



# Topic Brief: Zinc for Schizophrenia and Schizoaffective Disorder

**Date:** 11/16/2023

**Nomination Number:** 1067

**Purpose:** This document summarizes the information addressing a [topic nomination](#) submitted on October 8, 2023, through the Effective Health Care Website. This information was used to inform the Evidence-based Practice Center (EPC) Program decisions about whether to produce an evidence report on the topic, and if so, what type of evidence report would be most suitable.

**Issue:** The nominator would like there to be a medical study to be conducted to determine the impact of zinc on people with schizophrenia and schizoaffective disorder.

**Findings:** The EPC program will not develop a new evidence product for this topic because primary research falls outside of the program's scope.

## Background

Schizophrenia is a psychological disorder that significantly impairs the way an individual perceives reality and causes psychosis, hallucinations, and other mental health symptoms.<sup>1</sup> At least one third of people with schizophrenia experience complete remission in their lifetime, while others may experience worsening and remission of symptoms periodically throughout their lives, and others a gradual worsening of symptoms over time.<sup>1</sup>

The exact prevalence of schizophrenia and schizoaffective disorders is difficult to pinpoint due to several factors, and schizophrenia is often combined with other psychotic disorders in prevalence estimation studies. However, estimates of the prevalence of schizophrenia and related psychotic disorders in the United States range between 0.25 and 0.64 percent.<sup>2</sup> Despite this relatively low prevalence, schizophrenia is one of the top 15 causes of disability worldwide, and is associated with increased mortality, co-occurring mental health disorders, and financial costs.<sup>2</sup> Globally, individuals with schizophrenia often face stigma, discrimination, and violation of their human rights, and more than two in three people with psychosis do not receive specialist mental health care.<sup>1</sup>

Zinc is a nutrient that helps the immune system and metabolism function, and is important to wound healing, and the sense of taste and smell. Research on oral zinc has shown that it may shorten the length of colds, aid in wound healing, and ease age-related macular degeneration.<sup>3</sup> However, zinc is also researched in relation to various other conditions, including mental health disorders. Evidence suggests potential benefits of zinc supplementation as a stand-alone intervention or as an adjunct to conventional antidepressant drug therapy for depression, for example.<sup>4</sup> Despite this, there appear to be methodological limitations in existing studies, so

additional well designed and adequately powered primary research about zinc’s impact on depression is still needed.<sup>5</sup> Please see Related Resources for information about reviews that address zinc’s role in schizophrenia and schizoaffective disorders.

## Assessment Methods

We assessed nomination for priority for a systematic review or other AHRQ EHC report with a hierarchical process using established selection criteria. Assessment of each criteria determined the need to evaluate the next one.

1. Determine the *appropriateness* of the nominated topic for inclusion in the EHC program.
2. Establish the overall *importance* of a potential topic as representing a health or healthcare issue in the United States.
3. Determine the *desirability of new evidence review* by examining whether a new systematic review or other AHRQ product would be duplicative.
4. Assess the *potential impact* a new systematic review or other AHRQ product.
5. Assess whether the *current state of the evidence* allows for a systematic review or other AHRQ product (feasibility).
6. Determine the *potential value* of a new systematic review or other AHRQ product.

## Related Resources

We identified additional information during our assessment that might be useful.

- A 2018 meta-analysis that explored zinc concentrations in schizophrenic patients may also be of interest: [Zinc in schizophrenia: A meta-analysis - ScienceDirect](#)
- A 2017 study explored the impact of zinc on depression and psychosis in both rodents and humans: [The Emerging Role for Zinc in Depression and Psychosis - PMC \(nih.gov\)](#)

## References

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**Conflict of Interest:** None of the investigators have any affiliations or financial involvement that conflicts with the material presented in this report.

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