Ashdin Publishing
Journal of Drug and Alcohol Research
Vol. 13 (2024), Article ID 236412, 10 pages
DOI: 10.4303/JDAR/236412

Review Article

Generic Drugs Vs Branded Drugs: Navigating Antitrust Law Issues in India

Surender Mehra[1*], Purnima Gupta[2], Disha Moitra[2], Babita Baeraiya[1], Rajneesh Kumar Patel[1], Raju Majhi[1], Supriya[1#]

[1]*Department of Law, Banaras Hindu University, India*
[2]*Department of Law, Maharaja Agrasen Institute of Management Studies, India*

[*]*Address Correspondence to Surender Mehra, E-mail: surenderm1979@gmail.com*

Note: [#] *Surender Mehra and Supriya contributed equally to this work, so they will be chosen to have joint Corresponding authorship.*

Received: 02 October 2024; Manuscript No: JDAR-24-150098; **Editor assigned:** 04 October 2024; PreQC No: JDAR-24-150098 (PQ); **Reviewed:** 18 October 2024; QC No: JDAR-24-150098; **Revised:** 23 October 2024; Manuscript No: JDAR-24-150098 (R); **Published:** 30 October 2024; **DOI:** 10.4303/JDAR/236412

Abstract

Generic drugs vs branded drugs has been a long-standing dispute in the pharmaceutical sector. The right to health is considered a basic human right, and through various judicial pronouncements, it has been included within the purview of Article 21 of the Indian Constitution. However, the exorbitant prices of medicines and the expensive bills incurred in hospitals have created a roadblock for the common man to effectively exercise this right. In such a scenario, generic drugs play a pivotal role in protecting people from financial hardship. Generic drugs are available at a cheaper price than branded drugs. However, due to some preconceived notions among the public regarding the safety and efficacy of generic drugs, there has been a conflict in preferring generic drugs over branded drugs. In order to understand the differences between generic and branded drugs, there is a dire need to revisit the structure of the pharmaceutical sector. The monopoly in the pharma sector and the rise in medicine prices due to unfair trade practices necessitate a discussion of the provisions of competition law in light of the aforementioned issues. The objective of this research paper is to analyze the current legal framework pertaining to the pharmaceutical industry and the competition law issues involved. The paper seeks to gather data through a questionnaire to understand the preference of people for generic or branded drugs. Furthermore, the paper discusses the role played by doctors in promoting generic drugs. Lastly, the paper attempts to study the impact of increased usage of generic drugs on economic efficiency in India.

Keywords: Generic drugs; Branded drug; Competition law; Economic efficiency; Trade margin; Regulation

Introduction

The Indian pharmaceutical industry is known globally for its generic medicines and low-cost vaccines. The Indian pharmacy sector holds the 3rd position in the manufacturing of pharmaceutical items and medicines, and this sector has emerged as a vibrant one over the years [1]. The Indian pharmacy sector has grown steadily with a Compound Annual Growth Rate (CAGR) of 9.43% [2]. The pharmacy sector has consistently earned a trade surplus. During 2020-21, the total pharmacy export was ₹ 180,555 crore (USD 24.35 billion) against the total pharmacy import of ₹ 49,436 crore (USD 6.66 billion), thereby generating a trade surplus of USD 17.68 billion [3]. By the end of September 2021, total pharmacy exports reached ₹ 87,864 crore (USD 11.88 billion) compared to total imports of ₹ 33,636 crore (USD 4.66 billion), thereby generating a trade surplus of ₹ 54,228 crore (USD 7.22 billion). Generic medications, Over-the-counter (OTC) medications, bulk medications, vaccines, contract manufacturing and research, bio-similars, and biologics are all part of the sector. The Indian pharmaceutical sector is significant on a global scale. The largest concentration of USFDA-compliant pharmaceutical plants outside of the United States is found in India. 500 producers of Active Pharmaceutical Ingredients (APIs) account for around 8% of the worldwide API market. India is the largest supplier of generic medicines, holding a 20% share in the global supply by manufacturing 60,000 different generic brands across 60 therapeutic categories [4]. India is known for its low-cost vaccines. Due to high-quality medicines and lower prices, the Indian pharmaceutical sector is referred to as "the pharmacy of the world." The low-cost affordable HIV treatment is an example of its success in medicine.

During the COVID-19 pandemic, the pharmaceutical sector has faced challenges and played an important role in combating the infection caused by COVID-19. Through collaboration with major firms and industries, the sector has enabled itself to develop and refine production processes that ensure the supply of medicine during times of crisis such as Favipiravir, Remdesivir, Ivermectin, Hydroxychloroquine, Dexamethasone, and Tocilizumab. Relief has been given to

more than 120 countries for Hydroxychloroquine (HCQ), 20 countries for paracetamol, and around 96 nations for vaccines globally during the COVID-19 pandemic [5].

Generic and Branded Drugs

Generic medicines are those for which the original patent has expired, allowing other manufacturers to produce them. Different markets may define "generic medicine" or "generic drug" differently. But according to the World Health Organisation (WHO), it is generally understood to refer to a pharmaceutical product that can be used in place of an innovator product is produced without a license from the innovator company; and is marketed after the patent or other exclusive rights have expired.

Are generic drugs equivalent to branded drugs?

There are issues related to generic medicine and branded drugs [6].

Whether the performance and effectiveness of generic and branded drugs are at Par or same?

The research on generic drugs shows that generic medicines are equally effective; although some studies indicate that consumer feel generic medicines do not work as well as the critical factors are potency, purity stability and cost-effectiveness.

What is the price difference between both medicines?

Name of Salt: Tablet Cetrizine

Dosage: 10 mg

Pack: 10 Tablet Packets

Average Market Price of Branded Medicines (Rs.): 37.50

Prices of Generic Medicines sold in Jan Aushodi Kendra: 2.75

Zee News, Editor, in his show Daily News, discussed the Government's plan to establish a legal framework requiring doctors to prescribe generic drugs, which would be cheaper than branded drugs [7]. "Doctors write prescriptions in such a way that poor people do not understand. Prescriptions states that he has to buy that medicine from private stores at high prices. We will implement a legal framework by which, if a doctor writes a prescription, he must indicate that it will be sufficient for patients to buy generic medicine and that he need not prescribe any other medicine," Hon'ble Prime Minister of India recently stated [8].

National list of essential medicines

The National list of essential medicines 2022, which includes 384 medications, was announced by Union Health Minister of India. A medicine is included to the NLEM; a number of factors are taken into account. The regulations state that the medication must be vital and necessary to treat a sickness. There must be strong, primary proof of the medication's safety and effectiveness. According to the NLEM recommendations, when adding a medication to the LEM, the entire cost of therapy must be taken into account. The ideal metric for this might not be the unit price alone [9,10].

Are doctors inclined to promote branded medicine?

The Story of popular antipyretic medicine: A petition filed before the Supreme Court of India has raised concerns about promotional practices for the drug, alleging that the pharmaceutical company spent 1,000 crores on promotions. The medicine saw a significant sales increase during the COVID-19 pandemic, earning 567 crores between March 2020 and December 2021. Hon'ble Justice noted that a doctor recommended this medicine to him during his COVID-19 treatment [11].

Major Pharmaceutical Legislation in India

A. The 1940 Drugs and Cosmetics Act and the 1945 Rules: The 1940 Drug Act was enhanced by the present Drugs and Cosmetics Act. This act's primary goal was to control the import, production, distribution, and retail of pharmaceuticals.

B. The main goal of the Pharmacy Act of 1948 was to control the practice of pharmacy in India.

C. In 1954, the Drugs and Magic cures Act was enacted with the primary objective of regulating specific drug-related marketing and outlawing specific advertisements pertaining to magic cures.

D. In order to impose and collect excise duties on medical and toilet preparations, the medical and Toilet Preparations (Excise duty) Act, 1955 was passed.

E-pharmacy in India

Digital technology and information have provided new opportunities in the healthcare sector, improving the delivery and supply chain to maximize capacity and effectiveness. The wholesale and retail pharmaceutical markets have undergone dynamic changes with the entry of e-pharmacy. The share of e-pharmacy was recorded at around 2.8% in 2018 [12]. During the COVID-19 lockdown, 300 million out of 8.8 million households purchased medicine through online pharmacies [13]. The e-pharmacy market in India is witnessing major amalgamations, mergers, and acquisitions, with key players such as Amazon, Reliance Retail, PharmEasy, and Medlife.

There are 2 e-pharmacy business models in India:

1. Inventory-based model
2. Marketplace-based model

Some online pharmacies are part of larger multi-product e-commerce platforms, but the majority operate under the marketplace-based model, where online pharmacies connect buyers and sellers through intermediary technology. The inventory-based model, however, boasts a strong supply chain with fewer intermediaries, ensuring higher margins and consumer discounts. Online pharmacies also work through carry and forwarding agents, who serve as the front-line workers for drug companies [14,15].

Additionally, e-pharmacy market players offer doorstep

delivery to customers through offline pharmacies. This effort helps them retain and grow their customer base by using the inventory-based model in combination with mobile applications or phone delivery services.

Drugs and Cosmetics Rules, 1945

- It has been made mandatory for all online e-pharmacy market players to obtain licenses from the central government licensing authority.
- E-pharmacy players are required to maintain records of patient details, including written or electronic prescriptions.
- Online pharmacies are also required to keep patients' private information confidential and are prohibited from disclosing this information to any third party, except to the state or central government.
- The premises of online pharmacies will be inspected and monitored by the licensing authority.
- Online portals are prohibited from advertising medicines.
- A mechanism will be provided for complaint redressal regarding the sale of inferior or spurious quality medicines. Consumers can file complaints about poor-quality medicines with sector regulators, who are required to take necessary action against the e-pharmacies.

Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)

A large portion of the Indian population cannot afford medicines. Branded medicines are more expensive compared to generic medicines, although they are equally effective and safe. To provide quality generic medicines to the poor and underprivileged, the Pradhan Mantri Bhartiya Janaushadhi Pariyojana was launched in 2008. In 2015, the Honorable Prime Minister recommended that Jan Aushadhi Kendras be opened across the country [16].

As of December 31, 2022, 8,675 Jan Aushadhi Kendras are operational. Citizens saved ₹2,500 crores during the 2019-20 financial year through this initiative [16]. These generic medicines are 50% to 90% cheaper than branded medicines (Pharmaceutical and Medical Devices Bureau of India) [17].

Objectives

- Providing all types of quality medicines and surgical instruments at the lowest and most affordable prices to consumers and patients.
- Creating awareness among the public that generic medicines are equally effective and safe as branded medicines.
- Ensuring easy access to menstrual health services for all women.
- Opening PMBJP Kendras and generating employment opportunities.

Normal incentives

An enhanced incentive of up to ₹ 5 lakhs is provided to Kendras run by entrepreneurs connected to PMBI through software. An incentive of 15% of the monthly purchases made from PMBI is given to these Kendras, subject to a ceiling of ₹ 15,000 per month. This incentive is also available to existing Kendras, for which the current incentive limit of ₹ 2.50 lakh has been provided. A new incentive plan has also been launched.

Under this plan, Kendras can now receive an additional ₹ 2 lakh on top of the regular incentives:

1. ₹ 1.50 lakh as reimbursement for furniture and fixtures.
2. ₹ 0.50 lakh as reimbursement for computers, internet, printers, scanners, etc. [18].

Economic efficiency

The term "economic efficiency" is frequently used by economists to describe a scenario where all resources are optimally utilized, with minimal waste. From this definition, 2 essential prerequisites for economic efficiency can be identified: The allocation of goods and factors of production should be done in a way that maximizes their potential, and there should be a focus on maximizing productivity while minimizing waste.

The concept of economic efficiency is based on the principle that resources are scarce and should therefore be used effectively to maximize profits and minimize costs. Various economists have developed several methods to measure the economic efficiency of a country. The most common approach is to measure productive efficiency, allocative efficiency, and dynamic efficiency, which together constitute the economic efficiency of a country [19].

Productive efficiency focuses on the availability and usage of resources. The central idea is similar to that of economic efficiency, emphasizing that resources are scarce, and decisions should be made to minimize waste. Measuring productive efficiency helps to understand how efficiently available resources are being used.

Allocative efficiency shifts focus from input and resource availability to output. It asserts that production should consider the preferences of end consumers, creating equilibrium between the supply and demand of goods. By applying allocative efficiency, the selection of goods to be produced can be prioritized according to consumer preferences, thus reducing waste.

Dynamic efficiency is an extension of productive efficiency, focusing on how a country or firm changes its productive efficiency over time in response to societal needs. Dynamic efficiency is also concerned with better management and utilization of human resources, as well as the implementation of innovative techniques for the production of goods.

Continuing along the same lines, if we talk about the economic efficiency of India with respect to the

pharmaceutical industry, increased production and use of generic drugs can help reduce healthcare expenses for the general population. This, in turn, allows people to save or invest in other areas of the economy, which would ultimately contribute to the country's economic growth. Considering the needs of consumers, i.e., allocative efficiency, drugs should be produced in such a way that they benefit the larger population. However, due to the exorbitant prices of branded drugs, a major section of the Indian population is unable to afford them. To benefit society at large, the production of generic drugs should be encouraged.

Anti-trust Law Issues and Pharmaceuticals sector

Generic drug competition in the Indian market: Price and non-price issues

In the technical session of a workshop on competition issues in the pharmaceutical sector in India, organized by the Competition Commission of India, several remarks were made by doctors regarding price and non-price competition issues. According to Dr. Sakthivel Selvraj, pharmaceutical companies create a market suited to their needs and engage in vertical and horizontal anti-competitive practices through product differentiation. Drug prices are influenced by product differentiation based on color and taste. There are 17 brands per molecule, and multiple brands are supplied by a single company with the same strength and dosage. He emphasized that retail market prices are around 25% higher than procurement prices [20].

According to Dr. Y.K. Gupta, every doctor knows the generic names of drugs and rarely discusses brand names. However, when they enter the market and the profession, they mostly talk about the brand names of drugs. He pointed out that low-cost medicines do not equate to poor quality. Unfortunately, many reputed doctors trust expensive brands. Dr. Ashok Vaid acknowledged that only 10% of the Indian population can afford costly treatments and favors cost-effective generic drugs.

Recommendation: Public procurement and E-Pharmacy

Public procurement of drugs can help provide essential medicines at affordable prices by bypassing the challenges of traditional distribution chains and reducing reliance on price controls. Additionally, e-pharmacies, with proper regulation, can increase transparency and encourage price competition among retailers. The Ministry of Health and Family Welfare has taken steps toward this by introducing the 2017 draft rules on drug sales and distribution to facilitate online drug sales, ensuring fair competition between online and offline platforms [21].

Pharmaceutical distribution: Trade practice and competition

According to Dr. Preeti, there are market distortions at every level of the supply chain, from the retail market to the manufacturing stage. The retail margin for drugs is higher by 10%. Online pharmacies can serve as an alternative for the expansion of generic drugs.

Mr. Dara Patel talked about the robust distribution system in India, which depends on businesses, manufacturing companies, and their policies. There are agents and retailers, and margins vary from 8% to 20%. He emphasized the need for checks and balances to control the distribution system [22].

Mr. Vaijanath Jagushte emphasized strict compliance with all pharmaceutical legislation. Mr. K.G. Ananthakrishnan said that the pharmaceutical department and NPPA must focus on a patient-centric approach, affordability, safety, and efficacy.

Recommendation: Strong regulatory framework ensuring transparency, data portability and standardisation of diagnostic labs.

Hospitals should be required to disclose key data like mortality and infection rates to help consumers make informed healthcare choices. Ensuring reliable test results across labs and establishing a strong regulatory framework is essential. This would prevent hospitals from restricting purchases of standardized products, allow treatment based on external lab reports, and enable portability of patient data.

Competition in the pharmaceutical sector: Role of regulation and anti-trust

Dr. Naresh Trehan pointed out that to ensure the quality of drugs and check for the presence of spurious drugs, a strict mechanism needs to be developed. His main concern was why doctors prescribe branded medicines instead of generics [23].

Dr. Ajay Bhaskarbhatla stated that the 9 lakh retailers in India create a strong but false impression of high levels of competition in the pharmaceutical sector. The DPCO 2013 lays down a price ceiling, but market power continues to exploit the common man. He highlighted 3 key issues: Incomplete regulation, market-based ceiling determination, and non-compliance. These aspects limit the effectiveness of pharmaceutical regulation.

Mr. A.K. Pardhan noted that the Drugs and Cosmetics Act (DCA), 1940 does not specifically define branded or generic drugs, though its objective is the safety, quality, and efficacy of drugs.

Mr. Ramji Srinivasan highlighted 4 challenges for the pharmaceutical sector: E-pharmacy, whether trade margins should be abolished, and the need for product information booklets for consumers and retailers.

Recommendation: Effective and uniform quality control of drugs and One company-one drug-one brand name-one price policy.

To address the issue of brand proliferation, there is a need for consistent and effective quality control measures across states, ensuring all drugs meet statutory standards. This would help build trust in the regulatory system and allow for genuine generic competition. Additionally, the practice of artificial product differentiation should be curbed through a one-company-one drug-one brand name-one price policy.

Recommendation: Harmonisation of processes through effective centre state coordination and time-bound approval for new drugs.

There is a need to ensure harmonization of criteria/ processes followed by the state licensing authorities and centralization of training of inspectors to ensure uniformity interpretation and implementation. It is also imperative to make the approval of new drug time-bound along with detailed guidelines governing each stage of new drug approval process.

Madhya Pradesh Chemists and Distributors Federation against Madhya Pradesh Chemists and Druggist Association and Others (Case No. 64 of 2014)

The Madhya Pradesh Chemists and Distributors Federation (MPCDF) filed a complaint against the Madhya Pradesh Chemists and Druggist Association (MPCDA), Indore Chemists Association (ICA), and pharmaceutical companies, including Himalaya Drug Company (HDC) and Intas Pharmaceuticals Ltd. (IPL), alleging anti-competitive practices by restricting drug supply through a mandatory No Objection Certificate (NOC) or Letter of Consent (LOC) for stockist appointments. The Competition Commission of India (CCI) found these parties in violation of the Competition Act, ordered them to cease such practices, conduct compliance programs, and imposed financial penalties on the associations and companies, including their office bearer [24].

Analysis of Questionaire by Doctors

Perception towards quality and effectiveness of generic drugs

As per the survey of doctors, the researcher found that almost 47% of respondents perceive generic drugs as being of inferior quality compared to branded drugs. This reflects a potential lack of trust or concerns about the efficacy, safety, or consistency of generics. However, 38% of respondents believe that generic drugs are of the same quality, indicating that a substantial portion of the population sees them as equally effective as branded medications. The remaining group, which is less than 15%, perceives generic drugs as being of better quality, which might reflect experiences where generic drugs meet or exceed expectations [25] (Figures 1 and 2).

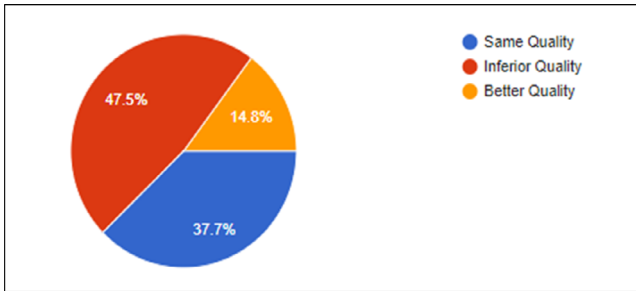

Figure 1: Survey report 1: Perception regarding quality of generic drugs compared to branded drugs

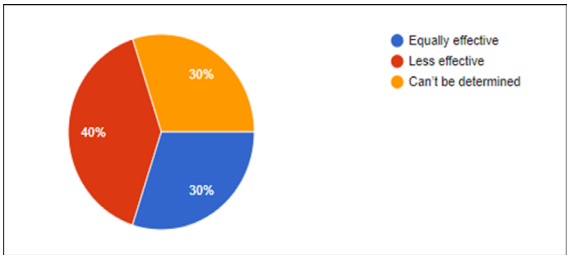

Figure 2: Survey report 2: Perception regarding effectiveness of generic drugs compared to branded drugs

The results also revealed a divided perception regarding the effectiveness of generic drugs compared to branded ones. A significant 40% of respondents believed that generic drugs were less effective, reflecting concerns about their efficacy, safety, or overall reliability. This indicated a lack of trust among a notable portion of the population, who felt that generic drugs did not match the quality of their branded counterparts. In contrast, 30% of respondents believed that generic drugs were equally effective as branded ones, showing that a substantial number of people trusted generics and felt they performed on par with branded options. However, another 30% of respondents expressed uncertainty, choosing the "can't say" option, which suggested a lack of knowledge, experience, or confidence in forming an opinion about the effectiveness of generic medications. Overall, while there was a portion of the population that viewed generics as equally effective, the majority either doubted their efficacy or remained unsure. This highlighted the need for greater awareness and education about the quality and benefits of generic drugs compared to branded ones.

How often doctors prescribe generic drugs over branded drugs?

In analysing how often generic drugs are prescribed over branded drugs, the data reveals that 67.2% of respondents prescribe generic drugs often, indicating a strong preference for generics in most cases. A smaller percentage, 24.6%, report prescribing generics rarely, suggesting that while they may occasionally opt for generics, they more frequently choose branded medications. The remaining 8.2% of respondents always prescribe generic drugs, showing complete reliance on generics for their prescriptions. This breakdown highlights a significant inclination towards prescribing generic drugs, with the majority of respondents frequently choosing generics over branded alternatives (Figure 3).

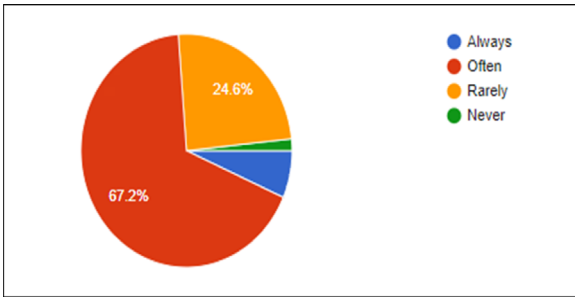

Figure 3: Survey report 3: Doctors prescribing generic drugs over

branded drugs

Another question was if doctors and healthcare professionals play a vital role in increase in demand of generic drugs and role played by doctors to reduce the burden of healthcare expenditure on common people. The result was that Doctors and healthcare professionals played a crucial role in increasing the demand for generic drugs and significantly contributed to reducing the burden of healthcare expenditure on common people. The responses provided overwhelmingly supported this view, with many indicating that doctors are in a position to prescribe generic, cost-effective medications to patients, particularly those from lower-income backgrounds. As the primary decision-makers in medication prescriptions, doctors influence what patients purchase. By consciously prescribing generic drugs instead of expensive branded alternatives, they lowered the cost of treatment, making healthcare more affordable.

Several respondents pointed out that prescribing generic drugs can help reduce the financial strain on people who cannot afford branded medications. Doctors can tailor their prescriptions based on a patient's economic status, offering generic drugs to those in need, while considering branded options for wealthier patients if necessary. Additionally, some respondents suggested that raising awareness about the availability and efficacy of generic drugs could further empower patients to choose these cheaper alternatives.

Another question that was asked from respondents were whether generic drugs should be preferred over branded drugs, elicits mixed responses, highlighting both the potential benefits and concerns associated with their use, particularly in the context of the pharmaceutical sector in India. Many believed that generic drugs should be prioritized, especially for individuals who cannot afford the high cost of branded medications. Generic drugs offer a cost-effective solution, making healthcare more accessible to the economically weaker sections of society and reducing the financial burden on both individuals and the country. When the safety and efficacy of generic drugs are comparable to branded alternatives, many argue that they should be preferred to lower healthcare costs. However, concerns arise regarding the quality and reliability of generic drugs, especially for critical treatments where the precision of dosage is crucial. Some believe generic drugs may be more suitable for common ailments, while branded drugs should be used for serious conditions. The potential impact on India's pharmaceutical sector is significant if generic drugs are widely preferred. Many respondents suggest that this shift could reduce the profitability of companies manufacturing branded medications, as lower-priced generics would dominate the market. This could affect their ability to recover research and development costs and maintain quality control. While some view this as a challenge for the industry, others believe it could benefit the broader Indian economy by making healthcare more affordable and accessible to larger sections of the population. Ultimately, the debate centers on finding a balance between offering cost-effective treatments through generics and ensuring the quality and efficacy of medications across the board.

Findings

The role of doctors is pivotal. By promoting generic drugs and encouraging informed decision-making, they can alleviate the financial burden of healthcare, making treatments more accessible to those in need and ultimately increasing the demand for generic medications. However, a few concerns have been noted, particularly regarding the potential for adverse effects if generic drugs are not as effective or well-tested as branded ones. Despite this, the general consensus is that when generic drugs offer the same quality as branded drugs, doctors should prioritize them, especially for economically disadvantaged patients. By prescribing more generics and educating patients about their benefits, doctors can significantly reduce overall healthcare expenditure for a large segment of the population.

Analysis of questionnaire by common man

Another questionnaire was conducted among the general public, where 43.6% were academicians/researchers, 79% were healthcare professionals, a few were in service, and the remaining 46.5% were general members of the public [26].

Awareness of the difference between generic drugs and branded drugs

The analysis shows that a significant majority, 64.7%, of respondents are aware of the difference between generic and branded drugs. This suggests a general understanding of the topic. However, 16.7% are unfamiliar with the distinction, and 18.6% are unsure, indicating that about one-third of people lack clarity. This highlights the need for better public education on the similarities and differences, particularly regarding efficacy, safety, and cost (Figure 4).

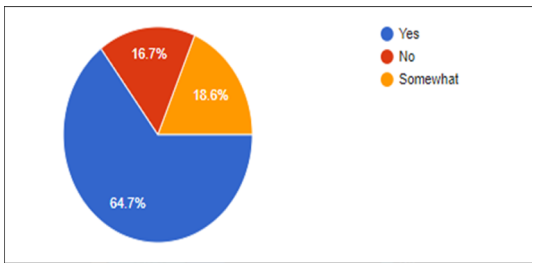

Figure 4: Survey report 4: Awareness between generic drugs and branded drugs

Perception of the quality of generic drugs as compared to branded drugs

The analysis reveals that perceptions of the quality of generic drugs compared to branded drugs are mixed. While 45.5% of respondents believe generic drugs offer the same quality, a significant portion, 15.8%, view them as inferior. Interestingly, 19.8% perceive generic drugs to be of better quality, reflecting a positive sentiment in some groups. However, with 18.8% uncertain, there remains a lack of clarity for many about the true quality and effectiveness of generics vs branded medications. This suggests a need

for more education on how generics are evaluated and regulated to meet the same standards as their branded counterparts (Figure 5).

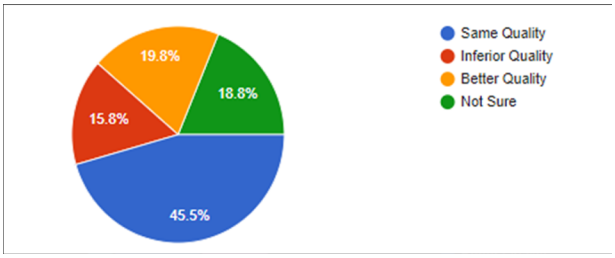

Figure 5: Survey report 5: Perception of quality of generic drugs compared to branded drugs

Effectiveness of branded drugs than generic drugs

The debate over the effectiveness of branded vs generic drugs reveals a diverse range of opinions among patients. In a recent survey, 31.4% of respondents felt neutral about the effectiveness of branded drugs, while 20.6% disagreed that they are superior, and 28.4% agreed with that notion. Despite these differing views, research generally supports that generic drugs are pharmacologically equivalent to their branded counterparts, providing similar clinical outcomes. Concerns about the quality and efficacy of generics often stem from perception biases influenced by socioeconomic factors. Ultimately, while some patients may prefer branded medications due to perceived effectiveness, substantial evidence indicates that generics can deliver the same therapeutic benefits at a lower cost (Figure 6).

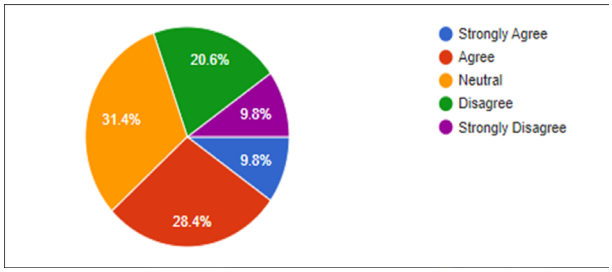

Figure 6: Survey report 6: Effectiveness of Branded drugs than generic drugs

Preference of substituting branded drugs by generic drugs

The data on preferences for substituting branded drugs with generic drugs indicates that the majority (46.1%) of people are open to substitution "sometimes," reflecting a balanced approach where factors like cost and effectiveness likely play a role in decision-making. A significant portion (28.4%) prefers to "always" opt for generics, suggesting a strong trust in their equivalency and value. However, a smaller group remains cautious, with 14.7% choosing to "rarely" substitute, likely due to concerns over quality or efficacy, and 10.8% opting "never" to substitute, possibly prioritizing brand-name reliability despite higher costs. This diversity highlights varying trust levels in generics and personal health priorities (Figure 7).

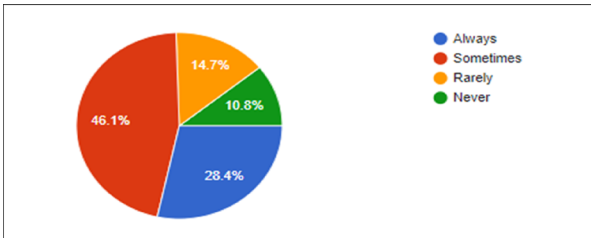

Figure 7: Survey report 7: Preference of substituting branded drugs by generic drugs

Percentage of monthly expenditure incurred on entire family members on healthcare

The data on monthly income spent on healthcare shows that the majority (72.3%) of individuals and families allocate 0%-30% of their income towards healthcare, indicating that for most, healthcare costs remain manageable within a smaller portion of their budget. A notable 18.8% of respondents incur 30%-60% of their income on healthcare, suggesting higher medical needs or out-of-pocket costs. Only a few people report spending more than 60%, which reflects significant healthcare burdens, possibly due to chronic conditions or expensive treatments. This distribution highlights the varying impact of healthcare expenses across different households (Figure 8).

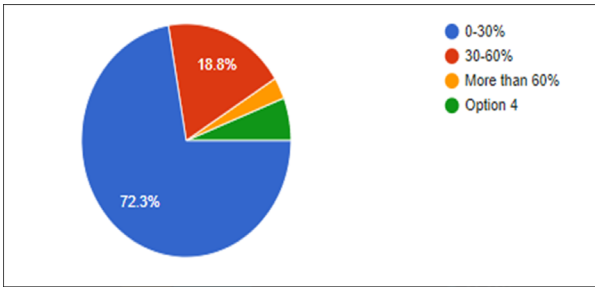

Figure 8: Survey report 8: Percentage of monthly expenditure incurred on entire family on healthcare

How often do you consider the cost when choosing between generic and branded drugs?

The survey results indicate that cost is an important factor for many patients when choosing between generic and branded drugs. Specifically, 46.5% of respondents sometimes consider cost, while 34.7% always do so. In contrast, only 13.9% rarely consider cost, and a small percentage never factor it in. This highlights a growing awareness of the financial implications of medication choices, as many patients seek affordable options without sacrificing effectiveness. The significant number of individuals who prioritize cost underscores the potential benefits of promoting generic medications, which can provide substantial savings while ensuring quality care (Figure 9).

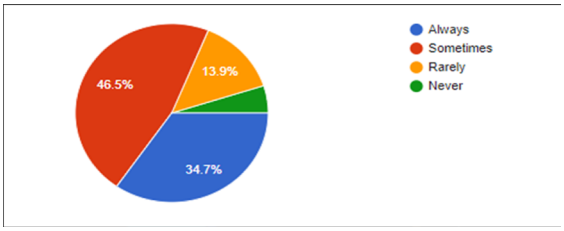

Figure 9: Survey report 9: Considering the cost when choosing between generic and branded drugs

Preference to use generic drugs if they are significantly cheaper, even if the brand is less known

When it comes to the use of generic drugs, public opinion appears to be divided, with a majority leaning toward a positive outlook. A significant portion, 42.6%, of respondents express a clear preference for using generic drugs if they are substantially cheaper, even if the brand is lesser known. This indicates a strong motivation driven by cost savings, reflecting the general understanding that generic drugs offer the same active ingredients and efficacy as their branded counterparts. On the other hand, 15.8% of people are hesitant and would not opt for generic drugs, possibly due to concerns about quality, brand trust, or the perceived superiority of well-known brands. This skepticism could stem from a lack of confidence in the manufacturing process or unfamiliarity with the generic option. The other segment, 41.6%, indicates that their choice depends on the circumstances, suggesting that many consumers evaluate generics on a case-by-case basis. Factors such as the severity of the condition, doctor recommendations, personal experiences, or the specific drug in question may influence their decision. This diverse set of responses highlights how cost, trust, and situational factors all play a role in shaping consumer choices regarding generic medications (Figure 10).

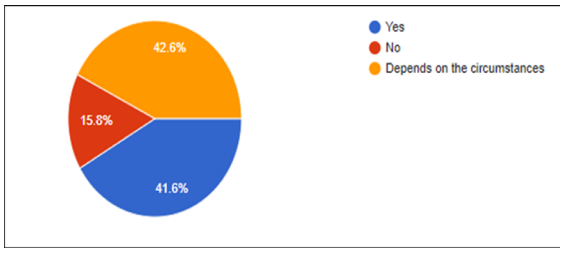

Figure 10: Survey report 10: Preference to use generic drugs if they are significantly cheaper

Regarding government policies encouraging the use of generic drugs to reduce healthcare costs

Regarding government policies encouraging the use of generic drugs to reduce healthcare costs, 40% agree and 43% strongly agree, signaling broad support for such initiatives. The 13% who are neutral may lack strong opinions, while the rest who disagree likely have concerns about efficacy or the potential impact on pharmaceutical innovation. Overall, the data suggests substantial backing for policies aimed at lowering healthcare costs through generics (Figure 11).

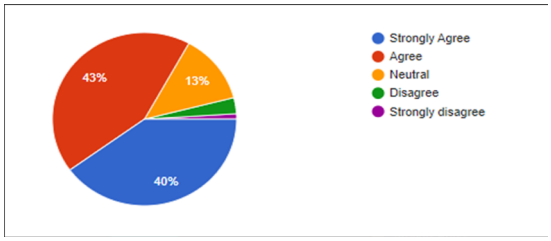

Figure 11: Survey report 11: Perception of persons regarding government policies encouraging use of generic drugs

Do you think reduction in healthcare expenditure will motive you to invest in other avenues?

A majority of respondents, with 45% agreeing and 39% strongly agreeing, believe that a reduction in healthcare expenditure would motivate them to invest in other avenues. This indicates that lower healthcare costs would free up financial resources, allowing people to allocate funds toward other areas such as savings, education, or leisure. The 11% who remain neutral may feel uncertain about how much of an impact reduced healthcare spending would have on their overall financial situation. The small percentage that disagrees may not see significant savings from healthcare reductions or may prioritize healthcare spending above other investments. Overall, the data reflects a strong correlation between lower healthcare expenses and increased potential for broader financial investments (Figure 12).

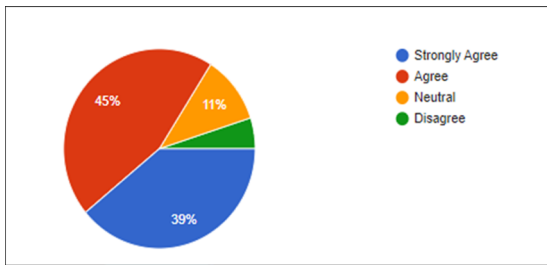

Figure 12: Survey report 12: Whether reduction in healthcare expenditure will motive investment in other avenues

The biggest barrier to the use of generic drugs

The biggest barrier to the use of generic drugs, according to 48.5% of respondents, is a lack of awareness. This suggests that many people may not be fully informed about the availability, benefits, and equivalency of generic medications compared to branded ones. This knowledge gap limits their ability to make cost-effective choices in healthcare. Additionally, 26.3% of people express concerns about the effectiveness and safety of generics, indicating skepticism about whether these drugs match the quality and outcomes of their branded counterparts. Meanwhile, 25.3% attribute their hesitation to the influence of branding, where well-known pharmaceutical brands carry more trust and recognition, swaying their preferences. Overall, the data highlights the need for better education and information to address misconceptions and boost confidence in the use of generics (Figure 13).

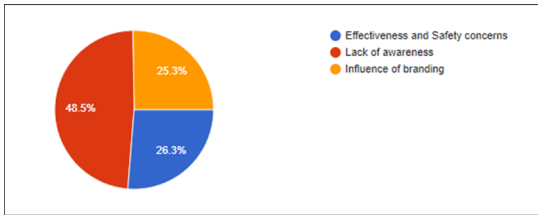

Figure 13: Survey report 13: Biggest barrier to use of generic drugs

In your opinion, what would improve the adoption of generic drugs in healthcare?

Improving the adoption of generic drugs in healthcare could be driven primarily by awareness campaigns, as indicated by 51% of respondents. This suggests that educating the public about the safety, efficacy, and cost savings of generics is key. Additionally, 32% believe that increasing the availability of generic drugs would help, as easier access could encourage more people to choose them. A smaller portion, 7%, feel that providing incentives to healthcare providers would boost adoption, while 10% see strict regulations on drug pricing as an important factor. Together, these measures could significantly enhance the uptake of generic medications (Figure 14).

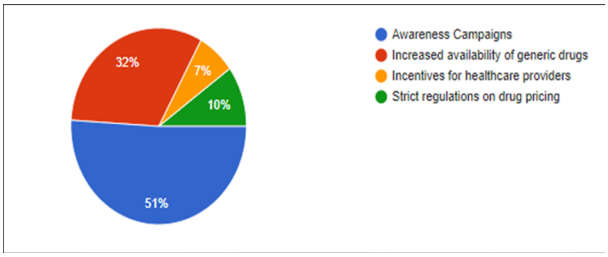

Figure 14: Survey report 14: Improve the adoption of generic drugs in healthcare

Discussion

Suggestions to reduce the healthcare expenditure and contribute in economic growth of the country

In response to the question about suggestions for reducing healthcare expenditure and contributing to economic growth, opinions were mixed. While 50 responses revealed a divide between those who offered suggestions and those who did not, several key themes emerged from the "yes" responses. Many suggested that government promotion of generic drugs is crucial, as increased visibility and trust in these medications could lower costs. There were calls for stricter government policies to regulate drug pricing and ensure quality, as concerns about the effectiveness of generics persist. Additionally, promoting health and wellness initiatives, such as yoga and sports, was highlighted as essential for preventive care. Many noted that awareness campaigns are particularly important for low-income populations, as wealthier individuals may continue to favor branded drugs. Overall, improving public healthcare facilities and ensuring the quality of generic medicines are vital for building trust and reducing reliance on expensive private hospitals. This multifaceted approach can enhance the healthcare system, which is fundamental to a country's economic and social well-being.

Conclusion

The first set of empirical data collected *via* a questionnaire from the general public shows that the majority of respondents, i.e., 45.5%, believe that generic drugs are of the same quality as branded drugs. Additionally, 19.8% of people believe that generic drugs are of better quality than branded drugs, while 18.8% are unsure about the quality, and 15.8% consider generic drugs to be of inferior quality. However, despite the majority believing in the effectiveness of generic drugs, only 28.4% are certain about substituting branded drugs with generic ones. This suggests that preconceived notions about generic drugs still create conflict in the minds of the general public when it comes to substituting branded drugs with generics.

Continuing on the same thread, the cost-effectiveness of generic drugs is a significant factor for the public when choosing between generic and branded drugs. This suggests that the exorbitant prices of branded drugs are creating a burden on the public. According to the data collected, the majority of respondents fall under the 0%-30% and 30%-60% categories in terms of monthly expenditure on healthcare facilities and medicines.

Furthermore, a significant portion of the public, i.e., 43% and 40%, agree and strongly agree, respectively, that government policies should be designed to encourage the increased use of generic drugs, which would, in turn, reduce healthcare expenditure. The results show that reducing healthcare costs would motivate the public to invest in other areas, contributing to the nation's economic growth. The major impediment to the broader use of generic drugs is the lack of awareness and misconceptions regarding their effectiveness and safety.

The next set of data, collected *via* a questionnaire shared with doctors, healthcare professionals, and those in the medical fraternity, reveals that the majority of doctors, i.e., 52.5%, perceive the quality of generic drugs to be the same as or better than branded drugs. They recognize that doctors and healthcare professionals play a vital role in promoting generic drugs. Given this responsibility, 67.2% of people in the medical fraternity, including doctors, often prescribe generic drugs to the public. Various suggestions from doctors and medical professionals include that increasing the use of generic drugs would be particularly beneficial for individuals with low incomes. They believe that, based on an individual's income, generic drugs should be preferred over branded drugs to ensure that everyone has access to affordable medicines. However, some argue that generic drugs should not generally be preferred and that increased usage could result in economic losses.

Suggestions

1. Effective and uniform enforcement of existing quality standards: It has been observed that the construction and enforcement of laws and regulations are not uniform. Different interpretations of the regulations for quality standards lead to confusion, ultimately

lowering the quality standard despite the same rules being in place across different states. A unified and harmonized system of quality standard enforcement is urgently needed. State-level regulatory agencies must engage skilled personnel with the requisite knowledge and develop the necessary infrastructure.

2. Transparent system: Information regarding the grant of licenses, inspections, and prosecutions for non-compliance must be made publicly available.
3. Systematic drug testing: To identify and eliminate spurious, substandard, or adulterated drugs, periodic and systematic collection of samples and testing must be conducted, with a strong methodology adopted for this purpose.
4. Supply chain and quality control: The handling, storage, transportation, and distribution of drugs impact their quality. The Good Distribution Practices for Pharmaceuticals (2018) set forth standards for quality control across the supply chain. Effective implementation of these guidelines can ensure proper quality control throughout the supply chain.
5. Public procurement and quality control: The pooled procurement system ensures quality audits, including visits to manufacturing units before purchase, sample examinations of each batch, and the rejection of poor-quality drugs.
6. Creation of awareness: Awareness programs should be organized to popularize cost-effective generic drugs. Due to the lack of awareness, branded drugs currently hold a significant share of the retail market.

Conflict of Interest

The authors declare that they have no conflict of interest.

Acknowledgement

None.

References

1. Competition Commission of India, Market studies, 2022.
2. Government of India Ministry of chemical and fertilizers, Department of Pharmaceuticals, Survey of pharma clusters, 2023.
3. Goverment of India Ministry of chemical and fertilizer, Department of Pharmaceuticals, Annual report, 2021-2022.
4. Stategic Investment Research Unit, Invest India, 2023.
5. The Economic Times, India supplied parcetamol hydrocholoquine to over 120 countries in last 2 months-Mr. Piyush Goyal, 2020.
6. G.L. Singal, A. Nanda, A. Kotwani, A comparative evaluation of price and quality of some branded versus branded-generic medicines of the same manufacturer in India, Indian J Pharmacol, 43(2011):131-6.
7. Zee News, Modi Government's nest initiative : Law for doctors to prescribe only generic drugs, 2017.
8. The Economic Times, PM Narendra Modi hints at rules for doctors to prescribe generic drugs, 2017.
9. Central Drugs Standard Control Organization, 2022.
10. Business Standard, What is the National List of Essential Medicine? 2022.
11. Aaj Tak, 2022.
12. Competition Commission of India. Market Study on the Pharmateucials Sector in India, 2021.
13. The Hindu, On regulating online sale of drugs in India, 2023.
14. S. Nilanjan, A. Sumeir, D. Shubhamay, P. Varun, Bhumika Indulia Regulation of Online Pharmacies in India, 2023.
15. P. Parikh, E Pharmacy business and models, 2021.
16. Pharmateucial & Medical Devices Bureau of India, Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP).
17. Government of India Ministry of Chemicals & Fertilizers, Department of Pharmaceuticals, Annual report, 2022-2023.
18. Pharmateucials and Medical Devices Bureau of India, Guidelines for opening PF New Pradhan Mantri Bhartiya Janausadhi Kendra (PMBJK), 2023.
19. Investopedia, Economic efficiency: Definition and examples, 2024.
20. Competition Commission of India, Workshop on competition issue in the pharmaceutical sector in India, (2021):203-233.
21. Competition Commision of India, Making markets work for affordable healthcare, 2018.
22. Competition Commission of India, Workshop on competition issue in the pharmaceutical sector in India, J Compet Law Policy, (2021):203-233.
23. P.M. Danzon, Competition and anti-trust issues the pharmaceutical industry, 2014.
24. Competition Commission of India, Annual report: 2019-20, 2020.
25. Google form, Generic vs branded drugs economic efficiency in India.
26. Survey, Google form, Generic drugs vs branded drugs.