

## **Reducing and discontinuing benzodiazepines and sedative hypnotics in Switzerland**

This doctoral project addresses the negative effects of benzodiazepines and other sedative hypnotics (BSH) on patients in Switzerland. Its overarching aim is to explore how targeted, implementable interventions can support the reduction or discontinuation of BSH use. To achieve a comprehensive understanding, the project is structured into three interlinked sub-studies, each employing different methodological approaches.

The first subproject investigates the frequency and characteristics of adverse events associated with BSH use in Switzerland. Building on existing prevalence data on prescription practices, it uses a WHO pharmacovigilance database to analyze adverse event reports. Events will be stratified by age, sex, type, severity, and other factors. In addition, the most frequent adverse events will be linked to specific substances. These findings will provide critical insights into the potential public health impact of strategies aimed at reducing BSH consumption.

The second subproject consists of a cluster-randomized clinical trial evaluating a supportive counseling tool designed for use in primary care. The intervention aims to assist general practitioners in guiding their patients through the reduction or discontinuation of BSH. The study will assess the tool's effectiveness, safety, feasibility, and acceptability in routine practice. By exploring how both physicians and patients benefit from the intervention, the trial will determine its potential to serve as a scalable model for improving medication safety and quality of care in patients with sleep disorders.

The third subproject examines the key factors that shape the success, safety, feasibility, and acceptance of discontinuing BSH. This qualitative study, embedded within the RCT of the second subproject, involves interviews with patients who actively attempted to reduce or discontinue their use of BSH. Insights gained will help to identify the facilitators and barriers that influence outcomes, thereby informing optimized, patient-centered approaches to deprescribing in primary care.

Overall, this PhD project aims to strengthen the evidence base on the harms of BSH use in Switzerland, while simultaneously testing and refining practical interventions that enable safe and effective deprescribing. In doing so, it contributes to improving medication safety, patient care, and the quality of healthcare delivery for individuals affected by sleep disorders.