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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

Inside this guide:

Community Mental Health Teams for schizophrenia - 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

from
Malone D, Marriott S, Newton-Howes G, Simmonds S, Tyrer P. Community mental health teams (CMHTs) for people with severe mental illnesses and disordered personality. Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD000270. DOI: 10.1002/14651858.CD000270.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

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 Patient 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

Introduce participants in the journal club to their scenario

Hospital admission rates are increasing in your district. The managers are concerned that Community Mental Health Team (CMHT) is encouraging the revolving door of re-hospitalisation. This is suggestion that the CMHT should be disbanded and a more consultant led service re-instigated. Remembering that this was similar to standard care of years ago, you are called to the managers meeting to justify continuation of the team.

You know that the managers have been on a critical appraisal course. You know that admission has, indeed, been increasing.

Questions for participants:

Q 1. What do you think the managers may ask?

A 1. [Suggestion] "The CMHT is causing admissions, is it not?"

Q 2. Admissions are increasing, is this linked to CMHT practices?

A 2. **Yes**, the two are linked, but admissions would probably be more in standard care (this can be brought out 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 the managers 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 Community Mental Health Team.

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 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 Patient 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 categorize their answers.

Do not be worried by silence.

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 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?

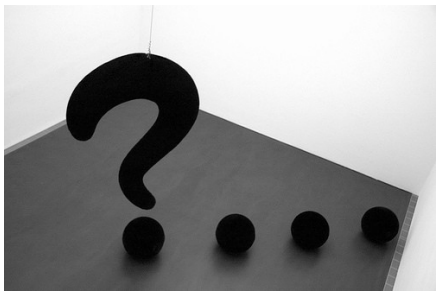
Is there a clinical bottom-line?

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 Patient?

a. Can I apply the results to Patient?

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

b. Should I apply the results to Patient?

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

Is the intervention consistent with Patient'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 'Service use: 1 admitted to hospital–medium term (up to 12 months).' best fits Manager's request of information about 'increasing hospitalization rate'.

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

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

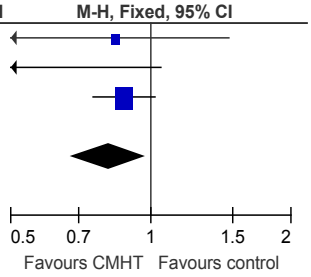
"The CMHT is causing admissions, is it not?"

Part 2.4 A quick a dirty way to work out NNT

Comparison: 1 CMHT versus STANDARD CARE (all diagnoses)
Outcome: 4 Service use: 1. Admitted to hospital - medium term (up to 12 months)

Study or Subgroup	CMHT Events	CMHT Total	Standard care Events	Standard care Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Burns 1993	18	150	26	182	22.3%	0.84 [0.48, 1.47]
Merson 1992	7	48	16	52	14.6%	0.47 [0.21, 1.05]
Tyrer 1998	62	82	63	73	63.2%	0.88 [0.75, 1.02]
Total (95% CI)		**280**		**307**	**100.0%**	**0.81 [0.67, 0.97]**
Total events	87		105			

Heterogeneity: Chi² = 2.77, df = 2 (P = 0.25); I² = 28%
Test for overall effect: Z = 2.24 (P = 0.03)



87 people out of 280 given CMHT were admitted to hospital in the medium term (**31%**) but 105 people out of 307 allocated to the standard care were admitted to hospital in the medium term (**34%**).
So, because a few people would have got better result without CMHT, the proportion *attributable* to CMHT, according to these results, is the difference between the groups (or 34% minus 31% = 3%).
Just round up or down to make it easy. Lets say, in this case, 5%.
So 5% of people in these trials, in the medium term, did not have re-hospitalisation – or put another way, 1 in 20, or put it another way twenty people have to be treated within the CMHT system in order for one more to avoid hospital admission in the medium term compared with the standard level of organisation of care (NNT=20).

Part 3. Managers meeting

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 (for the manager, doctor, service user and nurse lead).

Do not call for a volunteer—just nominate some people to be in each of these roles.

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.

The CMHT is causing admissions, is it not?

See if they can put acros s 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 Cochrane review - there is the impression that, for people not too dissimilar to our clients, about 1 in 20 avoids re-admission to hospital with CMHT in medium term (12 months)."

Admissions are increasing, is this linked to CMHT practices? 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 improvement that the best evidence suggests may not be all that you would want or hope for—but there is the residing suggestion that about 1 in 20 people avoids hospital re-admission in the medium term that is reasonably easily recognisable. That does not necessarily mean a solution but the measures used in these studies could on the other hand have averaged up so much that they missed out on the really important detailed changes ."

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.

Limitations of using this means of calculating NNT is that is does not take into account the baseline risk of the control group and does not give confidence intervals.

If we factoring in baseline risk of the control group the new NNT is 16.

NNT = 16, CI 9 to 99

http://www.nntonline.net/ebm/visualrx/what.asp

CATmaker

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

Box 1. Additional questions

☑ **Do service users like CMHTs any more than standard care?**
This is one for a good argument. Evidence from direct recording of satisfaction favours CMHT, but it's only based on one small trial. Data from the outcome of 'leaving the study early' are more, but equivocal.

☑ **How does CMHT affect the suicide rate?**
Again, a good one for argument in role play. The rate does look as if it is less but the confidence intervals are wide. From these data, CMHT does not statistically significantly reduce the rate - but it may have a clinically meaningful effect.

☑ **What about the cost?**
There are no economic data at all in this review. Savings will occur from reduced admission, and perhaps from reconfiguration of services.

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.

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Community Mental Health Teams 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

from
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Managers will arrive soon

What do you think managers 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, trough 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.

***manager 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.

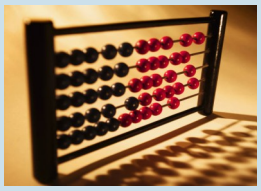
3.

***Managers arrive in 10 mins**

Can you extract numbers that will be useful to you and the managers?

Clue: focus on what you think manager may ask - hospital re-admission rate - graph number 1.4 may be a good one to use

1. Can you put relative risk into words?



The arithmetic is not complicated

2. Can you work out the proportion of hospital re-admission reduction *attributable* to use of CMHT?

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

4. Can you put that into words?

Manager meeting

Is there a good use of words you would want to use?

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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)

CATmaker

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Community Mental Health Teams for schizophrenia - PARTICIPANTS' CRIB SHEET

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Please return to:
Jun Xia
Cochrane Schizophrenia Group
Institute of Mental Health
The Sir Colin Campbell Building
Jubliee Campus
Triumph Road
Nottingham
UK
NG7 2RT
Email: jun.xia@nottingham.ac.uk
Tel: +44 (0)115 823 1287
Fax: +44 (0)115 823 1392

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

Community Mental Health Teams 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