

Implications of COVID-19 for individuals with psychoactive substance use disorders: an overview

Implicações da COVID-19 para indivíduos com transtornos relacionado ao uso de substâncias psicoativas: revisão overview

Implicaciones de COVID-19 para individuos con trastornos del consumo de sustancias psicoactivas: revisión general

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RESUMO

Objetivo: explorar as implicações biopsicossociais da COVID-19 para indivíduos com transtornos relacionado ao uso de substâncias psicoativas, bem como as estratégias de atenção a essa população durante o surto de SARS-CoV-2. **Método:** estudo descritivo que incluiu diferentes desenhos de estudos em bases de dados virtuais para mostrar o crescimento do número de publicações na área da saúde mental com ênfase em álcool e outras drogas durante a pandemia de COVID-19. Para isso, foram selecionadas duas bases de dados (Biblioteca Cochrane, via Cochrane Database of Systematic Reviews e Medline, via PubMed). **Resultados:** pessoas com transtornos relacionados ao uso das substâncias psicoativas geralmente apresentam condições de saúde pré-existentes que podem indicar maior risco a infecção por COVID-19. Por outro lado, indivíduos que já faziam o uso de substâncias, podem se beneficiar do uso para alívio temporário da ansiedade causada por essa situação, aumentando os riscos de uso nocivo. **Conclusão:** questões biológicas, individuais (cognitivo comportamentais) e sociais afetam sobremaneira indivíduos com transtornos relacionados ao uso de substâncias psicoativas colocando-os em alto risco para o contágio e desenvolvimento da COVID-19. **Descritores:** Usuários de drogas; Transtornos relacionados ao uso de substâncias; Consumo de Bebidas Alcoólicas; Pandemias; COVID-19.

ABSTRACT

Objective: to explore the biopsychosocial implications of COVID-19 for individuals with disorders related to the use of psychoactive substances, as well as the strategies to care for this population during the SARS-CoV-2 outbreak. **Method:** a descriptive study that included different study designs in virtual databases to show the growth in the number of publications in the area of mental health with an emphasis on alcohol and other drugs during the COVID-19 pandemic. For this, two databases were selected (Cochrane Library, via Cochrane Database of Systematic Reviews and Medline, via PubMed). **Results:** people with disorders related to the psychoactive substances use generally have pre-existing health conditions that may indicate a higher risk of COVID-19 infection. On the other hand, individuals who already used substances can benefit from the use for temporary relief of anxiety caused by this situation, increasing the risks of harmful use. **Conclusion:** biological, individual (cognitive behavioral) and social issues greatly affect individuals with disorders related to the use of psychoactive substances, placing them at high risk for the contagion and development of COVID-19. **Descriptors:** Drug users; Substance-related disorders; Alcohol Drinking; Pandemics; COVID-19

RESUMEN

Objetivo: explorar las implicaciones biopsicósociales del COVID-19 para las personas con trastornos relacionados con el uso de sustancias psicoactivas, así como las estrategias de atención a esta población durante el brote de SARS-CoV-2. **Método:** estudio descriptivo que incluyó diferentes diseños de estudios en bases de datos virtuales para mostrar el crecimiento en el número de publicaciones en el área de salud mental con énfasis en el alcohol y otras drogas durante la pandemia COVID-19. Se seleccionaron dos bases de datos (Cochrane Library, a través de Cochrane Database of Systematic Reviews y Medline, a través de PubMed). **Resultados:** Las personas con trastornos del consumo de sustancias psicoactivas generalmente tienen condiciones de salud preexistentes que pueden indicar un mayor riesgo de infección por COVID-19. Por otro lado, individuos que ya utilizaron sustancias pueden beneficiarse del uso para el alivio temporal de la ansiedad causada por esta situación, aumentando los riesgos de uso nocivo. **Conclusión:** biológicos, individuales (cognitivo-conductuales) y problemas sociales afectan en gran medida a individuos con trastornos relacionados con el uso de sustancias psicoactivas, poniéndolos en alto riesgo de contagio y desarrollo covid-19. **Descritores:** Consumidores de drogas; Trastornos por consumo de sustancias; Consumo de alcohol; Pandemias; COVID-19.

Introduction

In March 2020, the World Health Organization (WHO) recognized COVID-19 as a pandemic. One of the public health responses to COVID-19, from WHO, was the recommendation of social isolation as one of the most efficient measures to reduce the spread of COVID-19.¹ Currently available, on the other hand, the wider consequences of confinement are accumulating rapidly. Recent notes² in countries subjected to this drastic measure have shown worrying increases in anxiety, depression and substance abuse in the general population. In addition, specialists^{2,3} have suggested a deterioration in mental health during confinement, which can contribute to the emergence of severe psychiatric pathologies and an increased need to receive medical care during and after confinement.

Among the most common responses to the COVID-19 pandemic are the fear of becoming ill, of death, of losing livelihoods, and feelings of helplessness, boredom, loneliness, depression, anger and distrust. These situations lead to a worsening of mental health conditions and an increase in the use of alcohol, tobacco or other drugs⁴. Studies carried out after an outbreak of severe acute respiratory syndrome (SARS) ^{5,6} concluded that exposure to the outbreak of a serious infectious disease can, like other exposures to disasters, lead to abuse / dependence on alcohol and other drugs.⁶ Thus, COVID -19 has implications for the care of individuals with disorders related to the use of SPAs, considered more vulnerable during periods of pandemic.¹

Given the above, the objective is to explore the biopsychosocial implications of COVID-19 for individuals with disorders related to the use of psychoactive substances, as well as the strategies of care for this population during the outbreak SARS-CoV-2.

Method

This is a descriptive study that included different study designs in virtual databases to show the growth in the number of publications in the area of mental health with an emphasis that provide a high level of evidence for decision making and thus seek to justify the impacts of COVID-19 among people with disorders related to the use of psychoactive substances that can directly affect their treatment, as resources for specialized services and primary health care may be scarce, leaving the population at the margin of necessary care.

For this, two databases were selected (Cochrane Library, via Cochrane Database of Systematic Reviews and Medline, via PubMed Portal).

Results and Discussion

Biological and physical factors: increased vulnerability to COVID-19 among users of psychoactive substances

Individuals who use SPAs generally have pre-existing health conditions that may indicate a higher risk of infection with Sars-CoV-2 and its evolution.⁷ Individuals who already used alcohol during periods of isolation may benefit

from the use for the temporary relief of anxiety caused by this situation. However, from a biological point of view, the substance tends to potentiate anxiety due to the initial physical effects of alcohol consumption. In addition, alcohol consumption increases the production of cortisol^{8,9} contributing to the dysregulation of the immune response,¹⁰ predisposing to lung problems, of a mental nature, and other communicable and non-communicable pathologies.¹¹

The pandemic period is also a risk for individuals who are being treated for alcohol use disorder. Relapses of relapses can be constant, which increases the levels of circulating cortisol,¹² causing impairment of the modulation of the immune system. Immune impairment due to chronic alcohol consumption has been evidenced in several studies, both in animal models and in human beings. A study carried out in mice with chronic use of alcohol showed greater severity and mortality due to the influenza virus.¹³ There is also evidence that the immunological conditions and liver diseases in the use of alcohol (moderate or abusive) predispose the increased risk for viral and bacterial infections.^{9, 14} In addition, SPA users, when they develop pneumonia, are more likely to need the use of mechanical ventilation.¹⁵

Like alcohol, tobacco has also been identified as responsible for changes in the immune system, such as a reduction in immunoglobulins and TCD4 + lymphocytes, which weaken the body of passive and active smokers against bacterial pneumonia,¹⁶ in addition to causing changes in lung function and inflammation. local and systematic.¹⁷ Despite these notes on the possible weaknesses of smokers, the published literature on cases of COVID-19 and the use of tobacco is controversial about this vulnerability. Authors point out that being a smoker adversely compromises the evolution of infection and severity of the coronavirus¹⁸ and that it can induce death.¹⁹ On the other hand, studies^{20,21} have highlighted the low rate of smokers among patients with more severe symptoms. A possible explanation for these observations would be the fact of the competition of the Sars-CoV-2 virus for the binding site in the nicotinic acetylcholine receptor (nAChR), suggesting that nicotine would have a protective factor against the coronavirus.²² The use of SPAs may favor the infection by COVID-19;²³ but social detachment and the other consequences of the pandemic favor relapses increasing the risks for excessive alcohol consumption.^{24,25}

Psychological and individual factors: the use / abuse of SPA in response to negative feelings, and the exacerbation of problematic use during and after the pandemic

It is still unclear the real psychological impact of the countless factors experienced by those who use SPAs and the general population during and after the pandemic. According to the WHO, the current moment exacerbates several psychological factors that can contribute to relapses to alcohol use, or this use can be a risk factor for depressive episodes.²⁶ Social / economic factors and negative feelings (fear of becoming infected and infecting loved ones) , grief, imposed social isolation, loneliness, stress, sadness and depression), have affected a large part of the population during quarantine.¹⁴ These negative feelings can exacerbate substance use and abuse.²⁷ The use of alcohol is associated with isolation social and has been detected as a strategy used by individuals to face negative emotional problems.^{7,27,28}

The combination of stress, anxiety and the availability of alcoholic beverages are factors that favor the increase in addictive behavior. Studies carried out at the beginning of the pandemic showed an increase in alcohol consumption, depression and poor management in coping with stress;^{27,29} being the greatest impairment in the 21 to 40 age group. A study carried out in China, the first epicenter of the disease, showed the psychological impact of COVID-19. The symptoms of stress, anxiety and depression (moderate and severe) were more prevalent in women and in individuals with low education.³⁰ Stress is considered a risk factor for the initiation and maintenance of alcohol consumption. The occurrence of neuroadaptation to chronic alcohol use that causes positive feedback, due to its potential to raise cortisol levels that activate the desire to consume alcohol.²⁴

Association of the use of SPAs and risk behaviors

The use of SPA can be associated and or contribute to other risk behaviors for the relief of negative feelings caused by the pandemic, such as gambling²⁵ and increased impulsivity, with the prioritization of substance use, which can lead to non-compliance of the containment strategies for the dissemination of the coronavirus.^{24,31} Other individual factors must be taken into account, such as the use of equipment for the use of some SPAs such as crack, which usually improvised with inappropriate and shared materials³² can favor contamination by the virus, as well as the act of use performed in a group which stimulates crowding,³³ abstinence itself and the search for the acquisition of SPA can be a factor of exposure to the virus for the individual himself, his family and also for health professionals.²³

The age group can also be a factor related to the individual, we currently have a large number of users of SPAs in the age group of 50 years or older³⁴ and many have associated, communicable and non-communicable comorbidities,³⁵ increasing the vulnerability to contamination.

Scholars²⁹ from Poland found the presence of suicidal ideation, and a higher probability of consuming alcoholic beverages, especially among those who used the strategy of denying the pandemic event and had a low score in the assessment and mental health.

In general, the use of psychoactive substances has been identified as a predictor of self-harm and suicidal behavior.^{26,36} The intensification of negative feelings during the pandemic can lead not only to suicidal behavior,^{25,37} but also to suicidal ideation, self-mutilation and self-injury.³⁸ This behavior assumes greater repercussion among individuals undergoing treatment for the use of SPAs, since a study pointed out that those without a psychiatric history were seven times more likely to commit suicide, increasing to 13 times more when the use of SPAs was associated with psychiatric history, than in the general population.³⁹

Fear of becoming a source of contamination for loved ones,⁴⁰ the economic crisis and high unemployment rates³⁶ represent a risk factor for suicide during the pandemic. Alcohol consumption can also be used as a mechanism to alleviate negative emotions,⁴¹ since, under the effect of the substance, the individual has a greater chance of ending the self-extermination plan. Although American studies have pointed to a drop in the rate of suicidal ideation during social

isolation, there has been an increase in the emergency sector of complications from alcohol use.⁴²

Implications of using smoked or inhaled SPAs for COVID-19

Studies have pointed out that the use of inhaled or smoked SPAs causes pulmonary and cardiovascular morbidities,⁷ increasing the inflammatory levels in these individuals, increasing the risk of COVID-19.²⁵ Infection. Pre-existing respiratory problems due to the use of tobacco and marijuana, for example, may increase the risk of exposure to COVID-19,³¹ as well as other pathologies associated with these substances.⁷ However, studies^{43,44} have suggested that marijuana benefits proven for other purposes through the use of cannabinoids can be applied to control inflammatory effect of COVID-19, and that this substance has the potential to limit the progression of the disease.

Tobacco is responsible for several changes in the respiratory system, increasing the risks for pulmonary inflammations, worsening in cases of influenza¹⁶ and a higher number of hospitalizations and ICU use when compared to non-smokers.⁴⁵ In the MERS-CoV outbreak in 2014, being a smoker, having diabetes mellitus, chronic kidney disease and being elderly were among the factors associated with mortality.⁴⁶

During the pandemic, tobacco was highlighted by the association of its consumption and the risks to people's health. South Africa and India have banned the sale of cigarettes, disregarding the smoker's difficulty in quitting addiction.⁴⁷

Although there is little evidence in the literature on tobacco and COVID-19, the toxins present in cigarettes (nicotine, carbon monoxide and polycyclic aromatic hydrocarbons) cause an increase in blood pressure, cardiovascular, pulmonary and immunological impairments⁽⁴⁸⁾, increasing vulnerability among smokers for COVID-19 infection. The smoker has five times more risk of contracting "Influenza". Studies in China have shown that smokers are 1.4 times more likely to have severe symptoms of COVID-19 and up to 2.4 times more likely to need respirators and die.¹⁹ In the UK, the risk was 1.25 times greater death by COVID-19.⁴⁷ Evidencing an unfavorable prognosis when compared to those who never smoked.¹⁸ The most recent review to date, which included eight systematic reviews and meta-analysis on the relationship between tobacco and COVID-19, confirmed that smokers have a lot more chances of developing aggravations resulting from COVID-19 and that the recommendation is to stop smoking as soon as possible, corroborating the WHO suggestion.⁴⁹

Due to the conditions of consumption of hookahs, which have shared mouthpieces, the risk of contamination by COVID-19 increases, in addition to herpes, influenza, among others.⁵⁰ Regarding electronic cigarettes, which has been an alternative among tobacco users, studies have pointed out that the burning of solvents / aromas causes pulmonary and immunological impairments.^{51,52} At the moment, there is no evidence on the increased risk of SARS-CoV-2 contamination by the use of this substance.⁴⁷

In general, relevant studies on the consumption of illicit drugs and their implications for COVID -19 are scarce. A French study showed an increase in marijuana use of 31.2% during the pandemic.⁵³ In the same country, a significant increase in the number of overdoses per Methadone was also reported from the

second week of lockdown.⁵⁴ Due to possible sharing of pipes, the crack user has the risk of viral transmission, such as HIV, Hepatitis C and Tuberculosis, 32 which may also apply to the new coronavirus. Not only in viral transmission, but also in respiratory problems. The COVID-19 pandemic requires legislative changes to reduce harm, since users of inhaled drugs, such as crack and cocaine, are included in the risk group because they are more susceptible to lung diseases.³² This applies to marijuana (*cannabis*) due to the fact that it is a smoked illicit drug and because it carries with it the same burden of risks already mentioned.

In view of what was exposed about the use of SPAs and the risk factors that may represent a situation of vulnerability during and after the pandemic. Chart 1 presents the recommendations and possible management for individuals who use SPAs..

Table 1- Recommendations for biological, physical, psychological and individual management of individuals with disorders related to the use of SPA during the COVID-19 pandemic

<p><i>Biological and physical factors</i></p> <ul style="list-style-type: none">- Monitor individuals undergoing treatment with pre-existing health conditions;- Monitor the use of medications for continuous use, in order to minimize the risk of complications due to pre-existing conditions;- Observe and investigate changes in the pattern of consumption, lapses and relapses;- Attention to clinical pictures of intoxication due to the use of SPAs or abstinence, which can be a confounding factor for the diagnosis of COVID-19. <p><i>Psychological and individual factors</i></p> <ul style="list-style-type: none">- Encourage maintenance and contact, even if virtual, with the existing support network (family, friends and mutual support groups).- Provide access lines to accommodate grief, stress, sadness, depression, anxiety;- Investigation of self-harm, self-mutilation and suicidal ideation;- Intensification of harm reduction policies among users of illicit substances.- Guidelines on the risks of consuming inhaled and smoked drugs for contamination;- Guidelines for the risks of sharing cigarettes and utensils for the use of smoked and inhaled drugs;- Contribute to the recognition of craving / cracking as a risk factor for contamination.

Social factors and social vulnerability: predisposition for COVID-19 among individuals with disorders related to the use of SPA.

Approximately 32% of people who currently use alcohol and 20% of smokers increased their consumption during the pandemic. Relapses to alcohol and tobacco abuse were relatively common in 19% and 25%, respectively.⁵⁵ Chinese study showed that the risky use of alcohol increased to 29.1%, the harmful use to 9.5% and alcohol dependence reached 1.6% .⁵⁶

Among the psychoactive substances consumed during the pandemic, alcohol has been the most identified among the population. More than 30% changed their drinking habits, about 16% reported drinking less, while 14% declared an increase in the consumption pattern.²⁹

The North American demand for alcohol was demonstrated since the beginning of the pandemic when the commercialization of this substance increased 55%. Sales of distilled beverages such as tequila, gin and cocktails increased by 75%, due to storage before the early closure of liquor stores in some

states.⁵⁷ Another problem resulting from the decrease in the availability of alcohol in commerce due to the closing of bars and liquor stores. The sale of the product can be attributed to 70% alcohol intake among individuals with a disorder related to alcohol use, demanding greater attention from their family members on this issue.

This increase in the demand for alcoholic beverages associated with the social isolation imposed by COVID-19 has led to numerous consequences of a social nature, increasing the rates of violent behavior and aggressiveness among families. Children, women and the elderly being the most likely to experience or witness conditions of domestic violence.⁵⁸

These potential situations of violence that occurred during social isolation were used as the main justification for the increase in excessive alcohol consumption that maximizes the risks, frequency and severity of perpetration of intimate partner violence, physical and psychological violence and sexual violence against children and adolescents;⁵⁹ and health professionals should be aware of these signs of domestic violence.⁶⁰

Worldwide, rates of domestic violence have increased considerably. In China, reports of these aggressions tripled during social distance. France indicated a 30% increase in reports of domestic violence, in Brazil it is estimated that these violent behaviors increased by 40 to 50% and Italy and the United States also observed an increase in this type of violence.⁵⁷ The main factors associated with the increased violent attitudes have been attributed, among others, to the abusive use of alcohol and other substances, suspension of work activities and loss or decrease of family income.⁶⁰ Although children are more susceptible to situations of violence, reports of domestic violence against this population have reduced during social distance, possibly due to the closure of schools, daycare centers and other community social protection organizations that favor detection, mainly by educators.⁵⁷

Potentialization of social vulnerability of individuals with disorders related to the use of SPA and COVID-19

Globally, people on the street are more prone to precariousness and the abusive use of alcohol and other substances.¹⁹ There is evidence in the literature that previous epidemics have considerably impacted these individuals, increasing the pattern of SPA use and that this estimate is maintains in the current context of COVID-19.²³

Even with evidence of increased use in the population, a study points out⁶¹ that the issues of vulnerability compromise even the most accurate estimates, given that due to the marginalization and social exclusion of crack users, for example, it is possible that a large portion of them have not even been heard, making evident the fragility and social vulnerability of these individuals in relation to health care and adequate guidance in the context of the pandemic.

In addition to these implications, individuals with disorders related to the use of SPA on the street are confronted by a continuous stay in unhealthy conditions, which contribute to a greater risk of infection by COVID-19 and, consequently, increased transmissibility.⁶² This can be attributed to the lack of personal hygiene materials and hand hygiene facilities.²³

Influence of social media on alcohol consumption during social isolation

During the pandemic, countless social networks like Facebook, Twitter and Instagram, became important vehicles of communication for the acquisition of alcohol. Given this, social media have influenced people to the behavior of drinking during the period of social detachment.^{63,64} In addition to these applications, worldwide, several restaurants and businesses that offer alcoholic beverages or delivery services (delivery) are considered essential and have led to the excessive use of these substances.⁶³ It is also observed the use of social media by digital influencers disseminating cocktail and drinks recipes for consumption with friends through virtual happy hour.⁶⁵ Such propagations have contributed to the increase in the standard consumption of alcoholic beverages at home,⁶³ increasing the risks of COVID-19 infection, due to its impact on the impairment of the immune system.⁹

(Mis) information in the context of a pandemic related to alcohol use

Advertising about hand sanitizer containing alcohol to prevent the spread of the virus, apparently led to the mistaken belief that alcohol consumption can protect against COVID-19.⁶⁶ This campaign contributed to the dissemination of a series of misinformation associated with the effects of alcohol on COVID-19. Among them, that alcohol would strengthen the immune system, protecting the person from viral infection. In addition, the erroneous content has spread that the consumption of alcoholic beverages with a concentration greater than 60% would have the same effect on the body that 70% alcohol has for hand hygiene and that drinking in large quantities would destroy the virus inhaled from the air.⁵⁹

These misunderstandings aroused concern among health authorities and agencies. These situations highlight the need to implement strategies to improve information related to the use of alcohol and COVID-19, through the media and social media⁽⁵⁹⁾, so that the news are disseminated according to reality, avoiding the misinformation that causes damage to the health of the populations.⁵⁶ In this same direction, results that marijuana could bring benefits in the treatment of COVID-19,^{43,44} were transmitted and reached the general population very easily, constituting a risk for the incentive to use and increase the use of this substance due to the belief in the benefit of smoking marijuana.

COVID-19 implications for health care and care for people with disorders related to the use of SPA

The impacts of COVID-19 among people with disorders related to the use of SPAs can directly affect their treatment, as resources for specialized services and primary health care can be scarce, leaving the population at the margin of necessary care.⁶⁷

Various complications due to the use and abuse of SPAs and psychological problems can also have important repercussions on specialized mental health services. According to the Pan American Health Organization (PAHO),⁶⁸ in the post-pandemic period, we must prepare for a likely increase in the demand for assistance to individuals with abuse of alcohol and other SPAs, and of a mental nature. In this context, nursing will have an important role, mainly for carrying

out actions that can help the identification of these individuals during the search for care and reintegration into the psychosocial care network.

If, in the pre-pandemic period of COVID-19, only one in five people with harmful alcohol consumption received adequate treatment,⁶⁹ this relationship currently tends to increase, requiring the services that make up the apparatuses of the psychosocial care network to reorganize themselves to ensure access and follow-up for people with disorders related to the use of SPAs, either due to the need to continue treatment related to addictions or because of COVID-19.⁷⁰ infection.

Many countries have limited access or reorganized health services during the pandemic, especially for the most vulnerable populations, with the risk of interrupting harm reduction actions, reversing the gains obtained in the promotion, prevention and treatment of the human immunodeficiency virus (HIV) and Sexually Transmitted Infections (STIs), as they are not considered essential services,³¹ which may also have occurred with the treatment of disorders related to the use of SPAs.

Some challenges are posed to support principles that ensure access to treatment with equity and quality during the pandemic, since this population is subjected to carrying in their histories the marginalization, prejudice and stigmas that in health services are accentuated by mistaken perceptions professionals,³¹ and may further compromise the attention to this population during this period.

The expansion of access to health and intersectoral policies for people with disorders related to the use of SPAs needs to be seen for issues that go beyond substance use, mainly because they are more vulnerable and with greater risks of morbidity and mortality due to COVID-19.^{71,72}

In order to not only guarantee access to services, but also biopsychosocial care strategies in a unique way, several actions have been proposed. In line with the current PAHO recommendations related to isolation or social distance, the fundamental role of health services in the dissemination of preventive measures for this population is highlighted, such as increased basic care, personal hygiene, hand washing and use of equipment personal protection.⁷³

However, the recommendations for distance and social isolation have produced paradoxes that reverberate in the care of people with disorders related to the use of SPAs, as there is an increase in consumption, association with other more available substances,²⁵ greater risk of intoxication and overdose⁷⁴ as well as abstinence syndrome,⁷⁵⁻⁷⁷ leading to a greater demand for specialized services in alcohol and other drugs.⁷⁸ In addition, these factors enhance the risks already faced by this population, such as: the presence of comorbidities, immunity compromised and difficulties in complying with the measures established to prevent the transmission of COVID-19.⁷⁹

Attention / care strategies

Despite the existing challenges, the pandemic gives rise to innovative ways to ensure the continuity of follow-up for people with disorders related to the use of SPAs. Among the strategies, the use of teleservice has been an assistance resource for assessing the beginning of treatment and for specific drug monitoring for additions,^{80,81} for monitoring users who remain abstinent and are at risk of relapses due to social isolation the absence of possibilities to participate

in support group meetings.⁷ As well as in the identification and monitoring of subjective aspects such as anxiety,^{82,83} ideation and attempted suicide,⁸⁴ cases of psychic comorbidities such as: depression^{83,85-87} affective disorder bipolar^{88,89} and post-traumatic stress disorder.^{82,83}

Another strategy to keep the socio-affective network active, establishing contact, even if virtual, with family, friends and colleagues is the use of social networks that can promote the sharing of care and solidarity actions, in order to favor the feeling of support and social comfort.⁹⁰

Virtual connections seem to be safe strategies to initiate and maintain treatment, however these platforms require some resources that will depend on the computer, telephone and internet access, which highlights the drastic gap that exists between drug users who are in a situation of social vulnerability⁹¹ besides to require trained professionals to use these tools.

The relaxation of rules and protocols in specialized services also deserves to be reviewed in the pandemic period. In the United States, in order to reduce the chances of deaths from opioid overdose, government agencies, the Drug Enforcement Administration and the Substance Abuse and Mental Health Services Administration, issued reorganization guidelines for accessing and continuing drug treatment through telehealth.^{80,81}

Monitoring and follow-up of the use of SPAs by Primary Care services during the pandemic

Primary health care plays an important role in organizing and coordinating care to cope with COVID-19, as it develops health promotion and prevention actions for the population and community, reducing referral to hospitals and urgent and emergency devices.⁹² These services should also increase attention to psychic and social aspects arising from social isolation and precariousness of life, such as alcoholism, chronic conditions resulting from use⁹³ panic syndrome, anxiety disorder, depression, mental disorders and risk of violence domestic.⁵⁹

Betting on biopsychosocial care strategies with the involvement of the entire network is necessary not only for access to clinical treatment for those who already suffer from disorders related to the use of SPAs, in specialized services such as the Psychosocial Care Centers for Alcohol and Drugs (CAPS- AD), but also to prevent diseases related to the use of the general population through screening,⁹⁴ using instruments validated for this purpose, such as: Alcohol Use Disorders Identification Test (AUDIT), Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) and Cut Annoyedby Criticism, Guilty and Eye-opener (CAGE) developed to identify the pattern of consumption of alcohol and other drugs in the general population,⁹⁵ since alcohol consumption tends to increase during these periods.^{55,56} this, the recognition and the use of technological care tools to manage situations identified in the service, such as the brief intervention and motivational interview. onal can contribute to the care of the population in preventing the aggravation of problems related to the use of SPAs during the pandemic.

In situations of greater severity related to the use of substances that may occur in the period of social detachment, such as intoxication or severe withdrawal syndrome, access to appropriate places and specialized care should be guaranteed,⁽⁹⁶⁾ paying attention to the fact that the resulting symptoms the

consumption of alcohol or abrupt withdrawal can be confused with symptoms of COVID-19 or even be associated with it.⁷² Therefore, the importance of making a differential diagnosis that will assist in the proper management of the case. In this sense, specialized services that do not operate continuously should provide their users with information and guidance on where to seek emergency help, if they need it.

Grupos de autoajuda

Daily, thousands of people globally find recovery for SPAS addiction in anonymous groups. In Brazil there are more than 15 different groups of anonymous, including Narcotics Anonymous (NA), Gamblers Anonymous (JOG-ANON), Smokers Anonymous (FA), among others.⁹⁷ Although therapeutic communities have been listed as essential services,⁹⁸ self-help groups did not have the same recognition, causing numerous difficulties to the thousands of individuals with problems related to the use of SPAS who use groups of anonymous people without access to “treatment”. Because they are organizations without a government connection, they mostly depend on spaces such as churches and schools to maintain their activities, so they were forced to close their doors during the quarantine.⁹⁹

This becomes more worrying when considering the fact that a large portion of individuals who attend self-help group meetings are often not in government statistics, as they are not connected to health services. The interruption of reception in self-help groups can put these individuals at risk mainly for lapses and relapses in the use of SPAS, since the uncertainties and fears imposed by the pandemic can trigger the craving / craving for use. Once they were prevented from meeting, the digital means that were already used in a discreet way, started to be used more and became the only alternative for maintaining the Groups. Alcoholics Anonymous (AA), for example, has made daily online meetings available on its website, enabling attendees to migrate to digital platforms.¹⁰⁰ In addition, several groups have conducted their own online meeting methods either on their own website or through applications such as Zoom, Zello, Google Meet, Whatsapp, among others.¹⁰¹ Despite the impacts of COVID-19 on the functioning of self-help groups, there is still no published evidence on the consequences of the absence of face-to-face meetings. Studies capable of monitoring these consequences should be encouraged.

In Table 2, we address and present the recommendations on the key points identified about social factors and the implications for health care and care for these individuals in the context of the pandemic.

Table 2- Recommendations for the management of social factors and health care and attention of individuals with disorders related to the use of SPAs during the COVID-19 epidemic.

<p><i>Social factors and social vulnerability</i></p> <ul style="list-style-type: none">-Promote social actions to welcome the homeless population;-Monitor the pattern of substance use during the pandemic;-Promote educational actions through social media to reduce SPA consumption;-Provide community initiatives that ensure that citizens are aware of the increased risk of domestic violence during the pandemic;-Encourage neighbors, friends and family to observe signs of violence by children, women and the elderly and encourage them to report the aggressors to local authorities.- Clarify and advise on untrue news and rumors about the use of SPAs and COVID-19;

Attention and care in health services

- Tracking the use of SPA in the population in all health services;
- Ensuring access to health services and intersectoral devices;
- Offer continuous monitoring, of territorial and community basis, to people with disorders related to the use of SPAs;
- Provide information on COVID-19 and means of mitigation;
- Encourage precautionary measures to mitigate contagion (wearing masks, adequate social distance and hand washing);
- Stimulate actions aimed at autonomy and self-care;
- To guide the search for urgent and emergency services in cases of severe intoxication or severe withdrawal syndrome caused by SPAs;
- To guide and inform about services available to deal with emergency situations during the pandemic.
- Use phones, whatsapp and other forms of video contact to support people with disorders related to the use of SPAs in specialized services;
- Disclosure of websites and telephones of self-help groups (Alcoholics Anonymous, Narcotics Anonymous, Smokers Anonymous).

Conclusion

Biological, individual (cognitive behavioral) and social issues greatly affect individuals with disorders related to the use of psychoactive substances, placing them at high risk for the contagion and development of COVID-19. While those who already suffer from some disorder may face difficulties in care during the pandemic, there may be an increase in consumption among the general population, increasing the harmful consumption of these substances, which represents a great risk for families and communities, not only due to social problems such as domestic violence during periods of social detachment, but also due to the increase of these disorders in the post pandemic, causing an overload in health services with economic repercussions. Guarantee access to specialized services seeking other alternatives of remote care during this period and implement preventive actions in primary health care services such as screening and early identification of harmful substance use during the pandemic, considering other alternatives for socialization such as groups of self-help seems to be important strategies for coping with issues associated with disorders related to the use of psychoactive substances during the COVID-19 pandemic.

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References

1. World Health Organization. Mental health and psychosocial considerations during the COVID-19 outbreak, 18 March 2020. [Internet]. Geneva: WHO; . 2020 [cited 2020 Jul 26]. Available from: <https://apps.who.int/iris/bitstream/handle/10665/331490/WHO-2019-nCoV-MentalHealth-2020.1-eng.pdf?sequence=1&isAllowed=y>

2. Mahase E. Covid-19: Mental health consequences of pandemic need urgent research, paper advises. *BMJ* (Clinical research ed) [Internet]. 2020 Apr 16 [cited 2020 Jul 26];369:m1515. Available from: <http://group.bmj.com/group/rights-licensing/>
3. Holmes EA, O'Connor RC, Perry VH, Tracey I, Wessely S, Arseneault L, et al. Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science [Internet]. Vol. 7, *The Lancet Psychiatry*. Elsevier Ltd; 2020 [cited 2020 Jul 26]. p. 547. Available from: <https://pmc/articles/PMC7159850/?report=abstract>
4. World Health Organization. Information note COVID-19 and NCDs [Internet]. 2020 [cited 2020 Jul 26]. Available from: <https://www.who.int/publications/m/item/covid-19-and-ncds>
5. Lau JTF, Yang X, Pang E, Tsui HY, Wong E, Yun KW. SARS-related perceptions in Hong Kong. *Emerging Infectious Diseases* [Internet]. 2005 Mar [cited 2020 Jul 26];11(3):417-24. Available from: <https://pmc/articles/PMC3298267/?report=abstract>
6. Wu P, Liu X, Fang Y, Fan B, Fuller CJ, Guan Z, et al. EPIDEMIOLOGY Alcohol Abuse/Dependence Symptoms Among Hospital Employees Exposed to a SARS Outbreak. *Alcohol & Alcoholism*. 2008;43(6):706-12.
7. Volkow ND. Collision of the COVID-19 and Addiction Epidemics. *Annals of Internal Medicine* [Internet]. 2020 Apr 2 [cited 2020 Jun 6];M20-1212. Available from: <https://www.acpjournals.org/doi/10.7326/M20-1212>
8. Blaine SK, Milivojevic V, Fox H, Sinha R. Alcohol effects on stress pathways: Impact on craving and relapse risk. Vol. 61, *Canadian Journal of Psychiatry*. SAGE Publications Inc.; 2016. p. 145-53.
9. Molina PE, Happel KI, Zhang P, Kolls JK, Nelson S. Focus on: Alcohol and the immune system. *Alcohol Research and Health* [Internet]. 2010 [cited 2020 Jul 26];33(1-2):97-108. Available from: <https://pmc/articles/PMC3887500/?report=abstract>
10. Orio L, Antón M, Rodríguez-Rojo IC, Correas Á, García-Bueno B, Corral M, et al. Young alcohol binge drinkers have elevated blood endotoxin, peripheral inflammation and low cortisol levels: neuropsychological correlations in women. *Addiction Biology*. 2018 Sep 1;23(5):1130-44.
11. World Health Organization. Alcohol does not protect against COVID-19; access should be restricted during lockdown [Internet]. Geneva: WHO; 2020 [cited 2020 Jun 5]. Available from: <https://www.euro.who.int/en/health-topics/disease-prevention/alcohol-use/news/news/2020/04/alcohol-does-not-protect-against-covid-19-access-should-be-restricted-during-lockdown>
12. Sinha R. Effects of Adrenal Sensitivity, Stress- and Cue-Induced Craving, and Anxiety on Subsequent Alcohol Relapse and Treatment Outcomes. *Archives of General Psychiatry* [Internet]. 2011 Sep 1 [cited 2020 Jun 5];68(9):942. Available from: <http://archpsyc.jamanetwork.com/article.aspx?doi=10.1001/archgenpsychiatry.2011.49>
13. Meyerholz DK, Edsen-Moore M, McGill J, Coleman RA, Cook RT, Legge KL. Chronic Alcohol Consumption Increases the Severity of Murine Influenza Virus Infections. *The Journal of Immunology* [Internet]. 2008 Jul 1 [cited 2020 Jun 6];181(1):641-8. Available from: <http://www.jimmunol.org/lookup/doi/10.4049/jimmunol.181.1.641>
14. Testino G. Are Patients With Alcohol Use Disorders at Increased Risk for Covid-19 Infection? *Alcohol and Alcoholism* [Internet]. 2020 May 13 [cited 2020 Jun 8];2020:1-3. Available from: <https://academic.oup.com/alcalc/advance-article/doi/10.1093/alcalc/agaa037/5827422>
15. Gupta NM, Lindenauer PK, Yu P-C, Imrey PB, Haessler S, Deshpande A, et al. Association Between Alcohol Use Disorders and Outcomes of Patients Hospitalized With Community-Acquired Pneumonia. *JAMA Network Open* [Internet]. 2019 Jun 7 [cited 2020 Jun 7];2(6):e195172. Available from: <http://jamanetworkopen.jamanetwork.com/article.aspx?doi=10.1001/jamanetworkopen.2019.5172>

16. Arcavi L, Benowitz NL. Cigarette Smoking and Infection. *Archives of Internal Medicine* [Internet]. 2004 Nov 8 [cited 2020 Jun 6];164(20):2206. Available from: <http://archinte.jamanetwork.com/article.aspx?doi=10.1001/archinte.164.20.2206>
17. Zhou Z, Chen P, Peng H. Are healthy smokers really healthy? *Tobacco Induced Diseases* [Internet]. 2016 Dec 15 [cited 2020 Jun 6];14(1):35. Available from: <http://www.tobaccoinduceddiseases.org/Are-healthy-smokers-really-healthy-6725702.html>
18. Liu W, Tao ZW, Wang L, Yuan ML, Liu K, Zhou L, et al. Analysis of factors associated with disease outcomes in hospitalized patients with 2019 novel coronavirus disease. *Chinese medical journal* [Internet]. 2020 May 5 [cited 2020 Jun 28];133(9):1032–8. Available from: <http://pmc/articles/PMC7147279/?report=abstract>
19. Vardavas C, Nikitara K. COVID-19 and smoking: A systematic review of the evidence. *Tobacco Induced Diseases* [Internet]. 2020 Mar 20 [cited 2020 Jun 6];18(March). Available from: <http://www.journalssystem.com/tid/COVID-19-and-smoking-A-systematic-review-of-the-evidence,119324,0,2.html>
20. Miyara M, Tubach F, POURCHER V, Morelot-Panzini C, Pernet J, Haroche J, et al. Low incidence of daily active tobacco smoking in patients with symptomatic COVID-19. *Qeios*. 2020 Apr 21.
21. Fontanet A, Tondeur L, Madec Y, Grant R, Besombes C, Jolly N, et al. Cluster of COVID-19 in northern France: A retrospective closed cohort study. *medRxiv* [Internet]. 2020 Apr 23 [cited 2020 Jun 21];2020.04.18.20071134. Available from: <https://www.medrxiv.org/content/10.1101/2020.04.18.20071134v1>
22. Changeux jean-pierre, Amoura Z, Rey F, Miyara M. A nicotinic hypothesis for Covid-19 with preventive and therapeutic implications. *Qeios*. 2020 Apr 21;
23. Ornell F, Moura HF, Scherer JN, Pechansky F, Kessler FHP, von Diemen L. The COVID-19 pandemic and its impact on substance use: Implications for prevention and treatment. *Psychiatry Research* [Internet]. 2020 Jul [cited 2020 Jun 8];289:113096. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0165178120309033>
24. Clay JM, Parker MO. Alcohol use and misuse during the COVID-19 pandemic: a potential public health crisis? *The Lancet Public Health* [Internet]. 2020 May 1 [cited 2020 Jun 6];5(5):e259. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S2468266720300888>
25. Marsden J, Darke S, Hall W, Hickman M, Holmes J, Humphreys K, et al. Mitigating and learning from the impact of COVID-19 infection on addictive disorders. *Addiction* [Internet]. 2020 Jun 28 [cited 2020 Jun 6];115(6):1007–10. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/add.15080>
26. World Health Organization. Harmful use of alcohol, alcohol dependence and mental health conditions: a review of the evidence for their association and integrated treatment approaches [Internet]. Copenhagen; 2019 [cited 2020 Jul 26]. Available from: <http://www.euro.who.int/pubrequest>
27. Ahmed MZ, Ahmed O, Aibao Z, Hanbin S, Siyu L, Ahmad A. Epidemic of COVID-19 in China and associated Psychological Problems. *Asian Journal of Psychiatry*. 2020 Jun 1;51:102092.
28. Yawger G. Social Isolation Predicting Problematic Alcohol Use in Emerging Adults: Examining the Unique Role of Existential Isolation. *Graduate College Dissertations and Theses* [Internet]. 2018 [cited 2020 Jun 29]; Available from: <https://scholarworks.uvm.edu/graddis>
29. Chodkiewicz J, Talarowska M, Miniszewska J, Nawrocka N, Bilinski P. Alcohol Consumption Reported during the COVID-19 Pandemic: The Initial Stage. *International journal of environmental research and public health* [Internet]. 2020 Jun 29 [cited 2020 Jul 13];17(13):4677. Available from: <https://www.mdpi.com/1660-4601/17/13/4677>
30. Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS, et al. Immediate Psychological Responses and Associated Factors during the Initial Stage of the 2019 Coronavirus Disease (COVID-19) Epidemic

- among the General Population in China. *International Journal of Environmental Research and Public Health* [Internet]. 2020 Mar 6 [cited 2020 Jun 5];17(5):1729. Available from: <https://www.mdpi.com/1660-4601/17/5/1729>
31. Dunlop A, Lokuge B, Masters D, Sequeira M, Saul P, Dunlop G, et al. Challenges in maintaining treatment services for people who use drugs during the COVID-19 pandemic. *Harm Reduction Journal* [Internet]. 2020 Dec 6 [cited 2020 Jun 8];17(1):26. Available from: <https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-020-00370-7>
32. Harris M. An urgent impetus for action: safe inhalation interventions to reduce COVID-19 transmission and fatality risk among people who smoke crack cocaine in the United Kingdom. *International Journal of Drug Policy* [Internet]. 2020 [cited 2020 Jul 26]; Available from: <https://dx.doi.org/10.1016%2Fj.drugpo.2020.102829>
33. Alves, DY. *Etnográfica Revista do Centro em Rede de Investigação em Antropologia*. <http://journals.openedition.org/etnografica> [Internet]. 2016 Oct 1 [cited 2020 Jul 23];20(3):495–515. Available from: <http://journals.openedition.org/etnografica/4640>
34. Kuerbis A, Sacco P, Blazer DG, Moore AA. Substance Abuse Among Older Adults. Vol. 30, *Clinics in Geriatric Medicine*. W.B. Saunders; 2014. p. 629–54.
35. Lagisetty PA, Maust D, Heisler M, Bohnert A. Physical and Mental Health Comorbidities Associated With Primary Care Visits For Substance Use Disorders. *Journal of Addiction Medicine* [Internet]. 2017 [cited 2020 Jun 8];11(2):161–2. Available from: <http://journals.lww.com/01271255-201704000-00015>
36. Breet E, Goldstone D, Bantjes J. Substance use and suicidal ideation and behaviour in low- and middle-income countries: a systematic review. *BMC Public Health* [Internet]. 2018 Dec 24 [cited 2020 Jul 14];18(1):549. Available from: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-018-5425-6>
37. Sher L. An infectious disease pandemic and increased suicide risk [Internet]. Vol. 42, *Revista brasileira de psiquiatria (Sao Paulo, Brazil: 1999)*. NLM (Medline); 2020 [cited 2020 Aug 4]. p. 239–40. Available from: <http://www.bjp.org.br/details/989/en-US/an-infectious-disease-pandemic-and-increased-suicide-risk>
38. Job E, Steptoe A, Fancourt D. Abuse, self-harm and suicidal ideation in the UK during the COVID-19 pandemic. *The British Journal of Psychiatry* [Internet]. 2020 Jul 13 [cited 2020 Jul 15];1–4. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/32654678>
39. Hesse M, Thylstrup B, Seid AK, Skogen JC. Suicide among people treated for drug use disorders: A Danish national record-linkage study. *BMC Public Health* [Internet]. 2020 Jan 31 [cited 2020 Jul 15];20(1):146. Available from: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-8261-4>
40. Goyal K, Chauhan P, Chhikara K, Gupta P, Singh MP. Fear of COVID 2019: First suicidal case in India! *Asian Journal of Psychiatry* [Internet]. 2020 Mar 1 [cited 2020 Jun 4];49:101989. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S1876201820300976>
41. Gauthier JM, Cole AB, Bagge CL. A preliminary examination of the association between drinking as a typical coping strategy and level of acute alcohol consumption prior to a suicide attempt. *Psychiatry Research*. 2019 Dec 1;282:112626.
42. Smalley CM, Malone Jr DA, Meldon SW, Borden BL, Simon DO EL, Muir MHSA MR, et al. The impact of COVID-19 on suicidal ideation and alcohol presentations to emergency departments in a large healthcare system. *American Journal of Emergency Medicine* [Internet]. 2020 [cited 2020 Jul 16]; Available from: <https://dx.doi.org/10.1016%2Fj.ajem.2020.05.093>
43. Byraredy SN, Mohan M. SARS-CoV2 induced respiratory distress: Can cannabinoids be added to anti-viral therapies to reduce lung inflammation? Vol. 87, *Brain, Behavior, and Immunity*. Academic Press Inc.; 2020. p. 120–1.

44. Hill KP. Cannabinoids and the Coronavirus. *Cannabis and Cannabinoid Research* [Internet]. 2020 Jun 1 [cited 2020 Jul 26];5(2):118–20. Available from: <https://www.liebertpub.com/doi/10.1089/can.2020.0035>
45. Han L, Ran J, Mak Y-W, Suen LK-P, Lee PH, Peiris JSM, et al. Smoking and Influenza-associated Morbidity and Mortality. *Epidemiology* [Internet]. 2019 May 1 [cited 2020 Jun 21];30(3):405–17. Available from: <http://journals.lww.com/00001648-201905000-00015>
46. Sherbini N, Iskandrani A, Kharaba A, Khalid G, Abduljawad M, AL-Jahdali H. Middle East respiratory syndrome coronavirus in Al-Madinah City, Saudi Arabia: Demographic, clinical and survival data. *Journal of Epidemiology and Global Health* [Internet]. 2016 Mar 1 [cited 2020 Jun 6];7(1):29. Available from: <https://www.atlantis-press.com/article/125905799>
47. Van Zyl-Smit RN, Richards G, Leone FT. Tobacco smoking and COVID-19 infection. *The Lancet Respiratory Medicine* [Internet]. 2020 May [cited 2020 Jul 26];8(7):664. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7247798/>
48. Olds JL, Kabbari N. Is nicotine exposure linked to cardiopulmonary vulnerability to COVID-19 in the general population? *The FEBS Journal* [Internet]. 2020 Mar 28 [cited 2020 Jun 9]; Available from: <http://doi.wiley.com/10.1111/febs.15303>
49. Grundy EJ, Suddek T, Filippidis FT, Majeed A, Coronini-Cronberg S. Smoking, SARS-CoV-2 and COVID-19: A review of reviews considering implications for public health policy and practice. *Tobacco Induced Diseases* [Internet]. 2020 Jul 3 [cited 2020 Jul 26];18(July). Available from: <https://doi.org/10.18332/tid/124788>
50. Silva ALO da, Moreira JC e M, Stella Regina. COVID-19 and smoking: A high-risk association. *Cadernos de Saude Publica* [Internet]. 2020 [cited 2020 Jul 26];36(5):72020. Available from: https://www.scielo.br/pdf/csp/v36n5/en_1678-4464-csp-36-05-e00072020.pdf
51. Clapp PW, Pawlak EA, Lackey JT, Keating JE, Reeber SL, Glish GL, et al. Flavored e-cigarette liquids and cinnamaldehyde impair respiratory innate immune cell function. *American Journal of Physiology - Lung Cellular and Molecular Physiology* [Internet]. 2017 [cited 2020 Jul 20];313(2):L278–92. Available from: <https://doi.org/10.1152/ajplung.00452.2016>
52. Sussan TE, Gajghate S, Thimmulappa RK, Ma J, Kim J-H, Sudini K, et al. Exposure to Electronic Cigarettes Impairs Pulmonary Anti-Bacterial and Anti-Viral Defenses in a Mouse Model. Metzger DW, editor. *PLOS ONE* [Internet]. 2015 Feb 4 [cited 2020 Jul 20];10(2):e0116861. Available from: <https://dx.plos.org/10.1371/journal.pone.0116861>
53. Rolland B, Haesebaert F, Zante E, Benyamina A, Haesebaert J, Franck N. Global changes and factors of increase in caloric/salty food, screen, and substance use, during the early COVID-19 containment phase in France: a general population online survey. (Preprint). *JMIR Public Health and Surveillance*. 2020 Apr 26;
54. Lapeyre-Mestre M, Boucher A, Daveluy A, Gibaja V, Jouanjus E, Mallaret M, et al. Addictovigilance contribution during COVID-19 epidemic and lockdown in France. *Therapies*. 2020 Jun 23;
55. Sun Y, Li Y, Bao Y, Meng S, Sun Y, Schumann G, et al. Brief Report: Increased Addictive Internet and Substance Use Behavior During the COVID-19 Pandemic in China. *The American Journal on Addictions* [Internet]. 2020 Jul 4 [cited 2020 Jul 26];29(4):268–70. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/ajad.13066>
56. Ahmed W, Vidal-Alaball J, Downing J, Seguí FL. COVID-19 and the 5G conspiracy theory: Social network analysis of twitter data. *Journal of Medical Internet Research* [Internet]. 2020 May 1 [cited 2020 Jul 26];22(5):e19458. Available from: <https://www.jmir.org/2020/5/e19458/>
57. Campbell AM. An increasing risk of family violence during the Covid-19 pandemic: Strengthening community collaborations to save lives. *Forensic Science International: Reports* [Internet]. 2020 Dec [cited 2020 Jul 26];2:100089. Available from: <https://dx.doi.org/10.1016%2Fj.fsir.2020.100089>

58. Vigo D, Patten S, Pajer K, Krausz M, Taylor S, Rush B, et al. Mental Health of Communities during the COVID-19 Pandemic [Internet]. Canadian Journal of Psychiatry. SAGE Publications Inc.; 2020 [cited 2020 Jul 26]. p. 070674372092667. Available from: <http://journals.sagepub.com/doi/10.1177/0706743720926676>
59. World Health Organization. Alcohol and COVID-19: what you need to know. Geneva; 2020.
60. Telles LE de B, Valença AM, Barros AJS, da Silva AG. Domestic violence in the COVID-19 pandemic: a forensic psychiatric perspective. Brazilian Journal of Psychiatry [Internet]. 2020 Jun 1 [cited 2020 Aug 5];0(0). Available from: <http://www.bjp.org.br/details/2007/en-US/domestic-violence-in-the-covid-19-pandemic-a-forensic-psychiatric-perspective>
61. Krapp J. Portal.fiocruz. Pesquisa revela dados sobre o consumo de drogas no Brasil [Internet]. 2019 [cited 2020 Jul 26]. Available from: <https://portal.fiocruz.br/noticia/pesquisa-revela-dados-sobre-o-consumo-de-drogas-no-brasil>
62. Neto MLR, de Souza RI, Quezado RMM, Mendonça ECS, de Araújo TI, Luz DCRP, et al. When basic supplies are missing, what to do? Specific demands of the local street population in times of coronavirus – a concern of social psychiatry [Internet]. Vol. 288, Psychiatry Research. Elsevier Ireland Ltd; 2020 [cited 2020 Jul 26]. p. 112939. Available from: <https://doi.org/10.1016/j.psychres.2020.112939>
63. Da BL, Im GY, Schiano TD. COVID-19 Hangover: A Rising Tide of Alcohol Use Disorder and Alcohol-Associated Liver Disease. Hepatology [Internet]. 2020 May 5 [cited 2020 Jul 26];hep.31307. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1002/hep.31307>
64. Nelson LM, Simard JF, Oluyomi A, Nava V, Rosas LG, Bondy M, et al. US Public Concerns about the COVID-19 Pandemic from Results of a Survey Given via Social Media. JAMA Internal Medicine. American Medical Association; 2020.
65. Dewey C. The Guardian. “Quarantinis” and beer chugs: Is the pandemic driving us to drink? | Coronavirus outbreak [Internet]. The Guardian. 2020 [cited 2020 Jul 26]. Available from: <https://www.theguardian.com/us-news/2020/apr/27/coronavirus-pandemic-drinking-alcohol>
66. Mehra A, Rani S, Sahoo S, Parveen S, Singh AP, Chakrabarti S, et al. A crisis for elderly with mental disorders: Relapse of symptoms due to heightened anxiety due to COVID-19. Asian Journal of Psychiatry [Internet]. 2020 Jun 1 [cited 2020 Jul 26];51:102114. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7166027/>
67. Fatke B, Hölzle P, Frank A, Förstl H. Psychische Probleme in der Pandemie – Beobachtungen während der COVID-19-Krise. DMW - Deutsche Medizinische Wochenschrift [Internet]. 2020 May 9 [cited 2020 Jun 4];145(10):675–81. Available from: <http://www.thieme-connect.de/DOI/DOI?10.1055/a-1147-2889>
68. Organização Pan-Americana da Saúde (OPAS/OMS). Proteção Da Saúde Mental Em Situações De Epidemias [Internet]. 2006 [cited 2020 Jun 9]. Available from: <https://www.paho.org/hq/dmdocuments/2009/Protecao-da-Saude-Mentalem-Situacoes-de-Epidemias-Portugues.pdf>
69. Finlay I, Gilmore I. Covid-19 and alcohol-a dangerous cocktail [Internet]. Vol. 369, BMJ (Clinical research ed.). NLM (Medline); 2020 [cited 2020 Jul 27]. p. m1987. Available from: <https://alcoholchange.org.uk/publication/roles-of-alcohol-in-intimate-partner->
70. Brasil. NOTA TÉCNICA N°12/2020-CGMAD/ DAPES/ SAPS/ MS [Internet]. 2020 May [cited 2020 Jul 26]. Available from: <http://portal.anvisa.gov.br/documents/219201/4340788/Nota+Te%C2%B4cnica+12+GGTES.pdf/42dfec78-8651-4714-b5dd-e9840f9b6037>
71. Becker WC, Fiellin DA. When Epidemics Collide: Coronavirus Disease 2019 (COVID-19) and the Opioid Crisis. Annals of internal medicine [Internet]. 2020 Jul 7 [cited 2020 Jul 27]; Available from: <https://www.acpjournals.org/doi/abs/10.7326/M20-1210>

72. Chevance A, Gourion D, Hoertel N, Llorca PM, Thomas P, Bocher R, et al. Ensuring mental health care during the SARS-CoV-2 epidemic in France: A narrative review. *L'Encephale*. 2020 Jun 1;46(3):193–201.
73. Organização Pan-Americana da Saúde (OPAS/OMS). OPAS/OMS Brasil - Folha informativa – COVID-19 (doença causada pelo novo coronavírus) [Internet]. OPAS/OMS. 2020 [cited 2020 Jul 27]. Available from: https://www.paho.org/bra/index.php?option=com_content&view=article&id=6101:covid19&Itemid=875
74. Alexander GC, Stoller KB, Haffajee RL, Saloner B. An Epidemic in the Midst of a Pandemic: Opioid Use Disorder and COVID-19. *Annals of internal medicine* [Internet]. 2020 Jul 7 [cited 2020 Jul 27]; Available from: <https://dx.doi.org/10.7326%2FM20-1141>
75. Dubey MJ, Ghosh R, Chatterjee S, Biswas P, Chatterjee S, Dubey S. COVID-19 and addiction. *Diabetes and Metabolic Syndrome: Clinical Research and Reviews* [Internet]. 2020 Sep 1 [cited 2020 Jul 27];14(5):817–23. Available from: <https://dx.doi.org/10.1016%2Fj.dsx.2020.06.008>
76. Varma RP. Alcohol withdrawal management during the Covid-19 lockdown in Kerala. *Indian journal of medical ethics*. 2020 Apr 1;V(2):105–6.
77. Ahmed S, Khaium MO, Tazmeem F. COVID-19 lockdown in India triggers a rapid rise in suicides due to the alcohol withdrawal symptoms: Evidence from media reports. *International Journal of Social Psychiatry* [Internet]. 2020 Jun 26 [cited 2020 Jul 27];002076402093880. Available from: <http://journals.sagepub.com/doi/10.1177/0020764020938809>
78. Columb D, Hussain R, O'Gara C. Addiction Psychiatry and COVID-19 – Impact on patients and service provision. *Irish Journal of Psychological Medicine* [Internet]. 2020 May 21 [cited 2020 Jun 5];1–15. Available from: https://www.cambridge.org/core/product/identifier/S0790966720000476/type/journal_article
79. Narasimha VL, Shukla L, Mukherjee D, Menon J, Huddar S, Panda UK, et al. Complicated Alcohol Withdrawal—An Unintended Consequence of COVID-19 Lockdown. *Alcohol and Alcoholism*. 2020 Jun 25;55(4):350–3.
80. DEA. U.S. Department of Justice, Drug Enforcement Administration. COVID_19 Information Page: Telemedicine. 2020.
81. Samhsa. Opioid Treatment Program (OTP) Guidance [Internet]. 2020 [cited 2020 Jul 27]. Available from: www.samhsa.gov
82. Moring JC, Dondanville KA, Fina BA, Hassija C, Chard K, Monson C, et al. Cognitive Processing Therapy for Posttraumatic Stress Disorder via Telehealth: Practical Considerations During the COVID-19 Pandemic. *Journal of Traumatic Stress* [Internet]. 2020 Jun 11 [cited 2020 Jul 27];jts.22544. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1002/jts.22544>
83. Zhou X, Snoswell CL, Harding LE, Bambling M, Edirippulige S, Bai X, et al. The Role of Telehealth in Reducing the Mental Health Burden from COVID-19 [Internet]. Vol. 26, *Telemedicine and e-Health*. Mary Ann Liebert Inc.; 2020 [cited 2020 Jul 27]. p. 377–9. Available from: www.blackdoginstitute.org.au/getting-help/self-help-tools-apps
84. Conejero I, Berrouiguet S, Ducasse D, Leboyer M, Jardon V, Olié E, et al. Suicidal behavior in light of COVID-19 outbreak: Clinical challenges and treatment perspectives. *Encephale* [Internet]. 2020 [cited 2020 Jul 27];46(3):S66. Available from: <https://doi.org/10.1016/j.encep.2020.05.001>
85. Kannarkat JT, Smith NN, McLeod-Bryant SA. Mobilization of Telepsychiatry in Response to COVID-19—Moving Toward 21st Century Access to Care. *Administration and Policy in Mental Health and Mental Health Services Research* [Internet]. 2020 Jul 1 [cited 2020 Jul 27];47(4):489–91. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7180652/>
86. Liu S, Yang L, Zhang C, Xiang YT, Liu Z, Hu S, et al. Online mental health services in China during the COVID-19 outbreak [Internet]. Vol. 7, *The Lancet Psychiatry*. Elsevier Ltd; 2020 [cited

- 2020 Jul 26]. p. e17-8. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7129099/>
87. Varker T, Brand RM, Ward J, Terhaag S, Phelps A. Efficacy of Synchronous Telepsychology Interventions for People With Anxiety, Depression, Posttraumatic Stress Disorder, and Adjustment Disorder: A Rapid Evidence Assessment. *Psychological Services* [Internet]. 2018 May 28 [cited 2020 Jul 27]; Available from: <https://doi.org/10.1037/ser0000239>
88. Barney A, Buckelew S, Mesheriakova V, Raymond-Flesch M. The COVID-19 Pandemic and Rapid Implementation of Adolescent and Young Adult Telemedicine: Challenges and Opportunities for Innovation. *Journal of Adolescent Health* [Internet]. 2020 [cited 2020 Jul 26]; Available from: <https://dx.doi.org/10.1016%2Fj.jadohealth.2020.05.006>
89. Burgess C, Miller C, Franz A, Abel EA, Gyulai L, Osser D, et al. Practical lessons learned for assessing and treating bipolar disorder via telehealth modalities during the COVID-19 pandemic. *Bipolar Disorders* [Internet]. 2020 Jul [cited 2020 Jul 26]; bdi.12969. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/bdi.12969>
90. Qiu J, Shen B, Zhao M, Wang Z, Xie B, Xu Y. A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: Implications and policy recommendations [Internet]. Vol. 33, *General Psychiatry*. BMJ Publishing Group; 2020 [cited 2020 Jul 27]. p. 100213. Available from: <https://gpsych.bmj.com/content/33/2/e100213>
91. Khatri UG, Perrone J, Khatri U. Opioid Use Disorder and COVID-19: Crashing of the Crises. 2020.
92. Harzheim E, Martins C, Wollmann L, Pedebos LA, Faller L de A, Marques MDC, et al. Federal actions to support and strengthen local efforts to combat COVID-19: Primary health care (PHC) in the driver's seat. *Ciencia e Saude Coletiva* [Internet]. 2020 Jun 1 [cited 2020 Jul 27]; 25:2493-7. Available from: <http://orcid.org/0000-0003-3384-2637>
93. Sarti TD, Lazarini WS, Fontenelle LF, Almeida APSC. Qual o papel da Atenção Primária à Saúde diante da pandemia provocada pela COVID-19? *Epidemiologia e serviços de saúde: revista do Sistema Unico de Saude do Brasil* [Internet]. 2020 [cited 2020 Jul 27]; 29(2):e2020166. Available from: <http://www.ihu.unisinos.br/78-noticias/596584-o->
94. Udemer M, Peiffer G, Perriot J, Jaafari N. Pulmonary complications in cocaine users [Internet]. Vol. 37, *Revue des Maladies Respiratoires*. Elsevier Masson SAS; 2020 [cited 2020 Jun 29]. p. 45-59. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S076184251931037X>
95. World Health Organization. Alcohol brief intervention training manual for primary care. Copenhagen; 2017.
96. Karamouzian M, Johnson C, Kerr T. Public health messaging and harm reduction in the time of COVID-19 [Internet]. Vol. 7, *The Lancet Psychiatry*. Elsevier Ltd; 2020 [cited 2020 Jul 26]. p. 390-1. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7185931/>
97. Associação Saúde da Família. Associação Saúde da Família. Grupos de Anônimos [Internet]. [saudedafamilia.org](http://www.saudedafamilia.org). 2020 [cited 2020 Jul 26]. Available from: http://www.saudedafamilia.org/_wp/index.php/pt/home/rede-atendimento-emocional-psicologico/grupos-de-anonimos/
98. Brasil, Cidadania e Assistência Social. Comunidades Terapêuticas e grupos auxiliam quem precisa de apoio durante pandemia — Português (Brasil) [Internet]. gov.br. 2020 [cited 2020 Jul 26]. Available from: <https://www.gov.br/pt-br/noticias/assistencia-social/2020/06/comunidades-terapeuticas-e-grupos-auxiliam-quem-precisa-de-apoio-durante-pandemia>
99. Hoffman J. The New York Times. Online Help to Stay Sober During a Pandemic [Internet]. The New York Times. [cited 2020 Jul 26]. Available from: <https://www.nytimes.com/2020/03/26/health/coronavirus-sobriety-online-help.html>

100. Alcoólicos Anônimo. Alcoólicos Anônimo do Brasil. COVID19 [Internet]. Alcoólicos Anônimo do Brasil. 2020 [cited 2020 Jul 26]. Available from: <https://www.aa.org.br/membros/covid19>

101. Laranjeira R. VEJA. Como dependentes de álcool e drogas estão vivendo no isolamento social [Internet]. veja.abril. 2020 [cited 2020 Jul 26]. Available from: <https://veja.abril.com.br/blog/letra-de-medico/como-dependentes-de-alcool-e-drogas-estao-vivendo-no-isolamento-social/>

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