Intervention to reduce weight gain in schizophrenia
– THE LEADERS GUIDE

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:

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 Sarah arrives, 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 – Sarah

Introduce participants in the journal club to their scenario

Sarah is a 48 year old lady with schizophrenia for the last 20 years. She has been treated with anti-psychotic medications for most of this time. She is presently on Risperidone and it seems to be doing well for her in terms of her mental health. Over the years, she has put on about 3 stone in weight and her current BMI is 38. She has tried to lose weight with as much exercise as she can undertake and dietary modification. She has struggled to lose weight and wants to see you about what can be done to help her. She is open to all sorts of interventions, including talking therapies and medication.

Questions for participants:

Q 1. What do you think Sarah may ask?

A 1. [Suggestion] "Of the treatments available what do you think works best?"

Q 2. Could anything have been done to prevent me gaining weight in the first place?

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

Q 3. How effective is Cognitive Behaviour intervention for loosing weight?

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 Sarah 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 interventions to reduce weight gain in 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.

LIST 1:

1.

2.

3.

4.

5.

List 2:

1.

2.

3.

4.

5.

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 Sarah?**

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 Sarah 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.

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 Sarah?

a. Can I apply the results to Sarah?

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

b. Should I apply the results to Sarah?

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

Is the intervention consistent with Sarah'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

How effective is CBT for loosing weight?

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 re-

port 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 'Weight change 9.2.1' best fits Sarah's request of information about getting 'better'.
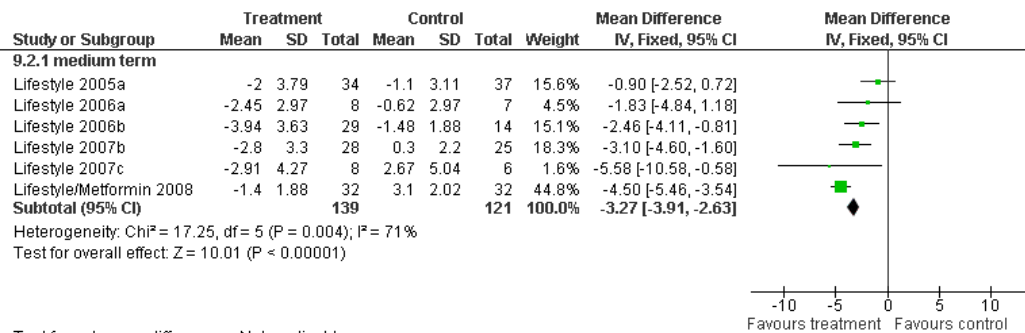
And from **Group 3 get some feel of how applicable the findings are.**
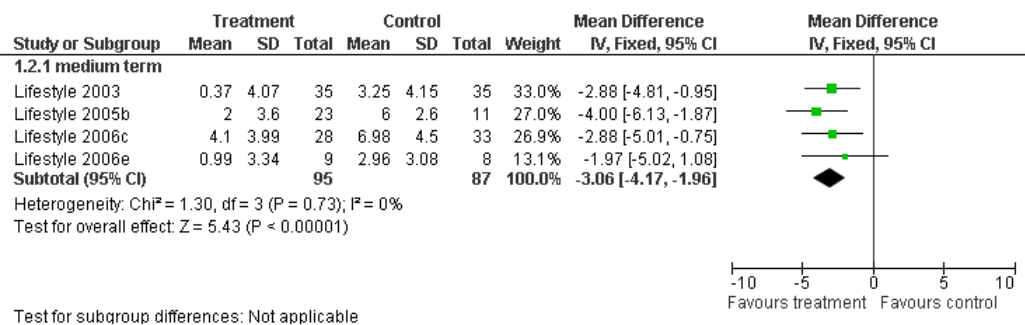
Part 2.4 Understanding the numbers

COMPARISON 9. TREATMENT:1. LIFESTYLE INTERVENTION versus STANDARD CARE
Outcome 9.2 Weight 1. Change (kgs)

Study or Subgroup	Treatment Mean	SD	Total	Control Mean	SD	Total	Weight	Mean Difference IV, Fixed, 95% CI
9.2.1 medium term								
Lifestyle 2005a	-2	3.79	34	-1.1	3.11	37	15.6%	-0.90 [-2.52, 0.72]
Lifestyle 2006a	-2.45	2.97	8	-0.62	2.97	7	4.5%	-1.83 [-4.84, 1.18]
Lifestyle 2006b	-3.94	3.63	29	-1.48	1.88	14	15.1%	-2.46 [-4.11, -0.81]
Lifestyle 2007b	-2.8	3.3	28	0.3	2.2	25	18.3%	-3.10 [-4.60, -1.60]
Lifestyle 2007c	-2.91	4.27	8	2.67	5.04	6	1.6%	-5.58 [-10.58, -0.58]
Lifestyle/Metformin 2008	-1.4	1.88	32	3.1	2.02	32	44.8%	-4.50 [-5.46, -3.54]
Subtotal (95% CI)			139			121	100.0%	-3.27 [-3.91, -2.63]

Heterogeneity: Chi² = 17.25, df = 5 (P = 0.004); I² = 71%
Test for overall effect: Z = 10.01 (P < 0.00001)

Test for subgroup differences: Not applicable

Mean Difference IV, Fixed, 95% CI -10 -5 0 5 10 Favours treatment Favours control

COMPARISON 1. PREVENTION: 1. LIFESTYLE INTERVENTION versus STANDARD CARE
Outcome 1.2 Weight 1. Change (kgs)

Study or Subgroup	Treatment Mean	SD	Total	Control Mean	SD	Total	Weight	Mean Difference IV, Fixed, 95% CI
1.2.1 medium term								
Lifestyle 2003	0.37	4.07	35	3.25	4.15	35	33.0%	-2.88 [-4.81, -0.95]
Lifestyle 2005b	2	3.6	23	6	2.6	11	27.0%	-4.00 [-6.13, -1.87]
Lifestyle 2006c	4.1	3.99	28	6.98	4.5	33	26.9%	-2.88 [-5.01, -0.75]
Lifestyle 2006e	0.99	3.34	9	2.96	3.08	8	13.1%	-1.97 [-5.02, 1.08]
Subtotal (95% CI)			95			87	100.0%	-3.06 [-4.17, -1.96]

Heterogeneity: Chi² = 1.30, df = 3 (P = 0.73); I² = 0%
Test for overall effect: Z = 5.43 (P < 0.00001)

Test for subgroup differences: Not applicable

Mean Difference IV, Fixed, 95% CI -10 -5 0 5 10 Favours treatment Favours control

Part 3. Sarah arrives

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 Sarah.

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 Sarahs may ask - use them.

How effective is Cognitive Behaviour intervention for loosing weight?

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 Cochrane review - there is the impression that most people receive cognitive behavioural intervention do manage to achieve weight loss in 3 months time ."

Could anything have been done to prevent me gaining weight in the first place?

Again there is no right answer but think about how to

put into words what the research outcome really means.

Perhaps - "Well, from a prevention point of view, there is evidence indicating that both cognitive behavioural interventions and antidiabetic agents can effectively prevent weight gain. But the effect of these interventions are immediately evident. Usually people need to keep up the treatment for 3 month and over to see the effect.'

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.**

Box 1. Additional questions

☑ **What about medications, doc, can you prescribe me Sibutramine?**

Sibutramine is H2 antagonist drug - Comparison 10 'H2 ANTAGONIST DRUG versus PLACEBO' has data on short term weight change. See if you can understand the outcome and explain it to Sarah if Sibutramine can help her to lose weight.

☑ **Would Sibutramine help in reducing my BMI?**

The answer is yes, in short term Sibutramine may help Sarah to reduce her BMI. Most people take Sibutramine do manage to reduce BMI by just 8 weeks, but there is no long term data to show if the effect will sustain.

CATmaker

This can be part of a store of
Critically **A**ppraised **T**opics
- see CATmaker online

The Cochrane Library

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.

Intervention to reduce weight gain in schizophrenia

– HANDOUT FOR PARTICIPANTS

Sarah *will* arrive soon

What do you think Sarah may ask?

List:

1.

2.

3.

4.

5.

> If you had not had this paper fall into your lap where might you have gone for reliable information?

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

1.

2.

3.

4.

5.

***Sarah arrives in 30 mins**

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

After discussion do you want to change the key points you need to know to see if this review can help?*

1.

2.

3.

*Sarah arrives in 10 mins

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

Clue: focus on what you think Sarah may ask - main effects and adverse effects - graph 9.2.1 may be a good one to use

1. Do you understand weighted mean difference?

2. What did the evidence say about the effectiveness of cognitive behavioral interventions?

3. Could cognitive behavioral intervention have prevented Sarah's weight gain in the first place?

The arithmetic is not complicated

Sarah arrives

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

Intervention to reduce weight gain in schizophrenia

– PARTICIPANTS' CRIB SHEET

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A Understanding the numbers – Graph 9.2.1

There is the residing evidence that cognitive behavioural interventions are effective both in the prevention and treatment of weight gain in people with schizophrenia. Most people treated with this kind of interventions do manage to achieve weight lose by about 12 weeks (Graph 9.2.1, N=260, WMD=-3.27, CI –3.91 to –2.63).

In prevention trials, about 1 in 13 people discontinues the treatment within 12 weeks, but the same doesn't apply to people in treatment trials.

Thank you

This is one of 40 Cochrane Schizo-phrenia Group Guides for Journal Clubs

A full list is found on

http://szg.cochrane.org/journal-club

Intervention to reduce weight gain in 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