that we appropriately adjusted for several of the potential confounding variables highlighted by Dr Aitchison in our statistical models, including rape, household income, and marital status.

Please see our response to another "Letter to the Editor"[3] for further details.

Natalie P Mota, MA
Margaret Burnett, MD, FRCPC
Jitender Sareen, MD, FRCPC
Winnipeg, Manitoba

References

1. Cosh C. Science-reporting smell test of the week [Internet]. Toronto (ON): Maclean's; May 4, 2010 [cited 2010 May 21]. Available from: http://www2.macleans.ca/tag/natalie-mota/.
2. Kessler RC, Berglund P, Chiu WT, et al. The US National Comorbidity Survey Replication (NCS-R): design and field procedures. Int J Methods Psychiatr Res. 2004;13:69–92.
3. Mota NP, Burnett M, Sareen J. Re: yet another flawed study. Can J Psychiatry. 2010;56(1):72.

New Psychotherapies for Mood and Anxiety Disorders: Necessary Innovation or Waste of Resources?

Dear Editor:

With much interest we read the systematic review from Stirman et al[1] about new psychotherapies for mood and anxiety disorders. Although the study has been well conducted, we think the authors have not sufficiently answered the question of whether we actually need new psychotherapies.

On the one hand, there is a clear need for better treatments, as mood and anxiety disorders constitute a considerable burden for patients and society. Further, modelling studies have shown that current treatments can reduce only one-third of the disease burden of depression and less than one-half of anxiety disorders, even in optimal conditions.[2]

However, there are already dozens of different types of psychotherapy for mood and anxiety disorders, and there is very little evidence that the effects of treatments differ significantly from each other. In depression, we found that interpersonal psychotherapy is somewhat more effective than other therapies,[3] but differences were very small (Cohen's $d < 0.21$) and the clinical relevance is not clear. In the field of anxiety disorders, there is evidence that relaxation is less effective than cognitive-behavioural therapy, but there is very little evidence for significant differences between other therapies.

We think that new therapies are only needed if the additional effect compared with existing therapies is at least $d = 0.20$. Larger effect sizes are not reasonable to expect as 0.20 is the largest difference between therapies found until now. Further, this effect needs to be empirically demonstrated in high-quality trials. However, to show such an effect of 0.20 we would need huge numbers. A simple power calculation shows that this would require a trial of about 1000 participants (STATA [Statacorp, College Station, TX] sampsi command). As a comparison, the large National Institute of Mental Health Treatment of Depression Collaborative Trial examining the effects of treatments of depression included only 250 patients.

We want to suggest, therefore, that the field stops with developing new psychotherapies for mood and anxiety disorders unless the developers can convince financers of research to conduct a well-powered comparative study that shows that this therapy is indeed more effective than existing therapies. In the meantime, the field should focus on the real problems that limit the contribution of therapies to the reduction of disease burden, including the large number of patients who do not respond to any treatment, the patients who still have considerable residual symptoms after successful treatments, and patients who relapse.

References

1. Stirman SW, Toder K, Crits-Christoph P. New psychotherapies for mood and anxiety disorders. Can J Psychiatry. 2010;55:193–201.
2. Andrews G, Issakidis C, Sanderson K, et al. Utilising survey data to inform public policy: comparison of the cost-effectiveness of treatment of ten mental disorders. Br J Psychiatry. 2004;184:526–533.
3. Cuijpers P, van Straten A, Andersson G, et al. Psychotherapy for depression in adults: a meta-analysis of comparative outcome studies. J Consult Clin Psychol. 2008;76:909–922.

Pim Cuijpers, PhD
Annemieke van Straten, PhD
Amsterdam, The Netherlands

Reply

Re: New Psychotherapies for Mood and Anxiety Disorders: Necessary Innovation or Waste of Resources?

Dear Editor:

We certainly agree with Dr Cuijpers and Dr van Straten that to date there have not been many examples of clear successes in developing new psychotherapies that are measurably superior to existing psychotherapies.

But there are good reasons why the field should not stop attempting to develop new psychotherapies. As Dr Cuijpers and Dr van Straten make clear, we need ways to address lack of response, residual symptoms, and relapse rates associated with existing treatments. Other than sequencing or combined existing treatments, or attempting to match treatments to patient characteristics, the development of new psychotherapies that target nonresponders, residual symptoms, and (or) relapse is the

only other way to address these significant limitations of existing treatments. In fact, some of the innovations in psychotherapy development over the past 20 years have been along these lines (for example, relapse prevention strategies or well-being therapy for residual symptoms).

Dr Cuijpers and Dr van Straten discuss the need for large sample sizes to adequately test for incremental improvements above that found with existing treatments. We agree that funding agencies should recognize that, to make progress in testing new treatments against existing treatments, larger sample sizes than used in the past are needed. However, the 0.20 effect size recommended by Dr Cuijpers and Dr van Straten is arbitrary. Sample size estimation changes considerably depending on the specified effect size. For example, if one is satisfied with having adequate power (0.80) to detect a Cohen's *d* effect size of 0.28 (which is still rather small), only 200 patients per group ($\alpha = 0.05$; 2-tailed) are needed, a number that is more reasonable, though still larger than what has typically been used in the past. Further, including a larger number of assessment points can increase statistical power, further reducing the needed sample size.

One cannot stop innovation—we suspect imaginative clinicians and researchers will continue to generate new ideas. In addition, because we do not know in advance whether a new treatment will achieve the 0.20 effect size (or any other effect size) compared with an existing treatment, it is not possible to stop the treatment development process at an early stage. However, Dr Cuijpers and Dr van Straten's reminder that often new psychotherapies are no better than existing ones suggests that if an investigator wants to develop a new treatment, it would be more efficient to cut to the chase and test the new treatment against an established one. This would be preferable to conducting a series of studies comparing the new treatment with relatively weak control conditions so that efficacy is first demonstrated, only to later find out that the new treatment is no better than existing ones. Tests of comparative efficacy have the further advantage of allowing earlier investigation and characterization of different patterns of response to active treatments among patients with particular characteristics. Such research will ultimately allow us to optimize the fit of patients to treatments and to reduce the likelihood of nonresponse.

Paul Crits-Christoph, PhD
Shannon Wiltsey Stirman, PhD
Philadelphia, Pennsylvania