Behavioural activation

Q 4: Is behavioural activation better (more effective than/as safe as) than treatment as usual in adults with depressive episode/disorder?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

Behavourial activation is a behavioural treatment for depression in which the depressed person is guided to increase the number of rewarding activities in his or her life. Behavioural activation is a component of cognitive behavioral therapy (CBT) and maybe as effective as CBT. Administration of behavioural activation is much less complex than cognitive therapy or CBT. Its relative simplicity makes it of interest as a potential feasible form of psychological treatment in non-specialized health care settings.

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

- **Population:** adults with depressive episode/disorder
- **Interventions:** behavioural activation
- **Comparison:** treatment as usual
- **Outcomes:**
    - symptom severity post intervention
    - functioning post intervention
    - symptom severity at 6 to 12 months follow-up
    - adverse effects (including tolerability)

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List of the systematic reviews identified by the search process

INCLUDED IN GRADE TABLES OR FOOTNOTES

Ekers D, Richards D, Gilbody S (2008). A meta-analysis of randomized trials of behavioural treatment of depression. *Psychological Medicine,* 38:611-623.

EXCLUDED FROM GRADE TABLES AND FOOTNOTES

Cuijpers P, van Straten A, Warmerdam L (2007). Behavioral activation treatments of depression: A meta-analysis. *Clinical Psychology Review*, 27:318-26. (Reason for exclusion: no comparison with treatment as usual)

PICO Table

Serial no.	Intervention/Comparison	Outcomes	Systematic reviews used for GRADE	Explanation
1	**Behavioural activation/treatment as usual**	symptom severity post intervention; functioning post intervention; symptom severity at 6 to 12 months follow-up; adverse effects (including tolerability)	Ekers et al (2008)	This is the only systematic review on behavioural activation that compares with treatment as usual.

Narrative description of the studies that went into the analysis

Ekers et al (2008) review for the outcome symptom severity covers 12 studies, which they describe as follows: Participants were taken from adult community sources consisting of out-patients [7 studies], volunteers [3 studies] and students [1 study]. Two studies were on older adults. Interventions ranged from supported bibliotherapy (2 studies), brief therapy with six 40-min sessions [1 study] to 24 50-min sessions [1 study]. Facilitators were advanced graduate psychology/therapy students in five studies, experienced psychotherapists in four studies and unclear in one study

GRADE Tables

Table 1

Behavioural activation

Author(s): Van Ommeren. Mark, Barbui, Corrado
Date: 2009-04-21
Question: Should behavior activation vs usual care be used for depressive episode/disorder?
Settings:
Bibliography: Ekers D, Richards D, Gilbody S (2008). A meta-analysis of randomized trials of behavioural treatment of depression. *Psychological Medicine,* 38:611-623.

Quality assessment							Summary of findings					Importance
							No of patients		Effect		Quality	
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	Behavior activation	usual care	Relative (95% CI)	Absolute		
Symptom level (post intervention) (Better indicated by lower values)												
12[1]	randomized trials	serious[2]	serious[3]	no serious indirectness	no serious imprecision	none[4]	214[5]	245[5]	-	SMD 0.7 lower (1 to 0.39 lower)	LOW	CRITICAL
functioning (Better indicated by lower values)												
0[6]	No evidence available					None	0	0	-	MD 0 higher (0 to 0 higher)		IMPORTANT
Symptom level (+ 6 months follow-up) (Better indicated by lower values)												
0[7]	No evidence available					None	0	0	-	MD 0 higher (0 to 0 higher)		IMPORTANT
Drop outs (Drop out rate)												
3	randomized trials	serious[2]	no serious inconsistency[1]	no serious indirectness	serious[8]	None	0/92 (0%)[9]	0/107 (0%)[9]	0.58 (0.28 to 1.20)[10]	0 fewer per 1000 (from 0 fewer to 0 more)	LOW	IMPORTANT

[1] Table 2 Ekers et al (2008) The accompanying text states that "Effect size was not significantly related to the level of baseline severity (meta-regression b-coefficient 0.04, 95% CI x0.04 to 0.12; I2=54%, p=0.28)".

[2] Clear guidance on aspects of study quality that directly influence outcomes is unclear.

[3] Heterogenety for this comparison is 55% (Table 2, Ekers et al (2008)).

[4] Fig 2 Ekers et al (2008).

[5] Fig 1 Ekers et al (2008).

[6] We did not identify a systematic review on this outcome.

[7] We did not identify a systematic review on this outcome. Although both Ekers et al (2008) and Cuijpers et al (2007**)** do have this outcome, they do not have it specifically for comparison with treatment as usual. Nonetheless, both reviews suggest that results of effects of behavioral activation are maintained for more than 6 months. Eg McLean & Hakstian (1990) show maintenance of effects of 2.5 years.

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[8] Sample size is small (less than 200 people).
[9] Email correspondence with Ekers D clarified that the 3 papers with dropout percentages were: McLean & Hakstian (1979), Dimidjian et al (2006) and McKendree-Smith (1998).

[10] Ekers et al (2008) Table 2.

Figure 1 in Ekers et al (2008) provides the N for each of these 3 studies. Their sum is the denominator provided here. The individual papers were studied to identify drop out rates: McLean BA: 2; McLean Control 5; Dimidjan BA:4, Dimidjan Control 4.

Reference List

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

Dimidjian S et al (2006). Randomized trial of behavioral activation, cognitive therapy, and antidepressant medication in the acute treatment of adults with major depression.

Ekers D, Richards D, Gilbody S (2008). A meta-analysis of randomized trials of behavioural treatment of depression. *Psychological Medicine,* 38:611-623.

McLean PD, Hakistan AR (1979). Clinical depression: comparative efficacy of outpatient treatments. *Journal of Clinical Consulting and Clinical Psychology,* 47:818-36.

McLean PD, Hakistan AR (1990). Relative endurance of unipolar depression treatment effects: longitudinal follow-up. *Journal of Clinical Consulting and Clinical Psychology,* 58:482-8.

From evidence to recommendations

Factor	Explanation
Narrative summary of the	There is low quality evidence for a strong effect favoring behavioural activation over treatment as usual in reducing depression symptoms post treatment (N = 12; n = 459; SMD = -0.70; 95% CI, -1.00 to -0.39)

evidence base on the scoped question	In terms of dropouts the evidence is inconclusive and so it is not possible to determine if there is a clinically important difference between behavioural activation over treatment as usual (N = 3, n = 199; OR = 0.58, 95% CI 0.28 - 1.20)
Summary of the quality of evidence on the scoped question	See narrative summary above
Other relevant evidence	Effect size was not significantly related to the level of baseline severity (see footnote 1 in GRADE table)
Balance of benefits versus harms	No known systematic evidence for harmful events is known to the authors. Accordingly, the balance between benefits and harm appears favorable for the intervention.
Define the values and preferences including any variability and human rights issues.	It is of value to include a range of interventions in a non-specialized health care package covering the treatment of depression. Behavioural activation may increase the chances that people participate in family life and in decisions on their life.
Define the costs and resource use and any other relevant feasibility	The administration of behavioural activation is a relatively non-sophisticated intervention that can be quickly learned compared to most other evidence-based psychological treatments. However, the intervention has been studied mostly as a multiple session intervention performed by specialists (or student specialists) (Ekers et al (2008), which may not generalize to non-specialized health care. Nonetheless, the intervention can be modified into a brief intervention as adjunct treatment or as part of a first step in a stepped care approach in non-specialized care (personal communication, Dr Unutzer, November 2008)

issues	

Final recommendation

Behavioural activation should be considered as treatment of adults with depressive episode/disorder. In moderate and severe depression, this intervention should be considered as adjunct to antidepressants.
Strength of Recommendation: STANDARD

Limitations

The comparative effectiveness of behavioural activation versus other psychological or pharmacological interventions 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.

Mazzucchelli T, Kane R, Rees C. Behavioral Activation Treatments for Depression in Adults: A Meta-analysis and Review. Clin Psychol Sci Prac 2009,16: 383–411