Q 3: Is brief, structured psychological treatment in non-specialist health care settings better (more effective than/as safe as) than treatment as usual in people with depressive episode/disorder?

Background

In low and middle income countries the vast majority of people with mental disorders do not get treatment. Integrating mental health care in non-specialist health care is World Health Organization's (WHO's) policy to address this gap. Although both brief psychological and pharmacological treatment have a strong evidence basis for the treatment of depression in specialist care settings (NICE, 2007), less is known about the merits of brief psychological treatment in non-specialist health care settings.

Population/Intervention(s)/Comparison/Outcome(s) (PICO)

- Population: adults with depressive episode/disorder
- Interventions: brief psychological treatment in non-specialist health care settings
- **Comparison:** treatment as usual
- Outcomes:
 - o symptom severity post intervention
 - \circ functioning post intervention
 - symptom severity at 6 to 12 months follow-up
 - o adverse effects (including tolerability)

List of the systematic reviews identified by the search process

INCLUDED IN GRADE TABLES OR FOOTNOTES

Bortolotti B et al (2008) Psychological interventions for major depression in primary care: a meta-analytic review of randomized controlled trials. *General Hospital Psychiatry*, 30:293-302.

Cuijpers P et al (2009a). Psychological treatment of depression in primary care: a meta-analysis. British Journal of General Practice, 59:e51-60.

EXCLUDED FROM GRADE TABLES AND FOOTNOTES

Cuijpers P, van Straten A, Smit F (2006). Psychological treatment of late-life depression: a meta-analysis of randomized controlled trials. *International Journal of Geriatric Psychiatry*, 21:1139.

Cuijpers P, van Straten A, Warmerdam L (2007a). Behavioural activation treatments of depression: a meta-analysis. Clinical Psychology Review, 27:318-26.

Cuijpers P, van Straten A, Warmerdam L (2007b). Problem solving therapies for depression: a meta-analysis. European Psychiatry, 22:9-15.

Cuijpers P et al (2008a). Are psychological and pharmacologic interventions equally effective in the treatment of adult depressive disorders? A meta-analysis of comparative studies. *Journal of Clinical Psychiatry*, 69:1675-85.

Cuijpers P et al (2008b). Characteristics of effective psychological treatments of depression: a metaregression analysis. Psychotherapy Research, 2:225-36.

Cuijpers P et al (2008c). Psychotherapy for depression in adults: a meta-analysis of comparative outcome studies. *Journal of Consulting and Clinical Psychology*, 76:909-22.

Cuijpers P et al (2009b). Is psychotherapy for depression equally effective in younger and older adults? A meta-regression analysis. *International Psychogeriatrics*, 21:16-24

Cuijpers P et al (2009c). The effects of psychotherapy for adult depression are overestimated: a meta-analysis of study quality and effect size. *Psychological Medicine*. 3:1-13.

Cuijpers P et al (2009d). Psychotherapy versus the combination of psychotherapy and pharmacotherapy in the treatment of depression: a meta-analysis. *Depression and Anxiety*, 26:279-88.

Huibers MJ et al (2007). Psychosocial interventions by general practitioners. *Cochrane Database of Systematic Reviews*, (3):CD003494.

NICE (2007). Antenatal and postnatal mental health. *NICE guideline on clinical management and service guidance*. The British Psychological Society & The Royal College of Psychiatrists.

PICO Table

Serial no.	Intervention/Comparison	Outcomes	Systematic reviews used for GRADE	Explanation
1	brief psychological treatment by non- specialist health care providers	symptom severity post intervention; functioning post intervention; symptom severity at 6 to 12 months follow-up; adverse effects (including tolerability)	Cuijpers et al (2009a) for short- term outcomes Bortolotti et al (2008) for long- term outcomes	1. Cuijpers et al (2009a) is selected over Bortolotti et al (2008) for short-term outcomes because (a) Cuijpers et al (2009a) includes more studies for this outcome (15 vs. 6) (b) drop out rates in Bortolotti et al (2008) is provided for long-term treatment only (c) Cuijpers et al (2009a) had no language restrictions while Bortolotti et al (2008) only used English (d) Cuijpers et al (2009a) reviewed up to Dec 2007 vs. Bortolotti et al (2008) reviewed up to June 2006. 2. Cuijpers et al (2009a) did not report long-term outcomes, so Bortolotti et al (2008) was chosen for long-term outcomes 3. No reviews available on other outcomes of functioning & safety/acceptability

Narrative description of the studies that went into the analysis

Cuijpers et al (2009) review covers 15 studies, which are described as follows: Patients in seven studies were referred to the study by a general practitioner (GP), while in another six studies patients were screened for depression while waiting for their GP, or by a postal questionnaire sent to patients who had recently been seen by their GP. A combination of theses two methods were used in the remaining two studies, or the recruitment method was not clear. Of 15 studies, 7 studied cognitive behaviour treatments, 5 studied problem solving therapy, 2 studied interpersonal psychotherapy and 1 studied psychodynamic counselling. Cuijpers et al (2009a) review covers 6 studies with follow-up assessments that compared 11 treatments with usual care: cognitive behaviour treatment (5), problem solving therapy, interpersonal psychotherapy, psychodynamic treatment and counselling (3).

GRADE Tables

Author(s): Mark van Ommeren and Corrado Barbui
Date: 2009-04-25
Question: Should brief psychological treatment vs. usual care be used in people with depressive episode/disorder?
Settings: in non-specialist health care settings
Bibliography: Cuipers P et al (2009a). Psychological treatment of depression in primary care: a meta-analysis. British Journal of General Practice, 59:e51-60.

Bortolotti B et al (2008) Psychological interventions for major depression in primary care: a meta-analytic review of randomized controlled trials. General Hospital Psychiatry, 30:293-302.

Quality assessment							Summary of findings					
								No of patients Effect				Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	brief psychological treatment	usual care	Relative (95% Cl)	Absolute	Quality	
depression	symptom level (po	st intervention) (E	Better indicated	d by lower values)								
15 ¹	randomized trials	no serious limitations		no serious indirectness	no serious imprecision	none	804 ³	701 ⁴	-	SMD 0.31 lower (0.17 to 0.45 lower) ⁵	MODERATE	CRITICAL
depression	symptom level (+ (6 months follow-u	ıp) (follow-up 6	5 months; Better inc	dicated by lower va	lues)						

6 ⁶	randomized trials	very serious ⁷	very serious ⁸	no serious indirectness	no serious imprecision	none	433 ⁹	294 ⁹	-	SMD 0.30 lower (0.45 to 0.14 lower) ⁶	PPP VERY LOW	IMPORTANT
Functionin	g (Better indicated	by lower values)	1	1	1	I		Į		L	Į	ļ
0	no evidence available					none	0	0	-	MD 0 higher (0 to 0 higher)		IMPORTANT
Drop outs	(Better indicated by	y lower values)					1		1			
0	No evidence available					none	0	0	-	MD 0 higher (0 to 0 higher)		IMPORTANT

¹ Cuijpers et al (2009a).

 $^{\rm 2}$ I squared is 46% (table 2 Cuijpers et al (2009a)).

³ Sum of column 5, Table 1 Cuijpers et al (2009a).

⁴ Sum of column 10, Table 1 Cuijpers et al (2009a).

⁵ Table 2 Cuijpers et al (2009a).

⁶ Table 2 Bortolotti et al (2008) . Text on page 297 gives the references of the 6 studies.

⁷ see table 1 Bortolotti et al (2008) . 4 of 6 relevant studies have drop out of more than 30%.

⁸ I squared is 71%, see Table 2 Bortolotti et al (2008).

⁹ Fig 3 Bortolotti et al (2008).

Reference List

Bolton P, Wilk CM, Ndogoni L (2004). Assessment of depression prevalence in rural Uganda using symptom and function criteria. *Social Psychiatry and Psychiatric Epidemiology*, 39:442-7.

Bolton P et al (2007). Interventions for Depression Symptoms Among Adolescent Survivors of War and Displacement in Northern Uganda: A randomized controlled trial. *Journal of the American Medical Association*, 298:519-27.

Bortolotti B et al (2008) Psychological interventions for major depression in primary care: a meta-analytic review of randomized controlled trials. *General Hospital Psychiatry*, 30:293-302.

Cuijpers P, van Straten A, Smit F (2006). Psychological treatment of late-life depression: a meta-analysis of randomized controlled trials. *International Journal of Geriatric Psychiatry*, 21:1139.

Cuijpers P, van Straten A, Warmerdam L (2007a). Behavioural activation treatments of depression: a meta-analysis. Clinical Psychology Review, 27:318-26.

Cuijpers P, van Straten A, Warmerdam L (2007b). Problem solving therapies for depression: a meta-analysis. European Psychiatry, 22:9-15.

Cuijpers P et al (2008a). Are psychological and pharmacologic interventions equally effective in the treatment of adult depressive disorders? A meta-analysis of comparative studies. *Journal of Clinical Psychiatry*, 69:1675-85.

Cuijpers P et al (2008b). Characteristics of effective psychological treatments of depression: a metaregression analysis. Psychotherapy Research, 2:225-36.

Cuijpers P et al (2008c). Psychotherapy for depression in adults: a meta-analysis of comparative outcome studies. *Journal of Consulting and Clinical Psychology*, 76:909-22.

Cuijpers P et al (2009a). Psychological treatment of depression in primary care: a meta-analysis. British Journal of General Practice, 59:e51-60.

Cuijpers P et al (2009b). Is psychotherapy for depression equally effective in younger and older adults? A meta-regression analysis. *International Psychogeriatrics*, 21:16-24

Cuijpers P et al (2009c). The effects of psychotherapy for adult depression are overestimated: a meta-analysis of study quality and effect size. *Psychological Medicine*. 3:1-13.

Cuijpers P et al (2009d). Psychotherapy versus the combination of psychotherapy and pharmacotherapy in the treatment of depression: a meta-analysis. *Depression and Anxiety*, 26:279-88.

Huibers MJ et al (2007). Psychosocial interventions by general practitioners. Cochrane Database of Systematic Reviews, (3):CD003494.

Jacobson NS et al (1996). A component analysis of cognitive-behavioral treatment for depression. Journal of Consulting and Clinical Psychology, 64:295-304.

Mynors-Wallis LM et al (1995). Randomized controlled trial comparing problem-solving treatment with amitriptyline and placebo for major depression in primary care. *British Medical Journal*, 310:441–5.

Mynors-Wallis LM et al (2000). Randomized controlled trial of problem-solving treatment, antidepressant medication and combined treatment for major depression in primary care. *British Medical Journal*, 320:26–30.

NICE (2007). Antenatal and postnatal mental health. *NICE guideline on clinical management and service guidance*. The British Psychological Society & The Royal College of Psychiatrists.

Patel V et al (2003) Efficacy and cost-effectiveness of drug and psychological treatments for common mental disorders in general health care in Goa, India: a randomized controlled trial. *Lancet*, 361:33-39.

Rahman A et al (2008). Cognitive behaviour therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: a cluster-randomised controlled trial. *Lancet*, 372:902-9.

Factor Explanation In non-specialist health care settings there is moderate quality and consistent evidence favouring brief psychological Narrative summary of the evidence base for the scoping treatment over treatment as usual in reducing depression symptoms post treatment (N = 15; n = 1505; SMD = -0.31; 95% Cl, question -0.45 to -0.17). In non-specialist health care settings there is very low quality but consistent evidence favouring brief psychological treatment over treatment as usual in reducing depression symptoms 6 months after treatment (N = 6; n = 627; SMD = -0.30; 95% Cl, -0.45 to -0.14). The reported effect sizes are small. Summary of the quality of See narrative statement above. evidence for the scoping Functioning and adverse effects were not meta-analysed question Additional evidence (eg related Cuijpers et al (2009a) maintains the most comprehensive database of 149 randomized control trials (RCTs) of psychological evidence that was not scoped) treatment of depression, which have been meta-analysed testing numerous hypotheses. Conclusions are:

From evidence to recommendations

• Study quality and effect size (115 trials): standardized mean effect size for high-quality studies was small, while it

was large for the other studies, even after restricting the sample to the subset of other studies that used the kind of care-as-usual or non-specific controls that tended to be used in the high-quality studies. Heterogeneity was zero in the group of high-quality studies. The numbers needed to be treated in the high-quality studies was 8, while it was 2 in the lower-quality studies (Cuijpers et al, 2009c).

Cognitive-behaviour therapy (CBT), nondirective supportive treatment, behavioural activation treatment, psychodynamic treatment, problem-solving therapy, interpersonal psychotherapy, and social skills training compared with one other and with other psychological treatments (meta-analyses with a total of 53 studies): There was no indication that one of the treatments was more or less efficacious, with the exception of interpersonal psychotherapy which was somewhat more efficacious. Furthermore, nondirective supportive treatment which was somewhat less efficacious than the other treatments. The drop-out rate was significantly higher in CBT than in the other therapies, whereas it was significantly lower in problem-solving therapy (Cuijpers et al, 2008c).

• Characteristics of effective psychological treatments of depression (83 trials, 135 comparisons): The mean effect size of all the comparisons of psychological treatment vs. a control condition was large. In multivariate analyses, several variables were significant: Studies using problem-solving interventions and those aimed at women with postpartum depression or specific populations had higher effect sizes, whereas studies with students as therapists, those in which participants were recruited from clinical populations and through systematic screening, and those using care-as-usual or placebo control groups had lower effect sizes (Cuijpers et al, 2008b)

- Problem solving therapies for depression (13 trials): The mean standardized effect size was small in the fixed effects model and large in the random effects model, with very high heterogeneity. Subgroup analyses indicated relatively lower effects for individual interventions in studies with subjects who met criteria for major depression, studies in which intention-to-treat analyses were conducted instead off completers-only analyses, and studies with pill placebo and care-as-usual control groups (Cuijpers et al, 2007b).
- **Psychotherapy for depression in younger vs. older adults (112 trials):** The large effect sizes of both groups of comparisons did not differ significantly from each other (Cuijpers et al, 2009b).
- **Psychological treatment of late-life depression (25 trials).** Psychological treatments have moderate to large effects on depression in older adults. No differences were found between individual, group or bibliotherapy format, or between cognitive behavioural therapy and other types of psychological treatment (Cuijpers et al, 2006).
- Behavioral activation treatments of depression(16 trials): The pooled effect size was large. The comparisons with other psychological treatments at post-test were not significant. The changes from post-test to follow-up for activity scheduling were non-significant. Differences between activity scheduling and cognitive therapy were also non-significant (**Cuijpers et al**, 2007a).
- Psychological and pharmacologic interventions in the treatment of adult depressive disorders (30 trials) In patients with major depressive disorder, treatments with SSRIs were more effective than psychological treatments, while treatment with other antidepressants did not differ significantly. Pretest severity of depressive symptoms was not

	 associated with differential effects of psychological and pharmacologic treatments. Dropout rates were smaller in psychological interventions compared with pharmacologic treatments (Cuijpers et al, 2008a). Psychotherapy versus the combination of psychotherapy and pharmacotherapy in the treatment of depression (18 trials): The mean effect size indicating the difference between psychological and combined treatment was small, with low heterogeneity. At follow-up, no difference between psychological and combined treatments was found (Cuijpers et al, 2009d) Of note, problem-solving treatment did not show to be effective in Goa (Patel et al. 2003) and in Aceh, Indonesia (Bass et al unpublished data 2008).
	No meta-analysed data are available for adverse effects. The balance between benefits and harms of brief therapy in non- specialized health care settings thus appears favourable.
Define the values and preferences including any variability and human rights issues	 Promotion of the client/patients/users' capacity and skills is a component of most brief psychological treatments for depressive episode/disorder. This has value beyond the reduction of depression. There are additional valuable aspects in teaching general health workers psychological treatments as they contribute to important interpersonal skill in the health care providers such as listening, problem exploration, linking physical and psychological complaints, and involving patients in treatment decisions – making the health worker a better health worker It is of value to include a range of interventions in a non-specialized health care package covering the treatment of depression. Problem-solving therapy has unique value in that it may possibly address the ongoing social stressors (e.g. domestic dispute) that play a role in the development and maintenance of symptoms.
use and any other relevant feasibility issues	Brief psychological treatment is human resource-intensive as it requires substantial provider time, training and supervision. Psychological treatments are diverse in complexity. In particular CBTs are often complex and appear to be rooted most strongly in a particular individual-centered view of life. Problem-solving therapy is by far the least complex of the brief therapies, and PHC versions for problem-solving therapy exist (Mynor-Wallis et al, 1995, 2000; Patel et al 2003). Nonetheless,

learning problem-solving also requires training and supervision. Similarly, CBT components such as behavioural activation (BA) have been shown to be as effective (Jacobson et al, 1996, see scoping question on BA). CBT and interpersonal therapy have been successfully implemented by supervision community health workers as part of research projects in Uganda (Bolton et al 2004; 2007) and Pakistan (Rahman et al, 2008) - showing that such treatments are
feasible when sufficient human resources, including supervisors, are available. The context may play a role in the feasibility of brief interventions. For example, problem-solving therapy may more likely work in settings where strong social services already exist (Patel V personal communications, March 2009).
 behavioural therapy and problem-solving treatment should be considered as psychological treatment of depressive and health care settings if there are sufficient human resources (e.g., supervised community health workers). ANDARD

In moderate and severe depression, problem-solving treatment should be considered as adjunct to antidepressants. Strength of Recommendation: STANDARD

Limitations

Although psychological treatments of depression are an heterogeneous group of interventions, the evidence supporting their effectiveness was considered in aggregate. In addition, the comparative effectiveness of each psychological intervention versus the others was not reviewed using the GRADE methodology, and the comparative effectiveness of psychological treatments versus antidepressants was not assessed.

Update of the literature search – June 2012

In June 2012 the literature search for this scoping question was updated. The following systematic reviews were found to be relevant without changing the recommendation:

NICE Clinical Guidelines. CG90. Depression in adults: The treatment and management of depression in adults. Appendix 19: Clinical evidence forest plots. National Institute for Health and Clinical Excellence, 2010.

Cape J, Whittington C, Buszewicz M, Wallace P, Underwood L. Brief psychological therapies for anxiety and depression in primary care: meta-analysis and meta-regression. BMC Medicine 2010, 8:38

Cuijpers P, Clignet F, Van Meijel B, Van Straten A, Li J, Andersson G. Psychological treatment of depression in inpatients: A systematic review and metaanalysis. Clinical Psychology Review 31 (2011) 353–360, doi:10.1016/j.cpr.2011.01.002

Van't Hof E, Cuijpers P, Waheed W, Stein DJ. Psychological treatments for depression and anxiety disorders in low- and middle- income countries: a metaanalysis. Afr J Psychiatry 2011;14:200-207. doi: http://dx.doi.org/10.4314/ajpsy.v14i3.2