Benozdiazepines for psychosis-induced aggression or agitation

THE LEADERS GUIDE

Produced by the Editorial base of the Cochrane Schizophrenia Group
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from

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

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 and Tribunal, 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 – Service user

Introduce participants in the journal club to their scenario

Soren arrived in your local airport on a flight from Copenhagen. He told passport control that he believed himself to be a rampaging Viking. He has been detained under the Mental Health Act under your care. During his stay, he became acutely disturbed. Despite effort of calming the situation, medication had to be used. In the mental health review tribunal that you are due to attend, it is likely that Soren will accuse you of using unproven treatments to drug him up.

Questions for participants:
Q 1. What do you think Soren may ask?
A 1. [Suggestion] “Why did you use lorazepam and haloperidol?”
Q 2. What do you think legal representative may ask you at the tribunal?
A 2. One question my be “was this the least restrictive drug treatment?” but list the suggestions from participants as these are what will be 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 Soren and the mental health review tribunal 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 Benzodiazepine.

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 the 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 Soren and the tribunal 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

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.

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

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 impression ‘3.1 Global impression: 1. need for additional medication - medium term’

And from Group 3 get some feel of how applicable the findings are.
Part 2.4 What are the outcomes?

Comparison: 2. BENZODIAZEPINES vs ANTIPSYCHOTICS

2.2 Global impression: 2. Sedation - medium term

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Benzodiazepine</th>
<th>Antipsychotic</th>
<th>Risk Ratio</th>
<th>Risk Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Events</td>
<td>Total</td>
<td>Events</td>
<td>Total</td>
</tr>
<tr>
<td>Chouinard 1991</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Dorevitch 1999</td>
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<td>15</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Foster 1997</td>
<td>1</td>
<td>17</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Lerner 1979</td>
<td>6</td>
<td>20</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Meehan 2001</td>
<td>5</td>
<td>51</td>
<td>13</td>
<td>99</td>
</tr>
<tr>
<td>Salzman 1991</td>
<td>8</td>
<td>27</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td><strong>Total (95% CI)</strong></td>
<td>138</td>
<td>186</td>
<td>100%</td>
<td>1.02 [0.79, 1.32]</td>
</tr>
</tbody>
</table>

Test for overall effect: Z = 1.15 (P = 0.25)

Heterogeneity: Chi² = 1.41, df = 5 (P = 0.92); I² = 0%

Comparison: 3. BENZODIAZEPINE + ANTIPSYCHOTICS vs BENZODIAZEPINES

3.1 Global impression: 1. need for additional medication—medium term

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Combination</th>
<th>Benzodiazepine</th>
<th>Risk Ratio</th>
<th>Risk Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Events</td>
<td>Total</td>
<td>Events</td>
<td>Total</td>
</tr>
<tr>
<td>Battaglia 1997</td>
<td>27</td>
<td>32</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>Bienek 1998</td>
<td>0</td>
<td>9</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total (95% CI)</strong></td>
<td>41</td>
<td>42</td>
<td>100%</td>
<td>1.02 [0.79, 1.32]</td>
</tr>
</tbody>
</table>

Test for overall effect: Z = 0.13 (P = 0.90)

Part 3. The Tribunal

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 four chairs in consultation style.

Do not call for a volunteer—just nominate some participants to be the clinician, the service user, their lawyer, the tribunal lawyer and tribunal 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 service user may ask—use them.

‘Why did you use lorazepam and haloperidol?’
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:

“The best evidence we have is from a small recent Cochrane review - there is the impression that, the overall efficacy of using lorazepam or haloperidol alone is similar to use lorazepam with haloperidol. But use of the combination of drugs is less likely to cause extrapyramidal effects (Graph 4.6).”

‘was this the least restrictive drug treatment?’
Again there is no right answer but think about how to put into words what the research outcome really means.

Perhaps - “the conclusion that the best evidence shows may not be all that you would want or hope for - there is no clear evidence to favour the use of benzodiazepine or antipsychotics. Effect of either types of drug on sedation is equivocal (RR=0.76, CI 0.48 to 1.21).”

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.

Analysis in the right hand side box shows us that the general efficacy of using benzodiazepine with antipsychotics and using benzodiazepine alone are equivocal. People taking the combination of benzodiazepine and antipsychotics did not require additional medication, compare to people taking benzodiazepine alone (RR=1.02, CI 0.79 to 1.32). Compare to antipsychotics, benzodiazepine used alone seem more likely to cause sedation, but the difference is not statistically significant (RR=0.76, CI 0.48 to 1.21).
Benzodiazepines for psychosis-induced aggression or agitation

Soren and the Tribunal will arrive soon

What do you think Soren and the Tribunal 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. 

* 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. 

*Soren and Tribunal arrives in 10 mins

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

Clue: focus on what you think service user may ask - main effects and adverse effects - graph number 2.2 & 3.2) may be good ones to use

1. Can you put relative risk into words?

2. Is there any improvements attributable to use of Benzodiazepine?

3. Can you put above findings into words?

Soren and the Tribunal arrives

Is there a good use of words you would want to use?
Benzodiazepines for psychosis-induced aggression or agitation

PARTICIPANTS’ CRIB SHEET

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?
   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?
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3. Can I use the results to help the service user?
   a. Can I apply the results to the service user?
      Is the 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?

What are the outcomes? (Graph 2.2 & 3.2)

Analysis of Graph 2.2 and Graph 3.2 shows us that the general efficacy of using benzodiazepine with antipsychotics and using benzodiazepine alone are equivocal. People taking the combination of benzodiazepine and antipsychotics did not require additional medication, compare to people taking benzodiazepine alone (RR=1.02, CI 0.79 to 1.32). Compare to antipsychotics, benzodiazepine used alone seem more likely to cause sedation, but the difference is not statistically significant (RR=0.76, CI 0.48 to 1.21).
Benzodiazepines for psychosis-induced aggression or agitation - 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