cochrane Collaboration and indigenous health researchers, to identify the gaps in the international systematic review evidence base relevant to public health decision making to address health inequalities experienced by indigenous people, and to identify priority areas and topics for future reviews. Through established networks, indigenous and non-indigenous clinicians and academics from Australia, Canada, New Zealand and the USA were invited to participate in the project. We were able to engage with taskforce members in Australia and Canada such that a number of their key concerns about the usefulness of systematic reviews in indigenous contexts were identified.

Taskforce members indicated that it was not appropriate to develop an a priori list for identifying and prioritising topics for future systematic reviews. Prioritising topics according to criteria such as burden of disease was criticised by some taskforce members as too “biomedical” in its approach and thereby minimises the role played by the social determinants of health in leading to poor health and social outcomes.<sup>1</sup> Instead, the topics were categorised by levels of action within the WHO Commission on the Social Determinants of Health model.<sup>2</sup> In the process of developing this list, some researchers and clinicians who were invited to become taskforce members expressed reservations about the appropriateness and value of systematic reviews to indigenous health. This affected the willingness of some to engage in the project; at least two indigenous researchers expressed views that current systematic review methods have little to offer indigenous health, and

hence the issue did not warrant their engagement. There was, however, broad agreement on the need for good-quality evidence to support decision-making in indigenous health. Participants identified a number of concerns about the usefulness of systematic reviews in indigenous contexts. This article presents the key issues raised by those who participated, and those who declined to participate, in the project.

The usefulness of systematic reviews that draw on intervention studies conducted in other population groups to answer questions concerning indigenous health was questioned. In particular, concerns were expressed regarding (1) the applicability and transferability to indigenous contexts of evidence based on studies of other population groups if indigenous research was not available, and (2) the suitability of systematic review methodologies at the time of this project (2005) to generate appropriate evidence for indigenous health settings. Understanding of colonisation, dispossession, racism and assimilation as key determinants of inequities and inequalities experienced by indigenous peoples underpinned both of these concerns.<sup>3 4</sup>

A number of participants were concerned about the lack of good-quality primary intervention studies involving indigenous populations. They considered that this limited the potential of systematic reviews of intervention studies relevant to indigenous health. One participant expressed the view that improving the quality of indigenous health intervention research was of greater priority than conducting systematic reviews; another participant thought that there is an urgent need for systematic, generalisable implementation research in indigenous health, with a particular need for use of qualitative methods.

Assessing the applicability and transferability of health promotion and public health intervention studies conducted in other settings to indigenous health was seen as a major challenge, particularly given the diversity of settings and needs of indigenous peoples within and between countries. This indicates a need to expand the detail on individual studies included in reviews.<sup>5</sup>

There is a widely held view that research has often been harmful to indigenous peoples. Internationally, research ethics guidelines have been introduced to improve the conduct of indigenous health research and to promote the full participation of indigenous peoples in all stages of research processes.<sup>6–8</sup> Indigenous involvement in research processes is considered an issue of rigour and is a key to developing effective interventions for addressing health inequalities. Describing the level of indigenous involvement in primary studies

### What is already known on this subject

The level of complexity when synthesising evidence to inform public health and health promotion policy and practice increases further in the case of indigenous peoples for whom the social determinants of health are the key factor underlying health inequality.

### What this study adds

There is need to more effectively engage with the indigenous health sector if systematic reviews are to be useful in informing policy and practice that aims to improve indigenous health.

included in systematic reviews for indigenous health is therefore considered important.

The need for evidence to address poor health outcomes arising from multidimensional influences was also raised. More narrowly focused reviews were seen to be of limited use where social determinants are the main health issues needing to be addressed. However, participants emphasised that any exploration of alternative review methods needed to maintain rigour and quality.

A further issue concerned ensuring that systematic reviews of indigenous health are presented in a form that indigenous communities can understand and utilise. Some indigenous health researchers are currently exploring knowledge translation and exchange methodologies within indigenous health research,<sup>9</sup> which reflects a more widely recognised need in public health research.<sup>10–14</sup> Ensuring that systematic review methods of indigenous health research meet the needs of those who use them, including indigenous communities themselves, appears to be a key area of future work.

The need for better syntheses of evidence related to interventions addressing social determinants of health and health inequalities is increasingly on the agenda within public health across the world.<sup>15 16</sup> A number of groups within and outside of the Cochrane Collaboration are currently exploring alternative methods of synthesising evidence for systematic reviews. Further exploration and adaptation of existing methods in consultation with indigenous and non-indigenous stakeholders are required to determine how systematic reviews can provide meaningful evidence syntheses to inform decision making for indigenous health promotion and public health interventions. Active engagement of indigenous people, organisations and communities in all aspects of these processes is vital in ensuring that the evidence needs of indigenous peoples are met and that systematic reviews contribute effectively in addressing the significant inequities they experience.<sup>6–8</sup> Advocating for more rigorous evaluations of public health and health promotion interventions with indigenous populations, as well as exploring methods for evidence synthesis, are key tasks.

Our project identified important issues for further work. The increasing reference by policy agencies to systematic reviews of interventions means that such reviews have the potential to make an important contribution to public health and health promotion and in addressing health inequities. Accordingly, ensuring that systematic review methods meet the needs of indigenous peoples across the world is an important goal for the public health research community.

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