Data supplement to Psychological interventions for adults with bipolar disorder: systematic review and metaanalysis. Br J Psychiatry doi: 10.1192/bjp.bp.114.157123

Systematic search

The search was constructed using the groups of terms set out in Box 1. The full set of search terms is documented in sections 1 and 2. The selection of search terms was kept broad to maximise retrieval of evidence.

Box DS1 Summary of systematic search strategy: search strategy construction

Review area	Search type	Search construction	Study design	Databases searched and date range searched
Psychosocial interventions for adults	Generic search	General medical databases: [(1 population terms) AND (RCT terms/ SR terms)] Topic specific databases: [(population terms)]	Qualitative systematic reviews, Randomised controlled studies	General medical databases: (From inception to 20 th of January 2014): CINAHL (1960-2014), Embase (1947-2014), MEDLINE (1966-2014), PreMEDLINE (1966-2014) and PsycINFO (1880-2014) Topic specific databases (From inception to 20th of January 2014): CDSR (1982-2014), DARE (1968-2014), HMIC (1980-2014), HTA (1995-2014) and CENTRAL (1898-2014)

Section 1 Population search terms - all databases

1.1 STEM – General medical databases Embase, MEDLINE, PreMEDLINE, PsycINFO – OVID SP

1 exp bipolar disorder/ or mania/

21 use emez

3 exp bipolar disorder/

43 use mesz, prem

5 exp bipolar disorder/ or exp mania/

```
65 use psyh
7 ((bi?polar adj5 (disorder$ or depress$)) or ((cyclothymi$ or rapid or ultradian) adj5 cycl$) or hypomani$ or mania$ or manic$ or mixed
episode$ or rcbd).ti,ab.
8 or/2,4,6-7
1.2 STEM - topic specific databases
HTA, CDSR, DARE, CENTRAL - Wiley
#1
mesh descriptor bipolar disorder explode all trees
#2
(((bipolar or "bi polar") near/5 (disorder* or depress*)) or ((cyclothymi* or rapid or ultradian) near/5 cycl*) or hypomani* or mania* or
manic* or "mixed episode*" or rcbd):ti,ab,kw
(#1 or #2)
1.3 STEM – topic specific databases
CENTRAL – Wiley #1 mesh descriptor bipolar disorder explode all trees
#2 (((bipolar or "bi polar") near/5 (disorder* or depress*)) or ((cyclothymi* or rapid or ultradian) near/5 cycl*) or hypomani* or mania* or
manic* or "mixed episode*" or rcbd):ti,ab,kw
#3 (#1 or #2)
1.4 STEM – topic specific databases
CINAHL – Ebsco
s3
       s1 or s2
       ti ( (((bipolar or "bi polar") n5 (disorder* or depress*)) or ((cyclothymi* or rapid or ultradian) n5 cycl*) or hypomani* or mania* or
s2
manic* or "mixed episode*" or rcbd) ) or ab ( (((bipolar or "bi polar") n5 (disorder* or depress*)) or ((cyclothymi* or rapid or ultradian) n5
cycl*) or hypomani* or mania* or manic* or "mixed episode*" or rcbd))
s1
       (mh "bipolar disorder")
```

1.5 STEM – topic specific databases

HMIC - HDAS

1 hmic bipolar disorder/

2 hmic (((bipolar or "bi polar") and (disorder* or depress*)) or ((cyclothymi* or rapid or ultradian) and cycl*) or hypomani* or mania* or manic* or "mixed episode*" or rcbd).ti,ab

3 hmic 1 or 2

Section 2 Study design filters – all databases

- 2.1 Quantitative systematic review study design filters
- 2.1.1 Quantitative systematic review study design filter, general medical databases

Embase, MEDLINE, MEDLINE In-Process, PsycINFO – OVID SP

- 1 meta analysis/ or systematic review/
- 2 1 use emez
- 3 meta analysis.sh,pt. or "meta-analysis as topic"/ or "review literature as topic"/
- 4 3 use mesz, prem
- 5 (literature review or meta analysis).sh,id,md. or systematic review.id,md.
- 6 5 use psyh
- 7 (exp bibliographic database/ or (((electronic or computer\$ or online) adj database\$) or bids or cochrane or embase or index medicus or isi citation or medline or psyclit or psychlit or scisearch or science citation or (web adj2 science)).ti,ab.) and (review\$.ti,ab,sh,pt. or systematic\$.ti,ab.)
- 8 7 use emez

9 (exp databases, bibliographic/ or (((electronic or computer\$ or online) adj database\$) or bids or cochrane or embase or index medicus or isi citation or medline or psyclit or psychlit or scisearch or science citation or (web adj2 science)).ti,ab.) and (review\$.ti,ab,sh,pt. or systematic\$.ti,ab.)

10 9 use mesz, prem

11 (computer searching.sh,id. or (((electronic or computer\$ or online) adj database\$) or bids or cochrane or embase or index medicus or isi citation or medline or psyclit or psychlit or scisearch or science citation or (web adj2 science)).ti,ab.) and (review\$.ti,ab,pt. or systematic\$.ti,ab.)

12 11 use psyh

13 ((analy\$ or assessment\$ or evidence\$ or methodol\$ or quantitativ\$ or systematic\$) adj2 (overview\$ or review\$)).tw. or ((analy\$ or assessment\$ or evidence\$ or methodol\$ or quantitativ\$ or systematic\$).ti. and review\$.ti,pt.) or (systematic\$ adj2 search\$).ti,ab.

14 (metaanal\$ or meta anal\$).ti,ab.

15 (research adj (review\$ or integration)).ti,ab.

16 reference list\$.ab.

17 bibliograph\$.ab.

18 published studies.ab.

19 relevant journals.ab.

20 selection criteria.ab.

21 (data adj (extraction or synthesis)).ab.

22 (handsearch\$ or ((hand or manual) adj search\$)).ti,ab.

23 (mantel haenszel or peto or dersimonian or der simonian).ti,ab.

24 (fixed effect\$ or random effect\$).ti,ab.

25 ((pool\$ or combined or combining) adj2 (data or trials or studies or results)).ti,ab.

2.1.2 Qualitative systematic review study design filter, topic specific databases

CINAHL – EBSCO HOST

- s33 s1 or s2 or s3 or s4 or s5 or s6 or s7 or s8 or s9 or s10 or s11 or s12 or s13 or s14 or s15 or s16 or s22 or s23 or s26 or s27 or s28 or s29 or s30 or s31 or s32
- s32 ti (analy* n5 review* or assessment* n5 review* or evidence* n5 review* or methodol* n5 review* or quantativ* n5 review* or systematic* n5 review* or assessment* n5 review* or evidence* n5 review* or methodol* n5 review* or quantativ* n5 review* or systematic* n5 review* or systematic* n5 review*)
- s31 ti (analy* n5 overview* or assessment* n5 overview* or evidence* n5 overview* or methodol* n5 overview* or quantativ* n5 overview* or systematic* n5 overview* or assessment* n5 overview* or evidence* n5 overview* or methodol* n5 overview* or quantativ* n5 overview* or systematic* n5 overview*)
- s30 ti (pool* n2 results or combined n2 results or combining n2 results) or ab (pool* n2 results or combined n2 results or combining n2 results)
- s29 ti (pool* n2 studies or combined n2 studies or combining n2 studies) or ab (pool* n2 studies or combined n2 studies or combining n2 studies)
- s28 ti (pool* n2 trials or combined n2 trials or combining n2 trials) or ab (pool* n2 trials or combined n2 trials or combining n2 trials)
- s27 ti (pool* n2 data or combined n2 data or combining n2 data) or ab (pool* n2 data or combined n2 data or combining n2 data)
- s26 s24 and s25
- s25 ti review* or pt review*
- s24 ti analy* or assessment* or evidence* or methodol* or quantativ* or systematic*
- s23 ti "systematic* n5 search*" or ab "systematic* n5 search*"

```
s22 (s17 or s18 or s19) and (s20 or s21)
s21 ti systematic* or ab systematic*
s20 tx review* or mw review* or pt review*
s19 (mh "cochrane library")
s18 ti (bids or cochrane or index medicus or "isi citation" or psychlit or scisearch or "science citation" or web n2 science) or ab (
bids or cochrane or index medicus or "isi citation" or psyclit or psychlit or scisearch or "science citation" or web n2 science)
s17 ti ("electronic database*" or "bibliographic database*" or "computeri?ed database*" or "online database*") or ab ("electronic
database*" or "bibliographic database*" or "computeri?ed database*" or "online database*")
s16 (mh "literature review")
s15 pt systematic* or pt meta*
s14 ti ("fixed effect*" or "random effect*") or ab ("fixed effect*" or "random effect*")
s13 ti ("mantel haenszel" or peto or dersimonian or "der simonian") or ab ("mantel haenszel" or peto or dersimonian or "der simonian")
s12 ti (handsearch* or "hand search*" or "manual search*") or ab (handsearch* or "hand search*" or "manual search*")
s11 ab "data extraction" or "data synthesis"
s10 ab "selection criteria"
s9 ab "relevant journals"
s8 ab "published studies"
s7 ab bibliograph*
s6 ab "reference list*"
s5 ti ("research review*" or "research integration") or ab ("research review*" or "research integration")
s4 ti (metaanal* or "meta anal*") or ab (metaanal* or "meta anal*")
s3 (mh "meta analysis")
```

```
s2 (mh "systematic review")
s1 (mh "literature searching+")
```

- 2.2 Randomised controlled trial filters
- 2.2.1 Randomized controlled trial study design filter, general medical databases
 Embase, MEDLINE, PreMEDLINE, PsycINFO OVID SP 1 exp "clinical trial (topic)"/ or exp clinical trial/ or crossover procedure/ or double blind procedure/ or placebo/ or randomization/ or random sample/ or single blind procedure/
- 2 1 use emez
- exp clinical trial/ or exp "clinical trials as topic"/ or cross-over studies/ or double-blind method/ or placebos/ or random allocation/ or single-blind method/
- 4 3 use mesz, prem
- 5 (clinical trials or placebo or random sampling).sh,id.
- 6 5 use psyh
- 7 (clinical adj2 trial\$).ti,ab.
- 8 (crossover or cross over).ti,ab.
- 9 (((single\$ or doubl\$ or tripl\$) adj2 blind\$) or mask\$ or dummy or doubleblind\$ or singleblind\$ or tripleblind\$).ti,ab.
- 10 (placebo\$ or random\$).ti,ab.
- 11 treatment outcome\$.md. use psyh
- 12 animals/ not human\$.mp. use emez
- animal\$/ not human\$/ use mesz, prem
- 14 (animal not human).po. use psyh
- 15 (or/2,4,6-11) not (or/12-14)

2.2.2 Randomized controlled trial study design filter, topic specific databases

```
CINAHL—EBSCO Host
$10 $9 not $8

$9 $1 or $2 or $3 or $4 or $5 or $6 or $7

$8 (mh "animals") not (mh "human")

$7 (pt "clinical trial") or (pt "randomized controlled trial")

$6 ti ( placebo* or random* ) or ab ( placebo* or random* )

$5 ti ( single blind* or double blind* or treble blind* or mask* or dummy* or singleblind* or doubleblind* or trebleblind* ) or ab ( single blind* or double blind* or treble blind* or crossover or cross over )

$4 ti ( crossover or cross over ) or ab ( crossover or cross over )

$3 ti clinical n2 trial* or ab clinical n2 trial*

$2 (mh "crossover design") or (mh "placebos") or (mh "random assignment") or (mh "random sample")

$1 (mh "clinical trials+")
```

 Table DS1
 Characteristics of the included studies

STUDY	Coun	Mean	%	%	Mood	Intervention	N	Drop-out	Hours	Duration	Follow-up
	try	Age	Fem	Bipolar	at		Total	Total or	of	(weeks)	(weeks)
			ale	I	baseline		or per	per arm	contact		
							arm				
Individual Cognitive the	erapy (C'	T) / Cogni		avioural t	herapy (CE	,					
BALL2006 (65)	AUS	42	58%	NR	M	CT v TAU	25, 27	16%	20	26	52 / 78
JONES2014 (34)	GB	39	70%	79%	M	CBT v TAU	33, 34	3%	18	26	52
LAM2000 (67)	GB	39	52%	100 %	M	CBT v TAU	13, 12	8%	NR	26	52
LAM2003 (68)	GB	44	56%	100 %	M	CT v TAU	51, 52	16%	16	26	52
MEYER2012 (86)	DE	44	50%	79%	M	CBT v Supportive therapy	38, 38	13%, 16%	18, 18	39	143
MIKLOWITZ2007 (43)	US	40	59%	67%	Ad	CBT v Collaborative therapy	75, 130	41%, 30%	11, 2	39, 6	52
SCHMITZ2002 (46)	US	34	52%	NR	Ad	CBT v TAU	25, 21	36%, 67%	20	12	-
SCOTT2001 (51)	GB	39	60%	81%	A and M	CT v TAU	21, 21	14%	11	26	-
SCOTT2006 (52)	GB	41	65%	94%	A and M	CBT v TAU	127, 126	17%	NR	26	72
ZARETSKY2008 (66)	CA	41	NR	66 %	M	CBT v TAU	40, 39	28%	NR	13	52
Psychological therapy for	r medica	ation adhe	erence (PTM)							
COCHRAN1984 (69)	US	33	61%	75%	M	PTM v TAU	14, 14	14%	6	6	32
EKER2012 (42)	TR	36	54%	NR	M	PTM vs Attention control	35, 36	17%	12	6	-
Individual Psychoeducat	tion (PE))									
JAVADPOUR2013	IR	NR	51%	NR	M	PE v TAU	54, 54	17%, 24%	7	8	26 / 52 / 78
(62)											
LOBBAN2010 (63)	GB	45	68%	98%	M	PE v TAU	56, 40	5%	6	6	48
PERRY1999 (64)	GB	45	68%	91%	M	PE v TAU	34, 36	21%	9	NR	52
DOGAN2003 (61)	TR	37	35%	NR	M	PE v TAU	14, 12	NR	14	6	-
Individual PE vs Group						DE CDT	05 100	2.40/ 2.60/	17.0	20. 6	70
PARIKH2012 (39)	CA	41	58%	72%	M	PE vs CBT	95, 109	34%, 36%	17, 9	20, 6	72
Online Psychoeducation		ND	700/	NID	A 1 1	DE Au C 1	120	220/ 200/	0	0	26
PROUDFOOT2012 (59)	AUS	NR	70%	NR	Ad and M	PE vs Attention control	139, 141	32%, 29%	0	8	26
SMITH2011 (60)	GB	44	62%	86%	M	PE vs TAU	24, 26	33%	NR	17	43
TODD 2014 (35)	GB	43	72%	NR	A and M	PE vs TAU	61, 61	66%	0	26	-
Group Cognitive Behavi	ioural th	erapy (CB	BT)								

STUDY	Coun try	Mean Age	% Fem ale	% Bipolar I	Mood at baseline	Intervention	N Total or per arm	Drop-out Total or per arm	Hours of contact	Duration (weeks)	Follow-up (weeks)
DEBARROS2013 (36)	BR	44	69%	NR	M	CBT v Attention control	32, 23	NR	24	8	34 / 60
BERNHARD2009 (32)	DE	39	73%	63%			32, 36	22%	18	12	52
GOMES2011 (74)	BR	38	76 %	76 %	M	CBT v TAU	23, 27	0%	27	26	78
COSTA2012 (75)	BR	40	62%	84%	M	CBT v TAU	27, 14	0%	28	14	40
Group Social cognition a											
LAHERA2013 (78)	ES	39	65%	76%	M	CBT v TAU	21, 16	19%	18	18	-
Group Mindfulness b											
WILLIAMS2008 (77)	GB	NR	NR	NR	M	Mindfulness v Wait list	9, 8	NR	23	8	-
PERICH2013 (76)	AUS	NR	65%	62%	M	Mindfulness v TAU	48, 47	21%, 38%	18	8	22/ 35/48/61
Group Dialectical Behav	viour Th	erapy (DI	BT)								
VAN DIJK2013 (44)	CA	42	75%	42%	Ad	DBT v TAU	13, 13	8%, 8%	18	12	-
Functional remediation											
TORRENT2013 (72)	ES	40	NR	NR	M	Functional remediation v TAU	77, 80	29%, 18%	32	21	47
Group Psychoeducation	(PE)										
SAJATOVIC2009 (49)	US	41	68%	NR	A	PE v TAU	84, 80	51%	NR	52	-
CASTLE2010 (73)	AUS	42	77%	74 %	M	PE v TAU	42, 42	24%	23	13	52
TORRENT2013 (72)	ES	40	NR	NR	M	PE v TAU	82, 80	24%, 18%	32	21	47
COLOM2003 (70)	ES	35	62 %	100%	M	PE v Attention control	25, 25	NR	32	20	124
COLOM2003 ((71)	ES	34	63%	83%	M	PE v Attention control	60, 60	27%	32	21	124
Family psychoeduca											
CLARKIN1998 (38)	US	48	46%	100%	A	Family PE v TAU	19, 23	5%, 35%	NR	48	-
D'SOUZA2010 (79)	AUS	40	52 %	86%	M	Family PE v TAU	27, 31	NR	18	12	60
GLICK1993 (37)	US	32	67%	NR	A	Family PE v TAU	15, 11	20%, 19%	8	7	33
MILLER2004 (50)	US	39	56%	100%	A	Family PE v TAU	33, 29	36%	10	NR	121
Family psychoeduca											
BORDBAR2009 (80)	IR	30	22%	100%	M	Family PE v TAU	29, 28	0%	2	1	52
VAN GENT1991 (83)	NL	49	NR	NR	M	Family PE v Waitlist	14, 12	0%	NR	5	31
MADIGAN2012 (81)	IE	42	65%	NP	M	Family PE v Short carer focused intervention v TAU	18, 19, 10	28%, 21%	NR	5	57 / 109
PERLICK2010 (57)	US	35	62%	87%	A and M	Short carer focused intervention v TAU	25, 21	4%, 10%	11	14	-

STUDY	Coun try	Mean Age	% Fem ale	% Bipolar I	Mood at baseline	Intervention	N Total or per arm	Drop-out Total or per arm	Hours of contact	Duration (weeks)	Follow-up (weeks)
REINARES2008 (82)	ES	34	54%	83%	M	M Family PE v TAU		5%	18	12	65
Family Focused Therapy											
MIKLOWITZ2000 (56)	US	36	63%	100%	A and M	FFT v TAU	31, 70	10%	21	39	52 / 104
MIKLOWITZ2007 (43)	US	40	59%	67%	Ad	FFT v Collaborative therapy	26, 130	27%, 30%	11, 2	39, 6	52
MILLER2004 (50)	US	39	56%	100%	A	FFT vTAU	30, 29	36%, 33%	10, 9	NR	121
REA2003 (85)	US	26	NR	100%	M	FFT v PE (Individual)	28, 25	21%, 2%	21, 11	39, 39	-
Interpersonal and social											
SWARTZ2012 (45)	US	37	60 %	0%	Ad	IPRST v Quetiapine	14, 11	21%, 38%	6	12	-
FRANK1999 (48)	US	35	56	100%	A	IPRST v	39	43%	38	123	-
						Intensive clinical management	43	37%	15		
MIKLOWITZ2007 (43)	US	40	59%	67%	Ad	IPRST vs TAU	62, 130	32%, 30%	14, 2	39, 6	52
Collaborative care (Psyc	hiatric f	ocus)									
BAUER2006 (47)	US	47	9%	87%	A	Collaborative care v TAU	166, 164	25%, 15%	NR	156	-
SIMON2005 (55)	US	44	69%	76%	A and M	Systematic care management program v TAU	212 229	NR	NR	52	-
KESSING2013 (84)	DK	36	54%	NR	M	Specialized outpatient mood disorder clinic v TAU	72, 86	0%, 0%	NR NR	104/130 104/130	-
Collaborative care (Phys	sical hea	lth focus)									
FAGIOLINI2009 (40)	US	41	61%	67%	A and M	Enhanced Clinical Intervention vs TAU	235, 228	NR	NR	85	-
KILBOURNE2008 (53)	US	55	9%	76%	A and M	Collaborative care v TAU	61	NR	NR	26	-
KILBOURNE2012 (54)	US	45	61%	NR	A and M	Collaborative care v TAU	34, 34	NR	NR	30	52
Integrated group therap	v (IGT)										
WEISS2007 (41)	US	42	52%	81%	Ad and M	IGT v Drug counselling	31,31	23%, 45%	20, 20	20, 20	35
WEISS2009 (58)	US	38	41%	79%	Ad and M	IGT v Drug counselling	31, 30	19%, 20%	12, 12	12, 12	26
Integrated Cognitive ar	d Intern	ersonal T	herapy ((IC&IT)							
SCHWANNAUER2007	GB	37	48%	95%	NR	IC&IT v TAU	212	23%, 17%	25	20	46, 98

STUDY	Coun try	Mean Age	% Fem ale	% Bipolar I	Mood at baseline	Intervention	N Total or per arm	Drop-out Total or per arm	Hours of contact	Duration (weeks)	Follow-up (weeks)
(33)											

Definitions of abbreviations

TAU = Treatment as usual; PE = Psychoeducation; NR = Not reported;

M = maintenance (participants euthymic at baseline); Ad = participants in an acute depression at baseline; A = participants in an acute episode of mania or depression;

AUS = Australia; BR = Brazil; CA = Canada; DE = Germany; DK = Denmark; ES = Spain; GB = United Kingdom; IE = Ireland; IR = Islamic Republic of Iran; NL = Netherlands; TR = Turkey; US = United States;

Table DS2 Defining characteristics of psychological interventions* and collaborative care

Intervention	Mean/range contact (hours)	Mean/range group size	Mean/range duration (weeks)	Key elements
First comparison				
Individual Cognitive therapy (CT) / Cognitive Behavioural therapy (CBT)	16 (11-20)	N/A	28 (12-39)	Psychoeducation, identifying and modifying dysfunctional and negative thoughts, underlying maladaptive assumptions and beliefs, problem-solving training and strategies for early detection of mood episodes.
Psychological therapy for medication adherence (PTM)	9 (6-12)	N/A	6	Modified cognitive-behavioural intervention aimed at altering cognitions and behaviours that interfere with compliance. Psychoeducation, monitoring, and then instructions to alter compliance behaviour.
Individual Psychoeducation (PE)	9 (6-11)	N/A	17 (6-39)	Education on bipolar disorder, causative factors, clinical symptoms and early warning signs, medication side effects, and coping strategies for mood changes. Most PE interventions include the creation of a (relapse prevention) action plan.
Online Psychoeducation (PE)	0	N/A	15 (8-26)	Online interactive program addressing topics such as the causes of bipolar disorder, diagnosis, treatments, role of lifestyle (changes) and the importance of support.
Functional remediation	32	NR	21	Psychoeducation on cognitive deficits and their impact on daily life, strategies to manage them, especially attention, memory and executive function, with a special focus on enhancement of functioning in daily routine
Second comparison				
Group Cognitive Behavioural therapy (CBT)	24 (18-28)	6	17 (12-26)	Psychoeducation, identifying and modifying dysfunctional and negative thoughts, underlying maladaptive assumptions and beliefs, problem-solving training and strategies for early detection of mood episodes.
Group Social cognition and interaction training	18	12	18	Emotional training (definition of emotions, facial expression training, understanding of paranoid symptoms as an emotion); role-play social situations (distinguishing facts from guesses, jumping to conclusions, understanding bad events); and integration of learning.
Group Mindfulness based cognitive therapy	21 (18-23)	10 (6-14)	8	Psychoeducation, mindfulness meditation (observations of thoughts, feelings and bodily reactions) practice and cognitive therapy regarding depression.
Group Dialectical Behaviour Therapy (DBT)	18	N/A	12	Psychoeducation about bipolar disorder and treatment. Training of skills: states of mind, reducing vulnerability to emotions, nonjudgmental stance, acceptance, distracting, self-soothing, pro's and con's, urge management, self-validation opposite to emotion action and balancing enjoyable activities with responsibilities.
Group Psychoeducation (PE)	25 (9-32)	9 (7-10)	22 (8-26)	Interactive group sessions covering illness and treatment education, symptom monitoring and early detection, treatment adherence, illness management skills, coping strategies and problem solving.
Third comparison				

	12 (0.10)	3.7/1	T aa /= 16:	
Family psychoeducation (Service user and carers)	12 (9-18)	N/A	22 (7-48)	Intervention for family and the service user. Psychoeducation on bipolar and treatment, enhancing relationships (spouse, family, clinician), problem focused coping
and carersy				strategies.
Family psychoeducation (Carers)	10 (2-18)	N/A	6 (1-12)	Intervention for the family only. Psychoeducation on bipolar and treatment, dealing with one's own functioning (stress and other health risks) and practical advice.
Fourth comparison	1			, , ,
Collaborative care (Psychiatric focus)	N/A	N/A	N/A	Psychoeducation and a review of symptoms and side effects, medical and behavioural management of side effects, discussion of early-warning signs of impending episodes, and a (24-hour on-call) coordinating team of health professionals.
Collaborative care (Physical health focus)	N/A	N/A	N/A	Self-management, psychoeducation, disease (cardiovascular) prevention strategies and a care manager/team who advocates the service users interests.
Fifth comparison			<u> </u>	-
Integrated Cognitive and Interpersonal Therapy	25	8	20	Individuals could choose the group or individual intervention. Psychoeducation, identification of early warning signs, behavioural strategies for coping with symptoms, cognitive strategies, affect regulation techniques, social network analysis, and identification of interpersonal patterns and strategies.
Sixth comparison			·	
Family Focused Therapy (FFT)	15 (10-21)	N/A	39	An intervention with the service user and his/her family. Psychoeducation about bipolar disorder, communication enhancement training, and problem-solving skills training.
Seventh comparison (See Individual Cog	nitive Behaviou	ıral therapy ((CBT) for chara	
Eight comparison				
Interpersonal and social rhythm therapy (IPSRT)	16 (6-38)	N/A	12 (19-39)	Based on interpersonal therapy, but focussing on stabilizing social rhythms (social routines, daily activities and sleep/wake cycles) trough monitoring and anticipating on disruptive events.
Ninth comparison				
Integrated group therapy (IGT)	16 (12-20)	5	16 (12-20)	Cognitive behavioural relapse prevention model focusing on similarities between recovery/relapse processes in bipolar disorder and substance use disorder.
Drug counselling	16 (12-20)	5	16 (12-20)	A treatment group to facilitate abstinence from drug misuse, encourage mutual support, and teach new ways to cope with substance-related problems.
* Psychological interventions are structure			ychological mod	dels (linking thoughts, feelings and behaviour) of mood disorders. Main goals are to

^{*} Psychological interventions are structured interventions based on psychological models (linking thoughts, feelings and behaviour) of mood disorders. Main goals are to establish stable, normal mood and restore (social) functioning.

N/A = not applicable

 Table DS3
 Continuous measures used in included trials

Outcome type	Scales
Symptoms of depression	Bech–Rafaelsen Melancholia Scale (BRMS), Beck Depression Inventory (BDI), Center for Epidemiological Studies Depression Scale (CES-D), Goldberg Anxiety and Depression Scale (GADS), Hamilton Depression Rating Scale (HAM-D), Montgomery-Asberg Depression Rating Scale (MADRS), Bipolar Longitudinal Investigation of Problems (BLIP), Internal State Scale (ISS), Depression and Schedule for Affective Disorders and Schizophrenia, change version (SADS-C).
Symptoms of mania symptoms	Altman Self-Rating-Mania-Scale, Bech-Rafaelsen Mania Scale (BRMS), Bipolar Longitudinal Investigation of Problems (BLIP), Mania Rating Scale (MAS), Schedule for Affective Disorders and Schizophrenia, change version (SADS-C), Self-Rating Mania Inventory (SRMI) and Young Mania Rating Scale (YMRS).
Psychosocial functioning	Global Assessment of Functioning (GAF), MRC Social Performance Schedule (SPS), Social Adaptation Self Evaluation Scale (SASS), different versions of Social Adjustment Scale (SAS), Social and Occupational Functioning Assessment Scale (SOFAS), Social Functioning Interview, Social Performance Schedule (SPS), UCLA Social Attainment Scale, Work and Social Adjustment Scale (WSAS) and World Health Organization Disability Assessment Scale (WHODAS).
Quality of life	Medical Outcomes Study 36-item Short Form Health Survey (MOS-SF-36), Satisfaction with Life Scale (SWLS), Quality of Life in BD scale (QoL.BD), World Health Organisation Quality of Life Instrument.

Fig. DS1 Risk of bias graph.

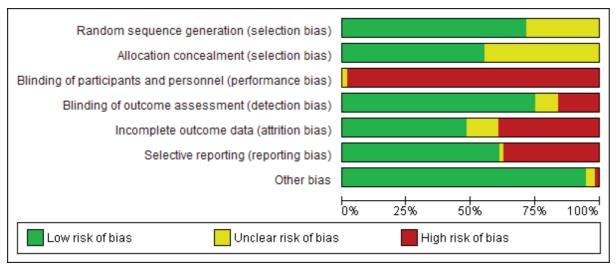


Fig. DS2 Risk of bias summary.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
BALL2006 [M]	•	?	•	•	•	•	•
BAUER2006a [M]	•	•	•				•
BERNHARD2009 [M]	?	?	•	•	•	•	•
BORDBAR2009 [M]	•	?	•	•	•	•	•
CASTLE2010 [M]	•	•		•		•	•
CLARKIN1998 [A]	•	?		?			•
CO CHRAN1 984 [M]	?	?	•		•	•	•
COLOM 2003a [M]	•	•		•	?		•
COLOM 2003b [M]	•	•		•	•	•	•
COSTA2012 [M]	•	•		•	•		•
DEBARROS2012 [M]	•	•		•			•
DIJK2013 [Ad]	•	•		•	•	•	•
DOGAN2003 [M]	•	?	•	?	•	•	•
DSOUZA2010 [M]	?	?		•		•	•
EKER2012	?	?	?	•	?	?	•
FAGIOLINI2009 [A&M]	•	•		•	?		•
FRANK1999a	•	•				•	•
G∐CK1993 [A]	?	?		•		•	•
GOMES2011 [M]	•	?	•	•	•	•	•
JAVADPOUR2013 [M]	•	•	•	•	•	•	•
JONES2013 [M]	•	•	•	•	•	•	•
KESSING2013 [M]	•	•		•	•	•	•
KILBOURNE2008 [A&M]	?	•	•	•	•	•	•
KILBOURNE2012 [A&M]	?	•		•	•	•	•
LAHERA2012 [M]	•	?		•	•	•	•
LAM 2000 [M]	?	?		•		•	•
LAM 2003 [M]	•	•	•	•	•	•	•
LIEBERMAN2010 [M]	•	•	•	•		•	?
LOBBAN2010 [M]	•	•			•		•

Fig. DS2 (continues) Risk of bias

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Otherbias
MADIGAN2012 [M]	•	•		?	•	•	•
MEYER2012 [M]	•	•		•	•	•	•
MIKLOWITZ2000 [A&M]	•	?	•	•	•	•	•
MIKLOWITZ2007b [Ad]	•	?	•	•	•	•	•
MILLER2004 [A]	?	?	•	•	•	•	•
PARIKH2012 [M]	•	•	•	•	?	•	?
PERICH2013 [M]	•	•	•	•	•	•	•
PERLICK2010 [A&M]	•	•	•	•	•	•	•
PERRY1999 [M]	•	•	•	•	•	•	•
PROUDFOOT2012 [Ad&M]	•	•	_	•	•	•	•
REA2003 [M] REINARES2008 [M]	?	?	-	•	•	•	•
SAJATOVIC2009 [A]	•	0	-	-	-	•	•
SCHMITZ2002	•	?	_	?	?	•	•
SCHWANNAUER2007	•	•	•	•	•		•
SCOTT2001 [A&M]]	?	?	•	•	?	•	•
SCOTT2006 [A&M]	•	•	•	•	?	•	•
SIMON2005 [A&M]	•	•	•	•	•	•	•
SMITH2011 [M]	•	?	•	•	•	•	•
SWARTZ2012 [Ad]	?	?	•	•	•	•	•
TODD 2012 [A&M]	•	•	•	•	•	•	•
TORRENT2013 [M]	•	?	•	•	•	•	•
VANGENT1991 [M]	?	?	•	•	•	•	•
WEISS2007 [Ad&M]	?	?	•	•	•	•	•
WEISS2009[Ad&M]	?	?		?	•	•	•
WILLIAMS2008 [M]	•	•		•	•	•	•
ZARETSKY2008 [M]	?	?	•	•			•

Caption: Risk of bias was rated as low (+), high (-), or unclear (?) using the Cochrane Risk of Bias Tool (23).; M = maintenance (participants euthymic at baseline); Ad = participants in an acute depression at baseline; A = participants in an acute episode of mania or depression;

 Table DS4
 Outcomes at post-treatment

1. Individual psychologi	cal intervention vs Treatment as u	sual (TAU)					
Outcome	(Sub-)analysis	Trials (reference)	N	ES [95% CI]	Heterogeneity: Chi² (p value); I²	Interv ention length (weeks)	Quality (GRADE)(27)
Depression symptoms	Total	8	683	SMD= -0.23 [-0.41, -0.05]	8.55 (P = 0.29); 18%	6-26	Low a e
	Online Psychoeducation	(35, 59)	378	SMD= -0.18 [-0.63, 0.26]	3.88 (P = 0.05); 74%	6-26	
	CBT	(34, 65, 67, 68)	305	SMD= -0.31 [-0.53, -0.08]	2.97 (P = 0.70); 0%	26	
Mania symptoms	CBT	(65, 67, 68)	171	SMD= -0.05 [-0.35, 0.25]	0.48 (P = 0.79); 0%	26	Very Low ade
Hospitalisation	Medication adherence therapy	(69)	28	RR= 0.14 [0.01, 2.53]	N/A	6	Low de
Relapse, any type	Total	6	365	RR= 0.66 [0.48, 0.92]	2.50 (P = 0.78); 0%	6-26	Moderate d
	Psychoeducation	(64)	70	RR= 0.69 [0.41, 1.15]	N/A	6	
	Medication adherence therapy	(69)	28	RR= 0.40 [0.09, 1.73]	N/A	6	
	СВТ	(51, 65, 66, 68)	267	RR= 0.67 [0.43, 1.04]	2.02 (P = 0.57); 0%	26	
Relapse, depression	Total	2	122	RR= 0.54 [0.06, 4.70]	4.15 (P = 0.04); 76%	6-26	Very Low abd
	Psychoeducation	(64)	70	RR= 1.29 [0.61, 2.73]	N/A	6	
	CBT	(65)	52	RR= 0.15 [0.02, 1.17]	N/A	26	
Relapse, mania	Psychoeducation	(64)	70	RR= 0.19 [0.05, 0.81]	N/A	6	Very Low de
Response, any	CBT	(51)	33	RR= 0.71 [0.46, 1.07]	N/A	26	Very Low de
Quality of life	Total	4	451	SMD= -0.46 [-1.05, 0.12]	20.14 (P = 0.0002); 85%	6-26	Very Low abe
	Psychoeducation	(61)	26	SMD= -0.36 [-1.30, 0.59]	N/A	6	
	Online Psychoeducation	(35, 59)	378	SMD= -0.86 [-1.26, -0.45]	16.50 (P < 0.0001); 94%	6-26	
	CBT	(34)	47	SMD= -0.35 [-0.93, 0.23]	N/A	26	
Psychosocial functioning GAF	CBT	(65)	94	SMD= -0.49 [-0.90, -0.08]	0.10 (P = 0.75); 0%	26	Very Low a d e

Psychosocial	Total	7	606	SMD= -0.34 [-0.51, -0.17]	6.49 (P = 0.37); 8%	6-26	Low a e
functioning Social							
and/or Work							
	Psychoeducation	(34, 64)	70	SMD= -0.17 [-0.64, 0.30]	N/A	6	
	Online Psychoeducation	(35, 59)	378	SMD= -0.31 [-0.67, 0.05]	2.55 (P = 0.11); 61%	6-26	
	CBT	(34, 51, 65,	158	SMD= -0.55 [-0.87, -0.23]	1.20 (P = 0.75); 0%	26	
		67)					
Study Discontinuation	Total	9	755	RR= 0.74 [0.44, 1.27]	11.29 (P = 0.13); 38%	6-26	Low de
	Psychoeducation	(63, 64)	166	RR=3.04 [0.33, 28.16]	1.28 (P = 0.26); 22%	6	
	Online Psychoeducation	(35)	122	RR=1.13 [0.46, 2.72]	N/A	26	
	Medication adherence therapy	(69)	28	No dropout	N/A	6	
	CBT	(34, 51, 52,	439	RR= 0.58 [0.30, 1.13]	7.87 (P = 0.10); 49%	26	
		65, 67)					

2. Group psychological intervention vs Treatment as usual (TAU)

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Inter	Quality
		(reference)			value); I ²	venti	(GRADE)(27)
						on	
						lengt	
						h	
						(week	
						s)	
Depression symptoms	Total	8	423	SMD= -0.24 [-0.64, 0.16]	25.65 (P = 0.0006); 73%	8-52	Very
							Low abde
	Psychoeducation	(49, 73)	152	SMD= 0.14 [-0.17, 0.46]	0.00 (P = 0.98); 0%	13-52	
	Mindfulness based cognitive	(76, 77)	109	SMD= -0.50 [-0.89, -0.12]	0.20 (P = 0.65); 0%	8	
	therapy						
	Dialectical behaviour therapy	(44)	24	SMD=-1.18 [-2.06, -0.30]	N/A	12	

	CBT	(32, 75)	91	SMD= -0.55 [-1.12, 0.02]	1.68 (P = 0.20); 40%	12-14	
	Social cognition and interaction training	(78)	37	SMD= 0.92 [0.23, 1.61]	N/A	18	
Mania symptoms	Total	6	375	SMD= -0.08 [-0.33, 0.16]	5.60 (P = 0.35); 11%	8-52	Very low a d e
	Psychoeducation	(49, 73)	152	SMD=0.06 [-1.05, 1.18]	1.69 (P = 0.19); 41%	13-52	
	Mindfulness based cognitive therapy	(76)	95	SMD=-0.10 [-0.50, 0.30]	N/A	8	
	CBT	(32, 75)	91	SMD=-0.21 [-0.89, 0.47]	1.75 (P = 0.19); 43%	12-14	
	Social cognition and interaction training	(78)	37	SMD= -0.37 [-1.02, 0.28]	N/A	18	
Hospitalisation	Total	3	205	RR=0.45 [0.10, 2.09]	3.94 (P = 0.14); 49%	14-21	Low d
	PE vs attention control	(70, 71)	170	RR=0.52 [0.06, 4.84]	2.48 (P = 0.12); 60%	21	
	CBT	(75)	35	RR=0.20 [0.02, 1.97]	N/A	14	
Relapse, any type	PE vs attention control	(70, 71)	170	RR=0.48 [0.22, 1.04]	2.42 (P = 0.12); 59%	21	Low d
Relapse, depression	PE vs attention control	(70, 71)	170	RR=0.39 [0.19, 0.78]	0.45 (P = 0.50); 0%	21	Low d
Relapse, mania	PE vs attention control	(70, 71)	170	RR=0.48 [0.28, 0.82]	0.80 (P = 0.37); 0%	21	Low d
Relapse, mixed episode	PE vs attention control	(70, 71)	170	RR=0.43 [0.18, 1.07]	1.11 (P = 0.29); 10%	21	Low d
Quality of life	CBT	(32, 75)	91	SMD=-0.38 [-1.74, 0.99]	9.06 (P = 0.003); 89%	12-14	Very Low abde
Psychosocial functioning GAF	Total	2	89	SMD= 0.01 [-0.40, 0.43]	0.01 (P = 0.92); 0%	12-18	Very Low ade
	CBT	(32)	52	SMD=0.03 [-0.51, 0.58]	N/A	12	
	Social cognition and interaction training	(78)	37	SMD=-0.01 [-0.66, 0.64]	N/A	18	
Psychosocial functioning Social and/or Work	Social cognition and interaction training	(78)	37	SMD=0.43 [-0.23, 1.09]	N/A	18	Very Low ade
Study Discontinuation	Total	9	703	RR=1.23 [0.83, 1.81]	6.77 (P = 0.24); 26%	8-52	Very Low abe
	Psychoeducation	(49, 72, 73)	410	RR=1.41 [0.75, 2.64]	5.61 (P = 0.06); 64%	13-52	

PE vs attention control	(71)	120	No discontinuation	N/A	21	
Mindfulness based cognitive	(77)	19	RR=2.91 [0.40, 21.35]	N/A	8	
therapy						
Dialectical behaviour therapy	(44)	26	RR=1.00 [0.07, 14.34]	N/A	12	
CBT	(32, 75)	91	RR= 0.88 [0.37, 2.08]	N/A (1 study no	14	
				discontinuation)		
Social cognition and	(78)	37	No discontinuation	N/A	18	
interaction training						

3. Family psychoeducation vs Treatment as usual (TAU)

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Inter	Quality
		(reference)			value); I²	venti	(GRADE)(27)
						on	
						lengt	
						h	
						(week	
						s)	
Depression symptoms	Group Family PE (carers)	(57)	43	SMD= -0.73 [-1.35, -0.10]	N/A	14	Low d e
Mania symptoms	Group Family PE (carers)	(57)	43	SMD= -0.66 [-1.28, -0.04]	N/A	14	Low d e
Study Discontinuation	Group Family PE (carers)	(57)	46	RR=0.42 [0.04, 4.31]	N/A	14	Low b d

4. Collaborative care vs TAU

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Inter	Quality
		(reference)			value); I²	venti	(GRADE)(27)
						on	
						lengt	
						h	

						(week	
						s)	
Depression symptoms	Physical health focus	(53, 54)	123	SMD=-0.22 [-0.63, 0.19]	1.32 (P = 0.25); 24%	26-30	Low a d e
Mania symptoms	Physical health focus	(53, 54)	123	SMD=-0.07 [-0.47, 0.32]	1.24 (P = 0.27); 19%	26-30	Low a d e
Hospitalisation	Psychiatric focus	(55, 84)	572	RR=0.68 [0.49, 0.94]	0.13 (P = 0.72); 0%	52- 130	Moderate d
Relapse, any type	Psychiatric focus	(55)	414	RR=0.99 [0.84, 1.17]	N/A	52	Low ^{d e}
Relapse, depression (number)	Psychiatric focus	(55, 84)	424	RR= 0.96 [0.80, 1.17]	0.48 (P = 0.49); 0%	52- 104	Low de
Relapse, mania	Psychiatric focus	(55, 84)	505	RR= 0.93 [0.57, 1.52]	5.23 (P = 0.05); 81%	52- 104	Very Low ^{b d e}
Quality of life	Total	2	379	SMD=-1.30 [-3.78, 1.18]	75.41 (P < 0.00001); 99%	30- 156	Very Low abd
	Physical health focus	(54)	65	SMD= -0.03 [-0.51, 0.46]	N/A	30	
	Psychiatric focus	(47)	314	SMD= -2.56 [-2.86, -2.26]	N/A	156	
Study Discontinuation	Total	4	997	RR= 0.99 [0.47, 2.07]	4.48 (P = 0.21); 33%	30- 156	Low b d
	Physical health focus	(54)	68	RR=2.00 [0.19, 21.03]	N/A	30	
	Psychiatric focus	3(47, 55, 84)	929	RR= 0.96 [0.40, 2.30]	4.02 (P = 0.13); 50%	52- 156	

5. Integrated Cognitive and Interpersonal Therapy (IC&IT) vs Treatment as usual (TAU)

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Inter	Quality
		(reference)			value); I²	venti	(GRADE)(27)
						on	
						lengt	
						h	
						(week	

						s)	
Depression symptoms	(IC&IT) vs TAU	(93)	193	SMD= -0.64 [-1.19, -0.09]	N/A	20	Low d
Mania symptoms	(IC&IT) vs TAU	(93)	193	SMD= -0.10 [-0.30, 0.10]	N/A	20	Low de
Quality of life	(IC&IT) vs TAU	(93)	193	SMD= -0.37 [-0.65, -0.08]	N/A	20	Low d
Study	(IC&IT) vs TAU	(93)	193	RR= 1.13 [0.47, 2.68]	N/A	20	Low d
Discontinuation							

6. Family Focused therapy (FFT) vs Active control

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Inter	Quality
		(reference)			value); I²	venti	(GRADE)(27)
						on	
						lengt	
						h	
						(week	
						s)	
Depression symptoms	FFT vs TAU	(56)	79	SMD= -0.40 [-0.80, 0.00]	N/A	39	Low a d
Mania symptoms	FFT vs TAU	(56)	79	SMD= 0.00 [-0.40, 0.40]	N/A	39	Low a d
Relapse, any type	FFT vs PE	(85)	53	RR= 0.89 [0.52, 1.54]	N/A	39	Low d
Hospitalisation	FFT vs PE	(85)	53	RR= 0.71 [0.33, 1.52]	N/A	39	Low d
Study Discontinuation	Total	2	154	RR= 0.63 [0.21, 1.89]	1.99 (P = 0.16); 50%	39	Low b d
	FFT vs TAU	(56)	101	RR= 0.36 [0.11, 1.12]	N/A		
	FFT vs PE	(85)	53	RR= 1.07 [0.37, 3.08]	N/A		

7. Cognitive behaviour therapy (CBT) vs Active Control

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Inter	Quality
		(reference)			value); I²	venti	(GRADE)(27)

						on lengt h (week s)	
Depression symptoms	CBT individual vs Supportive Therapy (ST)	(86)	76	SMD= 0.41 [0.12, 0.70]	N/A	39	Low de
Mania symptoms	CBT individual vs Supportive Therapy (ST)	(86)	76	SMD=0.20 [-0.11, 0.51]	N/A	39	Low de
Relapse, any type	CBT individual vs Supportive Therapy (ST)	(86)	76	RR=0.60 [0.34, 1.05]	N/A	39	Low ^{de}
Study Discontinuation	CBT individual vs Supportive Therapy (ST)	(86)	76	RR=0.80 [0.56, 1.14]	N/A	39	Low d

8. Interpersonal and social rhythm therapy (IPSRT) vs Active control

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Inter	Quality
		(reference)			value); I²	venti	(GRADE)(27)
						on	
						lengt	
						h	
						(week	
						s)	
Depression symptoms	IPSRT vs Quetiapine	(45)	25	SMD= 0.44 [-0.34, 1.22]	N/A	12	Very Low a d
Relapse, any type	IPSRT vs Intensive	(48)	41	RR= 1.55 [0.63, 3.84]	N/A	123	Very Low a d

	clinical management						
Response, any type (number)	IPSRT vs Quetiapine	(45)	25	RR= 0.98 [0.60, 1.60]	N/A	12	Very Low ad
Psychosocial functioning GAF	IPSRT vs Quetiapine	(45)	25	SMD= 0.55 [-0.26, 1.36]	N/A	12	Very Low a d
Psychosocial functioning Social and/or Work	IPSRT vs Intensive clinical management	(48)	82	SMD= -0.36 [-0.72, 0.00]	N/A	123	Very Low ad
Study Discontinuation	Total	2	107	RR= 0.94 [0.55, 1.59]	0.07 (P = 0.79); 0%	12- 123	Moderate ^d
	IPSRT vs Quetiapine	(45)	25	RR= 0.79 [0.20, 3.16]	N/A	12	
	IPSRT vs Intensive clinical management	(48)	82	RR= 0.96 [0.54, 1.71]	N/A	123	

9. Integrated group therapy (IGT) vs Active control

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Inter	Quality
		(reference)			value); I²	venti	(GRADE)(27)
						on	
						lengt	
						h	
						(week	
						s)	
Depression symptoms	IGT vs group drug	(58)	61	SMD= -0.35 [-0.85, 0.16]	N/A	12	Very Low ^{c d e}
	counselling						
Mania symptoms	IGT vs group drug	(58)	61	SMD= -0.17 [-0.68, 0.33]	N/A	12	Very Low ^{c d e}
	counselling						

a Risk of bias, b Inconsistency, c Indirectness, d Imprecision, e Publication/Reporting Bias TAU = Treatment as usual; CBT = Cognitive behaviour therapy; PE= Psychoeducation N/A = not applicable; SMD = Standardised mean difference; RR = Risk Ratio;

 Table DS5
 Outcomes at follow-up

1. Individual psychological intervention vs Treatment as usual (TAU)

Outcome	(Sub-)analysis	Trials (reference)	N	ES [95% CI]	Heterogeneity: Chi² (p value); I²	Follo w-up perio	Quality (GRADE)(27)
						d (week s)	
Depression symptoms	Total	5	534	SMD= -0.21 [-0.43, 0.01]	6.85 (P = 0.23); 27%	26-52	Low a
	Online Psychoeducation	(59, 60)	326	SMD= -0.36 [-1.09, 0.37]	5.82 (P = 0.02); 83%	26-43	
	CBT	(34, 65, 67, 68)	208	SMD= -0.19 [-0.46, 0.08]	0.64 (P = 0.73); 0%	52	
Mania symptoms	Total	4	164	SMD=-0.38 [-0.71, -0.04]	3.40 (P = 0.33); 12%	52	Very Low ade
	Online Psychoeducation	(60)	37	SMD=-0.24 [-0.89, 0.40]	N/A	43	
	CBT	(65, 67, 68)	127	SMD=-0.45 [-0.92, 0.01]	3.21 (P = 0.34); 38%	52	
Hospitalisation	Total	3	194	RR= 0.63 [0.38, 1.02]	2.19 (P = 0.35); 9%	32-52	Low d
	Psychoeducation	(64)	70	RR= 0.85 [0.47, 1.54]	N/A	52	
	Medication adherence therapy	(69)	28	RR= 0.40 [0.09, 1.73]	N/A	32	
	CBT	(68)	96	RR= 0.44 [0.20, 0.97]	N/A	52	
Relapse, any type	Total	8	532	RR= 0.74 [0.63, 0.87]	5.78 (P = 0.57); 0%	32-78	Moderate d
	Psychoeducation	(62-64)	252	RR= 0.81 [0.64, 1.02]	1.96 (P = 0.37); 0%	48-78	
	Medication adherence therapy	(69)	28	RR= 0.73 [0.43, 1.24]	N/A	32	
	СВТ	(34, 65, 66, 68)	252	RR= 0.67 [0.53, 0.86]	2.84 (P = 0.42); 0%	52	

Relapse, depression	Total	7	616	RR= 0.82 [0.59, 1.15]	14.84, (P = 0.02); 60%	43-72	Low b d
	Psychoeducation	(63, 64)	166	RR=1.07 [0.53, 2.14]	2.87 (P = 0.09); 65%	48-52	
	Online Psychoeducation	(60)	37	RR=1.31 [0.70, 2.45]	N/A	43	
	СВТ	(34, 52, 65, 68)	413	RR=0.65 [0.41, 1.02]	7.95 (P = 0.05); 62%	52-72	
Relapse, mania	Total	6	564	RR= 0.74 [0.50, 1.08]	7.92 (P = 0.16); 37%	43-72	Low b d
	Psychoeducation	(63, 64)	166	RR=0.56 [0.28, 1.11]	1.36 (P = 0.24); 27%	48-52	
	Online Psychoeducation	(60)	37	RR=0.94 [0.30, 2.96]	N/A	43	
	CBT	(34, 52, 68)	361	RR= 0.78 [0.45, 1.38]	4.65 (P = 0.10); 57%	52-72	
Response, any	CBT	(65)	52	RR=0.46 [0.21, 1.02]	N/A	52	Very Low a d
Response, depression	CBT	(43, 65)	257	RR= 0.69 [0.40, 1.13]	2.23 (P = 0.14); 55%	52	Very Low abd
Response, mania	CBT	(65)	52	RR= 1.53 [0.93, 2.52]	N/A	52	Very Low a d
Quality of life	Total	3	347	SMD= 0.04 [-0.17, 0.25]	1.44 (P = 0.49); $I^2 = 0.49$	26-52	Very Low ade
	Online Psychoeducation	(59, 60)	310	SMD= 0.08 [-0.14, 0.31]	0.02 (P = 0.90); I ² = 0%	26-43	
	CBT	(34)	37	SMD= -0.34 [-1.00, 0.32]	N/A	52	
Psychosocial functioning GAF	Total	2	89	SMD=-0.25 [-0.66, 0.17]	0.00 (P = 0.98); 0%	43-52	Low a d
	Online Psychoeducation	(60)	37	SMD=-0.25 [-0.90, 0.40]	N/A	43	
	CBT	(65)	52	SMD=-0.24 [-0.79, 0.31]	N/A	52	
Psychosocial functioning Social and/or Work	Total	8	585	SMD= -0.27 [-0.60, 0.05]	18.39 (P = 0.005); 67%	26-52	Very Low ^{abde}
	Psychoeducation	(63, 64)	70	SMD= -0.74 [-1.23, -0.26]	N/A	52	
	Online Psychoeducation	(59, 60)	310	SMD= 0.08 [-0.14, 0.30]	0.32 (P = 0.57); 0%	26-43	
	СВТ	(34, 65, 67, 68)	205	SMD= -0.39 [-0.78, 0.01]	5.36 (P = 0.15); 44%	52	
Study Discontinuation	Total	12	1163	RR= 0.97 [0.77, 1.23]	10.21 (P = 0.42); 2%	32-78	Low d
	Psychoeducation	(62-64)	274	RR= 1.26 [0.29, 5.58]	3.46 (P = 0.18); 42%	48-78	

Online Psychoeducation	(59, 60)	330	RR= 0.85 [0.28, 2.56]	1.54 (P = 0.22); 35%	26-43	
Medication adherence	(69)	28	No discontinuation	N/A	32	
therapy						
CBT	(34, 43, 65-	531	RR= 0.98 [0.74, 1.30]	5.47 (P = 0.36); 9%	52	
	68)					

2. Group psychological intervention vs Treatment as usual (TAU)

Outcome	(Sub-)analysis	Trials (reference)	N	ES [95% CI]	Heterogeneity: Chi² (p value); I²	Follo w-up perio d (week s)	Quality (GRADE) (27)
Depression symptoms	Total	3	219	SMD= 0.22 [-0.05, 0.49]	0.95 (P = 0.62); 0%	52-61	Very Low ade
	Psychoeducation	(73)	72	SMD=0.40 [-0.07, 0.87]	N/A	52	
	CBT	(32)	52	SMD=0.06 [-0.48, 0.60]	N/A	52	
	Mindfulness based cognitive therapy	(76)	95	SMD=0.18 [-0.22, 0.58]	N/A	61	
Mania symptoms	Total	3	219	SMD= 0.16 [-0.10, 0.43]	0.76 (P = 0.68); 0%	52-61	Very Low ade
	Psychoeducation	(73)	72	SMD= 0.33 [-0.14, 0.80]	N/A	52	
	CBT	(32)	52	SMD= 0.12 [-0.42, 0.66]	N/A	52	
	Mindfulness based cognitive therapy	(76)	95	SMD= 0.06 [-0.34, 0.46]	N/A	61	
Hospitalisation	Total	3	200	RR= 0.48 [0.16, 1.45]	2.30 (P = 0.13); 56%	78- 124	Very Low b d e
	PE vs attention control	(70, 71)	166	RR=0.48 [0.16, 1.45]	2.30 (P = 0.13; 56%	124	
	CBT	(74)	34	No hospitalisations	N/A	78	
Relapse, any type	Total	5	395	RR= 0.86 [0.61, 1.20]	21.46 (P = 0.0003);	52-	Very Low b d e

					81%	124	
	Psychoeducation	(73)	84	RR= 0.52 [0.32, 0.84]	N/A	52	
	PE vs attention control	(70, 71)	166	RR= 0.75 [0.64, 0.88]	0.83 (P = 0.36); 0%	124	
	Mindfulness based	(76)	95	RR=1.41 [1.07, 1.87]	N/A	61	
	cognitive therapy						
	CBT	(74)	50	RR= 1.17 [0.72, 1.91]	N/A	78	
Relapse, depression	Total	5	333	RR= 0.62 [0.45, 0.88]	7.12 (P = 0.13); 44%	52- 124	Low b d
	Psychoeducation	(73)	72	RR=0.33 [0.12, 0.91]	N/A	52	
	PE vs attention control	(70, 71)	166	RR=0.54 [0.36, 0.79]	1.25 (P = 0.26); 20%	124	
	Mindfulness based cognitive therapy	(76)	59	RR= 0.87 [0.59, 1.28]	N/A	61	
	CBT	(74)	36	RR=0.87 [0.41, 1.82]	N/A	78	
Relapse, mania	Total	5	328	RR= 0.97 [0.60, 1.57]	13.04 (P = 0.01); 69%	52-	Very Low abd
	Davahaaduaatian	(73)	72	DD- 1 02 [0 49 2 16]	N/A	124 52	
	Psychoeducation PE vs attention control		-	RR= 1.02 [0.48, 2.16]	0.59 (P = 0.44); 0%	124	
	Mindfulness based cognitive therapy	(70, 71)	166 54	RR= 0.64 [0.54, 0.76] RR= 1.21 [0.71, 2.07]	0.39 (P = 0.44); 0% N/A	61	
	CBT	(74)	36	RR= 2.61 [0.80, 8.52]	N/A	78	
Relapse, mixed episode	Total	4	274	RR= 0.48 [0.30, 0.77]	2.38 (P = 0.50); 0%	52- 124	Low b d
	Psychoeducation	(73)	72	RR= 1.25 [0.08, 19.22]	N/A	52	
	PE vs attention control	(70, 71)	166	RR= 0.43 [0.26, 0.71]	0.01 (P = 0.93); 0%	124	
	CBT	(74)	36	RR= 2.24 [0.22, 22.51]	N/A	78	
Quality of life	CBT	(32)	52	SMD= 0.30 [-0.25, 0.84]	N/A	52	Very Low a d
Psychosocial functioning GAF	CBT	(32)	52	SMD= 0.67 [0.11, 1.23]	N/A	52	Very Low a d
Study Discontinuation	Total	3	322	RR= 1.85 [0.53, 6.43]	1.85 (P = 0.09); 55%	52- 124	Very Low b d e

Psychoeducation	(73)	84	RR= 5.00 [1.17, 21.46]	N/A	52	
PE vs attention control	(71)	120	RR= 9.00 [0.50, 163.58]	N/A	124	
CBT	(32, 74)	118	RR= 0.83[0.37, 181]	0.10 (P = 0.66); 0%	52-78	

3. Family psychoeducation (PE) vs Treatment as usual (TAU)

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Follo	Quality
		(reference)			value); I²	w-up	(GRADE)(27)
						perio	
						d	
						(week	
						s)	
Depression symptoms	PE (Service user and	(79)	53	SMD= -0.15 [-0.69, 0.39]	N/A	60	Very Low ade
	carers)						
Mania symptoms	PE (Service user and	(79)	53	SMD= -0.78 [-1.34, -0.22]	N/A	60	Very Low ade
	carers)						
Hospitalisation	PE (Service user and	(80)	57	RR= 0.05 [0.00, 0.83]	N/A	60	Low d
	carers)						
Relapse, any type	Total	3	228	RR=0.52 [0.32, 0.84]	2.61 (P = 0.27); 23%	52-65	Low de
	PE (Service user and	(79)	58	RR=0.26 [0.08, 0.83]	N/A	60	
	carers)						
	Group Family PE	(80, 82)	170	RR=0.61 [0.44, 0.86]	0.50 (P = 0.48); 0%	52-65	
	(carers)						
Relapse, depression	Group Family PE	(82)	113	RR= 0.73 [0.44, 1.21]	N/A	65	Low de
	(carers)						
Relapse, mania	Group Family PE	(82)	113	RR= 0.35 [0.15, 0.85]	N/A	65	Low d
	(carers)						
Relapse, mixed episode	Group Family PE	(82)	113	RR= 0.20 [0.01, 4.00]	N/A	65	Very Low de
	(carers)						

Response, any	PE (Service user and	(50)	59	RR= 0.67 [0.34, 1.32]	N/A	121	Very Low ad
	carers)						
Response, mania	PE (Service user and	(50)	59	RR= 0.79 [0.46, 1.33]	N/A	121	Very Low a d
	carers)						
Quality of life	Group Family PE	2 arms of	35	SMD= -0.63 [-1.44, 0.18]	$0.22 (P = 0.64); I^2 =$	57	Very Low a d
	(carers)	(81)			0%		
Psychosocial functioning GAF	Group Family PE	2 arms of	35	SMD= -1.03 [-1.86, -0.19]	$0.01 (P = 0.93); I^2 =$	57	Very Low a d
	(carers)	(81)			0%		
Study Discontinuation	Group Family PE	(80-82)	217	RR= 1.02 [0.38, 2.74]	$0.37 (P = 0.95); I^2 =$	31-65	Very Low ^{d e}
	(carers)				0%		

4. Collaborative care vs TAU

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Follo	Quality
		(reference)			value); I²	w-up	(GRADE)(27)
						perio	
						d	
						(week	
						s)	
Depression symptoms	Physical health focus	(54)	65	SMD= -0.56 [-1.06, -0.07]	N/A	52	Very Low a d
Mania symptoms	Physical health focus	(54)	65	SMD= -0.10 [-0.59, 0.38]	N/A	52	Very Low a d
Quality of life	Physical health focus	(54)	65	SMD= -0.38 [-0.87, 0.11]	N/A	52	Very Low a d
Study Discontinuation	Physical health focus	(54)	68	RR=2.00 [0.19, 21.03]	N/A	52	Low a d

6. Family Focused therapy (FFT) vs (active) control

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Follo	Quality
		(reference)			value); I²	w-up	(GRADE)(27)
						perio	

						d	
						(week	
						s)	
Depression symptoms	FFT vs TAU	(56)	79	SMD= -0.10 [-0.56, 0.36]	N/A	52	Very Low a d
Mania symptoms	FFT vs TAU	(56)	79	SMD= -0.30 [-0.68, 0.08]	N/A	52	Very Low a d
Relapse, any type	FFT vs TAU	(56)	101	RR= 0.67 [0.34, 1.30]	N/A	52	Very Low a d
Response, any	FFT vs TAU	(50)	62	RR= 1.15 [0.68, 1.94]	N/A	121	Very Low a d
Response, depression	FFT vs TAU	(43)	156	RR= 0.48 [0.23, 0.98]	N/A	52	Very Low a d
Response, mania	FFT vs TAU	(50)	62	RR=1.15 [0.76, 1.75]	N/A	121	Very Low a d
Hospitalisation	FFT vs PE	(85)	38	RR= 0.24 [0.08, 0.74]	N/A	104	Very Low a d
Study Discontinuation	FFT vs TAU	(43, 50, 56)	144	RR= 0.63 [0.26, 1.50]	1.83 (P = 0.18); 45%	52-	Low d
						121	

7. Cognitive behaviour therapy (CBT) vs Active Control

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Follo	Quality
		(reference)			value); I²	w-up	(GRADE)(27)
						perio	
						d	
						(week	
						s)	
Depression symptoms	CBT individual vs	(86)	76	SMD= 0.49 [0.04, 0.94]	N/A	143	Very Low d e
	Supportive Therapy						
Relapse, any type	CBT individual vs	(86)	76	RR= 1.13 [0.81, 1.58]	N/A	143	Very Low de
	Supportive Therapy						
Relapse, depression	CBT individual vs	(86)	76	RR= 1.12 [0.69, 1.80]	N/A	143	Very Low de
	Supportive Therapy						
Relapse, mania	CBT individual vs	(86)	76	RR= 1.67 [0.96, 2.91]	N/A	143	Very Low de
	Supportive Therapy						

Relapse, mixed episode	CBT individual vs	(86)	76	RR= 0.33 [0.01, 7.93]	N/A	143	Very Low de
	Supportive Therapy						
Study Discontinuation	CBT individual vs	(86)	76	No discontinuation	N/A	143	-
	Supportive Therapy						

8. Interpersonal and social rhythm therapy (IPSRT) vs Active control

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Follo	Quality
		(reference)			value); I²	w-up	(GRADE)(27)
						perio	
						d	
						(week	
						s)	
Response, depression	IPRST vs TAU	(43)	192	RR= 0.73 [0.50, 1.07]	N/A	52	Very Low a d
Study Discontinuation	IPRST vs TAU	(43)	193	RR= 1.05 [0.67, 1.63]	N/A	52	Low d

9. Integrated group therapy vs Active control

Outcome	(Sub-)analysis	Trials	N	ES [95% CI]	Heterogeneity: Chi² (p	Follo	Quality
		(reference)			value); I²	w-up	(GRADE)(27)
						perio	
						d	
						(week	
						s)	
Depression symptoms	IGT vs group drug	(58)	61	SMD= 0.11 [-0.39, 0.61]	N/A	26	Very Low cde
	counselling						
Mania symptoms	IGT vs group drug	(58)	61	SMD= -0.53 [-1.05, -0.02]	N/A	26	Very Low ^{c d e}
	counselling						

a Risk of bias, b Inconsistency, c Indirectness, d Imprecision, e Publication/Reporting Bias

TAU = Treatment as usual; CBT = Cognitive behaviour therapy; PE= Psychoeducation N/A = not applicable; SMD = Standardised mean difference; RR = Risk Ratio;