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

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.

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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 Li and parents 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 – Li

Introduce participants in the journal club to their scenario

Li is 27 years old single child of Chinese origin. He suffered from schizophrenia since his late teenage years and, despite many medications, has only been partly responsive. You have treated him with clozapine and again there has been partial response, perhaps better than before. Nevertheless he is left with residual profound positive and negative symptoms and remains disabled.

You have heard that augmentation of Clozapine can be useful and are aware that Sulpiride has been used for this purpose. Li and his parents are about to attend your clinic after the Journal Club.

Questions for participants:
Q 1. What do you think Li may ask?
A 1. [Suggestion] “Will this do me any good Doc?”
Q 2. What do you think Li’s parents may ask?
A 2. [Suggestion] “Will he have even more side effects and will this help him become more like the son we used to have?”

List the suggestions from participants as these are useful in the role play.

Questions for participants:
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List the suggestions from participants as these are useful in the role play.

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 Li 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 Sulpiride Augmentation!

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.

Participant will think of most of the issues - you just need to catch them and write them on a board.

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 though 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 Li and parents 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.
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 Li?
   a. Can I apply the results to Li?
      Is Li so different from those in the trial that the results don’t apply?
   b. Should I apply the results to Li?
      How great would the benefit of therapy be for Li?
      Is the intervention consistent with Li’s values and preferences?
      Were all the clinically important outcomes considered?
      Are the benefits worth the harms and costs?

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 Graph 1.20 Sensitivity - global/mental state: No clinically important response (short - term) best fits Li’s request of information about getting ‘better’.

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. SULPIRIDE AUGMENTATION OF ANY ANTIPSYCHOTIC DRUGS vs ANY ANTIPSYCHOTIC DURG
Outcome 1.20 SENSITIVITY - Global/mental state: 1. No clinically important response (short term)

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Sulpiride + clozapine</th>
<th>Clozapine</th>
<th>Risk Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Events</td>
<td>Total</td>
<td>Weight</td>
</tr>
<tr>
<td>Gilleh 1997</td>
<td>8</td>
<td>16</td>
<td>1.0</td>
</tr>
<tr>
<td>Wang 1994</td>
<td>2</td>
<td>36</td>
<td>2.2</td>
</tr>
<tr>
<td>Xu 2008</td>
<td>6</td>
<td>32</td>
<td>22.9%</td>
</tr>
<tr>
<td>Zhu 1994</td>
<td>4</td>
<td>29</td>
<td>32.3%</td>
</tr>
<tr>
<td>Total (95% CI)</td>
<td>113</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

Total events: 22
Heterogeneity: Chi² = 1.25, df = 3 (P = 0.74), I² = 6%
Test for overall effect: Z = 2.51 (P = 0.01)

Using the above outcome as an example: 20 out of 113 people given Sulpiride augmentation of Clozapine have no important response in the short term (18%), compared with 32 out of 108 people (about 30%) in the group that continued to be treated with Clozapine alone. The difference attributable to the augmentation with Sulpiride seems around about 12% (or 30% minus 18%).

Just round up or down to make it easy. Let's say, in this case, 10%. 10% of the difference does seem attributable to the addition of Sulpiride - or put another way, 1 in 10 do do better by the definitions within these trials, or put another way NNT=10.

Part 3. Li and his 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 Li (and his 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 the service user may ask - use them.

Will this do me any good Doc?
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 have an improvement that is at least noticed by the researchers. Whether this is the improvement you are looking for is not entirely clear. You probably are looking for reduced symptoms and 'the devil becoming quiet', but what the researchers mean by improvement here is an overall progress on assessment scales, which may or may not mean a significant improvement clinically."

Will he have even more side effects and will this help him become more like the son we used to have?
Again there is no right answer but think about how to put into words what the research outcome really means.

Perhaps - "the best evidence we have is from an independent review that does suggest that the quality of data are not really very good, but the best estimate that 1 in 10 people do have some degree of an improvement, although for some people it may also change the profile of side effects that the person experiences."

This is an opportunity for the clinicians to convey the best evidence, but also humane management of the situation where the reality is that any improvement with the augmentation may not be profound enough to offset the damaging nature of the illness. This is the real world where evidence and application of that evidence is problematic.

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.

End on a positive note. Feedback how in a matter of minutes they have got though the bare bones of a big review, appraised and applied it - and, you hope, enjoyed doing it.
Li and his family will arrive soon

What do you think Li and his family may ask?

List:

1.

2.

3.

4.

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

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

1.

2.

3.

4.

5.

*Li and his family arrive in 30 mins

If you had not had this paper fall into your lap where might you have gone for reliable information?
After discussion do you want to change the key points you need to know to see if this review can help?*

1.

2.

3.

*Li and his parents arrive in 10 mins

Can you extract numbers that will be useful to you and Li?
Clue: focus on what you think Li may ask - main effects and adverse effects - graph number ‘1.20’ 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 Sulpiride augmentation?

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

4. Can you put that into words?

Li and his parents arrive
Is there a good use of words you would want to use?

Please: Let the journal club leader know what you thought of this format.
We wish to gather feedback to improve things.
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Sulpiride augmentation 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

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