

RATIONAL DRUG USE: CHOOSING BETWEEN GENERIC AND BRANDED MEDICINES**DOKKA SREYA*, CH. MERIMMA, CH. LAKHSMI, CHAND BABU RAO***Priyadarshini Institute of Pharmaceutical Education and Research, 5th Mile, Pulladigunta, Guntur-522017, Andhra Pradesh, India.***Article History:** Received: 06 Feb 2026, Revised: 24 Mar 2026, Accepted: 27 Apr 2026***Corresponding author**

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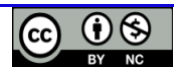
Abstract

Generic medications are essential for lowering medical expenses while preserving therapeutic efficacy on par with name-brand medications. With a focus on bioequivalence assessment and reporting quality, the examined publications collectively explore the scientific, regulatory, economic, and policy aspects of generic medicine use. Pharmacokinetic characteristics like area under the curve (AUC) and maximum plasma concentration (C_{max}) are used in bioequivalence studies, which serve as the regulatory basis for generic medicine approval by organizations like the FDA and EMA. Nonetheless, a number of studies point out serious shortcomings in the completeness and transparency of reporting, such as the failure to adequately disclose funding sources, trial sites, randomization procedures, and regulatory requirements. Despite these limitations, the majority of trials conclude bioequivalence, supporting the clinical interchangeability of generic and innovator products.

Keywords: *Generic medicines, Branded medicines, Bioequivalence, Pharmaceutical quality analysis, In vitro evaluation.*

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**INTRODUCTION**

When a medication is found, the pharmaceutical company files for a patent to keep other businesses out of its manufacturing and marketing processes. It is possible to manufacture and commercialize generic medications once the original patent has expired. The active substance or ingredients, strength, quality, purity, and efficacy of these drugs are identical to those of branded drugs. Since they don't need the high expenses for research, development, and testing, they are far less expensive than their branded counterparts. When compared to branded prescriptions, generics are a great alternative because they are safe and effective [1]. The significance of encouraging the adoption of less expensive generic substitutes over name-brand medications is hotly debated. Although generic medications have been shown to be just as effective at treating ailments as name-brand ones, there has been much discussion about their bioavailability—that is, the amount of the medication that reaches the site of action. As indicated in this analysis, many specialists still maintain that brand-name and generic medications are equally feasible and bioequivalent options for effective drug therapy [2]. The reason why the amount of generic and brand-name drugs sold in different parts of the world varies is because different countries have varied drug policies. For instance,

because of its privatized health care system, the US sells more generic medications than Canada and the UK [3]. Choosing between branded and generic medications is a significant decision that consumers must make when choosing pharmaceuticals. Understanding the factors that influence medicine choice is crucial for pharmaceutical companies, legislators, and healthcare practitioners as the healthcare sector changes and consumers gain more power.

GENERIC DRUG

Pharmaceutical products that have the same active ingredient as a name-brand medication but no longer have a patent are known as generics. Companies other than the original manufacturer of the brand-name medication produce generic medications. They are just as safe and effective as their name-brand equivalents, but they are usually less costly. The definitions of generic medications provided by different agencies are summarized here. Generic medicines are copies of original, branded medicines. They can be manufactured and sold after the protection on an original product expires. They have the same form and active pharmaceutical ingredient as the original medicine, and they are regulated according to the same standards [4].

Advantages of Generic Drugs

- Low cost / Affordable 💰 (much cheaper than branded drugs)
- Same active ingredient as branded medicine
- Same therapeutic effect (works the same way)
- Widely available in pharmacies

Disadvantages of Generic Drugs

- May differ in colour, shape, or taste from branded drugs
- Packaging may be less attractive
- Some patients/doctors may doubt effectiveness
- Different inactive ingredients may cause allergy in rare cases
- Brand recognition is low (name not familiar)

BRANDED DRUG

A medicine that has been created, produced, and marketed by a pharmaceutical company is known by its brand name. When a novel drug is found, the company files for a patent to shield itself from copying and selling it to other businesses. Branded medications are those that have been given a name by a business for marketing purposes. The International Non-proprietary Name (INN), commonly referred to as the generic name, is distinct from the names of branded medications. Branded medications may be the original product of a firm, or multiple companies may produce the same generic medication, each of which is given a unique brand name [5].

Advantages

- They are patented drug in their class.
- They might possess a newly found medicine with advantages.
- Not all medicines are available in generic form.
- It might be simple to memorise and write brand names
- High quality assurance-Strict research, testing, and quality control
- Proven safety & effectiveness through clinical trials

Disadvantages

- Branded drugs are high cost.
- Because of we have to pay for the drugs purchase, development, safety testing, marketing and transportation charges

DIFFERENCE BETWEEN GENERIC AND BRANDED DRUG

There are only two main differences between generic and brand-name drugs

1. The inactive ingredients, such as flavouring or preservatives, may change
 2. Generics generally cost less than brand-name versions
1. Examples of Generic and Branded Drugs & Its Manufacturers
 2. Costs of Generic And Brand Name Drug Testing And Prices Of Drugs In The Market;

Since there aren't any comparable medications on the market at the time of approval, brand-name medications that are still in the development stage are frequently not comparable to other medications that have the same active ingredient. Because of this, the medication needs to go through a lot of safety and effectiveness testing, which includes preclinical and clinical trials. There is a significant financial burden connected to these trials [6]. It is estimated by According to some reports, companies that create new medications spend \$802 million on research and development on average. However, the research that produced these findings focused on medications used to treat chronic conditions, which require long-term analysis to identify any long-term negative effects. Although this raises the possibility that the estimated figure is overestimated, other research indicates that it might perhaps be underestimated. According to some research, companies creating new medications bear an average financial burden of \$868 million throughout the development stage; however, other data indicates that the actual amount is probably closer to \$1.3 billion. Even though different numbers have been put forth in the literature, it is undeniable that the process of developing a new treatment entails expenses of hundreds of millions of dollars, which significantly depletes a company's financial resources. This isn't the situation for companies who make generic medications. According to estimates, it cost about \$603,000.10 on average to get FDA approval to sell generic medications in the US in the early 1990s. It is likely that the cost of developing generic medications is today more than a hundred times lower than that of brand-name medications, even though this number may have increased due to inflation since the early 1990s. [7].

SUMMARY OF THE CONSUMER PREFERENCE FACTORS**Price (Most Influential)**

Generic medicines are significantly cheaper than branded ones because they do not bear research, development, or heavy marketing costs. Price-sensitive consumers, especially in developing countries, strongly prefer generics.

Perceived Quality and Effectiveness

Many consumers believe branded medicines are more effective, safer, or of higher quality, even though generics contain the same active ingredients and must meet regulatory standards. This perception often Favors branded products [8].

Doctor's Prescription and Recommendation

Patients usually trust doctors' advice. If physicians prescribe branded drugs, consumers rarely question the choice. Conversely, when doctors recommend generics, acceptance increases.

Brand Trust and Familiarity

Well-known pharmaceutical brands build confidence through reputation and advertising. Consumers may associate brand name with reliability [9].

FACTORS INFLUENCING THE CONSUMER PREFERENCES IN CHOOSING BETWEEN BRANDED AND GENERIC MEDICATIONS

Cultural Factors

The respondents strongly agreed to the following item-statements of cultural factors: "Sa papilla ng gamot na acing bibilhing, tinatanong ko kung ito be ay nagging Mabasa na sa akin data" (WM=3.72); "Kapag lubok ko na ang gamot hindi Nawala ang Twala ko ditto." (WM=3.7); and "Binibili ko ang gamot na Naaraayan kong bilhin sa matata na pantheon" (WM=3.68); on the other hand, they agreed to the following statements: "Nainital ako na Wala sa tata ng gamot ang bias Nito sa appealing ng skit, Dahil nasally sa taming paesano ng paginal ang paganing ng Maysa kit." (WM=3.02); "Kapag gamot sa ubo mas pinipili ko.

In general, the respondents strongly agree on buying a medication that is effective for them. Although, in terms of the item statement "Kapag gamot sa ubo mas pinipili ko ang the respondents who use generic medications agreed (WM=2.77) that "may mega sang Kap an herbal Kahit an lto ay Generic," whereas those who use brand-name medications disagreed (WM=2.46). According to the study by Chesley et al. (2007), consumers need to be informed about medications and treatments, and public education helps people use medications in a safe and acceptable manner [10].

Psychological Factors

Regarding consumer preferences for medication selection, the respondents concur with the following factors: "If there is a bailing taste in the gamot, if there is a bible Ako ng bang brand o Hindi" (WM=3.1); "Nainital Ako an mas Mabasa ang mega gamot an branded kaya inhibiting gamot" (WM=3.08); "Nainital Ako an pare Hong Mabasa ang mega gamot an branded at generic kaya paramo gamot ng Bilibili" (WM=2.96); and "Nainital Ako an ang papilla ng gamot an bailing ay Hindi nasally as tata ng gamot" (WM=2.94). However, the customers don't agree. The result of the comparison between the response of the respondents who patronized Generic and Branded medicines showed variations. Those who patronized Generic medicines strongly agreed in terms of the following item-statements: "Nainital ako na ang papilla ng gamot na bibilhing ay hindi nasally sa tata ng gamot" (WM=3.35); "Nainital ako na pare Hong Mabasa ang mega gamot na branded at generic kaya paramo ko tong binibili" (WM=3.46); and they agreed to the statement "May mega aggravation na Neptunian ko na mas Mabasa ang Generic na gamot kesa sa branded" (WM=3.04).

On the other hand, those who patronized Branded medicines disagreed to the same statements, to wit: "Nainital ako na ang papilla ng gamot na bibilhing ay hindi nasally sa tata ng gamot" (WM=2.50); "Nainital ako na pare Hong Mabasa ang mega gamot na branded at generic kaya paramo ko tong binibili" (WM=2.42); and "May mega aggravation na Neptunian ko na mas

Mabasa ang Generic na gamot kesa as branded" (WM=1.88).

Social Factors

that the following social factors of consumer preferences when choosing medications were strongly agreed upon by the respondents: "Beilin ko lang ang gamut Ayon kung Ano ang nicest ng mega doctor para mas mobiles gambling" (WM=3.72); "Kapa bumble Ako ng gamut tartaning ko ang pharmacist kung Ano ang Mabasa" (WM= 3.36); "Malaki ang impudence ng mega Nappanee ko as commercials para as ng bibilhing gamot" (WM=2.94); "Madali akong makumbinsi na bumili ng gamot kapag ito ay kilala ng maraming tao" (WM=2.56) para sa kanila", which means their level of agreement was lowered compared to the other aspects of social factor. In general, in general, respondents buy medications from their attending physicians with valid prescriptions rather than at the recommendation of others. Those who bought generic medications disagreed with the item-statement "Madali akong makumbinsi na bumili ng gamot kapag ito ay kilala ng maraming tao" (WM=2.23), whereas those who bought brand-name medications agreed (WM=2.92]

Economic Factors

The respondents presented the economic factor of consumer preferences in choosing medications. The result revealed that the respondents strongly agreed in terms of: "Mas binibili ako ng mega gamot na Pasko sa acing budget" (WM=3.66);

They agree on the following economic factor of consumer preferences when choosing medications: "Sa Pagbilao ng gamot, kung Saan malapit na pharmacy ay duon na ako bibili kesa pumunta sa mas malayo" (WM=3.52); and "Kapag naubusan ang pharmacy ng gamot na binibili ko tinatanong ko kung meron ibang gamot na pwede kong ako na ibang pharmacy" (WM=3.18).

The mean score for the respondents' responses to the Economic Factors question was 3.38, indicating that most customers strongly agree that economic factors are taken into account when buying medications. They also agreed with the statements, "Kapag naubusan ang pharmacy ng gamot na binibili ko tinatanong ko kung meron ibang gamot na pwede kong bilhin para hindi na ako lumipat sa ibang pharmacy" (WM=3.25; WM=3.00). This suggests that consumers who buy generic medications are more likely than those who buy branded medications to inquire about the pricing differences or cost of generic versus branded medications before making a purchase. Finding out if a medication is branded or generic is one of the respondents' economic considerations when making a purchase [11].

PERCEPTION OF THE QUALITY OF GENERIC DRUGS AS COMPARED TO BRANDED DRUGS;

According to the analysis, opinions on the quality of generic medications are not entirely consistent with

those of branded medications. Although 45.5% of respondents think generic medications are of the same caliber, a sizable percentage, 15.8%, think they are of lower quality. It's interesting to note that 19.8% of people think generic medications are of higher quality, which shows that some groups have this opinion. But with 18.8% unsure, many people are still unsure about the actual efficacy and quality of generic drugs compared to name-brand ones. This indicates that additional information about how generics are assessed and controlled to match their branded counterparts is needed, according to the Journal of Drug and Alcohol Research

PREFERENCE TO USE GENERIC DRUGS IF THEY ARE SIGNIFICANTLY CHEAPER, EVEN IF THE BRAND IS LESS KNOWN:

The general public seems to have mixed feelings about the use of generic medications, with the majority having a more optimistic view. Even if the brand is less well-known, a sizable percentage of respondents (42.6%) clearly prefer to use generic medications if they are significantly less expensive. Given the widespread knowledge that generic medications have the same active ingredients and level of efficacy as their branded equivalents, this suggests a strong cost-savings-driven motivation. However, 15.8% of consumers are cautious and would not use generic medications, perhaps as a result of worries about brand trust, quality, or the perceived superiority of well-known brands. This doubt may be from ignorance of the general or a lack of faith in the manufacturing process. The second group, 41.6%, says that their decision is contingent on the situation, indicating that many buyers consider generics individually. Their choice may be influenced by elements including the severity of the ailment, medical advice, personal experiences, or the particular medication in question. This varied collection of answers demonstrates how situational, trust, and financial considerations all influence consumers' decisions on generic drugs [12].

CONCLUSION

The *in vitro* comparative study of generic and branded tablets generally summarizes the similarities and differences between the two types of medicines. Generic and branded tablets are considered bioequivalent, meaning they have the same rate and extent of absorption into the bloodstream. However, some minor differences in pharmacokinetics and pharmacodynamics may still exist. In conclusion, this review establishes a relationship between brand-name drug development costs and the subsequent increase in medicine prices. Despite these expenditures and the limitations imposed on brand-name drug patents, branded medicines continue to generate significant profits even after their patent periods expire. Government regulations and drug policies vary worldwide and play a major role in consumer decision-making and the success of generic medicines. These

policies differ across countries and healthcare systems, influencing the acceptance and utilization of generic drugs.

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AUTHOR CONTRIBUTIONS

All authors contributed equally to the preparation and completion of this manuscript.

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DECLARATION OF COMPETING INTEREST

The authors declare that there are no conflicts of interest regarding the publication of this paper.

REFERENCES:

1. Vetrivel D, Ilango KB, Bhuvaneshwari S, Gomathi P, Kowsalya Devi M. In-vitro comparative study of generic vs branded tablets: a review. *World Journal of Pharmaceutical Research*. 2023;12(18):419-437.
2. Kesselheim AS, Misono AS, Lee JL, Stedman MR, Brookhart MA, Choudhry NK, Shrank WH. Clinical equivalence of generic and brand-name drugs used in cardiovascular disease: a systematic review and meta-analysis. *JAMA*. 2008;300(21):2514-2526. doi:10.1001/jama.2008.758.
3. Arora K, Singh S, Singh PK. A review on generic and branded drugs: competence of generic drugs in comparison to branded drugs. *Current Research in Pharmaceutical Sciences*. 2019;9(4):63-66.
4. Baleria FE, Pascual MP, Santos MD, Ortiz AF, Gabriel AG, Mangahas TL. Sustainability of e-trike as alternative mode of public transportation system: the case of Cabanatuan City, Philippines. *Open Journal of Civil Engineering*. 2017;7(3):362-377. doi:10.4236/ojce.2017.73025.
5. Stafford RS. Regulating off-label drug use—rethinking the role of the FDA. *N Engl J Med*. 2008;358(14):1427-1429. doi:10.1056/NEJMp0802107.
6. Dunne S, Shannon B, Dunne C, Cullen W. A review of the differences and similarities between generic drugs and their originator counterparts, including economic benefits associated with usage of generic medicines, using Ireland as a case study. *BMC Pharmacol Toxicol*. 2013;14(1):1. doi:10.1186/2050-6511-14-1.
7. Hisa NT, Gindi S, Rao CB, Katakam P, Rao Chandu B. Evaluation of antiulcer activity of *Picrasma quassioides* Bennett aqueous extract in

- rodents. Vedic Research International Phytomedicine. 2013;1:27-31.
8. Gindi S, Methra T, Chandu BR, Boyina R, Dasari V. Antiuro lithiatic and in vitro antioxidant activity of leaves of *Ageratum conyzoides* in rats. World Journal of Pharmacy and Pharmaceutical Sciences. 2013;2(2):636-649.
 9. Nama S, Chandu BR, Awen BZ, Khagga M. Development and validation of a new RP-HPLC method for the determination of aprepitant in solid dosage forms. Trop J Pharm Res. 2011;10(4):489-495.
 10. Kiranmai M, Renuka P, Brahmaiah B, Chandu BR. Vitamin D as a promising anticancer agent. International Journal of Research in Pharmaceutical Chemistry. 2012;2(1):219-230.
 11. Dega Pati RT. Novel approaches in transdermal drug delivery system. Journal of Multidisciplinary Research. 2025:20-25.
 12. Dara SR. An overview of the use of natural indicators in acid-base titrations. UPI Journal of Pharmaceutical, Medical and Health Sciences. 2024:29-35.