

Making Sense of Evidence Programme

Starting a Journal Club

A guide

Introduction

You may have decided to use this guide to set up a journal club after attending our Making Sense of Evidence (MSE) workshops and learning about how evidence based research can make real impact for people and the services that they rely upon.

A successful journal club should be an ongoing forum to translate research evidence to practice, develop critical appraisal skills and keep up to date with research. This guide aims to identify the key elements to consider at the outset of setting up a club and how to keep it running effectively.

A range of MSE workshops are available to supplement your journal club: please contact us to discuss your needs. Additionally, if you have feedback about the guide or suggestions about further items for us to include, we are very keen to hear from you.

Email us at: penarc-events-training@exeter.ac.uk

Getting started

Agree the aim of the journal club

The levels of experience and interests of the group members will determine the aim of the journal club. Regular reviews following the initiation of the club can ensure that all members are able to engage and benefit.

Agreeing terms of reference which can be reviewed could be helpful in defining the ongoing structure and aims for the club.

An evidence-based format for a journal club allows members to develop, practice and improve their critical appraisal skills to enable them to implement evidence in practice.

Leadership

All participants can proactively contribute to the journal club, suggesting topics and providing feedback. However, a nominated lead, chair or champion could help to facilitate discussion about the development and direction of the club and ensure that logistics (such as timing, frequency, location and inviting external participants) are organised. These elements are essential to the club's success.

The group may consider rotating some responsibilities to ensure the club organisation does not become burdensome and provides other participants with further learning opportunities.

Finding and choosing articles

Papers may be identified from journal subscriptions, by chance, e.g., links in emails, media reports or articles on social media; or they may be searched for, depending on the topic of interest or the type of research. Recent contents of journals can be examined online or hand-searched depending on the clinical area of interest.

If specific methods papers are sought, key databases can be targeted for recent studies. Periodic hand-searching of specific methods-focused journals might also be useful.

Please see *Resources* for examples.

Club members could consider setting up and sharing a resources folder where papers of interest can be saved whenever found.

Papers are usually chosen to fit the interests of the club members, although some generic papers can work well too (as they help with learning about key concepts without any distraction due to the specific clinical interests). An agreed initial pre-screening criteria will help ensure that papers are relevant and appropriate.

- Title
- Authors
- References
- Abstract
- Data, figures and tables
- Additional considerations might include a limit for publication dates and specifications for papers e.g., systematic reviews, meta-analysis and reviews, randomised controlled trials or qualitative research or whether the journal club session is about a clinical issue or a key concept in understanding research.

Preparation

The group can agree upon a sufficient time for them to pre-read articles. If the articles are being pre-read, then it is best to circulate these at least 1 or 2 weeks in advance alongside any preparation instructions such as using a critical appraisal template to make notes. ***Appraisal templates are available on the MSE webpages***

Some groups may decide not to pre-read, due to workload demands. However, it may be worth pre-circulating any critical appraisal templates, as these are likely to be used regularly and once the group are familiar with them it will help make sessions efficient. Additionally, if one person is willing to pre-prepare the critical appraisal/make notes on a checklist, then this will help the debate. This could be the chair or lead, the individual who has identified the paper, or it could be a rotated role for journal club members to enable learning.

Running a journal club session

The structure of a session can vary, a standing agenda with terms of reference may be useful. The group can consider whether a short informal or a more formal presentation of the paper is required prior to discussion; this might be influenced by group size, time available and the way that sessions take place (e.g. online or in person).

The group, or the lead, should review the complexity of the article and decide whether a research methodology specialist (e.g. health economist, statistician or a qualitative researcher) could be invited to the meeting.

To facilitate a constructive discussion the group may consider alongside of using a critical appraisal tool/paper some of the following questions:

- Why was the article chosen?
- What was the main aim and hypothesis of the research?
- How was the study conducted (what method was used)?
- Was the methodology sound?
- What are the results and outcomes and how were they interpreted? (is there any evidence of bias, confounding etc.)?
- How does the result and conclusion fit with other papers/current knowledge – has the paper been surpassed by more recent research?
- Do the results suggest changes in current practice?
- What other studies may need to be conducted/what other research is available?

Aiding Success

Regular review can help the club evolve and improve. This can be facilitated by short anonymous questionnaires (e.g. via MS Forms) or end-of-session discussion.

Further considerations could be:

- Deciding which topics will interest the group
- Deciding the length of the meeting (30 mins – 1 hour)
- Establishing appropriate frequency for the meetings
- Providing or encouraging participants to attend critical appraisal training
- Making attendance mandatory
- Providing food and refreshments
- A good mix of staff (junior and senior)
- Planning sessions to provide more development opportunities for less experienced junior staff (e.g. chair rotation, introducing papers etc.)

Resources

Formulating a research question (PICO)

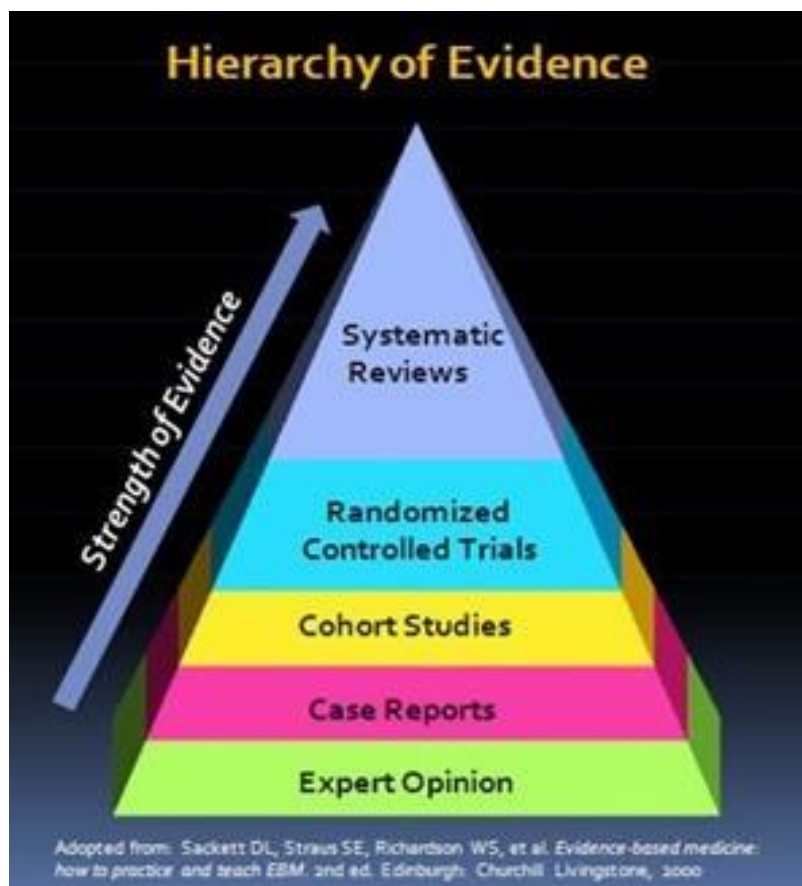
Patient/population

Intervention

Comparison

Outcomes

Hierarchy of Evidence



Searching for papers

Internet database resources

| Type of research | Databases | Web addresses |
|------------------------------|--|--|
| Systematic Reviews | Cochrane Database of Systematic Reviews Epistemonikos | https://www.cochranelibrary.com/cdsr/about-cdsr https://www.epistemonikos.org/ |
| Randomised Controlled Trials | CENTRAL database | https://www.cochranelibrary.com/central/about-central |
| Economic Evaluations | EconLit | https://www.aeaweb.org/econlit/ https://pubmed.ncbi.nlm.nih.gov/ |
| Qualitative Research | CINAHL or PsycINFO (if mental health related) | https://www.ebsco.com/products/research-databases/cinahl-database |
| All | Trip database PubMed | https://www.tripdatabase.com/ www.ncbi.nlm.nih.gov/pubmed |

Specific methods-focused journals for hand searching

Please note that you may need to copy and paste some of these links into your web browser

| Methods | Web address |
|------------------------------|---|
| Research Synthesis Methods | https://onlinelibrary.wiley.com/journal/17592887 |
| Clinical Epidemiology | https://www.jclinepi.com/issue/S0895-4356(22)X0012-7 |
| Systematic Reviews | https://systematicreviewsjournal.biomedcentral.com/ |
| Medical Research Methodology | https://systematicreviewsjournal.biomedcentral.com/ |
| Qualitative Research | https://journals.sagepub.com/home/qri |

Phone app resources

TRIP

UpToDate

BMJ Best

Practice

PubMed

BestEvidence

ClinicalKey

Statistical resources

“Catch Up Maths & Stats” by Michael Harris, Jacquelyn Taylor, Gordon Taylor: This book is an excellent introduction to statistics for people who have little or no prior knowledge of the subject. It covers the basics of statistical analysis, including descriptive statistics, probability, hypothesis testing, and confidence intervals.

Glossary

BMJ Best practice provides a glossary of EBM terms:

<https://bestpractice.bmj.com/info/us/toolkit/ebm-tools/a-glossary-of-ebm-terms/>