

THE ABUSE AND MISUSE OF PRESCRIPTION AND OVER THE COUNTER DRUGS

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ABSTRACT:

A growing number of reports have surfaced about the recreational abuse of several prescription and over-the-counter (OTC) medicines. Psychoactive pharmaceutical usage and "pharming" are two recent, popular practices that include the recreational use of OTC and prescription medications for non-medical purposes in order to produce psychoactive effects, either alone or in conjunction with other substances.

This article gives a general overview of the subject and focusses on a variety of medications, including over-the-counter medications like loperamide, dextromethorphan, benzydamine, promethazine, chlorphenamine, diphenhydramine, and hyoscine butylbromide and prescription medications like quetiapine, gabapentinoids, Z-drugs, bupropion, and venlafaxine, which have been identified as being misused and diverted or have already been documented in the literature and on websites maintained by drug users that document new trends and experiments in drug abuse.

Pharmacies, psychiatry, public health, and drug control regulations face challenges in light of this quickly evolving drug landscape. Additionally, there has been a change in drug availability and usage patterns, which may be related to the COVID-19 epidemic. This has led to a change in behaviours for both prescription and over-the-counter medications. Healthcare practitioners should be aware of probable diversion of prescription medicines, be able to identify instances of misuse, take into account the risk of polydrug abuse, and take steps to avoid it. Pharmacists should be active in evidence-based initiatives to identify, comprehend, and prevent drug diversion activities as well as the negative impacts of drug usage. They can also prevent and minimise drug addiction.

KEYWORDS: Pharmacists, prescription, drug misuse, over-the-counter, drug abuse.

INTRODUCTION:

The advent of new psychoactive substances (NPSs) and the recreational use of medications have caused an evolution in drug misuse situations in recent years.^{1,2,3,4} Prescription drug misuse is a rising health concern that involves not only the hazards associated with the individual medications but also the environment in which they are used (e.g., social situations, mental diagnoses, concurrent consumption of other substances with synergistic effects).^{4,5,6,7,8} There has been a noticeable rise in the general population's use of prescription medications recently.⁹ Nevertheless, there has been no correlation between this rise and better health. The World Health Organisation (WHO) reports that about 50% of people misuse these medications, which raises morbidity and death rates, and that over 50% of medications are prescribed or delivered improperly globally.^{10,11}

Data from the United Nations Office on Drugs and Crime (UNODC) indicate that prescription medication abuse and related deaths are becoming more commonplace globally.^{12,13,14} Healthcare professionals, women, elderly persons, and adolescents and young adults are vulnerable populations more likely to misuse drugs.¹⁵

Patients can obtain over-the-counter (OTC) medications without a prescription from a doctor. They are often prescribed for a wide variety of mild ailments, such as heartburn, musculoskeletal discomfort, headaches, and colds.¹⁶

OTC medications have a comforting safety record, but they are not innocuous, and abusing them—that is, taking them for purposes other than those prescribed by a doctor—can result in serious side effects including addiction or even death. Furthermore, improper usage of over-the-counter medications, which happens when these drugs are used for legitimate medical conditions but are administered incorrectly, can have a negative impact on patient outcomes.¹⁷

Since there are no authorised medications or vaccinations for the treatment of COVID-19, the epidemic has had an impact on the use of medications worldwide and the incidence of self-medication, particularly in its early stages.^{18,19} More precisely, the usage of over-the-counter medications has skyrocketed during the pandemic due to the infection's symptoms, which included fever, headache, exhaustion, and cough. In addition, the availability of over-the-counter medications, anxiety about being sick, and worry about being placed in quarantine might all lead to the use of OTC medications during the pandemic. In addition, people may turn to over-the-counter medications when they are unable to access medical treatment because of financial or practical barriers.¹⁸

Research has indicated that a variety of cultural, political, and environmental variables impact the use of self-medication to cure or prevent symptoms and illnesses. Self-medication is most frequently used to treat the following medical conditions: headache, joint pain, fever, cold and cough, allergy, heartburn, and diarrhoea. If health literacy is not improved, increased access to medications raises the possibility of abuse.^{20,21}

PRESCRIPTION DRUGS MISUSE:

Abuse of prescription drugs has emerged as a worrying scourge in modern times.^{22,23,24} This is particularly true for young people and adolescents, whose use of marijuana has outpaced all other illicit drug usage.^{25,26} While opioids, benzodiazepines, and stimulants have historically been the focus of attention, other commonly prescribed medications may also be abused, misused, or diverted for non-medical uses.²⁷ Prescription drug use among young individuals is often done for recreational (getting "high"), anxiety or relaxation relief, or academic performance enhancement.^{5,7,8,28} Drugs can be purchased over the internet, from friends or family, from drug dealers, or directly prescribed by a physician.^{2,29,30} The frequency of prescription drug usage among young people in the UK is not well-documented nationally, although there are emerging reports that indicate the issue is becoming more widespread.³¹

EXAMPLES OF MISUSED PRESCRIPTION DRUGS:

1. Quetiapine:

Because of its sedative, relaxing, and anxiolytic properties, quetiapine seems to be the most widely reported second-generation antipsychotic that is abused, according to the literature.^{32,33} There have been reports of high rates of quetiapine-related ambulance attendances and emergency department visits. Data from the Drug Abuse Warning Network (DAWN) regarding the frequency of quetiapine-related ED visits among the general US population between 2005 and 2011 showed an increase from 35,581 ED visits to 67,497 ED visits.³⁴ Similar statistics pertaining to rising rates of ambulance attendances for quetiapine have been documented in Australia. These data have been linked to mental disorders, history of heroin and alcohol usage, and concomitant toxicity from opioid replacement treatment and heroin.³⁵

Additionally, drug-seeking activities have been noted, including the distribution of illegal drugs and a rise in the availability of quetiapine on the black market.³⁶ Those with a history of substance abuse, mental health patients, prisoners, and opioid addicts are the groups most vulnerable to substance abuse.^{37,38} Lastly, the intranasal and intravenous administration methods have been explained.³⁹

2. Gabapentinoids:

The authorised therapies for neuropathic pain syndromes and epilepsy include gabapentin and pregabalin.^{40,41,42} Both drugs' potential for abuse has been documented more frequently; but, due to pregabalin's increased potency, quicker start of effect, and quick absorption, it is thought to have a larger potential for abuse. Harms associated with both gabapentinoids include death, physical dependency, and a tendency to promote depression of the central nervous system (CNS), particularly when taken in conjunction with opioids and sedatives. Those with previous or ongoing substance use disorders, primarily those who use opioids and other polydrugs, are the main group at risk for addiction.^{43,44,45,46} Opioid users often misuse pregabalin to self-treat physical pain, to achieve a desired psychoactive effect (e.g. potentiate the effects of heroin/cocaine), and combat opioid withdrawal symptoms.^{44,45,47,48}

Furthermore, during the past ten years, rates of ambulance attendances associated to pregabalin usage have significantly grown (for example, in Australia, from 0.28 instances per 100,000 population in the first half of 2012 to 3.32 cases per 100,000 in the second half of 2017).⁴⁹ Consequently, it was discovered that pregabalin and gabapentin may be abused, become addicted, or cause overdoses.^{43,44,45,46} In 2018, the Misuse of Drugs Advisory Council recommended that both be classified as Class C substances under the Misuse of Drugs Act 1971 and scheduled as Schedule 3 under the Misuse of Drugs Regulations 2001 to avoid preventing their lawful prescription use. This recommendation came after safety warnings and an increase in deaths associated with their use.⁵⁰

3. Z-Drugs:

The Z-drugs, also known as hypnotic medicines (zolpidem, zaleplon, and zopiclone), were first made available for the short-term treatment of insomnia in the 1980s.⁴⁰ Since they had better pharmacokinetic qualities and receptor selectivity than benzodiazepines, it was thought that they had a safer and more favourable profile.⁵¹ They have strong hypnotic effects that include a decrease in sleep latency and an enhancement in the quality of sleep via increasing the transmission of \hat{P} -aminobutyric acid (GABA) at the same GABA-type A receptor as benzodiazepines.

Concerns over their safety have increased recently due to problems with abuse and dependency,^{52,53} sexual assaults aided by drugs and risky sleep-related activities (such as eating, driving, and sleepwalking). Males and young individuals who use high dosage drugs recreationally have been reported to have problematic use of hypnotic substances. They are frequently misused via intravenous or intranasal injection in combination with other legal and illegal substances.⁵⁴

Study participants included long-term users, patients with co-occurring mood/neurotic disorders and SUDs, and elderly patients taking Z-drug hypnotics for insomnia who were unable to reduce the dosages required to control withdrawal symptoms.^{55,56} Both zolpidem and zopiclone showed the same risk of dependency; however, zopiclone was more relevant in cases of overdose adverse drug reactions and its sale on the illicit market.^{52,57} Similarly to benzodiazepines, since 2013, Z-drugs have been controlled as Class C and Schedule 4 substances under the Misuse of Drugs Act and Regulations, respectively.^{58,59}

4. Bupropion:

Bupropion's dopaminergic, stimulant-like properties among antidepressants may account for its potential recreational utility.⁴ It is a selective catecholamine (dopamine and noradrenaline) reuptake inhibitor, a type of second-generation antidepressant.⁴⁰ It is only authorised as a smoking cessation therapy in the UK.⁶⁰ 975 single drug bupropion instances were reported to the National Poison Data System (NPDS) over a 14-year period, with "intentional abuse" listed as the classified cause for exposure in cases involving people 13 years of age and older.⁶¹

Between 2000 and 2012, there was a 75% rise in the prevalence of misuse, with the majority of cases being teenagers and young adults who reported tachycardia, seizures, and agitation/irritability as clinical consequences.⁶¹ There have been reports of persons abusing the substance for recreational purposes by oral, nasal, or intravenous methods in order to get a "high" that is comparable to that of other stimulants, including cocaine.^{62,63,64,65,66}

5. Venlafaxine:

A member of the serotonin-norepinephrine reuptake inhibitor class of antidepressants is venlafaxine.⁴⁰ Its reuptake inhibition is linked to its recreational use; at low doses (150 mg/day), it has dose-dependent effects on selective serotonin (5-HT) transmission; at moderate levels (>150 mg/day), it has effects on both 5-HT and norepinephrine systems; and at high doses (>300 mg/day), it has effects on dopamine.⁶⁷ Large doses of venlafaxine may be taken to achieve effects similar to those of amphetamine and ecstasy. It has been reported that euphoria and enhanced sociality coexist with dissociative effects, such as a warped sense of time and "numbness."^{62,68} It seems that patients having a history of SUD (such as opioid addiction or dependency) were more susceptible to venlafaxine overuse.^{67,69}

Many overdose occurrences have resulted in fatalities, along with symptoms like tachycardia, seizures, coma, and serotonin syndrome; also, long-term usage has been linked to dependency problems.^{4,67,70} A retrospective analysis of venlafaxine exposures reported to the NPDS between 2000 and 2016 found that of the total 85,621, there were 752 deliberate venlafaxine exposures; the proportion of these exposures decreased from 107/10,000 in 2000 to 59.3/10,000 in 2016. With a median age of 23, half of the population was female. 90.8% of patients took venlafaxine via ingestion, whereas 4.7% took it by inhalation or intranasal delivery. The most often reported clinical symptoms were agitation (11.5%), sleepiness (20.7%), and tachycardia (33.9%). The authors proposed a number of explanations for the decline in purposeful abuse exposures in the research, including as underreporting or a potential decline in the incidence of venlafaxine misuse when patients switch to other medicines; however, they eliminated changes in venlafaxine prescription trends.⁷¹

OVER THE COUNTER DRUGS:

Medications that may be acquired over-the-counter (OTC) do not require a prescription. By obtaining over-the-counter (OTC) medications from pharmacies, people can treat their symptoms on their own. For over-the-counter (OTC) pharmaceuticals, there are store brand names, generic names, and brand names (similar to prescription treatments). Generic, store, and brand labels all have the same active components and work on the body in the same way if the concentration of those substances is the same. The most often misused over-the-counter medications are covered in this article along with some of its negative consequences. An extensive range of conditions and symptoms, including pain, colds and coughs, diarrhoea, nausea, and more, are treated using over-the-counter medications. OTC medications are becoming more and more popular since they may be misused at higher-than-recommended dosages and because it's possible to divert them to produce centrally psychoactive effects. OTC medications are used to treat and prevent a wide range of conditions, such as heartburn, headaches, musculoskeletal pain, allergies, and tobacco addiction.⁷²

Prescription drug abuse (i.e., using drugs to get high) includes taking a medicine in a method or dose that is different from what is prescribed, getting a prescription from someone else, even if it is for a valid medical condition like pain, and taking a medication to feel euphoric. Non-medical use of prescription drugs is the term used to describe several kinds of abuse. The three categories of drugs that are most frequently abused are as follows: Opioids are often used to relieve central nervous system [CNS] pain. Stimulants: frequently used to treat attention-deficit hyperactivity disorder, and depressants: used to treat anxiety and sleep disorders, including tranquilizers, sedatives, and hypnotics.⁷³

Over 80% of elderly people (57 to 85 years of age) use one or more prescription medications daily, and over 50% take five or more prescription medications or supplements daily. If you take a prescription medication in a method not recommended by a doctor or if you use it for purposes other than what it was designed to do. The use of medications (and other substances) is riskier in older people than in younger individuals as a result of the high prevalence of many (comorbid) chronic illnesses, age-related changes in medication metabolism as well as the potential for drug interactions.⁷⁴In addition, a large number of elderly people take nutritional and herbal supplements, over-the-counter medications, and other non-medical drug usage, which may worsen any potential health risks. In addition, a lot of elderly people use nutritional and herbal supplements in addition to over-the-counter medications, which may worsen any side effects from non-prescription drug use.⁷⁵

- **Misuse of opioid drugs:**

Opioids are medications that work on opioid receptors in the brain and spinal cord to reduce the intensity of pain signals. Additionally, they have an impact on the emotional regulation regions of the brain, which can further reduce the intensity of painful stimuli. For thousands of years, they have been used to treat pain, diarrhoea, and cough. These days, the most prevalent usage of opioids is for the relief of acute pain.⁷⁶

Hyperalgesia, a condition where individuals become more sensitive to pain or their pain worsens as a result of taking opioid medication, affects some people. Crucially, opioids not only reduce pain but also activate brain reward regions, producing a euphoric feeling known as a "high" that may trigger relapses and drug abuse disorders. Overdosing is dangerous because opioids interact with parts of the brain stem that regulate breathing. suffocating from an opioid overdose can occur if the user experiences respiratory suppression to the point of suffocating.

Naloxone can reverse an overdose (and save death) if it is administered promptly. Codeine is usually provided for mild discomfort, while morphine is usually advised for severe pain both before and after surgical procedures. In addition to treating pain, several of these drugs—like codeine and diphenoxylate—are also used to treat severe diarrhoea and coughs.^{76,77,78}

- **Effects of Opioids on brain and body:**

Opioid receptor proteins on nerve cells in the brain, spinal cord, gastrointestinal tract, and other organs are bonded to by opioids, and this is how they function. These drugs block the transmission of pain signals when they attach to their receptors. Opioids can also result in pleasure because they act on reward-related brain areas, but they can also produce drowsiness, mental confusion, nausea, constipation, and respiratory depression. This is

especially true when taking larger-than-recommended dosages or using them in ways that are not intended.⁷⁹

- **Commonly misused CNS depressants:**

CNS depressants are drugs that slow down brain activity. This class of drugs includes hypnotics, sedatives, and tranquilizers. They can be used to treat anxiety and sleep issues because of this characteristic.⁸⁰

- I. **Benzodiazepines:** Benzodiazepines including diazepam, clonazepam, and alprazolam are occasionally used to treat anxiety, acute stress responses, and panic attacks. Clonazepam is also used to treat insomnia and seizure disorders. More sedating benzodiazepines, such as triazolam and estazolam, are used to treat short-term sleep problems. In light of the significant potential for tolerance, dependence, or addiction, long-term prescriptions for benzodiazepines are uncommon.
- II. **Non-benzodiazepine sleep medications:** Z-drugs, such as zolpidem, eszopiclone, and zaleplon, function on the same GABA type A receptors in the brain as benzodiazepines while having a distinct chemical structure. They should be less likely to cause addiction and have fewer side effects than benzodiazepines.
- III. **Barbiturates:** It is less frequent to utilize medications like mephobarbital, phenobarbital, and pentobarbital sodium to treat anxiety and sleep disorders because of their increased overdose risk when compared to benzodiazepines. Nevertheless, they continue to be used in surgery and seizure management.

- **Effects of CNS depressants on the brain and body:**

The majority of CNS depressants function by increasing activity at inhibitory neurotransmitter receptors called gamma-aminobutyric acid receptors (GABA). Although CNS depressants function differently in different ways, they all provide a soothing or drowsy effect that is medically helpful for people with anxiety or sleep difficulties because they increase GABA transmission, which increases the inhibition of brain activity.⁸⁰

- **Consequences of CNS depressant misuse:**

Notwithstanding their beneficial medicinal benefits, barbiturates and benzodiazepines should only be taken as directed by a doctor.

Z-drugs, or non-benzodiazepine sleep aids, have not been well examined, although certain signs have led to worries about their potential for abuse. Rapid reduction or cessation of intake may cause dependency and withdrawal symptoms. Since CNS depressants lower brain activity, stopping them suddenly may induce a rebound effect that might lead to seizures or other undesirable effects.

Withdrawal from barbiturates can be lethal, whereas withdrawal from benzodiazepines is rarely deadly, despite the possibility of difficulty. Therefore, anybody thinking about stopping a CNS depressive or going through withdrawal symptoms after stopping one should speak with a doctor or get help right once.⁸⁰

- **Misuse of stimulants:**

Stimulants increase energy, alertness, and attention in addition to raising blood pressure, heart rate, and respiration. In the past, stimulants have been used to treat a variety of ailments, including obesity, neurological disorders, asthma, and other respiratory issues. These days, stimulants are only used to treat a small number of illnesses, including narcolepsy, ADHD, and occasionally treatment-resistant depression.⁸¹

- **Effects of stimulants on brain and body:**

Dextroamphetamine and methylphenidate are stimulants that affect the brain's monoamine neurotransmitter systems, which include dopamine and norepinephrine.⁸² The effects of these substances are enhanced by stimulants. These medications' effects on norepinephrine create euphoria via increasing blood pressure, heart rate, blood vessel constriction, blood glucose elevation, breathing tube opening, and dopamine signalling from stimulant usage that is not prescribed.⁸³

EXAMPLES OF MISUSED OTC DRUGS:

1. **Loperamide:** A typical anti-diarrhea medication is loperamide, which binds to $\beta\mu$ -opioid receptors in the gastrointestinal tract to increase sphincter tone and decrease peristalsis.⁶⁷ Loperamide does not produce cross-central opioid effects at therapeutic levels (e.g., 2 mg, with a maximum dosage of 16 mg); nevertheless, at large dosages (e.g., 50–800 mg), it may be misused recreationally to produce a euphoric condition known colloquially as "lope high."⁸⁴ It might be applied to control and alleviate the symptoms of opioid withdrawal.^{7,84,85,86}

Loperamide toxicity can have potentially fatal effects on the nervous system, respiratory system, heart, and lungs. It can also cause ventricular dysrhythmias and abnormalities in the electrocardiogram, such as torsades de pointes, prolonged QT, and QRS widening.^{67,87,88,89,90,91,92,93,94,95} Exposures to loperamide that were reported to the NPDS consistently showed deliberate abuse and misuse. The number of reported exposures increased by 91% between 2010 and 2015, totalling 201 and 383 exposures in each year, respectively. The majority of these instances included the misuse of single-agent loperamide and cardiotoxicity.^{96,97}

The Food and Drug Administration (FDA) has restricted the size of loperamide packages since September 2019 in an effort to decrease improper usage.⁹⁸ There are currently few

pharmacies that control its sale, and there are no laws against buying from non-pharmacy web retailers. Pharmacies that are interested can put procedures in place to limit excessive access and stop damage. Collateral buying, however, may still happen at pharmacies or other retail establishments.⁹⁹

2. **Dextromethorphan:** Several cough and cold medications include dextromethorphan, a semisynthetic morphine derivative and codeine analogue. Dextromethorphan has negligible analgesic and antitussive effects when taken in therapeutic amounts. When taken in large quantities, it blocks N-methyl-D-aspartate receptors, which results in the desired hallucinogenic and dissociative effects for recreational use. A mild to moderate stimulation with restlessness and euphoria (at 100–200 mg doses) to a dissociated state marked by hallucinations, paranoia, perceptual distortions, delusional beliefs, ataxia, and out-of-body experiences (at doses higher than 1,000 mg) are the range of neurobehavioural effects that are dose-related. We call these events "robo-ing," "robo-copping," or "robo-tripping."^{7,100,101,102,103}
3. **Benzylamine:** BZY is used topically to relieve oral and vaginal mucosal inflammations. It has analgesic and antipyretic properties. Misuse of BZY at high doses (i.e., 500–3,000 mg) to achieve stimulant effects on the central nervous system (e.g., euphoria, hyperreactivity, insomnia, abnormal behaviour, and psychotic symptoms, including paranoia and visual hallucinations) has been reported in a number of countries, including Brazil, Italy, Romania, Poland, and Turkey.^{104,105,106,107,108,109,110} Problems with BZY diversion might include youth and alcohol/cannabis usage concurrently.^{111,112,113}

Although the precise chemical process responsible for the intoxicating and strengthening effects of BZY remains unclear, a primary cannabinoid mode of action has been proposed.^{100,114} Informal self-reports, disseminated through social media and online drug forums, have played a role in the spread of BZY abuse by disseminating details about dosages, preparation methods, and routes of administration from commercial products. They have also offered recommendations for other psychotropic substances that can be used in conjunction with BZY to maximise its positive effects and mitigate its negative ones.^{111,112,113}

- **ANTI-HISTAMINE DRUGS:**

1. **Promethazine:** Promethazine, a histamine (H₁) receptor antagonist, is frequently used to treat symptoms of the common cold, motion sickness, allergic reactions, and nausea and vomiting. Its misuse potential appears to be connected to its soothing and sedative action, as well as the augmentation of other co-ingested chemicals, such as benzodiazepines and opioids. It is frequently offered with codeine as popular cough suppressants.^{114,100,115}
Because of its euphoric effects and ease of accessibility, promethazine misuse combined with soft drinks, candies, and in some cases, purple-colored alcohol (also known as "purple drank") has become popular among young people.^{116,117,118} Promethazine has been reported to be misused among people with an SUD or opioid dependence as a substitute for another drug (e.g., if the desired drug is unavailable or too costly) or to augment the effects of inadequate opioid dosing (i.e., to delay the onset of opioid withdrawal), despite being preferred to other substances, such as

benzodiazepines, for the treatment of anxiety and sleep disorders in substance-dependent patients.^{119,120,121,122}

2. **Chlorphenamine:**Chlorphenamine is a first-generation H1-receptor antagonist that is used as an inexpensive anxiolytic or sleep aid.¹²³ Strong antimuscarinic qualities in chlorphenamine have been linked to euphoric highs that encourage drug abuse and the risk of drug dependence, but in susceptible people (such as those with mental illnesses or those who abuse other drugs concurrently), chlorphenamine abuse may also result in psychotic symptoms.¹²⁴

When used concurrently with serotonergic medications or dextromethorphan in cough and cold suppressants, it may result in severe serotonin poisoning.^{102,125,126,127} There has been one recorded death with the concurrent use of chlorphenamine and an opioid.¹²⁸ Data gathered from the Texas Poison Centre Network Toxic Exposure Surveillance System have been used to characterise the misuse of chlorphenamine, and it shows that both its intended usage and abuse are on the rise, especially among youth.¹²⁹

3. **Diphenhydramine:**Diphenhydramine is an over-the-counter medication that reduces allergy symptoms by acting on peripheral and central H1 receptors, respectively.¹³⁰ A strong competitive antagonist on muscarinic receptors that causes sinus tachycardia, xerostomia, mydriasis, blurred vision, ileus, urine retention, CNS depression, agitation, hyperactivity, or psychosis is one of the many possible mechanisms of action linked to diphenhydramine abuse.^{102,130}

Diphenhydramine can produce stimulatory effects in children and young adults, such as raised mood, increased activity, and moderate euphoria, instead of the sedating qualities found in adults, when used at high dosages and concurrently with other substances (such as alcohol, cannabis, and stimulants). The mesolimbic pathway's increased dopaminergic neurotransmission is assumed to be the source of rewarding traits and drug-seeking behaviour. There are no instances of at-risk populations where this usage occurs.^{102,130}

4. **Hyoscine Butylbromide:**Hyoscine butylbromide, sometimes referred to as scopolamine butylbromide, is an anticholinergic substance produced from plants that is frequently used as an antispasmodic medication. A dosage of at least 10 mg is used as a premedication for anaesthesia, to relieve the symptoms of irritable bowel syndrome, and to regulate spasms of the digestive tract and other smooth muscles. Young people have previously been documented to use and misuse it as a psychoactive drug; they get it via proprietary goods (e.g., Buscopan [Sanofi]).¹³¹ It exerts strong central nervous system (CNS) effects at suprathreshold dosages (1.2 mg as a single dose; adults should take one to two tablets of 0.3 mg as a single dose). These effects include excitement, euphoria, restlessness, irritability, disorientation, and typical delirium-like states with auditory, visual, and tactile hallucinations, altered mood, insomnia, and cognitive dysfunctions.^{131,132,133} Although it hasn't been formally reported as an NPS, the European Monitoring Centre for Drugs and Drug Addiction issued an alert warning in 2016 about 17 intoxications with cocaine containing scopolamine.^{134,135}

ABUSE OF DRUGS DURING THR COVID-19 PANDEMIC

Public health policies have been put to the test by the COVID-19 epidemic because of new worries about drug users and those with SUDs.^{136,137} Those who fall into this vulnerable category may also be at risk for psychological comorbidities (such as mood and anxiety disorders, psychoses), physical problems (such as neuropathies, obesity, cardiovascular diseases, and hepatic/renal dysfunctions), homelessness, incarceration, economic hardships, and other socioeconomic problems resulting from drug addiction.^{137,138,139,140,141,142} Also affecting the pharma markets is the COVID-19 epidemic. There have been reports of price rises for users on the black market, losses in quality, and shortages of certain medications (such as opioids) at the street level.^{137,138,143} These problems, together with a general decline in income, may lead to changes in drug-using habits that are riskier, such the following:

- Use of pharmaceuticals made in the country;
- usage of over-the-counter and prescription medications;
- mixing with less expensive medications (such "street benzos") and synthetic cannabinoids¹⁴³

Quarantine, social isolation, and other restrictive measures implemented to curb the spread of COVID-19 impair access to drug services.^{137,138,139,141,144} Furthermore, community pharmacies are facing difficulties related to a lack of staff, disorganised services, and self-isolation. As a result, there is an urgent need to expand the availability of drug services in order to safeguard vulnerable populations and prevent further strain on the healthcare system.^{137,141,145}

CONCLUSION:

In comparison to the incidence of acute or chronic disorders and the use of prescription medications, the study population has a relatively high OTC drug consumption rate. OTC drug users are most likely to be members of the non-formal education or university education demographics. Analgesics are the most often used over-the-counter medication category, followed by antitussives and cold remedies. To optimise the use of OTC pharmaceuticals and prevent adverse effects related to inadequate information about their usage, national health policies pertaining to drug use should specifically target these demographics and drug categories.

Global public concern over prescription and over-the-counter drug addiction is growing. Pharmacists and healthcare professionals are facing significant challenges due to the current medication situations, especially in light of the Covid-19 outbreak. It is advised that these medical experts be watchful and devise plans to guarantee continuity of care for drug users and those suffering from drug use disorders, as well as to stop potential medication abuse and diversion.

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