

# INPLASY

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## Prevalence of psychoactive substance use and changes on consumption during the COVID -19 Pandemic in people with substance use disorders: protocol for systematic review and meta-analysis

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## ADMINISTRATIVE INFORMATION

**Support** - Universidade Federal de Juiz de Fora.

**Review Stage at time of this submission** - Completed but not published.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202430035

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 10 March 2024 and was last updated on 10 March 2024.

## INTRODUCTION

**Review question / Objective** What is the prevalence of substance use and changes in the consumption of psychoactive substances during the COVID-19 pandemic in people with a previous diagnosis of Substance Use Disorder undergoing treatment?

**Rationale** The COVID-19 pandemic brought a series of challenges to society and affected different layers of the population in different ways. People with more vulnerable conditions may have been more impacted, such as those with Substance Use Disorder (SUD). For these people, the effects of the pandemic are not limited to concerns about the spread of the disease, but also extend to mental health in general, as well as possible changes in the consumption of psychoactive substances. Thus, the need to study the impacts of COVID-19 on these population, considering they will require public policies and guidance for specific clinical decisions to formulate

treatment interventions. Although the number of articles on this topic is increasing day by day, there are still few studies aimed at this population. In this way, our study is a systematic, comprehensive and methodologically adequate review that aims to indicate the prevalence of results on the use of material in the period of the COVID-19 pandemic.

**Condition being studied** We pretende analyse prevalence of psychoactive substance use and changes in consumption during the pandemic in individuals with pré-existing Substance Use Disorder in treatment.

## METHODS

**Search strategy** ("COVID-19" AND "Substance-Related Disorders"), ("COVID-19" AND "Substance Use Disorders"), ("COVID-19" AND "addiction"), ("COVID-19" AND "Chemical dependency"), ("COVID-19" AND "Alcoholism"); ("Coronavirus" AND "Substance-Related Disorders"), ("Coronavirus" AND "Substance Use Disorders"),

("Coronavirus" AND "addiction"), ("Coronavirus" AND "Chemical dependency") ("Coronavirus" AND "Alcoholism"); ("SARS-CoV-2" AND "Substance-Related Disorders"); ("SARS-CoV-2" AND "Substance Use Disorders"), ("SARS-CoV-2" AND "addiction"), ("SARS-CoV-2" AND "Chemical dependency"), ("SARS-CoV-2" AND "Alcoholism").

**Participant or population** We will include studies of patients with substance use disorders, selected according to the criteria of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) or the International Classification of Diseases (ICD-9), or even patients assessed by screening test for alcohol, tobacco and substances - ASSIT (WHO), Alcohol Use Disorders Identification - AUDIT (WHO) and particular questionnaires.

**Intervention** For primary and secondary outcomes we will collect prevalence coefficient data and significant confidence ratios.

**Comparator** Not applicable.

**Study designs to be included** We plan to include cross-sectional studies with prevalence data, evaluating the psychoactive substance use (maintenance of consumption pattern, primary substance, increased use, decreased use) and other characteristics related to substance use such as craving, withdrawal symptoms and recovered, during the COVID-19 pandemic, data from March 2019 to July 2022. We Will Not restrict language. We will exclude other types of study designs, manuscripts that do not respect the purpose of the study and the guiding question; paid studies, as well as the results of publications between years less than March 2019 and gray literature.

**Eligibility criteria** Eligibility criteria for this review: Cross-sectional observational studies investigating the use of and changes in the consumption of psychoactive substance that met the following eligibility criteria will consider eligible: (1) studies published between March 2020 and July 2022 and; (2) people of both sexes, over the age of 18 years, who were classified as having some type of SUD and who were receiving treatment. There were no language restrictions. Studies for which data were not available for download and gray literature were excluded.

**Information sources** The search will carry out in the following databases: Medical Literature Analysis and Retrieval System Online (MEDLINE via PubMed), PsycINFO from the American Psychological Association (APA PsycNET), Latin

American and Caribbean Health Sciences Literature (LILACS), Scientific Electronic Library Online (SciELO) and the Virtual Health Library (BVS). The terms used for the search were selected according to the Health Sciences Descriptors (DeCS) and Medical Subject Headings (MeSH/ PubMed) and were combined using the Boolean operator AND. Eligibility criteria for this review: Cross-sectional observational studies investigating the use of and changes in the consumption of psychoactive substance that met the following eligibility criteria will consider eligible: (1) studies published between March 2020 and July 2022 and; (2) people of both sexes, over the age of 18 years, who were classified as having some type of SUD and who were receiving treatment. There were no language restrictions. Studies for which data were not available for download and gray literature were excluded.

**Main outcome(s)** 1 – Primary use substances, measured by Diagnostic and Statistical Manual of Mental Disorders V (DSM – V), International Statistical Classification of Diseases and Related Health Problems 10 (ICD – 10), Screening Test for Involvement with Alcohol, Tobacco and Other Substances (ASSIST), Alcohol use Disorders Identification Test (AUDIT), and particular questionnaire.

2 – Maintenance, increase and reduction in the consumption of psychoactive substances, measured by the Screening Test for Involvement with Alcohol, Tobacco and Other Substances (ASSIST), Alcohol Use Disorders Identification Test (AUDIT), and particular questionnaire.

**Additional outcome(s)** 3 – Phenomena related to the use of psychoactive substances: desire/craving behavior, (measured by Visual Analog Scale (VAS) and similar ones, Withdrawal Symptoms and Relapse.

**Data management** The studies identified in the search will be imported into the web-based bibliographic management program EndNote, a tool used to help select studies and exclude duplicates. The studies will be selected in two phases. In the first phase, four researchers (SRC, CPA, LAFA and PMLPA) will read the titles and abstracts of all the studies. Doubts about the inclusion of articles will be decided upon with the participation of a fifth researcher (LMAS). In the second phase, the studies potentially eligible for inclusion in the review will be read in full by the four researchers. Disagreements will be discussed and reconciled in team meetings and included the participation of a fifth reviewer (LMAS). After the study selection phase, two researchers (SRC and

CPA) independently will extract information on the identification of the studies (author, year of publication, country where the research was conducted); sample characteristics (number of patients, distribution by sex, age, SUD classification); information on the collection of primary outcome data (evaluation period; prevalence of main substance of use, prevalence of maintenance of increased and reduced consumption during the COVID-19 pandemic); and information on the collection of secondary outcome data (craving, withdrawal symptoms, relapse). We will do data extraction and management by four independent authors (SRC; LMAS) using a data extraction form in an Excel spreadsheet.

**Quality assessment / Risk of bias analysis** Two reviewers (SRC and CPA) will independently assess the risk of bias of each include trial using the Joanna Briggs Institute critical assessment tools for use in the JBI Systematic Reviews Checklist for Prevalence Studies

Any disagreements will be resolved by consensus and we will use the following definitions in life risk assessment: 1 - Was the sample design appropriate to address the target population?, 2 - Were study participants sampled adequately?, 3 - Was the sample size adequate?, 4 - Were the study subjects and setting described in detail?, 5 - Was the data analysis performed with sufficient coverage of the identified sample?, 6 - Were valid methods used to identify the condition?, 7 - Was the condition measured in a standardized and reliable way for all participants?, 8 - Was there appropriate statistical analysis?, 9 - Was the response rate adequate and, if not, was the low response rate managed appropriately?

We will focus on the prevalence data from the studies. For flag questions within each domain for each result, we will provide one of the four possible answers in the JBI tool ("Yes", "No", "Unclear", "Not apply") judging according to the answer presented for each answer "Low risk of bias," "Some concerns," or "High risk of life." The overall judgment of risk of bias for each outcome will be a less favorable assessment across domains.

We will summarize our findings in the "Risk of Bias" tables and figures.

**Strategy of data synthesis** We will plan perform statistical analysis. We will compile prevalence with 95% CIs of individual trials using a random-effects meta-analysis (when results of two or more similar studies can be pooled). Data will be analysed using the 'metatprop' function in the meta package in the R program.

**Subgroup analysis** If possible, we intend to perform subgroup analysis in case of heterogeneity considering the following variables:

- Primary use substances.
- Maintenance
- Increase and reduction in the consumption of psychoactive substances
- Craving and withdrawal symptoms.

**Sensitivity analysis** If possible, we will perform the following sensitivity analyses:

- Effects of risk of bias by excluding studies with high risk of bias.

**Language restriction** Search does not impose language restrictions.

**Country(ies) involved** Brazil.

**Keywords** Substance Use Disorder; Alcohol Use Disorder; Psychoactive Substance Consumption; COVID-19.

**Dissemination plans** We intend to submit our study in electronic journals specialized in the research topic, as a means of dissemination.

**Contributions of each author**

Author 1 - Sara Carvalho - CRediT authorship contribution statement Carvalho: Conceptualization, Methodology, Data curation, Investigation, Formal analysis, Writing- Original draft preparation, Visualization, Project administration.

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