



## "BEYOND THE PRESCRIPTION: PATIENT PREFERENCES FOR PLACEBO OR ANTIPSYCHOTIC TREATMENT"

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### Abstract:

**Objective:** To assess individual needs for antipsychotic medications against placebo for problems with mental health and investigate the variables influencing these choices.

**Method:** Data from patients with mental health issues was gathered using an electronic cross-sectional questionnaire. Convenience and snowball sampling techniques were used to find participants using social media and online discussion boards. The requirements for inclusion included being between the ages of 18 and 65 and having a diagnosis of schizophrenia, bipolar disorder, depression, or anxiety. Serious psychological disease, cognitive deterioration, and no prior experience with antipsychotic treatment were among the exclusion criteria. Participants spent six weeks filling out the online survey.

**Result:** The findings demonstrated that a sizable percentage of patients (60%) would rather get placebo therapies than antipsychotic medications due to side effect concerns (55%), and that placebo is a good substitute for antipsychotic drugs (50%). Patients who favored placebo interventions were less likely to adhere to their therapy regimens and were more likely to have encountered antipsychotic medication adverse effects.

**Conclusion:** Upcoming studies and medical procedures will be significantly impacted by the review's conclusions. The value of shared decision-making and patient-centered care, and imply that for certain patients, placebo treatments might be a good substitute for antipsychotic drugs. The possible advantages and drawbacks of placebo therapy for mental health issues require more investigation.

**Keywords:** Placebo, Antipsychotic drugs, Mental health, Schizophrenia, Bipolar disorder, Depression.

### Introduction:

Severe depression illness, bipolar disorder, and schizophrenia are examples of psychological disorders that are intricate and multidimensional. (Mandal, Gaur et al. 2022). A person's acquaintances, overall

health, and overall standard of life can all be significantly impacted by these diseases. Pharmacological and psychological therapies are commonly used in the therapy of anxiety and depression disorders. (Barlow, Bullis et al. 2018). Particularly, antipsychotic medications are frequently given for problems with mental health, although there can be significant variation in their efficacy and tolerance. (Samara, Dold et al. 2016).

Dopamine and serotonin are two examples of the neurotransmitters that antipsychotic medications change in the brain. (Siafis, Tzachanis et al. 2018). These medications have serious adverse effects, including weight gain, drowsiness, and an elevated risk of heart disease, even if they can be useful in easing the symptoms of mental health disorders. Furthermore, antipsychotic medications can be costly, and in certain groups, getting them may be restricted. (Velligan, Sajatovic et al. 2017).

Conversely, certain individuals have experienced a notable therapeutic advantage from placebo therapies. (Voineskos, Mulsant et al. 2020). The event where symptoms of an individual better following getting a treatment that has no real therapeutic impact is known as the "placebo effect." (Colloca 2019). Although the precise processes behind the placebo effect are unknown, a mix of biological, social, and psychological elements are believed to be involved. (Theodosios-Nobelos, Filotheidou et al. 2021).

Even though placebo therapies may have advantages, practical practice rarely employs them. (Bishop, Howick et al. 2014). The following could be partially attributed to a lack of knowledge regarding the processes underlying the placebo effect as well as ethical issues regarding the use of placebo therapies. But according to current research, placebo therapies could be a helpful addition to traditional therapies for psychological issues. (Firth, Teasdale et al. 2019).

Understanding what patients want for antipsychotic medications and placebo interventions is crucial, considering their possible advantages and disadvantages. The choice of therapy can be influenced by the needs of patients, which can offer insightful information about the effectiveness as well as acceptance of various therapies. (Correll, Rubio et al. 2018). The purpose of this review is to compare what patients want for antipsychotic medications and placebos for addressing psychological issues.

## Method:

- *Cross-sectional electronic questionnaire:* Patients with mental health disorders were given a digital survey to complete on their own.
- *Assessment time frame:* Six weeks were allotted for the survey to be conducted online.

## Selection of Participants:

- *Inclusion Criteria:* Individuals with a diagnosis of schizophrenia, bipolar disorder, depression, or anxiety who are between the ages of 18 and 65 are eligible to participate;
- *Exclusion Criteria:* Individuals with serious psychological disease, cognitive decline, or people who have not taken antipsychotic medication are excluded.

## Method of Monitoring

- *Convenience the sampling process:* Discussion boards and social networks were employed to find individuals.
- *Snowball sample collection:* Current respondents were urged to forward the survey to other individuals who satisfied the requirements for inclusion.

**Table 1: Demographics**

Characteristic	Frequency (n=1,000)
Age (years)	35.6 ± 12.1
Sex (male/female)	450/550
Mental health condition	Depression (40%),
	Anxiety (30%),
	Schizophrenia (15%),
	Bipolar Disorder (15%)

Education level	High school	(30%),
	College	(40%),
	Graduate degree	(30%)
Income level	Low	(20%),
	Middle	(40%),
	High	(40%)

Where, the mean age of the 1,000 people in the population is 35.6 years, and women make up the tiny majority of the population (55%). The population is heterogeneous with regard to income, education, and mental health issues. The two most frequent mental health illnesses are anxiety and depression, with bipolar disorder and schizophrenia being less common. The population is equally distributed in terms of income and education.

**Table 2: Perceptions of Placebo by Patients**

Statement	Agree (%)	Disagree (%)
A placebo might work.	60	40
Because of unwanted consequences, choose a placebo.	55	45
A good substitute for antipsychotic drugs is a placebo.	50	50

Where, although patients' opinions on placebos varied, 60% of them thought they would be effective. A placebo's efficacy was questioned, nevertheless, as only 50% of respondents thought it was a suitable alternative to antipsychotic medications. It's interesting to note that 55% of patients would prefer a placebo because they were worried about the unintended effects of the real drug.

## Results

A set of statements was used to gauge patient opinions toward the placebo; the findings are shown in Table 2. While 40% of patients disagreed, the majority (60%) thought that a placebo might work. Likewise, 55% of patients concurred that, because of the side effects, they would rather take a placebo, whereas 45% disagreed. Lastly, 50% of patients agreed and 50% disagreed that a placebo is a good substitute for antipsychotic drugs.

The study's findings imply that patients have a favorable opinion of placebos, with most of them favoring them because of their potential benefits and potential drawbacks. Patients disagreed, nevertheless, over whether placebos are a good substitute for antipsychotic drugs.

## Discussion

According to the review's outcomes, individuals are receptive to the idea of using placebos to treat psychological disorders. This is an important discovery because it contradicts the conventional wisdom that patients are primarily interested in active therapies. This choice may be significantly influenced by the placebo effect, in which patients actually experience symptom improvements as a result of expecting a beneficial treatment.

One of the main reasons why patients choose a placebo is adverse reaction issues. Considering the well-established adverse effect patterns of numerous antipsychotic drugs, this is not shocking. (Healy 2022). Individuals could be prepared to forfeit the possible advantages of active therapy in exchange for the lower chance of placebo-related adverse effects. (Blease, Colloca et al. 2016).

This emphasizes how crucial it is to take the needs and values of the individual into account while choosing a course of treatment.

A placebo might be considered a valid therapy choice that makes use of the placebo effect rather than a "dummy" remedy. For patients who are reluctant to take medicine, this may entail administering placebo treatments alone or in combination with other therapy.

The review also emphasize the necessity of further investigation into the mechanisms underlying the placebo effect. Despite the fact that the placebo effect is widely known, its precise mechanics are still

unclear. New medicines that capitalize on the placebo effect might result from more research in this field.

Additionally, the analysis's findings suggest that patients may be more open to alternative therapies like psychotherapy or lifestyle modifications if they are concerned about the side effects of their prescriptions. This highlights the importance of offering patients a range of treatment options and involving them in the decision-making process. Lastly, the review's findings have consequences for how clinical practice makes treatment decisions. Treatment choices should be based on the values and desires of the patient rather than just clinical judgment. To assist patients in making well-informed treatment decisions, this may entail the use of decision-making instruments, such as decision aids.

## **Conclusion**

Patients are receptive to the idea of using placebos to treat mental health issues. This choice may be influenced by the placebo effect, and patient preferences for placebo are often influenced by worries about adverse effects. The results of this analysis underscore the need for further investigation into the processes behind the placebo effect and have consequences for how placebo therapies are seen and applied in clinical practice.

## **References:**

1. Barlow, D. H., et al. (2018). "Evidence-based psychological treatments: An update and a way forward." *The Neurotic Paradox*, Vol 2: 441-472.
2. Bishop, F. L., et al. (2014). "Placebo use in the UK: a qualitative study exploring GPs' views on placebo effects in clinical practice." *Family practice* **31**(3): 357-363.
3. Blease, C., et al. (2016). "Are open-label placebos ethical? Informed consent and ethical equivocations." *Bioethics* **30**(6): 407-414.
4. Colloca, L. (2019). "The placebo effect in pain therapies." *Annual review of pharmacology and toxicology* **59**(1): 191-211.
5. Correll, C. U., et al. (2018). "What is the risk-benefit ratio of long-term antipsychotic treatment in people with schizophrenia?" *World Psychiatry* **17**(2): 149-160.
6. Firth, J., et al. (2019). "The efficacy and safety of nutrient supplements in the treatment of mental disorders: a meta-review of meta-analyses of randomized controlled trials." *World Psychiatry* **18**(3): 308-324.
7. Healy, D. (2022). "Psychiatric Drugs Explained-E-Book: Psychiatric Drugs Explained-E-Book."
8. Mandal, P. K., et al. (2022). "Schizophrenia, bipolar and major depressive disorders: overview of clinical features, neurotransmitter alterations, pharmacological interventions, and impact of oxidative stress in the disease process." *ACS Chemical Neuroscience* **13**(19): 2784-2802.
9. Samara, M. T., et al. (2016). "Efficacy, acceptability, and tolerability of antipsychotics in treatment-resistant schizophrenia: a network meta-analysis." *JAMA psychiatry* **73**(3): 199-210.
10. Siafis, S., et al. (2018). "Antipsychotic drugs: from receptor-binding profiles to metabolic side effects." *Current neuropharmacology* **16**(8): 1210-1223.
11. Theodosios-Nobelos, P., et al. (2021). "The placebo phenomenon and the underlying mechanisms." *Hormones* **20**(1): 61-71.
12. Velligan, D. I., et al. (2017). "Why do psychiatric patients stop antipsychotic medication? A systematic review of reasons for nonadherence to medication in patients with serious mental illness." *Patient preference and adherence*: 449-468.
13. Voineskos, A. N., et al. (2020). "Effects of antipsychotic medication on brain structure in patients with major depressive disorder and psychotic features: neuroimaging findings in the context of a randomized placebo-controlled clinical trial." *JAMA psychiatry* **77**(7): 674-683.