Writing a systematic review workshop

Duration Online – 4 half days

Skill level Introductory

Target Audience Healthcare professionals, academics, researchers, decision makers and

Evidence Synthesis Ireland fellows who have identified a review topic and

are ready to begin working on their protocol.

Prerequisites Have a basic knowledge of health research. Are interested in learning more

on the methodology of a review. Participants are requested to install the

RevMan software before the workshop.

Date 11th, 15th, 18th & 22nd January 2021

Time 10.00-13.00

Registration fee €150/80

Places 30 places available for individuals who are resident on the island of

Ireland

Background

Health care policy and practice decisions should be based on a synthesis of the global body of evidence rather than relying on individual studies. Cochrane Ireland and Evidence Synthesis Ireland promote evidence based healthcare policy and practice by supporting high quality, relevant systematic reviews and other synthesised research evidence.

Aim

This workshop provides authors, at the beginning of the systematic review process, with an in-depth understanding of how reviews are structured. It offers an insight to the development of a protocol, introducing participants to methodology, search methods, data extraction and meta-analysis. This workshop also includes an introduction to RevMan software and its use during protocol development.

Learning outcomes

In this course participants will be enabled to:

- Understand the basic principles of a systematic review
- Identify the scope of their review
- Understand search methods and apply these methods to their search strategy
- Apply the criteria for selecting studies
- Understand the principles of creating a data collection form and of data extraction.
- Attain a basic understanding of principles of meta-analysis

• Identify heterogeneity and understand the methods for assessing and addressing it

Teaching strategies

The workshop will consist of a mixture of short presentations, led by members of the Cochrane Ireland teaching faculty covering each of the stages of developing a systematic review protocol, small group activities and plenary discussions, providing participants with the opportunity to develop and refine their protocol. The number of participants for the course is limited to 25.

Facilitators

Prof Declan Devane, Professor in Midwifery, School of Nursing and Midwifery, NUI Galway Ms Elaine Finucane, Research Associate, Centre for Health Evaluation, Methodology Research and Evidence Synthesis (CHEMRES), NUI Galway.

Dr Fionnuala Jordan, Lecturer, School of Nursing and Midwifery, NUI Galway.

Course content/timetable

- Introduction to systematic reviews
- Writing a protocol
- Defining a review question defining objectives and creating a PICO (population, interventions, comparators, outcomes)
- Practical exercise with PICO development
- Identifying search terms and searching for relevant studies in a systematic way
- Practical exercise: developing a search strategy
- Screening studies assessing eligibility
- Assessing risk of bias
- Practical exercise on Risk of bias
- Data extraction and management; different types and formats of outcome data
- Practical exercise on Data extraction
- Meta-analysis methods for binary data (odds ratio, risk ratio)
- Meta-analysis methods for continuous data (mean difference, standardised mean difference)
 Introduction to meta-analysis
- Exploring heterogeneity; subgroup analysis and sensitivity analysis
- Tools to support systematic reviews: Introduction to Review Manager (RevMan), Covidence and Endnote