

### Special points of interest:

- This should take no longer than 1 hour to prepare
- First time you undertake a journal club in this way it may be a bit nerve-racking

but...

- It should be fun to conduct and attend
- It should begin and end on the practical day-to-day clinical situation

### Inside this guide:

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# Lithium for schizophrenia

## - THE LEADERS GUIDE

Produced by the Editorial base of the Cochrane Schizophrenia Group  
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from

Leucht S, Kissling W, McGrath J. Lithium for schizophrenia. Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD003834. DOI: 10.1002/14651858.CD003834.pub2.

## Background explanation

Thank you for giving this guide a go. The idea behind this is to make things easier for you when you lead the journal club.

Journal clubs are often difficult to conduct and far removed from clinical life. Even if the leaders do prepare well, those turning up may be more in need of lunch, coffee or a social time than practical academic stimulation and the implicit pressure to read a difficult paper.

This suggested design is an attempt to allow for those needs, whilst getting the very best out of the session.

This journal club design should really help those attending see that this

research may have some clinical value.

### What you will need to do is:

- ☒ Have a good read of this
- ☒ Then read the review to which this is attached.
- ☒ Distribute the review to those attending well before the club
- ☒ Make more copies for those turning up on spec
- ☒ Do not really expect many to have read the review



### PRINTING GUIDE

Pages 1-4 - one copy for you

Pages 5-6 - one copy for each participant - distributed at **start** of journal club

Page 7— one copy for each participant distributed at **end** of journal club

Page 8 - one copy for you to collate feedback

Full review for everyone

Try to find a colour printer that does double sided printing

## The three parts

### Part 1. Set the clinical scene (5 mins)

Be clear, but really make the participants feel the pressure of the situation...just like you would in clinical life

### Part 2. Critical appraisal of the review (20 mins)

Get participants to list what is needed from the review before service user arrive, get them to talk, split into groups—with a feeling of urgency.

### Part 3. Use of evidence in clinical life (20 mins)

Having distilled the evidence use role play to see how the participants would use what they have learned in everyday life.

## Part 1.1 Setting the scene – The service user

### Introduce participants in the journal club to their scenario

Clive has had serious mental illness for ten years. This has largely been a schizophrenia-like illness, but he is also frequently troubled with serious depression or, more rarely, an elevation of mood mixed with his

overtly schizophrenic psychotic symptoms. The mood swing that he experiences are very troublesome to him and you are tempted, from your experiences with people with bipolar disorder, to consider use of Lithium. He is attending clinic today to discuss this with you.



### Questions for participants:

Q 1. What do you think Clive may ask?

A 1. [Suggestion] "Well, doc, what are my odds of getting my mood better?"

Q 2. What do you think the service user means by 'better'?

A 2. **List** the suggestions - these are what you will come back to in the role play



*Take time to read and think about the review - this is the only time-consuming bit*

## Part 1.2 Setting the scene – the Journal club

### Complicate the scenario by adding the need to attend this journal club

Knowing you are due to see Clive in less than an hour you are nevertheless compelled to attend journal club.

You have not had time to read the paper and need some lunch.

By a stroke of luck the paper for discussion focuses on the value of Lithium.

### Questions for participants:

Q 1. If you had not had this paper fall into your lap where might you have gone for reliable information?

A 1. There are now lots of answers to this - The Cochrane Library, Clinical Evidence, NICE Technology Appraisals.

Anything that has a **reproducible method** by which results are obtained.

## Part 2.1 Critical appraisal of the review

### For every review there are only three important questions to ask:

1. Are the results valid?
2. What are the results?
3. Are the results applicable to service user?

You now have only 20 mins to get participants through this large review. To do this quickly is not easy, especially as many will not have read the paper in preparation.

**Suggestion:** Ask participants what salient facts they want to know - especially considering their tight time-scale.

**Remind** them that service user now arrives in about 20 mins.

You should be able to fit most of the suggestions supplied by participants into the three categories of question outlined above.

Read 2.2 as this gives more detail of the issues that will, in some shape or form, be supplied by the participants.

If they are not lively—give them a hand.

Do not panic. Bright journal club attendees will come up with all the answers—your job is to help focus their efforts and categorise their answers.

Do not be worried by silence.

### LIST 1:

1.

2.

3.

4.

5.

### List 2:

1.

2.

3.

4.

5.



Participants will think of most of the issues - you just need to catch them and write them on a board or flip chart

## Part 2.2 The three parts of appraising a review

### 1. Are the results valid?

*There is no point looking at the result if they are clearly not valid.*

#### a. Did the review address a clearly focused issue?

Did the review describe the population studied, intervention given, outcomes considered?

#### b. Did the authors select the right sort of studies for the review?

The right studies would address the review's question, have an adequate study design

#### c. Do you think the important, relevant studies were included?

Look for which bibliographic databases were used, personal contact with experts, search for unpublished as well as published studies, search for non-English language studies

#### d. Did the review's authors do enough to assess the quality of the included studies?

Did they use description of randomization, a rating scale?

### 2. What are the results?

#### a. Were the results similar from study to study?

Are the results of all included studies clearly displayed?

Are the results from different studies similar?

If not, are the reasons for variations between studies discussed?

#### b. What is the overall result of the review?

Is there a clinical bottom line?

What is it?

What is the numerical result?

#### c. How precise are the results?

Is there a confidence interval?

### 3. Can I use the results to help the service user?

#### a. Can I apply the results to the service user?

Is your service user so different from those in the trial that the results don't apply?

#### b. Should I apply the results to the service user?

How great would the benefit of therapy be for this particular person?

Is the intervention consistent with the service user's values and preferences?

Were all the clinically important outcomes considered?

Are the benefits worth the harms and costs?



*There is no point proceeding to the second question if journal club participants think the results are not valid*



**"Well, Doc, what are my odds of getting my mood better?"**

## Part 2.3 Doing the appraisal

Having managed the interactive session with the participants - acquiring the three questions that need to be addressed by those appraising a review and some idea of how to answer each of those questions - now divide the room into three.

Apportion one of the questions per group and ask each group to get a feel for the whole review (1 min) but to focus on answering their particular question for the rest of the participants (5 mins or so).

Encourage talking to each

other.

Move round the room to help the groups if they seem to need it.

Have your copy of the review marked up with where they may look for answers -although in a good review it should be obvious.

Stop the flow after about 10 minutes and ask each group to report in turn.

**Do Group 1 really think that the review uses valid methods? Why?**

After the first group's re-

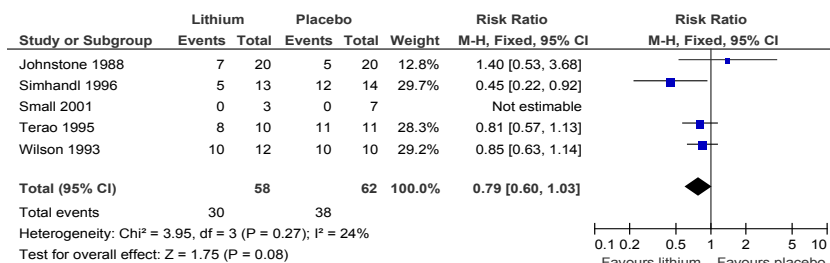
port you may want to ask everyone to vote whether to proceed or not. If they agree to proceed —see if you can **get Group 2 to give you the clinical bottom line.**

We suggest that Graph 3.2 - 'No clinically important response as defined by the authors' best fits the service user's request of information about getting 'better'.

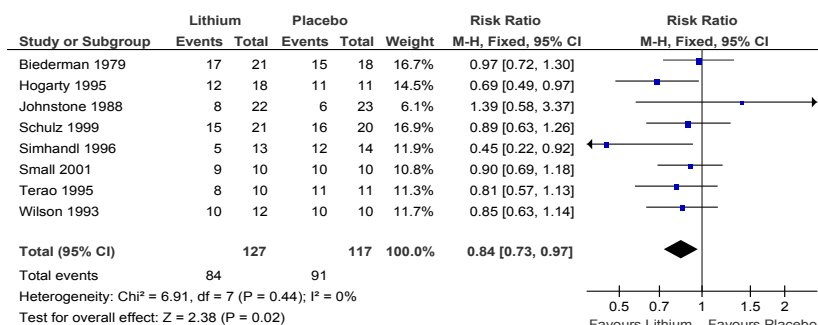
And from **Group 3** get some feel of how applicable the findings are.



SENSITIVITY ANALYSIS 1: LITHIUM AUGMENTATION - PARTICIPANTS WITH AFFECTIVE SYMPTOMS EXCLUDED  
Outcome: 4.2 No clinically significant improvement



ADJUNCTIVE LITHIUM + ANTIPSYCHOTICS vs PLACEBO/NO ADJUNCTIVE TREATMENT + ANTIPSYCHOTICS  
Outcome: 3.2 No clinically important response as defined by the authors



84 people out of 127 given Lithium were **not** clinically improved (**66%**) but 91 people out of 117 allocated to placebo did not improve (**78%**). So, because a few people would have got better without clozapine, the proportion attributable to taking clozapine, according to these results, is the difference between the groups (or **78% minus 66% = 12%**). Just round up or down to make it easy. Lets say, in this case, 10%. So 10% of people in these trials have the 'global impression of an improvement' – or put another way, 1 in 10, or put another way NNT = 10.

## Part 3. The service user arrives

This is the most important part of the journal club—the *practical application* of what knowledge you have gained.

This is one way of doing it.

Set out two chairs in consultation style. Do not call for a volunteer—just nominate someone to be the clinician and you be the service user.

Make sure that the clinician feels they can have time to ask their [relieved for not being singled out] colleagues for help [remember—this has got to be a combination of practical and fun].

Back on page 2 there are suggestions for what the service user may ask—use them.

**Well, Doc, what are my odds of getting my mood better?**

See if they can put across in a supportive way the best evidence as they understand it.

There is no perfect way to do this - but perhaps something like this:

"From the evidence we have, there is the impression that, for people not too dissimilar to you, about 1 in 10 really show an improvement with Lithium."

**What do YOU mean by "improvement"?** would be a good next question.

Again there is no right answer but think about how to put into words what the research outcome really means.

Perhaps - "the improvement that the best evidence sug-

gests may not be all that you would want or hope for—but there is the residing suggestion that about 1 in 10 people get a clinical improvement that is reasonably easily recognisable. That does not necessarily mean a cure but the measures used in these studies could on the other hand have averaged up so much that they missed out on the really important detailed changes like the devil becoming quiet."

As has been said—there is no right answer and all depends on personal style and situation. Your job is to encourage the best answer out of the clinician.

If it is going well there are other questions that you may ask—see side **Box 1**.

**Limitations of using this means of calculating NNT is that it does not take into account the baseline risk of the control group and does not give confidence intervals.**

**In this case factoring in baseline risk of the control group does not make a difference.**

**NNT = 9, CI 5 to 22**

<http://www.nntonline.net/ebm/visualrx/what.asp>



**This can be part of a store of Critically Appraised Topics - see CATmaker online**

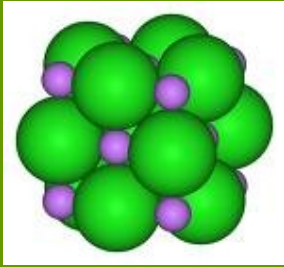
### Box 1. Additional questions

☒ **Do people find adding lithium in acceptable?**

There are no direct data but in the outcome of 'leaving the study early' about twice the number of people allocated to adjunctive lithium leave these trials compared with those on the more simple regimen. This may be for various reasons but unacceptability of treatment may be one of them. Can you get the people attending the journal club to put into words for the service user?

☒ **As far as I understand you are taking results from people without mood problems and assuming the results you talk about apply to me, is that so?**

This is not entirely true. Some of the data in the larger comparison does include people with mood problems - but the service user is right to point out that you may be making quite a big assumption. Can you get the people attending the journal club put that across clearly and honestly?



**Special points of interest:**

- The idea of this is to lead you from the clinical situation, through the research and back to the real-world clinical situation again
- You may or may not have read the paper - but even if you have not that does not mean that you cannot get something out of this



- Make sure you participate, and speak up - you will have to in the real clinic
- There is no perfect way of doing this - each person has an individual way of interacting and conveying information

# Lithium for schizophrenia

## - HANDOUT FOR PARTICIPANTS

Produced by the Editorial base of the Cochrane Schizophrenia Group  
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from

Leucht S, Kissling W, McGrath J. Lithium for schizophrenia. *Cochrane Database of Systematic Reviews* 2007, Issue 3.  
Art. No.: CD003834. DOI: 10.1002/14651858.CD003834.pub2.

The service user will arrive soon

What do you think the service user may ask?

List:

- 1.
- 2.
- 3.
- 4.

If you had not had this paper fall into your lap where might you have gone for reliable information?

What key points do you need to know to see if this review can help?\*

- 1.
- 2.
- 3.
- 4.
- 5.

\*the service user arrives in 30 mins



After discussion do you want to change the key points you need to know to see if this review can help?\*

1.

2.

3.

\*the service user arrives in 10 mins

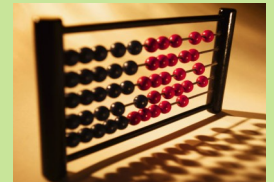
Can you extract numbers that will be useful to you and the service user?  
Clue: focus on what you think the service user may ask - main effects and adverse effects - graph number '3.2' may be a good one to use

1. Can you put relative risk into words?

2. Can you work out the proportion of improvements *attributable* to use of Lithium?

3. Can you work out the number needed to treat?

4. Can you put that into words?

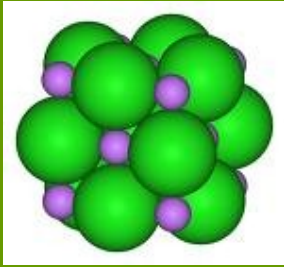


The arithmetic is not complicated

**The service user arrives**

Is there a good use of words you would want to use?





### Special points of interest:

- Best evidence suggests that clinically focused problem-based learning "has positive effects on physician competency" even long into the future.<sup>1</sup>

1. Koh GC, Khoo HE, Wong ML, Koh D. The effects of problem-based learning during medical school on physician competency: a systematic review. *CMAJ* 2008; 178(1):34-41. (free online)



This can be part of a store of  
Critically Appraised Topics  
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# Lithium for schizophrenia

## - PARTICIPANTS' CRIB SHEET

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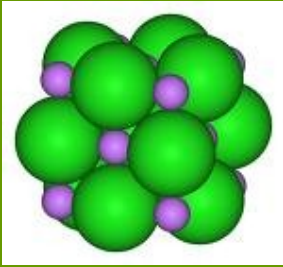
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to these results, is the difference between the groups (or 78% minus 66% = 12%). Just round up or down to make it easy. Lets say, in this case, 10%. So 10% of people in these trials have the 'global impression of an improvement' – or put another way, 1 in 10, or put another way NNT = 10.

other way, 1 in 10, or put another way NNT = 10.

So 20% of people in these trials, in the short term, have the 'global impression of an improvement' – or put another way, 1 in 5, or put another way NNT = 5.



**Please return to:**

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## Thank you

This is one of 40 Cochrane Schizophrenia Group Guides for Journal Clubs

A full list is found on

<http://szg.cochrane.org/journal-club>

# Lithium for schizophrenia

## - FEEDBACK

### Date and place of journal club

#### 1. How many attended?

About

#### 2. What was the background of the people attending? (please tick)

Health care professionals

☐

Consumers

☐

Policymakers

☐

Undergraduate

☐

Postgraduate

☐

Others

#### 3. Marks out of ten compared with usual journal club

(10=much better, 5=same, 0 = much worse)

#### Free text feedback