



Conscious Approach to Retail Medicine Prevents Thousands of Health Hazards: A Study in Asian Context

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Abstract. The crippling effects of illness and disease burden lead to loss of productivity, social isolation or exclusion and a negative socio-economic spiral for the individual as well as for the collective. For getting quick relief from illness and for saving time and money people are going to pharmacies directly for purchasing medicines Over-the-Counter (OTC), bypassing the consultation of a Physician. A person usually opts for the OTC when in there is an urgency of recovering from the sickness at the earliest, or they cannot afford the cumulative cost of Doctor's fees and price of medicines. But sometimes it is also by choice that they go to pharmacies directly to avoid usual medications prescribed conventionally by the doctors. In India over the counter medicines include painkillers, Vitamins and Nutritional supplements, cough, cold, Ayurveda medicines etc. The risk of various health hazards like drug resistance, adverse drug reaction and drug interactions increases due to unrestricted and irrational use of OTC medicine in the market. The high demand for OTC medicine is boosting the practice of Pharmacists or retail salespeople to dispense medicines without prescription even if those are listed as prescription medicine by the Drug Regulatory Authorities. As a cascading effect of this practice, self-medication is becoming a habit for consumers. Creating awareness regarding OTC drugs will help to lead better medical practices and will prevent unwanted consequences” by helping the consumers to make the learned decision.

Keywords: Retail health · Drug abuse · Safety profile

1 Introduction

Pharmaceuticals have become an indispensable component of contemporary life. Over-the-counter and prescription pharmaceuticals are included in retail pharmacy or the selling of pharmaceutical items. In addition to offering pharmaceutical drugs and related services, pharmacies also sell a variety of FMCG products. The market for pharmaceutical products is rising rapidly for a variety of reasons. The acceptability of present pharmaceuticals and innovative therapies will rise as a result of active market creation by players, an increase in the acceptance of biologics and medicine, and an increase in the propensity to self-medicate. In contrast to the other category, this consumer market

is continually pushed to recruit a growing number of new customers. Modern living has resulted in a variety of lifestyle-related diseases, creating demand for medications and medical equipment. [1]. In a similar manner, the growth of the health care market was fostered by the greater health consciousness brought about by the rise in education levels. People demand simplicity, quality, and transparency when determining how to spend their time and money, and they want the same of their healthcare providers. Healthcare institutions are increasingly examining retail health as a model for offering services to new patient populations and for providing good, convenient care to many customers.

Self-medication is a significant health concern, particularly in developing nations like India. Self-medication is one of the most popular and favored therapeutic strategies in undeveloped nations when universal health care access has not yet been achieved. Self-medication is the selection and use of medications by a person (or a family member) to cure self-recognized or self-diagnosed ailments or symptoms.. Increased access to medication and relief for the patient, the patient's active role in his or her own health care, better utilization of the skills of physicians and pharmacists, and a reduced (or at least optimized) burden on governments due to health expenditures associated with the treatment of minor health conditions are all associated with appropriate self-medication.. With the indiscriminate distribution of over-the-counter (OTC) medications, self-medication is gradually becoming a widespread practice or habit. Depending on population and country, the worldwide prevalence of self-medication ranges from 11.2% to 93.7%. [2]. According to numerous studies, self-medication may postpone care-seeking, resulting in counterintuitive economic losses due to delayed detection of underlying diseases and treatment. Also, self-medication can result in drug interactions that could have been avoided had the patient consulted a licensed physician. Self-medication with medications such as antibiotics may result in drug resistance; therefore, these behaviors must be regulated.

Self-medication methods cannot be regarded as wholly dangerous. Drugs categorised as “over the counter” are frequently available for purchase without a prescription, which can save patients time and money. Patients are still reliant on self-medication techniques for mild symptoms in the majority of Capitol Hill, tribal communities, and other hard-to-succeed places with a severe scarcity of human health workforce. Therefore, the purpose of this study is to:

1. To understand the reason for the spread of Retail medicines across various living areas
2. To identify the major impacts of the practice of self- medication on Society and Economy
3. To understand the judicial use of Retail medicines and create awareness for sustainable collective health

2 Literature Review

[2] The researchers assessed the extent of self-medication behaviors in India at the community level. This type of research can aid policymakers and regulatory authorities in streamlining the process of drug regulatory affairs, reviewing the list of essential

medicines, and assessing the safety profiles of over-the-counter medications by shedding light on the reasons why patients resort to this practice. In light of this, the purpose of the study was to assess the incidence of self-medication with allopathic medications and to examine the relationship between self-medication and sociodemographic variables in an urban area of Puducherry. This study also examined the mindset of individuals who engage in self-medication.

[1] The increasing non-medical usage of prescription medications is a global health hazard, as demonstrated by his research. It may involve the consumption of prescription pharmaceuticals, obtained with or without a prescription, that do not comply to the authorized duration, dose, or dosage, or that were not prescribed by a licensed physician. The study examined respondents' perceptions of the elements that influence their selection of a retail allopathic medical store from which to purchase routine health care products. The factors chosen for response collection are Convenient Location, Behaviour of Salespeople, Doctors' Suggestions, Discounted Price, Exterior Features of the Store, and Availability of Medicine. Analysis of the data based on the mean score suggests that reduced pricing (4.03) is the only element that has a significant impact on the selection of medical stores by customers.

[3] has demonstrated the role of Pharmacists in medication retailing. According to him, the pharmacist is the intermediary between physicians and patients who counsels and advises the patient to maximize the desired benefit of the drug while minimizing its unwanted effects.

[4] has conducted a cross-sectional study in Saudi Arabia to determine the self-medication tendencies. Medication purchased without a prescription is a global public health hazard of frightening proportions. In lieu of seeing a health expert, the majority of Saudi Arabians self-medicate and rely on advice from friends and family the bulk of the time, according to the study's findings.

[5] have focused on a comparison of ill health to that of other adverse agents and channels through which health conditions affect individuals which impairs or impedes the wellbeing of families. They have also explained the different strategies which the households deploy to meet it is the financial expenses incurred towards Health Services. They have used cross sectional data from various households in different parts of India that included a household shocks module and detailed information about health care use and spending.

[6] has tried to analyze the customers' mindset and their reasons of purchasing over the counter without prescription and has also studied which are the majority of medicines sold without prescriptions in Pune. The author has also studied the hazardous effects of medicines without prescriptions. The data shows that reasons for buying medicines without prescription include consumers' confidence on self-knowledge about the medicine either from past experience or by reading, hearing about it but at the same time it was seen that consumer awareness about side effects of medicines is low. Retailers of pharmaceuticals have an important role in society. As a result, a study examining customers' perceptions of retail pharmacies is conducted to get an understanding of the elements that influence the selection of a medical shop and to examine consumers' perceptions of chosen retail practices of medical shops in the geographical context of Kerala.

3 Method

The study is a descriptive study based on secondary data collected from various Published Research Papers and Books.

4 Discussion

4.1 Concept of Retail Medicine

Medicines are compounds which are having direct or indirect impact on Human health and well-being. Thus, drug regulatory authorities impose different restrictions on purchase of medicines with special emphasis on the very fact that whether those can be bought without prescription or not to maintain physiological homeostasis of human beings. Over-the-counter (OTC) drugs, often known as non-prescription medicines, are pharmaceuticals that can be purchased without a prescription and are safe and effective when used according to the directions on the label and as directed by a health care professional [7]. Self-medication is becoming increasingly widespread worldwide. The global prevalence of self-medication ranges from 11.2% to 93.7%, depending on population and country, according to surveys [8, 9]. People in modern metropolitan society are in a hurry, racing against the clock, while traffic congestion delays their travels. Consequently, when disease strikes, some persons opt for alternative therapies rather than consulting a doctor.

The marketing of a pharmaceutical as a non-prescription product which was earlier used as prescription only, refers to “Prescription to Non-prescription switch”. There are various attributes of the medicines like dosage form, contraindication, frequency of intake, route of drugs administration remains the same for these switched products. Inappropriate switching from Prescription to Non-prescription status can often cause problem, though it’s not a very usual scenario that the status of prescription medicines has been switched to OTC without a significant level of study which confers the safety index. Due to the fact that these products were once supposed to be used as prescription medicines, thus any quite wrong use, either thanks to negligence or with wrong intent, can pose various threats to health of the patient. Non-prescription medicines are usually having high safety profile and are thought to possess comparatively lesser contraindications because of which doctor’s prescription are not required for buying those. However, certain incidents of wrong use of non-prescription medicines causing negative or harmful health effects are observed, which somehow put a doubt on the very fact that they are completely safe. Any sort of medicines, including non-prescription or OTC medications, because certain alterations in human body’s usual physiological processes which may have adverse impacts on body if not taken as directed. Registered Pharmacists or sometimes retailers are one among the most conveniently available persons who often help customers to make a learned decision about the purchase and usage pattern of Non-prescription or OTC medicines.

People demand simplicity, quality, and transparency when determining how to spend their time and money, and they want the same of their healthcare providers. Emerging as a technique of offering consumers with convenient, high-quality treatment, retail health is on the rise. Healthcare systems should analyze this paradigm while providing

services to new and existing patient groups. Examining how retailers build in-store and online experiences to engage customers with their brands gives useful information for healthcare practitioners.

We are approaching an era of retail health and retail medicine, which means that healthcare practitioners are gathering knowledge through examining how retailers build in-store and online experiences to connect customers with brands. In accordance with a National Association of Community Health Centres (NACHC) proposal, even Federally Qualified Health Centres are examining retail health from a care and economic perspective. According to the NACHC, the retail model allows community health centers to give patients with customer awareness, friendliness, and quality perceptions..

4.2 Practice of Self-medication

Over-the-counter or non-prescription drugs are fluently and accessibly available order of drugs which are brought through a tone- drug practice for treating mild or common health problems. People want to get quick relief from illness and get back to the productive life. Occasionally they want to escape the hazards and charges of discussion a croaker. Cases occasionally want to avoid the conventional drugs specified by the croakers (like antibiotics and steroids) and prefer to switch to non-conventional protocols of treatment. Untoward drugs comprise of a range of products from acne treatment to cough and cold products to weight control products to impunity boosters. Non-prescription or OTC products are those products which are vended directly by the apothecaries without tradition from any listed medical guru. Cases have a common tendency to visit a near drugstore rather of visiting a medical professional for minor clinical symptoms similar as cough, cold, disinclinations, pain, fever, acidity, diarrhea, and skin- related conditions as it allows quick and less precious result to the problems [10].

People want easy access to primary healthcare services to preserve their health, but they also want to maintain their health while they are healthy, not simply in the event of a health emergency. To include health into their everyday lives, clients must have access to on-demand information, extended hours, accessible locations, walk-in movables, affordable services, and more than ever, transparent pricing.

Self-medication might be motivated by a variety of factors. Important factors include limited or no access to healthcare facilities, time-saving, prior good experience, small or mild disease, urgent situations, affordability, recommendations from friends or family, and enough knowledge of medications. Additionally, tone-drug may be fostered by social, artistic, and economic considerations. Self-medication can be both responsible and irresponsible. Over-the-counter (OTC) pharmaceuticals are the most often utilized tone-drugs. Without debate, the US Food and Drug Administration (FDA) approves OTC medications as safe and effective for the general public. Over-the-counter medications are well-known and widely accepted throughout the world.

Self-medication is not a completely safe activity, especially in the case of non-responsive tone-drugs. Incorrect tone-drug opinion, delays in seeking medical advice when demanded, occasional but severe adverse reactions, dangerous medicine relations, incorrect method of administration, incorrect lozenge, incorrect choice of remedy, masking a severe complaint, and the threat of dependence and abuse are implicit pitfalls of tone-drug practices. In this brief overview, the author examines new research

on some of the most significant problems associated with tone-drug practices, including polypharmacy and prescription interactions, substance misuse or dependency, misdiagnosis, and inappropriate treatment selection. The author also suggests methods that could be advocated to resolve or mitigate these problems.

- a) Due to incomplete data on the non-medical use of traditional medicines at the time and numerous gaps in the monitoring of their legal use for medical purposes as specified by health-care professionals (which creates opportunities for the diversion of these medicines to unintended recipients), the true scope of the problem is unknown. The majority of substance abuse research and media coverage focuses on illicit substances, alcohol, and tobacco. Despite this, the non-medical use of traditional medicines is a unique category of drug misuse in a number of ways and merits particular treatment in some situations. Pharmaceutical industry developments have led to the production of potent psychoactive medications that, when prescribed appropriately and taken as directed, improve the quality of life for patients with certain medical conditions, including acute pain, palliative care, epilepsy, opioid dependence, and acute anxiety. However, incorrect use of these substances can have significant health consequences and lead to addiction. In recognition of the risks that might be induced by the improper use of similar medications, three main medicine control treaties regulate their application.
- b) Through coordinated worldwide action, the 1961 Single Convention on Narcotic Narcotics, as revised by the 1972 Protocol, seeks to prohibit the use of illicit drugs.
- c) The 1971 Convention on Psychotropic Chemicals created a global regulatory mechanism for psychoactive drugs.
- d) The 1988 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, which covers legislative and executive provisions against pharmaceutical trafficking, including protections against money laundering and diversion of precursor chemicals. The objective of these agreements is to guarantee the inertness of these substances for medical and scientific use and to prohibit their diversion into illegal channels.
- a) The following are the most popular traditional drugs used in non-medical settings:
- b) Opiates; substances similar to hydrocodone, oxycodone, propoxyphene, hydromorphone, meperidine, and fentanyl.
- c) Other CNS depressants, such as barbiturates like pentobarbital sodium and benzodiazepines like diazepam and alprazolam; and CNS initiators, such as amphetamines like Dextroamphetamine and amphetamine-type stimulants like methylphenidate.

Increased non-medical use reduces demand for traditional specifics, resulting in new sources of diversion from medical to non-medical use or the production of counterfeit medications. In its 2006 report, the International Narcotics Control Board (INCB) noted that substances containing narcotic or psychotropic drugs are becoming the drugs of choice for many addicts, and that drug merchants are responding to this demand by increasing diversion and the production of counterfeit drugs.

The pharmaceutical request in the majority of nations is a complex and diverse assortment of administrations, associations, businesses, and individuals. Several sub-systems exist within the pharmaceutical force system, including those pertaining to

medicine development, regulation, product, distribution, defining, and allocating. At various stages of this process, multiple players or stakeholders are involved, including actors from the public sector, the commercial sector, and the collaborative sector.

People from all walks of life occasionally require protection from a retail medical store. The retail medical store industry comprises of neighborhood apothecaries, major drugstore chains, and supermarkets or general merchandisers with drugstore departments. As drug use continues to increase on a day-to-day basis, the prevalence of drug abuse continues to escalate.

4.3 Outcomes of Self-Medication

Self-medication has advantages and disadvantages on both the individual and communal levels. Utilized in a judicious manner, it can produce favorable results, whereas non-judiciously, it can lead to several health risks, such as drug dependence, substance misuse, adverse drug reactions, etc. Individually, the benefits of self-medication include saving time and money and avoiding the risks associated with doctor consulting. Easy access to retail establishments Self-reliance in effectively treating minor disorders Self-medication provides favorable economic outcomes at the collective level by reducing the strain on health care institutions, hence protecting restricted resources and increasing the accessibility of low-cost medications. Self-medication, on the other hand, may result in individual and communal damage. Medication without medical consultation can result in erroneous self-diagnosis and treatment, failure to succeed in an appropriate healthcare facility, insufficient dose, incorrect route of administration, improper timing of drugs, prolonged treatment, drug interaction, drug toxicity, adverse events, drug dependence, microbial resistance, and wasted national resources. Similarly, obtaining medicine without a prescription may result in the depletion of community resources and drug-related medical complications. Surprisingly, clinicians have listed self-medication with prescribed drugs as the leading source of overuse.

Beneficial self-medication practices can benefit both individuals and the health care business. For instance, minimizing work absences due to light illnesses, saving time and money on doctor's visits, and reducing (or at least optimizing) the load on governments due to health expenses associated with the treatment of minor health conditions are all examples of potential benefits [11]. According to recent studies, the convenience of going to a drugstore rather than visiting a doctor and avoiding the need to go to a hospital for treatment are among the most common reasons why people self-medicate. However, irresponsible self-medication using over-the-counter medications might result in drug-related issues and severe repercussions (including death) ([12] Globally, excessive self-medication is becoming a public health concern, namely antimicrobial resistance due by inappropriate antibiotic usage [13].

5 Conclusion

To conclude, it is often said that creating awareness for judicious use of OTC medicine and Empowering Pharmacists or Retail salespeople with the accurate and complete information regarding the products can help consumers to make learned and judicious

decision. Ethical decisions of Manufacturers also are crucial in this regard for the proper dissemination of information at various levels. Stringency in Regulation can mitigate the negative outcomes but self-regulation and having a conscious mind can illuminate the method of consumers' decision making. Increasing health awareness and education and disseminating more information about the risk issues of self-medication and the health hazards emerging as a consequence of self-medication, antibiotic stewardship, and stringency in the surveillance process to restrict or regulate the dispensing selling and consumption of Non- prescription based medicines should we e implemented at policy level.

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References

1. Murali E. Understanding Consumers' Behaviour towards Retail Medical Stores in Kerala'. *International Journal of Business and Management Invention (IJBMI)* n.d.;08:01–04.
2. Selvaraj K, Kumar SG, Ramalingam A. Prevalence of self-medication practices and its associated factors in Urban Puducherry, India. *Perspect Clin Res* n.d.;Jan;5(1):3:10 4103 2229–3485 124569.
3. Sinha HK. Role of pharmacists in retailing of drugs. *J Adv Pharm Technol Res* n.d.;5:10 4103 2231–4040 137383.
4. Al-Ghamdi S, Alfauri TM, Alharbi MA, Alsaihati MM, Alshaykh MM, Alharbi AA, et al. Current self-medication practices in the Kingdom of Saudi Arabia: an observational study. *Pan Afr Med J* n.d.;37. <https://doi.org/10.11604/pamj.2020.37.51.24098>.
5. Quintussi M, Poel E, Panda P. Economic consequences of ill-health for households in northern rural India. *BMC Health Serv Res* n.d.;15:179.
6. K K. Consumer Behavior towards Consuming Medicines without OTC in Pune City – An Empirical analysis. *International Journal in Management and Social Science* 2015;3.
7. Food US, Administration D. Understanding Over-the-counter Medicines n.d.
8. Arrais PS, Fernandes ME, Pizzol TD, Ramos LR, Mengue SS, Luiza VL. Prevalence of Self-Medication in Brazil and Associated Factors. *Rev Saude Publica* n.d.;50:13. <https://doi.org/10.1590/s1518-8787.2016050006117>.
9. Agudo-Prado S. Uses of digital tools among the elderly. *Comunicar* 2012;20:193–201. <https://doi.org/https://doi.org/10.3916/C39-2012-03-10>.
10. Woźniak-Holecka J, Grajek M, Siwozad K, Mazgaj K, Czech E. Consumer Behavior in OTC Medicines Market. *Przegl Epidemiol* n.d.;66:157–160.
11. Hughes D, Thesis GH-U, 2008 undefined. Arikunto, Suharsimi, Prosedur Penelitian Suatu Pendekatan Praktik, Jakarta: PT. Rineka Cipta, 2006, Cet. 6. EprintsWalisongoAcId n.d.
12. N. A, F. B, B. T-P, J. B, N. F, B. R. Frequency and Severity of Adverse Drug Reactions Due to Self-Medication: a Cross-Sectional Multicentre Survey in Emergency Departments. *Drug Saf* n.d.;36:1159–1168.
13. Watkins RR, Bonomo RA. Overview: Global and Local Impact of Antibiotic Resistance. *Infect Dis Clin North America* n.d.;30:313–322. <https://doi.org/10.1016/j.idc.2016.02.001>.

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