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Indian Journal of Forensic and Community Medicine

Journal homepage: <https://www.ijfcm.org/>

Original Research Article

Prescription drug misuse during pandemic

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ARTICLE INFO

Article history:

Received 29-07-2021

Accepted 27-08-2021

Available online 18-09-2021

Keywords:

Prescription drugs

Pandemic

ABSTRACT

Prescription drug misuse is when someone takes a medication inappropriately. The prescription drug misuse is not an uncommon issue but the use of prescription drugs has significantly increased during the covid 19 pandemic. The major factors that has contributed to the increased dependence to prescription drug use during the pandemic is the increased paranoia about the virus and the drug dependency of the substance abusers. The context of the study is the increased use of prescription drugs among young adults and case reports of violence attributed by drug use. The main aim of the study is to identify the trend of prescription drug use among young adults and the factors that contribute to the misuse. The study primarily focused on young adults and recorded the responses using the questionnaire. The methodology for the proposed study was through online interaction with the participants in the form of survey through google forms. The data collection method included literature review of published articles pertaining to the topic, newspaper articles and websites. The data collection was primarily through google forms and participants response are analyzed for arriving into conclusion. Further-more data from published article, journals, data published in websites like the National Health Portal, National Institute of Health (NIH)- National Institute of Drug Abuse (NIDA), World Health Organization (WHO). Both primary and secondary data is used for data collection. An age group between 20-30 was collected. This age group was selected due to the possibility that most utilization of prescription drugs would be contributed by these groups. Mostly randomized sampling was carried out due to the limitation of collecting data one to one considering the pandemic situations. After analyzing the results, it is inferred that there is a significant increase in use of prescription drugs during the pandemic time and the study also found a trend of alarming concern of buying prescription drug without it being prescribed by the medical practitioner which hence is a serious case of social concern.

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1. Introduction

Prescription drug is any pharmaceutical drug which is to be used only as prescribed by a medical practitioner. Prescription drug is however widely misused in our country. The prescription drug misuse is a very common issue among people especially young adults,¹ this has significantly increased during the pandemic. There is a notable misconception that prescription drugs are less

harmful and relatively safe as compared to substance abused drug but prescription drugs also impart long term health risk to the patients. People tend to use pain relievers and tend to overdose with these medications such cases are highly common among females specifically taking opioid pain-relievers.^{2,3} The main purpose of the study was to identify if there is any potential misuse of prescription drug use and to identify the effect in a person's behavior. The main factor that is associated with prescription drug misuse is the fact that there use and misuse is less stigmatizing than the illicit drug abuse or the substance abuse. Self-

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medication and treatment is another potential public health concern where people tend to use prescription drugs without being prescribed by a medical practitioner in order to relieve from pain will become a habituation and in turn could lead to drug dependency. Such self-medications can potentially alleviate mental disturbances and could lead to abuse.⁴ The study included both male and female young respondents and majority of them admitted of using prescription drugs especially painkillers very frequently. Respondents also shared the experience of change in behavior and problems with memory. Prolonged use of prescription drugs attributed in violent behavioral changes. The increased trend in using alcohol and the use of prescription drugs are in rise among older adults.⁵ The study also found that majority of female respondents admitted of using a painkiller very frequently. The alarming concern is that a significant percentage of sample admitted of buying a prescription drug without a prescription which itself clearly stated the misuse (Figure 8). The pandemic have an impact on the substance abuse⁶ people have resorted to prescription drugs and even psychoactive drugs in the wake of unavailability of illicit drugs.

2. Objective of the Study

The study is conducted as a comparative study with focus on the following aspects:

1. To understand the current trend of prescription drug use.
2. To understand the trend in the current pandemic perspective.
3. To understand if there is any potential threat of abuse.
4. To understand whether the people are aware regarding medications and their long-term effects.
5. To identify whether there is any correlation between stress and prescription drug use.
6. To understand people's perspective for using medications.
7. To identify any pattern or behavior of self-treatment.
8. To identify whether there is any behavioral changes associated with drug use.
9. To understand the depth of the issue and to identify potential public health concern.

3. Methodology

The methodology for the proposed study was through online interaction with the participants in the form of survey through google forms. The data collection method included literature review of published articles pertaining to the topic, newspaper articles and websites.

3.1. Data collection

The data collection was primarily through google forms and participants response are analyzed for arriving into conclusion. Further-more data from published article, journals, data published in websites like the National Health Portal, National Institute of Health (NIH)- National Institute of Drug Abuse (NIDA), World Health Organization (WHO). Both primary and secondary data is used for data collection. An age group between 20-80 was collected. This age group was selected due to the possibility that most utilization of prescription drugs would be contributed by these groups. Mostly random sampling was carried out due to the limitation of collecting data one-to-one considering the pandemic situations.

3.2. Data interpretation

The data collected from 100 participants through the google form is analyzed. The data interpretation is carried out through the responses. The age group between 20-60 analyzed of the 100 respondents 49% participants were males and 51% respondents were females. Occupational status of the respondents included from students, teacher, doctor, business professional, IT sector, and retired individuals also. Of the responses recorded 74% of the participant do not suffer from any illness but 26% of the responses stated that they suffer from some illness. From the responses:

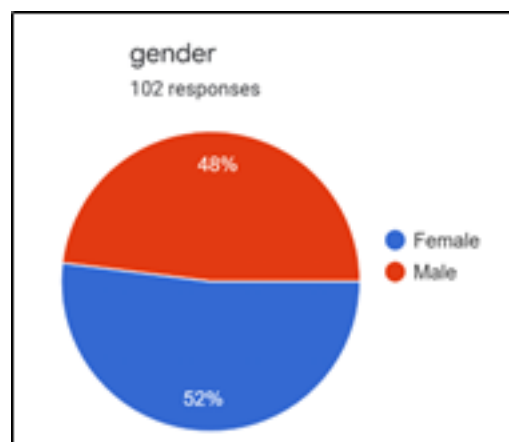


Fig. 1:

1. 21.3% people suffered from diabetes.
2. 14.9% suffered from blood pressure
3. 21.3% suffered from psychiatric/stress related issues
4. 42.6% stated others.

32.5% people take medications for the illness whereas 64.9% opted for no. from the responses it was inferred that 38% people experiences stress very frequently, 48% people experience stress rarely and 14% have no known experience

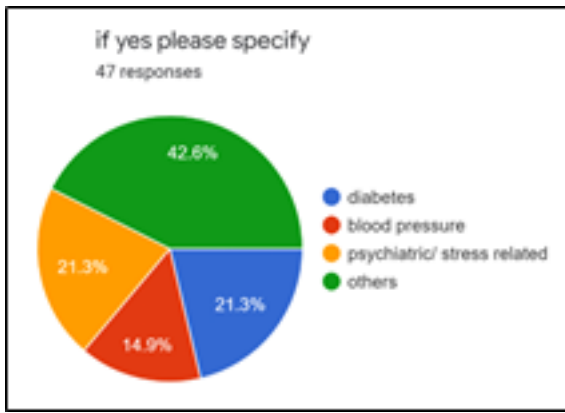


Fig. 2:

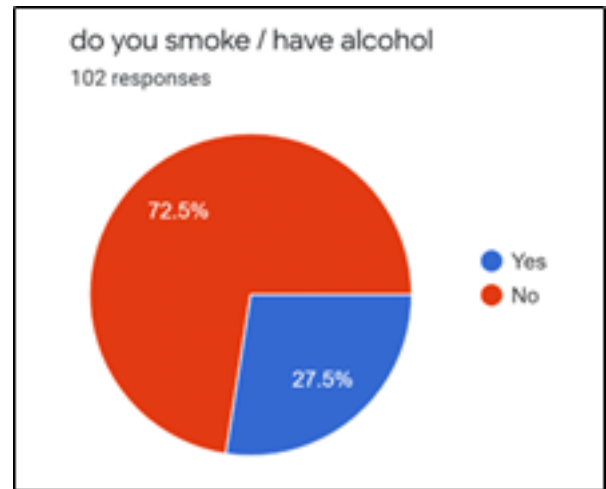


Fig. 4:

of stress which was a major breakthrough that people experienced stress considering the uncertainty prevailing. When asked about any alternate method to combat stress 50% stated no, 39% opted for yes and 11% opted for maybe. The alternate methods include yoga (12.3%), exercise (20%), meditation (18.5%) and 49.2% opted for others.

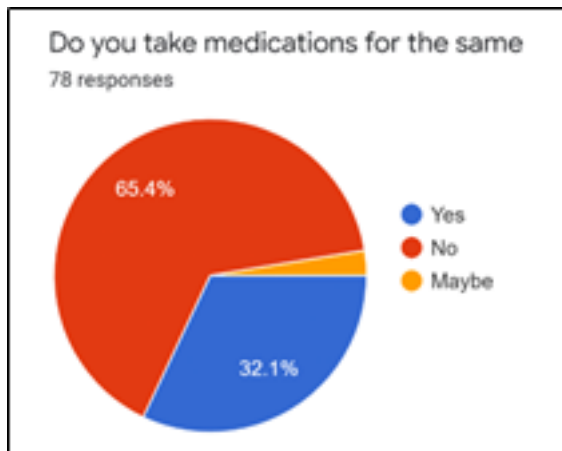


Fig. 3:

About using alcohol and smoking 72% respondents stated no and 28% stated that they use alcohol/ smoke. The respondents were asked whether they suffer from insomnia 55% of the participants stated that they have never experienced insomnia on the contrary 26% people admitted of experiencing insomnia regularly and a 19% of people shared having rarely experience of insomnia. As with the medications for insomnia 17% people takes medications and 9% admitted of using medications rarely.

As with the use of painkillers 25% of people uses painkillers very frequently, 45% uses painkillers rarely and a 30% never have ever used a painkiller. This sure points out to the self-treating trends by people and the misuse and abuse of painkillers. To make the self-treatment trend more obvious of the 100 respondents only 7% of the participants

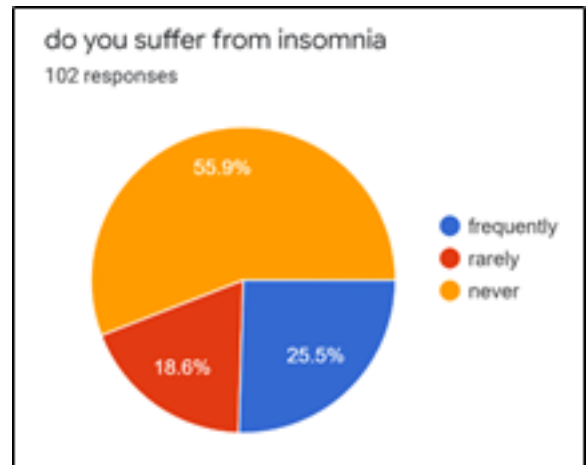


Fig. 5:

regularly go for a follow-up with the physician or doctor, 21% of the respondents never go for a doctor's appointment, 37% stated rarely and a 35% stated often. 69% people were aware of using the health effects of using a medication without them being prescribed by a doctor or without a follow-up whereas 31% is unaware leading to the need of awareness in these areas. As with buying medications without prescription 52% admitted of buying medications without a prescription and 48% stated no which hereby clearly proves that there is abuse of prescription drugs especially pain relievers owing to a serious public health risk as well as social concern.

32% of the people admitted of experiencing a change in behavior while using the medications, some of them even stated of having a change in behavior that often leads to a violent behavior. 35% people experiences difficulty in thinking and 65% people stated no. 45.5% people quite often experiences mood swings, 35.1% have

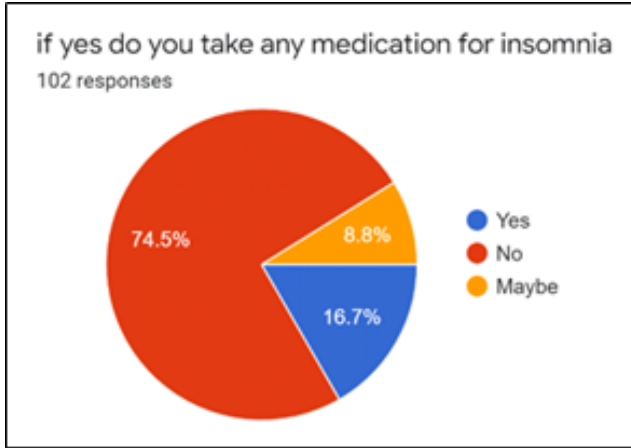


Fig. 6:



Fig. 9:

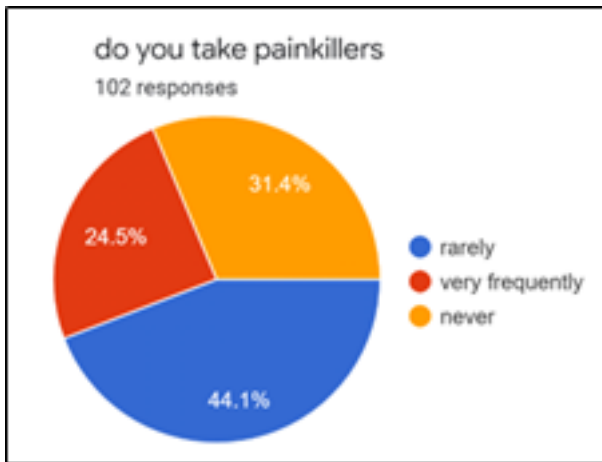


Fig. 7:

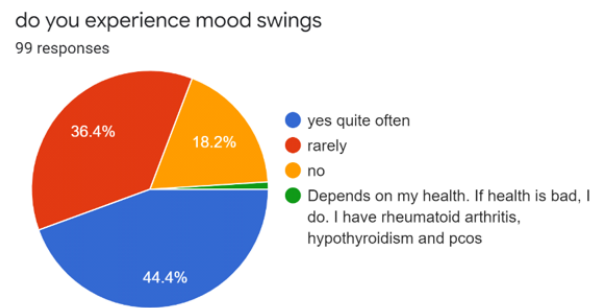


Fig. 10:

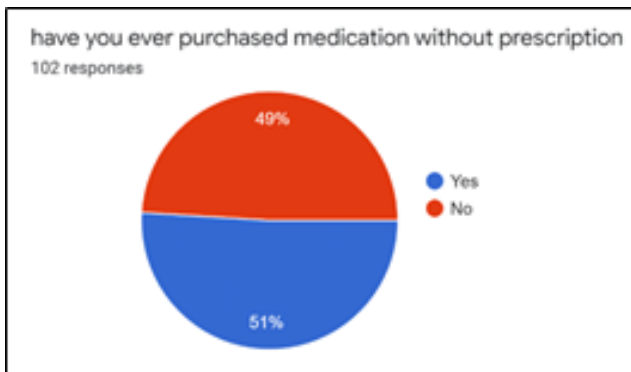


Fig. 8:

a rare experience and 18.6% have a no known experience. Some people also stated that due to their underlying health situations they experience mood swings. People with multiple issues such as PCOS, rheumatoid arthritis, and hypothyroidism and the medications for the same causes them to experience change in mood and behavior quite often.

As with experiencing stress 25% people are extremely affected by stress, 39% were moderately affected and 36% is less affected. People stated that because of the ongoing pandemic situations most of them have lost their job, facing financial difficulties, have lost a near and dear one and therefore is experiencing significant stress.

4. Results and Recommendation

From the given study it is inferred that people are experiencing a significant amount of stress due to the pandemic and are resorting to use of medications and alcohol. Pain killers are extensively used as part of self-treatment. Analgesics are extensively used and many people have admitted of taking paracetamol tablets to maintain their body temperature while travelling on the wake of covid-19 pandemic where thermal scanning is mandatory. This hence can lead to a potential public health concern. Huge paranoia is created because of the pandemic and people are restless and often showed violent behaviors.

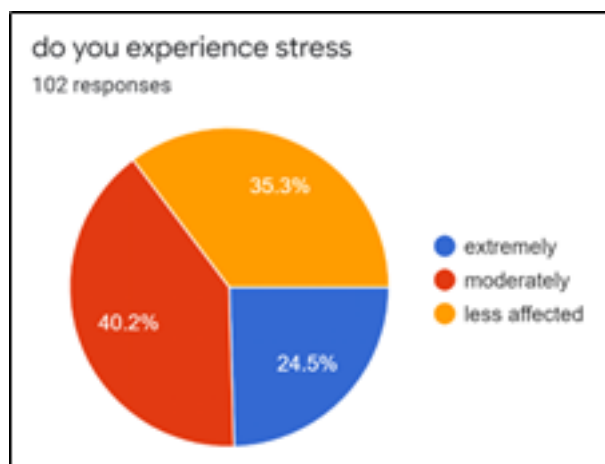


Fig. 11:

According to UNODC (United Nations Office on Drugs and Crime) the lockdown restrictions have caused an increase in demand of cannabis. It states some heroin users may switch to substances such as fentanyl and derivatives. It also states to an increase in pharmaceutical products such as benzodiazepines and buprenorphine.

The recommendations put forth includes mandatory periodical inspection of medical shops and stringent action should be taken against the shops permitting the sales of medicines without the prescription of registered medical practitioner. Proper awareness should be done to make people aware about the serious health concerns of self-treatment. A health and policing system should function hand in hand to tackle the problem, a panel should be formed with a public health consultant, a lady police officer to provide any assistance and help to any individuals facing any difficulty. Proper counselling should be done and strict legal actions should be also taken in case of any reported abusive behavior. The relevant reports and articles point out to a possible public health concern along with the hard-hit pandemic crisis. Mitigous and long-term action plan has to be formulated to tackle the substance abuse issue. Substance

abuse is not just an issue for the individual but it also leads to serious criminal, violent abuses which cannot be tolerated and lightly taken of.

5. Source of Funding

None.

6. Conflict of Interest

The author declares no conflict of interest.

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Cite this article: Anand AJ, Shankar A. Prescription drug misuse during pandemic. *Indian J Forensic Community Med* 2021;8(3):170-174.