



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

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Family intervention for schizophrenia

- THE LEADERS GUIDE

Produced by the Editorial base of the Cochrane Schizophrenia Group
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from

Pharoah F, Mari J, Rathbone J, Wong W. Family intervention for schizophrenia. Cochrane Database of Systematic Reviews 2010, Issue 12. Art. No.: CD000088. DOI: 10.1002/14651858.CD000088.pub3.

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 Helen and her family 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 – Helen

Introduce participants in the journal club to their scenario

Helen is a 38 year old single unemployed lady suffering from schizophrenia for the last 18 years. She has had numerous episodes of relapses and partial remission over the years. She is on Clozapine, which has worked to some extent, however, she continues to remain symptomatic. She lives with her parents and two younger brothers. She comes from a family of high-achievers and is constantly ridiculed for her inability to get a job.

There are frequent arguments in the family home and high expressed emotions that you are aware of. Given that she continues to struggle, you have been considering offering Helen and her family the option of having family intervention, which you feel maybe beneficial. You are due to see the family in this afternoon's outpatient clinic and they are bound to ask you some difficult questions.

Questions for participants:

Q 1. What do you think Helen may ask?

A 1. [Suggestion] "What is family intervention and would it work?"

Q 2. How long do I have to have this intervention for?

A 2. **List** the suggestions from participants as these are what Helen will come back to in the role play

Q 3. What do you think Helen's family will ask?

A 3. Again, list answers.



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

LIST 1:

1.

2.

3.

4.

5.

List 2:

1.

2.

3.

4.

5.

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 Helen and her family 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 family intervention.



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 Helen?

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 Helen and her family now arrive 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 give 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.



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 Helen?

a. Can I apply the results to Helen?

Is Helen so different from those in the trial that the results don't apply?

b. Should I apply the results to Helen?

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

Is the intervention consistent with Helen'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



"What is family intervention and would it work?"



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 report 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 the Graph providing data for 'Global state: 1. 1.4 relapse' best fits Helen's request of information about if the intervention would work.

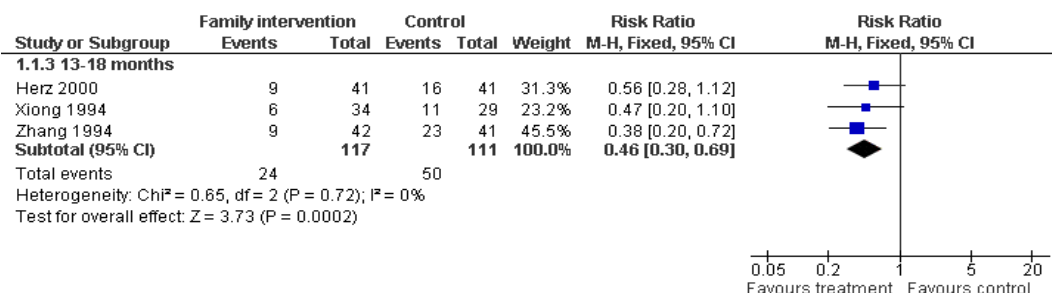
And from **Group 3 get some feel of how applicable the findings are.**



Part 2.4 A quick and dirty way to work out NNT

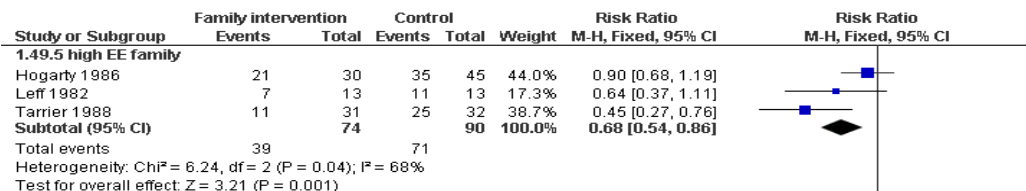
COMPARISON 1. ANY FAMILY-BASED INTERVENTION (>5 sessions) vs STANDARD CARE

Outcome: 1.1 Service utilisation : 1. hospital admission



COMPARISON 1. ANY FAMILY-BASED INTERVENTION (>5 sessions) vs STANDARD CARE

Outcome: 1.49 Family outcome: 5a Expressed emotion



24 people out of 117 given family intervention had hospital admission in the medium term (21%), but 50 people out of 111 allocated to standard care had hospital admission in the same period (45%). So, because a few people would have avoided hospital admission without family intervention, the proportion attributable to taking family intervention, according to these results, is the difference between the groups (or 45% minus 21% = 24%).

Just round up or down to make it easy. Lets say, in this case, 25%. So 25% of people in these trials, in the short term, have the 'global impression of an improvement' – or put another way, 1 in 4, or put another way NNT = 4.

Part 3. Helen and her family arrive

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 Helen and her family.

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 patients may ask - use them.

What is family intervention and would it work?

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: "We have some good evidence from a Cochrane review, which indicates that in the medium term, say in a year, family intervention does help to prevent relapse and about 1 in 4 people receiving family intervention avoids hospital admission."

How long do I have to have this intervention for?" 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 effect of family intervention is not obvious in the short term. But 7 to 12 months is a good starting point, about 1 in 7 people manage to avoid relapse after 7 to 12 month treatment."

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 = 5 (CI 4 to 8)

<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

☒ **What are my odds of getting better, Doc?**

You could be numerical here, explain to Helen the chances of her having improvement in mental state and social function perhaps. But do you understand the numbers yourselves? Can you put Relative Risk into words?

☒ **How much of your salary would you put on me staying out of hospital?**

It may not be good practice to rise to this challenge literally - after all, data does indicate that family intervention doesn't have long term effect on preventing hospital admission. Perhaps you could say that you would understand if Helen wants to stop the intervention after 12 months. But to give it a consistent go up to 12 months does seem indicated.

☒ **You have discussed with Helen about expressed emotions and she wants to know if this intervention would be beneficial for high expressed emotions?**

There is only a small number of studies measured this particular outcome, but there is the impression that about 1 in 4 families indeed have their level of expressed emotions reduced through family intervention (see Graph 1.49 above)



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

Family intervention for schizophrenia

- HANDOUT FOR PARTICIPANTS

Produced by the Editorial base of the Cochrane Schizophrenia Group
<http://szg.cochrane.org/en/index.html>, email: jun.xia@nottingham.ac.uk

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Pharoah F, Mari J, Rathbone J, Wong W. Family intervention for schizophrenia. Cochrane Database of Systematic Reviews 2010, Issue 12. Art. No.: CD000088. DOI: 10.1002/14651858.CD000088.pub3.

Helen and her family will arrive soon

What do you think Helen may ask?

List:

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

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.

*Helen and her family arrive 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.

*Helen and her family arrive in 10 mins

Can you extract numbers that will be useful to you and Helen?

Clue: focus on what you think Helen may ask - main effects and adverse effects - Graph 1.1.3 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 family intervention?

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

4. Can you put that into words?



Helen and her family arrive

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.¹

1. Koh GC, Khoo HE, Wang 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 - see CATmaker online

Family intervention for schizophrenia

- PARTICIPANTS' CRIB SHEET

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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>

Family intervention 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