

Characteristics of included studies

	Country	Study treatments (number of patients)	Trial duration (weeks)	Number of sessions	Study design	Characteristics of patients
Barrowclough 2006 (1)	UK	Cognitive Behavioural Therapy (n=57), TAU (n=56)	26	10.4	SB	82 (73%) men, 31 women (27%); mean age 38.83 years; baseline PANSS total score 63.8, positive symptoms 17.4, negative symptoms 14.1; duration of illness 13.67 years
Bechdolf 2004 (2)	Germany	Cognitive Behavioural Therapy (n=40), Psychoeducation (n=48)	8	11.9	SB	Inpatients; 40 (45%) men, 48 women (55%); mean age 31.8 years; baseline PANSS total score 63.75, positive symptoms 14.35, negative symptoms 16.95; duration of illness 4.45 years
Birchwood 2014 (3)	UK	Cognitive Behavioural Therapy (n=98), TAU (n=99)	39	19	SB	113 (57%) men, 84 women (43%); mean age 37.35 years; baseline PANSS total score 71.73, positive symptoms 19.38, negative symptoms 16.02; duration of illness 15.21 years
Drury 1996 (4)	UK	Cognitive Therapy ¹ (n=30), Recreation and support (n= 32)	12	NA	OL	Inpatient; 25 (63%) men, 15 women (37%); mean age 30.7 years; baseline PAS positive symptoms score 6; duration of illness 6.15 years
Durham 2003 (5)	Scotland	Cognitive Behavioural Therapy (n=22), Supportive Therapy (n=23), TAU (n=21)	39	20	SB	Inpatients and outpatients; 45 (68%) men, 21 women (32%); mean age 36.3 years; baseline PANSS total score 96.63, PSYRATS total 35.57; duration of illness 13 years
England 2007 (6)	NA (author's affiliation in Canada)	Cognitive nursing intervention ¹ (n=44), TAU (n=21)	18	12	SB	Outpatient; mean age 41 years; baseline BPRS-18 total score 51.05
Foster 2010 (7)	UK	Cognitive Behavioural Therapy (n= 12), TAU (n=12)	4	4	OL	Inpatients and outpatients; 14 (58%) men, 10 women (42%); mean age 36.3 years; baseline PSYRATS total score 35.57
Freeman 2014 (8)	UK	Cognitive Behavioural Therapy (n=15), TAU (n=15)	8	6	SB	Outpatients; 20 (67%) men, 10 women (33%); mean age 41.5 years; baseline PSYRATS total score 18.25
Freeman 2015a (9)	UK	Cognitive Behavioural Therapy (n=73), TAU (n=77)	8	5.5	SB	Inpatients and outpatients; 86 (57%) men, 64 women (43%); mean age 36.3 years; baseline PANSS total score 41.5, PSYRATS total 18.35
Freeman 2015b (10)	UK	Cognitive Behavioural Therapy (n=24), TAU (n=26)	12	7.3	SB	Outpatients; 34 (68%) men, 16 women (32%); mean age 40.9 years; baseline PANSS total score 81.65, baseline PSYRATS total 41.6
Garety 2008a (11)	UK	Cognitive Behavioural Therapy (n=27), Family Intervention (n=28),	39	13.9	SB	Inpatients and outpatients; 60 (72%) men, 23 (28%) women; mean age 36.4 years; baseline PANSS total score 67.31, positive symptoms 17.16, negative symptoms 15.58;

Garety 2008b (11)	UK	TAU (n=28) Cognitive Behavioural Therapy (n=106), TAU (n=112)	39	14.3	SB	duration of illness 11.57 years Inpatients and outpatients; 151 (69%) men, 67 (31%) women; mean age 38.1 years; baseline PANSS total score 64.29, positive symptoms 18.51, negative symptoms 12.38; duration of illness 10.4 years
Gottlieb 2017 (12)	USA	Cognitive Behavioural Therapy (n=19), TAU (n=18)	24	10	SB	Outpatients; 23 (62%) men, 14 women (38%); mean age 42.04 years; baseline BPRS-24 total score 54.92, PSYRATS 53.06, BPRS negative symptoms 6.23
Haddock 1999 (13)	UK	Cognitive Behavioural Therapy (n=10), Supportive counselling (n=11)	5	10.2	SB	Inpatients; 19 (90%) men, 2 women (10%); mean age 29.05 years; baseline BPRS total score 53.1
Haddock 2009 (14)	UK	Cognitive Behavioural Therapy (n=38), Social Activity Therapy (n=39)	26	17	SB	Inpatients and outpatients; 66 (86%), 11 (14%) women; mean age 34.8 years; baseline PANSS total score 63.81, positive symptoms 27.6, negative symptoms 13.04
Hazell 2016 (15)	England	Cognitive Behavioural therapy (n=15), Waitlist (n=15)	12	8	SB	Only protocol, authors confirmed that inclusion criteria are met and provided some outcome data, but no descriptive of patients are available in detail
Krakvik 2013 (16)	Norway	Cognitive Behavioural Therapy (n=23), Waitlist (n=22)	26	20	OL	Inpatients and outpatients; 29 (64%) men, 16 (36%) women; mean age 36.35 years; baseline PANSS total score 60.2, positive symptoms 16.05, negative symptoms 11.75
Kuipers 1997 (17)	UK	Cognitive Behavioural Therapy (n=28), TAU (n=32)	39	18.6	OL	Inpatients and outpatients; 38 (63%) men, 22 (37%) women; mean age 25.45 years; duration of illness 13.05 years
Lecomte 2008 (18)	Canada	Cognitive Behavioural Therapy (n=48), Social Skills Training (n=54), WL (n=27)	13	24	SB	Outpatients; 93 (72%) men, 36 (28%) women; mean age 24.49 years; baseline BPRS-E total score 41.67, BPRS positive symptoms 2, negative symptoms 1.8; duration of illness 2.69
Lee 2012 (19)	South Korea	Cognitive behavioural Social Skills Training ¹ (n=12), TAU (n=13)	7	12	SB	Inpatients; 8 (40%) men, 12 (60%) women; mean age 52.22 years; baseline BPRS total score 33.28, SAPS positive symptoms 42.24, SANS negative symptoms 50.05; duration of illness 19.19 years
Lee 2013 (20)	South Korea	Cognitive Behavioural Therapy (n=25), Supportive Therapy (n=25)	32	20.1	SB	Inpatients and outpatients; 21 (57%) men, 16 (43%) women; mean age 41.25 years; baseline PANSS total score 61.25, positive symptoms 18.95, negative symptoms 13.85; duration of illness 15.8 years
Levine 1998 (21)	NA (author's affiliation in Israel)	Cognitive Therapy ¹ (n=6), Supportive Therapy (n=6)	6	6	NA	12 (100%) men; mean age 34.5 years; baseline PANSS total score 57.95, positive symptoms 15.45, negative symptoms 13.3; duration of illness 10.92 years
Li 2015 (22)	China	Cognitive Behavioural Therapy (n=96),	24	15	SB	Inpatients and outpatients; 72 (38%) men, 120 (63%) women; mean age 31.36 years; baseline PANSS total score

Morrison 2014 (23)	UK	Supportive Therapy (n=96) Cognitive Therapy ¹ (n=37), TAU (n=37)	39	13.3	SB	72.6, positive symptoms 23.43, negative symptoms 20.4; duration of illness 8.21 39 (53%) men, 35 (47%) women; mean age 31.32 years; baseline PANSS total score 71.76, positive symptoms 20.98, negative symptoms 14.52
Penn 2009 (24)	USA	Cognitive Behavioural Therapy (n=32), Supportive Therapy (n=33)	12	8.3	SB	Outpatients; 33 (51%) men, 32 (49%) women; mean age 40.65 years; baseline PANSS total score 61.75, positive symptoms 17.55, negative symptoms 13.9; duration of illness 15.4 years
Pinninti 2010 (25)	USA	Cognitive Behavioural Therapy (n=18), TAU (n=15)	12	11.93	SB	Outpatients; 11 (44%) men, 14 (56%) women; mean age 40.49 years; baseline PSYRATS positive symptoms score 32.3; duration of illness 21.4 years
Rector 2003 (26)	Canada	Cognitive Behavioural Therapy (n=24), TAU (n=21)	26	20	SB	Outpatients; 20 (48%) men, 22 (52%) women; mean age 51.6 years; baseline PANSS total score 63.4, positive symptoms 14.8, negative symptoms 15.95; duration of illness 15.1 years
Sensky 2000 (27)	UK	Cognitive Behavioural Therapy (n=46), Befriending (n=44)	39	19	SB	53 (59%) men, 37 (41%) women; mean age 39.5 years; baseline CPRS schizophrenia change scale total score 10.7, SANS 33.45; duration of illness 14.5 years
Startup 2004 (28)	UK	Cognitive Behavioural Therapy (n=47), TAU (n=43)	26	12.9	OL	Inpatients; 68 (76%) men, 22 (24%) women; mean age 30.8 years; baseline BPRS-16 total score 45.75, SAPS positive symptoms 10.7, SANS negative symptoms 8.9; duration of illness 6.95 years
Tarrier 1998 (29)	UK	Cognitive Behavioural Therapy (n=33), Supportive Counselling (n=26), TAU (n=28)	10	20	SB	54 (75%) men, 18 (25%) women; mean age 39.54 years; baseline BPRS hallucinations positive symptoms 21.4, SANS negative symptoms 11.55; duration of illness 14.14 years
Valmaggia 2005 (30)	Netherlands, Belgium	Cognitive Behavioural Therapy (n=36), Supportive Counselling (n=26)	23	16	SB	Inpatients; 41 (71%) men, 17 (29%) women; mean age 35.48 years; baseline PANSS total score 65.4, positive symptoms 17.85, negative symptoms 13.91; duration of illness 9.2 years
van der Gaag 2011 (31)	Netherlands	Cognitive Behavioural Therapy (n=110), TAU (n=106)	26	13	SB	153 (71%) men, 63 (29%) women; mean age 36.99 years; baseline PANSS total score 69.3, PSYRATS total 31.35; duration of illness 10.58 years
Wykes 2005 (32)	UK	Cognitive Behavioural Therapy (n=45), TAU (n=40)	10	7	OL	Outpatients; 50 (59%) men, 35 (41%) women; mean age 39.7 years; baseline PSYRATS hallucination score 27.95

¹ based on the description of the intervention, considered CBT in the analyses. TAU=Treatment as usual, WL=Waitlist, OL=open label, SB=single blind, NA=not available, PANSS=Positive and Negative Syndrome Scale, SAPS=Scale for the Assessment of Positive Symptoms, PSYRATS=Psychotic Symptoms Rating Scale, SANS=Scale for the Assessment of Negative Symptoms, PAS=Psychiatric Assessment Scale

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