Psychiatry in Kerala

IMPACT OF COVID-19 PANDEMIC ON PEOPLE WITH ALCOHOL USE DISORDER IN KERALA–AN OBSERVATION FROM THRISSUR DISTRICT

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ABSTRACT

The novel coronavirus pandemic had caused the closure of beverage outlets in Kerala in late March 2020. There were a few suicides in the immediate period, which were highlighted in the media attributing to non-availability of alcohol. An observational study of patients admitted at the De-addiction Centre, NEST and Jubilee Mission Medical College and Research Institute was done. We recorded our observations from the closure of the beverage outlets until two weeks after. Though the government anticipated at least 100 patients, we encountered only 17. Those admitted were brought in delirium, with seizures or injuries sustained during delirium. The possible reasons behind this disparity are discussed which included the sale of illicit liquor or use of home-made preparations. The current situation arose due to a lack of planning and sudden closure of beverage outlets without warning being issued to mental health professionals. Opinions regarding steps to be taken for similar situations in the future are posited.

Keywords: COVID-19, alcohol use disorder, delirium, withdrawal

INTRODUCTION

The first case of novel coronavirus disease (COVID-19) in India was reported from Thrissur district in Kerala on 30th January 2020.[1] From the last week of February, contact tracing, compulsory quarantine and crowd control started in the state. A nationwide lockdown was declared on 24th March.[1]

Despite the lockdown, beverage outlets were crowded and enforcing social distancing was difficult. From 25th March all the liquor shops and bars were closed on Government order.

After the closure, media reported nine deaths in the state due to non-availability of alcohol; seven by suicide, one due to cardiac arrest and one by poisoning following consumption of non-beverage alcohol.[2] Soon the government initiated a scheme for permitting alcohol users to buy a fixed quota of liquor from the Excise Department if requested with a medical testimonial from a registered doctor. The Excise Department anticipated a large number of individuals developing withdrawal. For the district of Thrissur, an approximate need of 100 beds was expected to care for those in withdrawal. Services of a De-addiction Centre (NEST) and the Department of Psychiatry of Jubilee Mission Medical College were offered, and both institutions remained prepared. This report is based on the experience faced in these two centres in managing alcohol use disorder patients during this period.

This study was conducted to learn from our observations during this pandemic which could help in

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formulating guidelines for the management of substance use disorders if a crisis like this were to occur again.

OBSERVATIONS

Natural Empowering Survival Treatment and Research Centre (NEST), an institution run exclusively for the care of alcohol and drug use patients, is a sister concern of Jubilee Mission Hospital. Both institutions remained prepared to receive and care for the patients in withdrawal. Being the time of COVID-19 pandemic, NEST was closed otherwise, and the services of the hospital were limited. A total of 17 patients was managed in our institutions between 25th March and 9th May. (Table.1)

Table1. Alcohol Use Disorder patients treated at NEST and Jubilee Mission Medical College

Centre	Setting		Number
NEST de-addiction centre	Inpatient		4
Jubilee Mission Medical College and Research Institute	Inpatient		3
	Emergency		3
	Consultation		7
	Neurosurgery	2	
	Neurology	2	
	General Medicine	2	
	General Surgery	1	
Total			17

From 25th March to 28th March, seven patients who were referred by the Police or Excise department were brought to the De-addiction center. These patients were brought to the attention of the Excise department through VIMUKTHI, a de-addiction service hotline. All of them were brought in alcohol withdrawal state with delirium. Two of them were referred to the Medical College due to protracted delirium and a history of head injury. One patient was referred to a COVID care hospital for want of clear history and on clinical suspicion. The other 4 patients were managed in the centre up to a maximum of 14 days and discharged on recovery from withdrawal. All the admitted patients cooperated for the treatment during the course of the stay. They were not provided with the usual comprehensive de-addiction services package from the centre.

In the medical college hospital, three patients were brought in an alcohol withdrawal state. Two of the patients were brought in delirium, one of whom had sustained 3rd. degree burns while in delirium. Another patient with a past history of withdrawal seizure was brought with a recurrence of the same complaints.

Table 2. Demographic details of patients with alcohol use disorder

Variable	Number
Age	
Less than 20 years	0
20-50 years	9
More than 50 years	8
Gender	
Males	17
Females	0
Employment	
Employed	3
Unemployed	6
Employed, out of work	8
Marital status	
Married	14
Single	2
Divorced	0
Widower	1

None of the seven patients of both centres had expressed any suicidal ideation or death wishes. Comorbid psychiatric disorders were also managed simultaneously. Two patients had personality disorders, one had a social anxiety disorder, and one had depressive disorder.

None of these individuals was ready for de-addiction treatment and was in the pre-contemplation stage of motivation.

Individuals with Alcohol Use Disorder in a withdrawal state under the care of other departments were managed by consultation services of the department. During this period, seven patients were thus served: two each from neurosurgery, general medicine and neurology and one from general surgery. Four of them were in delirium, two had withdrawal seizures, and the remaining one had mild withdrawal symptoms. One had sustained a fall from a coconut tree while trying to make toddy illegally. None of them or their relatives were willing for transfer to the psychiatry ward and were managed in the respective departments itself. During the same period, we also treated two patients in the emergency department who came with mild withdrawal symptoms like sleep disturbance and

tremulousness. They were unwilling for admission to get treated. One of the former patient's relatives consulted twice for refill prescriptions.

Table 3, Illness characteristics of the patients with Alcohol Use Disorder

Diagnosis	Number
Withdrawal state, uncomplicated	4
Withdrawal state, with convulsions	1
Withdrawal state with delirium, without convulsions	10
Withdrawal state with delirium with convulsions	2
Comorbid psychiatric illness	4
Depressive Disorder	1
Social Anxiety Disorder	1
Personality Disorder	2
Comorbid medical/surgical illness	
Medical illness	
Diabetes	2
Hypertension	1
Infections	1
Cardiac disease	0
Electrolyte imbalance	1
Surgical illness	
Burns	1
Head injury	2

DISCUSSION

The worldwide prevalence of current Alcohol Use Disorder (AUD) is up to 14%.[3] Withdrawal syndrome is the most common reason for the consultation of AUD patients.[4] Severe alcohol withdrawal leads to substantial morbidities such as aspiration pneumonia, arrhythmia and myocardial infarction.[4] Delirium tremens occurs in 3–5% of patients who are hospitalised for the management of alcohol withdrawal.[5] Thanks to the availability of effective treatment, the current mortality rate in delirium are 3%.[6]

Unlike the surge of withdrawal cases during lockdown due to COVID-19 pandemic observed elsewhere (NIMHANS).[7] our institutions had a significantly lower number of cases. Availability of illicit liquor through unlicensed sources may be one of the reasons. Large quantities of such alcohol seized while brewing/distillation or otherwise during this period by authorities do support this argument. Use of toddy, locally made from the coconut by tapping could be another reason. Brewed preparation with lesser alcohol content may be enough to keep an abuser without severe withdrawal symptoms, even if not enough for getting intoxicated to satisfaction. This possibility is supported by the history given by a patient with injuries sustained due to a fall from a coconut tree. Certain Ayurveda preparations have a high content in alcohol, and a few of the individuals may be using it. Unofficial and secret sale of alcohol in some beverages/supply centres were also reported.

Alcohol users purchasing illicit products from criminals can give rise to an increase in crimes, their shifting to other intoxicants and more alcohol-related deaths due to adulteration with poisonous ingredients.[8] When the supply is irregular and erratic as in illicit trades, there is a chance for the user to take more quantity whenever accessible, which in turn may have a causal role for suicides.[9] In studies done on alcohol use disorders following natural disasters, it was found that men used alcohol as a means to cope with psychological distress or sleep disturbances in the post-disaster period. Both interrupted sleep and early morning awakening were risk factors for the overuse of alcohol.[10]

Some people increase their use of alcohol after a disaster, probably to escape from negative feelings and behaviours. This can lead to disturbed sleep, health problems and relationship issues. Reduction in the level of consumption or seeking help is hence advisable.[11] If the person is already on effective treatment, the need is to refill or replicate it.[2] If the person has not received treatment, the occasion can be used for inviting and introducing it. Polarisation effect on self-perceived changes in alcohol consumption is observed in disaster situations; either increases or decreases in drinking, though the finding could be a recall bias.[13] From merging the data of 10 post-disaster alcohol use studies, it was observed that the vast majority of them are continued or relapsed drinkers.[14] New users are rarely seen after any disaster. A study from this centre also reported alcohol use among inmates of a rescue camp started during Kerala Floods 2018.

There appears a need for the government to alert the mental health care professionals and health workers a few days before the closure of alcohol sale outlets so that necessary steps can be taken to prevent casualties. Stigma reduction strategies need to be devised and implemented to encourage those in need to seek help

from hospitals. Awareness regarding treatment and quelling public misconceptions regarding medications employed for detoxification is needed. There also needs to be an inquiry into and restriction of the sale of anti-craving agents by non-medical individuals to unsuspecting family members of alcohol-dependent individuals without forewarning about the deleterious effects. Misuse of Ayurveda preparations needs to be avoided. There needs to be more coordination between local self-government, excise department and mental health authorities.

CONCLUSION

The coronavirus pandemic forced us to think about contingency measures to be adopted in scenarios where substance-dependent individuals would be forced into abstinence. Though we expected a significant number of patients in withdrawal, the actual number of care seekers were far less. The present anticipation of a huge number of alcohol withdrawal patients appeared unrealistic in our scenario.

Use of illicit alcohol, non-beverage alcohol or coconut toddy could have kept severe withdrawal symptoms at bay. This might be a primary reason for why there was a discrepancy between the expected number and those who presented. Those who approached the hospital or centre were managed for their present crisis. Neither were they motivated to receive treatment for abstinence nor could we provide it as the centre was closed due to the COVID-19 pandemic.

We anticipate worsening of psychological problems due to the financial adversity which will be faced by many individuals. This can lead to worsening of alcohol abuse when the beverage outlets open up. We can also expect a rise in the crime rates, road traffic accidents, domestic violence during the immediate period of the reopening, which might be due to intoxication.

LIMITATIONS

The number of patients and the period of study is too less to generalise to an entire population. This study was done in a tertiary care centre and deaddiction centre, and we have not taken data from other private hospitals or government centres in the Thrissur district. We have not taken into account the socio-demographic profile of the admitted patients. We were not able to evaluate in-depth for biopsychosocial factors as many of the patients were seen as consultations in other departments. We are, therefore, unable to point out specific reasons why these people were affected more than others.

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Conflict of interest:
None declared.

REFERENCES

1. Timeline of a protracted lockdown: How Kerala dealt with Coronavirus. (2020, 2nd May) Onmanorama. Retrieved from: https://english.manoramaonline.com/news/kerala/2020/03/29/coronavirus-india-timeline.html
2. Chandrakanth Viswanath. A different tragedy strikes Kerala during COVID-19 lockdown due to non-availability of alcohol. (2020, 29th March) News 18. Retrieved from: https://www.news18.com/news/india/a-different-sort-of-tragedy-strikes-kerala-during-covid-19-lockdown-due-to-non-availability-of-alcohol-2556049.html
3. Poznyak V, Fleischmann A, Rekve D, Rylett M, Rehm J, Gmel G. The world health organisation's global monitoring system on alcohol and health. Alcohol Res. 2014;35(2):244-49
4. McKeon A, Frye MA, Delanty N. The alcohol withdrawal syndrome. J Neurol Neurosurg Psychiatry. 2008; 79(8):854-62.
5. Eyer F, Schuster T, Felgenhauer N, Pfab R, Strubel T, Saugel B et al. Risk assessment of moderate to severe alcohol withdrawal--predictors for seizures and delirium tremens in the course of withdrawal. Alcohol Alcohol. 2011; 46(4):427-33.
6. Salottolo K, McGuire E, Mains CW, van Doorn EC, Bar-Or D. Occurrence, Predictors, and Prognosis of Alcohol Withdrawal Syndrome and Delirium Tremens Following Traumatic Injury. Crit Care Med. 2017; 45(5):867-74.
7. Omkar Khandekar. Is an alcohol ban necessary during the lockdown? (2020, 24th April) Mint. Retrieved from: https://www.livemint.com/mint-lounge/features/is-an-alcohol-ban-necessary-during-the-lockdown-11587726286324.html
8. Barnett R.E, The Harmful Side Effects of Drug Prohibition. Georgetown Public Law and Legal Theory Research Paper No. 12-037. Utah L Rev 2009.11-34. Retrieved from: https://scholarship.law.georgetown.edu/facpub/817

9. Borges G, Bagge C, Cherpitel C J, Conner K, Orozco R, Rossow I. A meta-analysis of acute alcohol use and the risk of suicide attempt. Psychol Med. 2017; 47(5): 949–57

10. Kaneharaa A, Andob S, Arakic T, Usamid S, Kuwabarae H, Kanof Y, et al. Trends in psychological distress and alcoholism after The Great East Japan Earthquake of 2011. SSM - Population Health 2016;2: 807–12

11. National Centre for PTSD. US Centre for Veterans. https://www.ptsd.va.gov/professional/treat/type/PFA/PFA_Substance_Use.pdf. Accessed last on 23/05/2020.

12. Disaster Events and Services for Persons with Co-Occurring Substance Abuse and Mental Health Disorders. http://cretscmhd.psych.ucla.edu/nola/Video/MHR/CSAT/outreach/04-COCE DisasterEvents Text-SAMHSAapproved.pdf. Accessed last on 23/05/2020

13. Nordløkken A, Pape H, Wentzel-Larsen T, Heir T. Changes in alcohol consumption after a natural disaster: a study of Norwegian survivors after the 2004 Southeast Asia tsunami. BMC Public Health 2013; 13:58. Retrieved from: http://www.biomedcentral.com/1471-2458/13/58

14. North C.S, Ringwalt C.L, Downs D, Derzon J, Galvin D. Post disaster Course of Alcohol Use Disorders in Systematically Studied Survivors of 10 Disasters. Arch Gen Psychiatry. 2011;68(2):173-80.