Reviews of Reviews: just how meta does it get?

By: Nova Smalley

MRC/CSO Social and Public Health Sciences Unit







What is a Review of Reviews

Reviews of reviews and Systematic reviews are very much alike

What are the similarities?

Systematic review

Review of reviews

Use a protocol

Screening process

Data Extraction

Synthesis

So what's the difference?

Although they are similar, there are two main differences between them

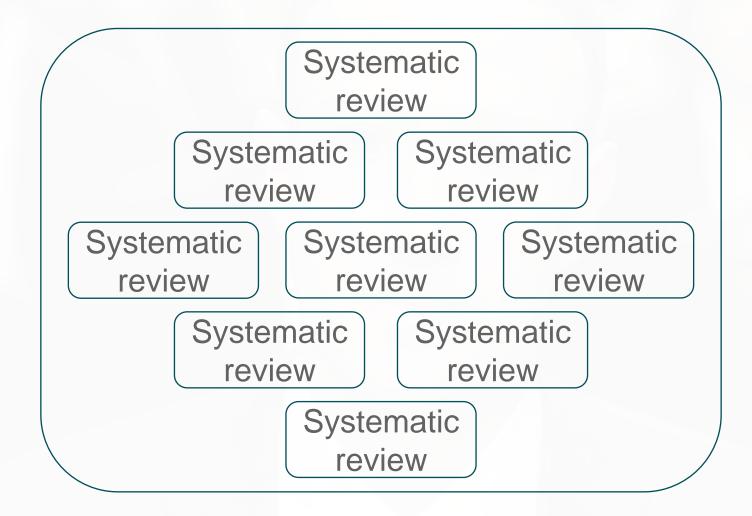
What's being reviewed

Checking overlap

Systematic review

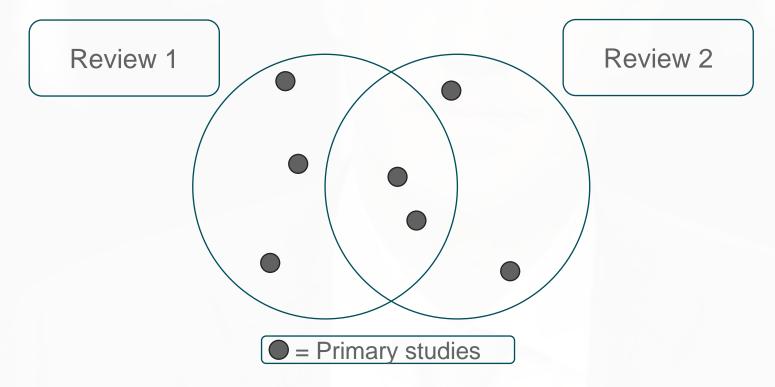
Primary Primary Primary **Studies** Studies Studies Primary Primary Primary Studies Studies Studies Primary Primary Primary Studies Studies Studies Primary Primary Primary **Studies** Studies Studies

Review of reviews



Overlap

- Reviews of reviews analyse systematic reviews
- Each of the systematic reviews can overlap



Citation matrices

	Review 1	Review 2	Review 3	Review 4
Primary publication 1	x			
Primary publication 2	х			x
Primary publication 3	х	x	x	x
Primary publication 4	x	x	x	
Primary publication 5	x	x		x
Primary publication 6	x			
Primary publication 7	x	x	x	
Primary publication 8	x			
Primary publication 9		х		
Primary publication 10		x		
Primary publication 11				x
Primary publication 12				x

$$CA (covered area) = \frac{N}{r c}$$

$$CCA (Corrected CA) = \frac{N - r}{r c - r}$$

Table 1. Interpretation of CCA

CCA	Overlap	
0-5	Slight	
6-10	Moderate	
11-15	High	
>15	Very high	

Abbreviation: CCA, corrected covered area.

Screenshots taken from Pieper et al. 2014

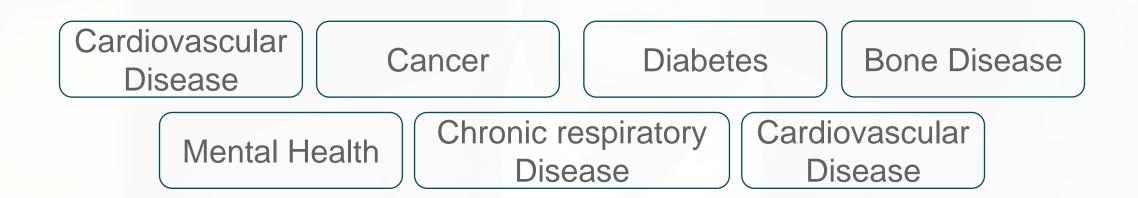
Citation Matrices

- Not a perfect solution
- If one study has many more primary studies than another it can affect how well the method works

Number of Reviews (c)	Total number of publications (<i>N</i>)	Number of Unique publications (r)	CCA
2	189	37	0%

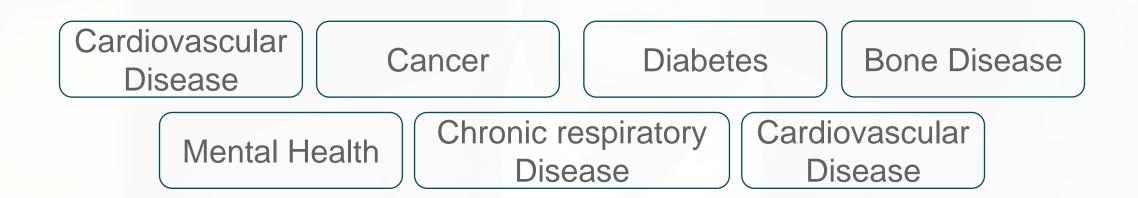
How I'm using it

- NCD Umbrella review
- The goal is to provide an overview of the current coverage by systematic reviews on NCD's in 7 key areas



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The end

To contact me or to access the slides again please scan the QR code



Refrences

■ 1. Pieper D, Antoine SL, Mathes T, Neugebauer EAM, Eikermann M. Systematic review finds overlapping reviews were not mentioned in every other overview. Journal of Clinical Epidemiology. 2014 Apr 1;67(4):368–75.

