



Antipsychotic medication for childhood-onset schizophrenia

- THE LEADERS GUIDE

Produced by the Editorial base of the Cochrane Schizophrenia Group
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from

Kennedy E, Kumar A, Datta SS. Antipsychotic medication for childhood-onset schizophrenia. Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD004027. DOI: 10.1002/14651858.CD004027.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

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

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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 Jake and his mother 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 – Jake

Introduce participants in the journal club to their scenario

Jake is a 12 year old boy who lives with his mum. His father was removed from the family 4 years ago, as he was accused of physically abusing Jake. Jake has been suffering from auditory hallucinations and has developed paranoid thoughts that he may be harmed. Following an assessment by the team, they feel that he is suffering from a first episode of psychosis, possibly schizophrenia. He has had the symptoms for

about two months and you feel pharmacological treatment should be initiated quickly, so that Jake can have a better prognosis. Jake and his mother are due to see you later on this afternoon. Although they are not keen on medication, are willing to give this a try, provided there is a good chance that he will recover and not suffer from debilitating side effects.

Questions for participants:

Q 1. What do you think Jake and his mother may ask?

A 1. [Suggestion] “Well, doc, what are the chances of Jake getting better?”

Q 2. What do you think she means by ‘better’?

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

Q 3. What do you think Jake might ask?

A 3. Again, list answers.



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 Jake and his mother 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 effectiveness of anti-psychotics in the treatment of childhood-onset schizophrenia.



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 Patient?

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 Jake and his mother 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 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 Jake?

a. Can I apply the results to Jake?

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

b. Should I apply the results to Jake?

How great would the benefit of therapy be for Jake?

Is the intervention consistent with Jake and his mother'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 the chances of Jake getting 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 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.**

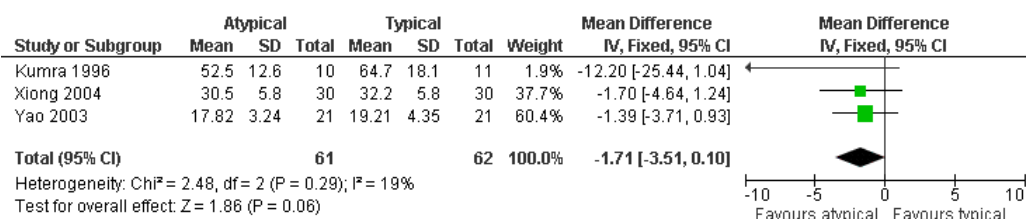
We suggest that the Graph providing data for 'Mental state 1.4.2: mean endpoint score (BPRS, high score = poor)' best fits Jake's mother's request of information about getting 'better'.

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

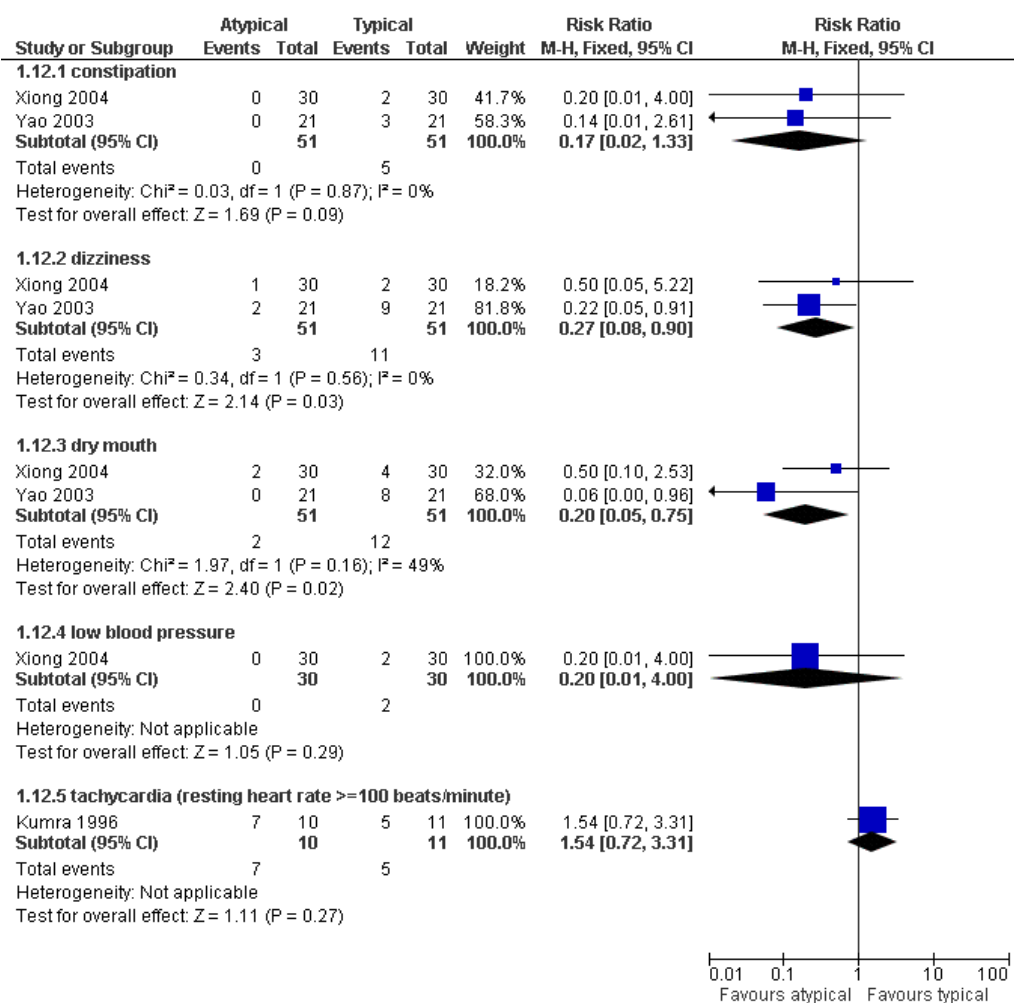


Part 2.4 Understanding the numbers

COMPARISON 1: ATYPICAL vs TYPICAL ANTIPSYCHOTICS (only short term)
Outcome: 1.4 Mental state: 2. Mean endpoint score (BPRS, high score = poor)



COMPARISON 1: ATYPICAL vs TYPICAL ANTIPSYCHOTICS (only short term)
Outcome: 1.12 Adverse effects: 4. Anticholinergic adverse effects (TESS)



Part 3. Jake & his mother arrive

This is the most important part of the journal club - the *practical application* of what knowledge you have gained. Set out two chairs in consultation style. Do not call for a volunteer - just nominate someone to be the clinician and you be Jake's mother.

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 Jake may ask - use them.

Well, Doc, what are the odds of Jake getting better?

Outcome on mental state (Graph 1.4) indicates that there is no real difference between atypical and typical antipsychotics. There is a trend favouring atypical antipsychotics, but it is not statistically significant. See if the Journal Club participants can put across in a supportive way the best evidence as they understand it.

What nasty side effects will my son experience?

You could talk about dizziness, tremors, drowsiness, constipation. Graph 1.12 on the left shows that compared to typical antipsychotics, atypical causes less dizziness and dry mouth, but there is no significant differences found between other side effects. 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 Box 1.

If **Part 3** is going well there are other questions that you may ask - see below:

☒ **What do you think Jake's mother means by 'getting better'?**

She is probably referring to the reduction of symptoms and improvement of social and global functioning. There is, unfortunately, no data available on social functioning, but Graph 1.3 does present data on mental state, which shows no difference between atypical and typical antipsychotics.





Antipsychotic medication for childhood-onset schizophrenia – HANDOUT FOR PARTICIPANTS

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Jake and his mother will arrive soon

What do you think Jake and his mother 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



- 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

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

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

*Jake and his mother arriving 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.

*Jake and his mother arriving in 10 mins

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

Clue: focus on what you think Jake and his mother may ask - main effects and adverse effects - graph number '1.4.2 & 1.12' may be good ones to use

1. Can you put weighted mean difference into words?

2. What is the chance of Jake getting 'better' if he takes atypical antipsychotic?

3. How likely is Jake to experience nasty side effects if he takes atypical antipsychotic?



Jake and his mother 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, 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

Antipsychotic medication for childhood-onset schizophrenia - PARTICIPANTS' CRIB SHEET

The three parts of appraising a review

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

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

b. Should I apply the results to Jake?

How great would the benefit of therapy be for Jake?

Is the intervention consistent with Jake and his mother's values and preferences?

Were all the clinically important outcomes considered?

Are the benefits worth the harms and costs?



Understanding the numbers (Graph 1.4.2)

Outcome on mental state (Graph 1.4) shows that there is no real difference between atypical and typical antipsychotics.

Weighted mean difference is -1.71 , favouring atypical antipsychotic, but confidence interval is -3.51 to 0.10 , which goes over the 'line of no effect' and indicating that there

is a trend favouring atypical antipsychotics, but the difference is not statistically significant.



The Cochrane Library



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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>

Antipsychotic medication for childhood-onset 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