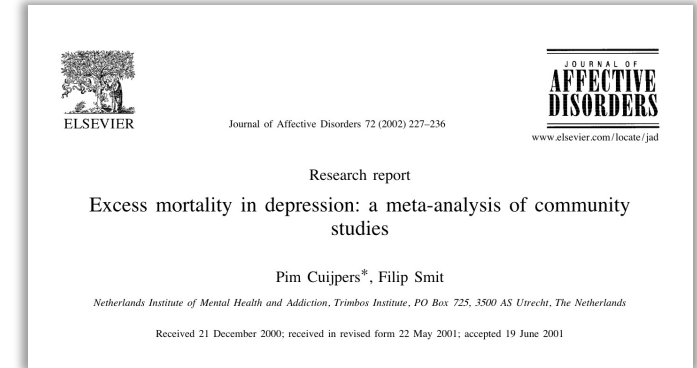# Meta-Analysis in Mental Health Care

- Meta-analyses are used for various types of scientific questions in mental health research, e.g.

  - Prevalence of mental disorders

  - Determinants of mental health, consequences of mental illness

  - **Effectiveness of mental health interventions** (e.g. psychotherapy, pharmacotherapy, preventive interventions, …)

  → **Any research topic with sufficient quantitative evidence for synthesis**

e.g. Cuijpers & Smit, 2002

Meta-Analysis in Mental Health Care

Why do we need meta-analyses of mental health interventions?

- Mental disorders are highly prevalent and associated with numerous negative consequences for the individual and society

- Numerous treatments are available, but not all work, and not all work for everyone

- Many effectiveness claims are based on clinical practice, expert opinion, tradition ("eminence-based medicine")

→ **Instead, mental health care of individuals should be based on the best evidence currently available to us!**

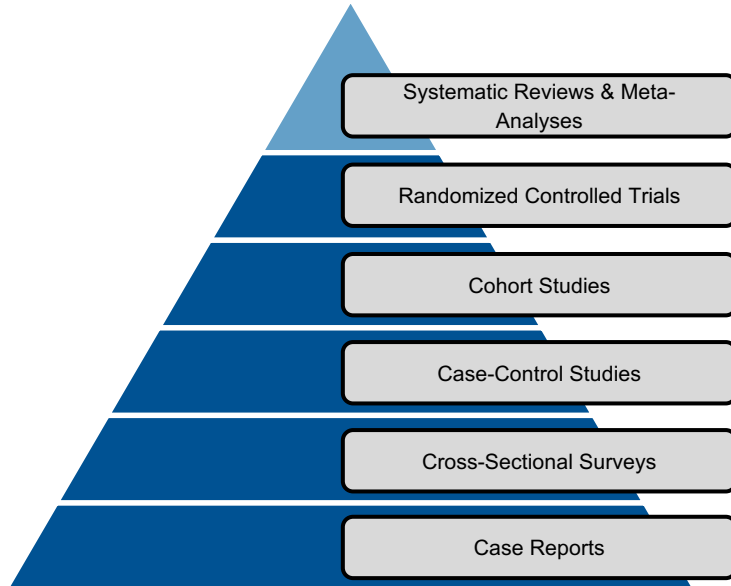→ **Encapsulated in the idea of "Evidence-Based Medicine" (EBM)**

Replying to @JavidTenzin and @CobraTateKING

I think most men wouldn't be depressed if they actually decided that depression is fake

Meta-Analysis in Mental Health Care

Evidence-based medicine (EBM) pyramid

Gordon Guyatt

Systematic reviews & meta-analyses of high-quality studies with robust findings can be considered the highest form of evidence in health care!

Adapted from Guyatt, G. H., Sackett, D. L., ... & Wilson, M. (1995). *JAMA*.

Cochrane

- Cochrane (formely Cochrane Collaboration), founded in 1993, has played a crucial role in the development of applied meta-analysis.

- Goal: "work together to produce credible, accessible health information that is free from commercial sponsorship and other conflicts of interest"

- Uses rigorous standards to synthesize evidence in the biomedical field, makes them available in the Cochrane library

- Issues the regularly updated Handbook for Systematic Reviews of Interventions (Higgins et al. 2019) and Cochrane Risk of Bias Tool (Sterne et al. 2019).

- An organization similar to Cochrane is the **Campbell Collaboration**, which primarily focuses on research in the social sciences.