



Comparative Analysis Of Pharmaceutical Marketing Strategies: A Survey Of Generic Vs. Branding Approaches For Metformin In Antidiabetic Drug Market Management

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Abstract: This research investigates the comparative effectiveness of pharmaceutical marketing strategies for metformin in the antidiabetic drug market, particularly focusing on generic versus branding approaches. The study explores how factors such as cost-effectiveness, accessibility, and perceptions of quality and efficacy influence consumer preferences in choosing between generic and branded versions of metformin. Through a comprehensive literature review, various aspects are examined, including branding and generic strategies, dynamic brand choice processes, competition in pharmaceutical pricing, and safety and efficacy comparisons between generic and branded metformin.

The research methodology involves conducting a survey among physicians, patients, and pharmacists in the Vidarbha region of India to gather insights into their preferences and perceptions regarding generic and branded metformin. The findings from the survey indicate a preference for branded medicine among physicians and patients, with concerns about the efficacy and safety of generics. However, there is a lack of awareness and misconceptions about generic medicines among the surveyed population.

These findings underscore the need for increased awareness campaigns to promote the use of generic drugs, emphasizing their safety and efficacy to improve accessibility and affordability in healthcare.

Keywords: Pharmaceutical marketing, Generic vs. branded, Physician preferences, Patient preferences, Pharmacists' perspectives, Generic drug misconceptions, Pricing strategies, Promotion strategies.

INTRODUCTION

This research explores the impact of generic and branding strategies on the market dynamics and consumer preferences for antidiabetic drugs, focusing on metformin. Metformin's widespread use makes it an ideal candidate for studying how these strategies influence the pharmaceutical industry. Factors such as cost-effectiveness, accessibility, and perceptions of quality and efficacy drive the choice between generic and branded versions. With diabetes prevalence rising globally, understanding these marketing strategies is crucial for improving patient care, controlling healthcare costs, and shaping industry practices.

This paper aims to conduct a thorough survey and comparative analysis of marketing strategies for generic and branded metformin. It will examine pricing, promotion, physician and patient preferences, and regulatory factors to understand their impact on market dynamics, patient adherence, and healthcare outcomes. Through rigorous data analysis, the research aims to provide insights for pharmaceutical companies, healthcare providers, policymakers, and patients. By shedding light on the complexities of generic versus branding strategies in metformin and antidiabetic drug management, the study seeks to inform decision-making and promote advancements in pharmaceutical marketing practices for public health improvement.

PROCEDURE

This research aims to gather insights from key stakeholders' pharmacists, physicians, and patients regarding their experiences, preferences, and perceptions related to branded and generic Metformin. By examining their perspectives, this study seeks to identify factors influencing the utilization of these medications and inform marketing strategies to enhance patient care and medication accessibility.

METHODOLOGY FOR SURVEY

The survey was conducted for following target populations. The population chosen for study comprises of the following categories:

Table.1. Number of Responses of Target Population

SR.NO.	CATEGORY	NUMBERS CONSULTED
1	PHYSICIANS	20
2	PATIENTS	327
3	PHARMACIST	51

This survey was conducted for a period of 1 month from February to March 2024. This data was collected from Vidarbha Region. The standard procedure a questionnaire was designed to collect the data focused on the generic or branded preference of the drugs by physicians, patients, and pharmacists. The survey was conducted on nearly 20 physicians, 327 patients and 51 pharmacists which includes :

- For physicians response we visited to our nearby area and some through online platforms like Google form.
- For patients response we visited to our nearby hospitals from out-patient department and contacted some through online platforms like Google form.
- For pharmacists response we visited to pharmacy stores attached to hospital, general pharmacy counter and pharmacy franchises like Medplus and Aarogya Bharti in our nearby area and some through online platforms like Google form.

SELECTION OF AREA

We are the students of the Dr. Rajendra Gode Institute of Pharmacy, Amravati. Thus, we selected Vidarbha region as the area for the conduction of our survey. We collected data from major cities from Maharashtra's Vidarbha region such as Amravati, Akola, Chandur Bazar and Wardha and Nagpur, and other small cities of nearby districts and some data via sharing on online portal.

SURVEY REPORT

We designed some standard questions for:

- Collection of data for survey.
- To examine the general information regarding generic and branded drugs.
- About the maximum preference of the people regarding drugs (generic and branded).
- To examine the impact of generic medicine on Indian market.
- To examine a myth about generic medicine.

✓ Questionnaire for Physicians

1. Which form of medicine will you prefer?
 - Generic
 - Branded
 - Not known
2. Does generic medicine produce side-effects compared to brand name medicine?
 - Yes
 - No
3. Are you aware of the scheme of Government of India called Jan Aushadhi?
 - Yes
 - No
4. If two drugs (generic and branded) are having same therapeutic efficacy (bioavailability), what will you prefer?
 - Generic
 - Branded
 - Drugs given by Medical Representative (MR)

SURVEY OUTCOME

1. Which form of medicine will you prefer?

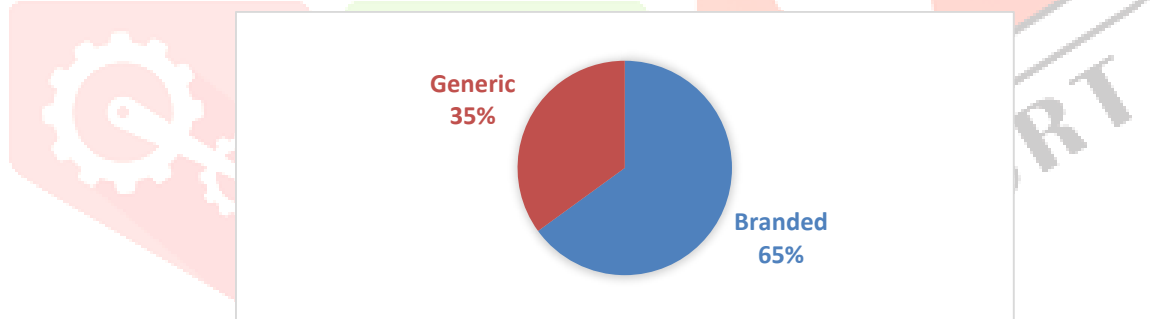


Fig.1. Physicians Preference of Medicine as Generic or Branded

The above graph shows the percentage of physicians preferring generic or branded medicine. Almost 65% physicians stated that they prefer branded medicine over generic.

Doctors often prefer brand-name medications for different reasons like trust in the brand's reputation or perceived effectiveness.

2. Does generic medicine produce side-effects compared to brand name medicine?

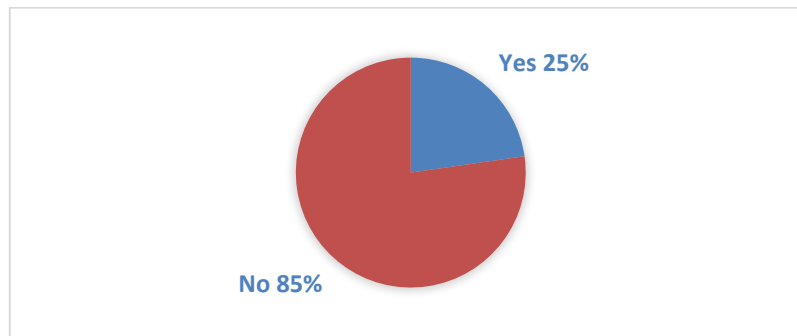


Fig.2. Physicians Preference for Side Effects Between Generic or Branded

The above graph shows physicians view of physicians about the side-effects of generic medicine. Over 85% physicians said that generic medicine does not produce side-effect as compared to branded medicine.

3. Are you aware of the scheme of Government of India called Jan Aushadhi?

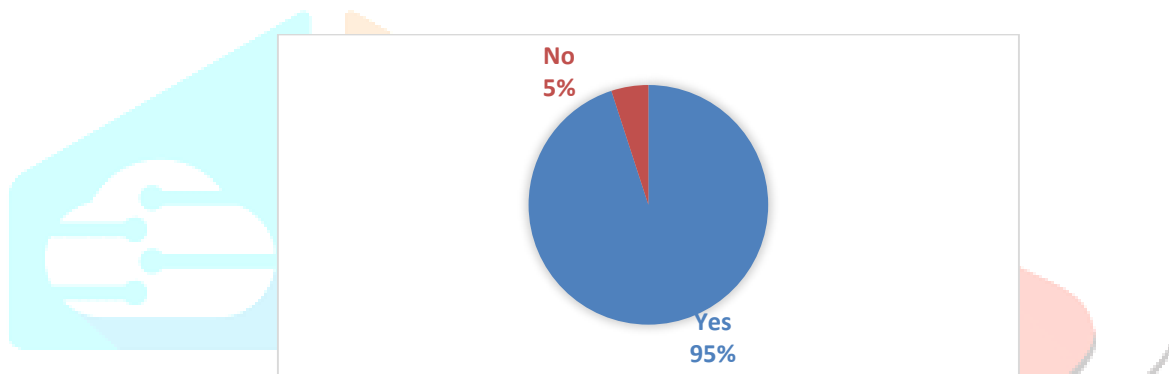


Fig. 3. Physicians Awareness of Scheme Named Jan Aushadi

The above graph shows about the awareness of physicians about the Jan Aushadhi scheme Almost 95% people stated that they are aware of the scheme of Government of India called Jan Aushadhi.

The Jan Aushadhi scheme in India is widely recognized by physicians, indicating successful government promotion efforts. This high awareness among doctors is crucial as they play a key role in prescribing affordable medications. It suggests the program is on track to achieve its goal of providing quality generic medicines at low prices.

4. If two drugs (generic and branded) are having same therapeutic efficacy (bioavailability), what will you prefer?

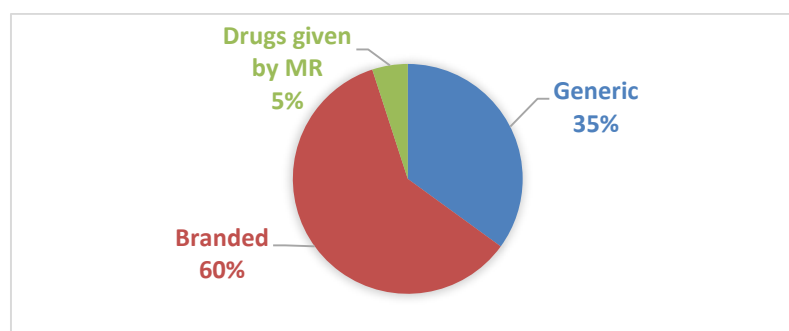


Fig.5. Physician Preference as Per Therapeutic Efficacy

The above graph shows about the 60% of physicians will preference of branded drugs, 36% physicians said that they will prefer generic drugs, 5% said that they will prefer branded drugs and 5% of physicians will preference drugs given by MR if two drugs (generic and branded) have same therapeutic efficacy (bioavailability).

After reviewing the data, it's evident that most people (60%) prefer branded drugs due to perceived quality or loyalty. However, (35%) still Favors branded drugs, possibly due to their cost-effectiveness and equivalent efficacy. Interestingly, a small group (5%) physicians mentioned a preference for drugs promoted by medical representatives, indicating the influence of marketing tactics.

✓ Questionnaire for Pharmacists:

1. Are generic medicines available in your Pharmacy?
 - Yes
 - No
2. Do you promote generic medicines?
 - Yes
 - No
3. Do you personally buy generic medicines instead of brand?
 - Yes
 - No
4. What is the percentage of generic medicines being prescribed by physician?
 - 25%
 - 50%
 - 75%
 - 100%
5. Which brands of Metformin have the maximum sale in your Pharmacy?
 - Glycomet
 - Metford500
 - Satmet-SR500
 - Glucoform 500
6. Which Brand of Metformin has the maximum sales by your Pharmacy?
 - Metformin 500
 - Glycoheal 500
 - Tenmet SR500

OUTCOME OF SURVEY

1. Are generic medicines available in your Pharmacy?

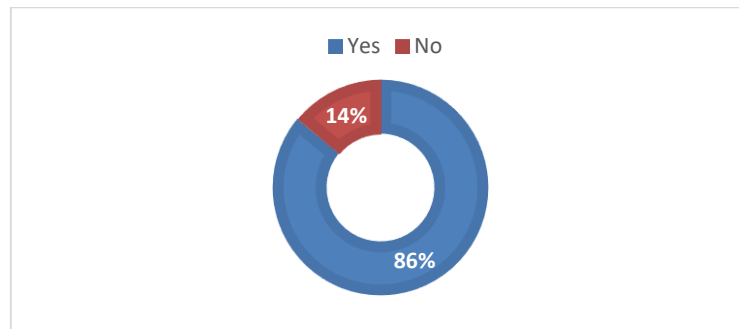


Fig.6. Pharmacist Preference for Availability of Generic Drugs

The above distribution graph shows % of availability of generic medicines in pharmacy. At about 86% pharmacy do not have generic medicines in their pharmacy 14% pharmacy have generic medicines for sale. Based on the provided data, it appears that a significant portion of pharmacies (86%) do not have generic medicines available, while only 14% do offer them for sale. This indicates a potential preference or reliance on branded medications among pharmacists.

2. Do you promote generic medicines?

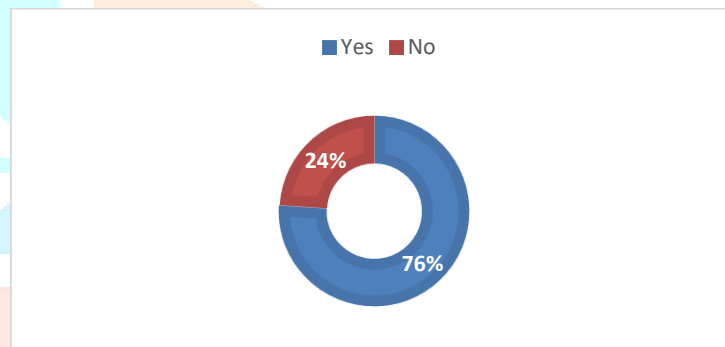


Fig.7. Pharmacist Preference for Promotion of Generic Drugs

The above distribution graph shows % of pharmacists promoting generic medicine. About 76% of pharmacist promote generic medicines 24% of pharmacist do not promote generic medicines.

Pharmacists promoting generics believe they save money, adhere to healthcare guidelines, and trust their efficacy. On the other hand, non-promoting pharmacist's express concerns about quality, prioritize patient preferences, or lack sufficient knowledge about generics.

3. Do you personally buy generic medicines instead of brand?

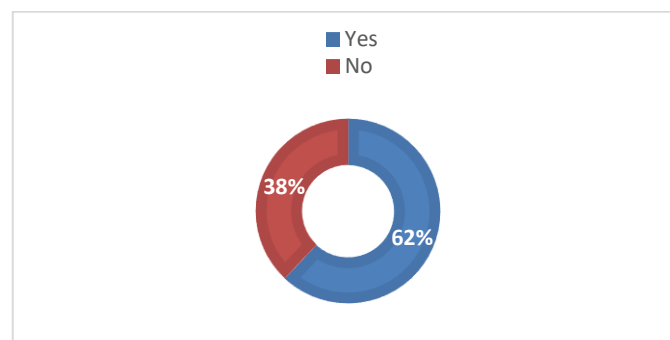


Fig.8. Pharmacist Preference for Personally Buying Generic Medicine

About 62% of pharmacists personally buy generic medicines instead of brand. About 38% of pharmacists prefer brand medicines over generic.

Pharmacists lean towards generics for their affordability and trust in equivalence, based on industry knowledge. Positive personal experiences, like fewer side effects, also sway their preference. However, some still opt for branded drugs due to loyalty or perceived quality, despite the higher cost. Overall, their choice hinges on cost-effectiveness, trust, personal experiences, and brand perception.

4. What is the percentage of generic medicines being prescribed by physician?

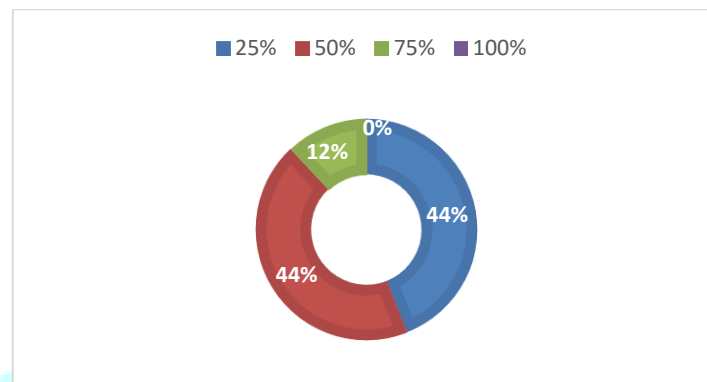


Fig.9. Pharmacist Preference for generic medicines being prescribed by physician

The above distribution graph shows % of physicians prescribing generic medicines. About 44% pharmacists said that only 50% physicians prescribe generic medicines, 44% pharmacists said that only 25% physicians prescribe generic medicines and 12% pharmacists said that only 75% physicians prescribe generic medicines some doctors might not be aware of generic options or have doubts about their quality. They might also prioritize patient preferences or be influenced by pharmaceutical companies' marketing. Some may just stick to their usual prescription habits.

5. Which brands of Metformin have the maximum sale in your Pharmacy?

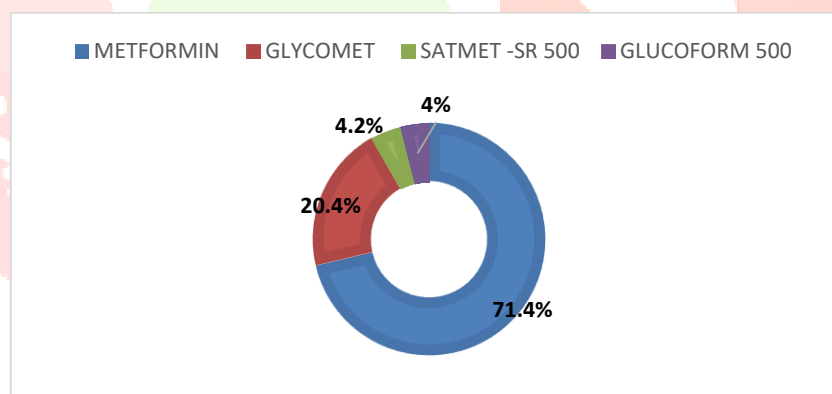


Fig.10. Pharmacist Preference for Sale of Different Branded Drugs

The following distribution graph shows % of sale of different brand of METFORMIN - 71.4%, GLYCOMET- 20.4% ,SATMET -SR 500- 4.2% ,GLUCOFORM 500- 4.0 % From a pharmacist's perspective, in their pharmacy, METFORMIN - 71.4%, GLYCOMET- 20.4% , SATMET -SR 500- 4.2%, GLUCOFORM 500- 4.0 %. This could be attributed to factors such as customer trust, efficacy and affordability, leading to higher sales volume of METFORMIN in compared to other brands.

6. Which generic medicine Metformin has the maximum sales by your Pharmacy?

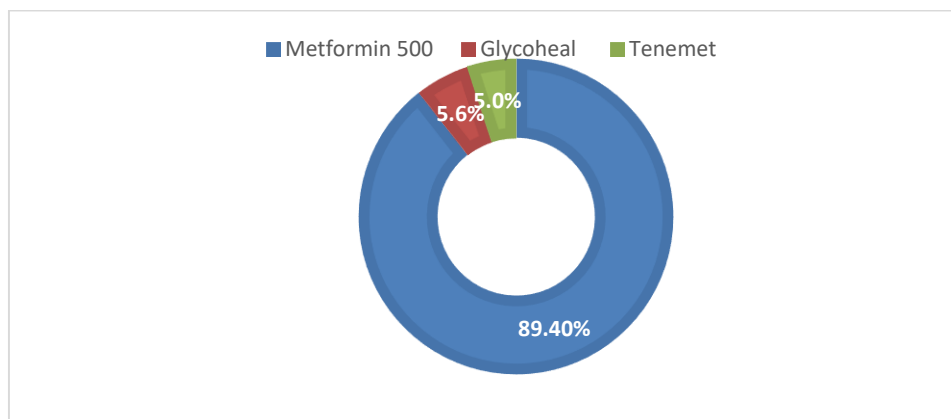


Fig.11. Pharmacist Preference for sale of different generic form of Metformin

The above distribution graph shows the % of sale of different generic form of Metformin. 89.4% - Metformin 500, 5.6% - Glycoheal, 5.0% - Tenemet, In their pharmacy, most customers prefer Metformin 500, which makes up 89.4% of our generic Metformin sales. Glycoheal and Tenemet have smaller shares at 5.6% and 5.0% respectively. This preference for Metformin 500 could be because customers trust its effectiveness and affordability more compared to other generic options like Glycoheal and Tenemet, making it the top choice for many.

✓ Questionnaire for Patients:

- Which type of medicines do you prefer?
 - Generic
 - Branded
 - Don't know
- Do you get the prescribed medicine in your nearby store?
 - Yes
 - No
- Why would you prefer generic drugs?
 - Due to low price
 - Due to its quality
 - Due to prescription
 - Other reasons
- Why would you prefer branded drugs?
 - Due to low price
 - Due to quality
 - Due to prescription
 - Other reasons
- Have you ever been told by a pharmacist or physician about generic and branded drugs?
 - Yes
 - No
- From where did you hear or see any information regarding generic drugs?
 - Newspaper
 - Pharmacist

7. Have you ever asked your doctor for lower cost drugs or generic medicines?
 - Yes
 - No
8. What do you think are the reasons behind the high cost of medicine?
 - Due to patients
 - Don't know
9. Do you think branded drugs are more efficacious than generic drugs?
 - Yes
 - No
10. Do you think for developing countries like India, generic drugs are the more suited option?
 - Yes
 - No

➤ Outcome of the Survey

1. Which type of medicines do you prefer?

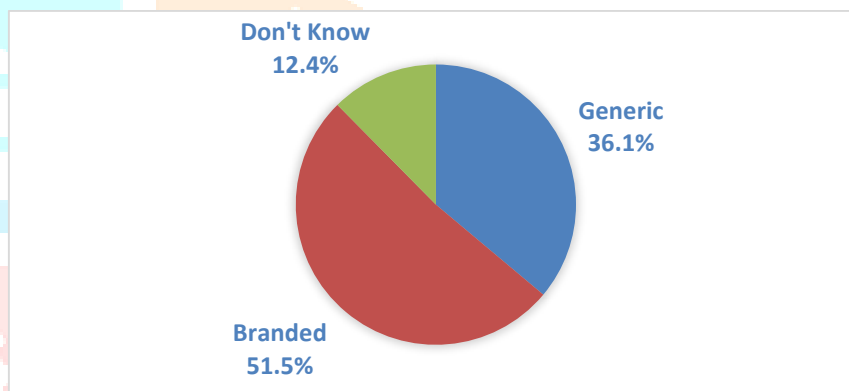


Fig.13. Patient's Preference for Type of Medicine to get Prefer

The above graph shows the distribution of % of people's awareness about use of type of medicine whether generic or branded. About 51.5% of people use branded medicine. 36.1% of people use generic medicine. 12.3% of people are not aware about the medicine they use whether generic or brand.

2. Do you get the prescribed medicine in your nearby store?

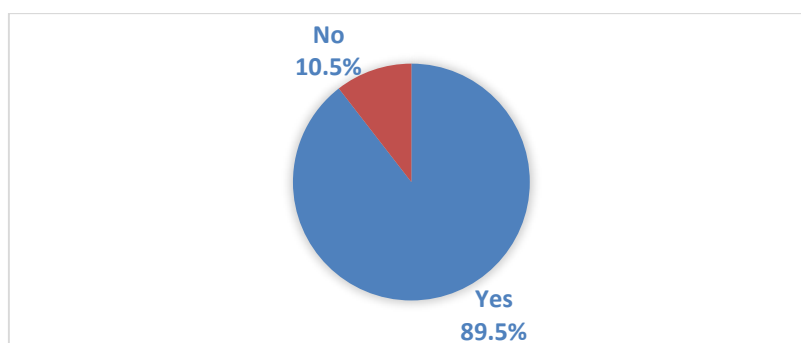


Fig.14. Patient's Preference for to Prescribed Medicine in Nearby Store

The above graph shows about availability of prescribed medicine at medical store. About 89.5% prescribed medicines available at store. According to graph only about 10.5% of the medicines are not available at medical store.

This suggests that most medications are obtainable, but there are shortages for some. To address this issue, improvements are needed in stock management, supply chains, and communication between healthcare providers and pharmacists. Additionally, investigating the reasons behind these shortages is crucial for developing targeted solutions to ensure better availability of prescribed medications.

3. Why would you prefer generic drugs?

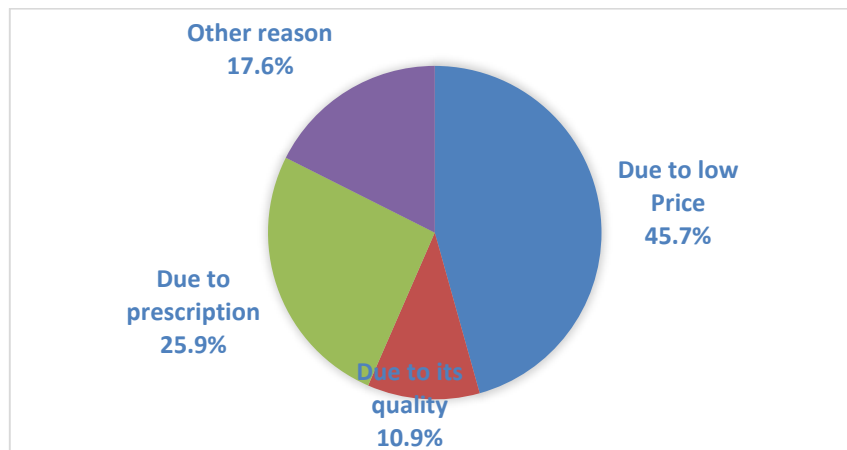


Fig.15. Patient's Preference for Generic Drug to Purchase

The above graph reveals the reasons for preference to generic medicines. About 45.7% of people prefer generic because of their low cost. 10.9% of people prefer because of their quality. 25.9% prefer generic medicine just because they are prescribed by physicians. 17.6% of people prefer generic medicine due to other reasons.

These findings underscore the importance of cost, quality perception, and healthcare provider guidance in shaping preferences for generics, emphasizing accessible healthcare and informed patient-provider communication.

4. Why would you prefer branded drugs?

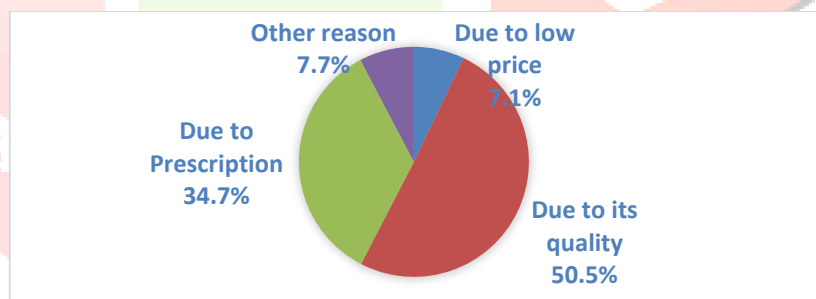


Fig.16. Patient's Preference for Branded Drugs

The above graph reveals the reasons for preference to generic medicines. About 7.1% of people prefer generic because of their low cost. 50.5% of people prefer because of their quality. 34.7% prefer generic medicine just because they are prescribed by physicians. 7.1% of people prefer generic medicine because of their low cost and quality (other reason).

It highlights the main reasons why individuals prefer branded drugs, emphasizing quality perception, physician recommendations, and the perceived balance between cost and quality. These insights shed light on the factors that shape preferences for branded medications.

5. Have you ever been told by a pharmacist or physician about generic and branded drugs?

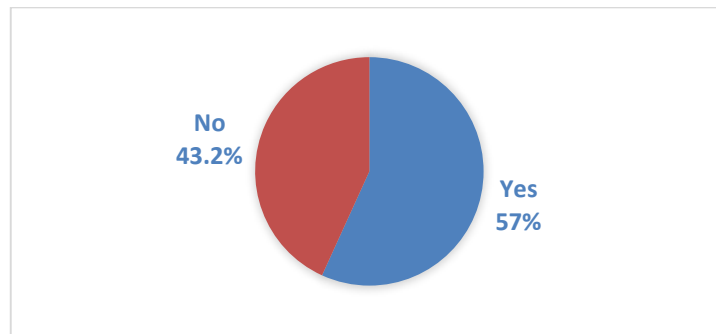


Fig.17. Patient's Preference for Pharmacist/ Physician about Generic & Branded Drugs

According to majority 56.8% people said that pharmacist and Physician does not provide information about generic and branded drugs. About 43.2% of people said that pharmacist and Physician provide information about generic and branded drugs.

6. From where did you hear or see any information regarding generic drugs?

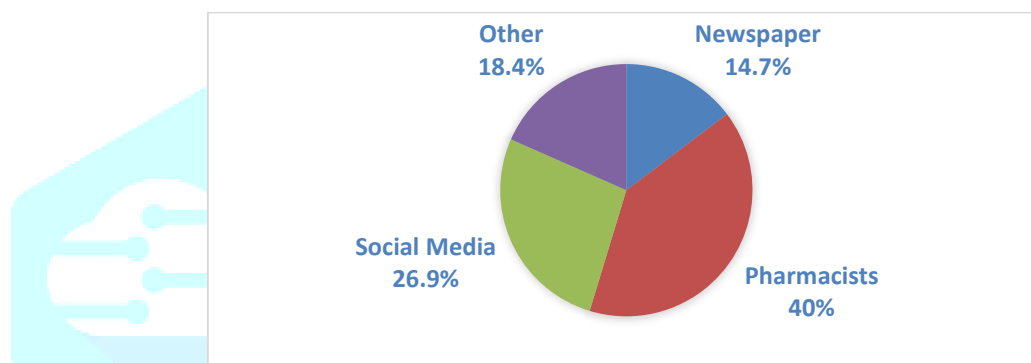


Fig.18. Patient's Preference to Hear or See any Information Regarding Generic Drugs

The above graph shows % of various sources from where people get information about generic medicines. Prominently, about 26.9% social media is the source of information of generic medicine. About 40% people get information from pharmacists. About 14.7% people get information from newspaper. About 18.4 % friends and family is the source of information about generic medicines.

People seek information about generic drugs from various sources, including pharmacists, social media, friends and family, and newspapers. They rely on pharmacists for expert guidance, turn to social media for convenience and community engagement, seek advice from friends and family due to trust and familiarity, and consult newspapers for credible coverage. These diverse sources reflect a need for expertise, accessibility, trust, and credibility in obtaining information about generic drugs, emphasizing the importance of informed decision-making in healthcare.

7. Have you ever asked your doctor for lower cost drugs or generic medicines?

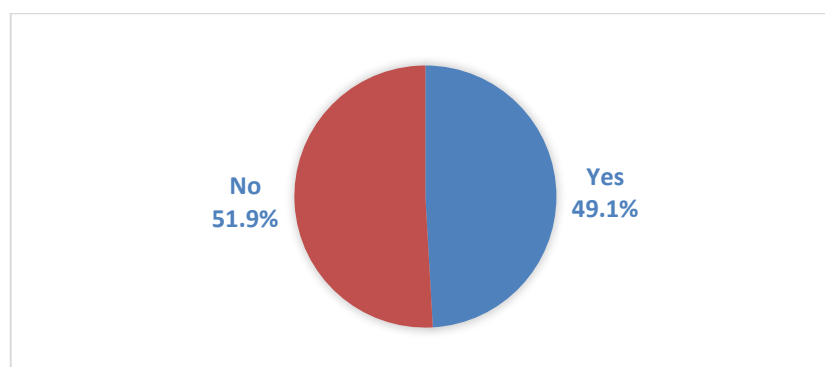


Fig.19. Patient's Preference for Asking Doctor for Lower Cost Drugs or Generic Medicines

The above graph shows % of people if they ask about low-cost medicine. Majority of people 50.9% do not ask for low-cost medicine. About 49.1% of people ask for physicians for low-cost medicine.

This suggests a balanced distribution between those who inquire and those who do not. Those who ask likely do so to address affordability concerns or explore cost-saving options. Conversely, those who don't may trust their physician's judgement or may be unaware of the option. Promoting awareness about generic medications and fostering open communication between patients and healthcare providers regarding medication costs could alleviate barriers to accessing affordable healthcare and enhance medication adherence.

8. What do you think are the reasons behind the high cost of medicine?

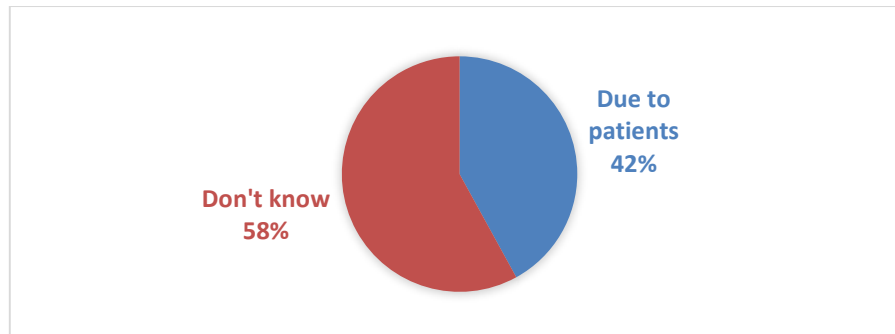


Fig.20. Patient's Preference for Reasons Behind the High Cost of Medicine

The above graph reveals the reasons for high cost of medicines. According to graph about majority 58% reason for high cost is that medicines are patented. About 42% of people are not aware about reasons for high cost of medicines.

9. Do you think branded drugs are more efficacious than generic drugs?

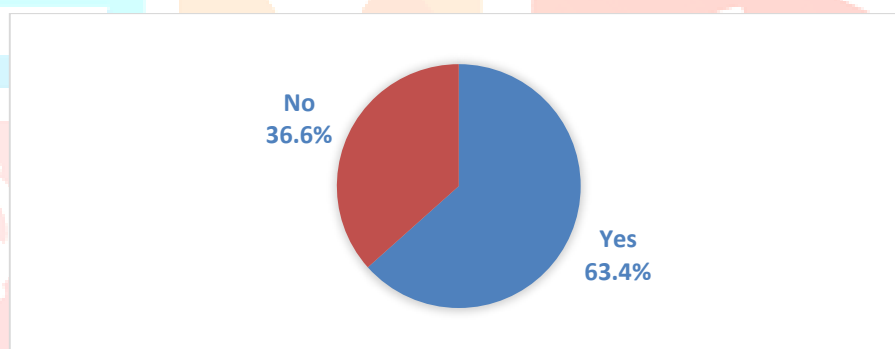


Fig.21. Patient's Preference for Branded Drugs are More Efficacious than Generic Drugs

The above graph reveals that the 63.4% people think that the branded drug are more effective than the generic medicine. And 36.6% people think that generic drugs are more effective than the branded medicine. it's important to note that scientific evidence often demonstrates generics' equal effectiveness. Generic drugs contain the same active ingredients and undergo rigorous testing for safety and efficacy. Perceptions of branded drugs' superiority may be influenced by factors like marketing or personal experiences.

10. Do you think for developing countries like India, generic drugs are the more suited option?

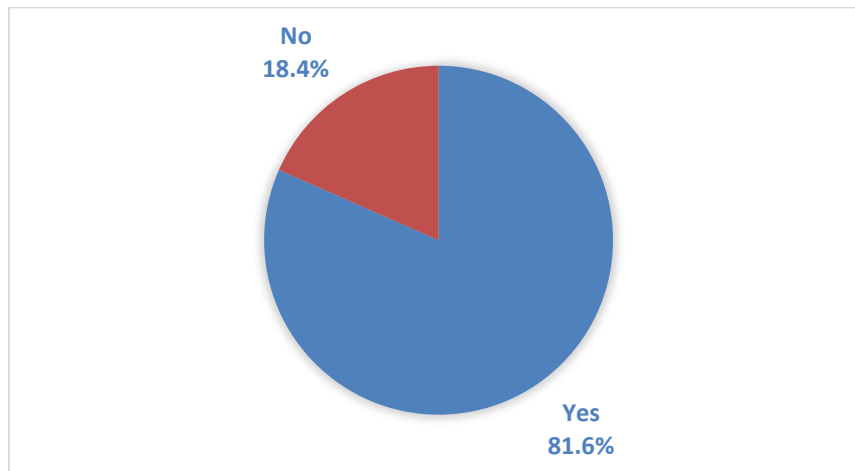


Fig.22. Patient's Preference for Developing Countries Like India, Generic Drugs Being More Suited

According to graph, 81.6% of people say that generic medicines are more suited option for developing countries like India. And 18.4% of people say that generic medicines are not suited option for developing countries.

This strong consensus indicates several advantages of generics in such contexts. Firstly, generics are cost-effective, ensuring accessibility in countries with limited healthcare resources and lower incomes. Secondly, they are widely available and distributed without patent restrictions, guaranteeing a consistent supply to meet healthcare needs. Thirdly, generic drugs undergo rigorous testing, ensuring they are as effective and safe as branded counterparts. Finally, generics promote competition and innovation, driving down prices and encouraging advancements in healthcare. Promoting generic drug use through policy initiatives and awareness campaigns is crucial for enhancing healthcare accessibility and affordability in developing countries like India.

CONCLUSION

This survey was conducted for period of 1 month from February 2024 to March 2024. As the standard procedure a questionnaire was designed to collect the data focused on the generic or branded preference of the drugs by physicians, patients and pharmacists. The survey was conducted on nearly 20 physicians, 327 patients and 51 pharmacists. The responses were collected by visiting to our nearby physician, hospitals and pharmacist area and some through online platforms like Google form.

From the all 3 surveys of patients, pharmacists and physicians it was observed that % of sale and use of brand medicine is more than generic medicines. About 80% of physicians prefer brand medicine so brand medicines are prescribed more and that is why from pharmacist's survey availability of brand medicines is good as compare to generic medicine. According to survey major reason for high cost of brand medicine is because they are patented. From patients survey it was observed that majority of patients prefer brand medicine because of their quality and generic medicine because of their low cost. From survey it was observed that people are not so aware about concept of generic medicine. Major source of information about generic medicine is social media, newspapers etc. majority of people said that they are not getting information about generic medicines about their usefulness so there are so many misconceptions about generic medicines are observed among the people.

In brand form Glycomet has maximum sell and in generic form Metformin has maximum sell. There is no any compulsion on pharmacist or physician for the high selling of branded form. We think that due to high demand of brand form from patients resulting high sell of brand form. We need to create more awareness about generic drugs among the people. For these we need to organize some campaign, we should spread knowledge about it, government should take a proper measure. By creating awareness about generic medicine, poor people can take a well treatment in affordable price.

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