

Putting pseudoephedrine behind the counter

Izza Shahid,¹ Emaan Amin,² Muhammad Mustafa Memon³

Over-the-counter (OTC) medications are used by 25-75% of the population in Asia.^{1,2} Recently, a commonly prescribed OTC cough syrup named 'Sancos' was recalled from the pharmacies of Pakistan.³ This decision came after the discovery that the syrup contained an increased percentage of sympathomimetic amine pseudoephedrine. Pseudoephedrine is a readily available OTC nasal decongestant which alleviates symptoms of nasal congestion via vasoconstriction of nasal blood vessels.⁴ However, if used in greater dosages, it can result in psychomotor stimulation within the central nervous system owing to its structural similarity with psychostimulant amphetamine.⁴ We discuss implications of this recall on the drug situation in Pakistan.

An alarmingly high percentage of individuals (84.8%) self-medicate in Karachi alone and use OTC medications, primarily painkillers, antipyretics and anti-tussives, with a total of 14% males and females self-medicating with cough syrups.⁵ Furthermore, the failure of the Drug Regulatory Authority of Pakistan to successfully recall Sancos (7 out of 1.15 million litres recalled) following the ruling underscores the dire threat which the citizens of Pakistan still face.³ In addition, the pharmaceutical industry goes largely unchecked, precipitating the manufacture of substandard and counterfeit drugs which are known to be both ineffective for treatment and detrimental to health.⁶

The United States implemented the Combat Methamphetamine Epidemic Act in 2005, whereby the amount of pseudoephedrine sold per person was restricted and presentation of identification details was

made mandatory at the time of purchase.⁷ In a similar fashion, Pakistan can adopt policies at a national level to regulate pseudoephedrine not only in cough preparations but also other commonly marketed medications. Moreover, pseudoephedrine containing drugs should be made behind-the-counter and prescriptions should be compulsory for purchase. Lastly, patient awareness is also vital to ensure that the sale of hazardous drugs comes to a halt.

Disclaimer: None to declare.

Conflict of Interest: None to declare.

Funding Sources: None to declare.

References

1. Sontakke S, Bajait Cs PSJKJ, Sr, Sontakke S, Bajait Cs PSJKJ., Sr Comparative study of evaluation of self-medication practices in first and third year medical students. *Int J Biol Med Res.* 2011; 2:561.
2. Banerjee I, Bhadury T. Self-medication practice among undergraduate medical students in a tertiary care medical college, West Bengal. *J Postgrad Med.* 2012;58:127-131.
3. Staff Reporter. Ministry directs recall of medicine. . [online] [cited 2018 May 1] Available from: URL:<https://nation.com.pk/11-Apr-2018/ministry-directs-recall-of-medicine>.
4. Laccourreye O, Werner A, Giroud JP, Couloigner V, Bonfils P, Bondon-Guitton E. Benefits, limits and danger of ephedrine and pseudoephedrine as nasal decongestants. *Eur Ann Otorhinolaryngol Head Neck Dis* 2015; 132: 31-4. doi: 10.1016/j.janorl.2014.11.001.
5. Afridi MI, Rasool G, Tabassum R, Shaheen M, Siddiquillah, Shujauddin M. Prevalence and pattern of self-medication in Karachi: A community survey. *Pak J Med Sci* 2015; 31: 1241-45. doi:10.12669/pjms.315.8216
6. Rasheed SA. Pakistan needs to tackle counterfeit medicines before this cancer becomes even more deeply entrenched. [online] [cited 2018 May 1] Available from: URL: <https://nation.com.pk/29-Apr-2017/pakistan-needs-to-tackle-counterfeit-medicines-before-this-cancer-becomes-even-more-deeply-entrenched>
7. Information by Drug Class. Legal Requirements for the Sale and Purchase of Drug Products containing Pseudoephedrine, Ephedrine, and Phenylpropanolamine. [online] [cited 2018 May 1] Available from: URL: <https://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm072423.htm>.

¹Ziauddin Medical College, Karachi, Pakistan. ^{2,3}Dow University of Health Sciences (DUHS), Karachi, Pakistan.

Correspondence: Izza Shahid. e-mail: izzashahid8@gmail.com