

# Will changes in alcohol and tobacco use be seen during the COVID-19 lockdown?

## ¿Se observarán cambios en el consumo de alcohol y tabaco durante el confinamiento por COVID-19?

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### Introduction

The coronavirus pandemic (COVID-19) of recent months has triggered a global emergency. Reactions of anxiety, worry or fear are estimated to be frequent across general population given the unknown and novel nature of the disease, and the social distancing measures resulting from the state of alarm. However, the potential psychological impact, not only of coronavirus per se but also of lockdown, is still unknown, as we are facing an exceptional and unprecedented situation.

Some studies focusing on the impact of Severe Acute Respiratory Syndrome (SARS), the first massive outbreak of an infectious disease in the 21st century, have shown significant repercussions on people's mental health and their level of well-being (Ko, Yen, Yen & Yang, 2006), even four years after the epidemic (Lam et al., 2009). People talk about "bio-disasters" capable of generating psychological impacts comparable to those of other catastrophes such as terrorist attacks, earthquakes, etc. (Chong et al., 2004; Wu et al., 2008). In the case of exposure to SARS, post-traumatic stress disorder and depressive disorders have been

shown to be the most prevalent mental disorders during long-term follow-up (Mak, Chu, Pan, Yiu & Chan, 2009). However, during SARS, neither the measures implemented nor the level of global impact were as extreme as on this occasion, so the effects of the COVID-19 pandemic can be expected to be even greater.

During the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) outbreak in 2015, which caused the confinement of almost 17,000 people exposed to it, an increased risk of post-traumatic stress symptoms was observed in health workers who had treated infected patients (Lee, Kang, Cho, Kim & Park, 2018), as well as symptoms of anxiety (7.6%), anger (16.6%) and depression (19.3%), even among those under isolation measures without having become infected themselves (Yoon, Kim, Ko & Lee, 2016); in many cases, these symptoms continued during the 4-6 month period after confinement (Jeong et al., 2016).

Studies published on the psychological impact of COVID-19 in China have observed emotional distress, with severe anxiety responses present in one third of the general population (Lima et al., 2020; Wang et al., 2020). However,

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a study carried out with a large general population sample in Spain showed how during the first weeks of lockdown (from March 19 to 26) the most frequently observed pathological psychological responses were depressive symptoms (46.7%), followed by avoidance behaviour (44.3%). Furthermore, contrary to expectations, anxiety responses were the least frequent, affecting 6.1% of the population (García-Álvarez et al., 2020). Likewise, the psychological effects of lockdown seem to increase as the days go by (García-Álvarez et al., 2020) and in certain vulnerable groups of the population, such as healthcare workers (Bai et al., 2004; Maunder et al., 2003), people with past somatic disease or those with or current mental disorder, more specifically, depression, anxiety or bipolar disorder (García-Álvarez et al., 2020). Similarly, people with substance use disorders could represent at-risk groups (Pfefferbaum & North, 2020).

At issue is how this public health emergency may generate not only negative dysfunctional responses but also a lack of compliance with public health directives and at the same time trigger unhealthy behaviours such as substance use abuse (Pfefferbaum & North, 2020). The following have been put forward as potentially the most frequent responses to lockdown: stress, depression, irritability, insomnia, fear, confusion, anger, frustration, boredom or stigma, while there is also a concern that these symptoms may persist long after the quarantine period (Brooks et al., 2020). Moreover, it has also been pointed out that such measures could have a notable impact in the form of increased suicide risk in the population (Reger, Stanley & Joiner, 2020).

In the face of such a radical change in our behaviour and habits (social distancing, teleworking, limits to sports and leisure activities outside our homes, etc.), the search for alternative activities is not surprising. While the importance of expressing negative emotions, keeping in touch with family and friends, doing regular activities, leisure activities, etc. is acknowledged (Park & Park, 2020), other activities such as drinking, smoking and the use of other substances could also increase, not only as a form of distraction or a behavioural avoidance strategy but also as a result of the stress, anxiety or depressive symptoms that are being experienced.

## Alcohol

Exposure to situations capable of generating post-traumatic stress disorders, such as terrorist attacks, natural disasters (earthquakes, volcanic eruptions) or accidents, has been associated with increased rates of alcohol abuse and dependence in some studies (Boscarino, Adams & Galea, 2006; Lebeaut, Tran & Vujanovic, 2020). However, results have shown the opposite tendency in others (North, Kawasaki, Spitznagel & Hong, 2004; Shimizu et al., 2000). It is therefore essential to analyze which factors are able to determine the differences found in these studies and esti-

mate the extent to which these behaviours may be on the increase during this period of lockdown.

In the case of SARS, alcohol abuse or dependence was linked to working in health care during the epidemic, even three years after the outbreak (Wu et al., 2008). A higher degree of exposure to the virus and having to be isolated as a consequence were identified as risk factors. However, having family members affected or killed by SARS, or being exposed to news about the epidemic, were not related to alcohol abuse and dependence. In addition, a dose-response relationship was identified between intensity of virus exposure and symptoms of long-term alcohol abuse and dependence (Wu et al., 2008).

Regarding the COVID-19 pandemic, there are still no data on substance abuse disorders, or studies assessing the possible increase in consumption as a consequence of lockdown.

## Tobacco

The use of alcohol, tobacco, and marijuana often occurs together (Degenhardt, Hall & Lynskey, 2001). It has been shown that smoking increases in the face of various environmental stressors, such as armed conflicts, natural disasters, etc. However, as in the case of alcohol (Sánchez-Autet et al., 2018), the possibility has been raised that this use is mediated by depressive symptoms or post-traumatic stress disorders (Ben-Zur & Zeidner, 2009; Jiménez-Treviño et al., 2019; Gross, Bastian, Smith, Harpaz-Rotem & Hoff, 2020). Differences based on gender have also been observed; specifically, it seems that women resort to smoking more frequently than men to regulate negative affect (Japuntich et al., 2016).

Regarding the COVID-19 pandemic, people who smoke or use vapers have been identified as a group more vulnerable to infection and its associated complications (Cai, 2020) since pathologies such as cardiovascular or comorbid respiratory diseases, which are more prevalent in chronic smokers, have been linked to a worse prognosis in patients infected with COVID-19 (Volkow, 2020). Therefore, special attention should be paid to this group given the increased risk of infection and the serious consequences they face.

It is also necessary to establish the extent to which changes in smoking patterns (new users, increased frequency, intensity of consumption, etc.) are taking place as a consequence of emotional distress, or as an avoidance strategy or alternative to boredom during lockdown and the pandemic.

## Assessment and intervention

For all the above reasons, an assessment of emotional disturbances and behavioural changes is necessary, not only for the present moment in time, but also prospec-

tively, especially in people with persistent dysfunctional responses, with the aim of creating specific interventions adapted to current needs. To this end, it is necessary to determine what the vulnerability factors as well as the protective factors are, and to design adapted programs.

Among the psychological support measures proposed in China to address COVID-19 is a multidisciplinary approach which includes, among others, psychologists, psychiatrists, and mental health specialists, and which aims to provide reliable and up-to-date information on the pandemic and to establish different services to provide psychological support, which may include internet-based treatment programs (Xiang et al., 2020).

In Spain, in addition to the standard mental health approach, currently being applied whenever possible by telephone, there are helplines staffed by psychologists providing support to health professionals, family members of people hospitalized by COVID-19 or in cases in which a death has occurred (informing the relatives, asking for consent for sedation, facilitating a final contact and reporting the death as it occurs) (Arango, 2020).

## Conclusions

While the coronavirus pandemic (COVID-19) and lockdown could trigger dysfunctional responses such as anxiety or depression, it could also lead to an increase in unhealthy behaviours such as excessive drinking or smoking.

It is necessary to develop psychological support measures for the entire population and, in particular, for the most vulnerable groups as well as for those who develop disorders as a consequence.

Moreover, it should be remembered that people subjected to situations of stress and isolation such as the current scenario could resort more frequently to substance use to alleviate negative emotions. Those with a substance use disorder in remission could also have to cope with tension and more intense cravings, leading to an increased risk of relapse. Therefore, primary care physicians and mental health specialists should pay special attention to this possibility, assessing their patients' situation and examining them to ensure they are free of any signs of substance abuse.

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## Conflict of interests

The authors declare no conflicts of interest.

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