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Abstract Information

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Systematic reviews and health equity: the role and risks of subgroup analyses

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Evidence for social welfare, evidence for education, evidence for crime and justice.

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Abstract:

Systematic reviews have been advocated as a key source of information on effective means of tackling inequalities in health. However there is some evidence that the best evidence is currently skewed towards non-disadvantaged settings, and that current systematic reviews tend not to provide evidence on differential effectiveness. This is important omission; the recent WHO report on the Social Determinants of Health noted: "For policy, however important an ethical imperative, values alone are insufficient. There needs to be evidence on what can be done and what is likely to work in practice to improve health and reduce health inequities". Subgroup analysis is likely to become more common as systematic reviewers in public health and related areas increasingly turn their attention to the relative effectiveness of interventions (such as social policies) in different socioeconomic groups, in an attempt to identify interventions with the potential to reduce income-related health inequities. This is not new; systematic reviewers have argued for some years for the importance of exploring moderator effects in systematic reviews, and the Campbell Equity Methods Group (co-registered with the Cochrane Health Equity Field) is currently developing methods in this area. Making systematic reviews more equity-focused is also consistent with the Campbell Collaboration's goal of helping people "make well-informed decisions about the effects of interventions in the social, Behavioral and educational arenas." However there are significant challenges for systematic reviewers with respect to the specification, conduct and interpretation of subgroup analyses, which have traditionally been seen as potentially biased, difficult to interpret and at particular risk of Type 1 error ("false positives"). There are also other potential analytic and publication biases.[1] Further evidence on this issue is provided by a survey of US and European RCTs, which found that American studies were five times more likely than European trials to report information on the ethnicity of participants. The authors suggested that this reflects deliberate recruitment policies to ensure that trials are representative, and the fact that all large federally-supported programmes are required to report statistics according to race or ethnicity. This implies that evidence on subgroup effects may vary between countries - posing another difficulty for decision-makers seeking to interpret and extrapolate from systematic reviews. This symposium will summarise the role, and risks of subgroup analyses in equity-focussed systematic reviews, using illustrative examples from public health, health promotion, education and other fields. It will also propose, for discussion, a set of recommendations for the conduct and interpretation of subgroup analyses in equity-focussed systematic reviews. References: 1. Cooper H. & Hedges L. The Handbook of Research Synthesis. Russell Sage, New York, 1994; pp508-509.
