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REVIEW

Interpersonal psychotherapy for eating disorders: current perspectives

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Background: Interpersonal psychotherapy (IPT) is a time-limited and affect-, life-event-, and present-focused psychotherapy originally conceptualized for unipolar depression, and then adapted to the treatment of other disorders, including eating disorders (EDs). The purpose of this paper is to conduct a systematic review of studies on IPT for EDs.

Methods: The authors performed literature searches, study selection, method, and quality evaluation independently. Data were summarized using a narrative approach.

Results: Of the 534 papers retrieved, 37 studies met the inclusion criteria, and 15 were considered for the systematic review (randomized controlled trials and long-term follow-up studies derived from the randomized controlled trials). Their analysis revealed six main findings: 1) no significant differences between IPT and cognitive-behavioral therapy (CBT) were found when administered as monotherapy to patients with anorexia nervosa; 2) when administered as monotherapy to patients with bulimia nervosa (BN), IPT had lower outcomes than CBT and its enhanced version; 3) patients with BN who remitted with IPT showed a prolonged time spent in clinical remission, when followed up on the long term; 4) IPT and CBT, with different timings and methods, have both shown efficacy in the mid-term/long-term period in patients with BN; 5) CBT and its enhanced version produced rapid changes in the acute phase. IPT led to improvements occurring later, with slower changes that tended to maintain efficacy in the long term; 6) abstinence from binge eating with group IPT for binge eating disorder is stable and maintained (or further improved) in the long term.

Conclusion: IPT is a reasonable, cost-effective alternative to CBT for the overall ED spectrum.

Keywords: interpersonal psychotherapy, eating spectrum, bulimia nervosa, anorexia nervosa, binge-eating disorder, treatment efficacy

Introduction

Rationale

The overvaluation of shape, weight, and eating control are core psychopathological features of eating disorders (EDs) and have negative effects on intimate relationships.[1] Extreme concern about eating control and its expressions negatively affect mood and cognition, damaging education and vocational performances, with up to 20% of subjects no longer able to function independently 10–20 years after the illness onset.[2,3] Features of EDs can be directly maintained by interpersonal difficulties: both binge eating and dietary restraint tend to occur in the context of (or are exacerbated by) adverse interpersonal events. Several psychotherapeutic approaches for EDs encompass interpersonal difficulties, stating that lifetime interpersonal dysfunctions could be precursors,

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prodromals, or sequelae of a full-blown ED.[4] Interpersonal psychotherapy (IPT) is a time-limited, affect-, life-event-, and present-focused psychotherapy that emphasizes the interpersonal context of symptoms. Mainly based on Sullivan's interpersonal theory and Bowlby's attachment model and originally conceptualized for unipolar depression, IPT has been adapted for the treatment of other disorders, including EDs.[5–9] In contrast to cognitive-behavior therapy for bulimia nervosa (CBT-BN), whose theoretical model was originally formulated in the 1980s, the adaptation of IPT to EDs derives from an empirically supported model.[10,11] The rationale for applying IPT to EDs is clinical rather than theoretical: interpersonal difficulties are common in patients with EDs; they may predate the onset of EDs or be consequential, but always maintain the disorder through a number of mechanisms, especially during late adolescence and early adulthood. Patients become more isolated from the normalizing influence of their peers, and, as a result, their symptoms persist unchallenged.

As in the classical IPT for depression, the patient and the therapist define a central "interpersonal problem" or "treatment focus", falling into one (or more) of the following categories: 1) lack of intimacy and interpersonal deficits; 2) interpersonal role disputes (a conflict, overt or covert, in an important relationship); 3) role transitions (an unsettling major life change); 4) complicated grief (a complicated bereavement reaction following the death of a loved one, with difficulty reestablishing satisfying interpersonal ties in the absence of the deceased); and 5) life goals (specific focus of IPT for EDs), namely, problems with future life plans interfering with interpersonal functioning.[12]

Despite the rationale supporting the adaptation of IPT to EDs, IPT has been modified for anorexia nervosa (AN) and bulimia nervosa (BN) to some degree to its disadvantage when compared with CBT, presuming an equivalence in target and techniques between AN and BN.[13]

Objectives

The main aim of this paper is to systematically review finding from clinical studies that tested IPT in EDs. We set out to systematically review the published literature on the topic in accordance with the PICOS process as follows: P—population: female and male patients of any age who met the diagnosis criteria for AN, BN, binge eating disorder (BED), and loss of control eating (LOC); I—intervention: individual or group therapy with IPT for EDs; C—comparison: patients with EDs before and after treatment with IPT, and matched groups treated with other forms of psychotherapy (such as CBT) or control groups (when available); O—outcome: changes in body mass index (BMI) or number of binge-purge episodes, or number of episodes of LOC, however expressed (absolute value, *z*- or *t*-scores standard deviations, increases in percentage from baseline to follow-up); S—study design: we initially included randomized controlled trials (RCTs), cohort studies, case–control studies, follow-up studies, pilot studies, quasi-experimental studies, case series, or case reports. However, we decided to perform the systematic review only on RCTs and on long-term follow-up studies derived from the RCTs.

Materials and methods

We adhered to the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) guidelines in completion of this systematic review.[14]

Protocol and registration

This systematic review is not included in a research protocol.

Eligibility criteria

We proceeded in two steps: First step: all studies published between 1990 and January 2018 using PubMed were included, provided that they met the following criteria: 1) written in English; 2) original articles on studies with a longitudinal design; and 3) prospective or retrospective, observational (analytical or descriptive), experimental or quasi-experimental, controlled or noncontrolled studies. Reviews and non-original articles (ie, case reports, editorials, Letters to the Editor, and book chapters) were not included. Second step: after this first selection, we decided to include in the systematic review only the RCTs and the long-term follow-up studies derived from the abovementioned RCTs.

Information source and search strategy

The literature search was designed and performed independently in duplicate by two authors. The PubMed database was systematically screened using the following terms: [Interpersonal Psychotherapy] AND [Anorexia Nervosa] (n=112); [Interpersonal Psychotherapy] and [Bulimia] (n=160); [Interpersonal Psychotherapy] AND [Loss of Control Eating] (n=29); [Interpersonal Psychotherapy] AND [Binge-Eating Disorder] (n=93); [IPT] AND [loss of control eating] (n=13); [IPT AND [binge eating] (n=49); [IPT] AND [LOC] (n=6); [IPT] AND BED] (n=26); [IPT] AND [Bulimia] (n=35); [IPT] AND [Anorexia Nervosa] (n=11), leading to a total of 534 papers. Records after duplicates removed were 282; four (n=4) additional records were selected after a manual search was carried out to retrieve other articles that had not been identified

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via the initial search strategy, leading to a total of 286 papers (for a detailed description, see PRISMA flow diagram).

Study selection

Two authors independently screened the resulting articles for their methodology and appropriateness for inclusion. Noncontrolled studies as well as studies that did not consider treatment response as primary outcome were excluded from the systematic review and summarized in Table 1. Quality appraisal of controlled studies was conducted according to the RCT of Psychotherapy Quality Rating Scale (RCT-PQRS) by Kocsis et al,[15] a 25-item measure designed and tested in the context of an assessment of the empirical psychodynamic literature, but applicable to all RCTs of psychotherapy. Consensus discussion was used to resolve disagreements between reviewers.[15]

Data collection process and data items

First, the title and abstract of each paper were assessed by two independent authors for language suitability and subject matter relevance, and the studies thereby selected were assessed for their appropriateness for inclusion and quality of method. The first author, year of publication, design, sample age, duration of follow-up, intervention, and main findings are reported in Table 1. Quality score of each RCT that passed the two rounds of screening is summarized in Tables 2 and 3.

Risk of bias in individual studies

To assess the risk of bias of individual studies we utilized the RCT-PQRS.[15] Results are summarized in Tables 2 and 3.

Data synthesis

Due to the lack of homogeneity among the resulting studies, a meta-analysis could not be performed. In particular, studies varied in terms of how improvements were measured. Hence, this systematic review is presented as a narrative synthesis.

Results

We found a total of 534 records (Figure 1). Records after duplicates removed were 282; four additional records were selected after a manual search carried out to retrieve other articles that had not been identified via the initial search strategy, leading to a total of 286 papers screened. Two hundred forty records were excluded: 156 papers because not focused on IPT, 46 reviews or editorials, 22 not written in English, and 16 not pertinent to the selected topics. Full-text articles assessed for eligibility were 46. Nine full-text articles were subsequently excluded for the following reasons: 1) Internet assessment of interpersonal areas but not IPT study; 2) theoretical paper; 3) study on self-image; 4) short commentary; 5) psychodynamic interpersonal model; 6) no IPT applied; 7) interpersonal problems in a sample not treated with IPT; 8) commentary and short review; and 9) study of interpersonal problems with no IPT applied. Finally, 37 studies (37/286; 12.9%) were included in the review, as summarized in Table 1. Three studies were on AN (8.1%), 14 on BN (37.8%), 7 on BED (18.9%), and 9 on adolescents with LOC (24.4%); 4 studies addressed the issue of the sequential (individual or group) treatment with IPT (10.8%). All studies were conducted on outpatient samples. Ten studies adopted an RCT methodology (10/37; 27.0%),[11,16,20,21,28,29,31,39,40,46] five were follow-up studies (5/37; 13.5%),[17–19,30,47] eleven were based on secondary analyses carried out on the same samples of RCTs (11/37; 29.7%),[50–54,58,59,61,62,64,67] three were case series or case reports (3/37; 8.1%),[55,66,69] four were pilot studies (10.8%),[45,55,68,70] and four were studies with experimental designs other than RCTs (retrospective,[57] quasi-experimental,[60] community based,[63] laboratory meal[65] (4/37; 10.8%).

Qualitative synthesis was conducted only on RCTs and on the derived long-term follow-up studies, when available, namely on 15 studies.

The RCTs were all of good quality (mean score/SD of the RCT-PQRS omnibus rating: 6.1±0.9 points; see Table 2).

Summary of evidence

Randomized controlled trial with IPT for anorexia nervosa

We found one RCT with two follow-up points. In a 20-week RCT, 56 patients were randomized to IPT, CBT, or a control treatment called "nonspecific supportive clinical management", based on educative-nutritional advice and supportive psychotherapy principles.[16] Patients were females diagnosed with AN according to the criterion of a BMI <17.5. Amenorrhea was not an inclusion criterion. A chronic, refractory course of AN was an exclusion criterion. Two patients taking antidepressants were included. Therapy, in each modality, consisted of 20-hour-long, manual-based sessions conducted over a minimum of 20 weeks. Each participant completed assessments after the 10th therapy session and after the final session. Thirty-five patients (35/56; 62.5%) attended at least 15 of the 20 therapy sessions. At the end of the study, IPT was the least effective of the three treatments. The explanations included the relative lack of symptom focus, the long time taken to decide the problem area, and a substantial lack of symptom reactivity to specific interpersonal events. However, no additional explanation on the difficulties for the problematic area choices was provided. The authors speculated

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Table 1 Studies on IPT for eating disorders

Authors	Patients	Design	Selection criteria	Outcome measures
Studies on anorexia				
McIntosh et al[16]	56	Randomized study (IPT vs CBT vs NSSCM.	AN-R (DSM-IV) BMI: <17.5> 14.5 Amenorrhea not necessary.	EDE, HAM-D, GAF, EDI-2.
Carter et al[17]	35/56	5-year follow-up.	Completers from McIntosh study (2005).	EDE, HAM-D, GAF, EDI-2.
McIntosh et al[50]	53/56	Adherence study for 53 of 56 female patients already randomized in the McIntosh study (2005).	AN-R (DSM-IV) BMI: <17.5> 14.5 Amenorrhea not necessary.	CSPRS: adherence to specific treatments.
Studies on bulimia				
Fairburn et al[11]	75	Randomized controlled study (CBT-BN vs BT vs IPT).	BN (DSM-IV).	Main outcome measure: binging/ purging frequency at therapy end
Fairburn et al[18]	75	12-month follow-up.	Completers of previous study (BN DSM-IV criteria).	4-, 8-, and 12-month evaluation with EDE.
Jones et al[51]	38/75	Same sample of Fairburn studies.	Completers of all the 1-year FU evaluations.	EAT-40, BDI, RSE, and a form for the assessment of binge eating, vomiting, and laxative abuse.
Fairburn et al[19]	89/99	6-year follow-up.	Ninety-nine patients with BN (DSM-IV) initially randomized to CBT-BN vs BT vs IPT; 89 reevaluated after 6 years.	DSM-IV diagnostic assessment at baseline and after 6 years.
Agras et al[20]	220	Randomized multicenter controlled study (CBT-BN vs BT vs IPT).	BN (DSM-III-R).	EDE before and after treatment, and at 4-, 8-, and 12-month follow-up.
Wolk and Devlin[52]	110/129	Randomized, multicenter study CBT-BN vs IPT.	DSM-III-R criteria for BN.	State of Change Scale (SOC) to predict outcome.
Constantino et al[53]	220	Patients drawn from the Agras multicenter RCT.	DSM-III-R criteria for BN.	EDE, Expectation of Improvement and Suitability of Treatment Form, IIP, HAq, Purge Frequency Form.
Costantino and Smith-Hansen[54]	220	Patients drawn from the Agras multicenter RCT.	BN (DSM-IV).	II-P, HAq (an 11-item self-report measures assessing alliance quality from the patients' perspective).
Arcelus et al[55]	59	Case series evaluation of a modified form of IPT for the treatment of BN	BN or EDNOS (DSM-IV).	SCL-90, RSE, EDE-Q, IIP-32 and BDI, at baseline. EDE-Q, IIP-32, and BDI.
Arcelus et al[56]	30	Pilot study. Comparison between IPTBN-10 and patients who already received IPT-BN or in Waiting List condition	DSM-IV criteria for BN and EDNOS with bulimic features, including BED.	BITE, EDE-Q, BDI.
Serpell et al[57]	98	Retrospective study.	BN/EDNOS BN-subtype.	BTHQ developed for the study.
Fairburn et al[21]	130	RCT on CBT-E vs IPT.	DSM-IV diagnoses of BN, BED, and "other EDs".	EDE; CIA; SCID-IV; BDI.
Cooper et al[58]	130	Same sample and initial design of the Fairburn study (2015).	BN, BED, and "other EDs" according to DSM-IV.	RSE; SCID-IV; SAS; EDE.
Gomez Penedo et al[59]	220	RCT (sample of Agras study) CBT-BN vs BT vs IPT.	BN (DSM-III-R).	IIP (127 items); IIP-C (64 items); EDE; SCID-III-R.
Studies on BED				
Wilfley et al[28]	56	Randomized controlled study (group CBT vs group IPT vs controls in WL). 1-year follow-up.	Nonpurging bulimia.	EDE, BMI.

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Interventions	Results
Twenty sessions conducted over a minimum of 20 weeks.	IPT was found to be the least effective of the three treatments.
Patients receiving vs not receiving any treatment for eating difficulties over the follow-up period.	Participants initially randomized to IPT (who had the poorest global outcome rating at posttreatment) showed the "best global outcome rating" at long-term follow-up.
Twenty sessions conducted over a minimum of 20 weeks. Selection of three sessions, across the three therapy phases.	The three forms of psychotherapy were distinguishable by blind raters. Subscale scores were higher for the corresponding therapy than the other therapy modalities.
Eighteen manual-based sessions conducted over 19 weeks.	CBT-BN significantly more effective in reducing "dysmorphophobic symptoms" and "resorting to overly drastic diets" than IPT.
No administration of therapies.	No differences between CBT-BN and IPT over the 8 months following treatment.
No administration of therapies.	Early decrease (weeks 1–4) in the frequency of binge eating in all three treatments. In IPT, there was little change thereafter, whereas in BT and CBT the decrease continued until around Week 8 and then the rate stabilized. Statistically significant improvement in self-esteem over time. No clues as to the mechanism of action of IPT.
No administration of therapies, except for patients with severe needs.	Forty-six percent of the sample still satisfied DSM-IV criteria for an ED. Patients who received CBT-BN or IPT were doing markedly better than those who had received BT.
Twenty weeks of treatment; 1-year follow-up.	CBT-BN was found to be superior to IPT at the end of treatment. By 8–12 months open follow-up, the two treatments were equivalent.
Nineteen sessions of treatment.	SOC was a weakly significant predictor of improvement only for IPT. No significant association was found for CBT-BN group.
Twenty weeks of treatment; 1-year follow-up.	Relationship between specific patient characteristics and the development of the alliance. In CBT, baseline symptom severity was negatively related to middle alliance. In IPT, more baseline interpersonal problems were associated with poorer alliance quality at mid-treatment.
Twenty weeks of treatment; 1-year follow-up.	Early and middle alliance negatively associated with interpersonal distress and positively associated with interpersonal affiliation. Middle alliance was related to treatment group interactions with rigidity, affiliation, and control. Alliance growth was higher in IPT than in CBT.
Sixteen weekly 45 minutes sessions. Evaluations at middle and treatment end.	By the middle of therapy, improvements in terms of reductions in EDE-Q scores, binging and self-induced vomiting, interpersonal functioning and depression.
Ten 45 minutes sessions, usually conducted on a weekly basis.	No significant difference was found between the groups for the presence of binging and vomiting, and not on any of the EDE-Q scales when comparing IPT-BN10 and IPT-BN.
One session: participants asked to answer to BTHQ.	No useful information of IPT: only three patients were treated with this psychotherapy.
20–50 minutes sessions; review 20 weeks after treatment; then, 60-week follow-up.	Changes significantly greater for CBT-E. 75.5% of CBT-E patients achieved remission, compared with 37.7% of IPT patients. Posttreatment differences between CBT-E and IPT were no longer statistically significant at 60 weeks.
Potential predictors and then moderators identification.	At 60-week follow-up, patients with low levels of self-esteem at baseline responded better to CBT-E than to IPT.
Focus on interpersonal problems at baseline as predictors of purge at 12 months after completion.	The more baseline problems were relevant the more patients were likely to recover when treated with IPT vs CBT.
Twelve weeks treatment with group CBT 12 weeks treatment with group IPT.	Both group CBT and group IPT had a significant improvement in reducing BED but not for WL. BED significantly below baseline levels for both treatments at 6-month and 1-year follow-up.

(*Continued*)

Table 1 (*Continued*)

Authors	Number	Design	Selection criteria	Outcome measures
Agras et al[60]	50	Quasi-experimental study Nonresponders to group CBT assigned to group IPT vs WL.	BED.	Frequency of binge eating; BDI; BES; SCL-90; RSE; TFEQ.
Wilfley et al[29]	162	Randomized controlled study Group CBT vs group IPT.	BED (DSM-III-R).	EDE, BMI, Rosemberg Self-Esteem and Social Functioning, IIP, SAS.
Wilson et al[31]	205/470	Randomized controlled study IPT vs BWL vs CBTgsh 24-week interval, 2 year follow-up.	BED (DSM-IV).	
Sysko et al[61]	205	Sample derived from the Wilson RCT.	BED (DSM-IV).	Latent class analysis to evaluate subgroups within the population of BED patients.
Hilbert et al[30]	90	RCT on CBT vs IPT (group) 4 year follow-up.	BED (DSM-IV-TR).	EDE, EDE-Q, depression and anxiety subscales of the BSI.
Hilbert et al[62]	205	RCT on IPT, CBTgsh, and BWT to compare the three treatments on the short term and the long term.	BED (DSM-IV).	EDE; number of objective binge-eating episodes over the past 28 days.
Studies on LOC in adolescents				
Tanofsky-Kraff et al[45]	113	Pilot study with IPT-WG; then RCT and 1–3-year follow-up.	Overweight adolescents (12–17 years).	BMI, EDE at baseline, 6 months, and 1 year.
Cassidy et al[63]	44	Community-based research with focus groups after IPT-WG.	Overweight adolescents (12–17 years).	BMI, EDE-Q.
Tanofsky-Kraff et al[46]	113/116	RCT with 60 patients randomly assigned to health education and 56 patients to IPT. Three patients excluded after randomization.	Overweight adolescents (12–17 years) between 75th and 97th percentile and at least one LOC episode during the last month.	BMI, binge episodes, LOC episodes, EDE, SAS, BDI, STAIC.
Berger et al[64]	56	Sample drawn from the Tanofsky-Kraff RCT, randomized to IPT-WG or health education program.	Adolescent girls (12–17 years) between 75th and 97th percentile.	Anthropometrics, EDE, BDI, TAS-20.
Tanofsky-Kraff et al[65]	88/113	Sample drawn from a previous RCT with 60 patients randomly assigned to health education and 56 patients to IPT. To test if IPT improves mood and eating in the laboratory, at baseline, and at 6 months (follow-up 1) and 1 year (follow-up 2) following the initiation of the groups, girls consumed lunch from a multi-item meal with an instruction designed to model an LOC episode. Girls also reported mood state immediately before each meal.	Overweight adolescents (12–17 years) between 75th and 97th percentile and at least one LOC episode during the last month.	Anthropometrics, EDE, Brunel Mood Scale for pre-meal negative affect, Buffet Test Meal.
Tanofsky-Kraff et al[66]	1	Brief case study.	Case report on a 13-year-old girl.	
Burke et al[67]	68	Secondary analyses on the same sample of the Tanofsky-Kraff study.	Overweight adolescents (12–17 years).	BMI, EDE.
Tanofsky-Kraff et al[47]	88/113	Sample from a previous RCT recontacted 3 years after the initiation of the group programs.	Overweight adolescents (12–17 years).	EDE, SAS, STAIC; CBCL.
Shomaker et al[68]	29	Randomized, comparison pilot trial on feasibility and acceptability of FB-IPT.	Preadolescents, 8–13 years overweight, obese, LOC.	Completers evaluated post follow-up – after 6 and 12 months.

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Interventions	Results
12 weeks group CBT. 12 weeks group IPT.	IPT/CBT both reduced binge eating and weight significantly more than the WLC. No further improvement with IPT for patients who did not improve with CBT.
Twenty weekly 90 minutes group IPT sessions and three individual sessions. Individual 50–60minutes long sessions (except for the first, which lasted for 2 hours). Nineteen sessions during 24 weeks.	Similar outcomes in remission rates (64% vs 59%), at the end of treatment and at 1-year follow-up. Dietary restriction improvement more rapid in CBT. No differences on the EDE subscales or for BDI or self-esteem scale. BWL >IPT and CBTgsh on BMI, and >CBTgsh in increasing dietary restraint. At 1 year, no significant differences were seen.
Individual 50–60 minutes sessions; 19 sessions during 24 weeks.	DSM-IV criteria may not sufficiently address the heterogeneity within this diagnosis.
Twenty weekly 90 minutes group sessions and three additional individual sessions. 24-week period; assessment both at post treatment, and at 6, 12, 18, and 24 months.	Abstinence from binge eating stable over the follow-up period in the IPT group; significant tendency to relapse among patients in the CBT group. Rapid response in 70% of study participants (145/205); no differences among the three treatment groups. Rapid responders in BWL did not differ from non-rapid responders in CBTgsh and IPT.
Individual 1.5-hours pregroup meeting; 10–12 group sessions (75–90 minutes). Focus Group and general reactions to IPT-WG.	IPT-WG associated with a significant decrease in binge eating and effective in preventing excessive weight gain over 1–3-year follow-up. Program generally well accepted by both adolescents and parents.
Individual 1.5-hours meeting followed by 12 consecutive weekly 90 minutes group sessions. HE was based on the HEY-Durham manual for high-school students.	Decreases in BMI gain, age-adjusted BMI metrics, symptoms of depression and anxiety, and frequency of LOC eating over 12 months FU with no group differences. In follow-up analyses, IPT was more efficacious than HE at reducing objective binge eating at the 12-month follow-up.
IPT-WG group sessions vs a health education program.	Relationship between adolescent girls' interpersonal problem area and depressive symptoms was not entirely accounted for by individual differences in alexithymia.
Individual 1.5 hours meeting followed by 12 consecutive weekly 90 minutes group sessions. HE was based on the HEY-Durham manual for high-school students.	IPT did not change total intake at the test meal and was associated with reduced snack-food intake. There was no significant group difference for changes in total intake relative to girls' daily energy needs.
IPT-WG group sessions.	Successful example of IPT-WG for the prevention of excessive weight gain and for the prevention of BED.
Adapted version of IPT or a HE comparison group.	Older patients in IPT with the lowest 3-year BMI gain compared to younger ones in both conditions and older girls in HE. Non-White girls in IPT-WG more likely to abstain from LOC eating at 3 years.
Approximately 3 years following the initiation of the group programs, girls were recontacted with an additional assessment.	No main effect of group on change in BMI/adiposity. Among girls with high self-reported baseline social adjustment problems or anxiety, IPT, compared with HE, was associated with the steepest declines in BMI. For adiposity, girls with high or low anxiety in HE, and girls with low anxiety in IPT experienced gains, while girls in IPT with high anxiety stabilized.
Twelve weekly, 45 minutes sessions delivered to parents and children vs HE program.	FB-IPT was well accepted by both patients and relatives.

(*Continued*)

Table 1 (*Continued*)

Authors	Number	Design	Selection criteria	Outcome measures
Studies on individual sequenced CBT-IPT				
Mitchell et al[39]	62	Randomized multicenter study: IPT vs fluoxetine/desipramine after CBT-BN.	DSM-IV patients with BN who failed the first treatment with CBT-BN.	Abstinence from purging.
Hendricks and Thompson[69]	1	Case report.	DSM-IV patient with BN, depression, and alcohol abuse (CBT-BN and IPT).	Abstinence from purging.
Studies on group sequenced CBT-IPT				
Nevonen et al[70]	29	Pilot study (group CBT followed by group IPT).	DSM-IV BN and EDNOS; BMI >18.	EDI-2, SCL-90, CRI, BDI, and BMI.
Nevonen and Broberg[40]	138	Randomized controlled study 2.5-year follow-up GRP vs IND.	DSM-IV BN and EDNOS; BMI >18.	RAB, EDE, CEDRI, EDI-2, IIP, SCL-90, BDI, BMI.

Abbreviations: AN, anorexia nervosa; BDI, Beck Depression Inventory; BED, binge eating disorder; BES, Binge Eating Scale; BITE, Bulimic Investigatory Test Edinburgh; BMI, body mass index; BMS, Brunel Mood Scale; BN, bulimia nervosa; BSI, Brief Symptom Inventory; BTHQ, Bulimia Treatment History Questionnaire; BWL, behavioral weight loss; CBCL, Child Behavior Checklist; CBT-BN, cognitive-behavioral therapy for bulimia nervosa; CBT-E, enhanced version of cognitive-behavioral therapy; CBTgsh, guided self-help based on cognitive behavior therapy; CEDRI, Clinical Eating Disorder Rating Instrument; CIA, Clinical Impairment Assessment Questionnaire; CRI, Coping Resources Inventory; CSPRS, Collaborative Study Psychotherapy Rating Scale; EDE, Eating Disorder Examination; EDE-Q, Eating Disorder Examination Questionnaire; EDI-2, Eating Disorder Inventory-2; ED-NOS, eating disorder not otherwise specified; SCID-IV, Structured Clinical Interview for DSM-IV; GAF, Global Assessment of Functioning; GRP, sequenced group treatment; HAM-D, Hamilton Rating Scale for Depression; HAq, 11-item self-report measures assesses alliance quality from the patients' perspective; IIP, Inventory of Interpersonal Problems; IIP-32, Short Version of the Inventory of Interpersonal Problems; IND, sequenced individual treatment; IPT, interpersonal psychotherapy; IPT-WG, IPT weight gain; LOC, loss of control eating; NSSCM, nonspecific supportive clinical management; RAB, Rating of Anorexia and Bulimia interview; RCT, randomized controlled trial; RSE, Rosemberg Self-Esteem and Social Functioning; SAS, Social Adjustment Scale; SCL-90, Symptom Checklist-90; SOC, State of Change Scale; STAIC, State-Trait Anxiety Inventory for Children-A Trait Scale; TAS-20, Toronto Alexithymia Scale; TFEQ, Three-Factor Eating Questionnaire; WL, waiting list; WLC, waiting list condition.

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that the presence of high rates of obsessive personality traits among AN patients might be related to the scarce response to CBT. Surprisingly, they did not consider that a sample of patients with obsessive traits might be too inwardly focused to pay attention to their external environment, including the interpersonal issues of IPT. A study limitation was represented by the heterogeneity of the sample with an age range between 17 and 40 years. Moreover, the same therapists delivered the three therapies, raising questions on allegiance.

Completers from this RCT were subsequently included in a 5-year follow-up.[17] Patients were classified according to whether they received any treatment for eating difficulties over the follow-up period (yes/no). At the end of the follow-up, patients initially randomized to IPT (who had the poorest global outcome rating immediately posttreatment) showed the "best global outcome rating", with a "lag" effect for IPT over time. Study limitations included the small sample size and the enrollment of patients with mild or subthreshold AN.

Randomized controlled trial with IPT for bulimia nervosa

Individual treatments

Fairburn et al published two RCTs of IPT for patients with BN.[11,18] The first study was on 75 patients randomized to cognitive-behavioral therapy for BN (CBT-BN; n=25), behavioral therapy for BN (BT; n=25) or IPT (n=25).[11] The treatments consisted of at least 18 manual-based sessions conducted over 19 weeks. The sessions were held twice weekly for the first month, weekly for the following 2 months and every 2 weeks during the final 6 weeks. Six experienced therapists administered all three treatments. No psychopharmacological treatment was allowed. CBT-BN was significantly more effective than IPT in reducing some key features of BN, such as "dysmorphophobic symptoms" and "resorting to overly drastic diets".

The same sample entered a second study, a "closed" 12-month follow-up, with no concurrent psychopharmacological treatments, except for patients who showed severe clinical needs. Patients were evaluated at 4, 8, and 12 months posttreatment. The initial differences between CBT-BN and IPT disappeared over 8 months, because of further improvement in the IPT group. The behavioral version of CBT-BN was least effective overall, with substantial posttreatment relapse. IPT was slower acting acutely than CBT-BN but similarly effective in the long term.[18]

Patients enrolled in the two previous studies were then followed up in a 6-year prospective study.[19] Eighty-nine patients underwent a diagnostic reassessment by interview. Patients

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Interventions	Results
Twenty sessions over 16 weeks.	The dropouts were frequent: of the 62 patients randomized to the second-line treatment, 37 completed while 25 dropped out or were withdrawn. The abstinence rates for subjects assigned to both second-line treatments were low: 16% for IPT and 10% for those assigned to medication management.
Four stages of treatment (IPT at stage IV).	The patient stopped binge eating, but she continued to vomit.
Twenty sessions over a period of 20 weeks. 1-year follow-up.	Self-ratings showed significant differences between pretreatment and follow-up. Compared with pretreatment, a significant decrease in the 1-year follow-up scores was found on interpersonal distrust, social insecurity, and interpersonal sensitivity.
Sequenced GRP: Twenty-three 2-hour sessions over a period of 20 weeks. Sequenced IND: 50–60 minutes weekly for 23 weeks.	The 2.5-year follow-up intention-to-treat analysis showed a stabilized recovery rate for GRP and increased recovery from the 1-year to the 2.5-year follow-up for IND. Logistic regression analyses showed no significant effects of medication on recovery between IND and GRP at posttreatment or follow-up assessments.

who received CBT-BN or IPT were markedly better than those who had received BT. IPT and CBT-BN produced equivalent and lasting decreases in general psychiatric features and in improved self-esteem/social functioning.

A multicenter RCT in a sample of 220 patients compared individual IPT vs CBT-BN.[20] IPT was defined in a similar way in this trial as in the previous ones: treatment attention was paid to eating habits or attitudes toward weight and shape, and no specific behavioral or cognitive procedures characterizing CBT were allowed. Treatments consisted of 19 individual sessions conducted over a 20-week period (twice weekly for the first 2 weeks, weekly for the next 12 weeks, and biweekly for the last 6 weeks). After the 20-week treatment period, patients were followed up for 1 year. CBT-BN was superior to IPT at the end of treatment in both intent-to-treat and completers analyses. By the 8–12-month open follow-up, the two treatments were equivalent. No differential predictors of response to IPT and CBT-BN were identified.

Fairburn et al compared the enhanced version of CBT (CBT-E) with IPT in patients with BN and other not-underweight EDs.[21] After the initial treatment, patients entered a 60-week follow-up and were reassessed with the EDE, blind to treatment condition.[22,23] Both groups showed a significant response post treatment. Changes were greater with CBT-E than with IPT. Patients treated with CBT-E reported no binge eating, vomiting, or laxative misuse in the 44.8% of cases (26/58) compared with the 21.7% (13/60) of patients treated with IPT. Seventy-five percent of CBT-E completers achieved remission vs 37% of IPT completers. At 60-week follow-up, posttreatment differences between CBT-E and IPT were no longer statistically significant. However, these results cannot be generalized to younger patients or to patients with lower BMI than those enrolled in the study.

Randomized controlled trial with IPT for BED

Group treatment for BED

Group CBT is the first-line treatment for BED since the late 1990s.[24] Group IPT for BED is more recent and empirically related to the pathological management of negative emotions as dysfunctional responses to interpersonal stressors (emotional eating).[25–27]

A study compared the efficacy of group CBT, group IPT, and a waiting list (WL) condition on a sample of 56 women with nonpurging BN.[28] At posttreatment, both CBT and IPT showed significant improvements in reducing binge eating, whereas the WL condition did not. Binge eating remained significantly below baseline levels for both active treatment conditions at 6 months and 1 year.

Wilfley et al compared group IPT and CBT on a sample of BED patients (n=162).[29] Both treatments provided 20 weekly group sessions of 90 minutes and three individual sessions addressing patients' goals and progresses at three triage points: pretreatment, midtreatment, and posttreatment. Outcome measures included BMI and EDE at baseline, at the end of treatment, and every 4 months during a 1-year posttreatment follow-up.[22] The two groups showed similar outcomes in recovery rates at posttreatment (79% for CBT vs 73% for IPT) and at 1-year follow-up (59% for CBT vs 62% for IPT). The frequency of binge eating remained lower than at baseline. The two therapies differed in timing of improvement of dietary restriction that occurred more rapidly with CBT than with IPT.

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Table 2 Research clinical trials on IPT for EDs: RCT of Psychotherapy Quality Rating Scale scoring

	Fairburn et al[11]	Wilfley et al[28]	Agras et al[20]	Wilfley et al[29]	Mitchell et al[39]	McIntosh et al[16]	Nevonen and Broberg[40]	Wilson et al[31]	Tanofsky-Kraff et al[46]	Fairburn[21]
Description of subjects										
1. Diagnostic method and inclusion/exclusion criteria	2	2	2	2	2	2	2	2	2	2
2. Documentation/demonstration of reliability of diagnostic methodology	2	2	2	2	2	2	2	2	2	2
3. Description of relevant comorbidities	2	0	2	2	2	1	0	2	1	2
4. Description of number of patients screened, included, and excluded	2	0	2	2	2	1	2	2	2	2
Definition and delivery of treatment										
5. Treatment(s) (including control/comparison groups) are sufficiently described or referenced to allow for replication	2	2	2	2	2	2	2	2	2	2
6. The treatment being studied is treatment delivered	2	2	2	2	2	2	2	2	2	2
7. Therapist training/level of experience in treatment(s) under investigation	2	2	2	2	2	2	2	2	2	2
8. Therapist supervision while treatment is being provided	2	2	2	2	2	2	2	2	2	2
9. Description of concurrent treatments allowed and administered	2	2	2	0	0	1	1	0	1	2
Outcome measures										
10. Validated outcome measure(s)	2	2	2	2	2	2	2	2	2	2
11. Primary outcome measure(s) specified in advance	2	2	2	2	2	2	2	2	2	2
12. Outcome assessment by raters blinded to treatment group and with established reliability	2	2	2	2	0	2	2	2	2	2
13. Discussion of safety and adverse events during study treatment(s)	2	0	0	2	0	1	0	0	0	1
14. Assessment of long-term post-termination outcome	0	2	0	2	2	0	2	2	2	2
Data analysis										
15. Intent-to-treat method for data analysis, primary outcome	0	2	2	2	2	2	2	2	2	2
16. Description of dropouts and withdrawals	2	0	2	2	2	1	2	2	2	1
17. Appropriate statistical tests	2	2	2	2	2	2	2	2	2	2
18. Adequate sample size	2	2	2	2	2	2	2	2	2	2
19. Appropriate consideration of therapist and site effects	2	2	2	2	2	1	0	2	2	2
Treatment assignment										
20. A priori relevant hypotheses that justify comparison group(s)	2	2	2	2	2	2	2	2	2	2
21. Comparison group(s) from same population and timeframe as experimental group	2	2	2	2	2	2	2	2	2	2
22. Randomized assignment to treatment groups	2	2	2	2	2	1	2	2	2	2
Overall quality of study										
23. Balance of allegiance to types of treatment by practitioners	2	2	2	2	0	2	0	2	0	2
24. Conclusions justified by sample, measures, and data analysis	2	2	2	2	2	2	2	2	2	2
25. Omnibus rating	7	7	7	7	6	6	5	7	6	7

Abbreviations: ED, eating disorder; IPT, interpersonal psychotherapy; RCT, randomized controlled trial.

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Table 3 Long-term follow-up derived from sample randomized in RCTs on IPT for EDs: RCT of Psychotherapy Quality Rating Scale scoring

	[a]Fairburn et al[18]	[b]Fairburn et al[19]	[c]Carter et al[17]	[d]Hilbert et al[30]	[e]Tanofsky-Kraff et al[47]
Description of subjects					
1. Diagnostic method and inclusion/exclusion criteria	2	2	2	2	1
2. Documentation/demonstration of reliability of diagnostic methodology	2	2	2	2	2
3. Description of relevant comorbidities	1	2	0	1	1
4. Description of numbers of subjects screened, included, and excluded	0	1	0	2	2
Definition and delivery of treatment					
5. Treatment(s) (including control/comparison groups) are sufficiently described or referenced to allow for replication	2	1	1	2	2
6. The treatment being studied is treatment delivered	2	2	2	2	2
7. Therapist training and level of experience in the treatment(s) under investigation	2	2	1	1	2
8. Therapist supervision while treatment is being provided	2	2	2	2	2
9. Description of concurrent treatments allowed and administered	2	0	1	1	0
Outcome measures					
10. Validated outcome measure(s)	2	2	2	2	2
11. Primary outcome measure(s) specified in advance	2	2	2	2	2
12. Outcome assessment by raters blinded to treatment group and with established reliability	2	2	0	0	2
13. Discussion of safety and adverse events during study treatment(s)	2	2	1	0	0
14. Assessment of long-term post-termination outcome	2	2	2	2	2
Data analysis					
15. Intent-to-treat method for data analysis, primary outcome	0	0	2	2	0
16. Description of dropouts and withdrawals	2	2	1	1	0
17. Appropriate statistical tests	2	2	2	2	2
18. Adequate sample size	2	2	1	2	2
19. Appropriate consideration of therapist and site effects	2	2	0	0	0
Treatment assignment					
20. A priori relevant hypotheses that justify comparison group(s)	2	2	2	2	0
21. Comparison group(s) from same population and time frame as experimental group	2	1	2	2	2
22. Randomized assignment to treatment groups	2	2	1	2	2
Overall quality of study					
23. Balance of allegiance to types of treatment by practitioners	2	0	2	0	0
24. Conclusions justified by sample, measures, and data analysis	2	2	2	2	2
25. Omnibus rating	7	5	5	5	5

Notes: Main reports, [a,b]Fairburn et al,[11] [c]McIntosh et al,[16] [d]Wilfley et al,[29] [e]Tanofsky-Kraff et al.[46]
Abbreviations: ED, eating disorder; IPT, interpersonal psychotherapy; RCT, randomized controlled trial.

Hilbert et al reassessed 90 patients with BED 4 years after treatment cessation from the original study sample recruited by Wilfley et al.[29,30] All participants were randomized again to either CBT or IPT (n=45 each). Both treatments consisted of 20 weekly group sessions of 90 minutes and three additional individual sessions. Fifty-eight patients (64.4%) completed the long-term follow-up assessment. Outcome analyses included pretreatment, posttreatment, and 1–4-year follow-up. A substantial and long-lasting efficacy of both CBT and IPT was found, with full recovery from binge eating in >64% of patients. CBT and IPT yielded comparable long-term rates of remission to a subclinical level of BED: 80% of patients showed clinically significant improvement and 58% experienced an improvement in comorbid psychopathology. Abstinence from binge eating was stable over the follow-up period in the IPT group, whereas CBT patients had a significant tendency to relapse. Reduction of ED psychopathology in the IPT group was better maintained or further improved over the follow-up period, whereas for the CBT group, psychopathology worsened from 1-year to 4-year long-term follow-up, suggesting that the focus on improving interpersonal relationships prepares individuals more comprehensively for the social challenges of daily life.

Individual treatment for BED

Wilson et al compared the short- and longer term outcomes of three individual treatments in a sample of BED patients randomized to IPT (n=75), behavioral weight loss treat-

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ment (BWL; n=64), or the guided self-help based on CBT (CBTgsh; n=66).[31] Patients with BED were classified into two subtypes characterized by low and high negative affect. The three treatments were conducted over 24 weeks. Participants were followed up (6-month intervals) for 2 years post treatment completion. All sessions were 50–60 minutes long except for the first (2 hours long). The first three sessions were scheduled during the first 2 weeks, followed by 12 weekly sessions; the final four sessions occurred at 2-week intervals, for a total of 19 sessions over 24 weeks. The BWL treatment involved the same total therapy time and included moderate caloric restriction and exercise. The treatment initially focused on dietary change toward a weight loss goal of 7% of baseline weight; participants were asked to reduce first fat intake to 25% of total calories. If satisfactory weight loss progress was not achieved, a caloric goal was set based on initial weight. The exercise goal was 2.5 hours of moderate exercise each week. The core curriculum consisted of 16 weekly individual 50-minute sessions followed by four sessions at 2-week intervals, aimed at continuing weight loss and enhancing maintenance of such losses after the initial 16 sessions. The CBTgsh was based on Fairburn's book *Overcoming Binge Eating* and performed under a therapist's guidance, with ten treatment sessions, each lasting approximately 25 minutes, except for the first session (60 minutes long).[32] The first four sessions were weekly, the next two occurred at 2-week intervals, and the last four occurred at 4-week intervals. Questionnaires administered included the BDI, the Rosenberg Self-Esteem Scale, and the Social Adjustment Self-Report Scale.[33–35] Intention-to-treat analyses revealed no differences among the three treatments in remission from binge eating, reduction in days of binge eating, or no longer meeting DSM-IV criteria for BED. Similarly, no differences emerged on the EDE subscales or for BDI or the self-esteem scale. BWL was significantly more effective in reducing BMI than IPT and CBTgsh, and more effective than CBTgsh in increasing dietary restraint. BWL produced a greater number of patients with a 5% reduction in body weight (41%) compared with IPT (15%) or CBTgsh (15%). At 1 year, no significant differences among treatments in any measure of binge eating were found. The BWL group showed significantly more BMI gain than the CBTgsh group. No significant moderator effect of negative affect subtype on remission from binge eating was found. The BWL program was no longer significantly different from the other treatments in terms of weight loss.

Studies addressing sequenced treatment CBT-IPT

CBT and IPT seem "immiscible" because of their procedural differences.[36,37] IPT is a less directive, affect-focused approach that differs considerably from CBT in both style and content. However, whether IPT may succeed in cases in which CBT has failed is an open question. For example, Reveler and Fairburn conducted a study on patients with BN and diabetes who responded negatively to a first CBT trial, but who significantly improved after a switch to IPT and a second reassignment to CBT.[37] It has been argued that either IPT or CBT could be the initial treatment choice for EDs. Literature recommends CBT as initial treatment, because of a more rapid short-term efficacy and a wide dissemination. IPT is considered a second-line treatment when CBT fails.[38] Findings from clinical studies on this topic are very limited and focused on BN. We found two RCTs.

Individual study on sequenced CBT-IPT for BN

A study by Mitchell et al, derived from the one published by Agras et al, tested a second step treatment with IPT or antidepressants for patients with BN who failed the initial treatment with CBT.[20,39] A cohort of patients initially treated with CBT-BN was randomized to either IPT or medication management with fluoxetine, followed by desipramine for patients who did not achieve abstinence from purging with fluoxetine. All subjects were initially assessed for 2 weeks, and then they began a 20-session, 16-week course of CBT-BN. Between weeks 16 and 17, patients were not administered with CBT-BN and assessed. Patients who continued to purge were randomly assigned to the second-line treatments. A total of 62 subjects completing the prerandomization phase were eligible for randomization, based on self-reported purging during the past 2 weeks of CBT-BN treatment. The same psychotherapist who had previously delivered CBT-BN delivered IPT in 20 sessions over 16 weeks. At week 33, the IPT treatment ended. Patients randomized to medication therapy were treated with fluoxetine (60 mg/day). Subjects who did not tolerate this dose had their dosage reduced. Patients whose purging did not respond to this dosage within 8 weeks had fluoxetine discontinued and began desipramine at 50 mg/day with subsequent increases to a maximum of 300 mg/day. Patients were then reassessed between weeks 33 and 34 and followed up at week 60. Patients on IPT did not receive additional therapy. Patients on medication management were maintained on the same dosage until week 60 with monthly medication visits. At week 60, pharmacotherapy was discontinued. Despite this sophisticated study design, results

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were limited. Dropouts were frequent: of the 62 subjects randomized to the second treatments, 37 completed, while 25 dropped out. Of the 25 subjects who dropped out, 10 were on IPT. Moreover, considering that the same therapist delivered the two psychotherapies, the problem of what was the therapists' relative competence in and allegiance to the two treatments was the main study limitation.

Group study on sequenced CBT-IPT for BN

Nevonen and Broberg tested whether a sequenced group treatment (GRP) had similar effectiveness to sequenced individual treatment (IND) in recovery and remission, clinical ratings, self-reports of symptoms, interpersonal problems, and concomitant psychopathology in a sample of patients with BN.[40] One hundred thirty-eight patients (aged 18–24 years) entered the RCT. Patients taking psychotropic medication, already in psychotherapy, or reporting suicidal behaviors were excluded. The GRP consisted of 23 sessions over a period of 20 weeks. Group sessions were 2 hours long and occurred twice weekly for the first 3 weeks, and weekly thereafter for 17 weeks. The individual sessions were 50–60 minutes weekly for 23 weeks. Attrition and long-term (2.5 years) follow-up results were analyzed, using "intention-to-treat" and "completer" samples. The sequenced GRP consisted of twenty-three 2-hour sessions over 20 weeks, scheduled twice weekly for the first 3 weeks and weekly thereafter for 17 weeks. The individual sessions lasted 50–60 minutes weekly for 23 weeks. Four senior psychotherapists conducted both the IND and the GRP, following a revolving schedule, to control for the "therapist factor". Sixty-three (IND, n=31; GRP, n=32) of 86 participants (73%) completed the study. The immediate posttreatment recovery rate was 26% (n=8) in IND and 28% (n=9) in GRP. At 1-year follow-up, 52% of patients in IND (n=16) and 37.5% (n=12) of those in GRP recovered. At the 2.5-year follow-up, the recovery percentages were 47% in IND (n=14) and 37% in GRP (n=10). Although both IND and GRP showed efficacy at post treatment, the 1-year follow-up revealed increased recovery for IND as opposed to a decreased recovery for GRP in the intention-to-treat analyses. The 2.5-year follow-up intention-to-treat analysis showed a stabilized recovery rate for GRP and an increased recovery from the 1-year to the 2.5-year follow-up for IND. Remission rates increased for IND, whereas GRP slightly decreased from the 1-year to the 2.5-year follow-up. In the completers' sample, IND was superior to GRP in terms of reducing bulimia symptoms. However, in terms of recovery and remission, both IND and GRP were effective at post treatment. Neither the intention-to-treat nor the completers' analyses revealed significant differences between groups. The interpersonal problems measured revealed medium effect changes from pretreatment to 1-year follow-up for both the intention-to-treat and the completers' samples. The authors speculated that this finding might reflect a process of accepting and expressing interpersonal experiences, with an attempt of trying out other ways of functioning after the end of treatment.

Loss of control eating in adolescents: IPT and IPT weight gain

LOC among overweight adolescents ranges from 6% to 40%.[41–44] To date, evidence of efficacy of IPT in this population is limited. Of the six available studies, four were on the same sample of overweight adolescent girls aged 12–17 years enrolled in a first pilot study on the acceptability/feasibility of IPT-weight gain (IPT-WG), and then followed up for 1–3 years.[45–47]

IPT-WG was an adaptation of IPT, with group sessions 75–90 minutes long focused on psychoeducation and interpersonal skill building. The IPT-WG group was compared with a health group program (HE) based on the "Hey-Durham" health program for high school students, and adapted to match the number of sessions for IPT-WG.[48] In summary, these studies found a benefit of IPT-WG in reducing LOC eating when compared with HE, especially in girls of ethnic minorities. When binge eating was considered as a categorical variable, girls of the HE group were seven times more likely to endorse binge eating at the 12-month evaluation than IPT-WG patients. However, IPT-WG was not superior to HE for preventing excess weight gain at 1–3-year follow-up.

Discussion

Summary of evidence

Of the 534 papers retrieved, 37 studies met the inclusion criteria, and 15 were considered for the systematic review (RCTs and long-term follow-up studies derived from the RCTs).

The analysis of the 15 selected papers revealed six main findings: 1) When administered as monotherapy to patients with AN, no significant differences were found between IPT and CBT; 2) when administered as monotherapy to patients with BN, IPT had lower outcomes than CBT and CBT-E; 3) patients who remitted with IPT showed a prolonged time spent in clinical remission, when followed up on the long term; 4) IPT and CBT, with different timings and methods, have both shown efficacy in the mid-term/long-term period, in patients with BN; 5) CBT and CBT-E produced rapid changes

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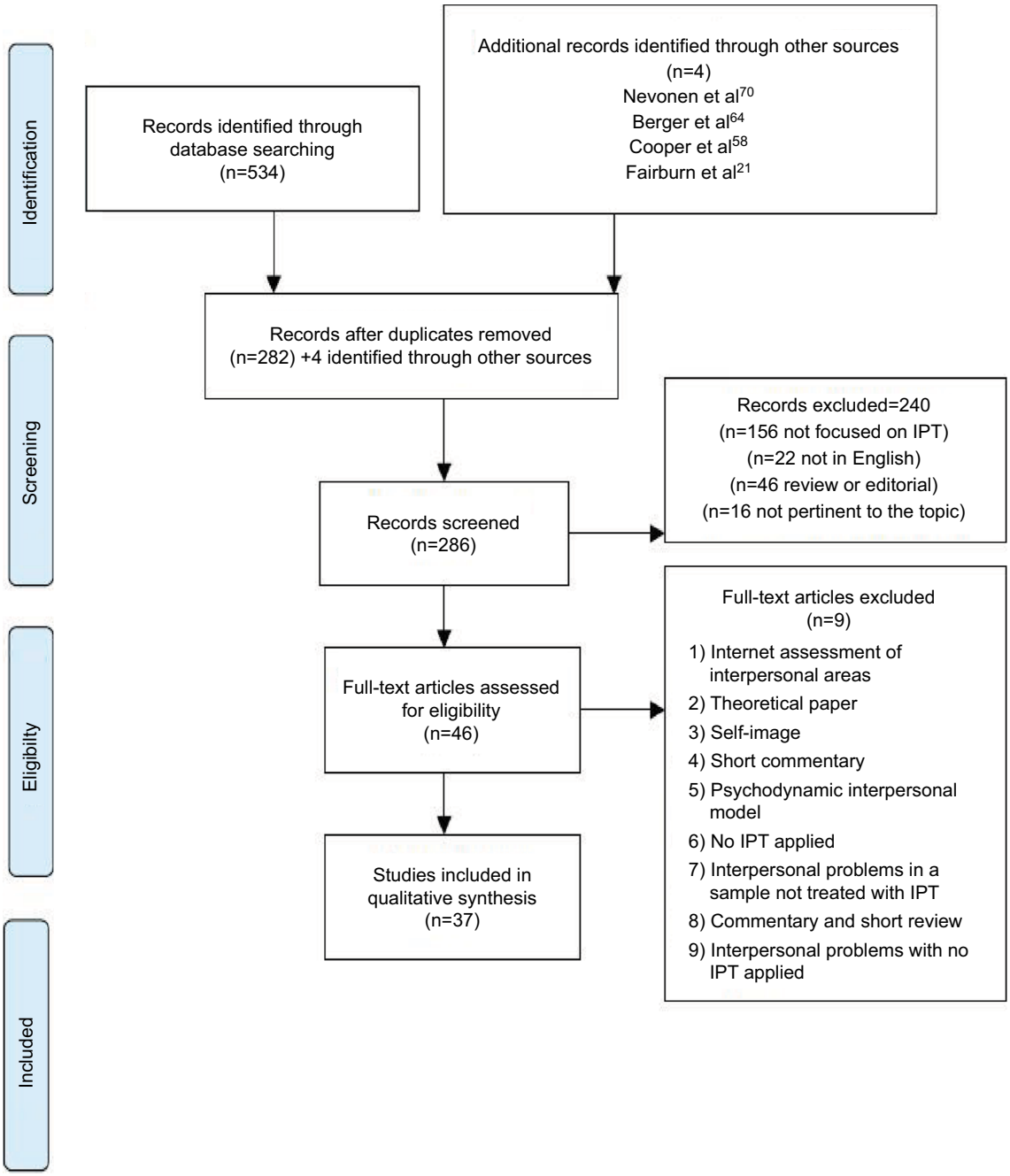

Figure 1 PRISMA flow diagram of selection studies.[14]
Abbreviation: PRISMA, Preferred Reporting Items for Systematic Review and Meta-Analyses.

in the acute phase. IPT led to improvements occurring later, with slower changes that tended to increase with time and to maintain efficacy in the long term; 6) abstinence from binge eating with group IPT for BED is stable and maintained (or further improved) in the long term.

The RCTs were all of good level, according to the RCT-PQRS scores.

Summary of limitations

There are several limitations to consider when interpreting this review. The first is that only 10 out of 37 selected studies had a controlled design.[11,16,20,21,28,29,31,39,40,46] Moreover, only five studies, all derived from previously randomized samples, addressed the question of a longer term standardized follow-up, which varied considerably between studies.[17–19,30,47]

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Furthermore, the number of instruments utilized for the assessment of psychological and psychopathological characteristics of patients with EDs is too wide and inhomogeneous. In this review, 30 different scales were found, raising questions on how to compare findings from such a number of scales, exploring in different ways different areas.

Finally, treatment allegiance is an important topic. A recent meta-analysis of the crossed therapist design in comparative trials demonstrated the bias due to a differential psychotherapist allegiance: those researchers who strongly allied to a treatment ignore therapist allegiance potentially skewing outcomes.[49]

Conclusions and areas for future research

The severity of ED presentation and clinical course poses challenges to find available, easy-to-administer, and evidence-based treatments. The interpersonal dimension of EDs encourages the progressive enlargement of the spectrum of IPT applications to this area. Controlled clinical trials suggest that IPT is a reasonable, cost-effective alternative to CBT for patients with BN and BED, especially in the long term.

The number of studies with IPT for AN is very limited, but the available finding is interesting. IPT and CBT-BN, with different timings and methods, both show efficacy in the mid-term/long-term period in patients with BN. CBT-BN produces rapid changes in the acute phase. The CBT-E is more effective than IPT in not-underweight patients with transdiagnostic characteristics. Taken as a whole, the body of evidence supporting the IPT use in BN is more modest than for CBT-BN and CBT-E.

The IPT approach to EDs focuses on interpersonal dimensions, leading to improvements in eating behaviors secondary to relational improvements. Findings suggest that IPT may lead to slower changes in the overall clinical picture, but also that changes tend to increase over time, thus sustaining efficacy in the long term. An alternative reading of this evidence is that the effects of CBT, when compared with IPT on the long term, may fade over time.

Researches demonstrate the efficacy of a therapeutic strategy focused on eating behaviors in addition to interpersonal background for BED. IPT, by decreasing emotional eating of BED, shows efficacy for both control and maintenance of body weight. Further research is required to establish how IPT specifically works for these patients. Available studies on IPT-induced mediators of change (focused on the identification of potential specific mechanisms of IPT) are limited or provide negative finding. The current knowledge on IPT, as an alternative to CBT in EDs, leads us to suggest that future research should investigate in greater detail whether the sequential or the combined approach with CBT and/or pharmacotherapy is preferable.

Author contributions

All authors gave their substantial contributions to conception and design, data acquisition, data analysis, and interpretation. All authors gave contributions in drafting the article or critically revising it for important intellectual content, and gave their final approval of the version to be published. All authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of the work are appropriately investigated and resolved.

Disclosure

The authors report no conflicts of interest in this work.

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