

Topic proposal

I understand that this proposal will be retained by the SIGN Programme Lead and be made available on the SIGN website for time period that the proposal is being considered. **Only proposals with a completed Declaration of Interests for the principal proposer will be considered**

1. What is the problem/need for a guideline/clinical scenario?

Scottish Clinical Guidance on the assessment and treatment of eating disorders are now significantly dated. Whilst the new NICE Guideline (2017) on the management of eating disorders is admirable in systemically reviewing the research evidence, unfortunately for a number of reasons the guidance does not meet the unique service needs of Scottish patients.

Historically, there has been precedent set for a clearer consideration of the needs of a Scottish population. In 2004 NICE Guideline on Eating Disorders(NICE 2004) was followed in 2006 by QIS Recommendations (Eating Disorders in Scotland – Recommendation for Management and Treatment - 2006) for Eating disorders services in Scotland which updated and extended which updated and extended the NICE Guideline to align it to the Scottish NHS, cultural and geographical climate. This was broadly acclaimed and led to striking expansion in the provision and quality of services over the following decade. This is documented in detail in the Briefing Paper of the Royal College of Psychiatry 2014 (Management of Eating Disorders in Scotland - 2014). However, the improvement has been somewhat patchy, and whilst there are centres of recognised excellence, there is also concern that there are wide variations in practice. Even where resources appear better, clinicians and carers point to inequalities, and sometimes to reluctance to invest in proven treatments. In response to these concerns, the Mental Welfare Commission for Scotland has promised to undertake a themed visit of ED Services in 2018.

When the Royal College of Psychiatrist Faculty of Eating Disorders was formed two years ago there was a call on both sides of the border for an update to the old guidelines. Scottish clinicians deliberately held back, in the hope that advances in NICE methodology would result in a guideline that might be wholeheartedly adopted in Scotland without the need for a separate document. The new NICE Guideline for Eating Disorders, published in May 2017 includes an excellent up to date review and quality rating of the available published evidence, and incorporates key documents such as MARSIPAN and Junior MARSIPAN which support safe medical management of eating disorders to prevent avoidable deaths.

Overall, professional and public bodies representing Eating Disorders in Scotland - including care and service user groups - have expressed concern that these guidelines do not meet the needs of the Scottish population. Moreover, although there were representatives from Scotland at the initial Stakeholders' meeting, no Scottish representatives were invited to join the NICE Committee. The interpretation by that body of the huge volume but poor quality of available evidence has been questioned. There is a sense that NICE's recommendations may be more favourably balanced towards the models of therapy developed and practised by the English authors of the Guideline. NICE focussed on urban populations in specialist eating disorder academic centres without fully considering the implementation of these interventions within a more geographically diverse population and associated services.

Variations in service resource and clinical practice across Scotland are compounded by the wide remote and rural geography in Scotland and absence of specialist treatment in parts of the country. The Scottish QIS recommendations were published in 2006 precisely to move beyond academic research criteria to address service outcome data, and our specific cultural and service setting. However, they are over a decade old. Meanwhile, the life-saving MARSIPAN Guidelines, focusing on the medical complication associated with anorexia

	<p>nervosa and associated management, are not consistently implemented across Scotland. It would be more powerful in the Scottish climate to incorporate these into a SIGN guideline, as this would bring them to the serious notice and respect of Scottish Primary Care and Hospital Medicine, where SIGN is the system of guidelines most current with Scottish practitioners.</p> <p>Management of Eating Disorders is not prominent in the Scottish Government's new Mental Health Strategy, although many of the crucial issues in that strategy – such as Child & Adolescent Mental Health, Transitions, Perinatal Mental Health and the needs of Carers – are particularly salient to Eating Disorders. A SIGN Guideline would provide practical, specific detail on how to enact these issues within the field and clarify how these could be met for the Specialty of Eating Disorders.</p> <p>We envisage that the SIGN Eating Disorders Guideline would be created by a broad range of multi-disciplinary clinicians including</p> <ul style="list-style-type: none"> General Practitioners Psychiatrists Psychologists Physicians Nurses Occupational Therapists Dietitians Physiotherapists Service Users and Carers Medico Legal Experts Social Work General Practitioners Student Health Services Representatives from Secondary & Primary Education Sports Coaches Perinatal Mental Health Clinicians <p>This list is not exhaustive and members may be co-opted to undertake a specific piece of work and report back to a core group.</p> <p>The current evidence base has already been covered by NICE and the associated analysis. This would enable work to progress quickly as it would not have to be repeated. We would add Scottish service audits and experience to the academic evidence base.</p>
<p>2.</p>	<p>Burden of the condition</p>
	<p><i>Mortality</i> Anorexia Nervosa has the highest mortality of any Psychiatric Disorder. About half of deaths result from the physical consequences of starvation, overexercise and purging behaviour. A little under half of these deaths are by suicide. Analysis of deaths of hospitalised Psychiatric patients in Scotland demonstrated that average life expectancy for patients diagnosed with an eating disorder was only 39 years. This is all the more shocking given that such patients are typically high achievers, who contribute greatly to society if they recover.</p> <p><i>Incidence</i> It has been estimated that the annual incidence of anorexia nervosa is 8.1 per 100,000 population and incidence of bulimia nervosa is 11.4 per 100,000 population with approximately 90% of all cases present in women.</p> <p><i>Prevalence and chronicity</i> Studies suggest that the prevalence of eating disorders in teenage girls is as high as 12% (Stice) with about 1% meeting criteria for anorexia nervosa. Male eating disorders are</p>

	<p>increasingly recognised too. BEAT (2015) highlight that the symptoms of eating disorders are first recognised under the age of 16 in approximately 60% of cases, so that <i>'the cycle of treatment, recovery and relapse can cause severe disruption to sufferers' education, with the potential for long term impacts on their employment, professional development and lifetime earnings'</i>. (BEAT 2015). Only about third of patients achieve full functional recovery, and this typically takes 6-7 years to achieve. Early intervention with evidence based approaches is associated with considerably higher levels of recovery and shorter recovery times.</p> <p>BEAT (2015) report an annual average cost of £8,850 to treat someone suffering with an eating disorder within mental health services. This does not include the treatment of physical symptoms that commonly - annual treatment costs may reach at least £100,000 per year. The psychosocial and financial burden of care on families caring for people with severe eating disorders has been found to be greater even than for carers of people with schizophrenia (Whitney & Treasure). Whilst such disorders reduce fertility, partial and temporary recoveries allow many sufferers to become parents. Without help the consequences of the eating disorder psychopathology are perpetuated down the generations.</p>
<p>3.</p>	<p>Variations</p>
	<p>Geographical: The contrast between large densely populated urban areas and far-flung remote and rural populations in Scotland is a key reason for patchy provision of services. The speciality of Eating Disorders has pioneered the use of teleconferencing and other creative solutions to geographical challenges, but these projects require update, evaluation, and equitable provision across the country. Guidelines are needed to identify which principles of service provision must be honoured, whilst suggesting a range of different ways to address those principles within a diverse culture. In Scotland it may be unavoidable – rather than a consequence of poor planning – for rural patients to travel far from home for treatment. There is considerable variance in whether patients and their families can expect to have travel and accommodation costs resourced, and the extent to which families and lay carers are involved in care. SIGN could usefully examine and recommend best practice in such practical matters.</p> <p>Legal: In addition to the variation in service provision and quality across Scotland, there are important difference between Scottish and English Law, and in particular the Mental Health and Childrens Acts in the two nations. Saving life in the field of Eating Disorders relies crucially on responsible interpretation and enactment of this legislation in the Scottish context. Finally, there are differences between the 2 nations in the age and nature of major transitions in medical, mental health and educational settings for those young people who are most likely to experience the onset of eating disorders. This is a within the context of a devolved health care system with differing commissioning recommendations and associated healthcare targets.</p> <p>Variation in health outcomes across Scotland: It is a consistent observation from professional meetings, anecdotal reports and the testimonies of patients, parents and carers that both within the specialism of Eating Disorders, service provision and outcomes are very different in different regions of Scotland. Carers in the charities SEDIG and BEAT have provided both formal feedback and unsolicited comments that there is an enormous sense of inequitable care.</p> <p>It is hard to evidence this precisely: whilst some outcome measurement has occurred within certain networks and regions, there is a lack of agreed outcome measures and associated data collection nationally. Without the capacity to audit such outcomes, it is difficult. A SIGN Guideline would urge an informed structure for future research and audit projects – this would be a unique feature of a SIGN Guideline, starting procedures to evaluate change in service provision or design, and thus paving the way for a dynamic growth in evidence.</p>

4.	Areas of uncertainty to be covered
	<p>Key Question 1</p> <p>What are the most effective models of treatment for people suffering from the different eating disorders? How is treatment modified to meet different levels of severity, and chronicity and to accommodate co-morbidity?</p>
	<p>Key Question 2</p> <p>What are the characteristics of effective eating disorders services? This will cover issues of stepped care, referral, management of both medical and mental health risks, waiting time management, choice of treatments, provision of groups and individual therapy, nature and characteristics of therapeutic relationships, nature of multidisciplinary professionalism, management of transitions and networking with other specialisms.</p>
	<p>Key Question 3</p> <p>Which adaptations of treatment and service are appropriate to take account of different geographical and social locations? This will cover use of telecommunications and new technologies, effective data collection (i.e. Minimum Dataset), issues of transport and accommodation and relative benefits of centralisation or diffusion of services.</p>
5.	Areas that will not be covered
	<p>We will not be covering the management of obesity in the absence of a diagnosable eating disorder (such as binge eating disorder, for example) but our SIGN recommendations will be in harmony with the government obesity and public health nutritional guidelines.</p>
6.	Aspects of the proposed clinical topic that are key areas of concern for patients, carers and/or the organisations that represent them
	<ul style="list-style-type: none"> • Prevention of mortality • Training of GPs in the nature of eating disorders and timely referral to specialist services by primary care • Reduction in waiting time for treatment • Involvement and acknowledgement of the role of parents and carers, and advice on the balance between confidentiality versus information needed for good care and risk management • Service design and treatment that provides optimal outcomes for a Scottish population. • Standardisation of Outcome measures • Safe management of transitions, particularly the transition from CAMHS to adult services
7.	Population
	<ul style="list-style-type: none"> • Our guideline would span the management of eating disorders in individuals/groups • across the age range, • in all gender groups, • all cultures and • all geographical areas in Scotland. • Patients will broadly meet ICD10 and/or DSM- V criteria for an Eating Disorder. These classifications include those who do not meet narrow 'cut off' criteria.

	<ul style="list-style-type: none"> Groups which have been hitherto neglected include male patients, patients at the extremes of youth and age, those who also suffer from Type 1 Diabetes, and people whose disorder is dominated by compulsive exercise rather than food restriction.
8.	Healthcare setting
	We will include Primary Care, General Practice, NHS Inpatient, Outpatient, intensive outreach and Day patient services. Links with both the independent sector and with voluntary and social care settings will be considered.
9.	Potential
	<p><i>Potential to improve current practice</i> Better clinical treatments in terms of evidence-based outcomes Opportunities to institute routine measurement and monitoring to refine and improve future updates A SIGN guideline could improve the equality of service across Scotland and allow evidence based practice to be rolled out to areas with no specialist services. It could provide guidance on service design and evidence based practice aligned with more rural locations. The guideline would be Scotland specific.</p>
	<p><i>Potential impact on important health outcomes</i> The potential for a decline in the high mortality rates associated with eating disorders The potential for improved recovery and remission rates. The potential for shorter duration of illness and associated impact on quality of life. The potential for improved health outcomes for families and carers as treatment is beneficial for whole families both financially, psychosocially and for their mental health.</p>
	<p><i>Potential impact on resources</i> Potential to reduce waste associated with offering unhelpful or mis-timed services Potential for reduction in length of inpatient admissions as a consequence of more comprehensive and evidence based outpatient service provision. Reduction in admission to Non-NHS and OOA settings with great distances from home Potential for reduced number of health based outpatient appointments (mental and physical health) Potential for reduced financial burden to patients and carers .e.g absence from work, direct treatment based costs. <i>Efficiencies and savings would be likely additive over time rather than short term savings and would likely take some years to emerge</i></p>
10.	What evidence based guidance is currently available?
	Now outdated: Scottish QIS Guidelines (2006) Current: NICE guidelines 2017 MARSIPAN Junior MARSIPAN
11.	Relevance to current Scottish Government policies
	Management of Eating Disorders is not prominent in the Scottish Government's new Mental Health Strategy, although many of the crucial issues in that strategy – such as Child & Adolescent Mental Health, Transitions, Perinatal Mental Health and the needs of Carers – are particularly salient to Eating Disorders. The Guideline would be expected to appear during the lifetime of the current Strategy and could inform its planned reviews. The Guideline will be infused with the spirit of the current CMO's extremely popular concept and philosophy of Realistic Medicine (Calderwood 2016) but will strike a responsible balance

	<p>between the pragmatism of Realistic Medicine on the one hand and the inevitable aspirational idealism of evidence based guidelines on the other.</p> <p>The Scottish Parliament has consistently held public debates in Chamber annually during Eating Disorders Awareness week (Dennis Robertson, 2014 etc), and has consistently supported improved provision of Eating Disorders Services.</p>
12.	Who is this guidance for?
	<p>All Healthcare professionals including physical, mental health, Primary Care, MW Commission, social care, education and advocacy spanning Tier 1 to Tier 4 Services. (Please refer to list of participating disciplines, above)</p> <p>In addition to brief reference guidance, a Patient and Carer version will be produced as it was with the QIS guidelines in 2006</p>
13.	Implementation
	<p><i>Links with existing audit programmes:</i></p> <p>The Scottish Eating Disorders Research Network meets annually and fosters a programme of research and audit across the country In the North of Scotland, the Managed Clinical Network holds information and data, including outcome measures (BMI, EDE-Q, CORE10 and DASS/HADS) as well as service information, waiting list details, and mental health act provision. This system, under its Quality Assurance umbrella, might usefully be rolled out across the country. ISD carries a wealth of information and data</p>
	<p><i>Existing educational initiatives</i></p> <p>Eating Disorders Education and Training Scotland (EEATS, Further details available on website) is an accreditable programme of training and theoretical knowledge designed to equip specialist eating disorders professionals of any discipline. Its syllabus currently includes awareness and knowledge of QIS and NICE guidelines. SIGN Guidance would be included in the updated syllabus and training would be incorporated into EEATS supervisors' and trainees' workshops. We could help train SIGN Champions in Eating Disorders and would ensure that training should be delivered across many professional settings.</p> <p>In 2006 the newly published HIS Recommendations on Eating Disorders were launched at the first Aberdeen Eating Disorders Conference. This Conference is still Scotland's leading professional Eating Disorders Conference and would be delighted to host a similar launch of A new SIGN.</p>
	<p><i>Strategies for monitoring implementation</i></p> <p>The Royal College of Psychiatrists in Scotland's Faculty of EDs has a planned conference day early in 2018 to examine the state of ED services across the country and to evaluate these in terms of the principles of Realistic Medicine. This might provide a useful benchmark for the baseline state of services. The absence of measures and baselines and of any machinery for gathering these in many parts of the country would, of necessity, be one of the targets for improvement which SIGN would recommend and monitor.</p> <p>The bodies described in the 2 boxes directly above would be invoked in disseminating monitoring and measurement over a 5 – 10 year period.</p>

14.	Primary contact for topic proposal
	<ol style="list-style-type: none"> 1. Dr Jane Morris, Chair of ScotFED, and Clinical Lead, North of Scotland Managed Clinical Network for Eating Disorders, Consultant Psychiatrist the Eden Unit. janemorris1@nhs.net 2. Mrs Linda Keenan, Manager, North of Scotland MCN for Eating Disorders 3. Fiona Duffy, Consultant Clinical Psychologist, Chair of SEDIG
15.	Group(s) or institution(s) supporting the proposal
	<ul style="list-style-type: none"> • Royal College of Psychiatrists in Scotland (Faculty of Eating Disorders: ScotFED) • Royal College of General Practitioners in Scotland • BEAT- the Eating Disorders Association • Scottish Eating Disorders Interest Group (SEDIG) • Managed Clinical Network for Eating Disorders, North Scotland • Mental Welfare Commission for Scotland (MWC) • NEEDS (North East Scotland Eating Disorders users and carers groups)

Declaration of Interests

Please complete all sections and if you have nothing to declare please put 'N/A'

Having read the [SIGN Policy on Declaration of Competing Interests](#) I declare the following competing interests for the previous year, and the following year. I understand that this declaration will be retained by the SIGN Programme Lead and be made available on the SIGN website for time period that the proposal is being considered.

Signature:	
Name:	
Relationship to SIGN:	Topic proposal primary contact
Date:	
Date received at SIGN:	

Personal Interests

Remuneration from employment

	Name of Employer and Post held	Nature of Business	Self or partner/relative	Specific?
Details of employment held which may be significant to, or relevant to, or bear upon the work of SIGN				

Remuneration from self employment

	Name of Business	Nature of Business	Self or partner/relative	Specific?
Details of self employment held which may be significant to, or relevant to, or bear upon the work of SIGN				

Remuneration as holder of paid office

	Nature of Office held	Organisation	Self or partner/relative	Specific?
Details of office held which may be significant to, or relevant to, or bear upon the work of SIGN				

Remuneration as a director of an undertaking

	Name of Undertaking	Nature of Business	Self or partner/ relative	Specific?
Details of directorship held which may be significant to, or relevant to, or bear upon the work of SIGN				

Remuneration as a partner in a firm

	Name of Partnership	Nature of Business	Self or partner/ relative	Specific?
Details of Partnership held which may be significant to, or relevant to, or bear upon the work of SIGN				

Shares and securities

	Description of organisation	Description of nature of holding (value need not be disclosed)	Self or partner/ relative	Specific?
Details of interests in shares and securities in commercial healthcare companies, organisations and undertakings				

Remuneration from consultancy or other fee paid work commissioned by, or gifts from, commercial healthcare companies, organisations and undertakings

	Nature of work	For whom undertaken and frequency	Self or partner/ relative	Specific?
Details of consultancy or other fee paid work which may be significant of to, or relevant to, or bear upon the work of SIGN				

Details of gifts which may be significant to, or relevant to, or bear upon the work of SIGN				
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Non-financial interests

	Description of interest	Self or partner/ relative	Specific?
Details of non-financial interests which may be significant to, or relevant to, or bear upon the work of SIGN			

Non-personal interests

	Name of company, organisation or undertaking	Nature of interest
Details of non-personal support from commercial healthcare companies, organisations or undertakings		

Signature _____

Date: _____

Thank you for completing this form.

**Please return to
 Roberta James
 SIGN Programme Lead
 SIGN Executive, Healthcare Improvement Scotland,
 Gyle Square | 1 South Gyle Crescent | Edinburgh | EH12 9EB**

t: 0131 623 4735
 e: roberta.james@nhs.net

Data Protection

Your details will be stored on a database for the purposes of managing this guideline topic proposal. We may retain your details so that we can contact you about future Healthcare Improvement Scotland activities. We will not pass these details on to any third parties. Please indicate if you do not want your details to be stored after the proposal is published.

Initial screen

Purpose: initial screening by SIGN Senior Management Team to exclude proposals that are neither clinical, nor multi-professional, nor appropriate for the SIGN process.

1.	Is this an appropriate clinical topic for a SIGN guideline? Is it a clinical topic, what is the breadth of the topic and is there a need for the guideline as identified in the proposal?	
	Yes	
2.	Is there a suitable alternative product which would address this topic? Would another Healthcare Improvement Scotland product better address the topic?	
	No	
3.	Has this topic been considered before and rejected? What were the reasons for rejection and are they still applicable	
	No, QIS Recommendations (Eating Disorders in Scotland – Recommendation for Management and Treatment - 2006) for Eating disorders services in Scotland which updated and extended the 2004 NICE Guideline to align it to the Scottish NHS are now out of date.	
4.	Outcome	
	Go forward to the next stage of topic selection	YES 15/11/2017
	Reject	

Scope of recent evidence

Summary:

Ten **Guidelines** were identified with publication dates ranging from 2009–2019. The guidelines were aimed at children, adolescents and young people and were from the UK, USA, Australian and New Zealand. There was also a pathway and quality standards from NICE. The following topics were covered in the guidelines:

- anorexia, binge eating disorder
- management of really sick patients
- treatment goal weights
- gynaecologic care

There is evidence from **one health technology assessment** from the UK, published in 2010, on the clinical effectiveness and cost-effectiveness of inpatient compared with outpatient treatment and general (routine) treatment against specialist treatment for young people with anorexia nervosa.

Eight **Cochrane reviews** provide evidence on:

- antidepressant interventions
- family therapy approaches
- individual psychological therapy
- self-help
- preventing eating disorders.

A further **239** systematic reviews were identified.

See Annex 1 for further details

Suitability screen

Purpose: screening by the Guideline Programme Advisory Board to select applications suitable for inclusion in the SIGN topic selection process.

1.	Is there an owner for the project? (preferably an individual)
	Yes
2.	Is this a clinical priority area for NHSScotland?
	<p>It has been estimated that the annual incidence of anorexia nervosa is 8.1 per 100,000 population and incidence of bulimia nervosa is 11.4 per 100,000 population with approximately 90% of all cases present in women.</p> <p>The Scottish Government 10 year Mental Health Strategy sets out clearly how to improve early intervention, and ensure better access to services, including specific actions to support people with eating disorders.</p>
3.	Is there a gap between current and optimal practice? OR Is there wide variation in current practice? (is this an area of clinical uncertainty)
	Variations in service resource and clinical practice across Scotland are compounded by the wide remote and rural geography in Scotland and absence of specialist treatment in parts of the country. Service provision and outcomes are very different in different regions of Scotland. Carers in the charities SEDIG and BEAT have provided both formal feedback and unsolicited comments that there is an enormous sense of inequitable care.
4.	Is there a suitable guideline already available that could be adapted? (not necessarily by SIGN)
	The NICE guideline for eating disorders, was published in May 2017, but there is concern that these guidelines do not meet the needs of the Scottish population. There is a focus on urban populations in specialist eating disorder academic centres without full consideration of the implementation of these interventions within a more geographically diverse population and associated services.
5.	Is there adequate literature to make an evidence-based decision about appropriate practice? (is effective intervention proven and would it reduce mortality or morbidity)
	A large body of poor-quality evidence was assessed by NICE, which could be reinterpreted for the Scottish context. A large number of systematic views were identified.
6.	Would the proposed practice change result in sufficient change in outcomes (health status, provider and consumer satisfaction and cost) to justify the effort?
	There is the potential to improve current practice as a SIGN guideline could improve the equity of service across Scotland and allow evidence based practice to be rolled out to areas with no specialist services. There is the potential to reduce mortality rates, shorten the duration of illness and improve quality of life. Reducing unhelpful or miss-timed services would reduce costs and evidence-based outpatient services would reduce inpatient and admissions costs.
	How big is the gap?
	unclear
	How much effort will it take to close the gap?
	unclear

7.	Is there a perceived need for the guideline, as indicated by a network of relevant stakeholders?	
	<ul style="list-style-type: none"> • Royal College of Psychiatrists in Scotland (Faculty of Eating Disorders: ScotFED) • Royal College of General Practitioners in Scotland • BEAT- the Eating Disorders Association • Scottish Eating Disorders Interest Group (SEDIG) • Managed Clinical Network for Eating Disorders, North Scotland • Mental Welfare Commission for Scotland (MWC) • NEEDS (North East Scotland Eating Disorders users and carers groups) 	
8.	Is there a reasonable likelihood that NHSScotland could implement the change?	
	<p>The Royal College of Psychiatrists in Scotland's Faculty of EDs has a planned conference day early in 2018 to examine the state of ED services across the country and to evaluate these in terms of the principles of Realistic Medicine. This could provide a useful benchmark for the baseline state of services. The absence of measures and baselines and of any machinery for gathering these in many parts of the country would, of necessity, be one of the targets for improvement which SIGN would recommend and monitor.</p>	
9.	Does the proposer have any conflicts of interest? If so how will these be managed?	
	To be completed	
10.	Outcome	
	Go forward to the next stage of topic selection With the understanding that the questions need to be focused on the most effective interventions with the possibility of describing models of care for Scotland based on those recommendations.	YES 26/09/2018
	Reject	
11.	Decision	
	Ratified by SIGN Council for inclusion on the SIGN guideline development programme	Date
	<i>Comment</i>	13/02/2019

Annex 1 Scope of recent evidence

Topic: eating disorders (anorexia, bulimia, binge eating)

Resources searched:

[GIN](#) (1)

[NICE](#) (3)

[Cochrane Library](#) (8)

[INAHTA](#) (0)

[EUNetHTA](#) (0)

[UKHTA](#) (1)

[Trip Database](#) (6)

Medline and Embase and PsychInfo for SRs (239) after sifting

RCTS (numbers only)

Medline (1098), Embase (medline journals excluded)(174), CENTRAL (3883)

Dates searched: 15/1/19 for 2008-2019, English only

Guidelines

1. Royal College of Psychiatrists. Marsipan - Management of really sick patients with anorexia nervosa. 2014 [cited 2019 Jan 15]; Available from: https://www.rcpsych.ac.uk/docs/default-source/improving-care/better-mh-policy/college-reports/college-report-cr189.pdf?sfvrsn=6c2e7ada_2.
2. Royal College of Psychiatrists. Junior MARSIPAN: Management of Really Sick Patients under 18 with Anorexia Nervosa. 2012 [cited 2019 Jan 15]; Available from: https://www.rcpsych.ac.uk/docs/default-source/improving-care/better-mh-policy/college-reports/college-report-cr168.pdf?sfvrsn=e38d0c3b_2.
3. Adams LA, Shepard N, Caruso RA, Norling MJ, Belansky H, Cunningham RS. Putting evidence into practice: evidence-based interventions to prevent and manage anorexia. *Clinical journal of oncology nursing*. 2009;13(1):95-102. Epub 2009/02/06.
4. NICE. Eating disorders: recognition and treatment. 2017 [cited 2019 Jan 15]; Available from: <https://www.nice.org.uk/guidance/ng69>.
5. NICE. Eating disorders - pathway. 2019 [cited 2019 Jan 15]; Available from: <https://pathways.nice.org.uk/pathways/eating-disorders>.
6. NICE. Eating Disorders - Quality Standard. 2018 [cited 2019 Jan 15]; Available from: <https://www.nice.org.uk/guidance/qs175>.
7. Morris M, Hiebert J, Katzman D. Determining treatment goal weights for children and adolescents with anorexia nervosa. 2018 [cited 2019 Jan 15]; Available from: <https://www.cps.ca/en/documents/position/goal-weights>.
8. Findlay S, Pinzon J, Taddeo D, Katzman D. Family-based treatment of children and adolescents with anorexia nervosa: Guidelines for the community physician. 2012 [cited 2019 Jan 15]; Available from: <https://www.cps.ca/en/documents/position/anorexia-nervosa-family-based-treatment>.
9. American College of Obstetricians and Gynecologists. Gynecologic Care for Adolescents and Young Women with Eating Disorders. 2018 [cited 2019 Aug 15]; Available from: <https://www.acog.org/-/media/Committee-Opinions/Committee-on-Adolescent-Health-Care/co740.pdf?dmc=1&ts=20180615T0538389745>.
10. SBU. Treatment for binge eating disorder. 2016 [cited 2019 Jan 15]; Available from: https://www.sbu.se/contentassets/45a9498b95c24994ac478eb964be4fbe/treatment_for_binge_eating_disorder_en_gsmf_2016.pdf.
11. Lock J, La Via MC. Practice parameter for the assessment and treatment of children and adolescents with eating disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2015;54(5):412-25. Epub 2015/04/23.
12. Hay P, Chinn D, Forbes D, Madden S, Newton R, Sugenor L, *et al*. Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for the treatment of eating disorders. *Australian & New Zealand Journal of Psychiatry*. 2014;48(11):977-1008.

Health Technology Assessments

Gowers SG, Clark AF, Roberts C, Byford S, Barrett B, Griffiths A, et al. A randomised controlled multicentre trial of treatments for adolescent anorexia nervosa including assessment of cost-effectiveness and patient acceptability - the TOutCAN trial. *Health technology assessment (Winchester, England)* 2010;14(15):1-98

OBJECTIVE: To evaluate the clinical effectiveness and cost-effectiveness of inpatient compared with outpatient treatment and general (routine) treatment in Child and Adolescent Mental Health Services (CAMHS) against specialist treatment for young people with anorexia nervosa. In addition, to determine young people's and their carers' satisfaction with these treatments. **DESIGN:** A population-based, pragmatic randomised controlled trial (RCT) was carried out on young people age 12 to 18 presenting to community CAMHS with anorexia nervosa. **SETTING:** Thirty-five English CAMHS in the north-west of England co-ordinated through specialist centres in Manchester and Liverpool. **PARTICIPANTS:** Two hundred and fifteen young people (199 female) were identified, of whom 167 (mean age 14 years 11 months) were randomised and 48 were followed up as a preference group. **INTERVENTIONS:** Randomised patients were allocated to either inpatient treatment in one of four units with considerable experience in the treatment of anorexia nervosa, a specialist outpatient programme delivered in one of two centres, or treatment as usual in general community CAMHS. The outpatient programmes spanned 6 months of treatment. The length of inpatient treatment was determined on a case-by-case basis on clinical need with outpatient follow-up to a minimum of 6 months. **MAIN OUTCOME MEASURES:** Follow-up assessments were carried out at 1, 2 and 5 years. The primary outcome measure was the Morgan-Russell Average Outcome Scale (MRAOS) and associated categorical outcomes. Secondary outcome measures included physical measures of weight, height, body mass index (BMI) and % weight for height. Research ratings included the Health of the National Outcome Scale for Children and Adolescents (HoNOSCA). Self report measures comprised the user version of HoNOSCA (HoNOSCA-SR), the Eating Disorder Inventory 2 (EDI-2), the Family Assessment Device (FAD) and the recent Mood and Feelings Questionnaire (MFQ). Information on resource use was collected in interview at 1, 2 and 5 years using the Child and Adolescent Service Use Schedule (CA-SUS). Satisfaction was measured quantitatively using a questionnaire designed for the study and qualitative (free) responses on it. The questionnaire data were supplemented by qualitative analysis of user and carer focus groups. **RESULTS:** Of the 167 patients randomised, 65% adhered to the allocated treatment. Adherence was lower for inpatient treatment (49%) than for general CAMHS (71%) or specialist outpatient treatment (77%) ($p = 0.013$). Every subject was traced at both 1 and 2 years, with the main outcome measure completed (through contact with the subject, family members or clinicians), by 94% at 1 year, 93% at 2 years, but only 47% at 5 years. A validated outcome category was assigned for 98% at 1 year, 96% at 2 years and 60% at 5 years. There was significant improvement in all groups at each time point, with the number achieving a good outcome being 19% at 1 year, 33% at 2 years and 64% (of those followed up) at 5 years. Analysis demonstrated no difference in treatment effectiveness of randomisation to inpatient compared with outpatient treatment, or, specialist over generalist treatment at any time point, when baseline characteristics were taken into account. Generalist CAMHS treatment was slightly more expensive over the first 2 years of the study, largely because greater numbers were subsequently admitted to hospital after the initial treatment phase. The specialist outpatient programme was the dominant treatment in terms of incremental cost-effectiveness. Specialist treatments had a higher probability of being more cost-effective than generalist treatments and outpatient treatment had a higher probability of being more cost-effective than inpatient care. Parental satisfaction with treatment was generally good, though better with specialist than generalist treatment. Young people's satisfaction was much more mixed, but again better with specialist treatment, including inpatient care. **CONCLUSION:** Poor adherence to randomisation (despite initial consent to it), limits the assessment of the treatment effect of inpatient care. However, this study provides little support for lengthy inpatient psychiatric treatment on clinical or health economic grounds. These findings are broadly consistent with existing guidelines on the treatment of anorexia nervosa, which suggest that outpatient treatments should be offered to the majority, with inpatient treatment offered in rare cases, though our findings lend little support to a stepped-care approach in which inpatient care is offered to outpatient non-responders. Outpatient care, supported by brief (medical) inpatient management for correction of acute complications may be a preferable approach. The health economic analysis and user views both support NICE guidelines, which suggest that anorexia nervosa should be managed in specialist services that have experience and expertise in its management. Comprehensive general CAMHS might, however, be well placed to manage milder cases. Further research should focus on the specific components of outpatient psychological therapies. Although family-based treatments are well established, trials have not established their effectiveness compared with good-quality individual psychological therapies and the combination of individual and family approaches is untested. Further research is needed to establish which patients (if any) might respond to inpatient psychiatric treatment when unresponsive to outpatient care, the positive and negative components of it and the optimum length of stay. **TRIAL REGISTRATION:** NRR number (National Research Register) N0484056615; Current Controlled Trials ISRCTN39345394.

Cochrane reviews

Bacaltchuk J, Hay PPJ. Antidepressants versus placebo for people with bulimia nervosa. Cochrane Database of Systematic Reviews 2003;4):

- Background Bulimia Nervosa (BN) represents an important public health problem and is related to serious morbidity and even mortality. This review attempted to systematically evaluate the use of antidepressant medications compared with placebo for the treatment of bulimia nervosa. Objectives The primary objective of this review was to determine whether using antidepressant medications was clinically effective for the treatment of bulimia nervosa. The secondary objectives were: (i) to examine whether there was a differential effect for the various classes/types of antidepressants with regard to effectiveness and tolerability (ii) to test the hypothesis that the effect of antidepressants on bulimic symptoms was independent of its effect on depressive symptoms Search methods (1) electronic searches of MEDLINE (1966 to December 2002), EMBASE (1980-December 2002), PsycINFO (to December 2002), LILACS & SCISEARCH (to 2002) (2) the Cochrane Register of Controlled Trials and the Cochrane Depression, Anxiety and Neurosis Group Register - ongoing (3) inspection of the references of all identified trials (4) contact with the pharmaceutical companies and the principal investigator of included trials (5) inspection of the International Journal of Eating Disorders - ongoing Selection criteria Inclusion criteria: every randomised, placebo-controlled trial in which antidepressant medications were compared to placebo to reduce the symptoms of bulimia nervosa in patients of any age or gender. Quality criteria: reports were considered adequate if they were classified as A or B according to the Cochrane Manual. The Jadad scale, with a cut off of 2 points, was applied to check the validity of the above referred criterion but was not used as an inclusion criterion. Data collection and analysis Data were extracted independently by two reviewers for each included trial. Dichotomous data were evaluated by the relative risk with 95% confidence intervals (CI) around this measure, based on the random effects model; continuous data were evaluated by the standardised mean difference with the 95% CI. NNT was calculated using the inverse of the absolute risk reduction. Main results Currently the review includes 19 trials comparing antidepressants with placebo: 6 trials with TCAs (imipramine, desipramine and amitriptyline), 5 with SSRIs (fluoxetine), 5 with MAOIs (phenelzine, isocarboxazid, moclobemide and brofaromine) and 3 with other classes of drugs (mianserin, trazodone and bupropion). Similar results were obtained in terms of efficacy for these different groups of drugs. The pooled RR for remission of binge episodes was 0.87 (95% CI 0.81-0.93; $p < 0.001$) favouring drugs. The NNT for a mean treatment duration of 8 weeks, taking the non-remission rate in the placebo controls of 92% as a measure of the baseline risk was 9 (95% CI 6 - 16). The RR for clinical improvement, defined as a reduction of 50% or more in binge episodes was 0.63 (95% CI 0.55-0.74) and the NNT for a mean treatment duration of 9 weeks was 4 (95% CI 3 - 6), with a non-improvement rate of 67% in the placebo group. Patients treated with antidepressants were more likely to interrupt prematurely the treatment due to adverse events. Patients treated with TCAs dropped out due to any cause more frequently than patients treated with placebo. The opposite was found for those treated with fluoxetine, suggesting it may be a more acceptable treatment. Independence between antidepressant and anti-bulimic effects could not be evaluated due to incomplete published data. Authors' conclusions The use of a single antidepressant agent was clinically effective for the treatment of bulimia nervosa when compared to placebo, with an overall greater remission rate but a higher rate of dropouts. No differential effect regarding efficacy and tolerability among the various classes of antidepressants could be demonstrated. Plain language summary Antidepressants compared with placebo for bulimia nervosa Individual antidepressants are effective for the treatment of bulimia nervosa when compared to placebo treatment, with an overall greater remission rate but a higher rate of dropouts.

Claudino AM, Silva de Lima M, Hay PPJ, Bacaltchuk J, Schmidt UUS, Treasure J. Antidepressants for anorexia nervosa. Cochrane Database of Systematic Reviews 2006;1):

- Background Anorexia Nervosa (AN) is an illness characterised by extreme concern about body weight and shape, severe self-imposed weight loss, and endocrine dysfunction. In spite of its high mortality, morbidity and chronicity, there are few intervention studies on the subject. Objectives The aim of this review was to evaluate the efficacy and acceptability of antidepressant drugs in the treatment of acute AN. Search methods The strategy comprised of database searches of the Cochrane Collaboration Depression, Anxiety and Neurosis Controlled Trials Register, MEDLINE (1966 to April 28th, 2005), EMBASE (1980 to week 36, 2004), PsycINFO (1969 to August week 5, 2004), handsearching the International Journal of Eating Disorders and searching the reference lists of all papers selected. Personal letters were sent to researchers in the field requesting information on unpublished or in-progress trials. Selection criteria All randomised controlled trials of antidepressant treatment for AN patients, as defined by the Diagnostic and Statistical Manual, fourth edition (DSM-IV) or similar international criteria, were selected. Data collection and analysis Quality ratings were made giving consideration to the strong relationship between allocation concealment and potential for bias in the results; studies meeting criteria A and B were included. Trials were excluded if non-completion rates were above 50%. The standardised mean difference and relative risk were used for continuous data and dichotomous data comparisons, respectively. Whenever possible,

analyses were performed according to intention-to-treat principles. Heterogeneity was tested with the I-squared statistic. Weight change was the primary outcome. Secondary outcomes were severity of eating disorder, depression and anxiety symptoms, and global clinical state. Acceptability of treatment was evaluated by considering non-completion rates. Main results Only seven studies were included. Major methodological limitations such as small trial size and large confidence intervals decreased the power of the studies to detect differences between treatments, and meta-analysis of data was not possible for the majority of outcomes. Four placebo-controlled trials did not find evidence that antidepressants improved weight gain, eating disorder or associated psychopathology. Isolated findings, favouring amineptine and nortriptyline, emerged from the antidepressant versus antidepressant comparisons, but cannot be conceived as evidence of efficacy of a specific drug or class of antidepressant in light of the findings from the placebo comparisons. Non-completion rates were similar between the compared groups. Authors' conclusions A lack of quality information precludes us from drawing definite conclusions or recommendations on the use of antidepressants in acute AN. Future studies testing safer and more tolerable antidepressants in larger, well designed trials are needed to provide guidance for clinical practice. Plain language summary Antidepressants for anorexia nervosa The aim of the present review was to evaluate the evidence from randomised controlled trials for the efficacy and acceptability of antidepressant treatment in acute AN. Seven small studies were identified; four placebo-controlled trials did not find evidence of efficacy of antidepressants in improving weight gain, eating disorder or associated symptoms, as well as differences in completion rates. Meta-analysis of data was not possible for most outcomes. However, major methodological limitations of these studies (e.g. insufficient power to detect differences) prevent from drawing definite conclusions or recommendations for antidepressant use in acute AN. Further studies testing safer antidepressants in larger and well designed trials are needed to guide clinical practice.

Fisher CA, Skocic S, Rutherford KA, Hetrick SE. Family therapy approaches for anorexia nervosa. Cochrane Database of Systematic Reviews 2018;(10):

- Background Anorexia nervosa (AN) is characterised by a failure to maintain a normal body weight due to a paucity of nutrition, an intense fear of gaining weight or behaviour that prevents the individual from gaining weight, or both. The long-term prognosis is often poor, with severe developmental, medical and psychosocial complications, high rates of relapse and mortality. 'Family therapy approaches' indicate a range of approaches, derived from different theories, that involve the family in treatment. We have included therapies developed on the basis of dominant family systems theories, approaches that are based on or broadly similar to the family-based therapy derived from the Maudsley model, approaches that incorporate a focus on cognitive restructuring, as well as approaches that involve the family without articulation of a theoretical approach. This is an update of a Cochrane Review first published in 2010. Objectives To evaluate the efficacy of family therapy approaches compared with standard treatment and other treatments for AN. Search methods We searched the Cochrane Common Mental Disorders Controlled Trials Register (CCMDCTR) and PsycINFO (OVID) (all years to April 2016). We ran additional searches directly on Cochrane Central Register for Controlled Trials (CENTRAL), MEDLINE, Ovid Embase, and PsycINFO (to 2008 and 2016 to 2018). We searched the World Health Organization (WHO) trials portal (ICTRP) and ClinicalTrials.gov, together with four theses databases (all years to 2018). We checked the reference lists of all included studies and relevant systematic reviews. We have included in the analyses only studies from searches conducted to April 2016. Selection criteria Randomised controlled trials (RCTs) of family therapy approaches compared to any other intervention or other types of family therapy approaches were eligible for inclusion. We included participants of any age or gender with a primary clinical diagnosis of anorexia nervosa. Data collection and analysis Four review authors selected the studies, assessed quality and extracted data. We used a random-effects meta-analysis. We used the risk ratio (with a 95% confidence interval) to summarise dichotomous outcomes and both the standardised mean difference and the mean difference to summarise continuous measures. Main results We included 25 trials in this version of the review (13 from the original 2010 review and 12 newly-included studies). Sixteen trials were of adolescents, eight trials of adults (seven of these in young adults aged up to 26 years) and one trial included three age groups: one adolescent, one young adult and one adult. Most investigated family-based therapy or variants. Reporting of trial conduct was generally inadequate, so that in a large number of studies we rated the risk of bias as unclear for many of the domains. Selective reporting bias was particularly problematic, with 68% of studies rated at high risk of bias in this area, followed by incomplete outcome data, with 44% of studies rated at high risk of bias in this area. For the main outcome measure of remission there was some low-quality evidence (from only two studies, 81 participants) suggesting that family therapy approaches might offer some advantage over treatment as usual on rates of remission, post intervention (risk ratio (RR) 3.50, 95% confidence interval (CI) 1.49 to 8.23; I² = 0%). However, at follow-up, low-quality evidence from only one study suggested this effect was not maintained. There was very low-quality evidence from only one trial, which means it is difficult to determine whether family therapy approaches offer any advantage over educational interventions for remission (RR 9.00, 95% CI 0.53 to 153.79; 1 study, N = 30). Similarly, there was very low-quality evidence from only five trials for remission post-intervention, again meaning that it is difficult to determine whether there is any advantage of family therapy approaches over psychological interventions (RR 1.22, 95% CI 0.89 to 1.67; participants = 252;

studies = ; I² = 37%) and at long-term follow-up (RR 1.08, 95% CI 0.91 to 1.28; participants = 200; studies = 4 with 1 of these contributing 3 pairwise comparisons for different age groups; I² = 0%). There was no indication that the age group had any impact on the overall treatment effect; however, it should be noted that there were very few trials undertaken in adults, with the age range of adult studies included in this analysis from 20 to 27. There was some evidence of a small effect favouring family based therapy compared with other psychological interventions in terms of weight gain post-intervention (standardised mean difference (SMD) 0.32, 95% CI 0.01 to 0.63; participants = 210; studies = 4 with 1 of these contributing 3 pairwise comparisons for different age groups; I² = 11%). Overall, there was insufficient evidence to determine whether there were any differences between groups across all comparisons for most of the secondary outcomes (weight, eating disorder psychopathology, dropouts, relapse, or family functioning measures), either at post-intervention or at follow-up. Authors' conclusions There is a limited amount of low-quality evidence to suggest that family therapy approaches may be effective compared to treatment as usual in the short term. This finding is based on two trials that included only a small number of participants, and both had issues about potential bias. There is insufficient evidence to determine whether there is an advantage of family therapy approaches in people of any age compared to educational interventions (one study, very low quality) or psychological therapies (five studies, very low quality). Most studies contributing to this finding were undertaken in adolescents and youth. There are clear potential impacts on how family therapy approaches might be delivered to different age groups and further work is required to understand what the resulting effects on treatment efficacy might be. There is insufficient evidence to determine whether one type of family therapy approach is more effective than another. The field would benefit from further large, well-conducted trials.

Plain language summary Family therapy for those diagnosed with anorexia nervosa Review Question This review investigated whether family therapy approaches reduce rates of anorexia nervosa (AN), or associated symptoms, compared to other treatments. Background People with AN have a deliberately maintained low body weight and distorted body image. They also experience related medical and psychological problems, and the risk of dying from the disease (mortality) is relatively high. Family therapy approaches are one form of treatment used in AN. Search date The evidence is current up to 8 April 2016. Study characteristics We included 25 trials in the review. Fourteen trials used family-based therapy, one used systems family therapy, one used structural family therapy and seven studies used therapy with family involvement but did not provide specific details about the theory behind the therapy or its procedures, termed other family therapy. Two studies included two family therapy arms each: one included family-based therapy and systems family therapy arms, and one included systems family therapy and other family therapy arms. Four studies compared family therapy approaches to treatment as usual, six compared family therapy approaches to other psychological interventions and two compared family therapy to educational interventions. Twelve studies compared various forms of family therapy approaches to each other. Two studies included both a treatment as usual as well as other psychological intervention arms. Key results Overall there was some low-quality evidence from only two trials to suggest that family therapy approaches may be better than treatment as usual in the short term. The size and very low quality of the evidence base and the consistency of the trial outcomes are insufficient at this time to draw conclusions about whether family therapy approaches offer any clear advantage over educational or psychological interventions. We found very few differences between treatment groups on measures of weight, eating disorder symptoms and family functioning, and these differences were generally not maintained at follow-up. The reporting of death rates was not clear enough to assess whether death is reduced for those treated with family therapy approaches compared to other interventions. There was very little information about the effects of the interventions on general or family functioning. Quality of the evidence The way the trials were run was not adequately described in many studies and we found potential risks of bias in most of the studies. This limited the meaningful conclusions that we could draw from the studies. Authors' conclusions Overall, there is a very limited evidence base in this field. There is some low-quality evidence to suggest that family therapy approaches may be effective compared to treatment as usual in the short term. There is insufficient evidence to be able to determine whether family therapy approaches offer any advantage over educational interventions, other types of psychological therapy, or whether one type of family therapy approach is more effective than another. Most of the studies contributing to the findings were undertaken in adolescents and young adults. There are clear implications about how family therapy approaches might be delivered to different age groups, and we need further research to understand what the resulting effects on treatment might be.

Hay PJ, Claudino AM, Touyz S, Abd Elbaky G. Individual psychological therapy in the outpatient treatment of adults with anorexia nervosa. *Cochrane Database of Systematic Reviews* 2015;(7):

- Background Anorexia nervosa is a disorder with high morbidity and significant mortality. It is most common in young adult women, in whom the incidence may be increasing. The focus of treatment has moved to an outpatient setting, and a number of differing psychological therapies are presently used in treatment. This is an update of a Cochrane review which was last published in 2008. Objectives To assess the effects of specific individual psychological therapies for anorexia nervosa in adults or older adolescents treated in an outpatient setting. Search methods We searched the Cochrane Depression, Anxiety and Neurosis Review Group Specialised Register (CCDANCTR) (16 July 2014). This register includes relevant

randomised controlled trials from: the Cochrane Library (all years), MEDLINE (1950 to date), EMBASE (1974 to date), and PsycINFO (1967 to date). We screened reference lists of all included studies and sent letters to identified, notable researchers requesting information on unpublished or ongoing studies.

Selection criteria All randomised controlled trials of one or more individual outpatient psychological therapies for adults with anorexia nervosa, as defined by DSM-5 or similar international criteria.

Data collection and analysis We selected a range of outcome variables, including physical state, severity of eating disorder attitudes and beliefs, interpersonal function, and general psychiatric symptom severity. Continuous outcome data comparisons used the mean or standardised mean difference (MD or SMD), and binary outcome comparisons used the risk ratio (RR). Two review authors (PH and AC or ST) extracted data independently.

Main results We identified 10 trials from the search, with a total of 599 anorexia nervosa participants, and included them in the review. Seven had been identified in the previous versions of this review and we now include three new trials. We now deem one previously identified ongoing trial to be ineligible, and six ongoing trials are new for this update. Two of the 10 trials included children. Trials tested diverse psychological therapies and comparability was poor. Risks of bias were mostly evident through lack of blinded outcome assessments (in 60% of studies) and incomplete data reporting (attrition bias). The results suggest that treatment as usual (TAU) when delivered by a non-eating-disorder specialist or similar may be less efficacious than focal psychodynamic therapy. This was suggested for a primary outcome of recovery by achievement of a good or intermediate outcome on the Morgan and Russell Scale (RR 0.70, 95% confidence interval (CI) 0.51 to 0.97; 1 RCT, 40 participants; very low-quality evidence). However there were no differences between cognitive analytic therapy and TAU for this outcome (RR 0.78, 95% CI 0.61 to 1.00; 2 RCTs, 71 participants; very low-quality evidence), nor for body mass index (BMI). There were no differences in overall dropout rates between individual psychological therapies and TAU. Two trials found a non-specific specialist therapy (Specialist Supportive Clinical Management) or an Optimised TAU delivered by therapists with eating disorder expertise was similar in outcomes to cognitive behaviour therapy (BMI MD -0.00, 95% CI -0.91 to 0.91; 197 participants, low-quality evidence). When comparing individual psychological therapies with each other, no specific treatment was consistently superior to any other specific approach. Dietary advice as a control arm had a 100% non-completion rate in one trial (35 participants). None of the trials identified any adverse effects. Insufficient power was problematic for the majority of trials. Authors' conclusions There was a suggestion in one trial that focal psychodynamic therapy might be superior to TAU, but this is in the context of TAU performing poorly. An alternative control condition of dietary advice alone appeared to be unacceptable, but again this is based on just one trial. Owing to the risk of bias and limitations of studies, notably small sample sizes, we can draw no specific conclusions about the effects of specific individual psychological therapies for anorexia nervosa in adults or older adolescents. Larger RCTs of longer treatment duration and follow-up are needed.

Plain language summary Outpatient psychological therapy for adults with anorexia Why is this review important? Anorexia nervosa is a severe and disabling mental health disorder of self starvation. In the general population the lifetime prevalence of anorexia nervosa may be as high as 5 in 100 women. About one in 10 people with anorexia nervosa is male. Psychological therapies are the main treatment and most people are treated as outpatients. A number of different types of therapy are used, from dynamic (where past issues are explored) to very directive cognitive-behavioural therapies (where specific advice is given and people are required to keep records of their eating behaviour). It is important to know which psychological therapy is most likely to help people recover. This review aimed to assess evidence about the effects of individual psychological therapy (therapy provided to one person as opposed to a group) delivered in outpatient settings to older adolescents and adults with anorexia nervosa. Who will be interested in this review? This review will be of interest to people with lived experience of anorexia nervosa and people involved in their care. Which studies were included in the review? We used search databases to find randomised controlled studies of individual psychological therapy delivered in outpatient settings to older adolescents and adults with anorexia nervosa (completed up to July 16 2014). We included 10 trials that covered 599 people with anorexia nervosa. These trials had some limitations: they were small and often lost a lot of people. The investigators and people involved usually knew which treatment group they were in, which may have affected how they reported results. The trials used different types of psychological therapies. What does the evidence from the review tell us? There was a limited amount of very low-quality evidence to suggest that people might do better when receiving focal psychodynamic therapy compared to no treatment or treatment as usual. With one exception, we found little difference between specific psychological therapies. Most therapies appeared as acceptable as any other approach, except for dietary advice which had a 100% non-completion rate in one small trial. Because of the risk of bias and limitations of studies, notably small sample sizes, we can draw no specific conclusions about the effects of specific individual psychological therapies for anorexia nervosa in adults or older adolescents. What should happen next? We need more large multicentre randomised controlled trials of commonly-used psychological therapies in older adolescents and adults with anorexia nervosa.

Hay PPJ, Bacaltchuk J, Stefano S, Kashyap P. Psychological treatments for bulimia nervosa and bingeing. Cochrane Database of Systematic Reviews 2009;4):

- Background A specific manual-based form of cognitive behavioural therapy (CBT) has been developed

for the treatment of bulimia nervosa (CBT-BN) and other common related syndromes such as binge eating disorder. Other psychotherapies and modifications of CBT are also used. Objectives To evaluate the efficacy of CBT, CBT-BN and other psychotherapies in the treatment of adults with bulimia nervosa or related syndromes of recurrent binge eating. Search methods Handsearch of The International Journal of Eating Disorders since first issue; database searches of MEDLINE, EXTRAMED, EMBASE, PsycInfo, CURRENT CONTENTS, LILACS, SCISEARCH, CENTRAL and the The Cochrane Collaboration Depression, Anxiety & Neurosis Controlled Trials Register; citation list searching and personal approaches to authors were used. Search date June 2007. Selection criteria Randomised controlled trials of psychotherapy for adults with bulimia nervosa, binge eating disorder and/or eating disorder not otherwise specified (EDNOS) of a bulimic type which applied a standardised outcome methodology and had less than 50% drop-out rate. Data collection and analysis Data were analysed using the Review Manager software program. Relative risks were calculated for binary outcome data. Standardised mean differences were calculated for continuous variable outcome data. A random effects model was applied. Main results 48 studies (n = 3054 participants) were included. The review supported the efficacy of CBT and particularly CBT-BN in the treatment of people with bulimia nervosa and also (but less strongly due to the small number of trials) related eating disorder syndromes. Other psychotherapies were also efficacious, particularly interpersonal psychotherapy in the longer-term. Self-help approaches that used highly structured CBT treatment manuals were promising. Exposure and Response Prevention did not enhance the efficacy of CBT. Psychotherapy alone is unlikely to reduce or change body weight in people with bulimia nervosa or similar eating disorders. Authors' conclusions There is a small body of evidence for the efficacy of CBT in bulimia nervosa and similar syndromes, but the quality of trials is very variable and sample sizes are often small. More and larger trials are needed, particularly for binge eating disorder and other EDNOS syndromes. There is a need to develop more efficacious therapies for those with both a weight and an eating disorder. Plain language summary Psychological treatments for people with bulimia nervosa and bingeing Bulimia nervosa (BN) is an eating disorder in which people binge on food and then try to make up for this by extreme measures such as making themselves sick, taking laxatives or starving themselves. We reviewed studies of psychotherapies, including a specific form of psychotherapy called cognitive behavioural therapy (CBT-BN). We compared psychotherapy to control groups who got no treatment (e.g. people on waiting lists) and the specific CBT-BN with other types of psychotherapy. We found that CBT was better than other therapies, and better than no treatment, at reducing binge eating. Other psychotherapies were also better than no treatment in reducing binge eating. Some studies found that self-help using the CBT manual can be helpful, but more research and larger trials are needed.

Hay PPJ, Claudino AM, Kaio MH. Antidepressants versus psychological treatments and their combination for bulimia nervosa. Cochrane Database of Systematic Reviews 2001;4):

- Background Psychotherapeutic approaches, mainly cognitive behavior therapy, and antidepressant medication are the two treatment modalities that have received most support in controlled outcome studies of bulimia nervosa. Objectives The primary objective was to conduct a systematic review of all RCTs comparing antidepressants with psychological approaches or comparing their combination with each single approach for the treatment of bulimia nervosa. Search methods (1) electronic searches of MEDLINE (1966 to December 2000), EMBASE (1980-December 2000), PsycLIT (to December 2000), LILACS & SCISEARCH (to 1999) (2) the Cochrane Register of Controlled Trials and the Cochrane Depression, Anxiety and Neurosis Group Register - ongoing (3) handsearches of the references of all identified trials (4) contact with the pharmaceutical companies and the principal investigator of each included trial (5) handsearch of the International Journal of Eating Disorders - ongoing Selection criteria Inclusion criteria: every randomized controlled trial in which antidepressants were compared with psychological treatments or the combination of antidepressants with psychological approaches was compared to each treatment alone, to reduce the symptoms of bulimia nervosa in patients of any age or gender. Quality criteria: reports were considered adequate if they were classified as A or B according to the Cochrane Manual. Data collection and analysis Data were extracted independently by two reviewers for each included trial. The main outcome for efficacy was full remission of bulimic symptoms, defined as 100% reduction in binge or purge episodes from baseline to endpoint. Dichotomous data was evaluated by the relative risks and 95% confidence intervals around this measure, based on the random effects model; continuous data was evaluated by the average difference and the 95% confidence interval. Number needed to treat (NNT) and number needed to harm (NNH) were calculated using the inverse of the absolute risk reduction. Main results Five trials were included in comparison one (antidepressants versus psychological treatments), five in comparison two (antidepressants versus the combination) and seven in comparison three (psychological treatments versus the combination). Remission rates were 20% for single antidepressants compared to 39% for single psychotherapy (DerSimonian-Laird Relative Risk = 1.28; 95% Confidence Interval = 0.98;1.67). Dropout rates were higher for antidepressants than for psychotherapy (DerSimonian-Laird Relative Risk = 2.18; 95% Confidence Interval = 1.09;4.35). The NNH for a mean treatment duration of 17.5 weeks was 4 (95% confidence interval = 3;11). Comparison two found remission rates of 42% for the combination versus 23% for antidepressants (DerSimonian-Laird Relative Risk = 1.38; 95% Confidence

Interval = 0.98;1.93). Comparison three showed a 36% pooled remission rate for psychological approaches compared to 49% for the combination (DerSimonian-Laird Relative Risk = 1.21; 95% Confidence Interval = 1.02;1.45). The NNT for a mean treatment duration of 15 weeks was 8 (95% Confidence Interval = 4;320). Dropout rates were higher for the combination compared to single psychological treatments (DerSimonian-Laird Relative Risk = 0.57; 95% Confidence Interval = 0.38;0.88). The NNH was 7 (95% Confidence Interval = 4;21). Authors' conclusions Using a more conservative statistical approach, combination treatments were superior to single psychotherapy. This was the only statistically significant difference between treatments. The number of trials might be insufficient to show the statistical significance of a 19% absolute risk reduction in efficacy favouring psychotherapy or combination treatments over single antidepressants. Psychotherapy appeared to be more acceptable to subjects. When antidepressants were combined with psychological treatments, acceptability of the latter was significantly reduced. Plain language summary Antidepressants and psychological treatments, alone or combined, or bulimia nervosa Psychotherapeutic approaches, mainly cognitive behavior therapy, and antidepressant medication are the two treatment modalities that have received most support in controlled outcome studies of bulimia nervosa. Using a more conservative statistical approach, combination treatments were superior to single psychotherapy. This was the only statistically significant difference between treatments. The number of trials might be insufficient to show the statistical significance of a 19% absolute risk reduction in efficacy favouring psychotherapy or combination treatments over single antidepressants. Psychotherapy appeared to be more acceptable to subjects. When antidepressants were combined with psychological treatments, acceptability of the latter was significantly reduced.

Perkins SSJ, Murphy RRM, Schmidt UUS, Williams C. Self-help and guided self-help for eating disorders. Cochrane Database of Systematic Reviews 2006;3):

- Background Anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder (BED) and eating disorder not otherwise specified (EDNOS) are common and disabling disorders. Many patients experience difficulties accessing specialist psychological treatments. Pure self-help (PSH: self-help material only) or guided self-help (GSH: self-help material with therapist guidance), may bridge this gap. Objectives Main objective: Evaluate evidence from randomised controlled trials (RCTs) / controlled clinical trials (CCTs) for the efficacy of PSH/GSH with respect to eating disorder symptoms, compared with waiting list or placebo/attention control, other psychological or pharmacological treatments (or combinations/augmentations) in people with eating disorders. Secondary objective: Evaluate evidence for the efficacy of PSH/GSH regarding comorbid symptomatology and costs. Search methods CCDANCTR-Studies and CCDANCTR-References were searched in November 2005, other electronic databases were searched, relevant journals and grey literature were checked, and personal approaches were made to authors. Selection criteria Published/unpublished RCTs/CCTs evaluating PSH/GSH for any eating disorder. Data collection and analysis Data was extracted using a customized spreadsheet. Relative Risks (RR) were calculated from dichotomous data and weighted/standardized mean differences (WMD/SMD) from continuous data, using a random effects model. Main results Twelve RCTs and three CCTs were identified, all focusing on BN, BED, EDNOS or combinations of these, in adults, using manual-based PSH/GSH across various settings. Primary comparisons: At end of treatment, PSH/GSH did not significantly differ from waiting list in abstinence from bingeing (RR 0.72, 95% CI 0.47 to 1.09), or purging (RR 0.86, 95% CI 0.68 to 1.08), although these treatments produced greater improvement on other eating disorder symptoms, psychiatric symptomatology and interpersonal functioning but not depression. Compared to other formal psychological therapies, PSH/GSH did not differ significantly at end of treatment or follow-up in improvement on bingeing and purging (RR 0.99, 95% CI 0.75 to 1.31), other eating disorder symptoms, level of interpersonal functioning or depression. There were no significant differences in treatment dropout. Secondary comparisons: One small study in BED found that cognitive-behavioural GSH compared to a non-specific control treatment produced significantly greater improvements in abstinence from bingeing and other eating disorder symptoms. Studies comparing PSH with GSH found no significant differences between treatment groups at end of treatment or follow-up. Comparison between different types of PSH/GSH found significant differences on eating disorder symptoms but not on bingeing/purging abstinence rates. Authors' conclusions PSH/GSH may have some utility as a first step in treatment and may have potential as an alternative to formal therapist-delivered psychological therapy. Future research should focus on producing large well-conducted studies of self-help treatments in eating disorders including health economic evaluations, different types and modes of delivering self-help (e.g. computerised versus manual-based) and different populations and settings. Plain language summary Self-help and guided self-help for eating disorders The eating disorders (anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder (BED) and eating disorder not otherwise specified (EDNOS)) are disabling conditions and specialist treatment is not always easily accessible. Self-help may bridge the gap. This review aimed to evaluate pure self-help (PSH) and guided self-help (GSH) interventions for eating disorders for all ages and genders, compared to psychological, pharmacological or control treatments and waiting list. Fifteen trials were identified, all focused on BN, BED or EDNOS, using manual-based self-help. There is some evidence that PSH/GSH reduce eating disorder and other symptoms in comparison to

waiting list or control treatment and may produce comparable outcomes to formal therapist-delivered psychological therapies. PSH/GSH may have some utility as a first step in treatment. In the future there need to be large well-conducted effectiveness studies of self-help treatments with or without guidance incorporating cost evaluations and investigation of different types of self-help in different populations and settings.

Pratt BM, Woolfenden S. Interventions for preventing eating disorders in children and adolescents. Cochrane Database of Systematic Reviews 2002;(2):

- Background Eating disorders represent an extremely difficult, time-consuming and costly condition to treat. Being young, female, and dieting are some of the few identified risk factors that have been reliably linked to the development of eating disorders. There is currently limited evidence in the published literature to suggest that any particular type of program is effective in preventing eating disorders and there has been concern that some interventions have the potential to cause harm. Objectives To determine if eating disorder prevention programs for children and adolescents are effective in: (1) promoting healthy eating attitudes and behaviours; (2) promoting protective psychological factors; (3) promoting satisfactory physical health; (4) having a long-term, sustainable, and positive impact on mental and physical health; and, (5) ensuring safety in relation to possible harmful consequences on mental or physical health. Search methods Relevant trials are identified through searching the Cochrane Controlled Trial Register (CCTR) and relevant biomedical and social science databases, as well as reference lists from articles identified through the search strategy and contact with experts in the field. Selection criteria Randomised controlled trials (RCTs) with a major focus on eating disorder prevention programs for children and adolescents, where there is no known DSM-IV diagnosis of an eating disorder, are eligible for inclusion in the review. Trials must include a control group and at least one objective outcome measure (e.g., BMI) or a standardised psychological measure used with the intervention and control group, pre- and post-intervention. Data collection and analysis A total of 1016 titles have been identified through the search to date. Twenty-two studies were located that reported use of a randomised controlled trial methodology and were critically appraised by two independent reviewers. Twelve studies met the selection criteria outlined above. Main results Combined data from two eating disorder prevention programs based on a media literacy and advocacy approach indicate a reduction in the internalisation or acceptance of societal ideals relating to appearance at a 3- to 6-month follow-up (Kusel 1999; Neumark* 2000) [SMD -0.28, -0.51 to -0.05, 95% CI]. There is insufficient evidence to support the effect of five programs designed to address eating attitudes and behaviours and other adolescent issues in the general community or those classified as being at high risk for eating disorder (Buddeberg* 1998; Dalle Grave 2001; Killen 1993; Santonastaso 1999; Zanetti 1999) and insufficient evidence to support the effect of two programs designed to improve self-esteem (O'Dea 2000; Wade 2003). Data from two didactic eating disorder awareness programs could not be pooled for analysis. There is not sufficient evidence to suggest that harm resulted from any of the prevention programs included in the review. Authors' conclusions The one significant pooled effect in the current review does not allow for any firm conclusions to be made about the impact of prevention programs for eating disorders in children and adolescents, although none of the pooled comparisons indicated evidence of harm. The meta-analysis is in the process of being revised to account for the impact of cluster randomised trials. Plain language summary Preventing eating disorders in children and adolescents Eating disorders represent an extremely difficult, time-consuming and costly condition to treat. Being young, female, and dieting are some of the few identified risk factors that have been reliably linked to the development of eating disorders. Several eating disorder prevention programs have been developed and trialled with children and adolescents. There is currently limited evidence in the published literature to suggest that any particular type of program is effective in preventing eating disorders and there has been concern that some interventions have the potential to cause harm. The aim of this systematic review is to determine whether these interventions are effective in the prevention of eating disorders in children and adolescents. Only one statistically significant result was found in the present meta-analysis - a slight effect of media literacy and advocacy programs in reducing acceptance of societal body image ideals. There is not sufficient evidence to suggest that harm was caused by any of the 12 randomised controlled trials included in the review at short-term follow-up. The meta-analysis is in the process of being revised to account for the impact of cluster randomised trials.

Other Systematic reviews

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