Advanced Interventions Service
Ninewells Hospital & Medical School
Dundee | Scotland, UK
www.advancedinterventions.org.uk
NHS Tayside

Systematic reviews of psychological therapies: has the gold standard become a lead brick?

Rhiannon Buick, Karen J. Walker and David Christmas
Advanced Interventions Service, NHS Tayside, Dundee

University of Dundee
NHS National Services Scotland

Background

The 'gold standard' for evidence based practice is considered to be a systematic review and meta-analysis of randomised controlled trials. Whilst there are scales for assessing the methods and reporting of meta-analysis, the quality of the underlying evidence (and suitability for inclusion) is often not detailed. It is uncertain how generalisable the included studies are to the clinical populations seen in secondary care.

Methods

We took a recent meta-analysis of Cognitive Behavioural Therapy (CBT) for Obsessive Compulsive Disorder (OCD) that included 37 studies published between 1993 and 2014 (Öst, 2015).[1] Each study was assessed using the CONSORT 2010 guidelines and the Cochrane Collaboration ratings of bias. We also extracted information on the population characteristics from each study along with a baseline illness characteristics.

We assessed each study according to a number of criteria:

1. Did the study include participants between the ages of 18-65?
2. Was it a controlled trial?
3. Did all participants have a confirmed diagnosis of OCD?
4. Was the intervention a treatment rather than relapse-prevention?
5. Was the intervention a recognisable (and mainstream) therapy for OCD?
6. Does the study report baseline and exit scores with enough detail to calculate effect sizes?

Results

Characteristics of studies

Thirty-seven studies were included and rated. Two studies were duplicate publications of the same results. However as this analysis was of the meta-analysis by Öst, they were included.

Location that study was conducted in

The type of location was as follows: outpatients (59.9%); community (24.3%); and unspecified (16.2%). 54.1% of studies took place in a secondary care setting. The setting was unspecified in 16.2% of studies.

Recruitment methods

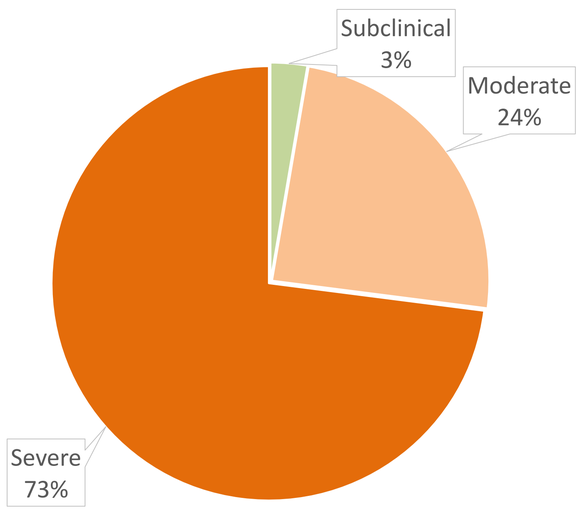
Patients were recruited via: clinical population (40.5%); internet (2.7%); media (13.4%); mixed methods (21.6%); unspecified (21.6%).

Comorbidity

Axis I comorbidity was reported in 12 (32.4%) studies. The mean proportion with axis I comorbidity was 56.2% (range 0% - 81.6%). Axis II comorbidity was reported in 4 (10.8%) studies. The mean proportion with axis II comorbidity was 38.3% (range 0% - 66%).

Severity

The mean baseline severity, measured on the Y-BOCS scale, was 24.8. This represents an illness severity in the low end of the 'severe' range. Excluding a relapse-prevention study means that the range of severity was 18 – 30.9. Only 75% of treatment studies had an average baseline severity that was in the 'severe' range.

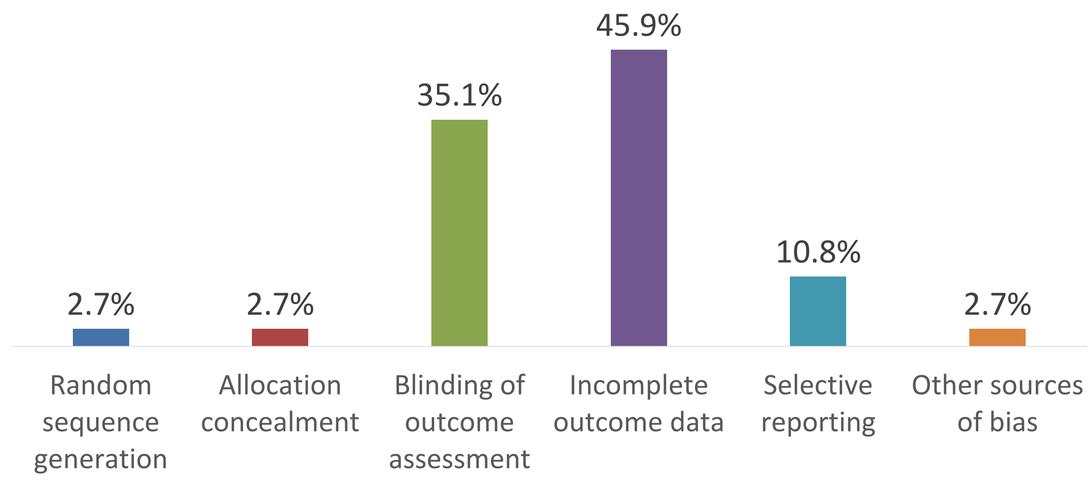


Medication and previous treatment

This was reported in 13 (35.1%) studies. Only 49.7% of participants had received previous treatment with antidepressants (range 12% - 81.3%). Psychological therapy status was reported in 5 (13.5%) studies, with 30.0% of participants having had previous psychological therapy (range 0% - 66%).

Risk of bias

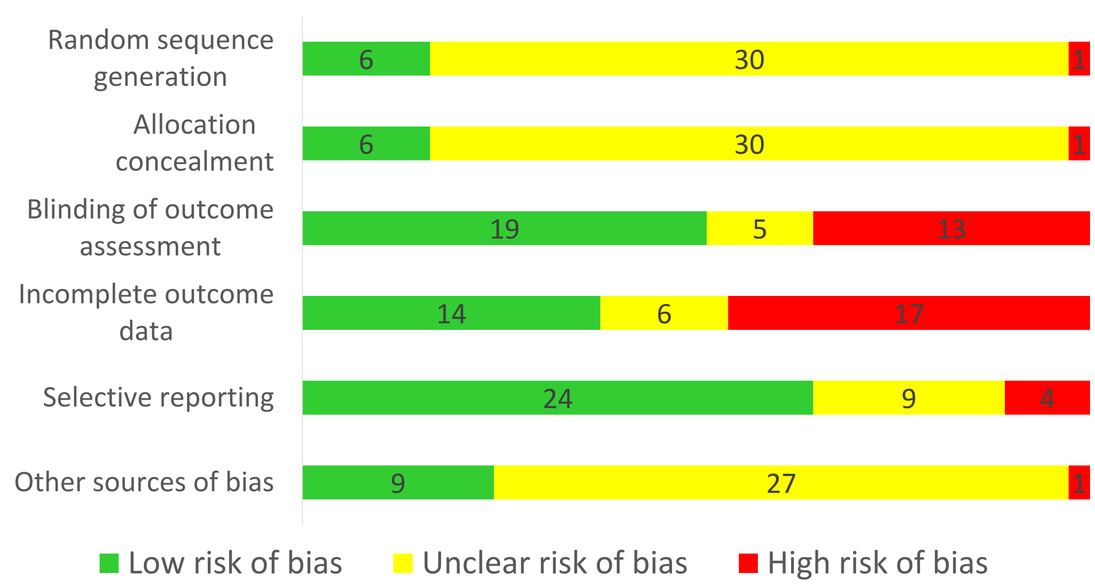
No studies were able to blind participants so this domain is not reported. The percentage of studies with low risk of bias in each domain ranged from 16.2% (random sequence generation) to 64.9% (selective reporting). The percentage of studies that were assessed in each domain as having high risk of bias are shown below:



Generalisability and exclusions

Only 27/37 (73.0%) studies met all criteria or had no other significant exclusions. Three studies were excluded because they compared augmentation of behaviour therapy with D-Cycloserine rather than comparing one psychological therapy with another (or a control). Four (10.8%) studies were excluded because baseline and outcome scores weren't reported in enough detail (for example, standard deviations were absent). Three (8.1%) studies were excluded because the intervention was not therapist-delivered CBT/ERP. Interventions included: computerised CBT (N=1); bibliotherapy (N=1); relapse prevention (N=1). One study reported no information about baseline characteristics of participants, making it impossible to determine if they were in the target group.

Cochrane ratings of bias



Discussion

There are a number of factors that create uncertainty when generalising the findings from this meta-analysis to typical patients seen in secondary care populations:

1. No studies included participants who were inpatients and only 40.5% of studies recruited from clinical populations.
2. Only one-third of participants had received previous psychological therapy and only one-half had had previous drug therapy. 32% of participants were treatment-naïve (range 10% - 76.5%).
3. The mean baseline Y-BOCS score was 24.8. Although this is in the 'severe' category, it limits generalisability to more severe and/or complex patient populations
4. In terms of bias, two domains had high numbers of studies rated at high risk of bias: blinding of outcome assessment (35.1%) and incomplete outcome data (45.9%).
5. With regards to generalisability to GAP populations, only three-quarters of studies would meet all criteria.

1 L.-G. Öst, et al. 2015. Clin Psychol Rev; 40: 156-169.