

Peer Review

Review of: "Psilocybin in Alcohol Use Disorder Maintains Abstinence Efficacy: A Scoping Review"

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The authors should be commended for undertaking this review. They essentially tell us what we already know – that psychedelics possibly have a role in the treatment of Alcohol Use Disorder, but that there is just not enough evidence, and more studies are needed. That said, there is utility in reviewing the evidence to date. However, this review has to conform to generally accepted epidemiological standards, so the authors need to actually use a proper, structured meta-analytical approach (there are numerous examples of this). Even if they do not do this, they owe the reader a coherent synthesis of the studies in one place (not all over the manuscript) – there are so many examples of these in the literature (sample size, inclusion criteria, etc.). Please help the reader to get a handle on the relevant studies before you tell us what you infer.

The authors have to explain how each study reached its results and conclusions and provide some critique study by study, in an organized fashion.

The authors need to deal with the key issues in psychedelics clinical trials – like placebo and blinding – there is a lot of literature on this and consensus papers from various groups.

There seems to be an OUD (Opiate Use Disorder) trial in the group – please remove, explain, or justify.

The discussion of mechanistic linkages is very weak. There is no deep discussion of the molecular mechanisms whereby psychedelics may work – what about the receptor pharmacology, especially for pathways of craving that drive relapse? Also, the authors are unclear about the role of functional brain scanning – a very confusing section.

The authors need to move away from advocacy to simply stating the facts and what we can learn about the next steps in psychedelic drug development for AUD (Alcohol Use Disorder).

The section about psilocybin synthesis is not relevant in a paper about trials for AUD. The authors should focus on the putative mechanisms of this class of drugs in terms of reducing craving (and relapse) and treating the underlying condition, etc.

The paper has some inaccuracies and non-sequiturs – for example, the most egregious is in the conclusion: “On the other hand, psilocybin does not appear to cause significant adverse effects, such as hallucinations at the tested dosages, which alleviates concerns regarding its clinical development.” The authors need a coherence check as part of the revision.

The most important thing is that the paper follows a much more standardized approach to the analysis of the studies and their implications. The authors should look at meta-analytical papers from psychiatry and Substance Use Disorders.

Declarations

Potential competing interests: No potential competing interests to declare.