

Factors associated with treatment outcomes in a randomized clinical trial for gambling disorder

What this research is about

Psychological, social, and clinical characteristics may influence responses to treatment for gambling disorder (GD). In a previous clinical trial, the researchers compared the treatment effects of as-needed intranasal naloxone and placebo (i.e., an inactive substance). The trial found similar treatment outcomes for patients receiving naloxone and those receiving placebo. Both groups showed improvements in gambling symptoms, gambling urges, depressive symptoms, and quality of life. The purpose of this study was to examine the background characteristics of participants in the previous clinical trial to identify factors influencing treatment outcomes.

What the researchers did

The researchers reanalyzed data from a previous 12-week randomized, double-blind, placebo-controlled clinical trial. Both men and women were included in the trial if they were between 18 and 75 years, scored 5 points or higher on the South Oaks Gambling Screen-Revised (SOGS-R), had moderate or severe GD per DSM-5 criteria, and had a minimum of 4 weeks since any previous treatment for GD.

Participants were randomly assigned to one of two groups: one group used the study drug (a 40 mg/mL naloxone nasal spray) as needed in response to gambling urges, while the control group used saline (a placebo). All participants received psychosocial support from trained psychologists.

During screening, participants completed an online SOGS-R questionnaire and provided their medical and gambling histories. At baseline, participants

What you need to know

This study examined the background characteristics of participants in a previous clinical trial to identify factors influencing treatment outcomes. The clinical trial found no benefit of intranasal naloxone over placebo. This study found that participants who showed higher medication adherence and greater readiness to change experienced better treatment outcomes, including greater reductions in gambling symptoms and improvements in quality of life. Participants with greater depressive symptoms started treatment with more severe gambling symptoms, but they also showed greater improvements in gambling symptoms and quality of life following treatment.

identified a treatment goal (i.e., abstinence or reduced gambling). They were assessed for their readiness to change using a visual analogue scale. During the trial, participants completed a daily e-diary to record gambling frequency, gambling spending, study drug use, and any adverse events.

Participants completed the following measures at baseline and weeks 3, 6, 9, and 12, except for quality of life, gambling severity, and alcohol use, which were measured at baseline and weeks 6 and 12:

- Gambling Symptom Assessment Scale (G-SAS)
- DSM-5 criteria to measure GD severity
- Gambling Abstinence Self-Efficacy Scale to measure confidence in abstaining from gambling.
- Alcohol Use Disorder Identification Test
- Montgomery-Åsberg Depression Rating Scale

- EU-ROHIS-QOL 8-item index for quality of life
- Perceived success in achieving treatment goals
- Smoking status (yes/no) at baseline only

A total of 127 participants enrolled in the study. Data from 118 participants who remained in the trial until at least week 6 were included in the analyses. A total of 106 participants completed the 12-week trial.

Using the e-diary data, participants were classified into low (<50%), medium (50–75%), high (75–100%) adherence groups according to their use of intranasal naloxone or placebo.

What the researchers found

Sociodemographic factors and types of gambling were not linked to treatment outcomes. Participants with high adherence had greater reductions in gambling symptoms (measured with the G-SAS) and gambling severity (based on DSM-5 criteria), regardless of whether they received naloxone or placebo, compared to those with medium and low adherence. The high-adherence group also increased their self-efficacy in abstaining from gambling more than the other two groups. The medium-adherence group showed greater improvements than the low-adherence group.

Participants with greater depressive symptoms had more severe gambling symptoms at baseline. These participants experienced a greater reduction in gambling symptoms over the course of treatment, and greater improvement in quality of life. But greater depressive symptoms at baseline were not linked to a greater reduction in gambling severity based on the DSM-5 criteria.

Higher readiness to change was linked to greater reductions in gambling urges, symptoms, and severity, as well as higher self-efficacy in abstaining from gambling and improved quality of life after treatment.

Among participants with high medication adherence, those assigned to naloxone had lower self-efficacy in abstaining from gambling at week 12 than those assigned to the placebo. But no other differences between the two groups were found.

All participants received psychosocial support and self-help materials during the trial. This makes it

impossible to determine the independent effects of these supports on treatment outcomes.

How you can use this research

Practitioners can use this research to identify factors that may support successful treatment outcomes. Promoting readiness to change and treatment engagement may help improve outcomes.

About the researchers

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About Greo Evidence Insights

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