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Psychoactive Substance Use behaviour during the recent Pandemic Lock down in Sri Lanka: A Qualitative study

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Abstract. A significant behavioral change in human lifestyle was noted during the recent COVID-19 pandemic throughout the world; Sri Lanka is no exception. The behavior related to psychoactive substance consumption mainly for alcohol and illicit drugs has become a debatable matter in this pandemic lockdown. This study was conducted to explore the psychoactive substance use behavior during the recent pandemic lockdown in Sri Lanka. A qualitative study was conducted using a series of phone-based in-depth interviews with a sample recruited by a mix of purposive and snowball sampling in mid-2021. Data were collected until data saturation achieved. Males who were dependent on different types of psychoactive substances from a wide range of age categories, social classes, ethnicities, and religions were included in the study to ensure the transferability of findings. In a given socioeconomic context, psychoactive substance use is rare among females in the country hence no females were not included in the study. Audio recordings of full conversations were transcribed into text and data were analyzed using a thematic approach. Alcohol, heroin, and cannabis were identified as the main psychoactive substances among participants. Frequency of psychoactive substance use, period of abstinence, changes of psychoactive substance type, different strategies in responding to the non-availability of psychoactive substance including storage, facing psychoactive substance-related legal issues, and attitude and motivation for changing its use were identified as main themes related to psychoactive substance use behavior during the recent pandemic lockdown in Sri Lanka. The recent COVID-19 pandemic has badly affected psychoactive substance use behavior. However, people who were dependent on them had developed adaptive behavior to continue their substance use behavior despite the pandemic lockdown. Therefore, policymakers' attention should be drawn to conducting preventive and harm reduction activities even during pandemics, especially for vulnerable populations.

Keywords. Psychoactive Substance Use behavior, COVID-19, Pandemic Lock down

INTRODUCTION

Although the prime attention has been focused on the control and management of coronavirus (COVID-19) during the recent COVID pandemic, it was observed that some of the other impacts of the pandemic have not been given due recognition. The Sri Lankan government has enforced lockdowns and movement restrictions several times, to prevent further spread of COVID-19 since the beginning of the pandemic. As a result of that, significant behavioural changes in human lifestyle were noted (1). The behaviour related to Psychoactive substance consumption mainly for alcohol and illicit drugs such as cannabis and heroin during the pandemic lockdown has become a debatable matter in different kinds of disciplines globally (2).

More than 30% of frequent users changed their substance use habits; either stopped, reduced or increased, because of the pandemic in Poland (3). Furthermore, 9.5% of Australians reported that their consumption of Psychoactive substances had decreased with the lockdown (4). On the other hand, Psychoactive substance sale rates have climbed up in certain countries with COVID-19 restrictions for both legal and illegal substances due to the disruption of the supplement chain (5). People with substance use behavior mainly illicit drugs were at a greater risk of worse COVID-19 outcomes (6). They found that the COVID-19 pandemic can lead to a surge of addictive behaviours (both new and relapse) due to disruption of the psychological well-being of the people. Emergencies due to withdrawal symptoms including deaths are being increasingly

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reported due to the disruption of the trafficking system of substances (7). This resulted in aggravating psychoactive substance-related harm including COVID-19-related deaths (8).

Lack of availability and accessibility prompted some substance users to abstain from Psychoactive substances during the lockdown period (9). However, it was apparent that most of these people got back to the habitual use of Psychoactive substances when restrictions were lifted. However Psychoactive substance consumption during the pandemic-induced movement restrictions is one of the invisible areas which many have missed out on in policy planning and interventional programs in this period (9).

Psychoactive substance-related harm is not a new phenomenon and it has been a serious health and social issue in Sri Lanka for a long time (10, 11, 12, 13) The problem of psychoactive substance addiction cannot be considered just as an individual problem. Because, it has influenced individuals, families, communities and society as a whole. So, there is a clear opportunity to motivate people to get rid of psychoactive substances, using the opportunity created by the pandemic restrictions. On the other hand, exploring the storage and consumption behaviour of psychoactive substances during the lockdown period will inform policymakers to make informed decisions to minimize psychoactive substance-related harm to society.

There is not enough systematically collected information to analyze the changes in psychoactive substance consumption during the lockdown in Sri Lanka. Three significant clusters of COVID-19 cases were reported during the pandemic (14), placing people at risk of community transmission while among them, two clusters were reported among a group of drug addicts in an urban slum area in Western province and the drug rehabilitation centre located in the North Western Province. Another cluster was reported among a group of navy officers and later it was found that they were also infected from the cluster of drug addicts reported in the urban slum area in the Western province. This emphasizes the necessity of identifying the patterns and contexts of Psychoactive substance consumption during a pandemic like COVID-19 focusing the harm reduction. Further, it's vital to understand the behavioural changes of psychoactive substance use and how social status or social inequalities influence Psychoactive substance consumption during the pandemic lockdown. It is also important to explore the motivation of people to quit psychoactive substances after a brief period of abstinence due to non-availability or non-accessibility.

This study intends to provide evidence-based recommendations to the mental health and public health authorities to initiate necessary action for an opportunistic Psychoactive substance prevention strategy, capitalizing on the 'lockdown' abstinence in pandemic situations like the recent COVID pandemic. Hence, this study was conducted to explore the psychoactive substance use behaviour during the recent pandemic lockdown in Sri Lanka.

MATERIAL AND METHODS

Study design and study sample. A qualitative study was conducted by using a series of in-depth interviews with a sample who were recruited by a mix of purposive and snowball sampling (purposively selected study subjects recruited others known to them). Phenomenological methods were followed by using both exploratory and explanatory approaches. Subjects from a wide range of age categories, social classes, ethnicities, religions and different types of psychoactive substances (alcohol, cannabis and heroin) were included to ensure the transferability of findings. Males who are dependent or addicted to psychoactive substances were included in the study. In a given socioeconomic context, psychoactive substance use is rare among females in the country hence no females were not included for the study.

Data collection. Phone-based interviews were conducted due to the practical difficulties posed by the pandemic situation in mid-2021. Four data collectors (two graduates and two undergraduates from medical and sociology disciplines) conducted interviews. They had prior training on data collection in qualitative studies under the principal investigator. Training was given before the data collection to ensure consistency. Interviews were conducted after obtaining informed verbal consent. Times were arranged in convenience with subjects. A semi-structured format was followed during

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the data collection. An interviewer guide was prepared based on key aspects research question to enhance the dependability. Interviews were recorded with the consent of the participants. Data collection was continued till the point of saturation of ideas where new themes had no more emerged. Data saturation was achieved after conducting 20 in-depth interviews including alcohol, cannabis and heroin users. Confidentiality and privacy of information were maximally secured. Data collection took four months period and each interview lasted between 30 to 40 minutes.

Data analysis. Audio recordings of full conversations were transcribed into text. Then thematic analysis was done. Coding and sorting were done. Common themes were identified and grouped together. Then general structure was synthesized by integrating and ordering relevant themes to fit into the framework of study questions. The trustworthiness of the study was assured by addressing the transferability and dependability of the methodology. Theoretical and methodological rigor was ensured.

Ethical considerations. Confidentiality of data and privacy of participants were assured at every level of data collection and analysis. Phone-based interviews facilitated the data collection while ensuring the quality of data with the anonymous nature of the data collection. Audio recordings and interview scripts were stored safely and can only be accessed by investigators. All the information leading to individual identification of participants was detached. Approval for data collection was obtained from institutional review board of the Regional Director of Health Services, Galle, Sri Lanka during the pandemic.

RESULT

A sample of 20 adult males in Southern province of Sri Lanka representing all three districts were involved in the study (Table 1). Purposive sampling which was further augmented by the snow-ball approach was used to ensure a representative nature and achieve a maximum degree of variation in terms of sociodemographic characteristics. All the males were used to taking psychoactive substances (either alcohol, heroin, cannabis or combinations) more than five days per week while 25% were daily users. Six themes were identified in relation to psychoactive substance use during the pandemic lockdown in Sri Lanka (Figure 1).

Table 1. Basic characteristics of the sample (N=20)

Characteristics		Number (%)
Residence (Districts)	Hambantota	08 (40%)
	Galle	06 (30%)
	Matara	06 (40%)
Age (Years)	25 - 35	03 (15%)
	36 - 45	05 (25%)
	46 - 55	05 (25%)
	56 - 65	07 (35%)
Highest education qualification	Primary Education (Grade 1-5)	03 (15%)
	Secondary Education (Grade 6-13)	14 (70%)
	Tertiary Education (Graduate and above)	03 (15%)
Marital Status	Married	15 (75%)
	Unmarried	3(15%)
	Widow	1 (5%)
	Divorced	1 (5%)
Occupation	Formal Sector	09 (45%)
	Informal Sector	11 (55%)
Monthly income (Rs.)	40,000.00 - 55,000.00	12 (60%)
	>55,000.00	08 (40%)

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Pattern of Psychoactive Substance Use	Psychoactive substance storage	Reaction to the non-availability
Psychoactive Substance Use behaviour during the recent Pandemic Lockdown in Sri Lanka		
Attitudes towards the non-availability	Facing psychoactive substance use-related legal issues	Attitude and motivation for changing Psychoactive substance behaviour

Figure 1. Themes identified in relation to psychoactive substance use during pandemic lockdown

Psychoactive substance storage and pattern of its use during the lockdown period, reaction to the non-availability of psychoactive substances, attitudes towards the non-availability, psychoactive substance-related legal issues and attitude and motivation for changing Psychoactive substance behaviour were identified as the main concerns of psychoactive substance users during pandemic lockdown period based on the in-depth interviews irrespective of the type of substance.

Psychoactive substance storage during the lockdown period. Attempt to store psychoactive substance including alcohol was not identified as an immediate response to the lockdown. However, some of them had tried to get stocks of substance through their friends who are illegally involving those substance related business, it didn't work as they have missed the chance due to unexceptional increment of its cost due to unavailability and high demand. Formal workers worried about not having easy access for the substance during pandemic lock down and wish to have some storage while some of them had shared substances with their friends who kept a storage. However, informal workers didn't worry about the storage as they were able to approach substances through illegal routes.

Several points emerged in relation to their tendency in storing psychoactive substance during the immediate aftermath of lockdown. Lack of a suitable place to store those substances with negative responses for taking substance from their families led them to believe home is not a safe place to store substances. Meanwhile high cost of substances during pandemic lockdown act as a barrier to keep a stock of those substances at once.

Psychoactive substance taking behaviour during the pandemic lockdown. Changes of Psychoactive substance taking behaviour during the lockdown period was identified under three main aspects; frequency of use, period of abstinence and change of the types of psychoactive substance use.

All of the respondents in the study were people who are addicted to psychoactive substances. Reduced frequency of consumption was noted among two third while no difference in its use was identified among rest. It seems pandemic lock down resulted in reduced frequency of psychoactive substance consumption. Lack of availability for formal workers and lack of affordability due to losing of daily income for informal workers were highlighted as common reasons.

Abstain from psychoactive substance for varying durations during the lock down period was identified. Almost half of the participants abstained for a period of one week during this time while some of the respondents abstained for periods of 1-2 weeks and more than 2 weeks.

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In response to the shortage of psychoactive substance due to the closure of liquor stores and breaking chain of illicit drug trafficking due to pandemic, changes have noted in the type of psychoactive substance they had consumed before. Before the pandemic lockdown participants who consumed arrack shifted to use illicit alcohol products. But there were none who exclusively consumed illicit alcohol products.

Though arrack remained as the most prevalent type even during the lockdown period a clear increase in the use of illicit alcohol was noted. Few people who never had illicit alcohol before started consuming it with the shortage of heroin while rest were used to take cannabis instead of heroin.

It was apparent that lack of availability of heroin and arrack prompted to turn to another available psychoactive substance probably illicit psychoactive substance (illicit alcohol or cannabis).

Different strategies in responding to the non-availability of Psychoactive substances during pandemic lockdown. As a result of the non-availability of psychoactive substances during pandemic lockdown, respondents had showed different strategies either to ensure supply or cope with non-availability. As strategies to ensure supply following practices were done; production of illicit alcohol at domestic level and production of home brewed 'spirits', purchasing illegally delivered alcohol and illicit drugs (psychoactive substance trafficking) and change into alternative psychoactive substance which had low cost and better access.

Two respondents had started producing illicit alcohol at home. One of them was involved at the beginning of the lockdown period and another person was involved after his stored liquor was finished. However, both of them belonged to low-income families and were daily laborers in the informal sector. Both men were above 50 years old and they were involved making illicit psychoactive substance in their young age.

It seems pandemic lockdown has prompted people to start brewing illicit psychoactive substance. They further described how they communicated the process to the younger generation as some youth in the area were attracted to their production process.

Few respondents who were alcohol dependent described how they brewed spirits at home with some natural ingredients due to lack of alcohol. However they did not wish to be identified as illegal psychoactive substance. Both of them preferred to take psychoactive substance individually, not with friends or other parties.

When considering other psychoactive substances, majority were able to purchase them which were delivered illegally. Psychoactive substance trafficking was noted as the main channel of supply during the lockdown.

They described the different supply chains of illegal psychoactive substance during the lockdown period. Many other participants were also able to purchase illicit psychoactive substance within their locality during the lockdown period. Following factors were elicited as contributory factors for these strategies; Perceived lack of legal monitoring, support from friends and their networks, prior knowledge related Psychoactive substance brewing, emergence of illegal Psychoactive substance supply as a profitable source of income. Perceived lack of legal monitoring for psychoactive substance related activities had created a relaxed environment. It was also apparent that some people made it a profitable business.

Facing Psychoactive substance use related legal issues during the lockdown period. All of these respondents had engaged illegal activities like producing illicit psychoactive substance, purchasing and trafficking in both directly and indirectly during the lockdown period. However, only one of them was punished by law during the lockdown. However, it was revealed they had more freedom to engage psychoactive substance related activities than previously with pandemic lockdown.

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Attitudes towards the unavailability of free access for psychoactive substances during pandemic lockdown. Respondents reacted differently to the unavailability of free access for psychoactive substances during pandemic lockdown. Some of the participants strongly disagreed to the decision of closing liquor shops and they thought this as an irrational decision that was made by the government. The increase in illegal psychoactive substance such as heroin and cannabis prices due to the unexpected banning of liquor was elicited as a main reason by them.

Attitude and motivation for changing Psychoactive substance taking behaviour. Four respondents had past experience in quitting from psychoactive substance for certain period of time and relapsing. They were able to identify what motivated them to stop its use and what made them to relapse. According to that, although they had stopped psychoactive substance taking it was not sustainable and relapsed due to different reasons such as recovering and moving for normal daily routine following disability by accident, getting higher income job which facilitated purchase of drugs and as a coping strategy to personnel problems.

Among the participants majority don't perceive taking psychoactive substance as a problem. They justified their psychoactive substance use behaviour by reasoning various kinds of socio economic and cultural ideas, beliefs and values. As a result of that, they do not want to change their behaviour.

However, minority of participants have identified psychoactive substance use as a problem, but still not committed to change their behaviour. For an example, one of the respondents wanted to change his behaviour to ensure his children's dignity in the community. But he still did not take a step to change his behaviour and not bother about rehabilitation as most of the rehabilitation centres were vacated due to the pandemic. However, it was revealed that, withdrawal symptoms have become a major barrier for committing to change their behaviour. Therefore, although they want to change their behaviour, when withdrawal symptoms arise, they automatically continue their behaviour.

DISCUSSION

This study was conducted to explore the psychoactive substance use behaviour during the recent pandemic lock down in Sri Lanka. The results identified, that several changes related to psychoactive substance storage and pattern of its use during lockdown period, reaction to the non-availability of psychoactive substance, attitudes towards the non-availability, psychoactive substance related legal issues and attitude and motivation for changing psychoactive substance taking behaviour during recent COVID-19 pandemics in the country. However, use of a qualitative study and non-probability sampling method for subject recruitment had affect the quality of data and it was acknowledged as a main limitation of the study.

The markets for psychoactive substances (heroin, alcohol, and cannabis) were impacted by COVID-19 pandemic, which had an impact on everything from availability and demand to manufacturing, trafficking, and marketing. The various countries have experienced various impacts on these characteristics; the retail markets, on the other hand, have experienced a more uniform transformation. There were reports of their shortages, stockpiling, price increases, and decrease in purity from all over the world (15) and there was no exception in Sri Lanka. Alcohol, heroin and cannabis are the commonly used psychoactive substances in Sri Lanka(10). As a developing nation, people faced in economic instability during covid pandemic(16). Hence, people who were dependent on those substances were faced a challenge in requiring daily usage of those substances. As the study found that dependents were fail to maintain a storage probably due to economic instability. Moreover, rising demand due to disruption of legal selling of alcohol and trafficking of heroin and cannabis had led to increase prices in many substances including illicit ones. With that there is no wonder of

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dependents shifting into more cheaper substances like illicit alcohol and cannabis which had easy access in living community compared to arracks and heroin.

The tight restrictions placed on people's movements and gathering places in an attempt to contain the pandemic have significantly decreased the social possibilities for alcohol and drug use(17). The places where drug users usually congregate as well as their social life were impacted by the prohibitions. Festivals have been postponed, and bars and clubs have shuttered. Furthermore, the imposition of confinement and quarantine restrictions has significantly restricted people's mobility and social contacts [24]. Moreover, travel restrictions during lockdown disrupts transportation of those substances, but illegal transportation had occurred according to their responds even with travel restrictions. Not checking vehicles which used for essential good transport may facilitate the illegal transportation of psychoactive substances within country during pandemic lockdown. Moreover, lock down with travel restriction and allow specially for alcohol dependents to make illicit alcohols at homes. Therefore, harm related to the psychoactive substances had not been changed even during pandemic lockdown.

Although present study revealed engagement of illegal activities like producing illicit psychoactive substance, purchasing and trafficking in both directly and indirectly during the lockdown period was high, having legal actions against them was negligible. Hence legal authorities should be aware on those possibilities even in a lock down with travel restrictions and may need to take appropriate action to control them.

As participants have poor attitudes toward changing their addictive behaviour, proper rehabilitation may be required to motivate them to quit substance use behaviour. Even with the unavailability of easy access to substances, none of them were able to change their behaviour. Hence, preventive and harm reduction strategies may require for those vulnerable populations. Rehabilitation, motivation to change and improving coping and life skills among them may help to address that problem.

In literature there were several studies conducted in related to this topic(18, 19, 20, 21, 22, 23, 24). According to a systematic review found that psychoactive substance use had been increased during COVID pandemic although it was expected to decrease in prevalence (4). This proved that substance dependents had not changed their behaviour and pandemic itself had led to increase the prevalence (4). However, according to a study conducted in Italy, it was found that there were some changes in the parameters linked to the use of psychoactive substances while the prevalence of consumption of each substance fell over the lockdown period, with alcohol being the most consumed substance (43.1%)(25) due to availability and affordability compared to the other substances. Those studies had different findings probably due to different socioeconomic contexts in those countries. However, all of these studies highlighted a common conclusion which is “psychoactive substance use behaviour had not changed during the COVID pandemic while pattern had been changed with increment in some substances”.

This study tracked a small number of subjects and was restricted to a population at high risk of alcohol and drug use in Sri Lanka. The study participants mainly resident from southern part (In of the country which may not have exposure to novel psychoactive substances. Hence, larger study will be required to identify exact picture of the psychoactive substance behaviour during a pandemic situation. By identifying correct picture will help for proper planning of preventive and harm reduction activities in future a pandemic by identifying gaps in the current preventive strategies which had used in recent covid pandemic.

CONCLUSION AND RECOMMENDATIONS

Pandemic lock down didn’t prompt regular users to store Psychoactive substance overwhelmingly. However, brewing of illicit Psychoactive substance and home brewing

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of spirits were become abundant. Because of that, a clear increase in the use of illicit Psychoactive substance was noted. Few people who never had some form of illicit psychoactive substances started consuming it. Illegally delivered low-cost psychoactive substances were become readily available in the community. Most of regular users had reduced frequency of consumption and some of them were abstained from psychoactive substance for varying lengths of periods. Non-availability, accessibly issues and lack of affordability due to losing of regular incomes were elicited as contributory factors. However, with time almost all of them had shifted to another easily available alternative psychoactive while they returned back to the regular consumption when the pandemic limitations were over. These findings highlighted the need of strengthening law enforcement to curb production and sales of illicit and illegally delivered psychoactive substance. There is an opportunity to sustain the abstinence of these people with an active intervention by public health staff. Advocacy of policy makers, public awareness and strengthening of primary care services for psychoactive substance rehabilitation should be done. Policy makers attention should be drawn to conduct preventive and harm reduction activities even during pandemics at least for vulnerable population.

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Conflict of Interest. Manuscript does not contain any individual person's data in any form (including any individual details, images or videos). Therefore, consent for publication was not considered. The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request. "The authors declare that they have no competing interests.

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