

# Best Evidence Summaries of Topics in Mental Healthcare

## **BEST** *in* **MH** *clinical question-answering service*

### **Question**

In adults of working age with an eating disorder diagnosis, how effective is motivational interviewing, compared to treatment as usual/any other intervention, for improving patient outcomes?

### **Clarification of question using PICO structure**

*Patients:* Adults of working age with eating disorders

*Intervention:* Motivational Interviewing

*Comparator:* Treatment as usual/Any other intervention

*Outcome:* Improved patient outcomes

### **Clinical and research implications**

No definite clinical implications can be made from the available evidence. The authors of one systematic review suggested that an MI approach can be used as an introduction or a preliminary phase before any of the interim behaviour change processes that may be needed in order to produce symptom change. The authors of the systematic review also stated that more rigorous studies, including RCTs, are needed to ascertain the clinical significance of the use of MI in eating disorders. These studies need to define what behaviour change techniques were used (in addition to the MI/MET condition) in the treatment groups.

### **What does the evidence say?**

*Number of included studies/reviews (number of participants)*

One systematic review (SR) met the inclusion criteria for this BEST summary (MacDonald 2012). The aim of this SR was to examine the effectiveness of interventions that included the principles and techniques of MI and its adaptations (MET) in the treatment of eating disorders.

*Main Findings*

The SR included six controlled studies and seven non-controlled studies, but only the controlled studies have been reported in this BEST summary. One of the controlled studies reported significant reductions in symptoms including binge eating, depression, self esteem/quality of life with an intervention that included MI + self-help manual compared to the manual alone. Another three studies reported a higher readiness to change with a MI intervention. There were no significant

differences between groups for other outcomes reported, including behavioural and attitudinal features.

#### *Authors Conclusions*

The authors stated that the studies included in the review do indicate the potential for using MI in the field of eating disorders, particularly with respect to 'readiness for change'.

#### *Reliability of conclusions/Strength of evidence*

Aspects of the SR were not well-reported including the number of reviewers involved in the screening and data extraction processes. In addition, no formal quality assessment was reported. The authors stated that many of the study samples were small. It was not explicitly reported how many of the included studies were RCTs. Given the unknown quality of the included studies, the reliability of their results, and hence any conclusion made from them, are uncertain.

#### **What do guidelines say?**

NICE clinical guideline CG9 describes the increasing use of motivation focussed care;

'Specialist eating disorder services are increasingly adopting a motivational approach to assessment and induction into treatment (Bauer & Treasure, 2003).' Pg. 35

'More recently there has been interest in the use of motivational interventions in the engagement and treatment of people with anorexia nervosa (Treasure & Ward, 1997; Vitousek *et al.*, 1998), however, RCTs in this area are as yet lacking.' Pg. 81

'Whilst a forceful approach may result in a degree of weight gain in anorexia nervosa, clinicians are increasingly drawing attention to the importance of engagement and positive motivation if short-term gains are to be maintained in the long term, whatever the treatment setting (Ward *et al.*, 1996).' Pg. 37

However, the guideline makes no direct recommendations for the use of motivational interviewing as an effective intervention for an eating disorder population.

**Date question received:** 17/06/2013

**Date searches conducted:** 18/06/2013

**Date answer completed:** 24/06/2013

## References

### Guidelines

1. National Institute for Health and Care Excellence (2004) Eating Disorders. Core Interventions in the Treatment and Management of Anorexia Nervosa, Bulimia Nervosa and Related Eating Disorders. CG9. London: National Institute for Health and Care Excellence.  
<http://www.nice.org.uk/nicedia/live/10932/29220/29220.pdf>

### Systematic Review

2. MacDonald P, Hibbs R, Corfield F, Treasure J. The use of motivational interviewing in eating disorders: A systematic review. *Psychiatry Research* 200 (2012) 1–11.






## Results


### Systematic Reviews


Author (year)	Search Date	Inclusion criteria	Number of included studies	Summary of results	Risk of bias
Macdonald (2012)	April 2012	<p>Studies included in this review were required to have a quantitative analysis of a guided behavioural intervention that referred to some aspect of motivational interviewing. Studies of any length were included in the review.</p> <p>Outcomes of (1) psychological distress, (2) self esteem/quality of life, (3) stage of change / readiness and motivation to change, (4) eating behaviours /attitudes/ symptomology, (5) carer burden, and (6) expressed emotion were examined.</p>	<p>13 studies were included in this review. 10 examined the intervention for patient outcomes, and 3 for carer outcomes. Of the 10 studied that examined patient outcomes, 6 had a comparison/ control group</p>	<p><b>Psychological distress</b> Of 6 studies that evaluated this outcome, two utilised a control/comparison group. In one of these studies, MI + self-help manual was compared with a self help manual only (Cassin et al. 2008). There was a moderate change in depression at 16 week follow-up in the adapted MI + manual group (<math>p &lt; 0.001</math>). Another study compared MET (motivational enhancement training) vs. treatment as usual, but no differences for this outcome were reported (Dean et al. 2008).</p> <p><b>Self-esteem/quality of life</b> Of 3 studies that evaluated this outcome, one comparative study reported better self esteem (using the Rosenberg Self-Esteem Scale) (<math>p &lt; 0.01</math>) and higher scores in The Extended Satisfaction with Life Scale (ESWLS) (<math>p &lt; 0.05</math>) at 16 weeks in a MI + manual group compared with a manual group (Cassin et al. 2008).</p> <p><b>Eating behaviours, attitudes and symptomatology</b> Eight studies measured this outcome, of which four used a randomized controlled trial (RCT) or case control design (Dean et al. 2008; Dunn et al. 2006; Treasure et al. 1999; Wade et al. 2009). Four RCTs reported no significant changes in behavioural and attitudinal features of EDs (Dunn et al. 2006; Dean et al,</p>	Unclear


				<p>2008; Wade et al. 2009; Katzman et al. 2010). Treasure et al. (1999) also found no differences between MET and CBT in terms of reducing bulimic symptoms. There was a significant difference between the two groups in the Dean et al. (2008) study on one of the EDI sub-scales “drive for thinness”. However, it was the Treatment As Usual (TAU) group that reported a significantly greater reduction compared with the MET group.</p> <p><b>Stage of change/readiness/motivation to change</b>  Eight studies measured increasing readiness or motivation to change, five of which utilised a RCT or case control design (Dean et al. 2008; Dunn et al. 2006; Katzman et al. 2010; Treasure et al. 1999; Wade et al. 2009). Three out of the five RCT studies found a higher readiness to change (Dean et al. 2008; Dunn et al. 2006; Wade et al. 2009).</p>	
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**Risk of Bias: SRs**

Author (year)	Risk of Bias				
	Inclusion criteria	Searches	Review Process	Quality assessment	Synthesis
Macdonald 2012					

 Low Risk

 High Risk

 Unclear Risk

## Search Details

Source	Search Strategy	Number of hits	Relevant evidence identified
<b><i>SRs and Guidelines</i></b>			
NICE	(Motivational interviewing) AND (Eating disorders)	24	1
DARE	((motivational OR motivation OR motivating OR motivate OR behavi* OR motivat*) AND (interview* OR session* OR counsel* OR practi*)) IN DARE 2168 Delete 2 (eating ADJ2 disorder*) IN DARE 84 Delete 3 (anorexi* OR bulimi* OR binge) IN DARE 137 Delete 4 MeSH DESCRIPTOR Binge-Eating Disorder EXPLODE ALL TREES 0 Delete 5 MeSH DESCRIPTOR Eating Disorders EXPLODE ALL TREES 64 Delete 6 MeSH DESCRIPTOR Anorexia EXPLODE ALL TREES 7 Delete 7 MeSH DESCRIPTOR Anorexia Nervosa EXPLODE ALL TREES 26 Delete 8 MeSH DESCRIPTOR Bulimia EXPLODE ALL TREES 17 Delete 9 MeSH DESCRIPTOR Bulimia Nervosa EXPLODE ALL TREES 12 Delete 10 #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 209 Delete 11 #1 AND #10		
<b><i>Primary studies</i></b>			
CENTRAL	#1 "motivational interviewing":ti,ab,kw (Word variations have been searched) 648	18	

	<p>#2Enter terms for search"eating disorders" 1014</p> <p>#3Enter terms for searchanorexia 2021</p> <p>#4Enter terms for searchbulimia826</p> <p>#5Enter terms for searchbinge* 784</p> <p>#6Enter terms for searchpurg* 402</p> <p>#7Enter terms for search#2 or #3 or #4 or #5 or #6 3886</p> <p>#8Enter terms for search#1 and #7 27</p>		
PsycINFO	<ol style="list-style-type: none"> <li>1. PsycINFO; exp EATING DISORDERS/; 21740 results.</li> <li>2. PsycINFO; (eating adj3 disorder*).ti,ab; 16843 results.</li> <li>3. PsycINFO; (anorexia OR bulimia).ti,ab; 14875 results.</li> <li>4. PsycINFO; (binge* OR purg*).ti,ab; 7951 results.</li> <li>5. PsycINFO; 1 OR 2 OR 3 OR 4; 31499 results.</li> <li>6. PsycINFO; "motivational interviewing".ti,ab; 1728 results.</li> <li>7. PsycINFO; MOTIVATIONAL INTERVIEWING/; 1035 results.</li> <li>8. PsycINFO; 6 OR 7; 1838 results.</li> <li>9. PsycINFO; 5 AND 8; 86 results.</li> <li>10. PsycINFO; CLINICAL TRIALS/; 6785 results.</li> <li>11. PsycINFO; random*.ti,ab; 119386 results.</li> <li>12. PsycINFO; groups*.ti,ab; 345738 results.</li> <li>13. PsycINFO; (doubl* adj3 blind*).ti,ab; 17330 results.</li> <li>14. PsycINFO; (singl* adj3 blind*).ti,ab; 1490 results.</li> <li>15. PsycINFO; EXPERIMENTAL DESIGN/; 8643 results.</li> <li>16. PsycINFO; controlled.ti,ab; 74434 results.</li> <li>17. PsycINFO; (clinical adj3 study).ti,ab; 7355 results.</li> <li>18. PsycINFO; trial.ti,ab; 62835 results.</li> <li>19. PsycINFO; "treatment outcome clinical trial".md; 24125 results.</li> <li>20. PsycINFO; 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16</li> </ol>	29	

	OR 17 OR 18 OR 19; 532918 results. 21. PsycINFO; 9 AND 20; 29 results.		
Embase	10. EMBASE; exp EATING DISORDERS/; 33695 results. 11. EMBASE; (eating adj3 disorder*).ti,ab; 16167 results. 12. EMBASE; (anorexia OR bulimia).ti,ab; 30306 results. 13. EMBASE; (binge* OR purg*).ti,ab; 15655 results. 14. EMBASE; 10 OR 11 OR 12 OR 13; 61513 results. 15. EMBASE; "motivational interviewing".ti,ab; 2058 results. 16. EMBASE; MOTIVATIONAL INTERVIEWING/; 362 results. 17. EMBASE; 15 OR 16; 2130 results. 18. EMBASE; 14 AND 17; 73 results. 19. EMBASE; random*.tw; 807943 results. 20. EMBASE; factorial*.tw; 20811 results. 21. EMBASE; placebo*.tw; 189290 results. 22. EMBASE; (crossover* OR cross-over*).tw; 65815 results. 23. EMBASE; (doubl* adj3 blind*).tw; 136964 results. 24. EMBASE; (singl* adj3 blind*).tw; 15493 results. 25. EMBASE; assign*.tw; 222142 results. 26. EMBASE; allocat*.tw; 75702 results. 27. EMBASE; volunteer*.tw; 167944 results. 28. EMBASE; CROSSOVER PROCEDURE/; 37150 results. 29. EMBASE; DOUBLE-BLIND PROCEDURE/; 115062 results. 30. EMBASE; SINGLE-BLIND PROCEDURE/; 17488 results. 31. EMBASE; RANDOMIZED CONTROLLED TRIAL/;	29	



	<p>344075 results.</p> <p>32. EMBASE; 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31; 1315243 results.</p> <p>33. EMBASE; 18 AND 32; 29 results.</p>		
Medline	<p>19. MEDLINE; exp EATING DISORDERS/; 21355 results.</p> <p>20. MEDLINE; (eating adj3 disorder*).ti,ab; 12434 results.</p> <p>21. MEDLINE; (anorexia OR bulimia).ti,ab; 24509 results.</p> <p>22. MEDLINE; (binge* OR purg*).ti,ab; 13043 results.</p> <p>23. MEDLINE; 19 OR 20 OR 21 OR 22; 47887 results.</p> <p>24. MEDLINE; "motivational interviewing".ti,ab; 1650 results.</p> <p>25. MEDLINE; MOTIVATIONAL INTERVIEWING/; 93 results.</p> <p>26. MEDLINE; 24 OR 25; 1676 results.</p> <p>27. MEDLINE; 23 AND 26; 36 results.</p> <p>28. MEDLINE; "randomized controlled trial".pt; 367179 results.</p> <p>29. MEDLINE; "controlled clinical trial".pt; 87694 results.</p> <p>30. MEDLINE; randomi?ed.ab; 337780 results.</p> <p>31. MEDLINE; placebo.ab; 151157 results.</p> <p>32. MEDLINE; "drug therapy".fs; 1680860 results.</p> <p>33. MEDLINE; randomly.ab; 202691 results.</p> <p>34. MEDLINE; trial.ab; 293128 results.</p> <p>35. MEDLINE; groups.ab; 1296939 results.</p> <p>36. MEDLINE; 28 OR 29 OR 30 OR 31 OR 32 OR 33 OR 34 OR 35; 3253160 results.</p> <p>37. MEDLINE; 27 AND 36; 22 results.</p>	22	
CINAHL	<p>38. CINAHL; exp EATING DISORDERS/; 7870 results.</p> <p>39. CINAHL; (eating adj3 disorder*).ti,ab; 4403 results.</p>	36	

	40. CINAHL; (anorexia OR bulimia).ti,ab; 3720 results. 41. CINAHL; (binge* OR purg*).ti,ab; 2387 results. 42. CINAHL; 38 OR 39 OR 40 OR 41; 10450 results. 43. CINAHL; "motivational interviewing".ti,ab; 799 results. 44. CINAHL; MOTIVATIONAL INTERVIEWING/; 845 results. 45. CINAHL; 43 OR 44; 1302 results. 46. CINAHL; 42 AND 45; 36 results.		
<b>Summary</b>	<b>NA</b>	<b>NA</b>	

### Disclaimer

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