

## EDITORIAL

# Addressing adherence to antidepressant treatment for depression

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While antidepressants, especially selective serotonin reuptake inhibitors and newer antidepressants, have been shown to be safe and effective for treating depressive disorders, remission rates remain low (at around 30%) and non-adherence and medication discontinuation remain high. So, why do people who display enough depressive symptoms to warrant psychopharmacological treatment stop taking their medication? Solmi et al.<sup>1</sup> provide an excellent review of factors that may be the leading causes of non-adherence to antidepressants. The authors classify these factors as patient-related or provider-related. The findings for patient-related factors are not surprising, and most providers who have treated individuals with depression would likely be able to accurately identify many of these if surveyed. It is no surprise that those with greater depression severity, poor illness insight, comorbidities, and stigma, as well as ethnic minorities and those in lower socioeconomic groups, are more likely to drop out of treatment. These findings are important, since they remind providers to consider their patient groups and the potential for non-adherence when contemplating antidepressant treatment. However, what may truly help us improve adherence in our patients comes from the findings about provider-related factors. In truth, we cannot change our patient's characteristics, but we can change our practices to help our patients improve their adherence to treatment recommendations.

Interestingly, the provider-related factors that lead to non-adherence occur predominantly at the start of treatment. For example, psychoeducation, treatment selection (which encompasses methods for choosing the medication, dosing regimen, and polypharmacy), dosing instructions, and initial therapeutic alliance all occur prior to treatment initiation, making this a key point of focus. These issues are key for all who prescribe antidepressants, whether primary care providers or mental health specialists. It is critical for providers to explain why they are prescribing the medication, the improvement and adverse reactions their patients can expect, as well as clear instructions about taking the medication and follow-up. This seems not only obvious, but a bare minimum expectation for providers. Even with busy practices, it only takes a few minutes to provide a patient with information about their diagnosis and treatment. Thus, the first step

for providers may be to evaluate whether their initial prescription visit includes critical discussion with patients about treatment selection, education about the illness and treatments, and expectations (both in terms of effectiveness and adverse outcomes). But treatment cannot stop there.

According to Rossom et al.,<sup>2</sup> over 70% of patients who are prescribed an antidepressant will refill their prescription within 160 days. Thus, most people DO continue to take their medication on some level. So how do we increase adherence further and more consistently? One important method stands out – ongoing and regular assessments. This is called measurement-based care, and many of the authors' recommendations are inherently a component of measurement-based care. Measurement-based care is defined as “the routine measurement of symptoms and side effects at each treatment visit and the use of a treatment manual describing when and how to modify medication doses based on these measures.”<sup>3</sup> By regularly assessing symptoms and side effects, and then adjusting treatment accordingly, providers will inevitably be implementing many of the authors' 10 clinical recommendations to improve adherence. Unfortunately, there are challenges to implementing measurement-based care, including time restrictions, resources, case complexity, and implementation logistics (for a good review, see Scott & Lewis<sup>4</sup>). Overcoming these barriers is not only up to individual providers – it is up to us as a society to examine our healthcare policies.

Another important point raised by Solmi et al.<sup>1</sup> is that we continue to be hindered by our trial and error approach to depression treatment. We do a disservice to our patients by continuing to view depression as a behavioral disorder when the evidence indicates that it is a biological disorder of the brain, as well as that each individual has unique variations of genetics, brain structures, and other biological factors in addition to the psychosocial factors linked to depression. We are in an era of incredible technological advances and powerful computational methods, providing us with an ideal opportunity to utilize these tools to begin to develop personalized medicine for treating depression and other mental illness. Several recent reports have identified small subgroups of patients whose biological characteristics have led to substantial increases

in treatment response and remission. One recent study found that a certain neural signature identified through machine learning could predict whether an individual would benefit from sertraline.<sup>5</sup> Would individuals with depression have better treatment adherence if we gave them the right treatment in the first place?

Non-adherence to treatment is a serious problem for people with depression, and it leads to many long-term consequences, including relapse or recurrence of symptoms, chronic depression, poor psychosocial outcomes and functioning, and increased suicidal behaviors, not to mention the impact on health care service utilization and costs. Identifying ways to reduce treatment dropout and improve medication adherence will undoubtedly improve lives. Unfortunately, it may not be as simple as just providing more education and spending more time with our patients. We need to provide personalized treatment and closely monitor it so that it is more robust and timely.

Measurement-based care and precision medicine should be our standard, not just a future goal that we someday hope to achieve. That is how we will improve adherence, and that is what will lead to an overall reduction in depression diagnoses.

### Disclosure

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