

knowledge snapshot



A review of medications for gambling disorder

What this article is about

Gambling disorder can result in significant harms. An estimated 0.2%–1.6% of US adults have gambling disorder. Gambling disorder often goes hand in hand with other mental health problems and addictions. Most people with gambling disorder recover. However, few people seek professional help. Clinical interventions such as psychotherapy are helpful in reducing problem gambling. Professional treatment can also improve well-being. No medication is currently approved for treatment of gambling disorder. However, medications may help reduce gambling problems and urges. This review focuses on clinical studies of medication for the treatment of gambling disorder.

What was done?

The authors conducted a systematic review. They identified clinical studies testing medications for the treatment of gambling disorder. These studies tested medication as compared to a placebo. A placebo is a “fake” treatment that has no active drug component. The studies must randomly assign participants to receive either the medication or the placebo.

The authors searched for studies from 1980 to 2019. The studies had to be in English. They only included studies done with adults. The authors then agreed on the articles to include for the review.

What you need to know

A total of 19 articles were included. The number of participants in each study ranged from 15 to 233, with a total of 1,268. Of the total participants, 59% completed treatment. The average age of the participants was 45 years. Most participants were

Why is this article important?

This review examined whether medications are helpful in the treatment of gambling disorder. The authors only included studies that compared medication to placebo. The review found that no strong evidence exists for any medication to treat gambling disorder. However, opioid antagonists such as naltrexone showed promise. Combined medication and psychotherapy helped retain patients in treatment compared to medication alone. The authors found many knowledge gaps. The limitations of current research include small sample sizes. Future studies also need to include more diverse participants. Also, including people with other mental health problems and addictions that co-occur with gambling would be helpful.

white, and more than half were men. A total of 15 studies looked at medication only. The other four studies combined medication with psychotherapy.

Most studies diagnosed gambling disorder through clinical interviews by professionals. The South Oaks Gambling Screen was often used to assess the severity of problem gambling.

Many measures of gambling outcomes were used to examine improvements following medication. These included the Clinical Global Impression Scale – Improvement and Severity Scales for gambling; the Pathological Gambling version of the Yale-Brown Obsessive-Compulsive Scale; and the Gambling Symptom Assessment Scale. Non-gambling related measures included depression and anxiety.

Five classes of medication had been studied. The first was opioid antagonists such as naltrexone and nalmefene. Opioid antagonists have been used to reduce cravings and urges in substance users. Opioid antagonists are the most studied medication for gambling and show some promise. For example, one study with 45 patients found that 75% of participants improved with naltrexone compared to 24% with placebo.

Serotonin-reuptake inhibitors (and other anti-depressants) have been used in part due to proposed similarities between gambling and obsessive-compulsive spectrum disorders. Examples of serotonin-reuptake inhibitors include fluvoxamine, paroxetine, sertraline, and bupropion. The results are mixed if these medications can help improve gambling disorder.

The third class was atypical antipsychotic drugs such as olanzapine. The use of olanzapine does not have support. Gambling shares similarities to bipolar disorders such as high levels of impulsivity. So, mood-stabilizing medications such as lithium and topiramate have also been used. Findings are mixed if mood stabilizers are helpful for gambling disorder. The last class of medication is N-acetylcysteine. One study found that after six-weeks of N-acetylcysteine, 83% of participants improved compared to 28.6% on placebo.

Studies that combined medication and psychotherapy also showed mixed results. The psychotherapies included motivational interviewing and cognitive behavioural therapy. The combined interventions helped increase the number of people who completed treatment. Of note, 72% of participants who received medication and psychotherapy completed treatment. In contrast, 56% of participants who received medication only completed the treatment.

The authors identified many knowledge gaps. Some limitations of the studies include small sample sizes. Studies also need to include more diverse participants. Studies should also include patients with co-occurring mental health problems and addictions that are common to gambling.

Who is it intended for?

This review is intended for clinicians who treat gambling disorder. It offers insights into current state of knowledge. This review may also help researchers to better design clinical studies for gambling disorder.

About the researchers

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About Gambling Research Exchange (GREO)

Gambling Research Exchange (GREO) has partnered with the Knowledge Mobilization Unit at York University to produce Research Snapshots. GREO is an independent knowledge translation and exchange organization that aims to eliminate harm from gambling. Our goal is to support evidence-informed decision making in safer gambling policies, standards, and practices. The work we do is intended for researchers, policy makers, gambling regulators and operators, and treatment and prevention service providers. Learn more about GREO by visiting greo.ca or emailing info@greo.ca.

