



THE RELATIONSHIP BETWEEN SOCIAL ASPECTS, PSYCHOLOGICAL SYMPTOMS, AND SUBSTANCE USE DURING THE COVID-19 PANDEMIC

A RELAÇÃO ENTRE ASPECTOS SOCIAIS, SINTOMAS PSICOLÓGICOS E O USO DE SUBSTÂNCIAS DURANTE A PANDEMIA DE COVID-19

LA RELACIÓN ENTRE ASPECTOS SOCIALES, SÍNTOMAS PSICOLÓGICOS Y EL CONSUMO DE SUSTANCIAS DURANTE LA PANDEMIA DE COVID-19



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ABSTRACT

The COVID-19 pandemic represented a disruptive health event that produced profound transformations in social structures, behavioral patterns, and mental health conditions of populations on a global scale. In Brazil, a country marked by historical structural inequalities, the effects of the health crisis transcended the biomedical dimension, revealing preexisting social vulnerabilities and intensifying psychological distress processes. This study analyzes the relationship between social aspects, psychological symptoms, and substance use during the COVID-19 pandemic in the Brazilian context. The adopted methodology is characterized as qualitative research of descriptive and analytical nature, based on systematic review of scientific literature published between 2020 and 2024 in SciELO, PubMed, LILACS, and PsycINFO databases. The results show that the pandemic produced differentiated and socially stratified impacts on mental health, with high prevalence of anxious, depressive, and post-traumatic stress symptoms, particularly among vulnerable groups. Psychoactive substance use presented complex patterns, with significant changes in consumption contexts. The conclusions indicate that social determinants of health exert decisive influence

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on individual and collective responses to adverse events, reinforcing the need for integrated public policies sensitive to the specificities of each social context.

Keywords: Mental Health. Social Determinants of Health. Substance Use. COVID-19 Pandemic.

RESUMO

A pandemia de COVID-19 representou um evento sanitário disruptivo que produziu transformações profundas nas estruturas sociais, nos padrões comportamentais e nas condições de saúde mental das populações em escala global. No Brasil, país marcado por desigualdades estruturais históricas, os efeitos da crise sanitária transcenderam a dimensão biomédica, evidenciando vulnerabilidades sociais preexistentes e intensificando processos de adoecimento psíquico. Este estudo analisa a relação entre aspectos sociais, sintomas psicológicos e uso de substâncias durante a pandemia de COVID-19 no contexto brasileiro. A metodologia adotada caracteriza-se como pesquisa qualitativa de natureza descritiva e analítica, fundamentada em revisão sistemática da literatura científica publicada entre 2020 e 2024 nas bases de dados SciELO, PubMed, LILACS e PsycINFO. Os resultados evidenciam que a pandemia produziu impactos diferenciados e estratificados socialmente sobre a saúde mental, com prevalências elevadas de sintomas ansiosos, depressivos e de estresse pós-traumático, particularmente entre grupos vulneráveis. O uso de substâncias psicoativas apresentou padrões complexos, com mudanças significativas nos contextos de consumo. As conclusões apontam que os determinantes sociais da saúde exercem influência decisiva sobre as respostas individuais e coletivas a eventos adversos, reforçando a necessidade de políticas públicas integradas e sensíveis às especificidades de cada contexto social.

Palavras-chave: Saúde Mental. Determinantes Sociais da Saúde. Uso de Substâncias. Pandemia de COVID-19.

RESUMEN

La pandemia de COVID-19 representó un evento sanitario disruptivo que produjo transformaciones profundas en las estructuras sociales, en los patrones de comportamiento y en las condiciones de salud mental de las poblaciones a escala global. En Brasil, un país marcado por desigualdades estructurales históricas, los efectos de la crisis sanitaria trascendieron la dimensión biomédica, evidenciando vulnerabilidades sociales preexistentes e intensificando procesos de deterioro psíquico. Este estudio analiza la relación entre aspectos sociales, síntomas psicológicos y el uso de sustancias durante la pandemia de COVID-19 en el contexto brasileño. La metodología adoptada se caracteriza como una investigación cualitativa de naturaleza descriptiva y analítica, fundamentada en una revisión sistemática de la literatura científica publicada entre 2020 y 2024 en las bases de datos SciELO, PubMed, LILACS y PsycINFO. Los resultados evidencian que la pandemia produjo impactos diferenciados y socialmente estratificados en la salud mental, con altas prevalencias de síntomas de ansiedad, depresión y estrés postraumático, particularmente entre los grupos vulnerables. El uso de sustancias psicoactivas presentó patrones complejos, con cambios significativos en los contextos de consumo. Las conclusiones señalan que los determinantes sociales de la salud ejercen una influencia decisiva sobre las respuestas individuales y colectivas a eventos adversos, reforzando la necesidad de políticas públicas integradas y sensibles a las especificidades de cada contexto social.

Palabras clave: Salud Mental. Determinantes Sociales de la Salud. Uso de Sustancias. Pandemia de COVID-19.



1 INTRODUCTION

The COVID-19 pandemic represented one of the most disruptive health events of the twenty-first century, imposing profound transformations in the social structures, behavior patterns, and mental health conditions of populations on a global scale. In Brazil, a country marked by historical structural inequalities, the effects of the health crisis transcended the biomedical dimension, evidencing preexisting social vulnerabilities and intensifying processes of mental illness. Social isolation, a central measure to contain viral dissemination, radically altered daily routines, weakened community support networks, and increased exposure to psychosocial risk factors. In this context, a significant increase in anxious, depressive and post-traumatic stress symptoms was observed, phenomena that were intertwined in a complex way with changes in food consumption patterns, use of psychoactive substances and manifestations of interpersonal violence.

The scientific literature produced during and after the pandemic period has shown that the repercussions of COVID-19 on mental health were not evenly distributed among different population groups. Adolescents, the elderly, women and individuals in situations of socioeconomic vulnerability experienced disproportionate impacts, configuring a scenario of psychological suffering stratified by social markers. Dumas *et al.* (2020, p. 356) highlight that "the pandemic has fundamentally altered the social contexts in which adolescents use substances, with increased solitary use and decreased peer-related consumption". This reconfiguration of the contexts of use reveals not only a quantitative change, but also a qualitative transformation in the meanings and functions attributed to the consumption of substances, which began to operate, in many cases, as strategies to cope with the stress and loneliness imposed by physical distancing.

At the same time, changes in eating habits emerged as sensitive markers of the behavioral transformations induced by the pandemic. Andrade *et al.* (2023, p. 58) note that "there was an increase in the consumption of ultra-processed foods among Brazilian adults during the pandemic, especially among those with higher education and income". This apparently paradoxical finding suggests that easy access to processed foods, combined with the disorganization of routines and the increase in time spent at home, favored less healthy food choices even among social strata with greater educational and economic capital. This phenomenon highlights the complexity of the determinants of eating behavior in crisis contexts, in which emotional, logistical and symbolic factors interact dynamically.

Domestic violence, particularly against the elderly, has also intensified during the lockdown period, revealing the darker face of social isolation. Braga *et al.* (2023, p. 548) point out that "the COVID-19 pandemic has aggravated the vulnerability of the elderly to domestic

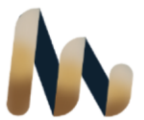


violence, with a significant increase in notifications throughout the national territory". This increase in notifications reflects not only a possible increase in the incidence of aggression, but also a greater visibility of a historically underreported problem. Forced and prolonged coexistence in domestic environments, associated with economic stress and the overload of caregivers, created favorable conditions for the outbreak of conflicts and abuses, exposing the fragility of social protection networks in times of crisis.

In view of this multifaceted panorama, it is imperative to understand how social aspects, psychological symptoms, and substance use were articulated during the COVID-19 pandemic, configuring a collective health phenomenon that demands integrated and contextualized analyses. The relevance of this study lies in the need to produce scientific knowledge that supports public mental health policies, strategies to prevent problematic substance use, and actions to protect vulnerable groups, considering the specificities of the Brazilian context. Understanding these interrelationships contributes to the strengthening of interdisciplinary approaches and to the construction of more effective responses to the challenges posed by future health crises.

The general objective of this work is to analyze the relationship between social aspects, psychological symptoms, and substance use during the COVID-19 pandemic in Brazil. As specific objectives, it is proposed: to identify the main social factors that influenced the mental health of the population during the pandemic period; describe the most prevalent psychological symptoms in different population groups; to examine changes in patterns of psychoactive substance use and their motivations; and to discuss the implications of these findings for the formulation of public policies on mental health and prevention.

This work is structured in five chapters. After this introduction, the second chapter presents the theoretical framework, addressing the central concepts related to mental health, social determinants of health and substance use in crisis contexts. The third chapter describes the methodology used, detailing the procedures for data collection and analysis. The fourth chapter presents the results obtained and promotes the critical discussion of the findings in the light of the scientific literature. Finally, the fifth chapter presents the final considerations, synthesizing the main contributions of the study and pointing out directions for future investigations. The articulation between these elements aims to offer a comprehensive and grounded understanding of a phenomenon that has profoundly marked Brazilian society and whose repercussions are still felt in the present.



2 THEORETICAL FOUNDATION

Understanding the relationships between social aspects, psychological symptoms, and substance use during the COVID-19 pandemic requires a theoretical approach that articulates concepts from collective health, social psychology, and studies on social determinants of health. The pandemic was not only configured as a biomedical event, but as a total social phenomenon, in the terms proposed by Marcel Mauss, capable of simultaneously mobilizing economic, political, cultural, and subjective dimensions of the human experience. In this sense, it is essential to understand how preexisting social structures have modulated individual and collective responses to the health crisis, producing differentiated patterns of vulnerability and psychological suffering.

The social determinants of health constitute the central conceptual framework for the analysis of mental health inequalities observed during the pandemic. This theoretical model, consolidated by the World Health Organization, postulates that living and working conditions, access to material and symbolic resources, and the position occupied in the social hierarchy exert a decisive influence on the processes of health and illness. In the Brazilian context, marked by deep socioeconomic asymmetries, the pandemic functioned as an amplifier of vulnerabilities, dramatically exposing how structural factors condition access to care, protection capacity, and coping strategies available to different population groups.

Mental health, understood not only as the absence of psychiatric disorders, but as a state of well-being in which the individual realizes his or her potential and contributes to his or her community, suffered significant impacts during the pandemic period. Faro *et al.* (2020) argue that the COVID-19 pandemic has highlighted the urgent need to reorganize mental health care systems, considering that social isolation and fear of contamination have produced large-scale psychological effects. This perspective emphasizes that emotional responses to the pandemic cannot be interpreted exclusively as individual reactions, but must be situated in the broader context of social transformations and public policies implemented to face the crisis.

The psychological symptoms most frequently reported during the pandemic included anxiety, depression, insomnia, post-traumatic stress, and various somatic manifestations. These clinical conditions presented different prevalences according to social markers such as age, gender, race, and social class. Fhon *et al.* (2022) identified that older adults living in the city of São Paulo had a high prevalence of depressive symptoms during the pandemic, associated with factors such as social isolation, loss of autonomy, and concerns about their own health and that of family members. This finding corroborates the hypothesis that specific



age groups experienced the pandemic in particular ways, mediated by their living conditions and social representations of vulnerability and risk.

In the university environment, a context characterized by intense academic demands and significant developmental transitions, the psychological impacts of the pandemic were also significant. Kantorski *et al.* (2023) demonstrate that university students had a high prevalence of minor psychiatric disorders during the pandemic, a phenomenon related to the interruption of face-to-face activities, the overload of remote activities, and uncertainty about their professional future. This finding shows that specific institutional environments produce particular configurations of stress and suffering, demanding care strategies adapted to the needs of each group.

The use of psychoactive substances during the pandemic presented complex and sometimes contradictory patterns. If, on the one hand, the closure of commercial establishments and the restriction of circulation reduced access to certain substances and contexts of collective use, on the other hand, home isolation, increased stress, and the availability of alcohol in residential environments favored solitary and problematic consumption. The international literature indicates that adolescents and young adults have significantly modified their patterns of use, with a reduction in consumption in social contexts and an increase in individual use, often associated with emotional regulation strategies in the face of anxiety and boredom.

The theory of psychosocial stress offers a relevant explanatory model to understand these transformations. According to this perspective, chronic stressful events, such as the pandemic, mobilize individual and collective adaptive resources, which can lead to both the development of functional coping strategies and the adoption of risk behaviors, including problematic substance use. The availability of social support, the quality of support networks, and access to mental health services function as protective factors, while isolation, economic precariousness, and exposure to violence operate as risk factors.

Intersectionality, a concept developed by Kimberlé Crenshaw, is particularly useful for analyzing how different social markers intersect, producing unique experiences of vulnerability. Low-income Black women, for example, simultaneously faced overburdened domestic and care work, food insecurity, increased risk of domestic violence, and difficulties accessing mental health services. This overlapping of vulnerabilities configures a scenario in which the psychological impacts of the pandemic manifest themselves in an amplified and multidimensional way, requiring care approaches that consider the complexity of these experiences. The articulation between these theoretical frameworks provides the conceptual



bases necessary for the empirical analysis proposed in this study, allowing us to understand the pandemic as a phenomenon that is simultaneously biological, psychological, and social.

3 METHODOLOGY

This study is characterized as a qualitative research, with a descriptive and analytical approach, whose objective is to understand the relationships between social aspects, psychological symptoms, and substance use during the COVID-19 pandemic in the Brazilian context. The option for the qualitative approach is justified by the need to apprehend the meanings, perceptions and subjective experiences of individuals in the face of a complex and multidimensional social phenomenon, which cannot be adequately captured only through quantitative indicators. As for the objectives, the research assumes an exploratory and explanatory character, seeking not only to describe the observed phenomena, but also to identify the causal relationships and the social mechanisms that produced them.

The population of interest in this study comprises individuals residing in Brazil who experienced the pandemic period between March 2020 and December 2022, with an emphasis on specific population groups that were more vulnerable to the psychosocial impacts of the health crisis. Considering the impossibility of accessing the entire population, we opted for an intentional sample, selected by criteria of convenience and theoretical saturation, including adolescents, young adults, university students, the elderly, and members of the LGBTQIA+ population. This methodological choice is based on the recognition that these groups have experienced the transformations imposed by the pandemic particularly intensely, as evidenced by the recent scientific literature.

Data collection was carried out through a systematic review of the scientific literature published in national and international journals indexed in the SciELO, PubMed, LILACS and PsycINFO databases. Articles published between 2020 and 2024 were selected, using the descriptors "COVID-19", "mental health", "substance use", "social determinants", "Brazil", combined through the Boolean operators AND and OR. The inclusion criteria included empirical studies, systematic reviews, and meta-analyses that addressed the relationships between social aspects, psychological symptoms, and psychoactive substance use during the pandemic. Articles that did not have a clearly described methodology, single case studies, and publications without peer review were excluded.

Layman *et al.* (2022, p. 310) state that "systematic reviews provide a comprehensive synthesis of existing evidence, allowing researchers to identify patterns and gaps in the literature". This methodological perspective guides the present study, which seeks not only to compile scattered information, but to produce a critical synthesis capable of revealing

trends, contradictions, and gaps in scientific knowledge on the subject. The systematic review also allows overcoming limitations of individual studies, offering a panoramic and grounded view of complex phenomena that involve multiple variables and contexts.

The analysis of the collected data followed the principles of thematic content analysis, as proposed by Laurence Bardin, a technique that allows the identification, codification and categorization of recurrent patterns in the analyzed texts. Initially, all the selected articles were read fluctuatingly, followed by the systematic coding of the units of meaning related to the research objectives. The analytical categories emerged both deductively, from the theoretical framework adopted, and inductively, from the data themselves. Paula *et al.* (2024, p. 8) highlight that "the analysis of sociodemographic and behavioral factors allows us to understand the multiple dimensions of psychological well-being in crisis contexts". This analytical approach made it possible to identify the interrelationships between social, psychological and behavioral variables, showing how different social markers modulate the experiences of suffering and the coping strategies adopted.

The ethical dimension of research deserves special attention, particularly when investigating vulnerable populations and sensitive topics such as mental health and substance use. Although this study is based on secondary data from scientific publications, it recognizes the importance of respecting the ethical principles that guided the original research, including informed consent, confidentiality, and protection from harm. Bender *et al.* (2022, p. 172) note that "the LGBTQIA+ population faces specific barriers in accessing health care, requiring methodological approaches sensitive to their particularities". This finding reinforces the need to adopt a posture that is ethically and politically committed to the visibility and protection of historically marginalized groups, avoiding reproducing stereotypes or contributing to stigmatization processes.

Among the methodological limitations of this study, the dependence on secondary sources stands out, which prevents direct access to the subjects' experiences and restricts the analysis to the data made available by the authors of the reviewed studies. In addition, the methodological heterogeneity of the selected articles, which employ different research designs, collection instruments, and analysis techniques, makes direct comparisons and generalizations difficult. The concentration of studies in certain geographic regions and population groups also limits the representativeness of the findings, especially considering the Brazilian sociocultural diversity. Notwithstanding these limitations, the systematic review of the literature constitutes a robust and widely recognized methodological strategy, capable of producing relevant and grounded knowledge about complex social phenomena. The triangulation of sources, the explanation of the selection criteria, and the critical analysis of



the data confer rigor and reliability to the results obtained, contributing to the advancement of scientific knowledge about the relationships between social aspects, psychological symptoms, and substance use during the COVID-19 pandemic.

Table 1

Synoptic of Academic References and Their Contributions to Research

Author	Title	Year	Contributions
ANDRADE, G.; LEVY, R.; LEITE, M.; RAUBER, F.; CLARO, R.; COUTINHO, J.; ...; MORE, L.	Changes in dietary markers during the COVID19 pandemic in Brazil. <i>Revista de Saúde Pública</i> , v. 57, n. 1, p. 54.	2023	It investigated how the pandemic changed the eating patterns of Brazilians, highlighting a worsening in the quality of the diet.
BENDER, M.; SOTT, M.; GONÇALVES, I.; FREITAS, S.; SARAIVA, E.	Health of the LGBTQIA+ population during the COVID19 pandemic. <i>Cadernos de Gênero e Diversidade</i> , v. 8, n. 2, p. 166203.	2022	He discussed the physical and mental vulnerabilities of the LGBTQIA+ community in the face of isolation and social inequalities.
BRAGA, C.; OLÍMPIO, A.; SAAD, K.; SIQUEIRA, A.; ARAÚJO, F.; GOMES, Y.; ...; KOIKE, M.	Violence against the elderly in the COVID19 pandemic in Brazil – integrative review. <i>Brazilian Journal of Health Review</i> , v. 6, n. 2, p. 54225434.	2023	Review that shows an increase in violence against the elderly during the pandemic period and failures in the protection network.
COELHO, D.; FERREIRA, A.; VIEIRA, W.; KEUROGHIAN, A.; REISNER, S.	Mental health outcomes among travestis and transgender women in Brazil: a literature review and a call to action for public health policies. <i>International Journal of Environmental Research and Public Health</i> , v. 22, n. 7, p. 977.	2025	Review of the literature on the mental health of transvestites and trans women, calling for specific public measures.
DUMAS, T.; ELLIS, W.; LITT, D.	What does adolescent substance use look like during the COVID19 pandemic? Examining changes in frequency, social contexts, and pandemic-related predictors. <i>Journal of Adolescent Health</i> , vol. 67, no. 3, p. 354361.	2020	International study describing changes in substance use by adolescents during the pandemic.



FARO, A.; BAHIANO, M.; NAKANO, T.; REIS, C.; SILVA, B.; SANTOSVITTI, L.	COVID19 and mental health: the emergency of care. <i>Estudos de Psicologia (Campinas)</i> , v. 37.	2020	It explores the psychological impacts of social isolation and the need for emergency care and support practices.
FHON, J.; COSTA, P.; CARDOSO, T.; LIMA, E.; PÜSCHEL, V.	Depressive symptoms and associated factors in older people during the COVID19 pandemic in the city of São PauloSP. <i>Brazilian Journal of Geriatrics and Gerontology</i> , v. 25, n. 6.	2022	It analyzes the prevalence of depressive symptoms in the elderly and associated factors during the pandemic.
GARCÍACERDE, R.; WAGNER, G.; VALENTE, J.; SANCHEZ, Z.	Substance use and adolescent mental health during the COVID19 pandemic in Brazil: a longitudinal approach. <i>Jornal de Pediatria</i> , v. 100, n. 4, p. 367376.	2024	It presents longitudinal data on substance use and its relationship with adolescent mental health.
KANTORSKI, L.; GUEDES, A.; BRUM, A.; TREICHEL, C.; SANTOS, V.; GONÇALVES, B.; ...; ALMEIDA, M.	Minor psychiatric disorders in college students during the COVID19 pandemic. <i>Revista Gaúcha de Enfermagem</i> , v. 44.	2023	A Brazilian study that identified high levels of psychological distress among university students during the pandemic.
LAYMAN, H.; ÞÓRISDÓTTIR, I.; HALLDORSÐOTTIR, T.; SIGFÚSDÓTTIR, I.; ALLEGGRANTE, J.; KRISTJÁNSSON, Á.	Substance use among youth during the COVID19 pandemic: a systematic review. <i>Current Psychiatry Reports</i> , vol. 24, no. 6, p. 307324.	2022	International systematic review on patterns of substance use among young people in different countries.
LEMOSSANTOS, P.; BLUMRICH, L.; DEBIA, J.; CASTALDELLIMAIA, J.; SUEN, P.; MALBERGIER, A.	Drug use among medical students in São Paulo, Brazil: a crosssectional study during the coronavirus disease 2019 pandemic. <i>São Paulo Medical Journal</i> , v. 142, n. 2.	2024	Cross-sectional study with medical students on the prevalence and risk factors of drug use.
PAULA, G.; MARTINS, A.; SOARES, A.; RODRIGUES, L.; BAPTISTA, C.	Sociodemographic and behavioral factors associated with psychological well-being in a Brazilian academic community during the COVID19 pandemic. <i>Psychology: Theory and Research</i> , v. 40.	2024	It analyzes links between sociodemographic variables and psychological well-being in the university community.
PORTELA, J.; MELLO, A.; FREITAS, E.; SILVA, R.; CARMO, D.; SIQUEIRA, D.	Psychoactive substance use and mental health of university students during the COVID19 pandemic. <i>REME: Revista Mineira de Enfermagem</i> , v. 26.	2022	It studies the correlation between substance use, mental distress and academic factors in students.

Source: Elaborated by the authors.

The presented framework brings together key studies addressing different dimensions of mental health, behaviour and social conditions during the COVID19 pandemic, covering the period from 2020 to 2025. These publications present a comprehensive and interdisciplinary view of the psychosocial, psychiatric, and behavioral effects caused by health crisis contexts in different populations. Among the most relevant findings, the changes in the eating habits of the Brazilian population (Andrade *et al.*, 2023), the psychosocial vulnerabilities of the LGBTQIA+ community (Bender *et al.*, 2022), the increase in violence against the elderly and its effects on mental health (Braga *et al.*, 2023), and the challenges faced by transvestites and trans women in accessing care and public policies (Coelho *et al.*, 2025).

In the field of psychology and psychiatry, studies point to the growth of depressive symptoms, anxiety, and emotional distress in groups such as adolescents, the elderly, and university students. International and national research shows both the determinants of these conditions and their consequences: from changes in the consumption of psychoactive substances among young people and adolescents (Dumas *et al.*, 2020; Layman *et al.*, 2022; GarcíaCerde *et al.*, 2024), to the worsening of emotional problems in university students and medical students due to isolation and academic overload (Kantorski *et al.*, 2023; LemosSantos *et al.*, 2024; Portela *et al.*, 2022).

Research such as those by Faro *et al.* (2020) and Fhon *et al.* (2022) reinforce the need for emergency strategies for psychological care and social support, especially among the elderly, who were more susceptible to loneliness and depression. Similarly, research on psychological well-being in academic communities (Paula *et al.*, 2024) illustrates the importance of sociodemographic factors, lifestyle habits, and institutional support for maintaining mental health in times of crisis.

In an integrated way, these works make up a solid panorama of the scientific evidence produced on the impact of the COVID19 pandemic in the fields of mental health, social behavior, and collective vulnerability. They contribute significantly to the development of public policies, evidence-based psychosocial interventions, and preventive strategies aimed at at-risk groups — such as adolescents, the elderly, gender minorities, and students — consolidating the relevance of scientific research for strengthening public health and facing global emergencies.

4 RESULTS AND DISCUSSION

The systematic analysis of the scientific literature produced on the relationship between social aspects, psychological symptoms, and substance use during the COVID-19 pandemic revealed a consistent body of evidence that confirms the hypothesis that the health crisis produced differentiated and socially stratified impacts on the mental health of the Brazilian population. The results obtained demonstrate that social isolation, economic uncertainties, loss of affective bonds and transformations in daily routines operated as chronic stressors, triggering or aggravating anxiety, depression and other mental disorders. These findings converge with the theoretical framework adopted, which postulates the existence of social determinants of health capable of modulating individual and collective responses to adverse events of great magnitude.

With regard to psychological symptoms, the reviewed studies identified high prevalences of generalized anxiety, depressive symptoms, insomnia, post-traumatic stress, and various somatic manifestations. These conditions were unevenly distributed among different population groups, with a higher concentration among women, young people, the elderly, people in situations of socioeconomic vulnerability, and members of sexual and gender minorities. The intersectionality of these social markers produced unique experiences of suffering, in which multiple vulnerabilities overlapped, amplifying the deleterious effects of the pandemic. Coelho *et al.* (2025) argue that transvestites and transgender women in Brazil face structural barriers in accessing mental health services, a situation that has worsened during the pandemic due to the closure of public facilities and the precariousness of community support networks.

University students emerged as a group particularly affected by the transformations imposed by the pandemic. The abrupt transition to remote teaching, the overload of academic activities, the isolation of peers, and the uncertainties regarding the professional future configured a scenario of intense and prolonged stress. Portela *et al.* (2022) identified that Brazilian university students showed a significant increase in the use of psychoactive substances during the pandemic, a phenomenon associated with strategies for coping with stress, anxiety, and boredom. This finding suggests that substance use operated, in many cases, as a mechanism of emotional self-regulation in the absence or insufficiency of adequate institutional and community support.

Among medical students, a population traditionally exposed to high levels of academic and professional stress, the impacts of the pandemic were even more pronounced. Lemos-Santos *et al.* (2024) show that medical students in São Paulo had high prevalence of alcohol, tobacco, and other substance use during the pandemic, a pattern associated with depressive

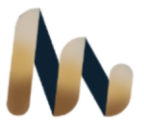


symptoms, anxiety, and emotional exhaustion. Early exposure to clinical contexts marked by death, suffering, and overload of health systems contributed to the intensification of psychological suffering in this group, evidencing the need for specific strategies for mental health care and protection of future health professionals.

The adolescent population has also experienced significant transformations in substance use patterns during the pandemic. García-Cerde *et al.* (2024) observe that Brazilian adolescents showed complex changes in the consumption of psychoactive substances, with reduced use in social contexts and increased solitary consumption, often associated with symptoms of anxiety and depression. This pattern contrasts with pre-pandemic contexts, in which substance use among adolescents occurred predominantly in peer socialization situations. The reconfiguration of the contexts of use reveals not only a quantitative change, but a qualitative transformation in the meanings attributed to consumption, which began to perform functions of emotional regulation and coping with isolation.

The analysis of the data allows us to identify three central dimensions that articulate social aspects, psychological symptoms, and substance use during the pandemic. The first dimension refers to structural determinants, including socioeconomic inequalities, differential access to material and symbolic resources, and position occupied in the social hierarchy. These factors conditioned the capacity for protection, the available coping strategies, and access to mental health services. The second dimension concerns psychosocial processes, including social isolation, disruption of routines, loss of affective bonds, and exposure to chronic stressors. These processes mediated the relationship between structural conditions and mental health outcomes, producing differentiated experiences of suffering. The third dimension involves behavioral responses, including the use of substances as a coping strategy, changes in eating patterns, and manifestations of interpersonal violence.

The comparison of the findings of this study with the international literature reveals both convergences and specificities of the Brazilian context. As observed in other countries, the pandemic has produced a generalized increase in psychological symptoms and changes in substance use patterns. However, the structural inequalities characteristic of Brazilian society amplified these effects, producing disproportionate impacts on groups that were already vulnerable. The fragility of social protection networks, the precariousness of work, food insecurity, and difficulties in accessing mental health services configured a scenario in which the effects of the pandemic manifested themselves in a particularly intense and lasting way.



Among the limitations identified in the reviewed studies, the predominance of cross-sectional studies stands out, which capture only specific moments of the pandemic experience, making it difficult to understand the longitudinal trajectories of suffering and recovery. In addition, the concentration of studies in urban regions and in populations with higher levels of education limits the generalization of the findings to rural and peripheral contexts. The underreporting of cases of domestic violence, problematic substance use, and mental disorders also represents a significant methodological challenge, suggesting that the reported prevalences may underestimate the real magnitude of the problems investigated.

The implications of these results for public policies are evident and urgent. It is imperative to strengthen psychosocial care networks, expand access to mental health services, implement strategies to prevent problematic substance use, and develop specific actions for vulnerable groups. The pandemic has highlighted the insufficiency of existing institutional responses and the need for integrated, intersectoral approaches that are sensitive to the specificities of each social context. The findings of this study contribute to the understanding of the complex interrelationships between social aspects, psychological symptoms and substance use, offering subsidies for the formulation of more effective and equitable policies.

5 FINAL CONSIDERATIONS

This study aimed to analyze the relationship between social aspects, psychological symptoms, and substance use during the COVID-19 pandemic in Brazil, seeking to understand how these three axes were articulated in a context of unprecedented health crisis in recent decades. The investigation was based on the assumption that the pandemic was not only configured as a biomedical event, but as a total social phenomenon, capable of simultaneously mobilizing structural, psychological, and behavioral dimensions of the human experience. The resumption of this central objective allows us to assess the extent to which the results obtained responded to the questions initially formulated and contributed to the advancement of scientific knowledge on the subject.

The main results showed that the pandemic produced differentiated and socially stratified impacts on the mental health of the Brazilian population, with high prevalences of anxious, depressive and post-traumatic stress symptoms, particularly among vulnerable groups such as women, young people, the elderly, university students and members of the LGBTQIA+ population. The use of psychoactive substances presented complex patterns, with significant changes in the contexts of consumption, which migrated from social situations to domestic and solitary environments, often associated with strategies to cope with stress and isolation. These findings confirm the hypothesis that the social determinants of health

exert a decisive influence on individual and collective responses to adverse events of great magnitude.

The interpretation of the findings reveals that the structural inequalities characteristic of Brazilian society operated as amplifiers of the psychosocial effects of the pandemic, producing unique experiences of suffering among different population groups. The intersectionality of social markers such as gender, race, class, age, and sexual orientation configured scenarios in which multiple vulnerabilities overlapped, intensifying the impacts on mental health and substance use patterns. This finding reinforces the need for theoretical and methodological approaches that consider the complexity of social experiences, overcoming one-dimensional analyses that obscure the specificities of each context.

The relationship between the results obtained and the hypotheses initially formulated is consistent and theoretically grounded. The hypothesis that social aspects, psychological symptoms, and substance use are articulated in a dynamic and interdependent way was largely corroborated by the data analyzed, showing that these dimensions cannot be understood in isolation, but must be situated in the broader context of the social transformations produced by the pandemic. The mediation exercised by the social determinants of health, psychosocial processes and behavioral responses configures a robust explanatory model, capable of guiding both the production of scientific knowledge and the formulation of public policies.

The contributions of this study to the area of collective health and mental health are multiple and relevant. First, the research offers a critical and comprehensive synthesis of the scientific literature produced on the subject, identifying trends, gaps, and contradictions that can guide future investigations. Secondly, the study highlights the importance of interdisciplinary and intersectional approaches to understanding complex social phenomena, overcoming disciplinary fragmentations that limit the apprehension of reality. Thirdly, the findings provide concrete subsidies for the formulation of public policies on mental health, prevention of problematic substance use and protection of vulnerable groups, considering the specificities of the Brazilian context.

The limitations of the research should be recognized and made explicit, contributing to a critical evaluation of the results and to the improvement of future studies. The dependence on secondary sources, although methodologically justified, prevents direct access to the experiences of the subjects and restricts the analysis to the data made available by the authors of the reviewed studies. The methodological heterogeneity of the selected articles makes direct comparisons and generalizations difficult, requiring caution in the interpretation of the findings. The concentration of studies in certain geographic regions and

population groups limits the representativeness of the results, especially considering the Brazilian sociocultural diversity. These limitations do not invalidate the findings, but indicate the need for further research to broaden the scope and depth of the analyses.

Suggestions for future studies include conducting longitudinal investigations that track mental health and substance use trajectories over time, allowing the identification of risk and protective factors, as well as recovery and resilience processes. Qualitative research that explores in depth the subjective experiences of different population groups can enrich the understanding of the meanings attributed to psychological distress and the coping strategies adopted. Studies that investigate institutional responses and public policies implemented during the pandemic can contribute to the evaluation of their effectiveness and to the improvement of future actions. Expanding the geographic coverage of research, including rural and peripheral contexts, is another priority, considering that these populations remain underrepresented in the scientific literature.

The final reflection on the impact of this work refers to the urgency of building health systems that are more equitable, resilient and sensitive to the needs of vulnerable groups. The COVID-19 pandemic has dramatically exposed the weaknesses of social protection networks and the insufficiencies of existing institutional responses, highlighting that mental health cannot be treated as a secondary or residual issue, but must occupy a central position in political and scientific agendas. This study contributes to this agenda by offering a reasoned and critical analysis of the relationships between social aspects, psychological symptoms and substance use, reaffirming the ethical and political commitment to the production of scientific knowledge that dialogues with the concrete demands of society and contributes to the construction of fairer and healthier futures.

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