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## Drug consumption during prolonged lockdown due to Covid-19 as observed in French addiction center

### KEYWORDS

COVID-19;  
 Coronavirus;  
 Surveys;  
 Drug addiction;  
 Drug dependence

### Abbreviations

COVID-19 coronavirus disease  
 CSAPA Center for Supportive Care and Prevention in Addic-  
 tology  
 OAT opioid agonist treatments  
 SARS-CoV-2 severe acute respiratory syndrome coronavirus  
 2  
 WHO World Health Organization

### Introduction

Coronavirus disease (COVID-19), which is caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was first identified in December 2019 in Wuhan, China, and has since spread rapidly, evolving into a full-blown pandemic [1]. On March 17, the French government declared a massive lockdown to impose a total stop of population movements throughout the territory. Lockdown lasted 8 weeks in France until May 11. During this lockdown, all medical consultations other than COVID 19 or vital emergencies were limited to the strict minimum. The regulations have been amended to allow patients to continue their chronic treatment using their expired prescription. The pharmacist could renew the treatment on presentation of an expired renewable prescription, regardless of the number of renewals. Dispensing was guaranteed for a maximum period of four weeks and in accordance with the dosage initially planned. He could also renew an expired non-renewable prescription if the patient had been on his treatment for at least three months (successive monthly prescriptions for at least three months). Regarding narcotic drugs such as opioid agonist treatments (OAT), the pharmacist could also renew them at identical dosages after agreement of the prescriber. Addiction centers were temporarily allowed to dispense methadone (syrup form) for 28 days, instead a maximum of 14 days normally. In our center specialized in illicit drugs, we stayed open and we

have used this possibility (dispensing for 28 days) and we changed from in-person consultations to phone consultations when possible (otherwise, face-to-face consultations were maintained). Following these virtual consultations, prescriptions were sent if necessary, to the patient's pharmacy so that the patient could get his treatment as close as possible from his home. During this unprecedented period, all of our lifestyle habits were turned upside down. To what extent has this lockdown disturbed our patients suffering from addiction treated at the Center for Supportive Care and Prevention in Addictology (CSAPA)? To find it out, we carried out a survey on our users. The objective was to measure the impact of this lockdown on the addictions of our patients and thus to better understand them. As anxiety, mood and sleep are factors related to consumption; we asked them if that period had led them to a change in their condition.

### Methods

The CSAPA in which we conducted the survey is a hospital CSAPA specializing in illicit drugs and sexual addictions with or without products (Chemsex). This center is located in Lyon (France) and has an active file of 1020 patients. The anonymous survey was not submitted to an ethics committee but was validated internally by the multidisciplinary team (doctors, pharmacist, nurses, psychologists, social workers and medical secretary). This questionnaire was administered by one of the center's professionals to all users who presented for a consultation, an interview or for dispensing of opioid substitution medication between May 19 and June 12. Patients were free to accept or refuse to answer the questionnaire. It was not offered to non-French speaking patients unless a translator was available. All questions were related to the lockdown period in France (from March 17 to May 11, 2020). The first question was about housing, the second one about entourage and the third one about work. Then, we asked them about their feelings about the arduousness (painful, bearable, pleasant or indifferent) of the period before questioning them on the evolution of their consumption (tobacco, alcohol, cannabis, psychostimulants, heroin, anxiolytics, opioid substitution treatment and behavioral addiction). The sixth question concerned mood, level of anxiety and quality of sleep. We asked them whether or not, during this period, they had felt a worsening or an improvement of their health condition. Finally, the following questions related to COVID-19 (contamination, access measures to the center and fears about this epidemic) and the sanitary measures imposed for their visit, as well as their feelings about telephone consultations if necessary.

The answers to the anonymous questionnaires were then recorded in an Excel® table (2010, Microsoft Corporation, United States) to extract the pertinent data and the descriptive statistics.

### Results

A total of 219 questionnaires were completed over the period, which represented 62.9% of all patient visits (including non-French speaking patients); 78.4% ( $n = 171$ ) were men and 21.6% ( $n = 47$ ) were women (1 missing data). The average age was 42.9 years (min: 22 years max: 70 years); 74.4%

**Table 1** Reported changes in drug consumption.

Drugs	Tobacco	Alcohol	Cannabis	Psycho-stimulant <sup>a</sup>	Heroin	Anxiolytic/ BZD <sup>b</sup>	Methadone	BUP <sup>c</sup>	Behavioral <sup>d</sup>
Not concerned <i>n</i> (%)	32 (14.9)	94 (43.9)	117 (54.4)	145 (67.8)	165 (77.5)	135 (62.5)	61 (28.5)	184 (86.0)	150 (79.4)
Missing values <i>n</i> (%)	4 (1.8)	5 (2.3)	4 (1.8)	5 (2.3)	6 (2.7)	3 (1.4)	5 (2.3)	5 (2.3)	30 (13.7)
<b>Concerned <i>n</i> (%)</b>	<b>183 (85.1)</b>	<b>120 (56.1)</b>	<b>98 (45.6)</b>	<b>69 (32.2)</b>	<b>48 (22.5)</b>	<b>81 (37.5)</b>	<b>153 (71.5)</b>	<b>30 (14.0)</b>	<b>39 (20.6)</b>
Unchanged <i>n</i> (%)	106 (57.9)	60 (50.0)	54 (55.1)	33 (47.8)	20 (41.7)	55 (67.9)	115 (75.2)	21 (70.0)	13 (33.3)
Increased <i>n</i> (%)	50 (27.3)	35 (29.2)	27 (27.6)	25 (36.2)	19 (39.6)	21 (25.9)	22 (14.4)	7 (23.3)	19 (48.7)
Decrease <i>n</i> (%)	27 (14.8)	25 (20.8)	17 (17.3)	11 (16.0)	9 (18.7)	5 (6.2)	16 (10.4)	2 (6.7)	7 (18.0)

<sup>a</sup> Psychostimulants: cocaine, amphetamines, cathinones (3MMC...).

<sup>b</sup> BZD: benzodiazepines.

<sup>c</sup> BUP: buprenorphine.

<sup>d</sup> Behavioral: sex, pornography, gaming, gambling, shopping...

(*n* = 163) had personal accommodation, 16.9% (*n* = 37) were staying with a loved one, 4.6% (*n* = 10) were in shelters and 4.1% (*n* = 9) were homeless; 36.1% (*n* = 79) lived alone while 50.2% (*n* = 110) lived with their family and 13.7% (*n* = 30) with an acquaintance.

Concerning work, 37.9% (*n* = 74, 24 missing data) were jobless. Among those who had a job (*n* = 121), 43.8% (*n* = 53) continued to work and 56.2% (*n* = 68) were put on partial unemployment during the lockdown.

Concerning feelings about the arduousness of this unprecedented period, 16.9% (*n* = 37) experienced it as pleasant and beneficial. The majority (48.9%, *n* = 107) supported it while 29.7% (*n* = 65) found it painful and difficult. Finally, 4.5% (*n* = 10) did not see any difference.

Among the 53 persons who continued to work during lockdown, 12 (22.6%) found this period painful, while among the people who found themselves unemployed (*n* = 68) they were 18 (26.5%) to find it painful. Finally, among the patients who did not work before this epidemic (*n* = 74), 28 (37.8%) found it painful.

Concerning drug consumption, the results are presented in Table 1.

Mood of the patients remained stable for 61.0% (*n* = 133, 1 missing data) of the patients while it worsened for 30.3% (*n* = 66) and improved for 8.7% (*n* = 19). During lockdown, 52.3% (*n* = 114, 1 missing data) did not see any change in their state of anxiety while 42.2% (*n* = 92) felt more anxious and 5.5% (*n* = 12), to the contrary, felt less anxious. Concerning the quality of sleep, 53.2% (*n* = 116, 1 missing data) did not feel any change, while 35.3% (*n* = 77) slept less and 11.5% (*n* = 25) said they had slept better.

Regarding the question on COVID-19 contamination, 13.2% (*n* = 29) thought they had it, including 82.8% (*n* = 24) with clinical signs. Of these 29 responses, only 10.3% (*n* = 3) reported having had a positive coronavirus test.

To the question about their feelings on the strict measures to access the center (entry one by one, and no longer with free access) during the lockdown period, the majority (81.3%, *n* = 178) found them suitable. Only 2.3% (*n* = 5) people found them exaggerated and 16.4% (*n* = 36) had no opinion. Then, we asked them if they were afraid to come to the center, 84.5% (*n* = 185) said no. Regarding their feelings of our health measures (hand cleaning with an alcoholic solution, wearing a mask, entry and exit flows...), 83.0% (*n* = 181, 1 missing data) found them satisfactory while 1.4% (*n* = 3) thought that we should have done more and 15.6% (*n* = 34) had no opinion.

Regarding telephone consultations, 23.3% (*n* = 51) of the interviewed people used them, with a total of 71 consultations. Respectively 95.7% (for the nurses), 92.0% (for the psychologists), 100% (for the social workers) and 94.7% (for the doctors) of those who have used this possibility of delocalized medico-psychosocial follow-up found it suitable for the situation. 54.3% (*n* = 25, 5 missing data) of them would also like that this possibility of consultation by telephone would continue after the pandemic.

## Discussion

Regarding the response rate (62.9%), not all patients could be interviewed. Indeed, we must take into account that our center's patient base includes a non-negligible part of non-French speakers who require an interpreter. In the

absence of an interpreter (during drugs dispensing), the questionnaire could not be administered and when we had one (during consultations), sometimes we could not delay him in his next missions with this survey. In addition, some patients were in a hurry, some doctors were late in their consultations and not all professionals participated in this survey.

The gender ratio and the average age are consistent with the population followed in addiction centers [2]. Despite the many biases described above, we believe that this survey is fairly representative of the population followed in an addiction center for illicit drugs.

The feeling about the arduousness of the lockdown seems to be linked to the fact that one has a job or not. However, the study does not have the statistical power to determine if there is a meaningful difference between those who continued to work and those putted on temporary unemployment. We have noticed over time that the farther we get from lockdown, the smaller number of people report this period as painful. Looking backwards, they found it more bearable. However, it will be necessary to wait for the publication of larger French or international studies to confirm this trend or to inform it.

According to preliminary data from the Global Drugs Survey [3], 47.1% of French interviewed people increased their alcohol consumption and 25.5% decreased (all countries). About cannabis, 54.2% of French interviewed people used it with increased amounts for 27.3% of them and a decrease for 36.5%. Regarding anxiolytics, 41.2% of users have not changed their habits, 17.2% have increased the number of days of consumption, and 41% have decreased. In our survey, the data (alcohol: 29.2% increased and 20.8% decreased, cannabis: 27.6% increased and 17.3% decreased) are different but the population is not the same. In the Global Drugs Survey, the average age is 28 and the gender ratio is much more balanced than in our sample (addictology center). The trend of increasing alcohol consumption is confirmed in these two studies; on the other hand, this is not the case for cannabis where they find more decline than increase whereas we have obtained in our results the opposite. With the exception of OAT which is explained by identical renewal by pharmacists, our results show that if half of the people have not changed their consumption level, for the other half, there is overall more increase than decrease. According to our survey, the two consumptions that increased the most during lockdown were behavioral activities and heroin. Regarding the increase in behavioral activities, it seems plausible that this is related to more free time during lockdown, but this causality was not explored in the investigation.

France introduced financial compensation to all those who have been unable to work. This fundamental element makes it difficult to compare with other countries, which have not implemented such significant financial support.

During the lockdown, we thought that patients would consume less and we dreaded that the end of lockdown would lead to a resume of consumption and to a risk of overdose. This risk was taken very seriously and the French addictovigilance network communicated regularly in order to sensitize health care professionals [4]. On our side, we have also worked in this direction by creating posters to warn patients and we have continued to distribute the naloxone

kit for patients dependent on opiates. Our figures do not show a significant drop in consumption, which is a proof that our patients had the resources to get their drugs.

Regarding tobacco and alcohol, accessibility to these products during the lockdown was not different. Unlike in India [5], sales continued and the French were able to buy them freely in stores. The tendency to increase consumption can therefore be understood with a very anxiety-provoking period and inactivity [6]. World Health Organisation (WHO) quote [7]: ‘‘Fear, worry, and stress are normal responses to perceived or real threats, and at times when we are faced with uncertainty or the unknown. So it is normal and understandable that people are experiencing fear in the context of the COVID-19 pandemic.’’ Is it this anxiety-provoking atmosphere that has pushed nearly 40% of our heroin users to increase their consumption?

Overall, our figures show that our patients have been successful in obtaining their illicit drugs and that the dealers have adapted to the conditions of the lockdown as described in the local press [8]. However, for people who have reduced their consumption, we have not explored the reasons. Indeed, some may have had difficulty accessing drugs while others may have been less solicited because of less social interaction or they took advantage of this period to regain control of their consumption. If this decrease is related to less access to products, our results are underestimated. Likewise, for users who have declared that they have maintained their consumption in the same way, we do not know whether this stability is linked or not to an accessibility problem, which would in fact have prevented any increase.

Regarding mood, anxiety and sleep, if half of the patients was not impacted, the other half saw them more degraded than improved. Is it this same half who did not modify his consumption and who does not declare a change in psychological state? Similarly, is it those who increased their consumption that declares an aggravation?

Some people declared they have contracted covid-19. With the exception of three patients who declared having had a positive test, the others thought they had it based on clinical signs. However, COVID is paucisymptomatic or asymptomatic for the majority of people, these figures may be underestimated. Conversely, as the symptoms are mostly non-specific (cough, fever, pain, diarrhea, headache, body aches...) it is impossible to confirm that those statements are real or not.

Concerning the almost total satisfaction of the measures taken at the center, it is possible that this figure is overestimated because the patient did not wish to say the opposite to the health care professionals. It is the same conclusion, which can be drawn on the telephone consultations: almost everybody found it suitable. However, they are divided when they are asked to continue this type of consultations for some, it’s a saving of time, for others, the physical presence remains essential.

## Conclusion

The lockdown period was never experienced before and has changed the life of each of us. Overnight, all our habits were turned upside down. The cessation of work, activities and travel associated with the anxiety-provoking climate (deadly

count every day) disturbed our habits and led for some to a deterioration of mood, sleep and increased anxiety. Half of our drug dependent patients seems to be impacted and they were able to modify their consumption, perhaps in connection with this change. If the supply difficulties could have led a reduction in their consumption, the survey shows the opposite: if an half did not change, for the other one, it is rather an upward trend (especially for behavioral addictions and heroin). We have modified our practices during the lockdown to allow patients who do not wish to come, to be managed by teleconsultation. Those who have benefited from this service are rather satisfied with this possibility, which has been offered to them, and a small majority would like it to continue.

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### Disclosure of interest

The authors declare that they have no competing interest.

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