PROJECT INFORMATION

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Comparing Medications Added to a Serotonin Reuptake Inhibitor to Treat Patients with PTSD

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What was the research about?

Posttraumatic stress disorder, or PTSD, is a mental health problem that can occur after a traumatic event. To manage PTSD symptoms, patients may take a serotonin reuptake inhibitor, or SRI. SRIs are a type of medicine often used to treat depression. If patients continue to have symptoms, doctors may add other types of medicine. It's unclear how much these medicines help PTSD symptoms. They may cause other problems, such as weight gain or heart disease.

In this study, the research team compared health records of patients with PTSD who were taking an SRI and received a prescription for one of four types of additional medicine:

- **An atypical antipsychotic**, usually used to treat schizophrenia and other psychotic disorders
- **Prazosin**, usually used to treat high blood pressure
- **Mirtazapine**, usually used to treat depression
- **A tricyclic antidepressant**, usually used to treat depression

The research team compared the mental and physical health of patients before and after they received prescriptions for these medicines.

What were the results?

Mental health. Patients receiving prescriptions for each of the medicines showed improved mental health. They had

- Very small decreases in PTSD symptoms
- Fewer hospital stays or emergency room visits for a mental health problem
- Fewer thoughts of suicide

Most patients received prescriptions for the new medicine after their mental health problems got worse. Three to four months after receiving a prescription, mental health problems usually went back to earlier levels but didn't continue to improve.

Physical health. Some health problems increased after patients received one of the four types of medicine. Health problems were more common for mirtazapine and least common for prazosin. For example,

- Weight gain and new cases of high cholesterol, high blood pressure, and high blood sugar were more common for patients prescribed mirtazapine and antipsychotics and less common for patients prescribed prazosin.
- Patients prescribed prazosin were less likely to get heart disease, have a heart attack or stroke, or die compared with patients prescribed the other types of medicine.

What did the research team do?

The research team looked at health records for 169,982 patients with PTSD. Of these, 74 percent were White, 19 percent were Black, 7 percent were another race, and 7 percent were Hispanic. The average age was 52, and 90 percent were men. All received care from the US Department of Veterans Affairs, or VA.

The research team compared patient health in the year before versus the year after adding a medicine. The team looked at patient traits, such as age or gender, which could affect the results.

Patients, clinicians, veterans' groups, and other groups gave input throughout the study.

What were the limits of the study?

Because the study didn't assign patients by chance to add the different types of medicine, other factors may have affected the study results. Most patients in the study were men. All received care at the VA. Results may differ for patients from other backgrounds.

Future research could assign patients by chance to add one of the types of medicine.

How can people use the results?

Patients with PTSD and their doctors can use the results when considering treatment for PTSD.

To learn more about this project, visit www.pcori.org/Cohen198.