ORIGINAL ARTICLE

Perceptions and Realities of Generic Medicine Use in Zimbabwe's Private Retail Pharmacies: A Qualitative Study of Patients and Pharmacists

Daniel Sibanda

University of Zambia Graduate Business School
32 Lilac Road, Harrisvale Bulawayo, danielmabandla@gmail.com

ABSTRACT

Background: Generic medicines are globally recognized as cost-effective alternatives to originator brands (OBs). In Zimbabwe, despite their widespread use in private pharmacies, public trust in generics remains low. This study explored psychosocial, clinical, and supply-side factors influencing the use of generic medicines among patients and pharmacists. The objective of the study was to explore perceptions of patients and pharmacists toward generic medicines in Zimbabwe's private pharmacies.

Methods: A qualitative study involving 30 patients and 20 pharmacists from Harare and Bulawayo was conducted using semi-structured interviews. Thematic analysis followed Braun & Clarke's six-step framework, supported by Nvivo.

Results: While most patients used generics, their use was driven by availability and affordability, not trust. Confusion prevailed regarding medicine classification, with many mistaking branded generics for originator brands. Pharmacists reported limited OBs stocking and expressed concern over patient misperceptions. Regulatory visibility was low.

Conclusion: The study reveals significant confusion around branding and limited patient confidence in generics, underscoring the need for targeted education, visible quality assurance, and pharmacist training.

BACKGROUND

Access to safe, effective, and affordable medicines is a cornerstone of health equity in low- and middle-income countries (LMICs).[1] Generic medicines defined as bioequivalent alternatives to originator brands (OBs) play a vital role in improving affordability and expanding access, especially where health insurance coverage is limited.[2] In Zimbabwe, where out-of-pocket (OOP) expenditure constitutes over 60% of total health spending, generics are not merely an alternative but the default option for most patients accessing private sector pharmacies.[3] Despite this, concerns around the perceived efficacy and safety of generics persist in many LMICs.[4,5,6]

To better understand this landscape, it is important to define the key terms used in this study:

Keywords: *Generic Drugs, Pharmacies, Health Knowledge, Attitudes, Practice, Health Services Accessibility, Zimbabwe, Drug Substitution, Pharmacists, Trust, Drug Costs, Qualitative Research*

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- **Originator Brands (OBs):** These are the original patented medicines developed by pharmaceutical innovators and first introduced to the market. They are usually more expensive and widely recognized by both prescribers and patients.[7]
- **Branded Generics:** These are generic versions of the OBs that are marketed under a brand name by companies other than the original innovator. Although they are bioequivalent to the OBs, they often have distinct packaging, promotional strategies, and pricing that make them appear more like OBs in the eyes of consumers.[7]
- **Lowest-Priced Generics (LPGs):** These are unbranded, cost-minimized generic versions of OBs, typically packaged in simpler forms and priced lower than branded generics. Despite their affordability, LPGs are frequently mistrusted by patients due to perceived inferior quality.[7]

However, despite the wide availability of generics, mistrust persists among patients and even healthcare providers.[4,5,6] Previous studies in sub-Saharan Africa have reported concerns regarding the perceived efficacy, safety, and quality of generics, particularly LPGs.[8] In Zimbabwe, the situation is further complicated by the proliferation of "branded generics", generic equivalents sold under distinct trade names with brand-like packaging and elevated pricing.[9,10] These medicines dominate pharmacy shelves, yet little is known about how patients and pharmacists perceive and navigate this pharmaceutical landscape. In Zambia, a similar picture has emerged: originator brands account for only about 17% of the market while generics constitute over 80%, and more than 90% of new product approvals by the Zambia Medicines Regulatory Authority (ZAMRA) have been generics rather than OBs. [11] Branded generics dominate the private pharmacy sector, often marketed under trade names and perceived as superior due to packaging and price, while lowest-priced generics, although central to Zambia's Medicines and Medical Supplies Agency (ZAMMSA) public procurement and donor-funded supply chains, remain mistrusted in private outlets. [11,12]

This study aimed to explore the perceptions, preferences, and behaviours of patients and pharmacists in Zimbabwe's private retail pharmacies regarding generic medicines, with particular attention to the role of branded generics. It seeks to fill a knowledge gap on how trust, cost, regulatory visibility, and therapeutic experience influence medicine use choices in a medicine price unregulated and rapidly evolving pharmaceutical market.

METHODS

Study Design and Setting

This was a qualitative exploratory study conducted in Zimbabwe's two largest urban centers, Harare and Bulawayo. Both cities were selected due to their high concentration of private pharmacies and socio-economic diversity.

Participants and Sampling

Purposive sampling was used to recruit 30 adult patients (15 per city) managing chronic or acute conditions, and 20 licensed pharmacists (10 per city) from both independent and chain pharmacies. Retail pharmacies were selected from low-, middle-, and high-income suburbs based on national income mapping. This ensured diverse socio-economic representation and practice settings.

Data Collection

Semi-structured interview guides tailored for patients and pharmacists were used. Topics included therapeutic experiences, perceptions of medicine categories, dispensing patterns, and regulatory awareness. Interviews were conducted in English and Shona or Ndebele, recorded, transcribed verbatim, translated where necessary.

Data Analysis

Thematic analysis followed Braun and Clarke's six-step framework: familiarization, coding, theme development, reviewing themes, defining/naming themes, and producing the report. NVivo software supported data management and coding.

Ethical Considerations

Ethical approval was obtained from the University of Zambia Biomedical Research Ethics Committee (UNZABREC REF. No.5732-2024) and the Medical Research Council of Zimbabwe (MRCZ/A/2647). Permission to access private pharmacies was granted by the Ministry of Health and Child Care of Zimbabwe. Written informed consent was obtained from all participants.

RESULTS

Patient Interview Results Summary

(N = 30; 15 from Harare and 15 from Bulawayo)

Background Information

Demographics:

The study included 30 adult patients, aged 22 to 68 years. There was an even distribution of gender (16 females, 14 males). Participants were drawn from both low- and middle-income suburbs in Harare and Bulawayo, reflecting a range of socio-economic and educational backgrounds.

Health Conditions

Over two-thirds (21 out of 30) of participants were managing chronic non-communicable diseases, primarily: Hypertension (12), Asthma (5), Diabetes (4). The remaining participants sought treatment for acute conditions (e.g., infections, musculoskeletal pain).

Education and Employment: 18 had attained secondary education, 7 had tertiary qualifications, and 5 had only primary education. Employment status included: informal traders (11), formally employed (8), unemployed (6), and retired (5).

Health Insurance Coverage

Only 4 participants had any form of medical insurance. The vast majority (86.7%) relied on direct out-of-pocket payments for medicines, reinforcing cost sensitivity and influencing medicine choices.

Medicine Use and Preferences

Access and Default to Generics:

Almost all participants obtained their medications from private retail pharmacies. Due to the limited availability of OBs, nearly all respondents reported receiving generic versions, even when they would have preferred otherwise.

> *"I asked for the original, but the pharmacist said they don't keep those—it's too expensive and people don't buy them,"* **said a respondent from Bulawayo**.

Knowledge of Medicine Types:

Despite regular exposure to generics, only 6 out of 30 could accurately distinguish between an OB, branded generic, and LPG. Most used general terms like "original" and "cheap" to describe their medications.

> *"I don't know what they call it. I just want the one that works,"* **remarked a patient from Harare.**

Branded Generics vs LPG Confusion:

The dominance of branded generics created significant confusion. Medicines with brand-like packaging and names were often assumed to be OBs. Several patients reported buying these assuming they were "better," only to later learn they were not the original product.

Price Sensitivity:

Most patients recognized generics as more affordable, but many associated lower prices with poorer quality.

"Sometimes the cheap one doesn't work. I go back and ask for the one in the box with the name," **noted a patient managing hypertension.**

Trust and Treatment Experience

Chronic Condition Challenges:

Among the 21 patients with chronic diseases, 15 reported having experienced unsatisfactory outcomes or side effects from LPGs. Common complaints included:

- Dizziness and fatigue from antihypertensives
- Inadequate relief from asthma inhalers
- Perceived reduced potency of antidiabetics

Therapeutic Switching and Brand Requests:

12 patients reported requesting a switch to a "known brand" or different version after a negative experience with a generic. Many believed that only certain brands worked well for them.

Distrust of Generics:

Mistrust was expressed by most patients—even those who routinely used generics. The lack of visible regulation or recognizable quality assurance on packaging reinforced this distrust.

"You can't trust those small ones—they look suspicious and come in plastic," **said a female respondent from Harare.**

Perceived Superiority of Branded Generics: Many patients viewed branded generics more favourably simply because they resembled OBs in presentation and were priced higher than LPGs.

Information and Communication

Sources of Influence:

Decisions were shaped by:

- Pharmacist advice (most influential)
- Peer recommendations
- Prior experiences
- Occasionally, clinician prescriptions (often unavailable in full)

- **Pharmacist Interactions**:

  Pharmacist explanations were inconsistent. While some patients received brief advice, many noted that they were simply handed a product with no explanation of its classification or quality.

  "They just say it's the same thing, cheaper. But they don't tell you who made it or if it's tested," observed one participant.

- **Lack of Public Awareness Campaigns**:

  None of the patients had seen any government-endorsed public education about generics, branded generics, or medicine quality marks. Confusion prevailed about the role of the Medicines Control Authority of Zimbabwe (MCAZ) in medicine approval.

- **Patient Recommendations**:
  - Introduce visual symbols of quality (e.g., MCAZ stickers or QR codes)
  - Provide posters or leaflets in pharmacies distinguishing OBs, branded generics, and LPGs
  - Encourage media campaigns using radio and television to clarify medicine categories and build public trust

Patient Perspectives

Most patients relied on generics due to affordability and availability. However, confusion between OBs, branded generics, and LPGs was common. Subthemes included mistrust in generic packaging, perceived lower quality of cheaper medicines, and reliance on pharmacist advice (Table 1).

Table 1: Patient Interview Themes and Subthemes

Theme	Subtheme	Key Findings	Illustrative Quote
Lack of OB Availability	Default to generics	Patients accepted generics due to no OB alternatives	"I asked for the original, but the pharmacist said they don't keep those, it's too expensive."
Confusion Between Medicine Types	Misidentification of branded generics as OBs	Most could not distinguish OBs, branded generics, or LPGs	"I just want the one that works."
Chronic Illness Concerns	Mistrust in packaging and side effects	Reported poor outcomes or side effects from LPGs	"Sometimes the cheap one doesn't work, so I go back for the box with the name."
Influence of Pharmacists	Limited explanation on quality	Patients relied on pharmacist advice but often received minimal info	"They just say it's the same thing, cheaper."

Pharmacist Interview Results Summary

(N = 20; 10 from Harare and 10 from Bulawayo)

Background Information

- **Professional Background**:
  All participants were licensed pharmacists with between 3 and 28 years of professional experience. The median experience was 12 years.
- **Practice Type**:
  - 12 pharmacists worked in independently owned pharmacies
  - 8 were employed in chain or franchise outlets

All pharmacies were located in medium- to high-density urban areas with moderate to high patient foot traffic.

- **Clientele and Drug Stocking**:
  Pharmacists served a mixed clientele, predominantly low- and middle-income earners. Almost all stocked:
  - Branded generics (100%)
  - LPGs (95%)
  - OBs (20–30%), and only in limited types like anti-retroviral drugs (ARVs), insulins or imported over the counter medicines (OTCs)

Dispensing Behaviour and Client Preferences

1. **Default to Generics**:

   All pharmacists reported routinely dispensing generics due to the limited demand and high cost of OBs. Most had not restocked OBs in months or years due to low turnover and supplier preference for faster-moving branded generics.

2. **Patient Requests**:

   Patients were more likely to request a product by *name*, often a branded generic or well-advertised product. However, when prices were high, patients defaulted to the cheapest available alternative.

   "They ask for Panado or Ventolin, but when I tell them the price, they ask for the cheapest one that works," said a **Harare pharmacist.**

3. **Chronic Illness Clients**:

   Patients with hypertension, asthma, and diabetes were reported to be the most

sensitive to therapeutic efficacy and brand preference. Pharmacists reported that these patients sometimes refused LPGs, returning to request specific branded generics or older trusted names.

4. **Trust and Cost Perception**:

   Pharmacists observed that many patients equated higher cost with better effectiveness, often mistaking branded generics for OBs due to their price and packaging.

Challenges and Observations

1. **Dominance of Branded Generics**:

   Pharmacists emphasized that branded generics now dominate the market, with multiple versions of the same molecule (e.g., amlodipine, metformin, diclofenac) supplied under various names. This has led to:

   a. Confusion among patients
   b. Difficulties in maintaining rational dispensing
   c. Inconsistent pricing across pharmacies

   "One drug has five brands and five prices—it confuses patients and sometimes even us," **noted a pharmacist in Bulawayo**.

2. **LPG Acceptance and Concerns**:

   While LPGs were stocked by 19 out of 20 pharmacies, they were described as less popular and sometimes questioned for quality, especially in the absence of MCAZ-visible certification on packaging.

3. **Pharmacist Knowledge and Misconceptions**:

   A few pharmacists (3 out of 20) acknowledged they were not fully confident in classifying some products correctly between OBs, branded generics, and LPGs, particularly when imported stock lacked proper documentation or labelling.

4. **Limited Availability of Obs**:

   Originator brands were rarely stocked due to their cost and limited supply. Most pharmacists viewed OBs as *"impractical for most customers"* and reserved only for patients with medical aid or specialist prescriptions.

Knowledge and Policy Environment

1. **Patient Education Burden**:

   Pharmacists found themselves as the **primary educators** on generic medicines, yet lacked:

   a. Standardized training in patient communication
   b. Leaflets, visual aids, or MCAZ-branded support materials

   "It's up to me to explain, but without tools, I just say 'it's the same medicine, just cheaper,'" **explained one Harare pharmacist.**

2. **Absence of Government Support**:
   All 20 pharmacists agreed that no national campaign or regulatory outreach had been done in recent years to promote generics or clarify medicine types to the public. Many felt this left them alone in defending or explaining generic substitutions.

3. **Recommendations for Improvement**:

   a. Visible MCAZ stamps or QR-verifiable certifications on generic packaging
   b. National media campaigns on the safety and value of generics
   c. Training workshops or Continuous Professional Development (CPD)

modules specifically on generic classification and patient counselling

d. Supply-side incentives to improve the availability of LPGs and selected OBs

Pharmacist Perspectives

Pharmacists reported a dominance of branded generics, low OB stocking, and classification uncertainty. Many faced challenges explaining medicine categories without official visual aids.

Table 2: Thematic Summary of Pharmacist Interviews

Theme	Subtheme	Key Findings	Illustrative Quote
Brand-Skewed Stocking Patterns	Dominance of branded generics	Multiple brands of same molecule with varied pricing	"One drug has five brands and five prices it confuses patients."
Patient Confusion and Cost Bias	Price perceived as indicator of quality	Patients equate higher cost with better quality	"Some brands look so convincing you would think they are originals."
Classification Uncertainty	Inconsistent product categorization	Some pharmacists unsure about classification without documentation	"Sometimes even we need to check the label closely."
Limited OB Stocking	High cost and low demand	OBs rarely stocked except for select medicines	"We only keep OBs for patients with medical aid."

DISCUSSION

The study found that despite widespread use of generic medicines in Zimbabwe's private pharmacy sector, public trust in these medicines is tenuous. Most patients reported using generics primarily because of affordability and availability, not because of confidence in their quality or efficacy. Branded generics dominate the pharmaceutical shelves, yet their resemblance to OBs creates confusion, reinforcing the perception that higher-priced medicines are more effective. LPGs, though affordable, are often mistrusted, particularly by patients managing chronic illnesses who report suboptimal therapeutic outcomes. Pharmacists, who serve as the primary gatekeepers of medicine information, also face challenges in classification, patient communication, and navigating a regulatory vacuum devoid of visual quality assurance tools or public education campaigns.

A key strength of this study is its dual-perspective design that incorporates the voices of both consumers (patients) and providers (pharmacists). This comprehensive approach facilitates an in-depth understanding of behavioural and systemic dynamics affecting generic medicine uptake. Additionally, using qualitative methods allowed for rich, contextual insights that quantitative methods might have missed. However, limitations include geographic confinement to two urban centers, thereby excluding rural populations whose experiences may differ significantly. Social desirability bias could also have influenced responses, especially among pharmacists concerned about reputational risk. Furthermore, the study did not quantify the prevalence of branded generics versus OBs and LPGs, which would have enhanced the generalizability of the findings.

Similar studies across sub-Saharan Africa echo concerns about generic medicine mistrust. For example, patients in Nigerian pharmacies often equated lower cost with lower quality, a perception exacerbated by inadequate pharmacist engagement and inconsistent labelling practices.[13] As reported in

a survey of Kenyan pharmacies, it was observed that patients frequently misidentified branded generics as OBs due to similar packaging and branding strategies.[14] In Senegal, it was found that health professionals and patients had low confidence in generics despite government endorsement.[15] Other research in Ethiopia confirmed that regulatory visibility and consistent patient education play key roles in building public confidence in generic medicines.[16] A global systematic review found that a significant proportion of doctors, pharmacists, and consumers held negative perceptions of generic medicines, often viewing them as inferior in quality compared to branded alternatives.[17] A multi-country study noted that in the absence of national branding and quality certification initiatives, branded generics tend to occupy a confusing middle space in the pharmaceutical landscape.[18]

However, Zimbabwe's pharmacy market is unique in the extent to which branded generics dominate shelves, often appearing indistinguishable from OBs.[10]This proliferation, coupled with the near absence of OBs due to high costs, has created a market environment where price and packaging not regulatory assurance or clinical evidence guide patient choice.

While other LMICs contend with generic mistrust, Zimbabwe's pharmaceutical sector faces a compounded challenge: branded generics dominate not only as economic alternatives but also as visual and psychological stand-ins for OBs. The confusion is amplified by inconsistent pharmacist explanations, lack of MCAZ Consumer-Facing quality assurance seals and insufficient government-led public education. Notably, this study identifies that even pharmacists' express uncertainty in differentiating medicine categories, an area less emphasized in previous studies. Moreover, this study revealed the emotional and experiential dimensions of medicine use particularly among chronic illness patients which remains underexplored in existing literature.

This study illustrates that Zimbabwe's reliance on generics, particularly branded generics, masks deeper systemic and psychosocial challenges. Patient trust cannot be assumed simply because generics are used widely. Instead, trust must be earned through visible regulatory enforcement, consistent pharmacist engagement, and deliberate public health messaging. Pharmacists, while central to medicine dispensation and patient education, require formal training and tools to effectively communicate medicine categories and regulatory assurance. Without structural reforms, the promise of generics in advancing health equity will remain compromised. Supply chain and regulatory solutions could include centralized procurement for private sector pharmacies, standardised packaging regulations, and visible MCAZ quality seals. Lessons from ZAMMSA show that coordinated generic stocking and community education can improve confidence and rational use.[11]

Future research should explore the quantitative distribution of OBs, branded generics, and LPGs in urban and rural pharmacies, and assess the clinical outcomes of patients who switch between these categories. There is also a need to evaluate the impact of potential interventions such as MCAZ-endorsed visual certification tools, public education campaigns, and pharmacist upskilling on patient trust and rational medicine use. Longitudinal studies could assess whether improved patient education correlates with better adherence, reduced switching, and improved clinical outcomes.

RECOMMENDATIONS

Regulatory: Introduce color-coded packaging and large-font International Non-proprietary Name (INN) labelling to distinguish medicine categories and this has also an added advantage of reducing medicines errors.[19]

Pharmacist Training: Develop CPD modules on generic counselling, supported by the Pharmacist Council of Zimbabwe (PCZ).

Public Education: Use community radio, Short Message Service (SMS) alerts, and pharmacy posters to increase public awareness and trust in generics.

Study Limitations

The study focused solely on two urban centers and private pharmacies, excluding rural and public health facilities. Social desirability bias may have influenced responses. Finally, classification confusion affected both patients and providers, suggesting a systemic knowledge gap.

CONCLUSION

Although generic medicines dominate Zimbabwe's private pharmacy sector, public trust remains fragile. Rebuilding trust requires visual quality markers, public education, and pharmacist empowerment.

List of Abbreviations

Abbreviation	Full Term
ARVs	Antiretroviral Drugs
CPD	Continuing Professional Development
CDSCO	Central Drugs Standard Control Organization
HAI	Health Action International
LMICs	Low- and Middle-Income Countries
LPGs	Lowest-Priced Generics
MCAZ	Medicines Control Authority of Zimbabwe
MRCZ	Medical Research Council of Zimbabwe
NAFDAC	National Agency for Food and Drug Administration and Control
OBs	Originator Brands
OTCs	Over-the-Counter Medicines
OOP	Out-of-Pocket (Expenditure)
UNZABREC	University of Zambia Biomedical Research Ethics Committee
WHO	World Health Organization
ZAMMSA	Zambia's Medicines and Medical Supplies Agency
ZAMRA	Zambia Medicines Regulatory Authority

What is already known on this topic

- Generic medicines are essential for access and affordability in LMICs
- Patient mistrust of generics is common in many African settings
- Branded generics are prevalent in private pharmacies

What this study adds

- Branded generics dominate Zimbabwe's private pharmacies and are often mistaken for OBs
- Trust in LPGs is low, especially among chronic disease patients
- Pharmacists lack tools and regulatory support to clarify medicine categories

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Competing Interests

The author declare that they have no competing interests.

Authors' Contributions

Daniel Sibanda: Conceptualization, Data Collection, Analysis, Drafting of Manuscript Review, Editing, Supervision

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