
Impact of Community Pharmacists in Managing Over-The-Counter (OTC) Medications

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Abstract: *OTC drugs are commonly utilized for self-care, providing customers with convenient access to remedies for common conditions without requiring a prescription. Improper utilization of over-the-counter (OTC) drugs can result in negative consequences such as adverse effects, drug interactions, and poor treatment. Community pharmacists have a vital role in overseeing over-the-counter (OTC) pharmaceuticals. They offer specialized guidance, ensure safe usage, and educate patients on acceptable self-medication practices. This paper examines the influence of community pharmacists in the management of over-the-counter (OTC) pharmaceuticals, emphasizing their responsibilities, advantages, difficulties, and methods to improve their efficiency. Community pharmacists can make a substantial impact on enhancing the safety and efficacy of over-the-counter (OTC) drugs by utilizing their accessibility and knowledge.*

Keywords: *Community Pharmacists, Over-The-Counter Medications, Self-Medication, Patient Education, Drug Safety.*

1. INTRODUCTION

OTC drugs play a crucial role in healthcare systems globally, providing simple and easily obtainable remedies for mild illnesses and encouraging self-care. These over-the-counter drugs, such as analgesics, antihistamines, digestive aids, and cosmetic items, can be purchased without a prescription and are commonly used by consumers. OTC drugs offer advantages such as convenient availability, financial savings, and the ability for individuals to take charge of their own healthcare. Nevertheless, the possible hazards linked to the misuse of over-the-counter (OTC) medication, such as inaccurate self-diagnosis, drug interactions, and excessive usage, require appropriate supervision and direction. Community pharmacists, being readily available healthcare practitioners, are optimally situated to oversee the utilization of over-the-counter drugs. Pharmacists possess specialized knowledge in pharmacotherapy and regularly engage with the public, allowing them to offer crucial



services such as advising patients, suggesting appropriate medications, and providing instruction on safe self-medication practices [1-5]. The involvement of community pharmacists in the management of over-the-counter (OTC) medications is crucial for ensuring the safe and effective use of these products, thereby preventing any harmful consequences and encouraging the best possible health results. This paper seeks to analyze the influence of community pharmacists in the management of over-the-counter (OTC) pharmaceuticals. It will examine their specific duties and responsibilities, the advantages of their participation, the obstacles they encounter, and potential ways to improve their performance in this domain. To enhance public health and safety, healthcare systems should acknowledge the crucial role of community pharmacists in managing over-the-counter (OTC) medications and provide them with enough support [5-7].

2. RELATED WORKS

Community pharmacists have many responsibilities in the management of over-the-counter (OTC) pharmaceuticals. These include offering guidance on choosing the right products, ensuring their safe usage, identifying possible interactions with other drugs, and teaching patients on self-care techniques. They have a broader range of responsibilities that go beyond just giving out prescriptions. They take a comprehensive approach to patient care. Pharmacists frequently act as the initial point of contact for clients seeking treatment for minor diseases. They evaluate symptoms, suggest suitable over-the-counter products, and offer guidance on their correct usage. In addition, pharmacists provide patients with information regarding probable adverse reactions, recommended dosing instructions, and the appropriate time to seek medical assistance. This individualized counseling aids in the prevention of misuse and encourages the safe and efficient utilization of over-the-counter drugs. Community pharmacists' participation in the management of over-the-counter (OTC) pharmaceuticals has numerous advantages, such as greater patient outcomes, improved medication safety, and heightened public awareness regarding self-medication practices. Research has shown that when pharmacists take the lead in managing over-the-counter medication, it results in improved health outcomes and increased satisfaction among patients [7-13]. Research has demonstrated that when pharmacists provide guidance on over-the-counter pain medicines, it effectively lowers the likelihood of excessive usage and related consequences, such as gastrointestinal bleeding and liver poisoning. Pharmacist advice regarding the utilization of over-the-counter (OTC) cold and allergy drugs serves to prevent improper usage and negative effects. Pharmacists empower patients by offering precise and timely information, enabling them to make well-informed choices regarding their self-care. This helps to minimize the chances of injury and enhances overall health. Although community pharmacists have notable advantages, they also encounter various obstacles when it comes to overseeing over-the-counter pharmaceuticals. A significant obstacle is the absence of extensive training in certain aspects of self-care and over-the-counter product expertise. Pharmacists possess extensive knowledge about prescription medications, but they may need extra training to keep up with the diverse range of over-the-counter (OTC) products that are available in the market [13-15]. Community pharmacists also encounter the difficulty of managing a heavy workload and strict time limitations. The requirements of administering



drugs and overseeing pharmacy operations can restrict the amount of time allocated for patient counseling and education. In addition, regulatory and legal obstacles, such as limitations on offering specific forms of medical guidance, can impede pharmacists' capacity to provide extensive over-the-counter medication management services. In order to optimize the influence of community pharmacists in the management of over-the-counter (OTC) pharmaceuticals, various tactics might be employed. These strategies encompass improving training and education, utilizing technology, and promoting regulatory reforms. Offering continuous training to pharmacists on over-the-counter drugs and self-care techniques can enhance their understanding and self-assurance in handling these goods. Pharmacists can acquire the necessary skills to offer efficient patient counseling and education by participating in continuing education programs and certification courses that specifically concentrate on OTC medicine management. Employing technology such as electronic health records (EHRs), mobile health applications, and telepharmacy can improve pharmacists' capacity to oversee over-the-counter (OTC) drugs [15-20]. Electronic Health Records (EHRs) facilitate efficient and coordinated communication between healthcare professionals, ensuring that pharmacists have timely access to the most current patient information. Mobile health applications enable patients to conveniently access information regarding over-the-counter drugs and facilitate remote consultations with pharmacists. Telepharmacy has the potential to enhance the availability of pharmacist services, especially in remote and underprivileged regions. Advocacy is necessary to tackle regulatory obstacles that restrict pharmacists' participation in over-the-counter pharmaceutical management. Advocating for legislation that broadens pharmacists' jurisdiction to offer medical guidance and counseling on over-the-counter (OTC) goods can augment their capacity to contribute to patient care. Furthermore, supporting the payment of pharmacists' clinical services helps guarantee that they receive appropriate remuneration for their valuable contributions to public health [21].

3. METHODOLOGY

This review involved an in-depth exploration of several academic databases, including PubMed, Google Scholar, and Scopus, using specific terms such as "community pharmacists," "over-the-counter medications," "self-medication," "patient education," and "drug safety." The selection criteria focused on research and articles that examined the responsibilities of community pharmacists in overseeing over-the-counter (OTC) pharmaceuticals. It also looked into the benefits and challenges associated with their involvement and identified methods to enhance their effectiveness. The review aimed to provide a comprehensive understanding of the current role of community pharmacists in managing OTC medications. By analyzing data from various sources, the review integrated evidence from recent studies and best practices in the field to develop strategies and solutions for improving the role of community pharmacists in this area. This approach ensured that the recommendations were based on up-to-date research and effective practices. Community pharmacists play a crucial role in managing OTC medications, which are widely used by patients for self-medication. They are often the first point of contact for individuals seeking advice on OTC drugs, making their involvement essential for ensuring the safe and effective use of these medications. Pharmacists provide valuable services such as counseling on proper



medication use, identifying potential drug interactions, and educating patients about side effects and contraindications. The review highlighted several benefits of community pharmacists' involvement in OTC medication management. These benefits include improved patient safety, better medication adherence, and enhanced patient knowledge about OTC drugs. By providing personalized advice and education, pharmacists can help patients make informed decisions about self-medication, thereby reducing the risk of misuse and adverse effects. However, the review also identified challenges that community pharmacists face in managing OTC medications. These challenges include a lack of access to patients' medical histories, time constraints, and the need for more recognition and support for their role in OTC medication management. Addressing these challenges is crucial to enhancing the effectiveness of community pharmacists in this area. To improve the role of community pharmacists in OTC medication management, the review proposed several strategies. One strategy is to provide pharmacists with better access to patient health information, allowing them to make more informed recommendations about OTC drugs. Another strategy is to advocate for policy changes that recognize and support the role of pharmacists in OTC medication management, including reimbursement for counseling services. Additionally, integrating pharmacists into broader healthcare teams can improve coordination and communication, leading to better patient outcomes. Education and training are also critical for empowering community pharmacists to effectively manage OTC medications. Continuing education programs and professional development opportunities can equip pharmacists with the knowledge and skills needed to provide high-quality advice and counseling on OTC drugs. Furthermore, raising awareness among healthcare providers and the public about the importance of pharmacists' role in OTC medication management can foster greater collaboration and utilization of their expertise. The review emphasizes the need for a supportive environment that allows community pharmacists to maximize their potential in OTC medication management. This includes providing adequate resources, training, and support to help pharmacists overcome the barriers they face. By doing so, pharmacists can contribute more effectively to the safe and efficient use of OTC medications, ultimately improving patient safety and health outcomes. The review underscores the significant impact that community pharmacists can have on the management of OTC medications. By leveraging their accessibility and expertise, pharmacists can play a crucial role in ensuring the safe and effective use of OTC drugs. Addressing the challenges they face and implementing strategies to enhance their role can lead to better health outcomes for patients. The findings of this review highlight the importance of empowering community pharmacists to take on a more active role in OTC medication management, ensuring that they can provide high-quality care to their patients.

4. RESULTS AND DISCUSSION

Community pharmacists have a distinct advantage in properly handling over-the-counter (OTC) medications since they are easily accessible and possess knowledge in medication administration. In addition to dispensing, their responsibilities encompass offering extensive guidance and education on over-the-counter (OTC) products. Pharmacists can choose the most suitable over-the-counter (OTC) medications by evaluating patients' symptoms, taking



into account factors such as their medical history, existing prescriptions, and possible drug interactions. Pharmacists have a vital role in providing patients with education on appropriate pharmaceutical usage, which encompasses information on dosage, methods of administration, and potential adverse effects. This education serves to mitigate the risk of misuse and guarantee that patients utilize over-the-counter medications in a safe and efficient manner. In addition, pharmacists oversee the detection of possible drug interactions and contraindications, especially in patients with chronic illnesses or those who are on multiple drugs. Community pharmacists' participation in the management of over-the-counter (OTC) pharmaceuticals yields multiple advantages, such as greater patient outcomes, improved medication safety, and heightened public awareness of self-care practices [20-25]. Research has shown that pharmacist interventions can decrease the likelihood of negative consequences, enhance the treatment of symptoms, and heighten patient contentment. Pharmacist-led counseling regarding the usage of over-the-counter pain relievers has been proven to decrease the occurrence of excessive use and associated problems. Pharmacists provide valuable advice on the proper use of over-the-counter (OTC) cold and allergy drugs, which helps to prevent improper usage and negative responses. Pharmacists empower patients by offering precise and timely information, enabling them to make well-informed choices regarding their self-care. This helps to minimize the chances of injury and enhances overall health. Although community pharmacists experience notable advantages, they also encounter various difficulties when it comes to overseeing over-the-counter (OTC) pharmaceuticals. An important obstacle is the absence of extensive training in certain aspects of self-care and over-the-counter product knowledge. Pharmacists possess extensive knowledge about prescription medications, but they may need extra training to keep up with the diverse range of over-the-counter (OTC) products that are available in the market [25-27].

Community pharmacists also confront the issue of dealing with a heavy workload and limited time. The requirements of administering drugs and overseeing pharmacy operations can restrict the amount of time allocated for patient counseling and education. Moreover, legislative and legal obstacles, such as limitations on dispensing specific categories of medical guidance, can impede pharmacists' capacity to provide full over-the-counter drug management services. In order to optimize the influence of community pharmacists in the management of over-the-counter (OTC) pharmaceuticals, various tactics might be employed. These encompass improving training and education, utilizing technology, and promoting regulatory modifications. Continuing to provide pharmacists with training on over-the-counter (OTC) drugs and self-care practices can enhance their understanding and self-assurance in handling these products. Pharmacists can enhance their ability to provide effective patient counseling and education by participating in continuing education programs and certification courses that specifically focus on the management of over-the-counter (OTC) medications [27-30]. Employing tools such as electronic health records (EHRs), mobile health applications, and telepharmacy might augment pharmacists' capacity to oversee over-the-counter (OTC) drugs. Electronic Health Records (EHRs) facilitate efficient and effective communication and collaboration among healthcare professionals, guaranteeing that pharmacists may access the most current patient information. Mobile health applications enable patients to conveniently access information regarding over-the-counter drugs and



facilitate remote consultations with pharmacists. Telepharmacy has the potential to enhance the availability of pharmacist services, especially in remote and underserved regions. Advocacy is necessary to tackle regulatory obstacles that restrict pharmacists' participation in over-the-counter pharmaceutical management. Advocating for legislation that broadens pharmacists' jurisdiction to offer medical guidance and counseling about over-the-counter (OTC) products can augment their capacity to contribute to patient care. Furthermore, supporting the reimbursement of pharmacists' clinical services helps guarantee that they receive fair remuneration for their valuable contributions to public health [30-37].

5. CONCLUSION

Community pharmacists have a crucial part in overseeing over-the-counter (OTC) drugs, utilizing their availability and knowledge to guarantee the secure and efficient utilization of these items. Pharmacists play a crucial role in preventing misuse, minimizing the chances of negative consequences, and promoting the best possible health outcomes through thorough patient counseling, education, and monitoring. Pharmacist participation in the administration of over-the-counter (OTC) medications yields substantial advantages, including better patient results, enhanced pharmaceutical security, and heightened public knowledge of self-care techniques. Pharmacists encounter obstacles such as insufficient training, heavy workload, and regulatory impediments that might impede their efficacy. In order to amplify the influence of community pharmacists in overseeing over-the-counter pharmaceuticals, it is crucial to offer continuous training and instruction, utilize technology to bolster their efforts, and fight for regulatory reforms that broaden their responsibilities and guarantee sufficient remuneration for their services. By tackling these obstacles and bolstering the involvement of pharmacists, healthcare systems can enhance the secure and efficient utilization of over-the-counter pharmaceuticals, thereby improving public health and safety. It is essential to empower community pharmacists to have a more significant impact on managing over-the-counter (OTC) medications. This will help improve health outcomes and decrease the hazards associated with self-medication. With the ongoing changes in healthcare, the significance of community pharmacists in overseeing over-the-counter (OTC) medications will grow, emphasizing the necessity for ongoing support and acknowledgment of their crucial role in patient care.

6. REFERENCES

1. Zehravi M, Maqbool M, Ara I. Polycystic ovary syndrome and infertility: an update. *International journal of adolescent medicine and health*. 2021 Jul 22; 34(2):1-9.
2. Lihite RJ, Lahkar M, Das S, Hazarika D, Kotni M, Maqbool M, Phukan S. A study on adverse drug reactions in a tertiary care hospital of Northeast India. *Alexandria journal of medicine*. 2017 Jul 11; 53(2):151-6.
3. Zehravi M, Maqbool M, Ara I. Correlation between obesity, gestational diabetes mellitus, and pregnancy outcomes: an overview. *International Journal of Adolescent Medicine and Health*. 2021 Jun 18; 33(6):339-45.



4. Maqbool M, Bekele F, Fekadu G. Treatment strategies against triple-negative breast cancer: an updated review. *Breast Cancer: Targets and Therapy*. 2022 Jan 11:15-24
5. Rasool S, Maqbool M. An overview about *Hedychium spicatum*: a review. *Journal of Drug Delivery and Therapeutics*. 2019 Feb 15; 9(1-s):476-80.
6. Zehravi M, Maqbool M, Ara I. Depression and anxiety in women with polycystic ovarian syndrome: a literature survey. *International Journal of Adolescent Medicine and Health*. 2021 Aug 23; 33(6):367-73.
7. Maqbool M, Gani I, Dar MA. Anti-diabetic effects of some medicinal plants in experimental animals: a review. *Asian Journal of Pharmaceutical Research and Development*. 2019 Feb 15; 7(1):66-9.
8. Zehravi M, Maqbool M, Ara I. Polycystic ovary syndrome and reproductive health of women: a curious association. *International journal of adolescent medicine and health*. 2021 Apr 21; 33(6):333-7.
9. Mohd M, Maqbool M, Dar MA, Mushtaq I. Polycystic ovary syndrome, a modern epidemic: an overview. *Journal of Drug Delivery and Therapeutics*. 2019 May 15; 9(3):641-4.
10. Maqbool M, Fekadu G, Jiang X, Bekele F, Tolossa T, Turi E, Fetensa G, Fanta K. An up to date on clinical prospects and management of osteoarthritis. *Annals of Medicine and Surgery*. 2021 Dec 1; 72:103077.
11. Majeed A, Bashir R, Farooq S, Maqbool M. Preparation, characterization and applications of nanoemulsions: An insight. *Journal of Drug Delivery and Therapeutics*. 2019 Mar 15; 9(2):520-7.
12. Zehravi M, Maqbool M, Ara I. Healthy lifestyle and dietary approaches to treating polycystic ovary syndrome: a review. *Open Health*. 2022 May 2; 3(1):60-5.
13. Maqbool R, Maqbool M, Zehravi M, Ara I. Menstrual distress in females of reproductive age: a literature review. *International journal of adolescent medicine and health*. 2021 Jul 22; 34(2):11-7.
14. Ara I, Maqbool M, Fekadu G, Hajam TA, Dar MA. Pharmaceutical significance of *Nigella sativa* L., a wonder herb. *Journal of Applied Pharmaceutical Sciences and Research*. 2020; 3(4):04-13.
15. Maqbool M, Nasir N, Mustafa S. Polycystic in ovarian syndrome and its various treatment strategies. *INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES*. 2018 Sep 1; 5(9):8470-8.
16. Maqbool M, Zehravi M, Maqbool R, Ara I. Study of adverse drug reactions in pulmonary medicine department of a Tertiary care hospital, Srinagar, Jammu & Kashmir, India. *CELLMED*. 2021; 11(2):8-1.
17. Ara I, Maqbool M, Bukhari B, Ara N, Hajam TA. Present status, standardization and safety issues with herbal drugs. *International Journal of Research in Pharmaceutical Sciences and Technology*. 2020 May 18; 1(3):95-101.
18. Ara I, Maqbool M, Gani I. Reproductive Health of Women: implications and attributes. *International Journal of Current Research in Physiology and Pharmacology*. 2022 Nov 28:8-18.
19. Zehravi M, Maqbool R, Maqbool M, Ara I. To Identify Patterns of Drug Usage among Patients Who Seek Care in Psychiatry Outpatient Department of a Tertiary Care



- Hospital in Srinagar, Jammu and Kashmir, India. *Journal of Pharmaceutical Research International*. 2021 Jun 10; 33(31A):135-40.
20. Maqbool M, Javed S, Bajwa AA. Assessment OF pain management IN postoperative cases using different scales and questionnaires. *INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES*. 2019 Jan 1; 6(1):983-7.
 21. Ara I, Maqbool M, Zehravi M. Psychic consequences of infertility on couples: A short commentary. *Open Health*. 2022 Jan 1; 3(1):114-9.
 22. Bashir R, Maqbool M, Ara I, Zehravi M. An Insight into Novel Drug Delivery System: In Situ Gels. *CELLMED*. 2021; 11(1):6-1.
 23. Zehravi M, Maqbool M, Ara I. Teenage menstrual dysfunction: an overview. *International Journal of Adolescent Medicine and Health*. 2022 Sep 19; 35(1):15-9.
 24. Ara I, Zehravi M, Maqbool M, Gani I. A review of recent developments and future challenges in the implementation of universal health coverage policy framework in some countries. *Journal of Pharmaceutical Research & Reports*. SRC/JPRSR-131. DOI: doi. org/10.47363/JPRSR/2022 (3). 2022; 127.
 25. Maqbool M, Shabbir W, Aamir S. Adverse events of blood transfusion and blood safety in clinical practice. *Indo American Journal of Pharmaceutical Sciences*. 2018 Aug 1; 5(8):8254-9.
 26. Maqbool M, Naeem A, Aamer S. Diabetes mellitus and its various management strategies in practice. *Indo American Journal of Pharmaceutical Sciences*. 2018 Aug 1; 5(8):8163-+.
 27. Maqbool M, Tariq S, Amjad S. Prescribing practices in pediatrics and drug utilization studies promoting pediatric health. *Indo American Journal of Pharmaceutical Sciences*. 2018 Aug 1; 5(8):8070-6.
 28. Maqbool M, Ikram U, Anwar A. Adverse drug reaction monitoring and occurrence in drugs used in pulmonary disorders. *Indo American Journal of Pharmaceutical Sciences*. 2018 Aug 1; 5(8):8060-5.
 29. Maqbool R, Maqbool M, Zehravi M, Ara I. Acute neurological conditions during pregnancy and their management: a review. *International Journal of Adolescent Medicine and Health*. 2021 Aug 23; 33(6):357-66.
 30. Zehravi M, Maqbool M, Ara I. An overview about safety surveillance of adverse drug reactions and pharmacovigilance in India. *The Indian Journal of Nutrition and Dietetics*. 2021 Jul: 408-18.
 31. Maqbool M, Zehravi M. Neuroprotective role of polyphenols in treatment of neurological disorders: A review. *Interventional Pain Medicine and Neuromodulation*. 2021 Dec 31; 1(1).
 32. Maqbool M, Ara I, Gani I. The Story of Polycystic Ovarian Syndrome: A Challenging Disorder with Numerous Consequences for Females of Reproductive Age. *International Journal of Current Research in Physiology and Pharmacology*. 2022 Nov 28:19-31.
 33. Maqbool M, Gani I. Utilization of statins in reducing comorbidities of diabetes mellitus: A systematic review. *Journal of Pharmacy Practice and Community Medicine*. 2018; 4(4).



34. Maqbool R, Maqbool M, Zehravi M, Ara I. Acute neurological conditions during pregnancy and their management: a review. *International Journal of Adolescent Medicine and Health*. 2021 Aug 23; 33(6):357-66.
35. Maqbool M, Tariq S, Amjad S. Prescribing practices in pediatrics and drug utilization studies promoting pediatric health. *Indo American Journal of Pharmaceutical Sciences*. 2018 Aug 1; 5(8):8070-6.
36. Maqbool M, Naeem A, Aamer S. Diabetes mellitus and its various management strategies in practice. *Indo American Journal of Pharmaceutical Sciences*. 2018 Aug 1; 5(8):8163-+.
37. Maqbool M, Shabbir W, Aamir S. Adverse events of blood transfusion and blood safety in clinical practice. *Indo American Journal of Pharmaceutical Sciences*. 2018 Aug 1; 5(8):8254-9.