SOI: 1.1/TAS DOI: 10.15863/TAS

International Scientific Journal

Theoretical & Applied Science

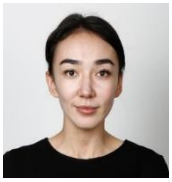
p-ISSN: 2308-4944 (print) **e-ISSN:** 2409-0085 (online)

Year: 2025 **Issue:** 03 **Volume:** 143

Received: 06.03.2025
Accepted/Published: 30.03.2025 https://T-Science.org

Issue Article

D.S. Sayidyrahimova
Andijan branch of Kakand University
department of "Language Studies"
saidrahimova71@mail.ru



Moxinabony Jaxongir qizi Axmedova
Andijan branch of Kakand University
first year student of the speciality pediatrics 24-07

CURRENT PROBLEMS OF DRUG PROVISION IN MEDICAL INSTITUTIONS

Abstract: *Drug provision within medical institutions plays a pivotal role in ensuring patient safety and quality healthcare services. However, several prevailing issues hinder efficient and reliable medication management. Chief among these are supply chain disruptions, which have intensified during global events such as pandemics or geopolitical conflicts, leading to drug shortages and delayed delivery. Financial constraints, especially in lower-resourced settings, further compound these challenges by limiting the procurement of essential medications. Regulatory barriers and complex approval processes also contribute to inefficiencies and reduced agility in adapting to evolving patient needs. Additionally, insufficient digital infrastructure and fragmented recordkeeping systems can result in medication errors, stock mismanagement, and a lack of real-time tracking. High pharmaceutical costs—due in part to patent protections, limited market competition, and complex pricing mechanisms—pose another challenge for institutions aiming to balance budgets with patient needs. Lastly, a shortage of skilled professionals in pharmacy management and insufficient communication between healthcare stakeholders can exacerbate risk factors for errors and drive up operational costs. Addressing these multifaceted challenges requires coordinated strategies, including improved supply chain transparency, strengthened digital health systems, and equitable pricing frameworks, to enhance patient care and foster sustainable drug provision in medical institutions.*

Key words: *communication, pharmaceutical, healthcare, patient, strengthened, management.*

Language: *English*

Citation: Sayidyrahimova, D.S., & Axmedova, M.J. (2025). Current problems of drug provision in medical institutions. *ISJ Theoretical & Applied Science, 03 (143),* 33-36.

Soi: https://s-o-i.org/1.1/TAS-03-143-4 ***Doi***: crossref https://dx.doi.org/10.15863/TAS.2025.03.143.4

Scopus ASCC: *3300.*

Introduction

Drug provision is a cornerstone of modern healthcare, ensuring that patients receive the medications they need to manage illnesses, recover from procedures, and maintain long-term health. In practice, however, providing drugs efficiently and safely can be fraught with challenges. Medical institutions worldwide face numerous issues, ranging from infrastructural hurdles and supply chain disruptions to regulatory complexities and economic constraints. This article examines the most pressing problems affecting drug provision in hospitals and other healthcare facilities, shedding light on systemic factors and potential avenues for improvement. Recent global events, including pandemics and geopolitical conflicts, have exposed the fragility of pharmaceutical supply chains. Manufacturers and distributors face disruptions in raw material sourcing, production, and international shipping—leading to frequent shortages of essential and life-saving medicines. This instability forces healthcare institutions to ration drugs, seek alternative suppliers, or rapidly switch to therapeutic substitutes. Even under stable conditions, poor coordination among

manufacturers, wholesalers, and healthcare institutions can result in delayed deliveries or mismanaged inventory. Without robust communication channels and real-time data sharing, facilities often fail to anticipate impending shortages, leading to last-minute procurement efforts that drive up costs. Budget constraints are a significant barrier to securing an adequate drug supply. Public-sector hospitals, especially in lower-income regions, frequently struggle to prioritize medicines over other competing budgetary needs (e.g., infrastructure, staffing, and equipment). This results in limited stock of essential medications and can worsen patient outcomes. Many critical drugs—especially those protected by patents or produced by a limited number of manufacturers—come with high price tags. Complex pricing mechanisms, patent protection laws, and limited generic competition can collectively inflate drug costs. When expenditures mount, institutions often have to choose between sourcing cheaper generics of uncertain quality or limiting the range of medications available. Regulatory frameworks aim to ensure drug safety and efficacy. However, these processes can sometimes be overly lengthy or complex, delaying the introduction of new or alternative medications. In some regions, inefficiencies in public agencies can further stall approvals, widening the gap between the discovery of innovative treatments and their eventual use in clinical practice. Globalized pharmaceutical trade requires drugs to meet varying regulatory standards across countries. Manufacturers may face repetitive and overlapping validation processes, driving up production costs and limiting the availability of medications in certain markets. This variation disproportionately affects smaller healthcare systems with less negotiating power.

In many medical institutions, drug inventory is tracked manually or through disjointed software systems. This can lead to errors in stock counts, misallocation of resources, and delayed reordering of essential medicines. Without reliable digital tools, pharmacy staff spend valuable time on recordkeeping rather than on clinical or patient-facing tasks. Real-time data tracking is critical for anticipating shortages, optimizing distribution, and preventing stockouts. Outdated or non-integrated systems cannot quickly signal the need for reordering or substitutions. In a dynamic environment—especially during a crisis—decisions made without real-time data can result in both surpluses of some medications and shortages of others.

A well-trained pharmacy workforce is essential for efficient drug management. However, many regions face shortages of pharmacists and pharmacy technicians, as well as ongoing challenges in retaining skilled professionals. These staffing gaps undermine the ability to implement quality control measures, track inventory accurately, and advise on safe medication use. Pharmacy education often focuses on clinical aspects of patient care, with relatively less emphasis on logistics and supply chain management. As a result, staff may lack the specialized skills to navigate complex procurement processes, negotiate with suppliers, and implement advanced tracking systems.

Communication breakdowns frequently occur between hospital departments (e.g., pharmacy, nursing, and administration), leading to duplicative orders or delayed requisitions. When clinical departments operate in silos, minor discrepancies in order details (such as dosage or brand) can result in wasted resources and patient dissatisfaction. Beyond the walls of a single institution, a lack of coordination and communication with pharmaceutical companies, insurance providers, and regulatory bodies can hinder efficient drug provisioning. Misaligned incentives and limited data sharing exacerbate inefficiencies, elevating the risk of stockouts and medication errors.

The high cost of pharmaceuticals is a pressing concern in healthcare systems worldwide. Patients, medical institutions, and policymakers are grappling with the financial challenges posed by expensive medications—often leading to difficult decisions regarding treatment accessibility and budget allocation. This article explores the main drivers behind rising pharmaceutical prices, the impact on patients and healthcare providers, and potential strategies to address the issue. Pharmaceutical companies frequently justify high prices by pointing to the substantial R&D expenditures required to bring a new drug to market. The process, which involves discovery, preclinical testing, multiple phases of clinical trials, and regulatory approvals, can take years and cost billions of dollars. These costs are then passed on to consumers, hospitals, and insurance providers. Patents grant companies a period of market exclusivity, allowing them to set prices without the pressure of direct competition. During this exclusivity window—often extended through legal and regulatory strategies—drugmakers can charge premium prices to recoup their investments and maximize profits. This dynamic delays the entry of more affordable generic drugs. Generic drugs offer a lower-cost alternative once a patent expires. However, obstacles such as lengthy regulatory processes, patent litigation, and supply chain complexities can slow the introduction of generics. In some cases, a single company produces both the branded drug and its generic, limiting true competition. This bottleneck can maintain higher prices even when market exclusivity is technically over. Each country enforces unique regulations, approval processes, and reimbursement policies. Pharmaceutical companies often set region-specific pricing strategies, leveraging higher prices in markets without strict price controls. These international discrepancies make it challenging to contain rising costs, particularly in countries without strong

regulatory frameworks. When medication prices rise, financial barriers can limit patient access to essential treatments. Individuals may skip doses, use lower-than-prescribed quantities, or forgo treatment entirely to save money. Poor adherence not only undermines patient health but can lead to higher long-term healthcare costs due to complications or hospital readmissions. Hospitals and clinics must balance drug expenditures with other budgetary needs like staffing, equipment, and facility maintenance. High drug costs can pressure institutions to ration certain treatments or redirect funds from other areas, potentially diminishing overall care quality. For insured patients, high drug prices often lead to elevated insurance premiums and copayments. Insurers bear some of the cost burden, but they shift a portion to consumers through higher deductibles or reduced coverage. Uninsured or underinsured individuals are even more vulnerable, facing steep out-of-pocket payments or outright inability to afford vital medications. Widespread challenges in medication affordability can exacerbate social inequalities. People in lower-income brackets experience worse health outcomes due to cost barriers. This can ripple through economies, as untreated illness reduces productivity and increases public health expenditure over time. Facilitating faster approval and market entry of generic drugs and biosimilars can drive down prices by spurring competition. Reforms that streamline regulatory pathways, protect against anti-competitive tactics, and encourage transparent pricing agreements can help reduce costs without compromising quality. Government agencies or large consortia (e.g., hospital networks or insurance coalitions) can negotiate with manufacturers to obtain lower prices for bulk purchases. Increasing price transparency—by making the costs of R&D, manufacturing, and distribution visible—can also help policymakers and consumers make informed decisions and pressure companies to adopt fairer pricing strategies.

Some healthcare systems and pharmaceutical companies are exploring value-based pricing models, where the cost of a drug is tied to its clinical effectiveness. If a drug does not deliver the expected therapeutic benefit, the manufacturer may offer refunds or rebates. This model encourages innovation and aligns prices more closely with patient outcomes. Balancing rewards for innovation with public health needs is crucial. Potential reforms include shortening the duration of market exclusivity for certain drugs, preventing “patent evergreening” (where minor drug modifications extend patent life), and funding R&D through public-private partnerships to reduce costs at the point of sale. In an era of medical advancements and expanding treatment options, addressing the high cost of pharmaceuticals remains critical. Patients should not have to compromise their health due to financial barriers, and healthcare systems should be able to budget effectively without sacrificing quality of care. By enacting collaborative and evidence-based solutions, society can move closer to a model of healthcare where groundbreaking medications remain affordable, sustainable, and accessible to all.

Conclusion

Drug provision in medical institutions is a multifaceted challenge that intersects clinical, logistical, and economic domains. Supply chain disruptions, budgetary constraints, and regulatory hurdles continue to strain the availability of essential medications, while outdated infrastructure and limited workforce expertise exacerbate these problems. Addressing these complex issues requires a holistic strategy—one that emphasizes strengthened supply chains, modernized digital tools, a well-trained workforce, and collaborative efforts among all healthcare stakeholders. By tackling these challenges proactively, medical institutions can improve the reliability and quality of patient care, ensuring that essential medications reach those who need them most.

References:

1. (2019). *World Health Organization (WHO). Medication Safety in High-risk Situations.* Geneva: WHO. https://apps.who.int/iris/handle/10665/325131
2. (2021). *World Health Organization (WHO). The Selection and Use of Essential Medicines: Report of the WHO Expert Committee (22nd ed.).* Geneva: WHO. https://www.who.int/publications/i/item/9789240041134
3. (2020). *International Pharmaceutical Federation (FIP). Pharmacists at the Frontline in COVID-19: Ensuring Access to Medicines.* The Hague: FIP. https://www.fip.org/files/content/priority-areas/coronavirus/Pharmacists%20at%20the%20frontline.pdf
4. (2020). *European Medicines Agency (EMA). Regulatory Science to 2025: Strategic Reflection.* Amsterdam: EMA. https://www.ema.europa.eu/en/documents/regul

atory-procedural-guideline/european-medicines-agency-regulatory-science-2025-strategic-reflection_en.pdf

5. (2021). *International Federation of Red Cross and Red Crescent Societies (IFRC). Healthcare in Emergencies: Ensuring Medicine Availability*. Geneva: IFRC. (General link; specific publication available via IFRC library) https://www.ifrc.org/
6. Kishore, S. P., Upadhyay, A., & Scheffler, R. (2020). Ensuring equitable access to medications in low- and middle-income countries. *The Lancet Global Health*, 8(5), e687–e688. https://doi.org/10.1016/S2214-109X(20)30079-4
7. Chowdary, S. P., & Agarwal, M. (2021). Challenges in pharmaceutical supply chain management. *Journal of Healthcare Management*, 66(4), 234–240. https://doi.org/10.1097/JHM-D-20-00233
8. Machado, M. C., Smith, L., & Corrigan, N. (2022). The role of health informatics in medication management. *International Journal of Medical Informatics*, 161, 104674. https://doi.org/10.1016/j.ijmedinf.2022.104674
9. Freedman, R., & Kwon, J. M. (2021). Global perspectives on pharmaceutical supply chain resilience. *Global Health: Science and Practice*, 9(3), 512–522. https://doi.org/10.9745/GHSP-D-21-00123
10. (2021). *United Nations Office for Project Services (UNOPS). Strengthening Medical Supply Chains: Lessons from Low-Resource Settings*. New York: UNOPS.