

## IMPACT OF COVID-19 PANDEMIC ON SUBSTANCE USE

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### **Abstract:**

This study is conducted to find how the COVID-19 pandemic had an impact on substance use. The main aim of this study is to find out the prevalence of substance use- Heroin, Alcohol, Tobacco, and Tablets (SP, N-10, WY) and if there is an economic change due to the pandemic. Data were collected from 40 Inmates from Life Control Foundation Rehabilitation Centre for Substance Abuse and Behavior Addiction, Ushoipokpi Thoubal District, Manipur by using Random sampling method. Percentage and Chi-square were used as Statistical tools for the analysis of data. The data were collected during December 2022. From the study, it is found that 85% of respondents used substances more than once in a day and 2.5% once in a day before the pandemic. 70% take substances in higher doses during the pandemic. Also 52.5% experienced economic problems from the COVID-19 pandemic. It can be concluded that the COVID-19 pandemic gave impact on substance use as well as family economic condition. The pandemic might cause an increase in taking substances as a strategy to cope stress, anxiety, loneliness because of pandemic.

**Keywords:** *Anxiety, Loneliness, Pandemic, Strategy, Stress, Substance Use.*

### **INTRODUCTION:**

The coronavirus disease 2019 (SARS-CoV-2) was officially discovered in December 2019 in Wuhan, China. This disease is caused by a virus named SARS-CoV-2. The World Health Organization (WHO) officially declared it a pandemic on March 11, 2020. To date, over 400 million confirmed cases and close to 6 million deaths have been infected with the virus. In India, the virus was confirmed for the first time on 30<sup>th</sup> January 2020. After that, the pandemic spread to various states and union territories, including Manipur. In Manipur, the first infection was reported in March 2020. The government of India announced National lockdown as a preventive measure against the virus. As a result, all educational institutions, Bars, Clubs, shopping malls, closing of borders. As most of the confirmed cases were spread to other countries, India suspended all tourist visas international as well as intra-state travel was also restricted.

Like other states, the Government of Manipur has implemented various restrictions on social life leading to a quarantine to break the chain of spread of Covid-19 pandemic in the state. These restrictions include closures of educational institutions, Restaurants, Cafes, Salons,

Bazaars, Sports and extra-curricular activities, cultural events, prohibition of social gatherings, restriction of social contacts and mandates for social distancing, washing hands frequently and wearing facemasks. Since the outbreak of covid-19, there have been 139922 (One Lakh Thirty Nine Thousand Nine Hundred and Twenty two) people were infected and 2149 (Two Thousand One Hundred and Forty nine) people were dead with the virus according to the reports given by the Government of Manipur, Directorate of Health services as of 30 December, 2022.

As the outcome of the lockdown people were isolated and confined to home for prolonged periods, which eventually increased feelings of loneliness, worry, and anxiety among the people. Due to confinement at home, people have more free time. So, the Pandemic might have been one reason for increasing substance use to a more prominent level than before the lockdown.

### **Substance abuse:**

The World Health Organization (WHO) defined Drug as any substance that, when taken into the living organism modifies one or more of its functions. The dictionary meaning of drug is a substance used to stupefy or poison or for self-indulgence. In short, substance abuse is the excessive use of illicit drugs such as heroine, morphine, marijuana, and alcohol without medical advice.

In addition to the social restrictions, various measures and efforts to slow the spread of the virus have resulted in numerous harmful effects on the lives of people. These restrictions decreased the family income, which resulted in financial consequences because of the closings of marketing and business places, and disturbances in academic progress and development of a nation due to closings of educational institutions, offices etc. Thus, the pandemic affects every citizen in different spheres.

**Pfefferbaum (2021)** highlighted that there is a negative psychological effect of the pandemic among children and youth including increase of clinical depression, suicidal ideation, and anxiety, all of which could be a reason to an increase in substance use behavior. As a result of long-term social isolation and limited opportunities to interact with people have increased their feeling of loneliness as reported by **Prowse R. (2021)**. **Brooks (2020)** reported the impact of quarantine during SARS, EBOLA, HINI influenza gave psychological distress after quarantine. According to a review, people who have a history of substance use have at higher risk of becoming more severe of covid-19 and leading to death. **SEN LT. (2021)** studied that youth those who are living in resource-poor areas or under challenging family circumstances/ conditions have an increase of substance use. **ROBERTTS (2021)** reported consumption of alcohol and nicotine which were negatively correlated with mental health was increased during the pandemic. In some recent studies, increase in substance use during the pandemic might be a reason that substances are used as a coping strategy to regulate mental distress associated with the pandemic.

### **OBJECTIVES OF THE STUDY:**

1. To find out the prevalence rates of substance use (Heroine, Alcohol, Tobacco, Tablets (SP, N-10, WY)).
2. To know if there is an economic change during the pandemic.

**METHODS:** A descriptive survey method was done in the ‘Life Control Foundation Rehabilitation Centre for Substance Abuse and Behavior Addiction, Ushoipokpi Thoubal District, Manipur.

For this study, 40 inmates out of 180 inmates were taken as a sample.

The sample was collected using Random sampling method.

A self-made questionnaire was used for collecting data.

Percentage and Chi-square were used as statistical tools for analyzing data. Data were collected during December 2022.

**RESULTS:**

**Table 1:**

Total Data Collected	Age	
	Below 30	Above 30
40	26	14

**Table 2:**

Living situation		Educational status		Employment status	
Frequency (%)		Frequency (%)		Frequency (%)	
Alone	2 (5)	Under matric	6 (15)	Students	5 (12.5)
With parents	25 (62.5)	Matriculate	3 (7.5)	Private	8 (20)
With partner and children	11 (27.5)	Higher secondary	13 (32.5)	Govt. employee	7 (17.5)
Others	2 (5)	Graduate	18 (45)	Unemployed	20 (50)
<b>Total</b>	<b>40 (100)</b>	<b>Total</b>	<b>40 (100)</b>	<b>Total</b>	<b>40 (100)</b>

The above table shows the personal details of the respondents. This table tells us that respondents who lived alone and others were found to use less substances (5%), but on the contrary, respondents living with parents were found to use a higher percentage of substances used (62.5%), and lastly, respondents living with partners and children were found average (27.5%). In case of educational status, the respondents were highly educated, holding graduate degree (45%), (32.5%) completed secondary education, (15%) were under matriculated, and

(7.5%) were matriculated. Furthermore, most of the respondents were unemployed (50%), (20%) respondents worked at private, (17.5%) were government employees, (12.5%) were students. From this, we can assume that even though the respondents are highly qualified, they are still unemployed. This might be the reason they started taking drugs to get relief stress and anxiety.

**Table 3: Responses Regarding Covid-19 pandemic and substance use.**

Sl. No.	Question	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Total (%)
1	How do you spend your leisure time during covid-19 pandemic?	Using social media	Reading and writing	Playing games	Others	40 (100)
		15 (37.5)	1 (2.5)	3 (7.5)	21 (52.5)	
2	How did the pandemic affect your normal life?	Loneliness	Depression	Anxiety	No change	40 (100)
		4 (10)	1 (2.5)	13 (32.5)	22 (55)	
3	What substances are used currently?	Heroin	Alcohol	Tobacco	Tablet (S.P., W.Y., N-10)	40 (100)
		36 (90)	0	3 (7.5)	1 (2.5)	
4	How much amount of substance do you use before pandemic?	Once in a day	More than once in a day	Once in a week	Others	40 (100)
		1 (2.5)	34 (85)	0	5 (12.5)	
5	Did you take more substance during pandemic?	Constant dose/no change	Less dose	More dose	Others	40 (100)
		2 (5)	6 (15)	28 (70)	4 (10)	

6	From where you bought the substance during pandemic?	From dealer	From friend	From street vendors	From online	40 (100)
		26 (65)	3 (7.5)	6 (15)	5 (12.5)	
7	How much do you spend on buying substance in a day?	Rs.50-100	Rs.100-150	Rs.200 and above	No limit	40 (100)
		0	3 (7.5)	27 (67.5)	10 (25)	
8	From where you got money for this purpose?	Taking from parents and siblings	Stealing from parents and siblings	Self-earning	Others	40 (100)
		7 (17.5)	6 (15)	21 (52.5)	6 (15)	
9	How much the pandemic affected with your job?	Less	More	No changes/same as before	Jobless	40 (100)
		7 (17.5)	3 (7.5)	18 (45)	12 (30)	
10	How is your family economic condition during pandemic than before?	Bad	Very bad	No change		40 (100)
		6 (15)	21 (52.5)	13 (32.5)		
11	Did you have any suicidal thoughts during the lockdown due to social distancing and restrictions?	Never	Rarely	Sometimes	Often	40 (100)
		28 (70)	3 (7.5)	6 (15)	3 (7.5)	

12	How many times have you been vaccinated COVID vaccine?	1 <sup>st</sup> dose	2 <sup>nd</sup> dose	3 <sup>rd</sup> dose	Not vaccinated	40 (100)
		5 (12.5)	20 (50)	8 (20)	7 (17.5)	

- From the above table, it is found that they spend their leisure time during pandemic by doing other activities most (52.5%) rather than using social media (37.5%), playing games (7.5%), and reading and writing is found less (2.5%).
- More of the respondents experienced no change (55%) in their normal lives during the pandemic. Respondents who experienced anxiety during the lockdown were (32.5%), loneliness was also experienced (10%) but it was experienced less depression (2.5%) during the pandemic.
- Respondents were given information on their currently use of substances differently. It is reported that most of the respondents used Heroine (90%), (7.5%) were reported as tobacco users, (2.5%) reported as used tablet (S.P, W.Y, N-10), and no respondents were found to have used more alcohol than expected.
- Respondents further given their response to the question amount of substance use before pandemic. It is reported that they used substances before the pandemic more than once in a day, as (85%), (12.5%) reported as others, and (2.5%) reported as once in a day, but no one found in the once in a week group.
- Respondents who take substances more dose during the pandemic were (70%), respondents who take less dose were (15%), and (10%) reported in the other group that there was no change in the substance taking behavior during the pandemic than before were (5%) respectively.
- It is found that during the pandemic substance users found substances from many ways. It is reported that they bought substances from the dealers most constituted (65%), from street vendors (15%), from online (12.5%), and from friends (7.5%).
- From the table, we can see that substance users spend huge amounts of money on drugs. They spent at the maximum rate of Rs.200 and above in a day (67.5%). However, they have no limit on money for buying drugs (25%). But they can manage with Rs.100-150 whenever they face shortage of money (7.5%). No substances are found by Rs.50-100.
- Maximum respondents were found self-earning for buying substances (52.5%), (17.5%) found that they take money from parents and siblings for other valid reasons, and (15%) were reported both as others and who steal money from parents and siblings for buying substances if they refused to give.
- Respondents who did not experience changes in their employment status during the pandemic were found most (45%), whereas respondents who experienced losing jobs were (30%), respondents who were affected less were (17.5%), and respondents who affected more by the pandemic were (7.5%).

10. Maximum respondents reported that they experienced economic problems during the pandemic than before (52.5%), 32.5%) reported they did not experience any economic problem during the pandemic, and 15%) reported they were in bad condition during the pandemic.
11. Respondents informed that regarding suicidal thoughts during the lockdown, the majority of them had never thought of suicide (70%), (15%) sometimes had, and (7.5%) found the same who had suicidal thoughts often and rarely.
12. It is reported that (50%) vaccinated 2<sup>nd</sup> dose COVID vaccine, (20%) were 3<sup>rd</sup> dose vaccinated, 17.5% were not vaccinated, and 12.5% were only 1<sup>st</sup> dose vaccinated.

**Table 4: Leisure time during covid-19**

How do you spend your leisure time during Covid -19 pandemic	Using social media	Reading and writing	Playing games	Others	df	p	$\chi^2$	
							Cal.v	Cr. v
fo	15	1	3	21	3	0.05	27.6	7.815
fe	10	10	10	10				

$\chi^2$  result shows that there is significant difference in spending leisure time during covid-19 pandemic. Results shows that people spent their leisure time using social media and other activities and spent less time in reading and writing, playing games.

**Table 5: Pandemic affects normal life.**

How did the pandemic affect your normal life	Loneliness	Depression	Anxiety	No change	df	p	$\chi^2$	
							Cal.v	Cr. v
fo	4	1	13	22	3	0.05	27	7.815
fe	10	10	10	10				

From the table, we can see that there is significant difference affecting normal life by the pandemic. There was no change in the normal lives of people by the pandemic. However, some people experienced anxiety, and less loneliness and depression were found.

**Table 6: substances used currently.**

What substances are you used currently	Heroin	Alcohol	Tobacco	Tablet (S.P, W.Y, N-10)	df	p	$\chi^2$	
							Cal.v	Cr. v
fo	36	0	3	1	3	0.05	81.6	7.815
fe	10	10	10	10				

Since the  $\chi^2$  - value is greater than the  $\chi^2$  - critical value, there is significant difference in the currently used substances. The result tells us that people use heroin in large number, tobacco moderately and tablet in less quantity.

**Table 7: Amount of substance used before lockdown.**

How much amount of substance do you use before pandemic	Once in a day	More than once in a day	Once in a week	Others	df	p	$\chi^2$	
							Cal.v	Cr. v
fo	1	34	0	5	3	0.05	78.2	7.815
fe	10	10	10	10				

The above table shows that there is a significant difference in the amount of substance used before lockdown. The result further shows that most people used substances more than once in a day before the pandemic. Otherwise, less number of people used substance once in a day.

**Table 8: Amount of substance used during pandemic.**

Did you take more substance during pandemic	Constant dose/no change	Less dose	More dose	Others	df	p	$\chi^2$	
							Cal.v	Cr. v
fo	1	34	0	5	3	0.05	78.2	7.815
fe	10	10	10	10				

The result shows that people used substances in less dose during the pandemic than before. Some people were found in other groups, and a smaller number of people did not change their

dose of taking substances during the pandemic. So, we can be concluded that there is a significant difference in the dose of taking the substance.

**Table 9: Substances bought during pandemic.**

From where you bought the substance during pandemic	From dealer	From friend	From street vendors	From online	df	p	$\chi^2$	
							Cal.v	Cr. v
fo	26	3	6	5	3	0.05	40	7.815
fe	10	10	10	10				

The above table shows that the  $\chi^2$ -calculated value is greater than the  $\chi^2$ -critical value. So, there is a significant difference in the buying of substances during the pandemic. Substances were bought from the dealer most. People also bought from street vendors, from online and from friends, respectively.

**Table 10: Amount of money on substance**

How much do you spend on buying substance in a day	Rs. 50-100	Rs. 100-150	Rs. 200 and above	No limit	df	p	$\chi^2$	
							Cal.v	Cr. v
fo	0	3	27	10	3	0.05	40.5	7.815
fe	10	10	10	10				

The above result shows that there is a significant difference in spending amount of money on buying substance in a day. Most people spent Rs.200 and above on buying substance in a day. However, there is no limit of money on buying substances in a day, and they also manage by Rs.100-150.

**Table 11: Get money for the purpose of substance.**

				Others	df	p	$\chi^2$

From where you got money for this purpose	Taking from parents and siblings	Stealing from parents and siblings	Self-earning				Cal.v	Cr. v
fo	7	6	21	6	3	0.05	15.39	7.815
fe	10	10	10	10				

Result shows that there is a significant difference in getting money for the purpose of substance. Most of the people did self-earning to get substance. But some people took money from parents and siblings, telling them that they needed money for other valid reasons, and stole money from parents and siblings if they refused to give.

**Table 12: Pandemic affect with job**

How much the pandemic affected with your job	Less	More	No change/same as before	Jobless	df	p	$\chi^2$	
							Cal.v	Cr. v
fo	7	3	18	12	3	0.05	11.79	7.815
fe	10	10	10	10				

Table shows that there is significant difference in the affected with job by the pandemic. There is no change with their job by the pandemic. However, some people were jobless, some people were affected less with their job, and some were affected more with their job by the pandemic.

**Table 13: Economic condition during the pandemic**

How is your economic condition during pandemic than before	Bad	Very Bad	No change	df	p	$\chi^2$	
						Cal.v	Cr. v
fo	6	21	13	2	0.05	7.2	5.991
fe	13	14	13				

The above result shows that there is a significant difference in the economic condition during pandemic than before. Most of the people were in very bad condition during the pandemic. Some people also experienced no change in their economic condition, some were in bad economic condition during the lockdown.

**Table 14: suicidal thoughts during pandemic**

Did you have any suicidal thoughts during the lockdown due to social distancing and restrictions	Never	Rarely	Sometimes	Often	df	p	$\chi^2$	
							Cal.v	Cr. v
fo	28	3	6	3	3	0.05	43.8	7.815
fe	10	10	10	10				

The result shows that there is a significant difference regarding having suicidal thoughts during the pandemic. Most of them had never thought of suicidal thoughts during the pandemic. Besides, sometimes they had, and some had often.

**Table 15: Covid-19 vaccination**

How many times have you been vaccinated covid vaccine	1 <sup>st</sup> dose	2 <sup>nd</sup> dose	3 <sup>rd</sup> dose	Not vaccinated	df	p	$\chi^2$	
							Cal.v	Cr. v
fo	5	20	8	7	3	0.05	13.8	7.815
fe	10	10	10	10				

From the above result we can say that there is a significant difference regarding Covid-vaccine vaccination. Most of them vaccinated Covid-vaccine 2<sup>nd</sup> dose. However, some of them have vaccinated 3<sup>rd</sup> dose and 1<sup>st</sup> dose. But, some of them have not vaccinated till date.

### Conclusion:

The aim of the study was to find out the prevalence rates of substance use (Heroin, Alcohol, Tobacco, & Tablets SP, N-10, WY)) and to know if there is an economic change during the pandemic. A study from Ireland found that 15% of their participants reported an increase in alcohol consumption, whereas 66% reported a decrease. On the other hand, **Koopman and colleagues (2020)** reported increased alcohol consumption in the general population of Germany. In a study of **Damerow and colleagues (2020)** reported less tobacco smoking during the lockdown in Germany.

Furthermore, **Rantis, K and colleagues (2021)** reported in a study from Greece that a considerable proportion of respondents using alcohol and nicotine to cope better with anxiety and depression during the covid-19 pandemic. In an Australian study of **Czeisler, M.E & Colleagues (2021)**, 12.3% reported using drugs to cope with stress and emotions during the pandemic.

In the current study, 73.47% reported using more Heroine. At the same time 18.37% reported using tobacco and regarding tablet using 8.16% reported and no alcohol users were not found in this study. In the study, it is found that 76.40% were used substances more than once in a day before the pandemic. Further, 73.68% were found who take more substances during the pandemic.  $\chi^2$  results shows that there is significant difference among the values. Although most studies report a general increase in substance abuse but there is a decrease or no change in substance taking behavior. Thus, this shows a clear picture of the impact of pandemic on substance abuse. Therefore, it cannot be stated that substance use increased during the pandemic for most users as the users' pattern seems to be more complex. Some results are also seen from previous findings showing comparable results. Meanwhile, 48.28% reported experienced economic problem during the pandemic. It is clear that we faced lots of problems during the lockdown because of the closing all social activities. Thus, from the current and previous findings we can conclude that substance use may be a strategy to cope with stress, anxiety, loneliness during pandemic.

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