

De effecten van psychologische behandeling van hardnekkige depressies: een overzicht

*NedKAD-conferentie: Hardnekkig of therapieresistent?
15 oktober 2021*



Prof.dr. Pim Cuijpers
www.pimcuijpers.com



LOOKING FURTHER

OVERVIEW

- Improving treatments for depression
- Psychological treatment of depression
- Psychotherapy for chronic depression
- A research agenda

Improving treatments of depression

VIEWPOINT

The Challenges of Improving Treatments for Depression

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In the past few decades substantial progress has been made in the research and development of treatments for major depression. Many different types of medications and psychotherapy are currently available and rigorous studies have shown that antidepressants are more effective than placebo,¹ and several types of psychotherapies are more effective than waiting list or other controls.² These findings suggest that many patients with depression can be successfully treated. Based on these significant and positive effects, many of these treatments are included in treatment guidelines and are widely used in clinical practice. However, not all patients with depression recover with available treatments and several important challenges need to be resolved to improve existing treatments and to increase the number of patients who benefit from them.

Spontaneous Recovery and Placebo Effects

An important challenge is the high rates of spontaneous response and placebo effects. More than half of patients who receive antidepressants or psychotherapy respond to treatment. However, response rates are also

chotherapy might not be necessary to get better. However, it is not possible yet to predict which patients will recover spontaneously or will respond to placebo, although innovative machine learning techniques and other biological markers may be helpful in the future.

Spontaneous recovery also complicates the validity of clinical knowledge as well as research about treatments. Because many patients recover while receiving treatment, clinicians and patients are inclined to think that the treatment is what made them better. However, because many patients also would have recovered without treatment, clinical judgements are not necessarily related to treatment effect.

Nonresponse

In contrast to response to drug or placebo, a considerable group of patients are difficult to treat or do not respond to treatment. Although patients may respond to another drug after failure to respond to an initially prescribed drug, the chance of successful response is almost halved with every new treatment tried.⁵ Even after trying several different treatments, a substantial proportion of patients do not respond. One estimate suggests that approxi-

THE PROBLEM WITH TREATMENTS OF DEPRESSION

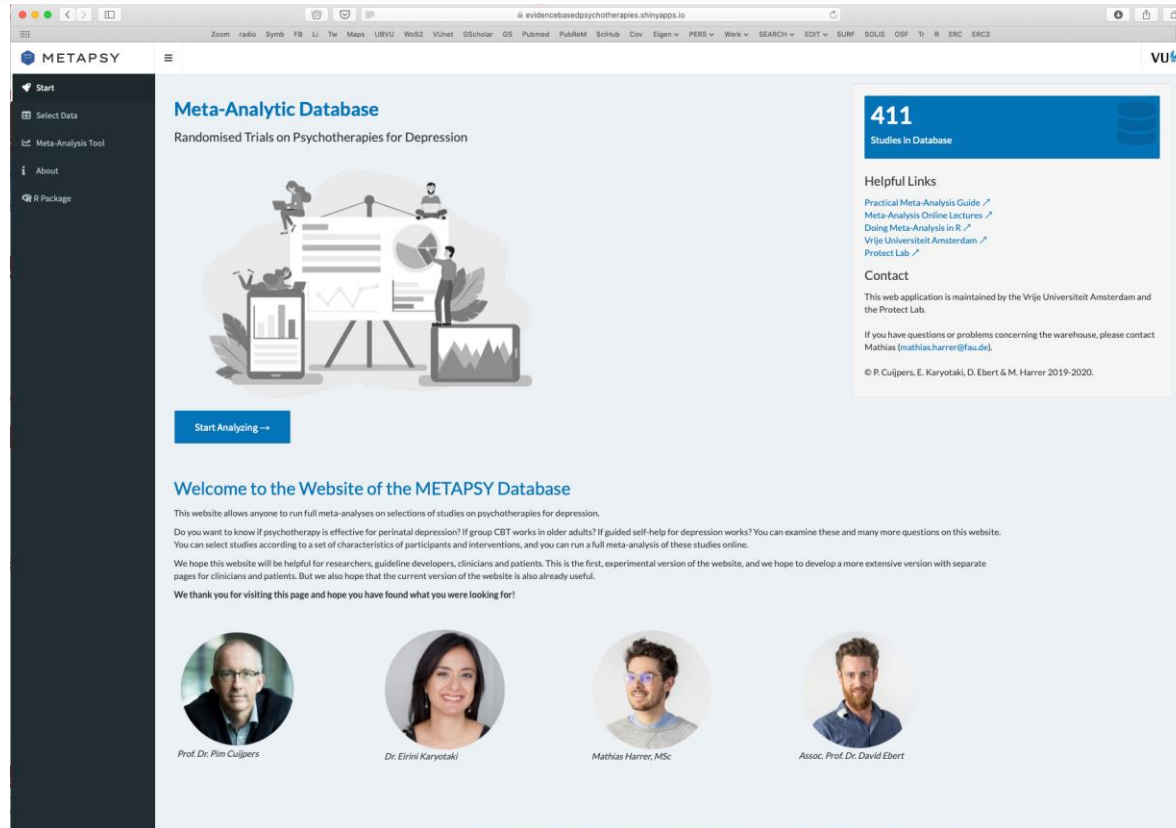
- Treatments are effective, but effects are limited
- On the one hand: high rates of spontaneous recovery, placebo response
 - 38% reponse in placebo (54% in ADM; Levkovitz et al., 2011)
 - 41% in control conditions (54% in psychotherapies; Cuijpers et al., 2014)
 - Non-treated patients: 23% in 3 months, 53% in 12 months (Whiteford et al., 2012)
 - ⇒ The majority of patients would get better anyway
 - ⇒ *We need low-intensity interventions!*
- On the other hand: A large group of patients who do not respond to any treatment (~30%)

Cuijpers, Journal of the American Medical Association (JAMA) 2018

Psychological treatment of adult depression

Overview: Cuijpers, Can Psychol 2017

RUN YOUR OWN META-ANALYSIS AT: WWW.METAPSY.ORG



The screenshot shows the METAPSY website interface. The browser address bar displays "evidencebasedpsychotherapies.shinyapps.io". The website header includes the METAPSY logo and a navigation menu with options like "Start", "Select Data", "Meta-Analysis Tool", "About", and "R Package". The main content area features a "Meta-Analytic Database" section with the title "Randomised Trials on Psychotherapies for Depression". Below the title is an illustration of people working with data charts and a "Start Analyzing" button. To the right, a blue box indicates "411 Studies in Database". Below this, there are "Helpful Links" and "Contact" information. The "Contact" section states that the web application is maintained by the Vrije Universiteit Amsterdam and the Protect Lab, and provides contact details for Mathias Harrer. At the bottom, there is a "Welcome to the Website of the METAPSY Database" section with a paragraph of text and a list of four team members with their names and titles: Prof. Dr. Pim Cuijpers, Dr. Eirini Karyotaki, Mathias Harrer, MSc, and Assoc. Prof. Dr. David Ebert.

METAPSY

Start
Select Data
Meta-Analysis Tool
About
R Package

Meta-Analytic Database

Randomised Trials on Psychotherapies for Depression

411 Studies in Database

Helpful Links

- [Practical Meta-Analysis Guide](#)
- [Meta-Analysis Online Lectures](#)
- [Doing Meta-Analysis in R](#)
- [Vrije Universiteit Amsterdam](#)
- [Protect Lab](#)

Contact

This web application is maintained by the Vrije Universiteit Amsterdam and the Protect Lab.

If you have questions or problems concerning the warehouse, please contact Mathias (mathias.harrer@fau.de).

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Welcome to the Website of the METAPSY Database

This website allows anyone to run full meta-analyses on selections of studies on psychotherapies for depression.

Do you want to know if psychotherapy is effective for perinatal depression? If group CBT works in older adults? If guided self-help for depression works? You can examine these and many more questions on this website. You can select studies according to a set of characteristics of participants and interventions, and you can run a full meta-analysis of these studies online.

We hope this website will be helpful for researchers, guideline developers, clinicians and patients. This is the first, experimental version of the website, and we hope to develop a more extensive version with separate pages for clinicians and patients. But we also hope that the current version of the website is also already useful.

We thank you for visiting this page and hope you have found what you were looking for!

Prof. Dr. Pim Cuijpers

Dr. Eirini Karyotaki

Mathias Harrer, MSc

Assoc. Prof. Dr. David Ebert

>800 RANDOMIZED TRIALS

- Effects of different psychotherapies versus control groups
- Direct comparisons between major types of psychotherapy with other psychotherapies
- Direct comparisons of psychotherapy with pharmacotherapy
- Comparisons of psychotherapy with combined treatment
- Comparisons of pharmacotherapy with combined treatment
- Randomized trials on psychotherapy for inpatients
- Direct comparisons of individual and group therapy
- Direct comparisons of face-to-face therapy with guided self-help
- Randomized trials on self-guided therapy for depression

Psychotherapies for depression: a network meta-analysis covering efficacy, acceptability and long-term outcomes of all main treatment types

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The effects of psychotherapies for depression have been examined in several hundreds of randomized trials, but no recent network meta-analysis (NMA) has integrated the results of these studies. We conducted an NMA of trials comparing cognitive behavioural, interpersonal, psychodynamic, problem-solving, behavioural activation, life-review and “third wave” therapies and non-directive supportive counseling with each other and with care-as-usual, waiting list and pill placebo control conditions. Response (50% reduction in symptoms) was the primary outcome, but we also assessed remission, standardized mean difference, and acceptability (all-cause dropout rate). Random-effects pairwise and network meta-analyses were conducted on 331 randomized trials with 34,285 patients. All therapies were more efficacious than care-as-usual and waiting list control conditions, and all therapies – except non-directive supportive counseling and psychodynamic therapy – were more efficacious than pill placebo. Standardized mean differences compared with care-as-usual ranged from -0.81 for life-review therapy to -0.32 for non-directive supportive counseling. Individual psychotherapies did not differ significantly from each other, with the only exception of non-directive supportive counseling, which was less efficacious than all other therapies. The results were similar when only studies with low risk of bias were included. Most therapies still had significant effects at 12-month follow-up compared to care-as-usual, and problem-solving therapy was found to have a somewhat higher long-term efficacy than some other therapies. No consistent differences in acceptability were found. Our conclusion is that the most important types of psychotherapy are efficacious and acceptable in the acute treatment of adult depression, with few significant differences between them. Patient preference and availability of each treatment type may play a larger role in the choice between types of psychotherapy, although it is possible that a more detailed characterization of patients with a diagnosis of depression may lead to a more precise matching between individual patients and individual psychotherapies.

Key words: Depression, psychotherapy, network meta-analysis, cognitive behavioural therapy, behavioural activation therapy, problem-solving therapy, interpersonal psychotherapy, psychodynamic therapy, life-review therapy, “third wave” therapies

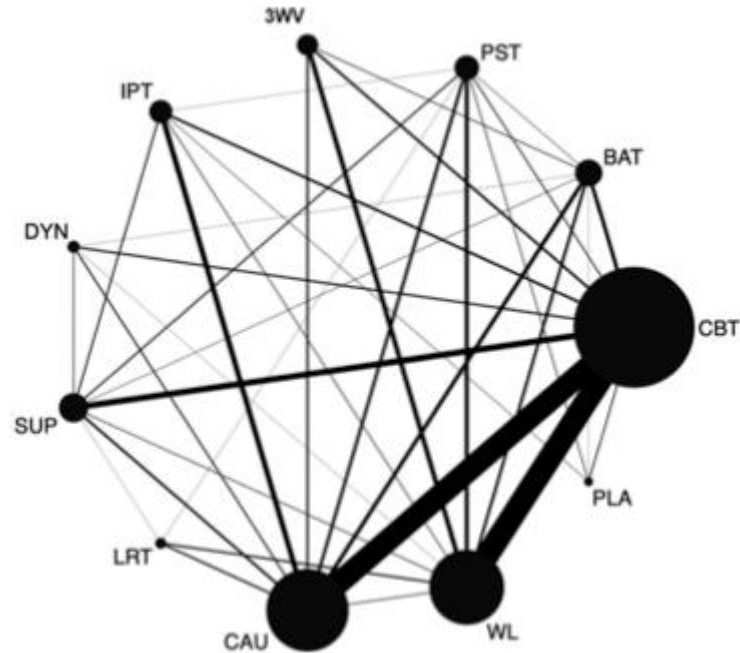
(*World Psychiatry* 2021;20:000-000)

Depressive disorders are common¹, costly^{2,3}, have a strong impact on quality of life of patients⁴, and are associated with considerable morbidity and mortality⁵. Next to antidepressants, psychotherapies are first-line treatments for depression, and both treatments are effective^{6,7}.

Cognitive behavioural therapy (CBT) is the most examined

of trials has been conducted since then) and did not examine acceptability of treatments. Also, the number of trials with low risk of bias was small and has substantially increased since then. Long-term outcomes of psychotherapies have also not yet been examined in an NMA. Furthermore, the methodology of NMAs has been developed considerably in the past few years, with more

COMPARATIVE EFFECTS OF PSYCHOTHERAPIES



Cuijpers et al., World Psychiatry June 2021

MAIN OUTCOMES

- 331 randomized trials with 34,285 patients.
- All therapies more efficacious than CAU and waiting list
- Effect sizes (vs CAU) ranged from -0.81 for life-review therapy to -0.32 for non-directive supportive counseling.
- No significant differences between therapies, except non-directive supportive counseling
- Similar results for studies with low risk of bias
- Most therapies still had significant effects at 12-month follow-up (vs CAU) with PST somewhat more effective

MAIN RESULTS

- No significant differences between individual, group, telephone, guided self-help (only small difference between group and guided self-help)
- Significantly more effective than waitlist (SMDs 0.87 to 1.02), care-as-usual (SMDs: 0.47 to 0.72), and unguided self-help (SMDs: 0.34 to 0.59).
- Sensitivity analyses excluding non-internet-based guided self-help: comparable outcomes
- Acceptability (study drop-out for any reason) was significantly higher in individual (RR=1.44) and group CBT (RR=1.39) compared to guided self-help.

ARE ALL THERAPIES EQUALLY EFFECTIVE?

- We don't know!
- Alternative explanations
- We know that therapies work, but not how they work; insufficient knowledge for any model, specific or non-specific
- But more importantly: what do we need at least for a treatment to be effective? And how can we minimize treatments without reducing the effects?

Cuijpers et al., Ann Rev Clin Psychol 2019

The effects of psychotherapies for depression on response, remission, reliable change, and deterioration: A meta-analysis

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Hisashi Noma³  | Toshi A. Furukawa⁴ 

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Abstract

Objective: Meta-analyses of psychotherapies usually report effects sizes, while clinicians and patients need to know the proportion of patients who benefit from therapy. We conducted a meta-analysis of therapies for depression reporting the rates of response (50% symptom reduction), remission (HAM-D <7), clinical significant deterioration for psychotherapy, and control conditions (CAU, waitlist, and pill placebo),

ABSOLUTE OUTCOMES

- 228 RCTs of psychotherapy for depression versus control
- 75 with low risk of bias
- Outcomes at 1-3 months after baseline (at post-test)
- Mainly estimates based on M at baseline, M, SD and N at post-test

- Outcomes:
 - *Response (50% symptom reduction)*
 - *Remission (HAM-D \leq 7 after treatment)*
 - *Reliable improvement*
 - *Reliable deterioration*

Cuijpers et al., Acta Psychiatry Scand 2021

RESPONSE RATES

	Response rate	95% CI
- All psychotherapies	0.41	0.38-0.43
- CBT	0.42	0.39-0.45
- Only low RoB	0.38	0.34-0.43
- At 9-12 months FU	0.42	0.35-0.50
Control groups		
- Care as usual	0.17	0.15-0.20
- Waitlist	0.16	0.14-0.18
- Placebo	0.31	0.23-0.40

OTHER OUTCOMES

	Outcome	Rate	95% CI
Psychotherapies*)	Remission	0.26	0.20-0.33
	RCI	0.59	0.54-0.64
	Deterioration	0.05	0.04-0.06
CAU	Remission	0.12	0.09-0.18
	RCI	0.30	0.26-0.34
	Deterioration	0.12	0.10-0.14
Waitlist	Remission	0.09	0.06-0.12
	RCI	0.30	0.27-0.32
	Deterioration	0.07	0.04-0.11

*) CAU as reference category; all outcomes at 2(\pm 1) months after baseline

Psychotherapy for Depression Across Different Age Groups A Systematic Review and Meta-analysis

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IMPORTANCE It is not clear whether psychotherapies for depression have comparable effects across the life span. Finding out is important from a clinical and scientific perspective.

OBJECTIVE To compare the effects of psychotherapies for depression between different age groups.

DATA SOURCES Four major bibliographic databases (PubMed, PsychINFO, Embase, and Cochrane) were searched for trials comparing psychotherapy with control conditions up to January 2019.

STUDY SELECTION Randomized trials comparing psychotherapies for depression with control conditions in all age groups were included.

DATA EXTRACTION AND SYNTHESIS Effect sizes (Hedges *g*) were calculated for all comparisons and pooled with random-effects models. Differences in effects between age groups were examined with mixed-effects subgroup analyses and in meta-regression analyses.

MAIN OUTCOMES AND MEASURES Depressive symptoms were the primary outcome.

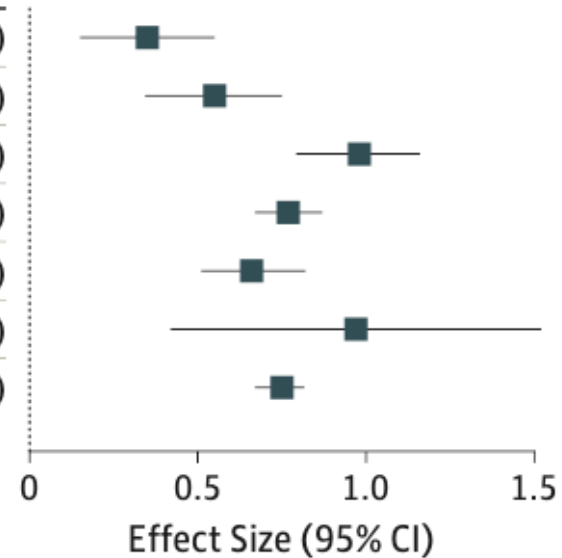
RESULTS After removing duplicates, 16 756 records were screened and 2608 full-text articles were screened. Of these, 366 trials (36 702 patients) with 453 comparisons between a therapy and a control condition were included in the qualitative analysis, including 13 (3.6%) in children (13 years and younger), 24 (6.6%) in adolescents (≥ 13 to 18 years), 19 (5.2%) in young adults (≥ 18 to 24 years), 242 (66.1%) in middle-aged adults (≥ 24 to 55 years), 58 (15.8%) in older adults (≥ 55 to 75 years), and 10 (2.7%) in older old adults (75 years and

+ Editorial

+ Supplemental content

EFFECT SIZES OF THERAPY ACROSS AGE GROUPS

Age Category	No.	Effect Size (95% CI)
Children	15	0.35 (0.15-0.55)
Adolescents	28	0.55 (0.34-0.75)
Young adults	27	0.98 (0.79-1.16)
Middle-aged adults	304	0.77 (0.67-0.87)
Older adults	69	0.66 (0.51-0.82)
Older old	10	0.97 (0.42-1.52)
All studies	453	0.75 (0.67-0.82)



OTHER OUTCOMES

	N	smd	NNT
Quality of life	31	0.33	10
Social functioning	31	0.46	7
Suicidality	4	0.12 n.s.	29
Hopelessness	18	1.10	3
Social support	15	0.38	8
Mental health children	7	0.40	8
Mother-child interaction	8	0.35	9
Parental functioning	5	0.67	4

Kolovos et al., Br J Psychiatry 2016; Cuijpers et al.,
Ment H Phys Act 2014; EACP 2015; Renner et al.,
Psychol Med 2013; Park et al., COTR 2015

WHAT HAVE TRIALS SHOWN FOR PSYCHOTHERAPY FOR DEPRESSION

- **No difference between treatment formats** (Cuijpers et al. JAMA Psychiatry 2019)
- **No difference in:**
 - Student populations (Cuijpers et al. Depress Anx 2016)
 - Older adults (Cuijpers et al. Maturitas, 2014)
 - Comorbid general medical disorders (Miguel et al., Psychol Med 2021)
 - Postpartum depression (Cuijpers et al. Psychol Med 2019)
- **Possibly lower effects in:**
 - chronic depression (Cuijpers et al., Clin Psychol Rev 2011)
 - Comorbid substance use problems (Cuijpers et al, in prep)
 - Subthreshold depression (Cuijpers et al., Br J Psychiatry 2014; JAACAP 2021)
 - Inpatients (Cuijpers et al., J Affect Dis 2020)
- **N sessions (6-24): not related to outcome** (Cuijpers et al., J Affect Dis 2013)
- **Also effective in low- and middle income countries** (Cuijpers et al., World Psychiatry 2018)

THE EFFECTS OF THERAPY ARE OVERESTIMATED

- The use of waiting list control groups
- Majority has some risk of bias (~80% of RCTs)
- Publication bias (reduces effect size with ~25%, like in ADM studies)
- Researcher allegiance and others
- Effect sizes drop with >50% after adjustment for these problems

Cuijpers et al., Epidem Psychiatr Sc 2019

A BETTER ESTIMATE OF THE EFFECTS OF THERAPIES FOR DEPRESSION (ALL TYPES)

	N	g	NNT
All studies	295	0.71	3
No waiting list	161	0.58	3
Low risk of bias	62	0.39	5
Adjusted for publ. bias	74	0.31	6

A BETTER ESTIMATE OF THE EFFECTS OF THERAPIES FOR DEPRESSION (ONLY CBT)

	N	g	NNT
All studies	159	0.71	3
No waiting list	77	0.54	3
Low risk of bias	34	0.39	5
Adjusted for publ. bias	38	0.34	5

A network meta-analysis of the effects of psychotherapies, pharmacotherapies and their combination in the treatment of adult depression

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No network meta-analysis has examined the relative effects of psychotherapies, pharmacotherapies and their combination in the treatment of adult depression, while this is a very important clinical issue. We conducted systematic searches in bibliographical databases to identify randomized trials in which a psychotherapy and a pharmacotherapy for the acute or long-term treatment of depression were compared with each other, or in which the combination of a psychotherapy and a pharmacotherapy was compared with either one alone. The main outcome was treatment response (50% improvement between baseline and endpoint). Remission and acceptability (defined as study drop-out for any reason) were also examined. Possible moderators that were assessed included chronic and treatment-resistant depression and baseline severity of depression. Data were pooled as relative risk (RR) using a random-effects model. A total of 101 studies with 11,910 patients were included. Depression in most studies was moderate to severe. In the network meta-analysis, combined treatment was more effective than psychotherapy alone (RR=1.27; 95% CI: 1.14-1.39) and pharmacotherapy alone (RR=1.25; 95% CI: 1.14-1.37) in achieving response at the end of treatment. No significant difference was found between psychotherapy alone and pharmacotherapy alone (RR=0.99; 95% CI: 0.92-1.08). Similar results were found for remission. Combined treatment (RR=1.23; 95% CI: 1.05-1.45) and psychotherapy alone (RR=1.17; 95% CI: 1.02-1.32) were more acceptable than pharmacotherapy. Results were similar for chronic and treatment-resistant depression. The combination of psychotherapy and pharmacotherapy seems to be the best choice for patients with moderate depression. More research is needed on long-term effects of treatments (including cost-effectiveness), on the impact of specific pharmacological and non-pharmacological approaches, and on the effects in specific populations of patients.

Key words: Depression, psychotherapy, pharmacotherapy, combined treatment, cognitive behavior therapy, interpersonal therapy, anti-depressants, acceptability, chronic depression, treatment-resistant depression, network meta-analysis

(*World Psychiatry* 2020;19:92–107)

RESULTS

- 101 trials with 11,910 patients comparing combined, psychotherapy, pharmacotherapy
- Response: Combined treatment is more effective than
 - Psychotherapy alone (RR=1.27; 95% CI: 1.14~1.39)
 - Pharmacotherapy alone (RR=1.25; 95% CI: 1.14~1.37)
- No significant difference between psychotherapy and pharmacotherapy (RR=0.99; 95% CI: 0.92~1.08).
- Similar results were found for remission.
- Combined treatment (RR=1.23; 95% CI: 1.05~1.45) and psychotherapy alone (RR=1.17; 95% CI: 1.02~1.32) are more acceptable than pharmacotherapy.
- Comparable results:
 - Chronic and treatment-resistant depression
 - Severe depression
 - Long-term outcomes

Initial treatment choices to achieve sustained response in major depression: a systematic review and network meta-analysis

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Major depression is often a relapsing disorder. It is therefore important to start its treatment with therapies that maximize the chance of not only getting the patients well but also keeping them well. We examined the associations between initial treatments and sustained response by conducting a network meta-analysis of randomized controlled trials (RCTs) in which adult patients with major depression were randomized to acute treatment with a psychotherapy (PSY), a protocolized antidepressant pharmacotherapy (PHA), their combination (COM), standard treatment in primary or secondary care (STD), or pill placebo, and were then followed up through a maintenance phase. By design, acute phase treatment could be continued into the maintenance phase, switched to another treatment or followed by discretionary treatment. We included 81 RCTs, with 13,722 participants. Sustained response was defined as responding to the acute treatment and subsequently having no depressive relapse through the maintenance phase (mean duration: 42.2±16.2 weeks, range 24-104 weeks). We extracted the data reported at the time point closest to 12 months. COM resulted in more sustained response than PHA, both when these treatments were continued into the maintenance phase (OR=2.52, 95% CI: 1.66-3.85) and when they were followed by discretionary treatment (OR=1.80, 95% CI: 1.21-2.67). The same applied to COM in comparison with STD (OR=2.90, 95% CI: 1.68-5.01 when COM was continued into the maintenance phase; OR=1.97, 95% CI: 1.51-2.58 when COM was followed by discretionary treatment). PSY also kept the patients well more often than PHA, both when these treatments were continued into the maintenance phase (OR=1.53, 95% CI: 1.00-2.35) and when they were followed by discretionary treatment (OR=1.66, 95% CI: 1.13-2.44). The same applied to PSY compared with STD (OR=1.76, 95% CI: 0.97-3.21 when PSY was continued into the maintenance phase; OR=1.83, 95% CI: 1.20-2.78 when PSY was followed by discretionary treatment). Given the average sustained response rate of 29% on STD, the advantages of PSY or COM over PHA or STD translated into risk differences ranging from 12 to 16 percentage points. We conclude that PSY and COM have more enduring effects than PHA. Clinical guidelines on the initial treatment choice for depression may need to be updated accordingly.

Key words: Major depression, treatment choice, maintenance treatment, sustained response, psychotherapy, pharmacotherapy, combination therapy, cognitive behavioral therapy, network meta-analysis

(*World Psychiatry* 2021;20:387–396)

METHODS

- 81 RCTs with 13,772 patients
- First step: PSY, ADM, Combined, placebo
- Second step: continuation, switching, or discretionary treatment
- Main outcome: response + no relapse through maintenance phase (at 12 months from baseline)

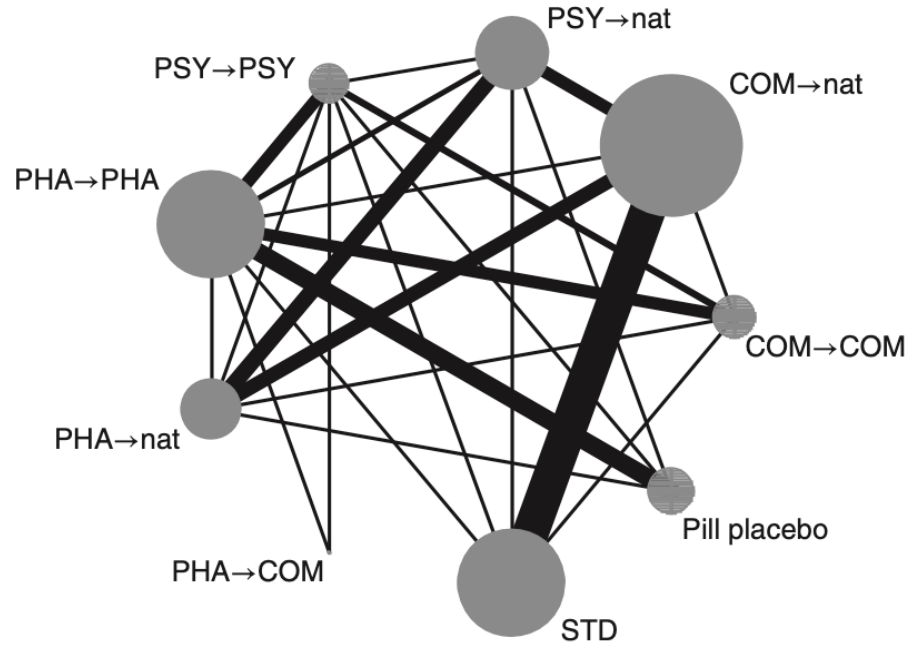


Figure 3 Network diagram for sustained response. COM - combination therapies, PHA - pharmacotherapies, PSY - psychotherapies, STD - standard treatment in primary or secondary care, nat - discretionary treatment. The size of the node is proportionate to the number of participants allocated to that node; the width of the line is proportionate to the number of studies examining that comparison.

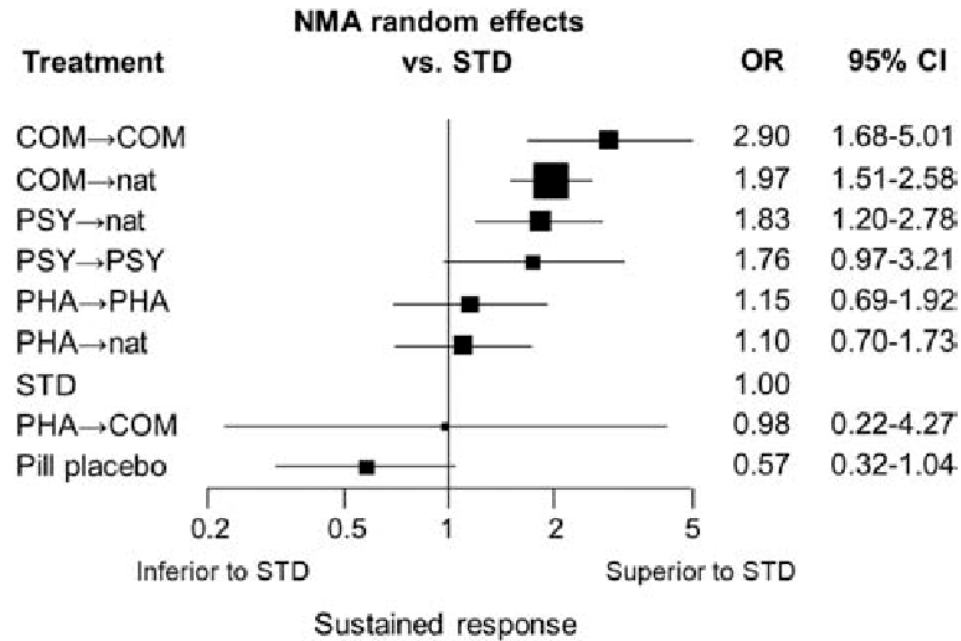


Figure 4 Ranked forest plot for sustained response. NMA - network meta-analysis, OR - odds ratio, CI - confidence interval, COM - combination therapies, PHA - pharmacotherapies, PSY - psychotherapies, STD - standard treatment in primary or secondary care, nat - discretionary treatment

Chronic depression

DEFINITION OF PERSISTENT DEPRESSION (DSM-5)

- Chronic major depressive disorder (lasting for at least two years),
- Dysthymia
- Double depression (major depression superimposed on a dysthymic disorder),
- Recurrent major depressive episodes with incomplete recovery between episodes.

⇒ Two years or longer, and are included under the chronic subtypes from the DSM-IV

⇒ We also included treatment-resistant depression (any definition)

PSYCHOTHERAPY VERSUS CONTROL GROUPS

- Relatively few studies (only 14 studies)
- Chronic MDD, dysthymia, treatment-resistant depression
- Risk of bias relatively low (low RoB in 11 of 14 studies)
- 17 intervention arms: CBT (6), psychodynamic (2), CBASP (2), MBCT (2), PST (2), other (3).
- 6-60 sessions
- 10 individual, 2 group and 2 mixed format
- Mostly CAU control (9 studies)

EFFECTS OF PSYCHOTHERAPY VS CONTROL

	N	g	95% CI	I²	NNT
Therapy vs control	17	0.44	0.20~0.68	56	7
- Chronic MDD vs control	10	0.58	0.22~0.94	42	5
- Treatment res vs control	5	0.42	-0.11~0.95	34	7
- Dysthymia vs control	2	0.01	-0.87~0.89	0	368

Difference between chronic, treatment-resistant, dysthymia: $p=0.001$

DIFFERENCE BETWEEN CHRONIC AND 'REGULAR' MDD

	N	g	95% CI	I²	NNT
Chronic depression	17	0.44	0.20~0.68	56	7
MDD	140	0.72	0.60~0.84	78	4

- Difference between Chronic depression and 'regular' MDD: $p=0.03$
- Not significant in multivariate metaregression analysis, adjusted for other characteristics of the studies ($p=0.54$)

PSYCHOTHERAPY VS ANTIDEPRESSANTS VS COMBINED (RESPONSE)

	Pairwise meta-analyses					
	N	RR	95% CI	I ²	95% CI	Egger
Chronic or treatment-resistant depression						
Combined vs. psychotherapy	3	1.45	1.16-1.79	55	0-86	1.00
Combined vs. pharmacotherapy	10	1.41	1.12-1.75	73	41-84	0.37
Psychotherapy vs. pharmacotherapy	6	0.84	0.70-1.00	25	0-70	0.37

	Network meta-analyses		
	RR	95% CI	χ^2 (df), p
Chronic or treatment-resistant depression			
Combined vs. psychotherapy	1.59	1.23-2.04	2.47 (2), 0.29
Combined vs. pharmacotherapy	1.39	1.15-1.67	
Psychotherapy vs. pharmacotherapy	0.87	0.68-1.10	

Cuijpers et al., World Psychiatry 2020

Cognitive-Behavioral Analysis System of Psychotherapy, Drug, or Their Combination for Persistent Depressive Disorder: Personalizing the Treatment Choice Using Individual Participant Data Network Metaregression

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CBASP

- IPD network meta-analysis: CBASP vs ADM vs Combined
- 3 RCTs with 1,036 participants
- Combined is better than either CBASP or ADM
- CBASP and ADM have comparable results
- IPD NMA allows personalised predictions:
- <https://kokoro.med.kyoto-u.ac.jp/CBASP/prediction/>

Furukawa et al., Psychother Psychosom 2018

Predicting severity

Input patient characteristics

Baseline depression severity (HAM-D24 score):
 15 28 40

Baseline anxiety severity (IDS anxiety/arousal factor score):
 5 7 25

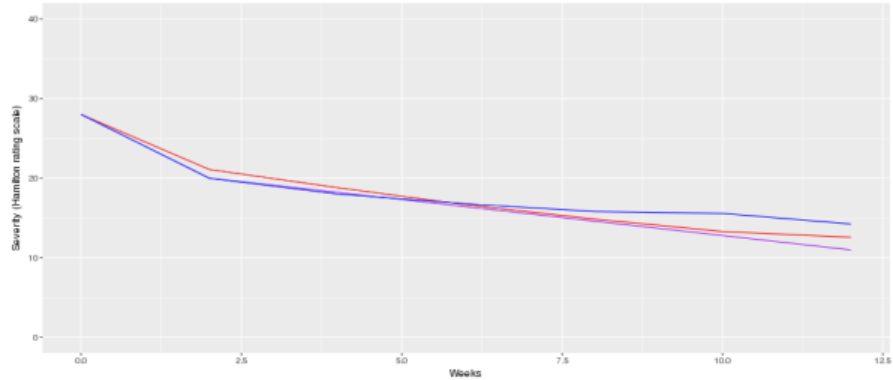
Age in years:
 25 46 85

Prior medication

History of emotional or physical neglect

Marital status

Primary diagnosis depression type



red: CBASP

blue: medications

purple: combination

Probability of dropping out within 12 weeks, CBASP: 29 %

Probability of dropping out within 12 weeks, COMBINATION: 20 %

Probability of dropping out within 12 weeks, MEDS: 28 %

Predicting severity

Input patient characteristics

Baseline depression severity (HAMD24 score):
15 28 40

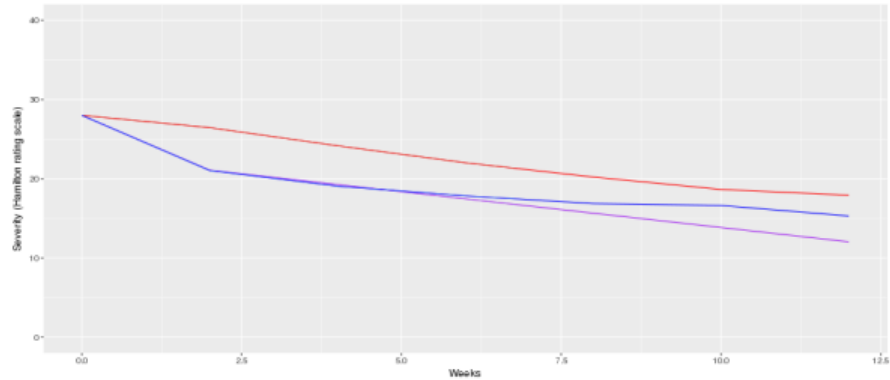
Baseline anxiety severity (IDS anxiety/arousal factor score):
5 23 25

Age in years:
25 46 65

Prior medication
 History of emotional or physical neglect

Marital status
single

Primary diagnosis depression type
Chronic major depression



red: CBASP

blue: medications

purple: combination

Probability of dropping out within 12 weeks, CBASP: 29 %

Probability of dropping out within 12 weeks, COMBINATION: 20 %

Probability of dropping out within 12 weeks, MEDS: 28 %

A research agenda

FUTURE DIRECTIONS

- No new treatments, formats, target groups
- Prevention of depression (reduction of incidence 20-25%)
- Improvement of treatments (chronic depression; relapse)
- Scaling up and simplifying treatments
- Research into processes of treatments:

Cuijpers, Curr Opin Psychiatry 2015

The Lancet Psychiatry Commission on psychological treatments research in tomorrow's science



Emily A Holmes, Ata Ghaderi, Catherine J Harmer, Paul G Ramchandani, Pim Cuijpers, Anthony P Morrison, Jonathan P Roiser, Claudi L H Bockting, Rory C O'Connor, Roz Shafran, Michelle L Moulds, Michelle G Craske

Executive summary

Background

Psychological treatments occupy an important place in evidence-based mental health treatments. Now is an exciting time to fuel treatment research: a pressing demand for improvements is poised alongside new opportunities from closer links with sister scientific and clinical disciplines. The need to improve mental health treatment is great; even the best treatments do not work for everyone, treatments have not been developed for many mental disorders, and the implementation of treatments needs to address worldwide scalability. Psychological treatments have yet to benefit from numerous innovations that have occurred in science, particularly those that have emerged in the past 20 years, and arguably vice versa. This Commission comprises ten parts that each outline an area in which we see substantial opportunity and scope for advancements that will move psychological treatments research forward.

Part 4: When in life? Psychological science, prevention, and early intervention—getting the approach right from the start

The social and economic tolls of mental health problems early in life make the development of effective prevention and early intervention approaches a priority. A preventive focus and a developmental approach are needed to identify risk factors for psychopathology, and identification of the optimal time at which to offer prevention approaches is needed to increase the likelihood of vulnerable young people growing up with positive mental health.

Part 5: Technology—can we transform the availability and efficacy of psychological treatment through new technologies?

New technologies provide exciting and timely means by which to disseminate and extend the efficacy and global reach of evidence-based interventions. eHealth and mHealth approaches that use information technology (eg, the internet, virtual reality, serious gaming) and

Lancet Psychiatry 2018
3: 237–86

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➤ Thank you for your attention!

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