



Consumer Perception and Market Performance of Generic Medicines in Nagpur

Avinash Sahu, Research Scholar, RTM Nagpur University, Nagpur
Dr. Ajit Shringarpure, Research Supervisor, RTM Nagpur University, Nagpur

Abstract

A significant trend in the pharmaceutical industry, especially in developing nations, is the rising use of generic versions of brand-name drugs. This study paper "Consumer Perception and Market Performance of Generic Medicines in Nagpur" seeks to investigate the several elements that affect consumer attitudes towards generic medications and how such attitudes affect the market performance in Nagpur city. The research uses a mixed-methods approach, collecting data from a wide range of people including consumers, healthcare professionals, and pharmaceutical stakeholders via quantitative surveys and qualitative interviews. Among the primary goals is to ascertain how well-informed customers are about generic medications, how much sway healthcare practitioners have over patient opinions, and what the regional generic medicine industry is like in terms of trends and key performance factors.

While many see generic medications as a way to save money compared to name-brand options, there are serious worries about the quality and effectiveness of these alternatives. Furthermore, consumers are greatly impacted by the recommendations of healthcare practitioners, especially physicians and chemists. The report also emphasises how marketing and regulatory policies affect the market penetration of generic drugs. Insights from this study may help pharmaceutical firms, healthcare providers, and lawmakers increase the use of generic medications. Better healthcare outcomes and more inexpensive medication accessibility in Nagpur may be achieved if stakeholders take the time to address the identified obstacles and make the most of the facilitators in order to build strategies that enhance the market performance of generic medications.

Keywords: Generic medicines, consumer perception, market performance, healthcare providers, marketing strategies.

Introduction

Essential pharmaceuticals are provided by the pharmaceutical sector, which plays a pivotal role in healthcare systems around the globe. Generic medications were developed as more affordable substitutes for branded pharmaceuticals in this market, providing the same or equivalent therapeutic effects at a lesser price. In an effort to lower healthcare costs without sacrificing treatment quality, generic drugs have been widely used. Generic medications have grown in importance in developing nations like India where a substantial portion of the population is struggling financially.

An interesting case study for evaluating the market expansion of generic medications is Nagpur, a renowned city in the Vidarbha area of Maharashtra. Generic medications have a lot of potential advantages, but there is a lot of variation in their market penetration and customer acceptability in Nagpur. To improve the adoption of generic drugs and guarantee affordable healthcare for everyone, it is crucial to understand what variables impact customer perception and market performance in this area.

In "Consumer Perception and Market Performance of Generic Medicines in Nagpur," the author sets out to investigate the many factors that influence the dynamics of the generic medication industry. Consumer knowledge and acceptability, healthcare practitioners' roles, regulatory rules, and marketing tactics are some of the important topics covered in the research. The study aims to have a thorough insight of the generic medications industry in Nagpur and find areas that might be improved by analysing these aspects.

This study aims to accomplish three things: first, it will determine how well-informed Nagpur consumers are about generic medicines; second, it will determine how much of an impact healthcare providers like doctors and chemists have on consumers' views and choices; and third, it will determine what factors, if any, are driving market trends and performance



indicators when it comes to generic medicine growth in the region. Pharmaceutical firms, healthcare providers, and lawmakers may all benefit from this study's results as they will provide light on how to best encourage the use of generic medications.

What follows is a synopsis of the relevant literature on generic medications, an explanation of the research methods, a presentation of the results, and a discussion of their significance. By providing this in-depth data, our goal is to add to the current conversation about making pharmaceuticals more accessible and affordable. Our ultimate goal is to enhance healthcare outcomes in Nagpur and nearby areas by doing so.

Literature review

Patel, D. K., Gota, V., & Patel, M. (2014). Views held by Ahmedabad city's consumers on branded and generic pharmaceuticals. The 2014 research by Gota, Patel, and Patel examines how people in Ahmedabad, India, feel about branded versus generic medications. Consumers' perceptions of generic and branded medicine prices, effectiveness, and quality are probably the focus of this study. The study's potential contributions to our knowledge of the Ahmedabad population's perspectives and decisions on pharmaceutical goods include illuminating the elements that impact consumer preferences for both types of medicine.

P. Patel and K. Desai (2018). Research on the opinions of Vadodara city residents on generic pharmaceuticals. Consumer impressions of generic pharmaceuticals in Vadodara city are the subject of the 2018 research by Desai and Patel. Consumers' opinions on the efficacy, cost-effectiveness, and quality of generic pharmaceuticals are probably the focus of this study in Vadodara. This research has the potential to provide light on how the people of Vadodara feel about generic medicines and what variables impact their decisions between generic and branded medications.

In a 2012 study titled "Brand and generic drugs: Are they the same?" Goyal and Bajaj posed the question. This discusses the differences and similarities between name-brand and generic pharmaceuticals. It might go over the composition, effectiveness, and safety of these two types of medications, as well as their similarities and distinctions. To better grasp the important differences and consequences of this option in healthcare, the article will likely shed light on the factors to think about while deciding between brand-name and generic medications.

Authors: Nigam, G., Yadav, K., and Sharma, S. (2017). Perceptions of generic medications by consumers: research in Rajasthan. Volume 7, Issue 1, Pages 40–44, International Journal of Simple and Applied Medical Sciences. Nigam, Yadav, and Sharma (2017) looked examined how people in the Indian state of Rajasthan felt about generic medications. Consumers' perceptions of generic pharmaceutical cost, efficacy, and quality in Rajasthan are probably the focus of this study. With any luck, this research will help us comprehend the local population's viewpoints and choices when it comes to pharmaceutical items in Rajasthan by illuminating the elements that impact consumer preferences for generic pharmaceuticals.

It is quite probable that the subjects of Kumar and Kumar's (2019) research, "A study on awareness and perception of generic medicines in Chennai city," are the people of Chennai and their level of familiarity with generic medications. Quality, efficacy, and understanding regarding generic pharmaceuticals are likely to be investigated in this study. This research has the potential to provide light on the perceptions and choices linked to pharmaceutical goods in Chennai, India, by examining the degree of knowledge and variables affecting customer preferences for generic pharmaceuticals.

The authors of the 2015 paper "Consumer perception towards generic drugs: A case study in Lucknow," Sharma and Verma, probably set out to learn how people in Lucknow feel about generic medications. Their views on the cost-effectiveness, efficacy, and quality of generic drugs are likely to be investigated in the study. The local population's viewpoints and decisions on pharmaceutical goods may be better understood with the use of this case study, which may provide light on the elements that impact consumer preferences for generic pharmaceuticals in Lucknow.

Objectives of the study

- To evaluate the level of awareness among consumers regarding generic medicines and their perceived benefits and drawbacks.
- To analyze the factors that influence consumer acceptance and trust in generic medicines compared to branded drugs.
- To investigate how doctors, pharmacists, and other healthcare professionals influence consumer perceptions and decisions regarding the use of generic medicines.

Research Methodology

Using a mixed-methods strategy, this research delves deeply into what is driving the expansion of the generic medication industry in Nagpur. A thorough comprehension of customer sentiment, market tendencies, and stakeholder functions is achieved via the research methodology's integration of quantitative and qualitative data gathering approaches. A representative cross-section of Nagpur's healthcare providers, patients, and other stakeholders were surveyed using standardised questionnaires to glean quantitative data. The purpose of the surveys was to gather in-depth information from healthcare practitioners and consumers about generic drug knowledge, attitudes, and use trends. The poll was able to get a representative sample of the population from among 500 respondents.

Deep interviews and focus groups supplemented the quantitative data with qualitative insights. Doctors, chemists, government regulators, and pharmaceutical industry representatives were all part of these. A more detailed picture of the drivers, stumbling blocks, and enablers of generic drug uptake and marketing emerged from the qualitative data. Market trends and performance metrics were also examined using secondary data. Part of this process was looking at generic pharmaceutical sales figures, market share reports, and government regulations. It was possible to conduct an exhaustive study of the dynamics of the Nagpur market by integrating these different data sources. In order to find important patterns and connections in the quantitative data, data analysis used statistical methods including descriptive statistics and regression analysis. Thematic analysis was used to find insights and recurrent themes in the qualitative data.

Data analysis and discussion

Table 1 - T-test of sample collected for Generic Medicines cheap to nonbranded medicines

	Test Value = 0					
	T	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
GM cheap to nonbranded medicines	12.644	62	0.041	-.1699	-.3880	.2714

A T-test was performed to examine the sample's view that generic drugs are cheaper than non-branded pharmaceuticals. The findings are shown in Table 1. In order to find out whether the mean perception score is significantly different, the test value was set to 0.

With 62 degrees of freedom (df), the T-test produced a t-value of 12.644, and the significance level (Sig.) was determined to be 0.041. It may be inferred that there is a statistically significant difference in the impression of generic drugs being cheaper than non-branded pharmaceuticals as the p-value (0.041) is lower than the customary threshold of 0.05.

A 95% confidence range spanning from -0.3880 to 0.2714 was used to determine the mean difference, which was determined to be -0.1699. On average, respondents seem to think that generic drugs are somewhat cheaper than non-branded pharmaceuticals, as shown by the negative mean difference. On the other hand, there is some variation in the opinions expressed by the respondents, as the confidence interval contains both positive and negative numbers.



These findings show that while most people think that generic drugs are less expensive than name-brand alternatives, some people in the sample are not sure or have conflicting feelings about this. It is crucial to raise consumer knowledge and provide transparent information on the cost advantages of generic drugs in order to enhance their market position and acceptability, as this research highlights.

Generic medications are often considered a more economical option than non-branded alternatives, according to the T-test analysis, which reveals a substantial but complex view. Policymakers and pharmaceutical businesses in Nagpur may use this information to their advantage when planning initiatives to increase the use of generic medications.

Discussion

The results of the T-test reveal interesting things about how people in Nagpur city think about the relative costs of generic and non-branded pharmaceuticals. Generic medications are often believed to be less expensive than non-branded alternatives, according to the statistically significant finding ($p = 0.041$).

Evaluation of Efficiency

According to the negative mean difference (-0.1699), people generally think that generic versions of branded medications are less costly than their non-branded counterparts. This view is in line with the general consensus that, because of reduced manufacturing costs and the lack of brand premiums, generic versions of pharmaceuticals may often be more affordable. Nevertheless, the confidence range (-0.3880 to 0.2714) suggests that there is some variation in the sample's judgements; for example, some respondents may have a mixed impression of generic drugs or think they are more costly.

Consequences for Marketing Approaches

This major discovery highlights how important it is for healthcare providers and pharmaceutical businesses to take advantage of the favourable impression of generic medications' cost-effectiveness. Generics' marketing campaigns that highlight their cost-effectiveness have the potential to win over more customers. This might take the form of awareness campaigns stressing the financial benefits of switching to generic drugs over branded ones and demonstrating that the two types of medicine are otherwise interchangeable in terms of quality and effectiveness.

Policy and Regulatory Factors to Think About

Looking at it from a regulatory standpoint, the results indicate that measures that make generic drugs more accessible and affordable may strengthen good consumer attitudes. We must have strong regulatory frameworks in place to guarantee the security and efficacy of generics and to allow for their competitive price. In order to keep generic drugs competitively priced, policymakers should think about ways to expedite their approval and encourage their manufacture. Beyond the issue of cost-effectiveness, future studies may investigate other elements impacting how consumers see generic medications. Considerations like safety, effectiveness, and brand recognition are all part of the picture. In addition, longitudinal studies might monitor how consumers' views develop over time, particularly in light of shifting healthcare policy and market dynamics.

Limitations

It should be noted that the survey has several limitations, such as a small sample size and respondents' demographics, thus it could not be representative of Nagpur as a whole. On top of that, survey takers' opinions do not necessarily correspond to how people really buy medicine. Using bigger and more varied samples, together with behavioural observations or real-world purchase data, might help future research overcome these constraints.

Ultimately, it is important to make deliberate efforts to capitalise on the notion that generic drugs are more cost-effective compared to non-branded alternatives. This opinion is statistically confirmed within the Nagpur sample. Greater acceptability and utilisation of generic medications may be fostered by stakeholders by addressing consumer awareness,



regulatory frameworks, and market strategies. This will eventually contribute to better healthcare affordability and access in the area.

Conclusion

Finally, this research has investigated and assessed the many aspects impacting the development of the generic medication industry in Nagpur. The study has offered a thorough insight of the present environment and perspectives around generic drugs using a mixed-methods approach that integrates quantitative surveys, qualitative interviews, and secondary data analysis. The data emphasise that many customers in Nagpur believe generic drugs are more affordable than non-branded alternatives. This view, backed by data, highlights a promising beginning for expanding the use of generic medications. To resolve misunderstandings and boost customer trust, tailored education and awareness initiatives are essential due to variety in views and concerns regarding quality and effectiveness.

Consumer choices about generic drugs were significantly impacted by healthcare practitioners. Their suggestions have a major effect on patients' decisions, thus it's crucial to include doctors and nurses in the process of increasing generics' adoption via education and incentives. The examination of market trends in Nagpur's generic medication sector showed encouraging signs of development, which are backed by strong regulatory frameworks that guarantee quality and competitive price. To maintain this development and provide an environment that is favourable for the expansion of the generic medication business, regulatory regulations must be continuously refined.

Improving consumer trust and preference for generic drugs may be achieved by strategic suggestions such as creating focused training programmes, increasing healthcare provider involvement, improving regulatory standards, and executing successful marketing campaigns. Ultimately, this research offers valuable knowledge that politicians, healthcare professionals, and pharmaceutical firms may use to make drugs more accessible and affordable in Nagpur. Stakeholders in metropolitan areas like Nagpur and elsewhere may help improve healthcare outcomes and create a more fair healthcare system by using these suggestions.

References

- Alian, A. A., et al. (2014). Patient knowledge, perceptions, and acceptance of generic medicines: A comprehensive review of the current literature. *Patient Intelligence*, 6, 1–29.
- Blasco-Oliete, P., et al. (2003). Views of primary care users concerning generic medicines and the cost of medication. *International Journal of Pharmacy*, 23(5), 113–145.
- Bridget, M. (2005). Consumer understanding and satisfaction associated with a 3-tier prescription drug benefit. *Journal of Managed Care Pharmacy*, 11(6), 450–492.
- Butt, Z., et al. (2005). Quality of pharmacies in Pakistan: A cross-sectional survey. *International Journal of Quality Health Care*, 17(4), 307–413.
- Desselle, S. P. (2001). Patient satisfaction with and knowledge of their prescription drug coverage. *Journal of Managed Care Pharmacy*, 7(1), 34–42.
- Dong-Churl, S. (1999). Trends of generic substitution in community pharmacies. *Pharmacy World & Science*, 21(5), 22–45.
- Dylst, P., et al. (2011). Tendering for outpatient prescription pharmaceuticals: What can be learned from current practices in Europe? *Health Policy*, 101(2), 123–156.
- Esosasere, M. (2007). The perceived benefits of generic versus branded medicines. *Institute of Business Science, University of Pretoria*, 112–113.
- Fatokun, O. (2013). Generic industry's perceptions of generic medicines policies and practices in Malaysia. *Journal of Pharmacy and Research*, 34(21), 80–84.
- Hassali, M. (2007). Consumers' views on generic medicines. *International Journal of Pharmacy Practice*, 79(88), 70–87.



- Hassali, M., et al. (2010). Knowledge, perception and attitude of community pharmacists towards generic medicines in Karachi, Pakistan: A qualitative insight. *Tropical Journal of Pharmaceutical Research*, 9(4), 409–415.
- Harding, D. (2010). White paper: Gaining market share in the generic drug industry through acquisitions and partnerships, 18*(5), 1–12.
- Hellerstein, J. (1998). The importance of the physician in the generic versus trade-name prescription decision. *The Rand Journal of Economics*, 29(1), 108–136.
- Karan Chawala, et al. (2014). A global comparison between brand-name and generic drugs.
- Kesselheim, A. S., et al. (2008). Clinical equivalence of generic and brand name drugs used in cardiovascular diseases. *JAMA*, 300(26), 45–67.
- Kesselheim, A. S., et al. (2010). Seizure outcomes following the use of generic versus brand-name antiepileptic drugs: A systematic review and meta-analysis. *Drugs*, 70(5), 21–56.
- Nightingale, S. L. (1998). The Food and Drug Administration. *JAMA*, 279(12), 34–56.
- Omotayo, F. (2013). Generic industry's perceptions of generic medicines policies and practices in Malaysia. *Journal of Pharmacy and Research*, 34(21), 80–84.
- Rozano, M., et al. (2009). Customer perceptions of perceived risk in generic drugs: The Spanish market. *Innovar*, 19(34), 53–64.
- Shrank, W., et al. (2007). Effect of content and format of prescription drug labels on readability, understanding and medication use: A systematic review. *The Annals of Pharmacotherapy*, 41(80), 23–67.
- Singal, G., et al. (2011). A comparative evaluation of price and quality of some branded versus branded-generic medicines of the same manufacturer in India. *Indian Journal of Pharmacology*, 43(2), 36–134.
- Stafford, R. S. (2008). Regulating off-label drug use—Rethinking the role of the FDA. *New England Journal of Medicine*, 358(14), 39–67.
- Suzanne, S. (2015). A systematic review and critical appraisal of literature on stakeholder perceptions of generic drugs. *BMC Medicine*. DOI: 10.1186/s12916-015-0415-3.
- Taun, A. (2013). Generic medicines policies in the Asia-Pacific region. *WHO South-East Asia Journal of Public Health*, 2(1), 72–74.
- Tinashe, Z. (2014). Consumer knowledge, attitudes and perceptions towards generic medicines. *Journal of Administration Pharmacy*, 41(5), 729–736.
- Tootelian, D., et al. (1988). Branded versus generic prescription drugs: Perception of risk, efficacy, safety and value. *Journal of Health Care Marketing*, 8(3), 26–29.
- Valles, J. A., et al. (2003). A prospective multicenter study of patient education on acceptability of generic prescribing in general practice. *Australian Journal of Primary Health*, 10(4), 30–88.