## Remission Rates for Depression in STAR\*D Study

To THE EDITOR: The less than spectacular remission rates for depression recently reported in The Sequenced Treatment Alternatives to Relieve Depression (STAR\*D) study (1) will likely be of no surprise to experienced clinicians. I, for one, am relieved to find that the frustratingly poor remission rates that I've witnessed for many years among my depressed patients (most of whom are characterized by features associated in the study with lower remission rates) are in accord with a well-designed effectiveness study such as STAR\*D. The STAR\*D study is a welcome change from the era of efficacy studies in which patients like mine were largely excluded.

The "real world" findings of the STAR\*D study pose thought-provoking questions concerning how we think about and promote treatments for depression. Much of the current promotional and educational literature on depression is infused with the more optimistic response (not remission) figures derived from older antidepressant efficacy studies. Certainly, much of the promotional literature emanating from the pharmaceutical industry seems to promise better results with antidepressants than those obtained in STAR\*D. I doubt that any pharmaceutical company would want it to be said that their antidepressant appears to be "only sufficient for a minority of patients, particularly high functioning, well-educated women with few comorbid psychiatric or medical problems" (2, p. 6). Even information from an APA informational website (www.healthyminds.org) on the treatment of depression, although no doubt technically accurate, seems to gloss over the unpleasant realities of the limitations in our treatments: "between 80%-90% of people with depression eventually respond well to treatment."

We don't serve anyone well by overselling what we have to offer. My clinical sense is that "real world" patients are often perplexed when they don't rapidly achieve a spectacular response from their medication, whatever it is. It is worth debating when our desire to impart hope becomes downright misleading to patients and their families and when overly optimistic pronouncements about the effectiveness of our treatments undercut our pleas for additional funding to study a wide range of treatment interventions for depression and other mental disorders, especially those interventions that may lack the financial backing of industry. Obviously, this initial report from the STAR\*D study is not the end of the matter, and it is important to note that the report suggests interventions that might yield higher remission rates (1). I look forward to subsequent publications from STAR\*D that will, hopefully, help us to better educate the public about what to expect from medications and what best to do when our patients are not among the minority who fully remit with the first medication that they try.

## References

1. Trivedi M, Rush AJ, Wisniewski SR, Nierenberg AA, Warden D, Ritz L, Norquist G, Howland RH, Lebowitz B, McGrath PJ, Shores-Wilson K, Biggs MM, Balasubramani GK, Fava M, STAR\*D Study Team: Evaluation of outcomes with citalopram for depression using measurement-based care in STAR\*D: implications for clinical practice. Am J Psychiatry 2006; 163:28–40

2. Insel TR: Beyond efficacy: the STAR\*D trial. Am J Psychiatry 2006; 163:5–7

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## Dr. Trivedi and Colleagues Reply

TO THE EDITOR: Dr. Hierholzer highlights the importance of conducting effectiveness studies using antidepressants in "real world" settings that include subjects who reflect the patient population treated in routine clinical practice, including patients with most axis I and axis III comorbidities. We, undoubtedly, agree with the necessity of conducting treatment studies with clinical practice subjects in order to provide a readily applicable set of findings for treating physicians. Furthermore, the modest remission rates found in our study highlight the need for diligently delivered treatments using the measurement-based care approach, which emphasizes the routine measurement of symptoms and side effects by ratings instruments. The STAR\*D study results not only have immediate clinical relevance but also provide a more realistic set of expectations for outcomes for major depression, thus emphasizing the timeliness of such a study.

We also agree with the distinctions between efficacy trial results and the more modest remission rates observed with the first-step antidepressant in the STAR\*D study. It has become clear from a number of recent effectiveness trials that remission from depression is not as common as previously thought and that the course of treatment and the low rates of remission and sustained benefit emphasize the chronic, recurrent, and treatment-resistant nature of major depressive disorder (1–3). We also agree that the results raise the question of whether more aggressive treatments, used either alone or in combination, should be employed earlier in the course of treatment.

In terms of assisting clinicians in tailoring treatment for individual patients, of particular note are the results from this phase of the STAR\*D study that identify a number of predictors, including being well-educated, employed, married, white, and female, with few complicating problems associated with a better antidepressant response. Factors associated with a poorer response included co-occurring anxiety, substance abuse or general medical conditions, and poorer quality of life.

Initial results from the STAR\*D report also emphasize the need to carefully study sequential treatments with currently available antidepressants using innovative study designs in "real world" settings that enhance transfer-of-knowledge to treating clinicians. Successful implementation of measurement-based care in clinical practice also provides a metric to gauge patient progress. Finally, results from subsequent steps in STAR\*D will provide guidance concerning the