

Best Evidence Summaries of Topics in Mental Healthcare

BEST in MH *clinical question-answering service*

Question

“For patients with eating disorders, how effective are psychoeducation groups, compared with any other intervention, for improving patient outcomes?”

Clarification of question using PICO structure

Patients: Patients with eating disorders
Intervention: Psychoeducation groups
Comparator: Any
Outcome: Any patient outcomes

Clinical and research implications

Two small, poor quality trials provided evidence for this question. There was some evidence that a computer-based health education package increased both knowledge and positive attitudes in patients with anorexia, bulimia or both; and that adding CBT to group psycho-education could reduce bingeing and purging episodes in patients with bulimia. However, neither trial directly compared group psycho-education with an appropriate comparator. They were also both small (54 and 58 patients) with some limitations in their reporting therefore further research using well-designed RCTs is warranted. One trial had an initial non-randomised component which found that bulimic patients who were not in remission from bingeing and purging after the group psycho-education were significantly more depressed and symptomatic and recommended that further research is needed into treatment options for these patients.

What does the evidence say?

Number of included studies/reviews (number of participants)

Two randomised controlled trials were included. One was in a mixed population with anorexia, bulimia or both (n=54) which compared a computer-based health education package with a placebo non-directive computer package. The other trial was in bulimic patients only (n=58) and compared the effects of adding CBT to group psycho-education with no further intervention (psycho-education alone).

Main Findings

The trial in the mixed anorexic and bulimic population found that those patients receiving the computerised health education package had a statistically significant increase in both knowledge and positive attitudes compared with the control group after the intervention (although the duration of the intervention and the timing of the assessments were not reported).

The trial of bulimic patients found that those patients receiving psycho-education with CBT reported statistically significantly fewer bingeing episodes and purging episodes at post-treatment (16 weeks) and a later follow-up (32 weeks), compared with those receiving no further treatment after psycho-education. Significantly more patients were in complete remission (no bingeing or purging symptoms) at post-treatment with psycho-education with CBT (43.2% compared with 10.5%). There was no statistically significant difference in eating disorder symptoms between the groups.

Authors Conclusions

The mixed population trial concluded that the computerised health education package (DIET) improved both knowledge and attitude in the sample of patients with eating disorders and was also acceptable, easy to use and useful for the patients. As behavioural changes cannot be assumed to follow changes in attitude further research is needed to assess if computerised health education is more than just a possible adjunctive therapy.

The trial of bulimic patients concluded that their results provided limited support for offering individual CBT to subjects once they have completed an initial trial of group psycho-education. A clinical implication is how non-remitters should be treated (those still bingeing and purging) as this

study showed that they were significantly more depressed and symptomatic after psycho-education and treatment options for these patients require further research.

Reliability of conclusions/Strength of evidence

Both of these trials were small and considered to be at a high risk of bias as certain aspects were unclear, especially details of the methods of randomisation and allocation concealment. They also did not provide much information about the included patients so it is difficult to assess the generalisability of their results to clinical practice. Although both trials evaluated some form of psycho-education only one was of a group intervention, the other used a computer-based package which provided the intervention on an individual basis. The group trial evaluated the addition of CBT to group psycho-education and both groups received the same psycho-education programme so the main comparison was between adding CBT to psycho-education and stopping psycho-education. Therefore, there was a lack of evidence to directly answer this question.

What do guidelines say?

Neither National Institute for Health and Care Excellence (NICE) nor Scottish Intercollegiate Guidelines Network (SIGN) guidelines comment upon the effectiveness of pure psycho-education groups for the treatment of eating disorders.

Date question received: 03/12/2014
Date searches conducted: 17/12/2014
Date answer completed: 09/01/2015

References

- Andrewes, D. G., Mulder, C., O'connor, P., McLennan, J., Say, S., Derham, H., & Weigall, S. (1996). Computerised psychoeducation for patients with eating disorders. *Australian & New Zealand Journal of Psychiatry*, 30(4), 492-497.
- Davis, R., McVey, G., Heinmaa, M., Rockert, W., & Kennedy, S. (1999). Sequencing of cognitive-behavioral treatments for bulimia nervosa. *International Journal of Eating Disorders*, 25(4), 361-374.

Results

RCTs

| Author (year) | Inclusion criteria | Number of participants | Summary of results | Risk of bias |
|------------------------|---|--|---|--|
| Andrewes et al. (1996) | <p><i>Participants:</i> Patients with DSM-III-R anorexia nervosa or bulimia nervosa, recruited from specialised clinics.</p> <p><i>Intervention:</i> Computer-based health education package (DIET). This contained information about dangers and myths of certain dieting methods, and information about the underlying mechanisms of eating disorders. This was used twice, with a week-long interval in between.</p> <p><i>Comparator:</i> Placebo computer-based non-directive counselling programme (CARL). This was used twice, with a week-long interval in between.</p> <p><i>Outcomes:</i> Eating disorders knowledge (Eating Disorders Knowledge Questionnaire; EDKQ), Eating disorders attitudes (Eating Disorders Attitude Questionnaire; EDAQ and also on a 10 cm visual analogue scale). Outcomes were measured before and after the intervention but the actual times were not reported.</p> | <p>N = 54 (Intervention = 27; Comparator = 27)</p> | <p>27 patients were randomised in each group of which 14 had anorexia nervosa, 9 had bulimia nervosa and 4 had both anorexia and bulimia. The mean age was 22 years. It appears that all were female although this was not reported.</p> <p>The DIET group showed a significantly greater increase in knowledge and a greater change in positive attitude compared with the control group. For attitudes the DIET group had a larger mean increase in EDAQ score from pre- to post-intervention of 17.9 compared to 0.9 for the control group. For knowledge the DIET group also had a larger increase in EDKG score of 14.3 compared to 2.7 for the control group.</p> | <p>High</p> <p>In general there was a lack of information about the trial methods, participants and results.</p> <p>There was no information about the methods of randomisation and allocation concealment. A placebo computer package was used so it appears (although not explicitly stated) that patients and physicians were blinded. There was no information about the blinding of outcome assessments.</p> <p>All patients appear to have been included in the results but the not all outcomes</p> |

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| | | | | were fully reported. |
| Davis et al. (1999) | <p><i>Participants:</i> Patients with DSM-III-R bulimia nervosa. Inclusions: minimum 6-month duration of illness; 85-125% of matched population mean weight. Exclusions: ongoing treatment; immediate suicidal risk; psychosis; acute medical instability.</p> <p><i>Intervention:</i> Psycho-education (PE) followed by individual CBT. Six 90-minute sessions, providing information about the recovery process, self-care, and advice for specific cognitive and behavioural change strategies given for 16 weeks.</p> <p><i>Comparator:</i> Psycho-education followed by no further treatment (six 90-min sessions for 16 weeks) using the same methods as the intervention group.</p> <p><i>Outcomes:</i> Eating disorder symptoms (Eating Disorders Examination Interview; EDE); depression (Beck Depression Inventory; BDI); distress symptoms (Brief Symptom Inventory; BSI); social functioning (Social Adjustment Scale; SAS); self-esteem (Rosenberg Self-Esteem Scale; RSS). Measured after the 16 week treatment period (post-treatment) and after a further 16 weeks (follow-up).</p> | <p>N = 58 (PE + CBT = 39; PE alone = 19)</p> | <p>The randomised trial was the second part of the research study. Originally 71 patients all received group PE for 6 weeks. They were then reassessed and randomised to PE + CBT or no further treatment (PE alone). Each session also included other clinic patients who were not involved in the study (5-8 study patients and 6-16 clinic patients).</p> <p>Patients were aged between 18 and 41 (mean 27.1) years, all were female and 71% had been referred to an eating disorder outpatient clinic at a hospital. The mean weight at baseline was 132.2 lbs, the mean duration of bulimic symptoms was 7.6 years and 34% had previously had anorexia nervosa.</p> <p>Two patients dropped out of CBT leaving 37 in the PE+ CBT group. Patients receiving PE+CBT reported significantly fewer bingeing episodes at post-treatment ($p < 0.03$) and follow-up ($p < 0.02$) compared to those receiving PE alone. They also reported fewer purging episodes at post-treatment ($p < 0.002$) and follow-up ($p <$</p> | <p>High</p> <p>Some aspects of the trial methods such as the methods of randomisation and allocation concealment were not reported. Baseline patient characteristics were not reported for each treatment group so it was not possible to judge the comparability of the groups.</p> <p>Given the nature of the interventions blinding of patients and physicians was not possible. Outcomes were assessed by one of two independent assessment clinicians not involved in patient care so outcome assessment is likely to have been blind to treatment group.</p> <p>Only 2 participants were excluded from the analysis</p> |

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| | | | <p>0.012). There was no statistically significant difference between groups in eating disorder symptoms (EDE) at either assessment.</p> <p>For the complete remission of bingeing and purging symptoms significantly more PE+CBT patients (43.2%) were in remission at post-treatment compared to PE alone patients (10.5%, $p < 0.02$).</p> | <p>and all outcomes appear to have been reported.</p> |
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Risk of Bias:

RCTs

| Study | RISK OF BIAS | | | | | |
|------------------------|-------------------|------------------------|--|--------------------------------|-------------------------|---------------------|
| | Random allocation | Allocation concealment | Blinding of participants and personnel | Blinding of outcome assessment | Incomplete outcome data | Selective Reporting |
| Andrewes et al. (1996) | ? | ? | 😊 | ? | 😊 | 😞 |
| Davis et al. (1999) | ? | ? | 😞 | 😊 | 😊 | 😊 |



Low Risk



High Risk



Unclear Risk

Search Details

| Source | Search Strategy | Number of hits | Relevant evidence identified |
|----------------------------------|--|----------------|------------------------------|
| <i>SRs and Guidelines</i> | | | |
| NICE | eating psychoeducation | 10 | 0 |
| DARE | 1 MeSH DESCRIPTOR Food EXPLODE ALL TREES 1184 Delete 2 MeSH DESCRIPTOR Eating Disorders EXPLODE ALL TREES 84 Delete 3 MeSH DESCRIPTOR Binge-Eating Disorder EXPLODE ALL TREES 5 Delete 4 MeSH DESCRIPTOR Bulimia EXPLODE ALL TREES 18 Delete 5 MeSH DESCRIPTOR Anorexia Nervosa EXPLODE ALL TREES 34 Delete 6 (Eating or food* or Anorexia* or Bulimia* or EDNOS) IN DARE 1064 Delete 7 #1 OR #2 OR #3 OR #4 OR #5 OR #6 2076 Delete 8 MeSH DESCRIPTOR Cognitive Therapy EXPLODE ALL TREES 733 Delete 9 MeSH DESCRIPTOR Psychological Techniques EXPLODE ALL TREES 76 Delete 10 MeSH DESCRIPTOR Psychotherapy EXPLODE ALL TREES 1957 Delete 11 MeSH DESCRIPTOR Psychotherapy, Group EXPLODE ALL TREES 206 Delete 12 MeSH DESCRIPTOR Psychotherapy, Brief EXPLODE ALL TREES 60 Delete 13 ((psycholog* adj2 therap*) OR CBT OR (cognit* adj2 behavio*) OR psychoeducat*) IN DARE 1467 Delete 14 ((psycholog* adj2 therap*) OR CBT OR (cognit* adj2 behavio*) OR psychoeducat* OR psychotherap*) IN DARE 1806 Delete 15 #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 2793 Delete 16 #7 AND #15 138 Delete | 138 | 0 |
| <i>Primary studies</i> | | | |
| CENTRAL | #7 MeSH descriptor: [Eating Disorders] explode all trees 830 #8 MeSH descriptor: [Patient Education as Topic] explode all trees 6619 #9 "psychoeducation group*" or psychoeducation 679 | 14 | 2 |

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|----------|--|----|---|
| | #10 #8 or #9 7174 #11 #7 and #10 20 Central only 14 | | |
| PsycINFO | 12. PsycINFO; exp EATING DISORDER/; 23778 results. 13. PsycINFO; EATING BEHAVIOR/ OR EATING DISORDERS/; 18227 results. 14. PsycINFO; 12 OR 13; 29659 results. 15. PsycINFO; PSYCHOEDUCATION/; 3337 results. 16. PsycINFO; psycho-education.ti,ab; 405 results. 17. PsycINFO; 15 OR 16; 3618 results. 18. PsycINFO; "psychoeducation group*".ti,ab; 114 results. 19. PsycINFO; group*.ti,ab; 677190 results. 20. PsycINFO; 17 AND 19; 1811 results. 21. PsycINFO; 18 OR 20; 1838 results. 22. PsycINFO; 14 AND 21; 67 results. 23. PsycINFO; CLINICAL TRIALS/; 8160 results. 24. PsycINFO; random*.ti,ab; 136122 results. 25. PsycINFO; groups.ti,ab; 379477 results. 26. PsycINFO; (double adj3 blind).ti,ab; 18321 results. 27. PsycINFO; (single adj3 blind).ti,ab; 1470 results. 28. PsycINFO; EXPERIMENTAL DESIGN/; 9404 results. 29. PsycINFO; controlled.ti,ab; 84318 results. 30. PsycINFO; (clinical adj3 study).ti,ab; 8240 results. 31. PsycINFO; trial.ti,ab; 71572 results. 32. PsycINFO; "treatment outcome clinical trial".md; 28410 results. 33. PsycINFO; 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32; 588787 results. 34. PsycINFO; 22 AND 33; 47 results. | 47 | 0 |
| Embase | 1. EMBASE; exp EATING DISORDER/; 36289 results. 2. EMBASE; EATING BEHAVIOR/ OR EATING DISORDERS/; 69022 results. 3. EMBASE; 1 OR 2; 87301 results. | 21 | 0 |

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| | 4. EMBASE; PSYCHOEDUCATION/; 3827 results. 5. EMBASE; psycho-education.ti,ab; 618 results. 6. EMBASE; 4 OR 5; 4283 results. 7. EMBASE; "psychoeducation group*".ti,ab; 93 results. 8. EMBASE; group*.ti,ab; 3223446 results. 9. EMBASE; 6 AND 8; 1627 results. 10. EMBASE; 7 OR 9; 1661 results. 11. EMBASE; 3 AND 10; 70 results. 12. EMBASE; random*.ti,ab; 918801 results. 13. EMBASE; factorial*.ti,ab; 23711 results. 14. EMBASE; (crossover* OR cross-over*).ti,ab; 70744 results. 15. EMBASE; placebo*.ti,ab; 204997 results. 16. EMBASE; (doubl* ADJ blind*).ti,ab; 145273 results. 17. EMBASE; (singl* ADJ blind*).ti,ab; 14960 results. 18. EMBASE; assign*.ti,ab; 246399 results. 19. EMBASE; allocat*.ti,ab; 87112 results. 20. EMBASE; volunteer*.ti,ab; 180278 results. 21. EMBASE; CROSSOVER PROCEDURE/; 40796 results. 22. EMBASE; DOUBLE BLIND PROCEDURE/; 116476 results. 23. EMBASE; RANDOMIZED CONTROLLED TRIAL/; 354795 results. 24. EMBASE; SINGLE BLIND PROCEDURE/; 19151 results. 25. EMBASE; 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24; 1458410 results. 26. EMBASE; 11 AND 25; 21 results. | | |
| Medline | 12. MEDLINE; exp EATING DISORDER/; 23506 results. 13. MEDLINE; EATING BEHAVIOR/ OR EATING DISORDERS/; 51122 results. 14. MEDLINE; 12 OR 13; 62652 results. 15. MEDLINE; PSYCHOEDUCATION/; 0 results. 16. MEDLINE; psycho-education.ti,ab; 320 results. 17. MEDLINE; 15 OR 16; 320 results. | 49 | 0 |

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|----------------|--|-----------|--|
| | 18. MEDLINE; "psychoeducation group*".ti,ab; 68 results. 19. MEDLINE; group*.ti,ab; 2659527 results. 20. MEDLINE; 17 AND 19; 167 results. 21. MEDLINE; 18 OR 20; 235 results. 22. MEDLINE; 14 AND 21; 5 results. 23. MEDLINE; PATIENT EDUCATION AS TOPIC/; 73236 results. 24. MEDLINE; "patient education".ti,ab; 12226 results. 25. MEDLINE; 18 OR 20 OR 23 OR 24; 79216 results. 26. MEDLINE; 14 AND 25; 277 results. 27. MEDLINE; "randomized controlled trial".pt; 401556 results. 28. MEDLINE; "controlled clinical trial".pt; 90822 results. 29. MEDLINE; randomized.ab; 322270 results. 30. MEDLINE; placebo.ab; 164894 results. 31. MEDLINE; "drug therapy".fs; 1789870 results. 32. MEDLINE; randomly.ab; 230597 results. 33. MEDLINE; trial.ab; 336214 results. 34. MEDLINE; groups.ab; 1448661 results. 35. MEDLINE; 27 OR 28 OR 29 OR 30 OR 31 OR 32 OR 33 OR 34; 3548445 results. 36. MEDLINE; 26 AND 35; 77 results. 37. MEDLINE; 23 OR 24; 79064 results. 38. MEDLINE; 19 AND 37; 14654 results. 39. MEDLINE; 21 OR 38; 14806 results. 40. MEDLINE; 14 AND 35 AND 39; 49 results. | | |
| Summary | NA | NA | |

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