EDITORIAL

Can Cochrane Reviews inform decisions to improve Indigenous people's health?

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This editorial accompanies a series of Cochrane Library Special Collections on the health of Indigenous peoples in Australia, Canada, and New Zealand, focusing on ***diabetes, fetal alcohol syndrome disorders****, and* ***suicide prevention****. Another editorial provides an overview:* ***Improving health outcomes for Indigenous peoples: what are the challenges?***

Cochrane Reviews can provide valuable evidence to support an accountable decision-making process to improve Indigenous people's health. Such a process needs to consider community values, preferences, local needs, and resource use, as well as provide opportunities for feedback and debate.[1]

In this editorial, we highlight strengths and limitations of systematic reviews in the context of Indigenous health, and we propose key steps to ensure systematic reviews are able to meet this challenge. We use the collective term ‘Indigenous’ when referring to first peoples, respectfully acknowledging the diversity and autonomy of different communities included in this broad term.

The Campbell and Cochrane Equity Methods Group (equity.cochrane.org) promotes the need to consider health equity in the design, conduct, and reporting of systematic reviews. Using the term ‘health equity’ reflects our commitment to redress avoidable and unfair health inequalities.[2] We promote the use of a holistic approach built on the social determinants of health to consistently and explicitly consider whether effects of interventions are unfairly distributed across socially stratifying characteristics. These include the components of the PROGRESS-Plus framework: place of residence, race/ethnicity/culture/language, occupation, gender/sex, religion, education, socioeconomic status, and social capital, plus three other axes of time-dependence (e.g. discharge from hospital), personal characteristics (e.g. age), and relationships.[3]

The health inequities seen and consistently reported among Indigenous peoples in affluent countries worldwide are unacceptable. These inequities are strongly related to a severe disadvantage in access to the social determinants of health–a result of colonisation, which stripped cultural identity, misappropriated land through coercion, and disempowered and persecuted Indigenous peoples. Improving health equity for Indigenous people is an international priority, and high-quality, appropriate systematic reviews are a particularly important tool to assist decision-makers. The need for effective interventions is urgent, health issues are often complex, and resources may be limited relative to need. High-quality reviews, such as Cochrane Reviews, have overall been remarkably successful in influencing practice and policy, helping to improve funding sustainability of effective programs but also leading to better health status for Indigenous people.

Systematic reviews enable learning from available research by transparently collating and synthesising all evidence available for a particular question, with careful critical appraisal to assess the influence of study quality and risk of bias.[4] Despite these potential benefits, there are several challenges to the effective use of evidence from systematic reviews in Indigenous health. Foremost, the relationships between Indigenous communities and predominantly non-Indigenous researchers have historically been poor, limiting the quantity and quality of relevant primary research available for synthesis. Research conducted with and by Indigenous peoples is critical, to ensure correct processes and community values are respected and to ensure questions are framed and prioritised appropriately.

What does this mean for systematic review authors? Combining the impact across different populations and settings has been the main focus of Cochrane Reviews, but if we want to inform health equity, we must also interrogate and use the invaluable diversity of data from different populations, settings, and processes of both research and implementation. Mixing this diversity into a single estimate will hide important differences. The PRISMA-Equity statement provides reporting guidelines to improve the applicability of systematic reviews to health equity questions, including relevance to Indigenous peoples.[5] Addressing health inequities is complex, particularly in the context of Indigenous health, and sophisticated evidence synthesis methods are required to illuminate these complexities.

The PRISMA-Equity reporting guideline recommends 20 items for equity-focused systematic reviews. These include describing the underlying program theory (including a visual logic model, if used), the rationale for eligible study designs that are fit for purpose (including non-randomised studies, which are likely to be particularly relevant for research addressing social determinants of health), selection of outcomes (and their importance for improving health equity), population characteristics across PROGRESS-Plus, reporting of additional analyses (such as subgroup analysis, meta-regression, process evaluation or mixed methods synthesis including qualitative data), and discussion of limits of applicability.

How good are systematic reviews currently at reporting these items? PROGRESS-Plus details are reported in less than 50% of systematic reviews, with sex and age being the most commonly reported.[6][7] One limitation to reporting PROGRESS-Plus characteristics is the extent to which they are reported in primary research studies, but up to half of the information on PROGRESS-Plus characteristics described in primary studies is not reported in systematic reviews.[8] Lack of reporting is a major barrier to considering external validity of findings to populations and settings beyond those included in the primary studies.[9] Randomised controlled trials and other primary studies may be intentionally restrictive, either explicitly excluding people with certain characteristics (e.g. older age, multiple comorbidities) or implicitly excluding people by their recruitment strategies. In evaluating the utility of existing research, consideration needs to be given to the acceptability of different study designs to Indigenous peoples. In particular, an important consideration when interpreting applicability is the use of flexible research designs conducted with and by Indigenous peoples. Systematic reviews have the opportunity to report and highlight these research design choices and their implications on applicability. Importantly, Cochrane has always emphasised that systematic reviews do not make recommendations: rather, they provide a synthesis of available evidence that can be used in deliberative processes.

Systematic review authors can maximize the value of reviews by reporting at a minimum the characteristics of populations included in eligible studies. There are also opportunities to explore questions about why, how, and under what circumstances interventions are effective (or not) by taking advantage of mixed methods, meta-regression, and emerging synthesis methods. A further step to enrich our understanding of complex issues and interventions to improve health equity is to actively include Indigenous peoples in systematic review processes.[10][11] These steps are not only something useful we can do, they are also the right thing to do.

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Declarations of interest

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