



Review Article

The Impact of Medicine Prices and Taxes on Access to Healthcare

Dr. Sapna Khemnar*, Gokul Cholke, Rushikesh Ghuge, Sunil Jadhav

Pravara Rural College of Pharmacy, Loni, Ahilyanagar, Maharashtra, India-431736

ARTICLE INFO

Published: 1 Nov 2025

Keywords:

Medicine prices, Taxation policies, Healthcare access, Affordability, Low- and middle-income countries (LMICs).

DOI:

10.5281/zenodo.1749833

ABSTRACT

This review examines the interplay between medicine prices, domestic taxes, and their effects on healthcare access globally. High medicine prices, often exacerbated by taxation policies, pose significant barriers to equitable access to essential medications, particularly in low- and middle-income countries (LMICs). This paper synthesizes evidence from pre-reviewed studies and reports, analyzing the role of taxes (e.g., value-added taxes, import tariffs) in driving up costs, the socioeconomic consequences for patients, and policy interventions aimed at balancing affordability with fiscal objectives. Key findings indicate that taxes can significantly inflate medicine prices, disproportionately affecting vulnerable populations, while policy measures like tax exemptions and price controls show promise but require careful design to avoid unintended consequences. Recommendations for future research and policy are provided to enhance access to affordable medicines.

INTRODUCTION

Access to affordable medicines is a cornerstone of global health equity, recognized as a fundamental human right. However, rising medicine prices and associated taxes create barriers, particularly for low-income households and those in LMICs. Domestic taxes, such as value-added taxes (VAT) and sales taxes, can constitute a substantial portion of medicine costs, compounding the financial burden on patients. This review aims to

- Summarize the factors driving high medicine prices, focusing on the role of taxes.
- Evaluate the impact of taxes on access to essential medicines.
- Assess policy interventions to mitigate price-related barriers while supporting fiscal systems.
- Identify research gaps and propose directions for future studies.

METHODOLOGY

***Corresponding Author:** Dr. Sapna Khemnar

Address: Pravara Rural College of Pharmacy, Loni, Ahilyanagar, Maharashtra, India-431736

Email : nandkumar5001@gmail.com

Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.



This review synthesizes findings from peer-reviewed articles, reports, and policy analyses published between 2005 and 2025, sourced from databases like PubMed, Web of Science, and organizational websites (e.g., WHO, RAND). The search focused on terms such as “medicine prices,” “pharmaceutical taxes,” “drug affordability,” and “access to medicines.” Inclusion criteria prioritized studies addressing domestic taxes (e.g., VAT, sales taxes) and their impact on medicine prices and access, with a focus on both high-income countries (HICs) and LMICs. A narrative synthesis approach was used to organize findings by themes: determinants of medicine prices, tax impacts, and policy interventions.

DETERMINANTS OF MEDICINE PRICES

Medicine prices are influenced by multiple factors, including:

- **Research and Development (R&D) Costs:** Pharmaceutical companies cite high R&D costs (estimated at \$802 million pre-tax per drug) as a justification for high prices, though public funding and tax credits often offset these costs.
- **Market Dynamics:** Patent protections and limited competition, especially for brand-name drugs, enable manufacturers to set prices based on “what the market will bear.” In the U.S., brand-name drug prices are 3.22–3.44 times higher than in other HICs.
- **Pharmacy Benefit Managers (PBMs):** PBMs negotiate prices but may prioritize higher priced drugs due to fee structures, contributing to cost increases.
- **Regulatory Environment:** Lack of price regulation in markets like the U.S. allows significant price hikes, unlike countries with reference pricing systems (e.g., Canada’s Patented Medicine Prices Review Board).

Taxes, including VAT, sales taxes, and import tariffs, further inflate prices, often disproportionately in LMICs where tax systems are less progressive.

ROLE OF TAXES IN MEDICINE PRICES

Domestic taxes significantly contribute to medicine costs, particularly in LMICs:

- **Value-Added Taxes (VAT):** In many countries, VAT on medicines ranges from 5–20%, adding to retail prices. For example, WHO/HAI surveys found that taxes can account for up to 20% of medicine costs in LMICs, acting as a principal barrier to access.
- **Import Tariffs:** In countries reliant on imported drugs, tariffs increase costs, further limiting affordability. Recent shifts from trade tariffs to VAT have been documented, but the net effect on prices varies by country.
- **Impact on Affordability:** High taxes exacerbate financial burdens, with 30% of U.S. adults reporting non-adherence to prescriptions due to cost. In LMICs, taxes push essential medicines out of reach for the poorest households.
- **Revenue vs. Health Trade-Off:** While medicine taxes generate revenue (approximately 1% of total public revenue in some LMICs), their removal could improve access without significantly impacting fiscal budgets. However, national treasuries often resist tax exemptions due to revenue concerns.

SOCIOECONOMIC AND HEALTH IMPACTS

High medicine prices, compounded by taxes, have profound consequences:

- **Non-Adherence:** Approximately 30% of Americans and higher proportions in LMICs



skip doses, split pills, or forgo prescriptions due to cost. This leads to worse health outcomes, such as increased hospitalizations.

- **Inequities:** Low-income and uninsured populations face the greatest barriers, with 40% of U.S. adults aged 18–29 and those with incomes below \$40,000 reporting cost-related non-adherence. In LMICs, the poorest households are disproportionately affected due to limited insurance coverage.
- **Healthcare System Strain:** High drug prices and shortages force hospitals to allocate resources to secure alternatives, increasing costs by up to 20% and diverting funds from other services.

POLICY INTERVENTIONS

Several strategies have been proposed or implemented to address high medicine prices and tax-related barriers.

- **Tax Exemptions/Reductions:** Removing VAT or sales taxes on essential medicines can lower prices, as recommended by the WHO. However, implementation requires balancing revenue losses with health benefits.
- **Price Controls:** Policies like reference pricing (external or internal) and value-based pricing have reduced costs in countries like Canada and European nations. The U.S. Inflation Reduction Act (2022) allows Medicare to negotiate prices, a step toward controlling brand name drug costs.
- **Promoting Generics:** Encouraging generic and bio similar use through tax incentives and expedited approvals lowers prices, as generics in the U.S. are 84% of prices in other HICs.
- **Transparency:** Price transparency, including disclosing net transaction prices, enables better policy design and negotiation.

- **Tax on Price Increases:** Proposals to tax excessive price hikes (e.g., above inflation) aim to deter manufacturers while generating revenue to offset costs.
- **Pooled Procurement:** Combining purchasing power across regions or countries reduces prices through economies of scale.

Challenges include resistance from pharmaceutical companies, potential reductions in R&D incentives, and administrative complexities in implementing tax reforms.

DISCUSSION

The literature highlights a complex interplay between medicine prices, taxes, and access taxes, while a critical revenue source, often exacerbate affordability issues, particularly in LMICs where progressive tax systems are less common. Policy interventions like tax exemptions and price controls show promise but face resistance due to fiscal and industry pressures. The U.S. experience underscores the challenges of an unregulated market, where brand-name drug prices far exceed those in other HICs. Conversely, countries with robust regulatory frameworks (e.g., Canada) demonstrate better control over price escalation.

Limitations in the literature include a lack of granular data on net prices (after rebates) and the impact of tax exemptions on national revenues. Most studies focus on retail prices, with only one addressing net prices. Additionally, the long-term effects of price controls on innovation remain debated, with estimates suggesting a 40–50% price cut could reduce R&D projects by 30–60%.

FUTURE RESEARCH DIRECTIONS

- **Net Price Analysis:** More studies on net prices (after rebates) to understand true affordability.



- **Tax Policy Impact:** Longitudinal studies on the effects of tax exemptions on access and revenue.
- **LMIC Focus:** Research on tax structures in LMICs to design equitable policies.
- **Innovation Trade-Offs:** Assessing the impact of price controls on pharmaceutical R&D without relying on industry narratives.
- **Global Comparisons:** Expanding price comparison studies to include more LMICs and biologics.

CONCLUSION

Medicine prices, amplified by domestic taxes, significantly hinder access to essential medications, particularly for low-income populations. While taxes are vital for fiscal systems, their application to medicines often undermines health equity. Policy interventions like tax exemptions, price controls, and generic promotion offer viable solutions, but their success depends on balancing health and economic objectives. Governments must prioritize transparency, progressive tax policies, and international cooperation to ensure affordable access to medicines while supporting innovation. Future research should address data gaps and explore tailored solutions for LMICs to achieve sustainable health outcomes.

REFERENCES

1. KFF. (2024). Public Opinion on Prescription Drugs and Their Prices.

2. Mulcahy, A. W., et al. (2024). International Prescription Drug Price Comparisons: Estimates Using 2022 Data. RAND Corporation.
3. Health Action International. (2014). Sales Taxes on Medicines.
4. Mulcahy, A. W., et al. (2021). International Prescription Drug Price Comparisons: Current Empirical Estimates. RAND Corporation.
5. Abbott, T., & Vernon, J. (2005). The Cost of U.S. Pharmaceutical Price Reductions. NBER.
6. Morgan, S., et al. (2020). Pricing of Pharmaceuticals is Becoming a Major Challenge for Health Systems. The BMJ.
7. Harvard Health. (2024). Why Do Your Prescription Drugs Cost So Much?
8. National Academies. (2017). Making Medicines Affordable.
9. American Hospital Association. (2024). Drug Prices and Shortages Jeopardize Patient Access.
10. WHO. (2020). Pricing Policy Guideline to Improve Affordable Access to Medicines.
11. Pew Charitable Trusts. (2018). A Tax on Drug Price Increases Can Offset Costs.

HOW TO CITE: Dr. Sapna Khemnar, Gokul Cholke, Rushikesh Ghuge, Sunil Jadhav, The Impact of Medicine Prices and Taxes on Access to Healthcare, Int. J. of Pharm. Sci., 2025, Vol 3, Issue 11, 1-4. <https://doi.org/10.5281/zenodo.1749833>

