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Reporting guidelines for systematic reviews that consider effects on health equity

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We would like to invite readers of Speaking of Medicine to complete a survey about which items should be reported in equity-oriented systematic reviews. The survey is available at:

<http://www.surveymonkey.com/s/D38NWP3>.

After an initial survey, we will summarize comments and feedback, and send the survey for a second round of feedback including the ranking of importance of the items.

Health inequities are differences in health which are both avoidable and considered unfair or unjust [1]. Between-country and within-country health inequity persists despite local, national and international initiatives to redress them such as the 2008 Marmot review in the UK, the WHO Commission on Social Determinants of Health. For example, despite progress towards the Millennium Development Goals, within-country inequality in under-5 mortality increased in as many countries as it decreased [2]. Systematic reviews have been called for to compile the evidence on how to reduce inequalities [3].

Systematic reviews are increasingly promoted as a tool to inform decision-making, evidenced by the Mexico Statement in 2004 (WHA 58.10), the final report of the Measurement and Evidence Knowledge Network of the WHO Commission on Social Determinants of Health [4] and the Montreux Health Systems Conference (2010).

Systematic reviews which focus on average effects can hide differences between groups, such as effects of interventions in vulnerable or poor populations. The Campbell and Cochrane Equity group uses the acronym PROGRESS-Plus to define factors across which differences in effects may relate to health equity: Place of residence (rural/urban/inner city, low- or middle-income country), Race/ethnicity/culture, Occupation, Gender/sex, Religion, Education (literacy), Socioeconomic status, and Social capital, while "Plus" refers to other categories across which discrimination may exist such as sexual orientation, age, disability, or disease status [5]. Other criteria have also been used to identify factors across which differences in effects are important [6;7]. Systematic reviews can assess effects in vulnerable populations using one of three methods outlined in BOX 1. Based on a random sample of systematic reviews in 2004, we estimate that approximately 25% of systematic reviews indexed in MEDLINE meet one or more of these criteria as equity-oriented systematic reviews [8;9].

Box 1: Examples of how systematic reviews can assess effects of interventions in vulnerable populations

Method	Examples
1. Assessing the effects of interventions specifically targeted at vulnerable populations	School feeding for disadvantaged children Home visits for disadvantaged mothers
2. Assessing the differential effects of universal programs across categories of disadvantage (e.g. across the one or more PROGRESS+ factors)	Effects of workplace occupational health programs for different social classes Effects of tobacco control across socioeconomic factors
3. Answering a question that is relevant to vulnerable populations (e.g. related to diseases for which vulnerable populations carry a disproportionate burden such as neglected tropical diseases)	Insecticide treated bednets for preventing malaria mortality Directly observed therapy for tuberculosis

The Campbell and Cochrane Equity Methods Group was convened in 2006 to develop and evaluate methods to assess effects on health inequity in equity-oriented systematic reviews [10]. In 2010, members of this team (PT, MP, VW) and members of the CSDH Measurement and Evidence Network published guidance on seven features of systematic reviews that may need modifying in order to provide better answer to questions about health inequity [11]. We recently assessed the methods used by systematic reviews to assess effects in vulnerable populations in a Cochrane methodology systematic review [8]. and identified deficiencies in reporting including insufficient reporting of methods for analyses (e.g. subgroup analyses) and lack of transparency in judgments about applicability to disadvantaged settings [8]. Individual studies included in this review identified lack of clarity of reporting of analyses relevant to specific factors, such as sex and gender [12], low and middle income countries [13] and people of low socioeconomic status [14]. Policy-makers have also cited the lack of consideration of health equity as a barrier to using systematic review for evidence-informed decision-making [15;16].

One way to improve reporting of facets of specific importance to SRs reporting on inequities is to develop specific reporting guidelines [17], for example, by revising the PRISMA statement. The PRISMA statement contains 26 items, and the aim of PRISMA is to encourage transparency of reporting of the methods of SRs [18]. Currently PRISMA has no guidance specific to health

equity and we are now in the process of developing an extension to PRISMA specifically for equity SRs.

To produce a PRISMA equity extension we are following the methods recommended by Moher et al [17] to develop health research reporting guidelines. In the first phase, we conducted a pilot study (PT, MP, VW, DM), held preliminary meetings to discuss these items and compared PRISMA items with empiric evidence about equity-oriented systematic reviews. From this we identified a preliminary set of 14 characteristics of equity-oriented reviews that may require modification of existing items in PRISMA or the addition of new items.

These steps include the identifying the need for the guidance, obtaining funding, identifying participants for a consensus meeting, conducting a Delphi exercise to gather broad feedback and opinions prior to the consensus meeting, holding a face to face consensus meeting to discuss background empiric evidence and survey results, developing the guidance statement and elaboration documents and developing and implementing a knowledge translation strategy. The knowledge translation strategy includes developing methods to encourage feedback and criticism as well as promoting endorsement and adherence to the guideline by journals, funders, organizations and individuals.

The next step is to consult widely using a two-round Delphi survey to find out what a broad range of authors and readers of SRs thinks we should include in the PRISMA equity extension. We have therefore invited you to complete a survey which is available at:

<http://www.surveymonkey.com/s/D38NWP3>.

After an initial survey, we will summarize comments and feedback, and send the survey for a second round of feedback including the ranking of importance of the items.

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