


**ABUSE OF OVER THE COUNTER MEDICATIONS****Mahjabeen Naaz<sup>1</sup>, Mir S Adil<sup>2</sup>**<sup>1</sup> Pharm D, Sultan-UI-Uloom College of Pharmacy, Hyderabad, India.<sup>2</sup> Clinical Pharmacologist, Aster Prime Hospital, Hyderabad, India.

<b>*For Correspondence:</b> Sultan-UI-Uloom College of Pharmacy, Hyderabad, India.	<b>ABSTRACT</b> OTC medications do not require any prescription. Self-medication is the administration of drugs by the individuals for the treatment of common ailments without any consultation from the physician. It is a major cause of abuse of OTC medicines. The trade of OTC medicines from pharmacies helps the individuals for the treatment of common ailments like headaches, common cold, musculoskeletal pain, allergies, tobacco dependence, and heartburn. Doses more than required or intake of the drugs without proper diagnosis can give a step for the abuse of OTC medications. As the doses of drugs increases progressively OTC medicines are conversely being abused. This may lead a serious disease that could be treated earlier with proper medication. This can also cause economic burden on the individual without improvement in his health. Therefore, it is the responsibility of the pharmacists to educate the individuals about the use of medicines, their dose and dose frequency. Since educating people is a great problem various barrier are faced by the pharmacists in educating the individuals that include improper communication, abuse management and language familiarity. The knowledge of OTC medications and their abuse can be spread through camps, advertisements and educational visits. Though the abuse of OTC medications cannot be completely eradicated but through various policies and treatment strategies the abuse of OTC medications can be managed effectively.
<b>Received: 05.06.2017</b> <b>Accepted: 22.12.2017</b>	
<b>Access this article online</b>	
<b>Website:</b> <a href="http://www.drugresearch.in">www.drugresearch.in</a>	
<b>Quick Response Code:</b>  	
<b>KEYWORDS</b> OTC medications, self-medication, abuse, economic burden, knowledge, pharmacists, strategies abuse of OTC medications can be managed effectively.	

**INTRODUCTION**

**O**TC medications are the drugs sold to the patients without any prescription from the physician for the treatment of common ailments. These are also termed as non-prescription medications. These medicines can help for a wide range of conditions and not limited to headaches, common cold, musculoskeletal pain, allergies, tobacco dependence, and heartburn.<sup>[1]</sup> Globally, the abuse of these drugs is mounting trouble. Even as there is a plain data on the exploitation of the drugs, predominantly those containing opioids, modern information from the United Kingdom (UK), Australia, and New Zealand.<sup>[2]</sup> Numerous OTC medications can be potentially be abused. Frequently abused medications consist of antihistamines, sleep aids, caffeine, ephedrine, ibuprofen, antitussives and expectorants, laxatives, anabolic steroids.<sup>[1]</sup> On prolonged consumption of ibuprofen, gastric ulcer, gastrointestinal bleeding, hepatotoxicity and inflammatory bowel conditions were seemed to be precipitated.<sup>[3]</sup>

## MATERIALS AND METHODS

Series of problems and harms coupled with OTC medicine abuse were acknowledged and comprise of three wide categories. Foremost, there were direct pharmacological and psychological harms of the drug abuse. Following, there were also physiological harms of another active ingredient in a compound formulation. Third, there were those harms related to other consequences, such as economic costs and effects on personal and social life and also progression to abuse of other substances. <sup>[4]</sup> 'Misuse' and 'Abuse'-these terms appear to be similar but have specific meaning. Misuse is the use of OTC medications for genuine health motive but at over doses or for a prolonged duration than recommended, e.g. higher dose administration of an analgesic to treat headache. Whereas, abuse is a non-medical and improper use of OTC medicines, e.g. use of tobacco for the relief of depression or weight control.<sup>[5]</sup> Major problem about self-analysis and the use of OTC medications is that public create a false assumption of a condition and use OTC medications incorrectly and shortly complain about a severe condition to the physician of which could have been treated in advance.<sup>[6]</sup> For instance, stimulants such as Ritalin® achieve their effects by acting on the same neurotransmitter systems as cocaine. Opioid pain relievers such as OxyContin® attach to the same cell receptors targeted by illegal opioids like heroin. And dextromethorphan when taken at higher doses acts on same cell receptors as ketamine, producing similar out-of-body experiences. Consequently, all these classes of drugs when abused directly or indirectly lead to agreeable raise of dopamine levels in the brain's reward pathway. Constantly prolonged use of these drugs can ultimately lead to addiction. <sup>[7]</sup> The reliance on medication may be curative despite of the class to which it belongs.

There are clear differences between the physical dependence on medication, active addiction, addiction in remission, and pseudo addiction. Physical dependence of a drug may arise, resulting in withdrawal symptoms if the medication is suddenly stopped. Drug seeking behavior and actions by some people may not reflect addiction but rather complexity to obtain right medications either by a prescription or otherwise as they are labeled as addicts. A number of people with a history of addiction to illegal drugs might also have severe pain that could be benefitted from suitable opioid pain medication. A person recovering from drug addiction might require stimulant for narcolepsy or a tranquilizer for anxiety. A condition of pseudo addiction might occur if these problems are not well treated due to physician's fear. <sup>[8]</sup>

## RESULTS

There will undeniably be an increase in the range of over-the-counter products in the coming years. A sense of balance will be required between the benefits that mount up against potential risks in broadening of OTC drug accessibility. Thereby, few of the adverse effects can also be predicted easily. As in case, the over-use of stimulant laxatives can show a way to cathartic colon that is associated with dosage and duration of use.<sup>[9]</sup> Many of the problems faced by the patient can be effortlessly solved by pharmacists that include selection of products, confusion of OTC brand name, suitable product use, and when to take medications.

## DISCUSSION

Patients can look up to a pharmacist in seeking advice. Thus, pharmacists have a sturdy control on purchase of OTC medication and product selection.<sup>[1]</sup> Various treatment strategies can be opted to control the abuse of OTC medications. These include probing about drug use during office visits, working on careful record keeping of prescription refills and control over prescription blanks, treating

pain assertively and aptly, taking into consideration about detoxification, referring patients who are addicted to medications for example Alcoholic Anonymous, Narcotics Anonymous and Pills Anonymous.<sup>[8]</sup>

## CONCLUSION

Abuse of OTC medications is not new problem. This can lead to complications such as increased health care cost, increased mortality and morbidity. OTC medications on long use or at higher doses can lead to adverse effects and sometimes addiction; therefore, it is duty of a pharmacist to guide the patients on use of OTC medications, their use, long term effects and interactions with other prescribed drugs. This can be achieved by limiting supplies, raising public and professional awareness and using existing services and Internet support groups. Lack of proper advice to the patients about the medications can also be added as a reason for the abuse of OTC medications. Therefore, pharmacists can educate and counsel the patients about use of OTC medications. Spread of knowledge about the use and misuse of OTC medications can be done by arranging camps, educational visits, advertisements and distributing pamphlets.

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