Participants in antidepressant drug trials are atypical patients, researchers report

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One reason antidepressant medication treatments do not work as well in real life as they do in clinical studies could be the limited type of study participants selected, researchers at UT Southwestern Medical Center have found.

"We are basing our judgment of clinical care in the United States on samples of patients that are totally different from the patient population actually treated in primary care and mental health facilities," said Dr. Madhukar Trivedi, professor of psychiatry at UT Southwestern and senior author of a study published in the May issue of the American Journal of Psychiatry. "Antidepressants should not be seen as a panacea. The general belief is that they work well, but they are less effective in real-world practice, and more work is needed."

As part of the Sequenced Treatment Alternatives to Relieve Depression (STAR*D) study scientists found that only 22 percent of the 2,855 participants treated with a commonly prescribed antidepressant would have met the criteria for inclusion in a typical antidepressant efficacy trial. Those who did meet criteria had shorter bouts of depression, quicker response to medication, less severe side effects and fewer adverse events compared with those people with depression who would have been excluded from such a trial, used to gain Food and Drug Administration approval of the drugs used.

The STAR*D trial was the first large-scale study to define the effectiveness of several treatment steps in primary care and mental

health settings for people with depression, Dr. Trivedi said.

The six-year, $35 million STAR*D study is the largest investigation on the treatment of major depressive disorder and is considered a benchmark in the field of depression research. It initially included more than 4,000 people from outpatient treatment sites across the country. About 65 percent of STAR*D participants, however, had a medical co-morbidity such as diabetes that typically would have excluded them from participating in other clinical trials to test the efficacy of antidepressants, said Dr. Trivedi, co-principal investigator of STAR*D.

"Evidence is growing that depression is like other chronic medical illnesses where it's not just one small, short bout, but a longer battle. People with depression may be at higher risk for other illnesses including obesity or diabetes, yet people with these conditions are excluded from drug trials for depression," Dr. Trivedi said.

STAR*D provided evidence for step-by-step guidelines to address treatment-resistant depression. Many treatment-resistant depression patients would be excluded from drug efficacy trials because those trials typically eliminate study candidates who have previously tried treatment, have suicidal thoughts or have other psychiatric illnesses.

"These are the patients impacted by depression the most - highest suicide potential, highest unemployment rates, highest social impairment - and they are likely to produce poorer outcomes," Dr. Trivedi said. "That population doesn't get studied systematically in traditional pharmaceutical industry studies."

More research involving patients routinely seen in clinical practice coupled with pharmacogenetics is sorely needed to better understand how to best match patients with specific antidepressant treatments, Dr. Trivedi said.

He recommended that clinicians continue to prescribe antidepressants but with more realistic expectations about the disease's long-term nature. Dr. Trivedi said researchers should design future trials in real clinical practice settings where patients have co-morbidities, as he is doing in his current research.

Source: UT Southwestern Medical Center (news : web)