HSR&D

Brief Psychotherapy for Depression in Primary Care: A Systematic Review of the Evidence

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PREFACE

Health Services Research & Development Service's (HSR&D's) Evidence-based Synthesis Program (ESP) was established to provide timely and accurate syntheses of targeted healthcare topics of particular importance to Veterans Affairs (VA) managers and policymakers, as they work to improve the health and healthcare of Veterans. The ESP disseminates these reports throughout the VA.

HSR&D provides funding for four ESP Centers and each Center has an active VA affiliation. The ESP Centers generate evidence syntheses on important clinical practice topics, and these reports help:

- develop clinical policies informed by evidence,
- guide the implementation of effective services to improve patient outcomes and to support VA clinical practice guidelines and performance measures, and
- set the direction for future research to address gaps in clinical knowledge.

In 2009, an ESP Coordinating Center was created to expand the capacity of HSR&D Central Office and the four ESP sites by developing and maintaining program processes. In addition, the Center established a Steering Committee comprised of HSR&D field-based investigators, VA Patient Care Services, Office of Quality and Performance, and Veterans Integrated Service Networks (VISN) Clinical Management Officers. The Steering Committee provides program oversight, guides strategic planning, coordinates dissemination activities, and develops collaborations with VA leadership to identify new ESP topics of importance to Veterans and the VA healthcare system.

Comments on this evidence report are welcome and can be sent to Nicole Floyd, ESP Coordinating Center Program Manager, at nicole.floyd@va.gov.

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EVIDENCE REPORT

INTRODUCTION

Depressive disorders present a major public health concern. The prevalence of current depression among U.S. adults is 6.6%,[1] affecting up to 16 to 18% of the population over their lifetime.[2] High prevalence rates have also been noted in the Veteran population,[3] and particularly high rates have been found in primary care settings.[4] Although primary care physicians treat a high proportion of patients with depressive disorders,[5] the treatment of depression in primary care tends to be variable and suboptimal.[6] Because of this, it is a public health priority to identify treatments for depression that are effective, evidence-based, and suitable for dissemination in primary care.

The two evidence-based, first-line interventions for depression recommended by VA/Department of Defense (DoD) guidelines are pharmacotherapy and/or psychotherapy.[7] Based on several systematic reviews showing small-to-moderate benefit, the guideline recommends several classes of antidepressants as first-line therapy. Among psychotherapies, cognitive behavioral therapy (CBT), interpersonal psychotherapy (IPT) and problem-solving therapy (PST) are recommended as first-line treatment. For CBT and IPT, 16 to 20 sessions are recommended. Other psychotherapies are recommended for specific clinical situations, such as dialectical behavioral therapy (DBT), in combination with antidepressants for older adults with chronic major depressive disorder (MDD). In general, the evidence suggests that pharmacotherapy and psychotherapy are individually efficacious treatments and that there can be additive clinical benefit when these treatments are used in tandem.[8,9]

Despite persuasive evidence of effectiveness for both pharmacotherapy and psychotherapy in the treatment of depression, medication remains by far the most commonly utilized intervention in primary care settings.[10-12] However, there has been a growing interest in and commitment to the integration of psychotherapy and other mental health services into primary care settings,[13-15] perhaps most notably within the Veterans Health Administration.[16,17] Providing primary care patients with the option of receiving psychotherapy for their depression is an important objective for multiple reasons: there are many patients who, given the option, prefer psychotherapy to medication;[18-21] there is a need to provide alternative treatments for patients who do not improve on or cannot tolerate antidepressant medication;[22,23] and there may be unique benefits from psychotherapy in terms of costs[24-28] and relapse prevention.[29-31]

While there is good rationale for increasing the availability of psychological treatments for depression in primary care, there are also substantial barriers to incorporating psychotherapies into this setting. As with the prescription of antidepressant medication, there is a significant problem in delivering psychotherapy at the proper dose and with fidelity to the treatment model.[6,32] There are also a number of barriers to implementing psychotherapies in primary care that are distinct from barriers to providing effective pharmacological treatment. These barriers involve such pragmatic concerns as finding space in primary care clinics where psychotherapy can be provided in confidentiality and securing an adequate workforce with the proper training to meet the demand for psychotherapy.

Perhaps the most significant barrier to providing psychotherapies in primary care settings is that, unlike pharmacological treatment, many empirically supported psychotherapy treatment protocols consist of at least 12 to 16 weekly 1-hour sessions.[33,34] While this treatment duration is much abbreviated compared with older approaches to the provision of psychotherapy,[35] it is arguably still too intensive for reliable implementation in primary care settings.

Recognizing that time and resource constraints present important barriers to effectively implementing standard-duration psychotherapies (i.e., 12 to 20 sessions) for depression in primary care settings, this report evaluates whether psychotherapy for depression can be efficacious after a period of 8 or fewer sessions—what we define as brief psychotherapy. In examining the evidence on brief psychotherapies for depression, this report also aims to address issues of the amount of training necessary to deliver psychotherapeutic treatment effectively and the availability of data on key clinical outcomes like social functioning and satisfaction with treatment. Effectively treating depression in primary care patients is an important public health priority. With that in mind, this report endeavors to examine whether brief psychotherapies are often tailored specifically for primary care settings and are efficacious for the treatment of depression.

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METHODS

TOPIC DEVELOPMENT

This review was commissioned by the Department of Veterans Affairs' Evidence-based Synthesis Program. The topic was selected after a formal topic nomination and prioritization process that included representatives from the Office of Mental Health Services, Health Services Research and Development, the Mental Health QUERI, and the Office of Mental Health and Primary Care Integration. The key research questions for this review were developed and refined after preliminary review of published peer-reviewed literature and consultation with VA and non-VA experts to select the patients and subgroups, interventions, outcomes, and settings addressed in this review.

The final key questions were as follows:

Key Question 1: For primary care patients with depressive disorders, are brief, evidence-based psychotherapies with durations of up to eight sessions more efficacious than control for depressive symptoms (i.e., on self-report and/or clinician-administered measures) and quality of life (i.e., functional status and/or health-related quality of life)?

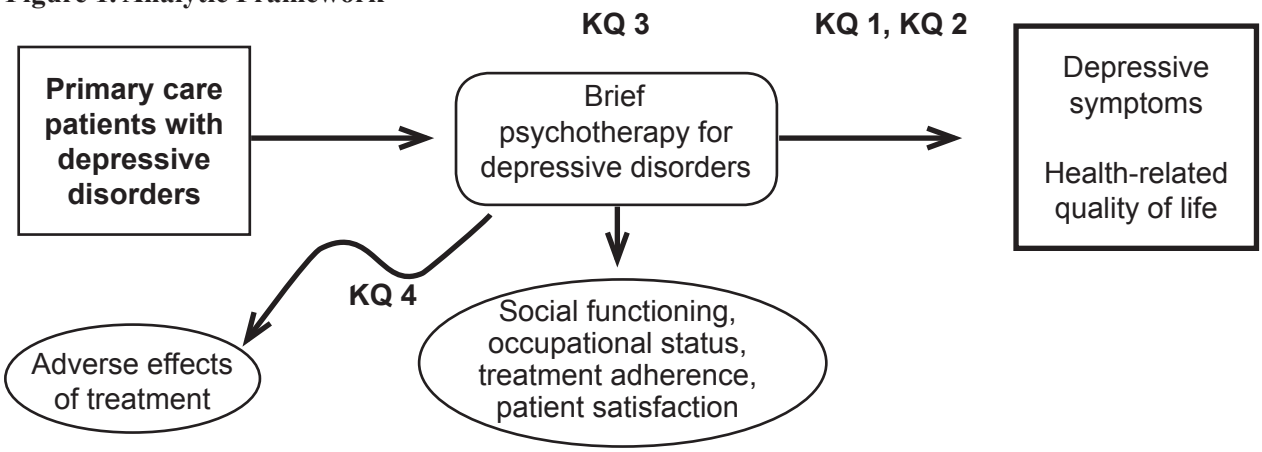
Key Question 2: For primary care patients with depressive disorders treated with a brief, evidence-based psychotherapy, is there evidence that treatment effect may vary by the number of sessions delivered?

Key Question 3: For psychotherapies demonstrating clinically significant treatment effects, what are the characteristics of treatment providers (i.e., type of provider and training), and what are the modalities of therapy (i.e., individual/group, face-to-face/teletherapy/Internet-based)?

Key Question 4: How commonly reported are the key clinical outcomes of quality of life, social functioning, occupational status, patient satisfaction, and adverse treatment effects in randomized trials of psychotherapy?

We developed and followed a standard protocol for all steps of this review. Our approach was guided by the analytic framework shown in Figure 1.

Figure 1. Analytic Framework



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OVERALL APPROACH

We utilized a combined approach, identifying and evaluating existing, good-quality systematic reviews and supplementing these reviews by searching for and evaluating original research not included in these reviews. We were guided in this process by published recommendations for conducting "complex systematic reviews,"[36] which integrate findings from previous systematic reviews and findings from newly identified original research.

SEARCH STRATEGY

We conducted our search strategy using the following three complementary approaches:

1. We searched for relevant, good-quality, English-language systematic reviews in MEDLINE (via PubMed), Embase, and PsycINFO from database inception through May 2010.
2. We used a well-documented Internet-accessible database of 243 psychotherapy trials (www.psychotherapyrcts.org/index.php?id=3), current through January 2010, as a data source for original research. Using this database, we searched for studies coded as including adults with a mood disorder who received face-to-face psychotherapy at a dose of eight or fewer therapy sessions.
3. To identify any recent literature not yet catalogued in the Internet-accessible database, we searched for English-language publications in MEDLINE (via PubMed), Embase, and PsycINFO from January 2009 (one year prior to the search date of the online database) through August 1, 2010.

We developed search strategies in consultation with a master librarian. The search terms and MeSH headings for the search strategies appear in Appendix A. We supplemented electronic searching by examining the bibliographies of included studies and systematic review articles.

STUDY SELECTION

Using prespecified inclusion/exclusion criteria, two trained researchers reviewed the list of titles and abstracts, then selected articles, identified from any of the computerized and manual searches described above, for further review. Each article retrieved was reviewed using a brief screening form to determine eligibility. Systematic reviews were evaluated as "good," "fair," or "poor" using quality criteria (see Quality Assessment below) adapted from a previous report,[37,38] and only good-quality reviews relevant to one of our study questions were retained. To be included in our evidence report, original research studies had to (1) be a randomized controlled trial (RCT), (2) compare an eligible psychotherapy of eight or fewer sessions to control, and (3) report effects on depression. Detailed eligibility criteria are described in Table 1.

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Table 1. Summary of Inclusion and Exclusion Criteria

Study characteristic	Inclusion criteria	Exclusion criteria
Study design	Randomized controlled trial	None
Population	Adults with major depressive disorder (MDD), dysthymic disorder, or subthreshold (minor) depression in acute-phase treatment	Treatment-resistant depression, postpartum depression, premenstrual dysphoric disorder, bipolar disorder, seasonal affective disorder, or double depression (i.e., MDD and dysthymia)
Interventions	Cognitive behavioral therapy (CBT) (including cognitive therapy and behavior therapy), interpersonal therapy (IPT), problem-solving therapy (PST), mindfulness-based cognitive therapy (MBCT), cognitive behavioral analysis system of psychotherapy (CBASP), dialectical behavioral therapy (DBT), functional analytic psychotherapy (FAP), acceptance and commitment therapy (ACT), or short-term psychodynamic therapy with ≤ 8 planned sessions	Generic counseling, life review therapy, psychoeducational therapy, supportive therapy, bibliotherapy, or Internet-based psychotherapies
Comparators	Waitlist, attention control, usual care Antidepressant medication if intervention is psychotherapy and an antidepressant	Another psychotherapy
Setting	Outpatient general medical or general mental health	Study conducted outside of North America, Western Europe, New Zealand, or Australia
Outcome	Depressive symptoms using a validated instrument reported at ≥ 6 weeks after randomization	None

DATA ABSTRACTION

For each newly identified primary research study, a trained researcher abstracted data from published reports into evidence tables (Appendix B). A second reviewer overread all data abstractions. We resolved disagreements by consensus among the first and second reviewer or by obtaining a third reviewer's opinion when consensus could not be reached. For eligible trials included in the two systematic reviews, we abstracted summary data from the reviews and supplemented these data by using the original publications when the reviews had incomplete information. We abstracted the following data: (1) study design and setting, (2) eligibility criteria, (3) exclusion criteria, (4) sample size, (5) demographics, (6) duration of followup, (7) depression clinical category, (8) intervention characteristics (e.g., type of therapy, mode, frequency, therapist), (9) comparator characteristics, (10) outcome measures, (11) results, and (12) adverse effects.

QUALITY ASSESSMENT

For systematic reviews, we assessed the comprehensiveness of the search strategy, the description and appropriateness of inclusion criteria, whether primary studies were assessed for quality and the adequacy of the quality measure, the reproducibility of methods to assess studies, whether the results of relevant studies were combined appropriately, whether heterogeneity and publication bias were assessed, and whether the conclusions were supported by the data

presented. Systematic reviews were rated "good" if the conclusions were supported by the data presented and there were no important study limitations. For original research studies, we assessed risk of bias using the key quality criteria described in the Agency for Healthcare Research and Quality (AHRQ) *Methods Guide for Effectiveness and Comparative Effectiveness Reviews,*[39] adapted for this specific topic. We abstracted data on adequacy of randomization and allocation concealment, comparability of groups at baseline, blinding, completeness of followup and differential loss to followup, whether incomplete data were addressed appropriately, validity of outcome measures, and conflict of interest. Using these data elements, we assigned a summary quality score of "good," "fair," or "poor" to individual RCTs.

DATA SYNTHESIS

When good-quality systematic reviews were identified, we summarized the reviews' findings in narrative form. For original research studies that were not included in the systematic reviews, results were summarized descriptively in tables that include the study sample, intervention, comparator, duration of followup, and primary outcomes. We critically analyzed these studies to compare their characteristics, methods, and findings. We then evaluated whether the new evidence was likely to change estimates from prior reviews by considering the precision and stability of estimates from the original review, the number and size of the new studies relative to studies in the original review, the quality of the new studies, and the consistency in estimates and conclusions between the new evidence and the original reviews.[39] After considering these issues, we updated prior meta-analyses when substantial new evidence was available and a new summary estimate might lead to different conclusions.

Because studies did not use a single common instrument to measure depression severity, our meta-analysis used effect sizes to summarize intervention effects. Effect sizes were calculated for each study by subtracting (at posttest) the average score of the control group from the average score of the experimental group and dividing the result by the pooled standard deviations (SDs) of the experimental and control groups. A negative effect size indicates a greater effect in the intervention group. For example, an effect size of -0.5 indicates that the mean decline in depression severity for the experimental group is half an SD greater than the mean decline in the control group. We applied this convention of a negative effect size indicating a greater intervention effect to our summary of existing systematic reviews, converting signs when necessary for consistency. Effect sizes are commonly interpreted as small (0.2), moderate (0.5), and large (≥ 0.80).[40,41] To further aid interpretation of effect sizes, we converted these estimates to the number needed to treat (NNT) using the approach described by Kraemer.[41] When studies used more than one validated instrument to assess depression severity, we used the mean of the effect sizes so that each study (or control group) contributed only one effect size. When means and SDs were not reported, we used other statistics (e.g., event rates) to calculate the effect size. For studies with more than one active eligible intervention (e.g., behavioral therapy and cognitive therapy arms) compared to a single control, we combined the intervention arms to avoid lack of independence that would be created if we entered each intervention into the analysis separately.[42]

Because considerable heterogeneity was expected, we used a random effects model to calculate a pooled mean effect size. We used the Q statistic and the I^2 statistic to assess for heterogeneity in outcomes between studies. Because the Q statistic is underpowered, we consider a $p < 0.10$

as statistically significant. The I^2 statistic is an indicator of heterogeneity in percentages. The importance of between-study heterogeneity was represented by the I^2 statistic thresholds of 0% to 40% as likely not important, 30% to 60% as moderate, 50% to 90% as substantial, and 75% to 100% as considerable.[43] Publication bias was tested by inspecting the funnel plot of the meta-analysis. This procedure is based on the expectation that if no publication bias is present, the effect sizes will be dispersed equally on either side of the overall effect. However, this method has limited power to detect publication bias, particularly when the number of included studies is few.

We conducted preplanned subgroup analyses by study quality and type of control group. For other study characteristics (e.g., sessions delivered, type of depression), there was not sufficient variability and numbers of studies to conduct subgroup analyses. We used an influence analysis, recomputing the pooled mean effect by removing one study at a time, to determine the influence of individual studies on the overall effect. We used the computer program Comprehensive Meta-analysis, Version 2.2.021 (www.meta-analysis.com/pages/about_us.html), to conduct all meta-analyses.

Grading the Evidence for Each Key Question

We graded the strength of evidence for each key question using principles from the Grades of Recommendation, Assessment, Development, and Evaluation (GRADE) Working Group.[44] This approach assesses the strength of evidence for each critical outcome by considering risk of bias, consistency, directness, precision, and publication bias. Other domains relevant to observational designs were not pertinent to our review. After considering each domain, a summary rating of "high," "moderate," "low," or "insufficient" strength of evidence was assigned after discussion by two reviewers (Table 2).

Table 2. Definitions for Strength of Evidence Rating

Strength of evidence rating	Definition
High	Further research is very unlikely to change our confidence in the estimate of effect
Moderate	Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate
Low	Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate
Insufficient	Evidence on an outcome is absent or too weak, sparse, or inconsistent to estimate an effect

PEER REVIEW

A draft version of this report was sent to five peer reviewers. Their comments and our responses are presented in Appendix C.

RESULTS

Our general approach throughout the Results section is first to describe the relevant systematic reviews and then to describe the primary literature, with syntheses of the reviews and the primary literature occurring in conjunction with descriptions of the primary literature. This approach to integrating existing systematic reviews and new primary literature into a new "complex systematic review" was adopted and implemented in accordance with the recommendations for conducting complex systematic reviews proposed by Whitlock and colleagues.[36]

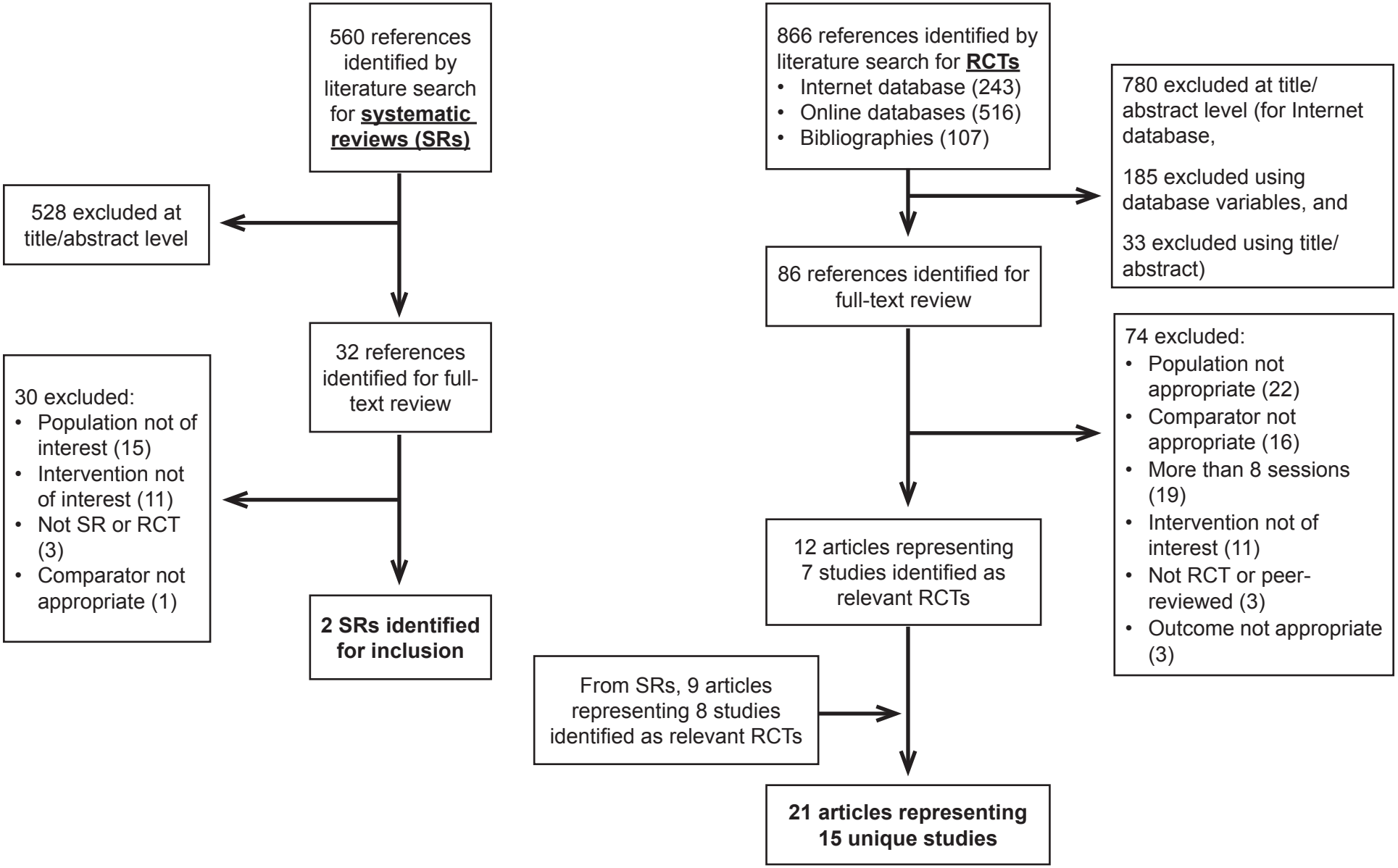
LITERATURE SEARCH AND STUDY CHARACTERISTICS

Systematic Reviews

Using the combined literature search of PubMed, Embase, PsycINFO, and Cochrane databases (Appendix A), we identified references for 560 potential systematic reviews (Figure 2). Of these, 528 were excluded at the title-and-abstract level, and 30 were excluded after conducting a full-text review. Two eligible reviews were retained: Cuijpers and colleagues[45] and Cape and colleagues.[46]

Cuijpers[45] completed a good-quality meta-analysis of 15 studies that examined psychotherapeutic interventions for depression in primary care. Studies were identified through an Internet-accessible database of psychotherapy trials[47] that was created by the authors via comprehensive literature searches in PubMed, PsycINFO, Embase, and the Cochrane Central Register of Controlled Trials from 1966 to December 2007. Included studies had interventions ranging in length from 6 to 16 sessions; only CBT and PST used 8 or fewer sessions. The majority of treatments were either CBT or PST, with two studies examining IPT and one study examining psychodynamic counseling. Most comparator conditions were care as usual (which was noted as being poorly described and variable in the reviewed studies), three were placebo, and two were waitlist. Half of the studies contained participants diagnosed with MDD, and the other half contained participants with other depressive conditions. Eight studies were conducted in the U.K., five in the U.S., and two in the Netherlands. The risk of bias varied across studies. Of the 15 trials, 13 assessed outcomes blind to treatment assignment, 10 were analyzed using the intent to treat principle, and dropout rates varied from 3.3 to 41.2%. The authors separated the seven studies with six or fewer sessions from the eight studies with more than six sessions; this subgroup analysis was of particular interest for the present review.

Figure 2. Literature Flow Diagram



Cape[46] completed a good-quality meta-analysis and meta-regression of 34 studies examining the effectiveness of brief psychological therapies in primary care for anxiety disorders, depressive disorders, and mixed anxiety and depression. Studies were identified via searches in MEDLINE, Embase, and PsycINFO databases from inception through July 2008. Included RCTs had number of sessions ranging from 2.3 to 9.8, with a median and mode of six sessions. Active treatment conditions had roughly equal distributions between studies for CBT, PST, and counseling. All comparator conditions were "general practitioner care as usual," which was not further described. Seven studies included patients with anxiety disorders, 14 included patients with depression, and 13 included patients with mixed anxiety and depression. Of the 14 depression studies, 6 enrolled patients with MDD, 6 enrolled mixed depressive disorders including minor depression, and 2 enrolled only those with minor depression. For the 14 depression studies, 8 were analyzed using the intent-to-treat principle, and 10 had lost to followup less than 20%. The number with blinded outcome assessment was not reported. Approximately two-thirds of the studies were conducted in the U.K., with the remaining third conducted in other European countries and the U.S. The authors separately reviewed the studies of brief psychotherapy for depression, and this subgroup analysis was used in the present review.

After articles from the Cuijpers[45] and Cape[46] reviews were screened by two independent reviewers, nine articles representing eight unique studies met eligibility criteria and were retained for further analysis in tandem with the additional original research studies identified from the primary literature searches.

Primary Literature

The combined searches for primary literature in electronic databases (MEDLINE, Embase, and PsycINFO), in a well-documented Internet-accessible database of psychotherapy trials,[47] and in bibliographies of included studies (Appendix A) identified 866 citations. Of these, 12 articles representing 7 unique studies met eligibility criteria (Figure 2).

Study characteristics from the 15 relevant RCTs of brief psychotherapy—8 from the Cuijpers[45] and Cape[46] reviews and 7 from the additional RCTs identified in our primary literature search—are summarized in Table 3. Characteristics of psychotherapy interventions used in the 15 RCTs of brief psychotherapy are summarized in Table 4.

Table 3. Summary of Study Characteristics

	Author, year	Depressive disorder	Age mean (SD)	% Female	% White	Setting	Recruitment	Most distal followup[a]	Depression outcomes	Quality[b]
RCTs from systematic reviews	Barrett et al., 2001[48] and Frank et al., 2002[4]	Minor depression or dysthymia	43.6 (NR)	67%	89%	PC	Screening and referral	11 weeks	HRSD-17; HSCL-20	–
	Dowrick et al., 2000[5]	MDD, dysthymia, adjustment disorder, or other depression	NR; Range: 18-65	66%	NR	PC	Screening from census and registry	52 weeks	BDI	–
	Lynch et al., 1997[49]	Elevated depressive symptoms without MDD	48.4 (NR)	86%	NR	PC	Screening	7 weeks	HRSD; BDI	–
	Lynch et al., 2004[50]	Elevated depressive symptoms	38.5 (13.7)	83%	NR	PC	Screening	6 weeks	HRSD; BDI; DHP	–
	Mynors-Wallis et al., 1995[51]	MDD	37.1 (11.4)	77%	95%	PC	Referral	12 weeks	HRSD; BDI	–
	Scott et al., 1997[52]	MDD	41 (10.4)	67%	NR	PC	Referral	52 weeks	HRSD; BDI	Fair
	Ward et al., 2000[53] and King et al., 2000[54]	Depression or mixed anxiety depression	36.8 (12.2)	76%	89%	PC	Referral	52 weeks	BDI-21	Fair
	Williams et al., 2000[55] and Frank et al., 2002[4]	Dysthymia or minor depression	71 (7.1)	43%	76%	PC	Screening and referral	11 weeks	HSCL-D-20; HRSD	–
RCTs from primary literature searches	Barnhofer et al., 2009[56]	MDD or subthreshold MDD	41.9 (10.4)	68%	NR	MH	Advertisement and referral	8 weeks	BDI	Good
	Laidlaw et al., 2008[57]	MDD	74.0 (8.0)	73%	NR	PC	Referral	26 weeks	BDI; GDS; HRSD	Fair
	Mynors-Wallis et al., 2000[58]	MDD	34.5 (NR)	78%	93%	PC	Referral	52 weeks	HRSD; BDI	Good
	Nezu, 1986[59]	MDD	41.7 (12.8)	81%	NR	MH	Advertisement	26 weeks	BDI; MMPI-D	Fair
	Simon et al., 2004[60] and Simon et al., 2009[61]	Antidepressant and depressive symptoms	44.8 (15.5)	74%	80%	PC	Registry	24 weeks	SCL	Good
	Wilson, 1982[62]	Self-report of depression	38.8 (NR)	66%	NR	MH	Advertisement	26 weeks	BDI	Poor
	Wilson, 1983[63]	Self-report of depression	39.5 (NR)	80%	NR	MH	Advertisement	8 weeks	BDI; HRSD	Fair

[a] Weeks since baseline assessment.

[b] Quality assessments were conducted for the seven newly identified RCTs, and in order to conduct the meta-analysis on studies of brief CBT, quality assessments were completed for two studies that had been included in the systematic reviews.

Abbreviations: BDI = Beck Depression Inventory, DHP = Diabetes Health Profile, DIS = Diagnostic Interview Schedule, GDS = Geriatric Depression Scale, GP = general practitioner, HRSD = Hamilton Rating Scale for Depression, HSLC-D = Headache Specific Locus of Control-Depression, MDD = major depressive disorder, MH = mental health, MMPI-D = Minnesota Multiphasic Personality Inventory Depression Scale, MOS-D = Medical Outcomes Study-Depression, NR = not reported, PC = primary care, PRIME-MD = Primary Care Evaluation of Mental Disorders Patient Health Questionnaire, RDC = Research Diagnostic Criteria, SADS-L = Schedule for Affective Disorders and Schizophrenia–Lifetime Version, SCAN = Schedules for Clinical Assessment in Neuropsychiatry, SCL = Symptom Checklist

Table 4. Summary of Intervention Characteristics

	Author, year	Therapy	# sessions	Session length	Session frequency	Modality	Therapist	Treatment fidelity?	Therapy completed [n (%)]	Control
RCTs from systematic reviews	Barrett et al., 2001[48] and Frank et al., 2002[4]	PST (n = 80)	6	30 min	Ever 2 weeks	Individual	PhD psychologist	Yes	64 (80%)	Placebo (n = 81)
	Dowrick et al., 2000[5]	PST (n = 128)	6	30 min	NR	Individual	Psychologists, nurses, allied health professionals	Yes	80 (63%)	Waitlist (n = 189)
	Lynch et al., 1997[49]	PST (n = 15)	6	20 min	Weekly	Individual; telephone	Graduate students	No	11 (73%)	Usual care (n = 14)
	Lynch et al., 2004[50]	PST (n = 18)	6	NR	Weekly	Individual; telephone	Nurses	Yes	NR	Usual care (n = 18)
	Mynors-Wallis et al., 1995[51]	PST (n = 30)	6	30 min	Every 2 weeks	Individual	Experienced psychiatrist and trained GPs	No	28 (93%)	Placebo (n = 30)
	Scott et al., 1997[52]	CBT (n = 24)	6	30 min	Weekly	Individual	CBT therapist	Yes	18 (75%)	Usual care (n = 24)
	Ward et al., 2000[53] and King et al., 2000[54]	CBT (n = 63)	6	50 min	Weekly	Individual	Experienced psychologists	Yes	56 (89%)	Usual care (n = 67)
	Williams et al., 2000[55] and Frank et al., 2002[4]	PST (n = 138)	6	30 min	Every 2 weeks	Individual	PhD psychologist, social workers, master's-level counselors	Yes	108 (78%)	Medication; placebo (n = 140)
RCTs from primary literature searches	Barnhofer et al., 2009[56]	MBCT (n = 16)	8	2 hours	Weekly	Group	MBCT therapists	Yes	14 (88%)	TAU (n = 14)
	Laidlaw et al., 2008[57]	CBT (n = 21)	8	NR	NR	Individual	Master's-level psychologist	Yes	20 (95%)	TAU (n = 23)
	Mynors-Wallis et al., 2000[58]	PST + Med. (n = 35)	6	30 min	Every 2 weeks	Individual	Research practice nurse	No	34 (97%)	Medication alone (n = 36)
	Nezu, 1986[59]	PST (n = 12)	8	1.75 hours	Weekly	Group	Graduate students	Yes	11 (92%)	Waitlist control (n = 9)
	Simon et al., 2004[60] and Simon et al., 2009[61]	CBT+TCM (n = 195)	8	35 min	Every ≈1.5 weeks[a]	Individual; Telephone	Master's-level psychologist	No	167 (86%)	TCM (n = 207)
	Wilson, 1982[62]	CBT (n ≈ 32)[b]	7	1 hour	Weekly	Individual	Graduate students	NR	21 (66%)	Minimal contact[c] (n ≈ 32)[b]
	Wilson, 1983[63]	CBT (n = 16)	8	1 hour	Weekly	Individual	NR	No	12 (75%)	Waitlist (n = 9)

[a] Weekly sessions for first 4 weeks, with frequency ranging from every 1 to 4 weeks for remaining four sessions.

[b] Estimate based on data provided in article.

[c] Minimal contact consisted of two 1-hour nondirective therapy sessions to coincide with medication refills.

Abbreviations: CBT = cognitive behavioral therapy (includes cognitive therapy and behavioral therapy), MBCT = mindfulness-based cognitive therapy, min = minutes, NR = not reported, PST = problem-solving therapy, TAU = treatment as usual, TCM = telephone case management

Of the 15 unique studies, 6 studies were conducted in the U.S., 6 in the U.K., 2 in Australia, and 1 recruited patients across several European countries. All studies were conducted with English-speaking patients. Patients were predominantly treated in primary care, with 11 trials taking place in a primary care setting, and 4 taking place in a mental health outpatient setting. Recruitment strategies varied such that participants were recruited via screening in five studies, referral from a provider in eight studies, advertisement in four studies, and registries in two studies; many trials used more than one recruitment method. Studies had varying diagnostic criteria for inclusion, with six trials specifically allowing for the inclusion of subthreshold depression (e.g., minor depression, adjustment disorder, depressive symptoms), five requiring a diagnosis of MDD, and the remaining four using other criteria (e.g., beginning antidepressant, self-report of depression).

The intervention in eight studies was PST; in six studies, CBT; and in one study, mindfulness-based cognitive therapy (MBCT). No trials of other psychotherapies using interventions of eight sessions or fewer were identified. Interventions were monitored for treatment fidelity in nine studies. Included studies most commonly measured depressive symptoms using the clinician-administered Hamilton Rating Scale for Depression (HRSD) and the self-report Beck Depression Inventory (BDI); only one study used neither of these measures. Even though no study extended treatment beyond eight sessions, followup duration was less than 6 months for seven studies and was 6 months or greater for eight studies. In all but one study, females outnumbered males by a ratio of at least 2 to 1. The average age for study participants ranged from 35 to 48 years of age in 13 of the 15 studies, with the 2 remaining studies having participants with average ages of 71 and 74 years of age. These two studies of elderly patients had mixed results: one found small to no benefit in elderly patients receiving PST for depression,[55] and the other found significant and sustained benefit in elderly patients receiving CBT for depression.[57] Most studies did not report race, and the six studies that did report race had heavily Caucasian samples. Only two study samples included any Veteran representation.[48,55] In both samples, Veterans composed only a portion of the overall sample, and data on Veterans were not presented separately.

Quality assessments were conducted for the seven RCTs identified in the primary literature searches—one was rated as poor, three as fair, and three as good. Fair and poor studies were often rated as such due to inadequately addressing incomplete outcome data and not having outcome assessors who were blind to treatment assignment. In order to conduct the meta-analysis on studies of brief CBT, quality assessments were completed for two studies that had been included in the systematic reviews; both were rated as fair.

KEY QUESTION 1. For primary care patients with depressive disorders, are brief, evidence-based psychotherapies with durations of up to eight sessions more efficacious than control for depressive symptoms (i.e., on self-report and/or clinician-administered measures) and quality of life (i.e., functional status and/or health-related quality of life)?

Systematic Reviews

Cuijpers'[45] systematic review of 15 RCTs found psychological treatment from a range of 6 to 16 sessions to be significantly more effective than control for treatment of depression in primary care (ES -0.31, 95% CI -0.45 to -0.17, NNT = 5.75). They found significantly larger effect sizes

for studies in which participants were referred by their general practitioner (GP) (ES -0.43, 95% CI -0.58 to -0.28, NNT = 4.20) than for studies in which participants were recruited through systematic screening (ES -0.13, 95% CI -0.34 to 0.08, NNT = 13.51). The lower effect size for brief psychotherapy in the subgroup of primary care patients recruited through systematic screening was suggested as the reason why an initial comparison favored brief psychotherapy delivered in non–primary care settings (ES -0.67, 95% CI -0.75 to -0.58, NNT = 2.75) compared to brief psychotherapy delivered in primary care settings (ES -0.31, 95% CI -0.45 to -0.17, NNT = 5.75). The authors found no significant difference between studies in which participants were diagnosed with MDD (ES -0.21, 95% CI -0.42 to 0.00, NNT = 8.47) and studies in which participants' depressive symptomatology was alternatively determined (ES -0.40, 95% CI -0.56 to -0.23, NNT = 4.50). The multiple subgroup analyses conducted in this good-quality review allowed for the authors to present both robust and nuanced findings. In regard to psychotherapies with a fewer number of sessions, the authors found that, compared to control, psychotherapies of ≤ 6 sessions (n = 7) had a small but significant positive effect for the treatment of depression in primary care (ES -0.25, 95% CI -0.48 to -0.02, NNT = 7.14). HRQOL outcomes were not reported in this review.

Cape's[46] meta-analysis of 34 studies examined efficacy in regard to treatment type and in regard to three diagnostic categories: anxiety, depression, and mixed depression and anxiety. For certain analyses, they combined patients with diagnoses in the latter two categories. They found smaller treatment effects when CBT was used for mixed depression and anxiety (ES -0.26, 95% CI -0.44 to -0.08) than for anxiety (i.e., predominantly panic disorder and generalized anxiety disorder; ES -1.06, 95% CI -1.31 to -0.80). They found similar small effect sizes for PST for depression and mixed depression and anxiety (ES -0.21, 95% CI -0.37 to -0.05) and for counseling for depression and mixed depression and anxiety (ES -0.32, 95% CI -0.52 to -0.11). The examination of different psychotherapies in three different diagnostic groups (i.e., depression, anxiety, and mixed depression and anxiety) was a particular strength of this review. In regard to brief psychotherapies specifically for patients with depression, the authors found a significant but small effect favoring brief CBT over usual GP care for depression (ES -0.33, 95% CI -0.60 to -0.06) and found a positive but statistically nonsignificant effect for PST over usual GP care (ES -0.26, 95% CI -0.49 to 0.03). No significant differences in efficacy were found between CBT and PST. HRQOL outcomes were not reported in this review.

Primary Literature

Among the seven studies that we discovered were not included in the systematic reviews were two studies of PST, one of MBCT, and four of CBT. The 4 studies of CBT randomized 535 participants to treatment or control, whereas the 2 relevant studies of brief CBT covered in the systematic reviews randomized 178 participants to treatment or control. Because of the number of CBT trials not considered in the previous 2 systematic reviews, we conducted a meta-analysis of the 6 trials involving 713 patients to evaluate the effects of brief CBT (6 to 8 sessions) for depression.

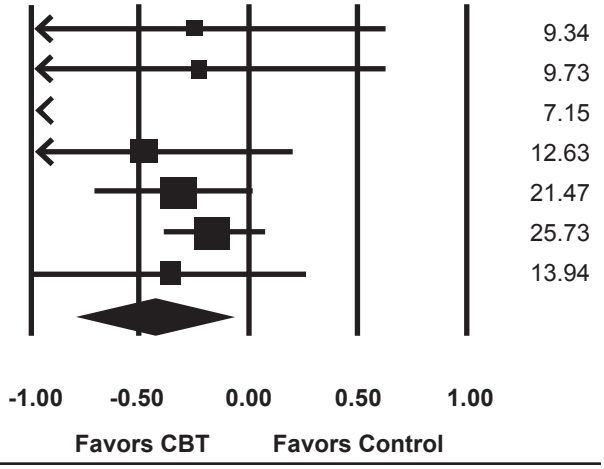
For the 6 trials, study quality was rated as good (n = 1), fair (n = 4), or poor (n = 1). Studies enrolled patients with MDD (n = 2), depressive symptoms (n = 2), depression or mixed anxiety depression (n = 1), or patients with depressive symptoms who were starting an antidepressant (n = 1). Control conditions were treatment as usual in four of the six trials, and in two trials control

conditions contained an additional therapeutic component beyond usual care.[60,62] Care as usual in these trials was typically described as allowing the primary care provider their usual discretion in treating depression; some studies noted that this could include antidepressant medication, counseling, or referral, whereas other studies did not specify the range of options left open to providers.

Participants receiving brief CBT for depression were more likely than participants receiving a control treatment to have reduced symptoms of depression (ES -0.42, 95% CI -0.74 to -0.10), but treatment effects differed significantly across studies (Cochran Q = 13.74, p = 0.03, I^2 = 56%) (Figure 3). The ES of -0.42 corresponds to an NNT of approximately 4.5. A funnel plot did not suggest significant publication bias, but with only six studies, this method has limited power to detect publication bias. To examine the moderate level of variability present, we conducted an influence analysis. In this analysis, the summary estimate ranged from -0.24 to -0.53, with the trial by Wilson[63] having the greatest influence. This trial was the only one of the six CBT studies to use a waitlist control condition as the comparator. Based on a priori hypotheses of variables that might influence the effect size estimate, we conducted two sensitivity analyses: in the first, we removed poor-quality studies from the meta-analysis; in the second, we removed both poor-quality studies and studies that used nontherapeutic comparator conditions (e.g., waitlist) from the meta-analysis. In the meta-analysis with the poor-quality study removed,[62] brief CBT for depression continued to be significantly more effective than control (ES -0.50, 95% CI -0.91 to -0.09), but treatment effects remained significantly heterogeneous (Cochran Q = 13.71, p = 0.008, I^2 = 71%). With the poor-quality study[62] and the study with a waitlist comparator[63] removed, treatment effects of brief CBT for depression were smaller (ES -0.24, 95% CI -0.42 to -0.06) but homogeneous (Cochran Q = 1.44, p = 0.70, I^2 = 0%). This effect size corresponds to an NNT of approximately eight. These results are highly consistent with both Cuijpers'[45] and Cape's[46] estimates of effect size for brief CBT for the treatment of depression.

Figure 3. Meta-analysis of Brief CBT for Depression

Study Name	Outcome	Std diff in means	Standard error	p-Value	Relative weight
Wilson 1982a	Self-report	-0.25	0.44	0.57	9.34
Wilson 1982b	Self-report	-0.23	0.43	0.59	9.73
Wilson 1983	Combined	-2.13	0.53	0.00	7.15
Scott 1997	Combined	-0.48	0.35	0.16	12.63
King 2000	Self-report	-0.34	0.19	0.06	21.47
Simon 2004	Self-report	-0.16	0.12	0.18	25.73
Laidlaw 2008	Combined	-0.36	0.32	0.26	13.94
		-0.42	0.16	0.01	



Meta Analysis

The 2 studies of PST identified in the primary literature searches and not included in the systematic reviews randomized 92 participants to treatment or control, whereas the 6 studies of PST covered in the systematic reviews randomized 881 participants. Thus, we did not conduct an updated meta-analysis for PST. The two studies of PST identified in the primary literature searches were conducted by Mynors-Wallis and colleagues[58] and Nezu.[59] In a good-quality trial involving 71 participants, Mynors-Wallis[58] found that adding six sessions of PST to antidepressant medication did not significantly enhance outcomes over treatment with antidepressant medication alone after 12 weeks (60% recovered versus 67%). They also found that after 12 and 52 weeks antidepressant alone was not significantly different in effectiveness from PST alone. In a small, fair-quality trial, Nezu[59] found eight sessions of PST to be significantly more effective in reducing depressive symptoms than either problem-focused therapy or a waitlist control at 8 weeks ($t = 3.25$, $p < .01$). These results are consistent with both Cape's[46] and Cuijpers'[45] conclusion that PST is an efficacious option for the treatment of depression.

No studies of MBCT were included in the systematic reviews. We identified a single good-quality study of MBCT that met our inclusion criteria.[56] This study randomized 30 subjects with MDD or subthreshold depression, recruited from a mental health setting, and found 8 sessions of MBCT to be more efficacious than treatment as usual at reducing depressive symptoms at 8 weeks ($F = 13.42$, $p = 0.001$).

Quality of life was too infrequently reported across studies to synthesize into any quantitative analyses. The two studies of CBT from the present meta-analysis that included data on quality of life did not find significant differences on quality-of-life outcomes between participants in the CBT conditions compared to participants in the control conditions.[53,57] No other trials from the studies identified via the primary literature searches included data on quality of life. The frequency with which data on quality of life were reported is considered in Key Question 4.

KEY QUESTION 2. For primary care patients with depressive disorders treated with a brief, evidence-based psychotherapy, is there evidence that treatment effect may vary by the number of sessions delivered?

Cuijpers[45] found a small difference in effect size between psychotherapies of six or fewer sessions (ES -0.25, 95% CI -0.48 to -0.02) compared to psychotherapies of seven or more sessions (ES -0.36, 95% CI -0.54 to -0.17), but confidence intervals overlapped. Should a more adequately powered meta-analysis be possible in the future, the means and confidence intervals surrounding these effect sizes leave room for the possibility of a clinically significant difference between brief and standard-duration psychotherapies.

Cape[46] did not conduct a comparison based on number of psychotherapy sessions delivered, as their review was limited to therapies of fewer than 10 sessions in duration. Similarly, because the present review included only studies with eight or fewer sessions and there was little variability in session number (six to eight), an analysis of whether treatment effect varies by quantity of therapy sessions could not be conducted.

KEY QUESTION 3. For psychotherapies demonstrating clinically significant treatment effects, what are the characteristics of treatment providers (i.e., type of provider and training), and what are the modalities of therapy (i.e., individual/group, face-to-face/teletherapy/Internet-based)?

Of the 15 RCTs evaluating brief therapies, 13 used an individual psychotherapy format, and 2 relied on a group therapy format. Two of the individual PST treatments and one of the individual CBT treatments were conducted over the phone. PST treatment providers included psychologists in three studies, nurses in three studies, graduate students in two studies, and other health professionals in three studies (e.g., GPs, allied health professionals, social workers). CBT treatment providers included psychologists in three studies, graduate students in one study, and nonidentified professionals in two studies. The MBCT treatment provider had completed an internship under the supervision of an expert MBCT therapist. There was substantial variability in the level of detail provided about therapists' training. Most therapists were noted either as having previous experience in the intervention treatment model or as having been trained and supervised for study purposes by one of the study's investigators.

While the number of sessions ranged only from six to eight, there was substantial variance in the intensity at which psychotherapies were provided. The most intensive therapy, MBCT, required 2 hours per week for 8 weeks, whereas multiple PST protocols required only 30-minute sessions spaced approximately every other week. Although it would appear that the two were separated by a difference of only two sessions, the intensity was different because the MBCT protocol specified a total of 16 hours of treatment, whereas the PST protocols specified a total of only 3.5 hours (first session is typically 1 hour). Three of the CBT protocols consisted of 50- to 60-minute sessions, and two consisted of 30- to 35-minute sessions.

Quantitative syntheses to examine differences on the basis of treatment intensity, provider type, individual versus group, and telephone versus in-person could not be completed because there was not an adequate number of studies in each of these subgroups.

KEY QUESTION 4. How commonly reported are the key clinical outcomes of quality of life, social functioning, occupational status, patient satisfaction, and adverse treatment effects in randomized trials of psychotherapy?

Neither of the two systematic reviews reported on quality of life, social functioning, occupational status, patient satisfaction, or adverse treatment effects. Of the 15 RCTs contained in this evidence report, 5 reported HRQOL, 5 reported social functioning, 0 reported occupational status, 2 reported patient satisfaction with treatment, and 1 reported adverse treatment effects (Table 5). The most commonly used measure of quality of life for studies that examined this clinical outcome was the SF-36. The one study that reported adverse treatment effects examined the side effects of taking psychotropic medication in tandem with psychotherapy.

Table 5. Key Clinical Outcome Measures

	Study	Quality of life	Social functioning	Occupational status	Patient satisfaction	Adverse treatment effects
RCTs from systematic reviews	Barrett et al, 2001[48] and Frank et al., 2002[4]	Yes, SF-36	NR	NR	NR	NR
	Dowrick et al., 2000[5]	Yes, SF-36	NR	NR	NR	NR
	Lynch et al., 1997[49]	NR	Yes	NR	NR	NR
	Lynch et al., 2004[50]	NR	NR	NR	NR	NR
	Mynors-Wallis et al., 1995[51]	NR	Yes	NR	Yes	NR
	Scott et al., 1997[52]	NR	NR	NR	NR	NR
	Ward et al., 2000[53] and King et al., 2000[54]	Yes, EuroQoL	Yes	NR	NR	NR
	Williams et al., 2000[55] and Frank et al., 2002[4]	Yes, SF-36	NR	NR	NR	NR
RCTs from primary literature searches	Barnhofer et al., 2009[56]	NR	NR	NR	NR	NR
	Laidlaw et al., 2008[57]	Yes, WHOQOL-BREF	Yes, social relationships	NR	NR	NR
	Mynors-Wallis et al., 2000[58]	NR	Yes, Social Adjustment Scale	NR	NR	Yes, medication side effects
	Nezu, 1986[59]	NR	NR	NR	NR	NR
	Simon et al., 2004[60] and Simon et al., 2009[61]	NR	NR	NR	Yes	NR
	Wilson, 1982[62]	NR	NR	NR	NR	NR
	Wilson, 1983[63]	NR	NR	NR	NR	NR

Abbreviations: NR = not reported, WHOQOL = World Health Organization Quality of Life

DISCUSSION

Based on our complex systematic review of two recent literature reviews and seven additional RCTs not considered in these previous reviews, the collective evidence suggests that six to eight sessions of brief CBT or PST for acute-phase treatment in primary care are more efficacious than usual care, but effects are modest. However, insofar as usual care consists of treatments that are intended to be effective and that may in some cases be "best practice" treatments, usual care could represent a more potent control condition than placebo controls used in antidepressant trials. Also, there is some evidence to indicate that brief psychotherapy may be more efficacious when patients are referred at the discretion of their primary care provider than when patients are selected for treatment on the basis of systematic depression screening. We conclude that brief psychotherapy may prove an efficacious treatment option for a number of patients with depression in VA primary care settings. Because the reviewed studies contained little Veteran representation, relied heavily on samples of predominantly middle-aged Caucasian females, and frequently excluded patients with complex or comorbid psychiatric conditions, additional research is needed to more definitively confirm the effectiveness of brief psychotherapy for depression in the Veteran population (Key Question 1).

Whether brief psychotherapies significantly differ in efficacy from standard-duration psychotherapies (12 to 20 sessions) is a question that we could not directly address given the limited range of session duration (6 to 8) in the 15 studies included in this review. Cuijpers' (2009) review[45] found no statistically significant differences between psychotherapies delivered in six or fewer sessions compared to psychotherapies delivered over seven or more sessions; however, the wide confidence intervals for effect sizes of brief and standard-duration psychotherapies leave open the possibility of clinically significant differences (Key Question 2).

Our review found that brief psychotherapies have been provided by an array of trained health care professionals, including non–mental health professionals. The efficacious treatments included in this review were provided not only by psychologists but also by graduate students, nurses, general practitioners, and other allied health professionals who had received training and supervision specific to the intervention being conducted. Details about training were sparse, meaning that the degree of training necessary to replicate studies' results is uncertain (Key Question 3). Finally, we discovered that effects on occupational status, patient satisfaction with treatment, and adverse treatment effects were seldom reported; HRQOL and social functioning were more commonly reported but still only considered in less than half the trials examined in this review (Key Question 4).

Depressive disorders cause enormous human suffering and impose a high economic burden. Ensuring access to evidence-based treatments for Veterans is critical to the VA mission. The current emphasis on evidence-based care management in the VA has the potential to significantly enhance the usual care of depression in VA primary care settings, and the Primary Care/Mental Health Integration program in the VA represents an important organizational strategy to improve access and the quality of mental health care. If the VA were to expand its capability to provide brief psychotherapy for primary care patients in the acute phase of depression, this too has the potential to improve access and quality. Fewer sessions would mean that the same workforce could provide treatment to a larger number of patients, potentially more cost-effectively. In

addition, clinicians from a variety of disciplines, if given adequate training and under appropriate supervision, may be able to provide brief therapies, further expanding access. Although the exact training was often incompletely described, many studies used focused training with non–mental health specialists, followed by fidelity monitoring to ensure quality. Fidelity monitoring may be a key component of replicating the positive treatment effects, particularly with generalist clinicians. Within the VA, a range of providers could be considered, including nurses, nurse practitioners, primary care physicians, social workers, and chaplains. However, given the current nursing shortage and high demands on primary care physicians, any change or expansion in roles would need to be considered carefully.

If non–mental health professionals were to assume the role of providing brief therapies, patients should be screened carefully for those without high complexity, and oversight should be provided by qualified mental health professionals to ensure the safety of the patient. In the VA, integrated primary care/mental health teams often consist of primary care clinicians, psychiatrists, psychologists, and nurses and may provide an ideal context and support system in which to implement such a model.

One of our key questions was to assess how frequently key clinical outcomes were assessed. Review results revealed a striking lack of consistency in assessing and reporting important outcome measures. Of the 15 RCTs contained in this review, only 5 reported HRQOL, 5 reported social functioning, 0 reported of occupational status, 2 reported patient satisfaction with treatment, and 1 reported adverse treatment effects. Evaluating the efficacy of treatment is clearly important; however, without measuring key clinical outcomes like quality of life, social functioning, and occupational functioning, we constrict ourselves to understanding only a very limited range of how psychotherapies can impact mental and physical health.

STRENGTHS AND LIMITATIONS

Our study has a number of strengths, including a protocol-driven review, a comprehensive search, careful quality assessment, and rigorous quantitative synthesis methods. For the included systematic reviews, we verified outcomes reported and supplemented the descriptions of included trials by abstracting missing data from the primary publications. We also combined a narrative review of recent, good-quality systematic reviews with new meta-analyses when indicated. This approach allowed us to capitalize on the strengths and often detailed analyses performed in existing reviews while updating those results to include the most recent and relevant studies.

However, several questions still remain. First, the efficacy of brief psychotherapy modalities other than CBT and PST could not be determined. Although we had hoped to review a variety of interventions, CBT and PST were the only treatments in our review for which more than one trial had been completed. Second, it is not clear if efficacy differs by the number of treatment sessions. This was a key question for our review that we were unable to answer. For CBT and PST, six to eight sessions has a small, beneficial effect compared to usual care, but a lower bound or dose-response relationship could not be determined. Third, the studies included in this review were composed primarily of Caucasian, middle-aged females. This limits applicability to the VA and to many other segments of society. Research is needed to evaluate whether results are applicable across diverse populations. Fourth, it remains unclear whether the efficacy of brief

psychotherapies varies according to depression severity (i.e., mild, moderate, severe). Fifth, major intervention outcomes (e.g., quality of life, social functioning, occupational status) are measured too infrequently. While these outcomes are often considered "secondary," they are critical in evaluating the safety and generalizability of treatments for real-world practice.

Despite these limitations, it appears that brief psychotherapy is effective in primary care settings in the acute-phase treatment of depression. Increasing the availability of psychotherapy, either through enlarging the pool of mental health professionals or by training non–mental health professionals, will advance the VA toward its mission of providing easy access to care for Veterans.[64]

CONCLUSIONS

We identified two systematic reviews and 15 trials of brief psychotherapy (i.e., ≤ 8 sessions) for depression, encompassing 1716 patients with MDD or depressive symptomatology. Both systematic reviews concluded that brief CBT and PST are efficacious for the acute-phase treatment of depression in primary care. This conclusion was corroborated by our analyses that included seven additional studies. Table 6 summarizes the strength of evidence for the question of whether brief psychotherapies are more efficacious than control for depressive symptoms. GRADE criteria were not applicable to the other key questions.

Table 6. Summary of the Strength of Evidence for Key Question 1

Number of studies (subjects)	**Domains pertaining to strength of evidence**				**Magnitude of effect and strength of evidence**
	Risk of Bias: Design/Quality	Consistency	Directness	Precision	Standardized mean difference (95% CI)
Key Question 1: Efficacy of brief psychotherapies					
Brief CBT 6 (713)	RCTs/Fair	Consistent	Direct	Some imprecision	-0.42 (-0.10 to -0.74) Moderate
Brief PST 8 (973)	RCTs/Good	Consistent	Direct	Some imprecision	-0.26 (-0.49 to -0.30) Moderate
MBCT 1 (30)	RCT/Good	NA	Direct	Serious imprecision	Low
Other therapies	NA	NA	NA	NA	Insufficient

FUTURE RESEARCH

The present review confirmed that brief psychotherapies (i.e., ≤ 8 sessions), such as brief CBT and brief PST, are efficacious as acute-phase treatments for depression. However, many questions remain to be answered about the effectiveness of brief psychotherapy. First, future research should rigorously test whether brief psychotherapies are of comparable efficacy to standard-duration psychotherapies (i.e., 12 to 20 sessions). This question was not directly tested by any trials in our review. Hence, our analysis of this question relied on pooled comparisons of various treatment durations from different trials, a method that is vulnerable to multiple confounders. Future research should include RCTs that compare psychotherapies that differ according to the number of sessions.

Existing research has also been limited by an inadequate consideration of patient outcomes. Accordingly, we advise future researchers to assess longer term outcomes after the conclusion of brief psychotherapies (e.g., 6 months or longer). Researchers should also assess a broader set of outcomes, such as social functioning, occupational status, and quality of life, instead of solely assessing depression severity. Quality-of-life measures are especially desirable as these allow for the computation of cost-effectiveness and cost-utility ratios, which are crucial for informing policy decisions.

Another priority for future research should be to evaluate whether the administration of brief psychotherapies in primary care settings actually produces the benefits that proponents claim. These include claims that (1) brief psychotherapies provided in the primary care context reduce the stigma of receiving treatment for mental health problems, (2) providing brief psychotherapies broadens the population that will initiate and complete treatment by placing a lower time burden on patients, and (3) brief psychotherapies increase the cost-effectiveness of psychotherapy. Proponents have also claimed that brief psychotherapies can be used to prevent the development of MDD in at-risk patients, such as patients with minor depression. These hypotheses should be tested empirically.

Finally, it is crucial to assess which types of brief psychotherapies can be provided with high treatment fidelity and efficacy and by which types of providers. Additional studies are needed to determine whether brief psychotherapies other than CBT and PST are efficacious. Also, an important consideration to be assessed is patient preferences for different treatment modalities and providers. Further, more research is needed to determine which providers are best suited to provide brief therapies. In the VA, these providers could include not only mental health professionals like psychologists, psychiatrists, and social workers but also appropriately trained and supervised registered nurses, nurse practitioners, physician's assistants, primary care physicians, and chaplains.

The VA has been a leader in fostering models of integrated primary care and mental health care, and in doing so, the VA is in a unique position to address many of the previously stated research needs within the context of integrated health care teams.

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