

Synthesising public health evidence

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Cochrane reviews - expanding the scope (title and methods)

From

Lovell HG. **Angiotensin converting enzyme inhibitors in normotensive diabetic patients with microalbuminuria** (Cochrane Review). In: *The Cochrane Library*, Issue 2, 2004. Chichester, UK: John Wiley & Sons, Ltd

To

Interventions to increase the supply of sidewalks and walking trails for the public. Public Health priority

History of evidence and research synthesis

1960s: Development of tools of research synthesis: systematic reviews - 1960's American social scientists

1972: Evidence based medicine - Archie Cochrane ⇨ Evidence based health (healthcare) - Cochrane Collaboration 1992

1996: Health Promotion & Public Health Field

1998: World Health Assembly evidence -based approach to health promotion

Cochrane Health Promotion & Public Health Field

The Cochrane Collaboration



International non-profit organization that prepares, maintains, and disseminates systematic up-to-date reviews of health interventions.

Cochrane Health Promotion and Public Health Field

Registered in 1996. Administered from Melbourne. Co-directed with the EPPI-Centre, London. Funded by VicHealth and UK NHS.

International Advisory Group commencing 2004

271 members from 33 countries

Aims:

- Promoting the conduct of reviews on HP/PH topics
- Methodological development and support, training and education

Relevant priorities

- Methods for public health and health promotion reviews
- Searching frameworks and filters for health promotion literature - published and unpublished
- Global priorities for systematic reviews
- Flagship reviews

Systematic reviews

- bring together findings from a range of research reports done around a specific decision or research question.
- explicit in reporting of the search for studies and criteria for including and excluding studies.
- Systematic reviews may or may not include a meta-analysis on the findings.

Evidence and quality

- Quality of the study design
- Quality of the intervention
- Quality of the methods and measurement process
- Careful analytical thinking about how the process of research impacts upon the outcomes

Global priorities

- Healthy cities, municipalities or spaces projects in reducing cardiovascular disease risk factors
- Interventions addressing gender disparities in family food distribution to improve child nutrition
- Interventions to decrease/minimise adverse health effects of urban sprawl *and/or* Interventions to increase the supply of sidewalks and walking trails for the public
- Interventions for healthier food choices:
 - Sales promotion strategies of supermarkets to increase healthier food purchase
 - Pricing policies to increase healthy food choices
- Interventions to improve breastfeeding options for women in employment

Developments

- ⇒ RCT's vs other designs
- ⇒ shift to debates around external and internal validity
- ⇒ methodological triangulation
 - all study designs, qual and quant with emphasis on quality assessment and environmental context
- ⇒ Inequalities 'lens'
- ⇒ methodological challenges enormous

Health Promotion Impact

- Evaluate changes in
 - behaviour
 - systems
 - organisational development
 - environments
 - community action
 - service change (health and beyond)

Optimistic outlook

Guidelines for HP & PH reviews

- context, ethics, theoretical frameworks, study designs, qualitative, process, cost and outcome data
 - TREND statement: transparent reporting of evaluations of non randomised study designs¹
 - Quality assessment in non randomised studies²
 - Qualitative & quantitative data - integration of benefits and harm with understanding from people's lives
- Levels and grades of evidence

¹Des Jarlais DC, Lyles C, Crepaz N, the TREND Group. Improving the reporting quality of nonrandomized evaluations: the TREND statement. *Am J Public Health* 2004;94: 361-6

²Deeks JJ, Dinnes J, D'Amico R, Sowden AJ, Sakarovich C, Song F, *et al.* Evaluating non-randomised intervention studies. *Health Technol Assess* 2003;7(27).

Optimistic outlook

- Strengths of Cochrane review process: includes studies other than English, updated every 2 years, electronically available, comments and criticisms
- NHMRC transitional guidelines: non-randomised, non-intervention research
- Grades of evidence¹

For more information...

- Field website
<http://www.vichealth.vic.gov.au/cochrane/>
- For more information please visit
<http://www.vichealth.vic.gov.au/cochrane/activities/guidelines.htm>