# The Cochrane Library



# ocational rehabilitation for people with severe mental illness

## - THE LEADERS GUIDE

Produced by the Editorial base of the Cochrane Schizophrenia Group <a href="http://szg.cochrane.org/en/index.html">http://szg.cochrane.org/en/index.html</a>, email: jun.xia@nottingham.ac.uk

#### from

Crowther R, Marshall M, Bond GR, Huxley P. Vocational rehabilitation for people with severe mental illness. *Cochrane Database of Systematic Reviews* 2001, Issue 2. Art. No.: CD003080. DOI: 10.1002/14651858.CD003080.

#### **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:**

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 A quick and dirty way to work out NNT	4
Part 3. The occupational therapist arrives	5
Participants' worksheet	6-7
Participants crib sheet	8
Feedback sheet	9

## **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



**Pre-vocational class** 

#### PRINTING GUIDE

Pages 1-5 - one copy for you

Pages 6-7 - one copy for each participant - distributed at **start** of journal club

Page 8— one copy for each participant distributed at **end** of journal club

Page 9 - 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 the occupational therapist 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 - the occupational therapist

#### Introduce participants in the journal club to their scenario

People who are recovering from serious mental illness are asked to do some low-grade work before attempting to enter the real world placement directly in competitive employment. The occupational therapist working in your team has long been providing for people an education package that begins to prepare people to enter employment. This involves sheltered

working environment, where people are asked to undertake some rather low-grade work. You are shortly to meet with the occupational therapist in order to discuss working practices.



#### Questions for participants:

- Q 1. What do you think the occupational therapist may ask?
- A 1. [Suggestion] "I have helped lots of people find jobs in the past what is the problem now?"
- Q 2. What do you think the clinician/manager may ask?
- A 2. [Suggestion] "Is there a better way of doing things?"
- Q 3. What do you think 'better' means?
- A 3. Again, list answers.



Take time to read and think about the review this is the only timeconsuming 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 1.2 Setting the scene - the Journal club

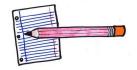
#### Complicate the scenario by adding the need to attend this journal club

Knowing you are due to see the occupational therapist 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 vocational rehabilitation.



#### 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 the occupational therapist now arrives 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.

### 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 bottomline?

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 occupational therapist?

# a. Can I apply the results to my service users?

Are my service users so different from those in the trial that the results don't apply?

# b. Should I apply the results to my service users?

Is the intervention consistent with service users' 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



"Is there a better way of doing things?"

## 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 partici-

pants (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.

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





### Part 2.4 A quick and dirty way to work out NNT

COMPARISON 8: SUPPORTED EMPLOYMENT (ALL APPROACHES) versus PRE-VOCATIONAL TRAINING

	Treatm	ent	Contr	ol		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% C	M-H, Fixed, 95% CI
8.1.1 at 9 months							
Drake-New Hampshire1	39	74	59	69	36.2%	0.62 [0.49, 0.78]	-
Drake-Washington	52	76	76	76	45.4%	0.69 [0.59, 0.80]	-
McFarlane-New York	25	37	29	32	18.4%	0.75 [0.58, 0.96]	
Subtotal (95% CI)		187		177	100.0%	0.67 [0.60, 0.76]	<b>•</b>
Total events	116		164				
Heterogeneity: Chi <sup>2</sup> = 1.25	5, df = 2 (P	= 0.53	); I <sup>2</sup> = 0%				
Test for overall effect: Z =	6.58 (P <	0.0000	1)				
8.1.2 at 12 months							
Bond-Indiana	33	43	37	43	17.5%	0.89 [0.73, 1.09]	
Drake-New Hampshire1	47	74	53	69	26.0%	0.83 [0.67, 1.03]	
Drake-Washington	56	76	74	76	35.1%	0.76 [0.66, 0.87]	_
Gervey-New York	6	22	10	12	6.1%	0.33 [0.16, 0.68]	4
McFarlane-New York	23	37	30	32	15.3%	0.66 [0.51, 0.87]	
Subtotal (95% CI)		252	-	232	100.0%	0.76 [0.69, 0.84]	<b>▲</b> I
Total events	165		204				
Heterogeneity: Chi <sup>2</sup> = 9.1	5, df = 4 (P	= 0.06	); I <sup>2</sup> = 56%	, 0			
Test for overall effect: Z =	5.53 (P <	0.0000	1)				
8.1.3 at 24 months							
Bond-Indiana	37	43	40	43	54.6%	0.93 [0.80, 1.07]	
McFarlane-New York	31	37	31	32	45.4%	0.93 [0.80, 1.07]	
Subtotal (95% CI)	31	80	31		100.0%	0.90 [0.81, 1.00]	•
Total events	68		71		/0		•
Heterogeneity: Chi <sup>2</sup> = 0.39		= 0.53					
Test for overall effect: Z =	,		,,				
		00,					
							<del></del>
							0.5 0.7 1 1.5 2
							Favours Treatment Favours Control

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.

In this case factoring in baseline risk of the control group does not make a difference.

NNT = 5,95% CI 4-8

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



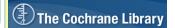
This can be part of a store of Critically Appraised Topics - see CATmaker online

165 people out of 225 receive supported employment were **not** in competitive employment at 12 months follow up (**73**%) but 204 people out of 232 allocated to pre-vocational training group were not in competitive employment during the same period (**88**%). So, because a few people would have been in competitive employment without supported employment, the proportion <u>attributable</u> to taking supported employment, according to these results, is the difference between the groups (or 88% minus 73% = 15%).

So 15% of people in these trials, at 12 months follow up, were in competitive employment – or put another way, 1 in 7, or put another way NNT = 7.

#### 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.



## Part 3. Occupational therapist 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 the occupational therapist.

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 the occupational therapist may ask—use them.

"I have helped lots of people find jobs in the past - what is the problem now?"

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:

"When pre-vocational training is compared to supported employment, there is evidence show that at 9 and 12 months post intervention follow up, people in the supported employment group are more likely to be in competitive employment - about 1 in 7 is in competitive employment at 12 months follow up."

#### "Is there a better way of doing things?"

Again there is no right answer but think about how to put into words what the research outcome really means.

Perhaps - "The evidence suggests supported employment is more effective than pre-vocational training in helping the service users obtain competitive employment - there is the residing suggestion that about 1 in 7 people stay in competitive employment at 12 months post intervention that is reasonably easily recognisable. Therefore, compare to pre-vocational training, supported employment is a better way."

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.



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

#### **Box 1. Additional questions**

## Is this finding strong enough to necessitate a change in practice?

It could well be. Changes should not be dictated by numbers alone but this is compelling that sheltered employment may not be as good as support within the workplace. However, this dose not mean that some people are better managed in sheltered environment - this is where judicious use of best evidence is called for - one size does not suit all.

But will service users like this immediate return to the working environment?  $\mathbf{\Lambda}$ There is no clear measuring of satisfaction but no indication from the outcome of 'Numbers not participating in the programme' that service users disliked the approach.

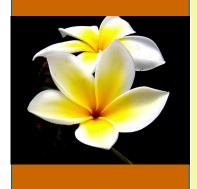


One size does not fit all!



**End on a positive note.** Feedback how in a matter of minutes they have got though the The Cochrane Library bare bones of a big review, appraised and applied it—and, you hope, enjoyed doing it.

# The Cochrane Library



#### 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

# ocational rehabilitation for people with severe mental ill-ness

## HANDOUT FOR PARTICIPANTS

Produced by the Editorial base of the Cochrane Schizophrenia Group <a href="http://szg.cochrane.org/en/index.html">http://szg.cochrane.org/en/index.html</a>, email: jun.xia@nottingham.ac.uk

#### from

Crowther R, Marshall M, Bond GR, Huxley P. Vocational rehabilitation for people with severe mental illness. Cochrane Database of Systematic Reviews 2001, Issue 2. Art. No.: CD003080. DOI: 10.1002/14651858.CD003080.

# The occupational therapist $\underline{\textit{will}}$ arrive soon What do you think the occupational therapist 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.

\*the occupational therapist arrives in 30 mins

After discussion do you want to change the key point to know to see if this review can help?*	ts you need
1.	
2.	
3.	
*The occupational therapist arrives in 10 mins	
Can you extract numbers that will be useful to you and the occupation	nal therapist?
Clue: focus on what you think the occupational therapist may ask - sustained employmenumber '8.1.3' may be a good one to use	ent rate - graph
1. Can you put relative risk into words?	
2. Can you work out the proportion of improvements attributable to use of supported employment?	The arithmetic is not complicated
3. Can you work out the number needed to treat?	
4. Can you put that into words?	
The occupational therapist arrives Is there a good use of words you would want to use?	

# The Cochrane Library



#### 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. 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

# ocational rehabilitation for people with severe mental ill-ness

## - 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 <u>are</u> 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 occupational therapist?
- a. Can I apply the results to my service users?

Are my service users so different from those in the trial that the results don't apply?

# b. Should I apply the results to my service users?

Is the intervention consistent with service users' values and preferences?

Were all the clinically important outcomes considered?

Are the benefits worth the harms and costs?



## A quick and dirty way to work out NNT (Graph 8.1.3)

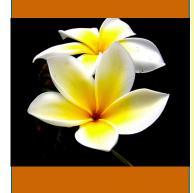
165 people out of 225 receive supported employment were **not** in competitive employment at 12 months follow up (**73**%) but 204 people out of 232 allocated to pre-vocational training group were not in competitive employment dur-

ing the same period (88%). So, because a few people would have been in competitive employment without supported employment, the proportion attributable to taking supported employment, according to these results, is the difference between

the groups (or 88% minus 73% = 15%).

So 15% of people in these trials, at 12 months follow up, were in competitive employment – or put another way, 1 in 7, or put another way NNT = 7.





#### Please return to:

Jun Xia
Cochrane Schizophrenia Group
Division of Psychiatry
University of Nottingham
The Sir Colin Campbell Building
Jubliee Campus
Innovation Park, Triumph Road
Nottingham
NG7 2RT
UK

E-mail:

jun.xia@Nottingham.ac.uk Tel: +44 (0)115 823 1287 Fax: +44 (0)115 823 1392

# Thank you

Free text feedback

This is one of 40 Cochrane Schizophrenia Group Guides for Journal Clubs

A full list is found on

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

# ocational rehabilitation for people with severe mental ill-ness

- FEEDBACK

Date and place of journal club					
1. How many attended?					
About					
2. What was the background of th	ne 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)