

THE PATTERN OF OVER-THE-COUNTER MEDICINES DISPENSED IN PAKISTAN

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Over the counter (OTC) drugs is a term used to describe a medication dispensed in pharmacies without proper prescription. Over the counter medicines have become a cornerstone of self-care with millions relying on them for quick relief from common ailments, from headaches and colds to allergies and digestive issues. OTC medications are readily available, accessible and often the first line of defense for those seeking immediate relief. This widespread practice has led to serious consequences on patient's health and on the burden of disease as well. It has led to increase in self diagnosis with the promotion of quackery and malpractice. The culprit behind this malpractice is poverty, lack of access to proper healthcare and the monopoly by pharmaceutical companies. This grave issue imposes serious consequences and requires prompt legislation and strict action in this regard as well as public education and awareness.

The World health Organization estimates that globally 50% of all antibiotics are prescribed, dispensed or sold without a prescription.¹ In 1704, a decision was made from the House of Lords in Britain which established that the apothecaries could prescribe medicine. This challenged the sole authority of the College of Physicians in prescribing and dispensing medicine. In 1860, the drugs of abuse were exempted from the status of over the counter medicines, and were labeled as prescription-only medicines to ensure safety. All

other medicines remained available until 1960, when a report was presented by Interdepartmental committee on drug Addiction, chaired by Sir Russel Brain which culminated in a decision to make most medicines prescription only. This attempt was, however not fully successful.²

On May 2004, the secretary of state for health for England and Wales announced that simvastatin would become available for over the counter sale in UK in 10 mg formulation starting from July 2004. The UK is the first country to make statin available over the counter. The decision was applauded by the Royal Pharmaceutical Society however, the Consumer Association turned it down stating that the pharmacists do not have access to the patient's medical record which is helpful in judging whether simvastatin is the appropriate and optimum treatment. The Lancet announced "OTC STATINS: A Bad Decision for Public Health."³

In a cross-sectional study, conducted from July 2023 to November 2023 in 10 selected community pharmacies of District Tharparkar, Sindh Pakistan found that only 33 % patients were with the prescriptions of a Registered Medical Practitioner while the 67% were without the prescription. The top three antibiotics that were dispensed without prescription were metronidazole (75%), ciprofloxacin (15%) and amoxicillin (10%). Out of 10 community pharmacies, only one community pharmacy was run by the in-charge qualified pharmacist (10%) while the rest of the community pharmacies were run by non-pharmacists (90%).⁴

In a simulated client study conducted in Pakistan, community pharmacies are identified as key stakeholders in reducing the inappropriate dispensing of antibiotics without prescriptions. A study in urban areas of Punjab revealed that almost 35% of antibiotics are

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dispensed without an official medical prescription on verbal request.⁵ 96.9% pharmacies and medical stores dispensed antibiotics without demanding a prescription with only 3.1% of pharmacies refusing to dispense antibiotics. The most frequently dispensed antibiotic was ciprofloxacin (22.1%).⁵

Ahmad et al (2022) focused on antibiotics dispensing without prescriptions in Hazara division, Pakistan, using simulated client method. They found antibiotics were dispensed in 90.5% of visits, with azithromycin and ciprofloxacin being the most dispensed.⁶

Butt et al (2005) investigated pharmacy quality in Pakistan, found that only 19.3% of pharmacies complete licensing requirements. This emphasized the need of enforcing regulations and prioritizing training program for drug sellers and pharmacist to ensure rational medication uses.⁶

The prevalence of self-medication in males and females in Karachi was found to be 84.8% The most frequent symptoms for which self-medication used were headache (32.7%), fever (23.3%) and (28.8%), fever reducing medicines (19.8%). The most common reason was previous experience with the similar symptom.⁷

According to WHO, 10 million people could die each year by 2050 in the absence of effective control measures against drug resistance.⁸ About 0.5 million people, including women and children, die each year due to medication errors in Pakistan.⁸ There is emergence of drug resistance against typhoid and poliomyelitis. The Pakistani Government has shut down 22 913 quackery outlets in the province of Punjab and has decided in 2019 to regulate the sale of antibiotics in the Federal Capital, Islamabad.⁸ There is a need of public awareness and imposition of regulations regarding sale and purchase of drugs across the country. All the quackery and over the counter availability of medicines should be addressed and proper measures to be taken to combat with this public health hazard.

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