

Benzodiazepine Use Associated With Brain Injury, Job Loss and Suicide

CU Anschutz researchers link benzo use to long-term neurological complications

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by [Laura Kelley](#) | July 5, 2023



Benzodiazepine use and discontinuation is associated with nervous system injury and negative life effects that continue after discontinuation, according to a new study from researchers at the [University of Colorado Anschutz Medical Campus](#).

The study was published today in the journal [PLOS ONE](#).

Use leads to long-term neurological complications

“Despite the fact that benzodiazepines have been widely prescribed for decades,

this survey presents significant new evidence that a subset of patients experience long-term neurological complications,” said [Alexis Ritvo, M.D., M.P.H.](#), an assistant professor in psychiatry at the [University of Colorado School of Medicine](#) and medical director of the nonprofit [Alliance for Benzodiazepine Best Practices](#). “This should change how we think about benzodiazepines and how they are prescribed.”

Common Benzodiazepines

- **Xanax** (alprazolam)
- **Klonopin** (clonazepam)
- **Ativan** (lorazepam)
- **Valium** (diazepam)
- **Librium** (chlordiazepoxide)
- **Restoril** (temazepam)

Previous studies had described this injury with various terminologies, perhaps the most well-known being protracted withdrawal. As part of the study, a scientific review board unified these names under the term benzodiazepine-induced neurological dysfunction (BIND) to more accurately describe the condition.

To better characterize BIND, Ritvo and colleagues analyzed data from a [previously published survey](#) of current and former benzodiazepine users that asked about their symptoms and adverse life effects attributed to benzodiazepine use. The survey of 1,207 benzodiazepine users from benzodiazepine support groups along with health and wellness sites is the largest of its kind. Respondents included those taking benzodiazepines (63.2%), in the process of tapering (24.4%) or fully discontinued (11.3%).

More than half reported suicidal thoughts or

attempted suicide

Symptoms were long-lasting, with 76.6% of all affirmative answers to symptom questions reporting the duration to be months or more than a year. The following ten symptoms persisted over a year in greater than half of respondents: low energy, difficulty focusing, memory loss, anxiety, insomnia, sensitivity to light and sounds, digestive problems, symptoms triggered by food and drink, muscle weakness and body pain. Particularly alarming, these symptoms were often reported as new and distinct from the symptoms for which benzodiazepines were originally prescribed. Notably, 54.4% of the respondents reported suicidal thoughts or attempted suicide.

BIND is thought to be a result of brain changes resulting from benzodiazepine exposure. A general review of the literature suggests that it occurs in roughly one in five long-term users. The risk factors for BIND are not known, and more research is needed to further define the condition, along with treatment options.

“Patients have been reporting long-term effects from benzodiazepines for over 60 years. I am one of those patients. Even though I took my medication as prescribed, I still experience symptoms on a daily basis at four years off benzodiazepines. Our survey and the new term BIND give a voice to the patient experience and point to the need for further investigations,” said [Christy Huff, M.D.](#), one of the paper’s coauthors and a cardiologist and director of [Benzodiazepine Information Coalition](#).

The survey was a collaborative effort between CU Anschutz, Vanderbilt University Medical Center, and several patient-led advocacy organizations that educate on benzodiazepine harms. Several members of the research team have lived experience with benzodiazepines, which informed the survey questions.

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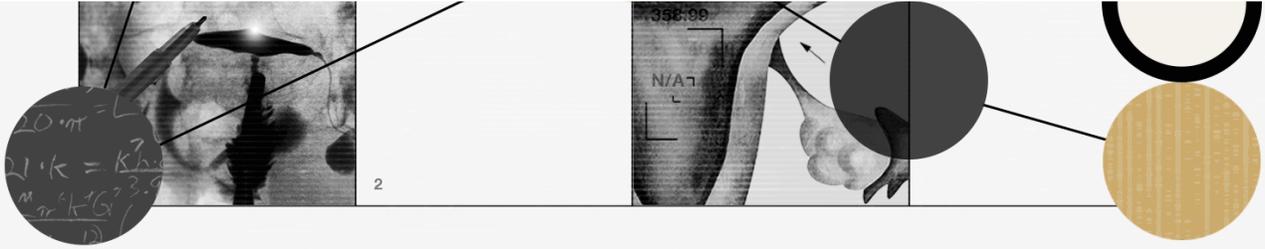
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