

Transition of Alcohol Use Behaviours Amidst COVID-19 Pandemic in India

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ABSTRACT

Background: The restrictions that were imposed in the course of the lockdown in the initial months of this pandemic necessitated intense behavior change in most individuals. The concerns of those who need alcohol were especially in focus. **Aim:** The study aimed at understand alcohol use behaviours in a young adult Indian population and to explore changes in these behaviors during the initial phase of the pandemic and to compare if the group with higher drink problems is showing different behaviors to those who have fewer drink problems (based on AUDIT score). **Method:** The survey comprised questions on alcohol consumption; craving, drinking patterns, self-monitoring and illegal alcohol purchase. The participants responded for two sets of these questions: Pre-pandemic and Pandemic. A total of 167 participants (100 = male; 65 = female; 2= other) responded to the survey over a span of 3 months (May'2020-August'2020). **Results:** Cronbach's alpha for the pre-pandemic and pandemic survey questions was found to be 0.919 and 0.929 respectively indicating a high consistency. Age of First Drink was moderately negatively correlated with Alcohol Usage (-0.348) and Craving (-0.305). Consumption Quantity and Frequency of drinking were only found to have a significant relationship with Phase of Drinking for High AUDIT group. For Low AUDIT group, only the consumption frequency had a significant relationship. However, it was interesting to note that all the alcohol use behaviours had a significant relationship with Nature of drinking in the pre-pandemic phase. Although during the pandemic all behaviours except self-monitoring behaviour had a significant relationship with Nature of drinking. **Conclusion:** High AUDIT score group had fewer drinks and drank less often during the pandemic times. Meanwhile, the Low AUDIT score group did not change how many drinks they had but they drank less often. Self-monitoring frequency was found to similar between High and Low AUDIT groups during the pandemic. Implications for future disaster management were discussed.

Keywords: COVID-19, Pandemic, Alcohol, Craving, AUDIT.

The global pandemic of COVID-19 has led to many questions related to people coping during the lockdown. The current situation in the country is uncertain and has limited our social lives. The impact of COVID-19 has been really broad and ranges from all kinds of fears (unknown, corona etc.) to economic recession, education, job opportunities

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etc. (Dubey et al., 2022) Keeping in mind the broad impact it is valid to assume that COVID-19 is a mass trauma. Psychological problems, health behaviour changes caused by the pandemic can lead to potential addictive issues which might include changes in the alcohol consumption behaviours (Zvolensky et al., 2020). According to WHO (2020), Alcohol consumption can intensify health vulnerability, risk-taking behaviours, violence and issues related to mental health. Alcohol consumption has an impact on the immune system and therefore, being associated with a range of adverse health issues. The weakening of immune system with excessive alcohol consumption makes the individual more susceptible of acquiring the SARS-CoV-2 virus.

Alcohol is also associated with mental health issues; population diagnosed with alcohol-use disorder or even the population who are at risk are more prone to aggravate their issues particularly during the COVID-19 pandemic. Alcohol dependence and depression has a mutually excitatory relationship; where presence of any of the two, increases the likelihood of occurrence of the other. A meta-analysis with several studies across multiple countries showed that relatively higher rates of Post-Traumatic Stress Disorder and Depressive disorder reports during the COVID-19 pandemic. The analysis mentioned one study which showed that the conditions for 25% of people who reported PTSD symptoms did not improve when examined post a 30 month follow-up. Studies also showed that individuals who had been in quarantine had a 5 times more vulnerability of developing depressive symptoms (Xiong et al., 2020).

According to Alcohol Change UK (2020), One in five people have claimed to be drinking more during the pandemic and One in three people have claimed to be drinking less/abstained from drinking during the pandemic. The research also saw found that one in 14 (7%) people saying their own or someone else's drinking had made the tension in their household worse since lockdown. One in seven people with children under 18 years living in their household reported that alcohol had increased tensions. Another cross-sectional study done shows a 17 % increase in alcohol consumption with a strong association between the increased consumption and depressive symptoms and poor mental health of an individual. (Jacob et al., 2020)

A study done in Poland on initial stages of lockdown found that alcohol was the most commonly used psychoactive substance with over 78% users identified. It also found that 30% of the users had a change in their drinking habit because of the pandemic. They found that 16% of them were drinking less which was a much younger population while; 14% of them drinking more which was a relatively older population. The increased drinking pattern was seen across the people who even had an increased drinking pattern right before the lockdown.

In line with the above trends, a study which was done on 1540 participants in the US showed that 14% of the population drank more alcohol as compared to 2019. It was also found that this increase was seen prominently in women with about increase in frequency of drinking by adding an extra drink for a month in 1 out of 4 women (Pollard, Tucker & Green, 2020).

In Canada, boredom, perceived stress and lack of daily routine was found to be the top three contributors for increased alcohol habits. Alcohol consumption quantity of alcohol had increased in 20% of the people and the alcohol consumption frequency had increased in 21% of the people (N.Research, 2020). Similar trends were found by a study done in Greece on

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705 adults. It was seen that 20.7% of the people drinking at home increased their alcohol consumption with isolation, change in everyday habits and coping with anxiety and depression being claimed as the major contributors (Panagiotidis et al., 2020)

A compilation of surveys from Australia showed that alcohol consumption increased in 25% of the adults (Stanton et al., 2020). The reasons here were also similar; depression symptoms, anxiety symptoms and high level of stress (Callinal et al., 2020). The study later showed that for the young population, the proportion of harmful drinking decreased compared to the initial phase. The reasons here could be the shift from a campus closure to residential environment with less social events and binge drinking (White et al., 2020). A waste-water analysis done in Australia found that there were lower levels of alcohol in the waste water during quarantine as compared to the same time of the previous year (White et al., 2020). Certain studies also showed that there was no increase in the purchases of alcohol in the UK during the pandemic as compared to the previous three years (Anderson et al., 2020). Decrease in binge drinking pattern was seen across countries in an international survey. Complying with the above found trends; less clubbing, parties and absence of peer pressure were the possible explanations found in the survey (Ammar et al., 2020).

Considering the stressors and the impact of the COVID-19 pandemic, a study hypothesized it similar to the great recession, 9/11 terrorist attack, the SARS epidemic etc. All of the above mentioned periods had increased use of alcohol and symptoms of anxiety, depression and PTSD; predicting the same for the current pandemic (Goncalves et al., 2020). A study done in India studied the change in incidence of severe alcohol withdrawal syndrome with a change-point analysis approach. They found a spike in cases with 4 more cases of severe alcohol withdrawal in the clinics in Bangalore (Narsimha, 2020). News has reported suicidal deaths and death due to toxic alcohol in other parts of country like Tamil Nadu and Kerala (Jayakumar, 2020) (Shekhar, 2020). The lockdown initiated across the world due to the global pandemic and the consequent restricted access to alcohol resulted in withdrawals for alcohol dependent individuals, increase in black marketing of alcohol and in extreme situations has resulted in suicide stemming from frustration of restricted access to alcohol (Nadkarni, Kapoor, Pathare, 2020). Distressed people are more likely to take refuge in addictive substances like alcohol, which could induce the development of substance-use disorders (Ornell et al., 2020).

Keeping in mind, the prohibition of sales being resumed in multiple states due to the rise in number of cases brought in by the second wave, similar trends could be predicted. This makes it necessary to understand the change in alcohol consumption patterns amidst the COVID-19 in India. The study will help to identify the change in behaviours pertaining to alcohol consumption and will also highlight the population percentage with increased/decreased consumption patterns. This would be helpful to lay down implications for future disaster management. The current survey aims to understand the direction of the transition of alcohol consumption behaviours in an Indian population, to highlight the increased/decreased alcohol use behaviours (consumption quantity, frequency, and craving) and to compare differences between the alcohol use behaviours across drinking groups during the pandemic.

MATERIALS AND METHODS

The research used survey method to collect data for understanding the transition in alcohol consumption patterns amidst the COVID-19 lockdown in India. Data collection of the survey was done through Google Forms and the responses were stored in a password encrypted Google drive with restricted access for the confidentiality of the data. A total of 167 participants (100 =

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male; 65 = female; 2= other) responded to the survey over a span of 3 months (May'2020-August'2020). Informed consent was obtained at the start of the survey where the participants were informed about the right to confidentiality and that they could even withdraw from the study if they felt uncomfortable to continue. Non-probability snowball sampling was maintained by the absence of researchers' involvement post the initial circulation of the survey link. The inclusion criterion was between the age (18-37 years) and the person must have had at least one alcoholic drink and still continues to drink. IRB form was submitted with the affiliated institution; Christ University, Bangalore.

The survey had four sections. The first section is the informed consent and also had the details of the study. The second section consists of the basic demographic details which are required in the context of the survey. It also contains certain questionnaires (about general health, use of alcohol and thoughts/cravings related to alcohol). The third section is the "Pre-pandemic survey" which had self-constructed questions pertaining to the consumption of alcohol prior to the lockdown. The fourth and the final section was the "Pandemic survey" which also had self-constructed questions similar to the third section, but needed to be answered keeping in mind the pandemic situation where sale of alcohol was prohibited E.g. "How often did you try getting alcohol illegally during a dry day?" "How often did you try getting alcohol illegally during the lockdown?" The survey comprised questions on alcohol consumption; craving, drinking patterns, self-monitoring and illegal alcohol purchase.

Instruments used

- **General Health Questionnaire (GHQ-12).** This psychometric tool focuses on health in general over the last few weeks. It is an important screening tool for research purposes.
- **Alcohol Use Disorder Identification Test (AUDIT).** This psychometric tool is a screening tool to identify an alcohol use disorder or even to identify people who are at risk. This was also used to group the individuals in two groups; High AUDIT drinking group (scores more than 7), Low AUDIT drinking group (scores equal or less than 7)
- **Penn Alcohol Craving Scale (PACS).** This psychometric tool is a 5 item questionnaire which measures an individual's craving specifically pertaining to alcohol. It assesses the severity of craving based on subjective measures of the individual.

Data Analysis

The reliability of the self-constructed survey questions was computed using Cronbach's Alpha through SPSS. Spearman's Rho was used to compute the correlation between age of first drink and severity of alcohol use and craving. Mann U Whitney test was used to analyze the distribution of PACS scores across High AUDIT and Low AUDIT groups. Kruskal Wallis test was used to analyze the distribution of AUDIT and PACS score across sex categories.

Pearson's Chi-Square was used to check whether there is a relation between two categorical variables; Phase of Drinking (Pre-Pandemic and Pandemic), Frequency of Drinking (Less than once a week, 1 to 4 times, 5 to Everyday). This analysis was done to understand whether there was a change in the alcohol use behaviours in the course of the pandemic transition.

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Pearson's Chi-Square was also used to check another set of variables from the survey; Nature of the drinking group (Low/High AUDIT drinkers) and all the other variables of the survey like Consumption Quantity/ Self-Monitoring Frequency etc. This part of the analysis gave clarity on whether if the differences between the drinking groups that were seen before the pandemic persisted during the pandemic as well.

RESULTS

The reliability for the pre-pandemic survey questions and pandemic survey questions was found to be 0.919 and 0.929 respectively indicating high reliability. Age of first drink was negatively correlated with severity of alcohol usage (AUDIT Score) and Craving (PACS score). The output values for both were (-0.348) and (-0.305) respectively, implying a moderate negative correlation. (Table-1) There was a difference between the severity of alcohol usage (AUDIT scores) across the sex categories, while the craving (PACS) was same across the sex categories. There was a difference between the craving of low AUDIT and high AUDIT drinkers.

Table 1 Correlation between Age of first drink, AUDIT score (severity of alcohol use), PACS score (craving)

			Age of First drink	AUDIT	PACS
Spearman's rho	Age of First drink	Correlation Coefficient	1.000	-.348**	-.305**
		Sig. (1-tailed)	.	.000	.000
		N	167	167	167
	AUDIT	Correlation Coefficient	-.348**	1.000	.533**
		Sig. (1-tailed)	.000	.	.000
		N	167	167	167
	PACS	Correlation Coefficient	-.305**	.533**	1.000
		Sig. (1-tailed)	.000	.000	.
		N	167	167	167

***. Correlation is significant at the 0.01 level (1-tailed).*

Table 2 2x2 Comparison of alcohol use behaviours before and during the pandemic of low AUDIT drinking group

Sr No.	Alcohol Use Behaviours	Pre-Pandemic (N=112)	Pandemic (N=112)	Chi-square
1.	How many standard drinks of alcohol do you consume on an occasion?			
	1 to 4	83.9%	88.4%	0.936 (0.333)
	5 to 10 or more	16.1%	11.6%	
2.	How often did you try getting alcohol illegally?			
	Never purchased	75.9%	83.9%	2.254 (0.133)
	Purchased (at least once)	24.1%	16.1%	
3.	How often did you crave for alcohol in one week?			
	Never	63.4%	61.6%	0.76 (0.783)
	At least once	36.6%	38.4%	

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Table 3 2x3 Comparison of alcohol use behaviours before and during the pandemic of low AUDIT drinking group

Sr No.	Alcohol Use Behaviours	Pre-Pandemic (N=112)	Pandemic (N=112)	Chi-square
1.	How often did you indulge into drinking alcohol in one week?			5.406 (0.020)*
	Never	61.5%	75.8%	
	1 to 4 times	36.7%	22.4%	
2.	How often did you indulge in drinking alone?			1.924 (0.382)
	Never	67.9%	75.9%	
	Occasionally	29.5%	21.4%	
3.	How often did you feel frustrated just because you could not go out for drinking?			0.522 (0.770)
	Never	68.8%	67.9%	
	Occasionally	67.9%	27.7%	
	Regularly	2.7%	4.5%	

Table 4 2x2 Comparison of alcohol use behaviours before and during the pandemic of high AUDIT drinking group

Sr No.	Alcohol Use Behaviours	Pre-Pandemic (N=55)	Pandemic (N=55)	Chi-square
1.	How many standard drinks of alcohol do you consume on an occasion?			0.936 (0.035)*
	1 to 4	45.5%	65.5%	
	5 to 10 or more	54.5%	34.5%	
2.	How often did you try getting alcohol illegally?			2.254 (0.086)
	Never purchased	43.6%	60%	
	Purchased (at least once)	56.4%	40%	
3.	How often did you crave for alcohol in one week?			1.739 (0.187)
	Never	10.9%	20%	
	At least once	89.1%	80%	

* $p \leq 0.05$

Table 5 2x3 Comparison of alcohol use behaviours before and during the pandemic of high AUDIT drinking group

Sr No.	Alcohol Use Behaviours	Pre-Pandemic (N=55)	Pandemic (N=55)	Chi-square
1.	How often did you indulge into drinking alcohol in one week?			10.380 (0.006)**
	Never	10.9%	34.5%	
	1 to 4 times	76.4%	61.8%	
2.	How often did you indulge			
	5 times to every day	12.7%	9%	

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	in drinking alone?			
	Never	27.3%	45.5%	3.929 (0.140)
	Occasionally	50.9%	38.2%	
	Regularly	21.8%	16.4%	
3.	How often did you feel frustrated just because you could not go out for drinking?			
	Never	43.6%	43.6%	5.291(0.067)
	Occasionally	43.9%	34.5%	
	Regularly	7.3%	21.8%	

The findings of the current study show that there were a lot of changes seen in the alcohol use behaviours. Table 2 to Table 5 has all the comparisons between pre-pandemic and pandemic phase across drinking groups. For Low AUDIT drinkers, the relationship between Phase of drinking (pre-pandemic/pandemic phase) and alcohol quantity consumption was not significant, $X^2(1, N=224) = 0.936, p > 0.05$. There is a slight decrease in individuals consuming 5 to 10 or more drinks (16.1% to 11.6%) and a slight increase in individuals consuming 1 to 4 drinks (83.9% to 88.4%) from pre-pandemic phase to during pandemic phase. This change in consumption quantity was not found to be significant after computing chi-square for the variables.

For High AUDIT drinkers, the relationship between Phase of drinking (pre-pandemic/during pandemic) and alcohol quantity consumption was significant, $X^2(1, N=110) = 4.453, p < 0.05$. There is a significant decrease in individuals consuming 5 to 10 or more drinks (54.5% to 34.5%) and a significant increase in 1 to 4 drinks (45.5% to 65.5%) from pre-pandemic phase to during pandemic phase. This change in consumption quantity was significant after computing chi-square for the variables. The study had a small effect size (Cramer's $V = 0.201$). Therefore, Alcohol consumption significantly dropped during the pandemic phase for only High AUDIT drinkers, while for Low AUDIT drinkers this decrease is not significant.

For Low AUDIT drinkers, the relationship between Phase of drinking (pre-pandemic/during pandemic) and alcohol consumption frequency was significant, $X^2(1, N=224) = 5.406, p < 0.05$. There was a slight decrease in individuals consuming 5-7 times in a week (1.8% to 0%), a decrease in people consuming alcohol 1 to 4 times in a week (37.5% to 23.2%) and increase in the people who never even drank on a weekly basis (62.5% to 72.8%). This change in consumption frequency was significant after computing chi-square for the variables. The study had a small effect size (Cramer's $V = 0.155$).

For High AUDIT drinkers, the relationship between Phase of drinking (pre-pandemic/during pandemic) and alcohol consumption frequency was significant, $X^2(1, N=224) = 10.380, p < 0.05$. There was a decrease in individuals consuming 5-7 times in a week (12.7% to 3.6%), and people consuming alcohol 1 to 4 times in a week (76.4% to 61.8%). Although there was an increase in the people who never even drank on a weekly basis (10.9% to 34.5%). This change in consumption frequency was significant after computing chi-square for the variables. The study had a moderate effect size (Cramer's $V = 0.307$). Therefore, alcohol consumption frequency significantly dropped for both; low and high AUDIT drinkers.

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Table 6 2x2 Comparison of alcohol use behaviours across Low and High AUDIT groups in pre-pandemic phase

Sr No.	Alcohol Use Behaviours	Low AUDIT group (N=167)	High AUDIT group (N=167)	Chi-square
1.	How many standard drinks of alcohol do you consume on an occasion?			
	1 to 4	83.9%	45.5%	26.659 (0.000)**
	5 to 10 or more	16.1%	54.5%	
2.	How often did you try getting alcohol illegally?			
	Never purchased	75.9%	43.6%	16.931 (0.000)**
	Purchased (at least once)	24.1%	56.4%	
3.	How often did you crave for alcohol in one week?			
	Never	63.4%	10.9%	38.805 (0.000)**
	At least once	36.6%	89.1%	
4.	How often did you use any application or a self-count to monitor your drinking in a week?			
	Never	94.6%	80 %	8.650 (0.003)**
	At least once	5.4%	20%	

**p =/ < 0.01

Table 7 2x3 Comparison of alcohol use behaviours across Low and High AUDIT groups in pre-pandemic phase

Sr No.	Alcohol Use Behaviours	Low AUDIT group (N=167)	High AUDIT group (N=167)	Chi-square
1.	How often did you indulge into drinking alcohol in one week?			
	Never	61.5%	10.9%	46.904 (0.000)**
	1 to 4 times	36.7%	76.4%	
5 times to every day	1.8%	12.7%		
2.	How often did you indulge in drinking alone?			
	Never	67.9%	27.3%	30.837 (0.000)**
	Occasionally	29.5%	50.9%	
Regularly	2.7%	21.8%		
3.	How often did you feel frustrated just because you could not go out for drinking?			
	Never	68.8%	43.6%	10.100 (0.006)**
	Occasionally	28.6%	49.1%	
Regularly	2.7%	7.3%		

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Table 8 2x2 Comparison of alcohol use behaviours across Low and High AUDIT groups in the pandemic phase

Sr No.	Alcohol Use Behaviours	Low AUDIT group (N=167)	High AUDIT group (N=167)	Chi-square
1.	How many standard drinks of alcohol do you consume on an occasion?			
	1 to 4	88.4%	65.5%	12.530 (0.000)**
	5 to 10 or more	11.6 %	34.5%	
2.	How often did you try getting alcohol illegally?			
	Never purchased	83.9%	60%	11.595 (0.001)**
	Purchased (at least once)	16.1%	40%	
3.	How often did you crave for alcohol in one week?			
	Never	61.6%	20%	25.587 (0.000)**
	At least once	38.4%	80%	
4.	How often did you use any application or a self-count to monitor your drinking in a week?			
	Never	92.9%	87.3%	1.407 (0.236)
	At least once	7.1%	12.7%	

**p =/ $<$ 0.01

Table 9 2x3 Comparison of alcohol use behaviours across Low and High AUDIT groups in the pandemic phase

Sr No.	Alcohol Use Behaviours	Low AUDIT group (N=167)	High AUDIT group (N=167)	Chi-square
1.	How often did you indulge into drinking alcohol in one week?	76.8.%	34.5%	29.840 (0.000)**
		23.2%	61.8%	
		0.0%	3.6%	
	Never			
2.	How often did you indulge in drinking alone?			18.958 (0.000)**
	Never	76.1%	45.5%	
	Occasionally	21.2%	38.2%	
	Regularly	2.7%	16.4%	
3.	How often did you feel frustrated just because you could not go out for drinking?	67.9%	43.6%	15.107 (0.001)**
		27.7%	34.5%	
		4.5%	21.8%	
	Never			
	Occasionally			
	Regularly			

**p =/ $<$ 0.01

Table 6-9 has all the comparisons of alcohol use behaviours between High AUDIT and low AUDIT groups. For Pre-pandemic phase, the relationship between nature of drinking (High AUDIT/Low AUDIT) and self-monitoring frequency was significant (1, N=167) = 8.650, $p < 0.05$. The High AUDIT drinkers had 20% people who monitored at least once a week and

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80% people who never monitored. The low AUDIT group had 5.4% people who monitored at least once a week and 94.6% people who never monitored their drinking. This difference between the two drinking groups was found to be significant. The effect size of the study was moderate (Cramer's $V=0.288$)

Contrastingly, for the Pandemic phase, the relationship between nature of drinking (High AUDIT/Low AUDIT) and self-monitoring frequency was not significant ($t(1, N=167) = 1.407, p > 0.05$). The High AUDIT drinkers had 12.7% people who monitored at least once a week and 87.3% people who never monitored. The low AUDIT group had 7.1 % people who monitored at least once a week and 92.9% people who never monitored their drinking. Hence, there was no relation between nature of drinking and self-monitoring frequency in the pandemic phase.

DISCUSSION

Two mechanisms are noticed post any kind of economic crisis: increase in psychological distress (interaction of financial difficulties, social isolation and uncertainty about the future) worsen patterns of alcohol use and increase attributable harm (Goeji et al., 2015). The other set of mechanisms, based on the physical and financial availability (affordability) of alcohol predict reductions in the level of alcohol use and attributable problems which is supported by the results of current research as well. (Babor et al., 2010)

While comparing Consumption Quantity, Frequency of consumption, Illegal alcohol purchase, Frequency of drinking alone, Frustration frequency, Self-reported craving it was found there was a significant decrease in the quantity and frequency of alcohol consumption in High AUDIT drinkers during the pandemic. Contrastingly, significant decrease was only found for the frequency of alcohol consumption in Low AUDIT drinkers. This implied that low AUDIT drinkers drank less frequently whereas, high AUDIT drinkers drank less quantity as well as less frequently during the pandemic. The reason for low AUDIT drinkers drinking less frequently could be because of the minimized social events and gatherings as an opportunity to consume alcohol. 65 percent (11/17) of people who had a score of 20 or more on the GHQ-12 had changed their drinking pattern either in terms of quantity or frequency. It was also seen that among people who had decreased their weekly consumption frequency, 31% (17/54) reported lower craving. Similarly, among people who had decreased their consumption quantity 37% (24/65) reported lower craving. Hence, the absence of a significant craving could have been one factor. The other factors for reductions could be because of psychological distress, lack of financial resources, physical unavailability and limited drinking opportunities in the outdoor settings (Rodriguez, Litt, & Stewart, 2020).

More than 60 percent of the people who decreased their consumption quantity and frequency of alcohol endured more than a mild craving. This implies a potential need for interventions to tackle the effects of craving. For people who had increased their consumption quantity, 78% reported more than mild craving while for the ones who had increased their frequency only 57% reported more than mild craving. Hence craving could have been majorly responsible for the increase in consumption quantity, but factors other than craving would have also been responsible for the increase; especially in the consumption frequency. The significant differences in alcohol use behaviors that were seen between the high AUDIT and low AUDIT groups during the pre-pandemic phase were found to be significantly different during the pandemic. Self Monitoring Frequency was an exception where there was a significant difference between the high and low AUDIT groups in the pre-pandemic phase,

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but this difference were not significant during the pandemic phase. The behavior is almost equal across both the drinking groups, which wasn't the case during the pre-pandemic phase. The monitoring of alcohol usage should be supplemented by assessing cravings of individuals through free testing drives. Interventions for individuals enduring cravings after reduction of alcohol should be promoted to avoid later increase, post resumed availability of sales of alcohol. Individuals with low craving and increased frequency should be interviewed to understand pandemic specific risk factors that might be salient contributors for the transition in alcohol use behaviours. Despite the overall decrease, a minority of the sample did increase their quantity and frequency of alcohol consumption. A targeted intervention is necessary on these individuals, since it has been observed that such individuals suffer with compromised mental health and symptoms of depression (Rehm et al., 2020). Self-monitoring frequency was found to be the same between low audit and high audit drinkers, with only minority (< 20%) of the sample indulging in the behaviour. Advertisements promoting self-monitoring among drinkers should be displayed to the population alongside general pandemic guidelines. It is a well-established claim that online advertisements are a reliable way for changing population health behaviours. Secondly, if these advertisements are targeted on individuals based on socio-demographics, lifestyle and other individual factors, the effectiveness of these advertisements are increased (Yom-Tov et al., 2018). Psycho-education related to web-based screening and intervention should be promoted as a viable and feasible alternative, as the pandemic compromise majority of public and private health services (Nadkarni, Kapoor & Pathare, 2020). Previous studies on web-based self-monitoring through screening and intervention for problematic alcohol use have shown good results regarding changes in users' alcohol consumption, as well as a large potential for cost-effectiveness (Sinadivonic et al., 2010). The findings and the implications are clinically relevant as they could be utilized again in the management of the ongoing second wave of COVID-19 in India.

Findings of this survey must be interpreted keeping in the light of its limitations. The response rate of the survey was limited. The survey results give the picture of the initial phase of lockdown in India. The sample was not normally distributed and the demographic profile of the study sample is not representative of the country. Since, the survey had self-reported data; there was a high chance of socially desirable answers. Attempts must be made to overcome such limitations in the future.

CONCLUSION

To conclude, this survey shows that the COVID-19 pandemic led to decrease in a few alcohol use behaviours. The impact was different for the two drinking groups mentioned in the study. High AUDIT score group had fewer drinks and drank less often during the pandemic times. Meanwhile, the Low AUDIT score group did not change how many drinks they had but they drank less often. Self-monitoring frequency was found to similar between High and Low AUDIT groups during the pandemic with only a minority of the sample using it. Advertisements could be used to target potential population to promote self-monitoring in the light of public health. With the current lack of unavailability of public health staff, Psychoeducation related to web-based screening and intervention should be promoted, to ease the burnout for mental health professionals. Cost-effective nature of such interventions would also not perpetuate the financial instability brought in by the COVID-19 Pandemic.

REFERENCES

- S. Dubey, P. Biswas, R. Ghosh, S. Chatterjee, M.J. Dubey, S. Chatterjee, D. Lahiri, C. J. Lavie, Psychosocial impact of COVID-19, *Diabetes Metab. Syndr.* 14 (2020) 779–788. [17]
- M.J. Zvolensky, L. Garey, A.H. Rogers, N.B. Schmidt, A.A. Vujanovic, E.A. Storch, J.D. Buckner, D.J. Paulus, C. Alfano, J.A.J. Smits, C. O’cleirigh, Psychological, addictive, and health behavior implications of the COVID-19
- J. Xiong, O. Lipsitz, F. Nasri, L.M.W. Lui, H. Gill, L. Phan, D. Chen-Li, M. Iacobucci, R. Ho, A. Majeed, R.S. McIntyre, Impact of COVID-19 pandemic on mental health in the general population: a systematic review, *J. Affect. Disord.* 277 (2020) 55–64.
- M.S. Pollard, J.S. Tucker, H.D. Green Jr, Changes in adult alcohol use and consequences during the COVID-19 pandemic in the US, *JAMA Network Open* 3 (2020) e2022942–e2022942.
- L. Jacob, L. Smith, N.C. Armstrong, A. Yakkundi, Y. Barnett, L. Butler, D. T. Mcdermott, A. Koyanagi, J.I. Shin, J. Meyer, J. Firth, O. Remes, G.F. L’opez- S’anchez, M.A. Tully, Alcohol use and mental health during COVID-19 lockdown: a cross-sectional study in a sample of UK adults, *Drug Alcohol Depend.* 219 (2020), 108488.
- R. Stanton, Q.G. To, S. Khalesi, S.L. Williams, S.J. Alley, T.L. Thwaite, A.S. Fenning, C. Vandelanotte, Depression, anxiety and stress during COVID-19: associations with changes in physical activity, sleep, tobacco and alcohol use in Australian adults, *Int. J. Environ. Res. Public Health* 17 (2020) 4065.
- S. Callinan, K. Smit, Y. Mojica-Perez, S. D’aquino, D. Moore, E. Kuntsche, Shifts in alcohol consumption during the COVID-19 pandemic: early indications from Australia, *Addiction* (2020).
- P. Panagiotidis, K. Rantis, V. Holeva, E. Parlapani, I. Diakogiannis, Changes in alcohol use habits in the general population, during the COVID-19 lockdown in Greece, *Alcohol and Alcohol.* (Oxford, Oxfordshire) 55 (2020) 702–704.
- H.R. White, A.K. Stevens, K. Hayes, K.M. Jackson, Changes in alcohol consumption among college students due to COVID-19: effects of campus closure and residential change, *J. Stud. Alcohol Drugs* 81 (2020) 725–730.
- A. Ammar, M. Brach, K. Trabelsi, H. Chtourou, O. Boukhris, L. Masmoudi, B. Bouaziz, E. Bentlage, D. How, M. Ahmed, P. Müller, N. Müller, A. Aloui, O. Hammouda, L.L. Paineiras-Domingos, A. Braakman-Jansen, C. Wrede, S. Bastoni, C.S. Pernambuco, L. Mataruna, M. Taheri, K. Irandoust, A. Khacharem, N.L. Bragazzi, K. Chamari, J.M. Glenn, N.T. Bott, F. Gargouri, L. Chaari, H. Batatia, G.M. Ali, O. Abdelkarim, M. Jarraya, K.E. Abed, N. Souissi, L. Van Gemert-Pijnen, B.L. Riemann, L. Riemann, W. Moalla, J. Gómez-Raja, M. Epstein, R. Sanderman, S. V. Schulz, A. Jerg, R. Al-Horani, T. Mansi, M. Jmail, F. Barbosa, F. Ferreira-Santos, B. Šimunič, R. Pišot, A. Gaggioli, S.J. Bailey, J.M. Steinacker, T. Driss, A. Hoekelmann, Effects of COVID-19 home confinement on eating behaviour and physical activity: results of the ECLB-COVID19 international online survey, *Nutrients* 12 (2020) 1583.
- P. Anderson, E.J. Llopis, A. O’donnell, E. Kaner, Impact of COVID-19 confinement on alcohol purchases in Great Britain: controlled interrupted time-series analysis during the first half of 2020 compared with 2015–2018, *Alcohol Alcohol.* (2020).
- R. Bade, B.S. Simpson, M. Ghetia, L. Nguyen, J.M. White, C. Gerber, Changes in alcohol consumption associated with social distancing and self-isolation policies triggered by COVID-19 in South Australia: a wastewater analysis study, *Addiction* (2020).
- P.D. Gonçalves, H.F. Moura, R.A. Do Amaral, J.M. Castaldelli-Maia, A. Malbergier, Alcohol use and COVID-19: can we predict the impact of the pandemic on alcohol

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- use based on the previous crises in the 21st century? A brief review, *Front. Psychiatry* (2020) 11.
- Venkata Lakshmi Narasimha, Lekhansh Shukla, Diptadhi Mukherjee, Jayakrishnan Menon, Sudheendra Huddar, Udit Kumar Panda, Jayant Mahadevan, Arun Kandasamy, Prabhat K Chand, Vivek Benegal, Pratima Murthy, Complicated Alcohol Withdrawal—An Unintended Consequence of COVID-19 Lockdown, *Alcohol and Alcoholism*, Volume 55, Issue 4, July 2020, Pages 350–353, <https://doi.org/10.1093/alcalc/agaa042>
- Jayakumar (2020). *Alcohol Non-Availability Kills More than Coronavirus in KERALA; Foreign Liquor Served as 'Medicine'* [Online] India Today Group.
Retrieved from: <https://www.businesstoday.in/current/economy-politics/alcohol-non-availability-kills-more-than-coronavirus-in-kerala-foreign-liquor-served-as-medicine/story/399716.html>
- GC. Shekhar(2020). *Lockdown Impact: From After Shave to Paint Varnish, Alcohol Alternatives Prove Fatal In Tamil Nadu* [Online] Outlook Publishing
Retrieved from: <https://www.outlookindia.com/website/story/india-news-coronavirus-lockdown-impact-from-after-shave-to-pain-varnish-alcohol-alternatives-prove-fatal-in-tamil-nadu/350176>
- Nadkarni, A. Kapoor and S. Pathare, COVID-19 and forced alcohol abstinence in India: The dilemmas around ethics and rights, *International Journal of Law and Psychiatry* (2020), <https://doi.org/10.1016/j.ijlp.2020.101579>
- Ornell F, Moura HF, Scherer JN, Pechansky F, Kessler F, von Diemen L. The COVID-19 Pandemic and its Impact on Substance Use: Implications for Prevention and Treatment. *Psychiatry Res.* 2020 May 13;289:113096.
- Rehm, J., Killian, C., Ferreira-Borges, C., Jeerngan, D., Monteiro, M., Parry, C., Sanchez, Z., and Manthaw, J (2020). Alcohol use in times of the COVID-19: Implications for monitoring and policy.
- Balhara, Y. P. S., Singh, S., Narang, P. (2020) The effect of lockdown following COVID -19 pandemic on alcohol use and help seeking behaviour: Observations and insights from a sample of alcohol use disorder patients under treatment from a tertiary care centre. *Psychiatry and Clinical Neurosciences*. doi:10.1111/pcn.13075
- Canadian Centre on Substance Use and Addiction. (2020). *COVID-19 and Increased Alcohol Consumptions: NANOS Poll Summary Report*. CCSA. Canadian Centre on Substance Use and Addiction
- Yom-Tov, E., Shembekar, J., Barclay, S. *et al.* The effectiveness of public health advertisements to promote health: a randomized-controlled trial on 794,000 participants. *npj Digital Med* 1, 24 (2018). <https://doi.org/10.1038/s41746-018-0031-7>

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Conflict of Interest

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