Description
Systematic reviews and meta-analyses are critical for evidence-based clinical and public health practice. They are a central component of policy and guideline development, especially with the widespread adoption of the GRADE system by WHO and other agencies. The widespread application of systematic reviews to synthesise evidence on key questions makes it useful for health professionals to be able to understand and critique this design. This one-day course will provide an introductory overview of systematic reviews and meta-analyses, with specific examples from TB and HIV.

Relation to Conference theme
Evidence-based TB and HIV care is central to improved control of the TB and HIV epidemics. Several agencies, including WHO and ATS, have endorsed the GRADE approach to guideline and policy development. The GRADE approach requires the use of systematic reviews and meta-analyses. This course provides an introduction to systematic reviews, their strengths and limitations.

Target audience
TB and HIV researchers, policy-makers, guideline development committee members, clinicians, nurses and librarians.

Objectives
1) To provide an introductory overview of the systematic review process, discuss the strengths and limitations of the method, and provide limited guidance on how to actually perform a systematic review; 2) To describe key components of a systematic review: formulation of the review question, searching of literature, quality assessment of studies, data extraction, and meta-analytic methods, methods to evaluate heterogeneity and publication bias and software options.

Keywords
Systematic reviews; meta-analysis; GRADE; evidence-based medicine; evidence-based public health

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TENTATIVE SCHEDULE

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<td>9.10 - 9.45</td>
<td>Importance of evidence synthesis in TB and HIV control</td>
<td>Andy Ramsay</td>
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<td>9.45 - 10.30</td>
<td>Systematic reviews: a step-by-step overview</td>
<td>Madhukar Pai</td>
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<td>Searching for and identifying relevant studies</td>
<td>Madhukar Pai</td>
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<td>Karen Steingart</td>
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1.40 - 2.20  Meta-analysis of randomised controlled trials  Dick Menzies
2.20 - 3.00  Meta-analysis of diagnostic studies  Karen Steingart
3.00 - 3.30  Tea break
3.15 - 4.00  Use of systematic reviews and the GRADE approach in policy and guideline development  Karin Weyer
4.00 - 4.50  How to write a review and get it published  Susan Jones
4.50 - 5.00  Course evaluations and closure  Coordinators

Course faculty

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