

**OTC Drug Abuse: Role of Clinical Pharmacist in its Management**Kumar Akash Saha<sup>\*</sup>, L.Devakar, Ritik Kashyap, Amit Kumar

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**E.mail id:** akashsaha1706@gmail.com**ABSTRACT**

Over the counter medications is a part of self-care and self-medication practices that are essential for any health care system. The ease of availability at low cost increases the abuse of these OTC drugs among the population. As these medications can be purchased without any consultation of physician or prescription, its abuse can lead to several health-related issues and addiction. Pharmacists being accessible to interfere with the patients and drug dispensing, they can educate and create awareness among the general public as well as the patients about the OTC drug abuse, addiction and their ill effects. Multiple challenges are also being faced by the pharmacists while interacting and counseling the patients in order to prevent OTC drug abuse. OTC drug addiction is a major problem being faced and their management mainly includes drug detox therapy, drug rehab therapy and sober lifestyle modifications. This article provides a brief review on the potential OTC drugs abuse and their management. This review further explains the challenges faced by the pharmacists during OTC drug abuse management. By proper monitoring of these OTC medications, their abuse may be controlled more effectively, thereby providing better pharmaceutical care.

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**Introduction**

The drugs obtained by patients without the prescription from a physician for the treatment of common illness are called as over the counter drugs (OTC) or non-prescription drugs. These drugs provides therapeutic benefits for a wide range of conditions like- fever, common cold, headache, heartburn, allergies, muscle pain, gastric pain etc. Concurrent misuse of these medications involves risk of developing adverse effects, drug interactions and addiction. Most of the patients use OTC medications without the proper diagnosis or consultancy from the physician or directly influenced through the advertisement which leads to the inappropriate medication use (like- incorrect dosage, drug interactions, incorrect frequency and adverse effects) and are unaware of the risks associated with OTC medications [1]. Irrational use of these OTC drugs can be habit-forming and potentially destructive (OTC drugs abuse) if left unchecked. As these OTC drugs are inexpensive, widely available and legal to use without any age requirement, so abuse of these drugs are widely observed in many countries [2].

**OTC drugs with most potential for abuse**

There are availability of multiple OTC medications with potential abuse like antihistamines,

sleeping pills, caffeine, ephedrine, pseudoephedrine, antitussives, expectorants, dextromethorphan and laxatives. Laxatives are abused for weight loss and high doses of antihistamines are used for achieving euphoric effect [3].

**Side effects of OTC drug abuse**

Different types of OTC drugs cause various side effects of abuse. The most often side effects of OTC drugs abuse are:

- Slurred speech
- Impaired motor coordination
- Impaired cognitive abilities
- OTC drug addiction
- Increased risk of organ failure
- Death [4]

**OTC drug Withdrawal Symptoms**

Regular abuse and then suddenly stop or cut back on use of some OTC drugs may also produce withdrawal symptoms. These withdrawal symptoms include:

- Mood swings
- Anxiety
- Irritability
- Agitation
- Disorientation [5]

**Table 1: List of OTC drugs abused**

Drug Category	Examples
Antihistamines	Diphenhydramine and coricidin
Cough medicines	Dextromethorphan
Codeine containing products	Compound analgesics (codeine with ibuprofen or paracetamol) and cough medicines
Analgesics	Aspirin and acetaminophen
Hypnotics	Sominex and nytol
Laxatives (oral and rectal)	Sodium phosphate laxative containing bisacodyl
Decongestants	Pseudoephedrine
Anti-Diarrhoeal	Loperamide
Motion sickness pills	Dimenhydrinate

**Table 2: Abusive side effects of some OTC drugs**

OTC drugs	Side effects due to abuse
Dextromethorphan (DXM)	Sweating, Panic Attacks, Euphoria, Paranoia, Increased B.P, Racing Heartbeat, Altered Perception of Time
Loperamide	Loss of Consciousness, Rapid Heartbeat, Abnormal Heart Rhythms, Cardiac Arrest
Acetaminophen	Stomach Cramps, Loss of Appetite, Confusion, Diarrhoea, Liver Damage
Dimenhydrinate	Hallucinations, Ringing in Ears, Irregular Heartbeats, Seizures

### Management for OTC drug addiction

According to the National Institute of Drug Abuse, the misuse of OTC drug like DXM and Loperamide can be lead to dependence and addiction. Most often the addiction is caused due to chronic and

long term abuse which can result in serious health problems, relationship issues or problems at work or school. Various forms of therapies have been proven to be successful in helping people to get over the addiction.

**OTC Drug Detox:** Detox program provides proper medical management to patients for withdrawal symptoms and medical emergencies. For OTC drug addiction, medical detox is the safest and easiest way for de-addiction. This program also provides the patient clinical support to help them cope with psychological effects after drug withdrawal.

**OTC Drug Rehab:** After the detox program and drug withdrawal, drug rehab program has been proven to provide structure and ongoing support to help quit the abusive habits. OTC drug rehab is different from OTC drug detox as the former program will provide behavioural therapies and support so that the patient can make positive lifestyle modifications over drug addiction whereas the later program helps to eliminate the physical dependence on drugs only. The rehab program consists of treatment components like-educational lectures, behavioural therapy, recovery support groups and life skills development. Most OTC drug treatment programs ensures health insurance benefits in favour of patients to reduce the cost of treatment.

**Sober lifestyle after OTC Drug Rehab:** After completing OTC drug addiction treatment program, sober lifestyle provides safe and structured recovery to

patients and also offers support services as drug and alcohol testing, volunteer placement, educational planning, employment assistance etc. Cost of sober living program varies depending on its location, amenities and program offerings. Sometimes the patient may feel trapped by the addiction but with proper support recovery is possible.

### Pharmacy based efforts to address OTC drug abuse

#### Pharmacist's role in OTC drug abuse

Pharmacists are the first point of contact with patient during the purchase of OTC drugs. They are appointed for the monitoring of OTC drugs and their rational use among a population. Pharmacist must be more vigilant and active towards those patients who intentionally or unintentionally consume multiple medications or provide fake prescriptions. These types



of patients must be closely monitored as malpractices of OTC drugs can lead to its abuse or addiction which in turn arises the health issues in the patients. Various methods have been employed by the pharmacist in order to reduce OTC drug abuse. The main three most commonly used methods are - keeping the implicated product out of sight, questioning by the pharmacist on the purchase of the product and if suspiciousness arises direct refusal to sell the implicated product. Some others techniques used by the pharmacist to reduce the OTC drug abuse include direct referral of the customer to a physician, referral to a drug or alcohol abuse team and involvement of the pharmacist in de-addiction program/rehab program/social awareness program.

### **Barriers for the pharmacist to prevent OTC drug abuse**

In the prevention of OTC drug abuse, the pharmacist faces multiple challenges which they need to counter. Lack of consistent data about OTC medications, their identification of problem related to health proves to be a major barrier. Other barriers that are usually faced by the pharmacist includes poor maintenance of patient medication profiles for OTC drug use, poor monitoring of patient's prescription data, lack of pharmacist's initiative have led to increase in abuse of OTC medications.

### **Approach to overcome the barriers**

Several programs are conducted to educate the pharmacist as well as the general public about the ill effects of OTC drug abuse, overlooking the OTC drug abuse through pharmacy take back programs, drug monitoring programs as well as vigilance program by professional pharmacy associations. In addition to these, pharmacist's roles like proper drug dispensing, proper record maintenance, active participation in prescription handling etc. can help to reduce the probability of OTC drug abuse [6].

### **Conclusion**

For the prevention of OTC drug abuse, the pharmacists need to be well informed about the OTC drugs that have high potential for abuse. Pharmacists plays a major role in counseling the patients, therefore better communication and understanding strategies between pharmacists and patients may prevent the occurrence of OTC drug abuse. A strong pharmacovigilance program along with a proper health care system for regulation of OTC drugs having

high abuse potential can provide a better management for the prevention of OTC drug abuse.

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