

Cochrane Collaboration, equity and public health: what works?

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Outline

- Why Cochrane and health equity?
- Cochrane Health Promotion and Public Health Field
- Cochrane Health Equity Field
- Cochrane Equity “Evidence Aid”

What is a systematic review?

Brings together a range of research studies on a specific topic and seeks to summarise the results of those studies into a single report

A review of the evidence on a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant primary research, and to extract and analyse data from the studies that are included in the review*

*Undertaking Systematic Reviews of Research on Effectiveness. CRD's Guidance for those Carrying Out or Commissioning Reviews. CRD Report Number 4 (2nd Edition). NHS Centre for Reviews and Dissemination, University of York. March 2001.

What is a systematic review?

- Establish objectives + selection criteria
- Search for eligible studies
- Apply selection criteria
- Assess study quality + assemble data
- Analyze results using meta-analysis, if appropriate and possible
- Perform sensitivity analyses
- Prepare report (+ keep it up to date!)

Why systematic reviews?

*Professional good intentions and plausible theories are **insufficient** for selecting policies and practices for protecting, promoting and restoring health.*

Iain Chalmers

Source: Andy Oxman

Well-intended interventions can be ineffective, waste resources, can sometimes do more harm than good, and can increase inequity

- Directly observed therapy for TB
- Scared straight
- Tobacco taxation
- Partial tobacco bans
- Free fire alarms
- Back to Sleep / Reduce the Risk

The Cochrane Collaboration

An international organisation that aims to help people make well-informed decisions about healthcare by preparing, maintaining and promoting the accessibility of systematic reviews of the effects of healthcare interventions.

Advantages of Cochrane reviews & *The Cochrane Library*

- Less risk of being misled by chance
- Less risk of bias
- Less likelihood of being out of date
- Less unnecessary duplication of effort
- More efficient
- Easy to access
- Continually improving

Source: Andy Oxman

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Cochrane HPPH

- Mission: To promote the conduct, dissemination and utilization of systematic reviews of all health promotion and public health interventions
- Guidelines
 - Support inclusion of equity [as core public health]
- Priorities
 - Supporting reviews that consider equity
- Informing PH research
 - Advocate for equity to be considered in primary research

HPPH Priority setting

- Taskforce was asked to broadly consider four factors when prioritising topics for HPPH:
 1. Burden of disease, magnitude of problem, urgency
 2. Importance to developing countries
 3. Avoidance of duplication
 4. Opportunity for action

- HPPH scoped existing reviews from those that had already been done in Cochrane, Effective Public Health Practice Project, Community Guide to Preventive Services, HDA Effectiveness reviews, EPPI Centre and NHS R&D HTA Programme

HPPH Priorities

- Improving environments for health: macro, organisational eg. Schools, communities
- Environmental strategies for disease prevention
- Health capacity building
- Service systems for HIV prevention
- Mental health and wellbeing
- Reducing tobacco exposure and consumption
- Improving nutrition and healthy food choices
- Maternal and newborn health

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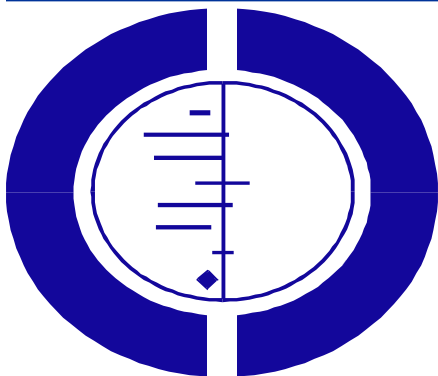
Cochrane and Campbell Collaboration Equity Field

- To identify interventions that improve the health status of the poor and reduce health inequities
 - Series of systematic reviews on effective interventions
 - Methods for applying an Equity Lens

please join us!

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Lancet Commentary
April 2006, Tugwell et al.



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Speaker's corner

Tackling inequalities in health: the need for building a systematic evidence base

Socioeconomic inequalities in health have been demonstrated in all countries with available data, and evidence on determinants of these inequalities is accumulating. Our understanding of the problem has reached the point where we can identify entry points for policies and interventions, and in some countries awareness of the problem among policy makers and public health practitioners has even produced an urge to implement policies and interventions that can reasonably be expected to be effective. Examples of such countries include the Netherlands, Sweden, and the United Kingdom, but more are likely to follow, given the current worldwide interest in inequalities in health.

Unfortunately, it is exceedingly difficult to find good evidence on the effectiveness of policies and interventions to reduce inequalities in health. The experience of both the Acheson Committee, conducting the Independent Inquiry into Inequalities in Health in Britain, and the Albeda Committee, developing a programme to reduce inequalities in health for the Dutch government, illustrate this. This lack of evidence is the result of a combination of factors: historically, very few policies and interventions have been implemented that explicitly targeted inequalities in health; many policies and interventions that were implemented have not been evaluated; those that were evaluated were not evaluated adequately; and results of relevant evaluation studies are often not easily accessible to policy makers and public health practitioners.

There is no reason why this situation could not be changed for the better. The "experience base" in which evaluation studies could be conducted is not small but huge, if we agree that much can be learned from policies and interventions that try to improve the living conditions and life chances of people with socioeconomic disadvantage. These can be found everywhere, and the trick may just be to add health measurements to ongoing evaluation efforts. Many clinical and public health trials are conducted in socioeconomically heterogeneous populations, and analyses by socioeconomic subgroup may tell us more about what works and what not in these groups. And, finally, there is a lot of work going on in many countries to improve the health of socioeconomically disadvantaged groups that is simply not evaluated at all. Even

modest evaluation efforts, focusing on process instead of outcome measures and using quasi-experimental instead of fully experimental designs, if properly conducted, can generate useful knowledge, and are certainly better than doing nothing to evaluate the effectiveness of policies and interventions.

Accessibility of results of evaluation studies can be improved by creating clearing houses and review groups. A recent overview of the European experience with policies and interventions to reduce inequalities in health¹ has shown again that accessibility is an enormous problem. It is difficult to find relevant studies in conventional literature databases, because keyword systems do not adequately identify such studies, and because some of these studies are not included in these databases, for example, because they are only reported in the national literature or "grey reports". International exchanges such as the one just mentioned typically identify a wide range of experiences, and uncover evaluation studies that have not reached the international literature. We therefore need a special effort to increase the accessibility of evaluation results, for example in the form of clearing houses. These may, on the basis of carefully designed search strategies and an international reporting system to collect information on ongoing and recently completed evaluation studies, increase the accessibility to policy makers and public health practitioners of relevant information. Another problem relates to the methodological evaluation of the evidence presented in the literature. Because of the difficulties in applying traditional research methods in this area many studies use alternative designs that are sometimes difficult to evaluate. It would therefore be useful to have international review and methods groups for policies and interventions to reduce inequalities in health, by analogy to or as part of the Cochrane or Campbell Collaborations, that could help in building a systematic evidence base.

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¹ Mackenbach JP, Bakker MJ, eds. *Reducing inequalities in health: the European experience*. London: Routledge, 2002.

Cochrane Equity “Evidence Aid”


- One-stop shop for all systematic reviews related to Equity



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cochrane collaboration > evidence aid

Evidence Aid: summaries relevant to natural disasters and healthcare e

This website highlights evidence relevant to the effects of interventions. Its aim is to help people making decisions about emergencies. The topics were originally identified as priorities by people in the regions affected by the 2004 tsunami, and possible, a structured summary ('Evidence Update') or another summary has been prepared, based on one or more Cochrane review exists, a link is given to the review in [The Cochrane Library](#). If a suitable Cochrane review is not available, topics in the BMJ's [Clinical Evidence](#). (The inclusion of links to material from outside The Cochrane Collaboration does not imply that we would like to comment or ask questions, please email reviews@cochrane.org).

[Infectious diseases](#)

[Injuries and wounds](#)

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[Pregnancy and childbirth](#)

Criteria for “equity-winners”

- Large effect size
- Burden of disease: priority for the disadvantaged
- Important outcome
- Controlled study designs

Methods

- Reviewed published lists of effective interventions
 - LMIC:
 - TEHIP essential health interventions,
 - Millions Saved,
 - World Bank Reaching The Poor,
 - WHO-CHOICE
 - HIC:
 - CDC Community health project,
 - UK Health Development Agency (HDA) systematic reviews
- Experts

LMIC – are these equity winners?

1. Increasing access to maternal/child health services
2. Oral rehydration distribution and training to increase access
3. Tobacco control legislation and taxation
4. Immunization campaigns
5. Insecticide-treated nets for malaria
6. School-feeding
7. Vitamin A supplementation
8. Disease Eradication campaigns
9. Health insurance (including conditional cash transfer)
10. Contracting out health services to NGOs

Are these Equity Intervention Winners?

10 high-impact interventions

In no particular order:

- 1) Family & School based Interventions to prevent obesity
- 2) Multi-faceted intervention to reduce falls in elderly populations
- 3) School-based sex education interventions
- 4) Smoking Cessation for pregnant women
- 5) Blood Alcohol Concentration Laws
- 6) Cycle Helmet Interventions
- 7) Peer-Based sexual risk reduction interventions
- 8) Ignition Interlock Devices
- 9) Theory based physical activity interventions
- 10) Clinician participation in smoking cessation

Next steps

- Continue to solicit interventions that meet criteria
- Develop process to rank and prioritize interventions
- Apply equity lens to top interventions

Ottawa



Thank you!
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