



# Benzodiazepines for psychosis-induced aggression or agitation - THE LEADERS GUIDE

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

from  
 Gillies D, Beck A, McCloud A, Rathbone J. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database of Systematic Reviews 2005, Issue 4. Art. No.: CD003079. DOI: 10.1002/14651858.CD003079.pub2.

### 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:

Part 1.1 Setting the scene	2
Part 2.1-2 Critical appraisal	2-3
Part 2.3 Doing the appraisal	3
Part 2.4 Interpret numerical outcomes	4
Part 3. Service user & Tribunal arrive	4
Participants' worksheet	5-6
Participants crib sheet	7
Feedback sheet	8

## 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.

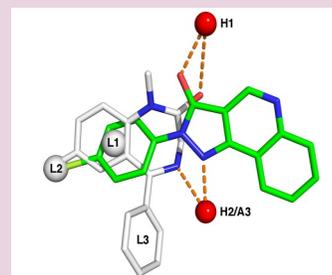
This suggested design is an attempt to allow for those needs, whilst getting the very best out of the session.

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 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 at-

tend, 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 may 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



*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 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 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 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 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

### 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?

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



**"Why did you use Lorazepam and Haloperidol?"**



## 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'

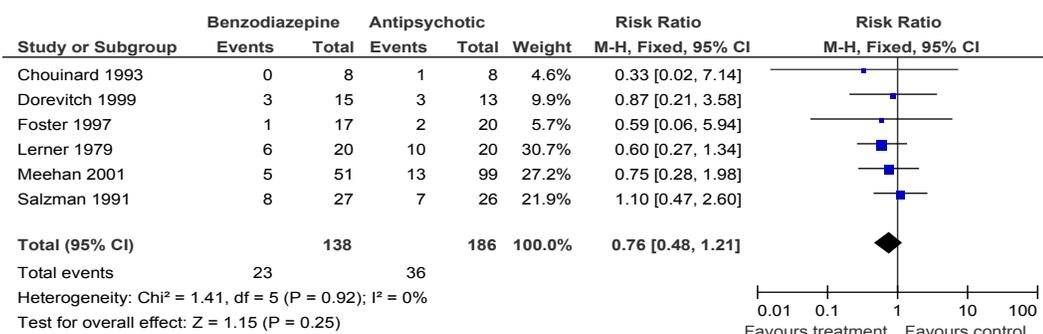
And from **Group 3 get some feel of how applicable the findings are.**



## Part 2.4 What are the outcomes?

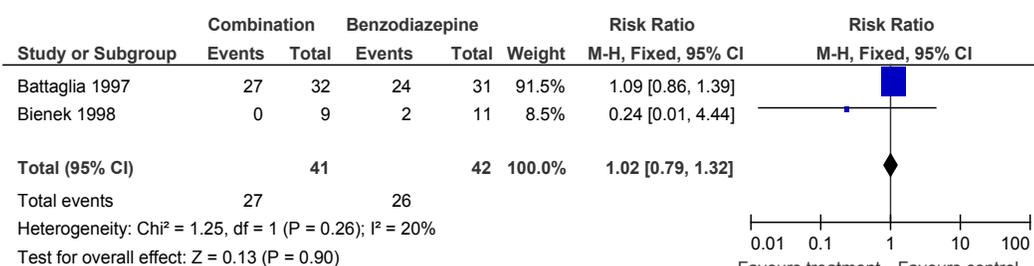
Comparison: 2. BENZODIAZEPINES vs ANTIPSYCHOTICS

2.2 Global impression: 2. Sedation - medium term



Comparison: 3. BENZODIAZEPINE + ANTIPSYCHOTICS vs BENZODIAZEPINES

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



## 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).



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

### Box 1. Additional questions

**Do you think it right to forcibly treat a person on the back of this evidence?**

This is a good point - data are very thin and if it was you getting the treatment you may want to have more evidence to back it up. There is an argument that treatment using benzodiazepines plus antipsychotics is not ethical outside of a well-designed trial. Other interventions have been better evaluated (see haloperidol + promethazine Cochrane review).

**The lawyer may say, “Are you just putting my client to sleep by use of lorazepam?”**

Some element of sedation is desirable - but tranquilisation is the main aim. This has not been measured in the relevant studies. There is no real *difference* between antipsychotic drugs alone and the benzodiazepine. However most people given either treatment are not sedated.

**Why do your guidelines recommend the use of lorazepam + haloperidol?**

This is a difficult one. Tradition. Familiarity with use. Force of habit. Not great evidence. Of course this combination is effective - but other treatments may well be more so and swifter and safer.



# Benzodiazepines for psychosis-induced aggression or agitation - 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](mailto:jun.xia@nottingham.ac.uk)

from

Gillies D, Beck A, McCloud A, Rathbone J. Benzodiazepines for psychosis-induced aggression or agitation. Cochrane Database of Systematic Reviews 2005, Issue 4. Art. No.: CD003079. DOI: 10.1002/14651858.CD003079.pub2.

## Soren and the Tribunal will arrive soon

What do you think Soren and the Tribunal 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?

### 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.

- 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

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?



The arithmetic is not complicated

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?

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 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?

### 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 - see CATmaker online



## 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>