

# Comparative study of Generic vs Branded Drugs in Chalisgaon Region

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***Abstract***—Generic medicines play an important role in reducing healthcare costs and improving access to treatment. However, the use of generic medicines is often influenced by public perception, awareness, and trust. The present study was conducted to compare generic and branded medicines in the Chalisgaon region with respect to awareness, preference, cost perception, and acceptance among the public. A cross-sectional survey was carried out using a structured questionnaire distributed through online and offline methods. A total of 66 participants responded to the survey. The results showed that 84.8% of respondents had heard about generic medicines, while 56.1% believed that generic and branded medicines have the same therapeutic effect. Around 51.5% preferred medicines based on doctor recommendation, whereas 28.8% preferred branded medicines and 19.7% preferred generic medicines. Furthermore, 68.2% of participants were willing to switch to generic medicines if recommended by a doctor. The findings indicate that awareness regarding generic medicines is fairly good, but misconceptions and trust issues still exist. Doctor recommendation was found to be a major factor influencing medicine choice. Increased awareness programs and active promotion by healthcare professionals may improve the acceptance and use of generic medicines.

***Index Terms***—Generic medicines, Branded medicines, Awareness, Cost perception, Chalisgaon, Survey study.

## I. INTRODUCTION

Medicines play a vital role in the prevention, management, and treatment of various diseases. In modern healthcare systems, two main categories of medicines are commonly available: branded medicines and generic medicines. Branded medicines are marketed by pharmaceutical companies under specific trade names, whereas generic medicines are equivalent versions that contain the same active ingredient, dosage form, strength, and route of administration as the original branded

products<sup>1</sup>. Despite being therapeutically equivalent, these two categories differ significantly in terms of cost, perception, and acceptance among the general public<sup>2</sup>.

Generic medicines are introduced into the market after the patent expiry of branded drugs. Since generic manufacturers do not bear the initial costs of drug discovery, development, and extensive marketing, these medicines are usually available at a much lower price compared to their branded counterparts<sup>3,26</sup>. This cost difference makes generic medicines an important tool in reducing healthcare expenditure, especially in developing countries like India where a large portion of the population pays for medicines out-of-pocket<sup>4</sup>. The availability of affordable medicines can improve treatment adherence and overall health outcomes<sup>5</sup>.

Although generic medicines are required to meet strict regulatory standards of quality, safety, and efficacy, their acceptance among patients is still influenced by various factors<sup>6</sup>. Regulatory authorities ensure that generic medicines demonstrate bioequivalence with branded drugs, meaning that they release the same amount of active ingredient into the bloodstream in a similar time frame<sup>7,25</sup>. However, despite this scientific equivalence, many people continue to have doubts about the effectiveness and quality of generic medicines<sup>8</sup>. These misconceptions are often influenced by factors such as brand loyalty, marketing strategies, and lack of awareness<sup>9</sup>.

One of the major factors affecting the use of generic medicines is the perception of patients and healthcare professionals<sup>10</sup>. Patients often associate higher cost with better quality, which leads to a preference for branded medicines. In addition, doctors play a crucial role in determining medicine choice, as patients usually rely on their prescriptions without questioning alternatives<sup>11,19</sup>. Pharmacists can also influence decisions by recommending substitutes, but their role varies depending on patient trust and local practices<sup>12</sup>.

In India, the government has taken several initiatives to promote the use of generic medicines, such as the Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP), which aims to provide quality generic medicines at affordable prices through dedicated stores<sup>13</sup>. Despite these efforts, the level of awareness and utilization of generic medicines still varies across different regions and populations<sup>14,20</sup>. Urban populations may have better access to information, while semi-urban and rural areas may face challenges related to awareness and availability<sup>15</sup>.

The Chalisgaon region represents a semi-urban area where healthcare practices are influenced by both traditional beliefs and modern medical systems. Studying this region provides valuable insights into the awareness, perception, and usage patterns of generic and branded medicines among the general public<sup>16,21</sup>. Understanding these factors is important for identifying barriers to the acceptance of generic medicines and for developing strategies to promote their use<sup>17</sup>.

Therefore, the present study was conducted to evaluate and compare generic and branded medicines in the Chalisgaon region with respect to awareness, preference, cost perception, and willingness to adopt generic alternatives<sup>22,23</sup>. The findings of this study may help in understanding public behavior and in designing interventions to improve the acceptance of generic medicines, ultimately contributing to more affordable and accessible healthcare<sup>18,24</sup>.

## II. MATERIALS AND METHODS

### Study Design

A cross-sectional questionnaire-based survey was conducted.

### Study Area

Chalisgaon region, Maharashtra, India.

### Study Population

General public including students, employed individuals, homemakers, and others.

### Sample Size

A total of 132 participants responded.

### Data Collection Tool

A structured questionnaire containing demographic and medicine-related questions was prepared.

### Data Collection Method

Responses were collected using Google Forms and direct interaction.

### Parameters Evaluated

- Awareness of generic medicines
- Preference between generic and branded medicines
- Perception of effectiveness
- Cost-related beliefs
- Willingness to switch to generics
- Source of medicine recommendation

### Data Analysis

Data were analyzed using percentages and represented through pie charts.

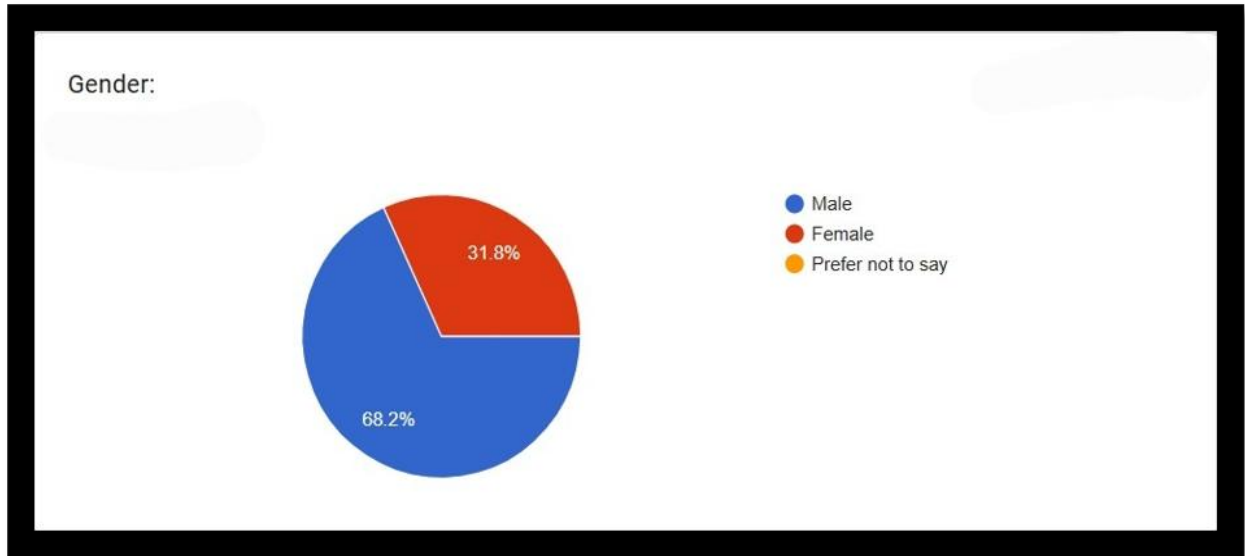
## III. RESULT

The data collected from the questionnaire survey were analyzed and presented in the form of tables, pie charts, and bar graphs. A total of 132 responses were obtained from participants in the Chalisgaon region. The results provide information regarding awareness, perception, and preference related to generic and branded medicines.

### 3.1 Gender Distribution of Participants

Table 3.1: Gender Distribution of Participants

Gender	Number of Participants	Percentage (%)
Male	90	68.2%
Female	42	31.8%
Total	132	100

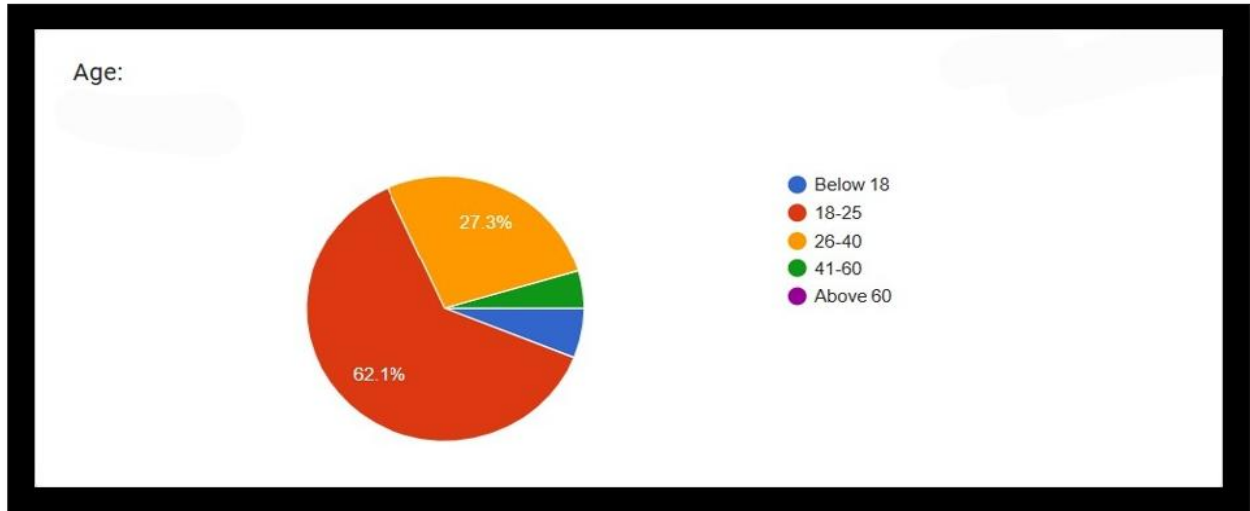


The pie chart shows that 68.2% of participants were male, while 31.8% were female. This indicates that male participants were more actively involved in the study compared to females.

### 3.2 Age-wise Distribution of Participants

Table 3.2: Age-wise Distribution of Participants

Age Group	Number of Participants	Percentage (%)
Below 18	2	1.5%
18-25	82	62.1%
26-40	36	27.3%
41-60	10	7.6%
Above 60	2	1.5%

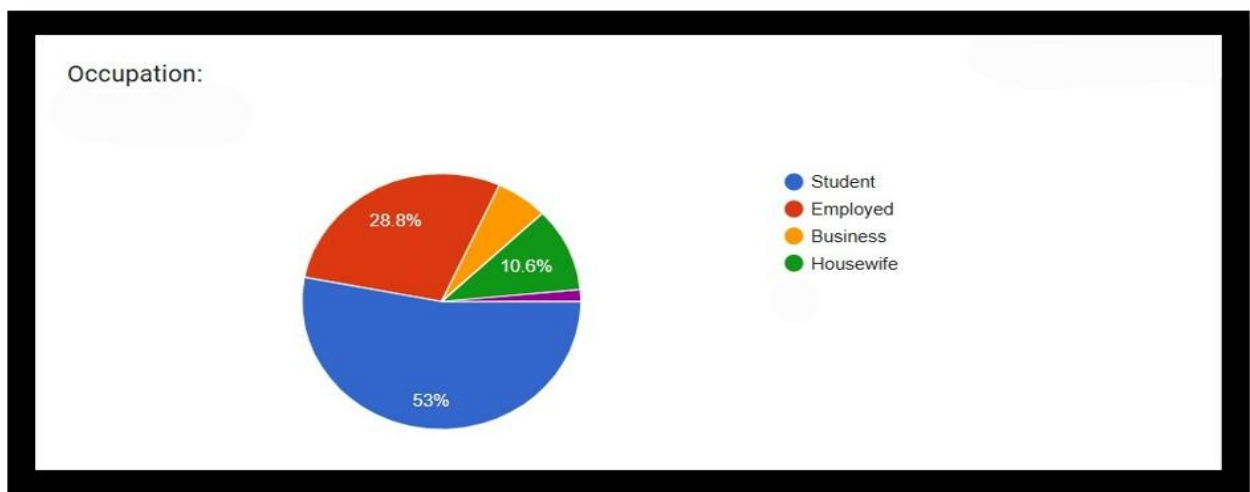


The majority of participants belonged to the age group of 18–25 years (62.1%), followed by 26–40 years (27.3%). This indicates that young adults formed the major portion of the study population.

### 3.3 Occupation Distribution

Table 3.3: Occupation Distribution

Occupation	Number of Participants	Percentage
Student	70	53.0%
Employed	38	28.8%
Housewife	14	10.6%
Business	6	4.5%
Others	4	3.1%

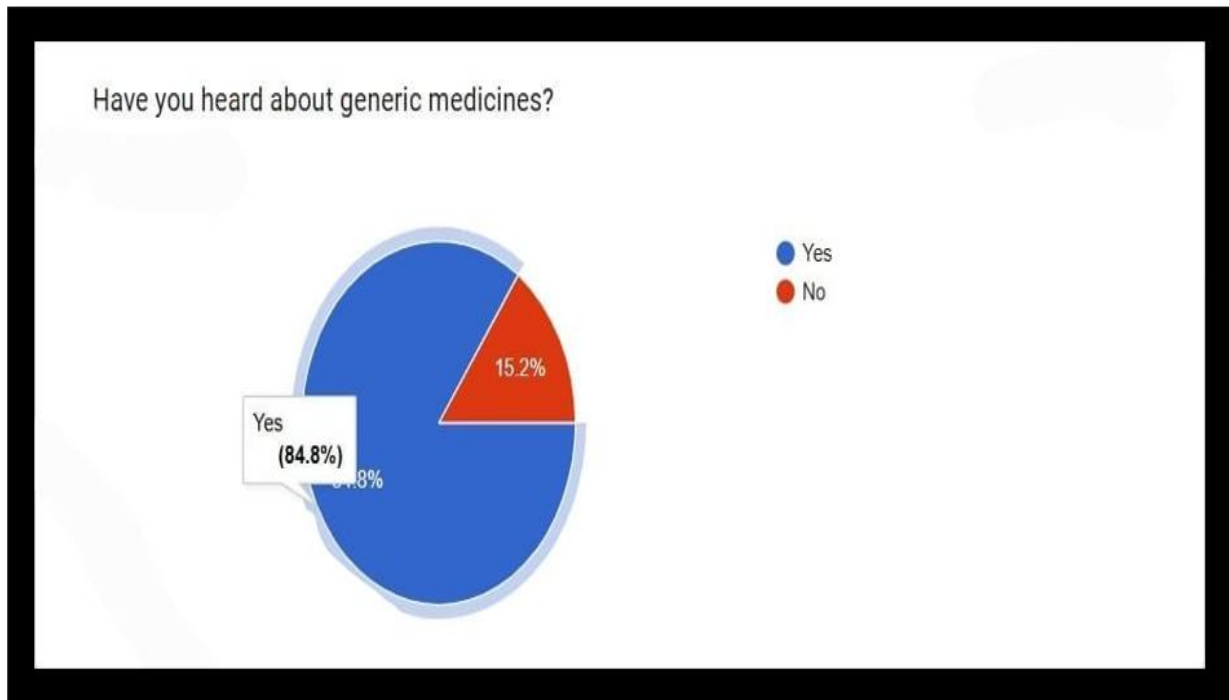


The chart indicates that students represented the largest group of respondents (53%), followed by employed individuals (28.8%).

### 3.4 Awareness about Generic Medicines

Table 3.4: Awareness about Generic Medicines

Response	Number	Percentage (%)
Yes	112	84.8%
No	20	15.2%

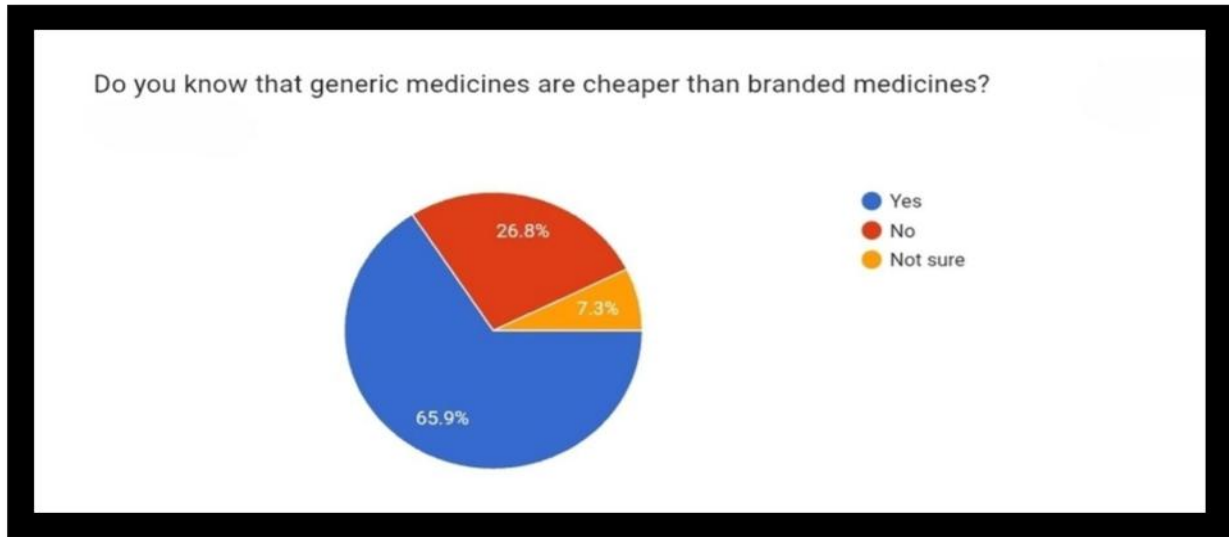


The majority of participants (84.8%) had heard about generic medicines, indicating good awareness among the study population.

### 3.5 Knowledge about Cost Difference

Table 3.5: Knowledge about Cost Difference

Response	Number	Percentage
Yes	88	65.9%
No	36	26.8%
Not Sure	8	7.3%

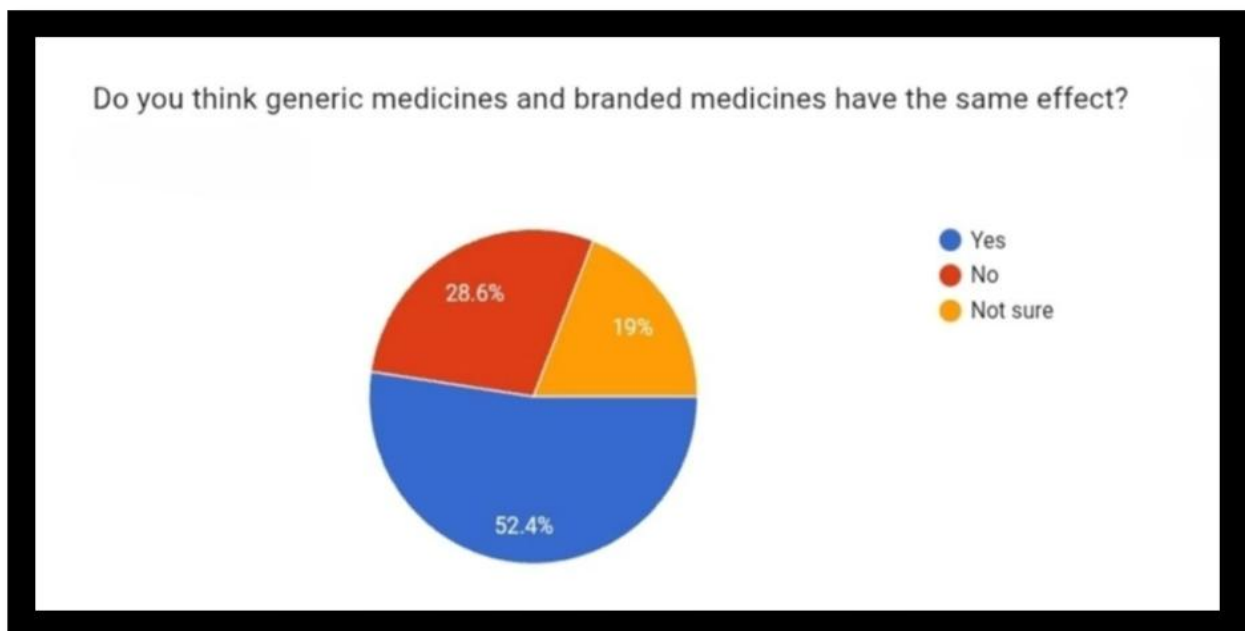


Most participants were aware that generic medicines are cheaper than branded medicines.

### 3.6 Perception Regarding Same Effect

Table 3.6: Perception Regarding Same Effect

Response	Number	Percentage
Yes	70	52.4%
No	38	28.6%
Not Sure	24	19%

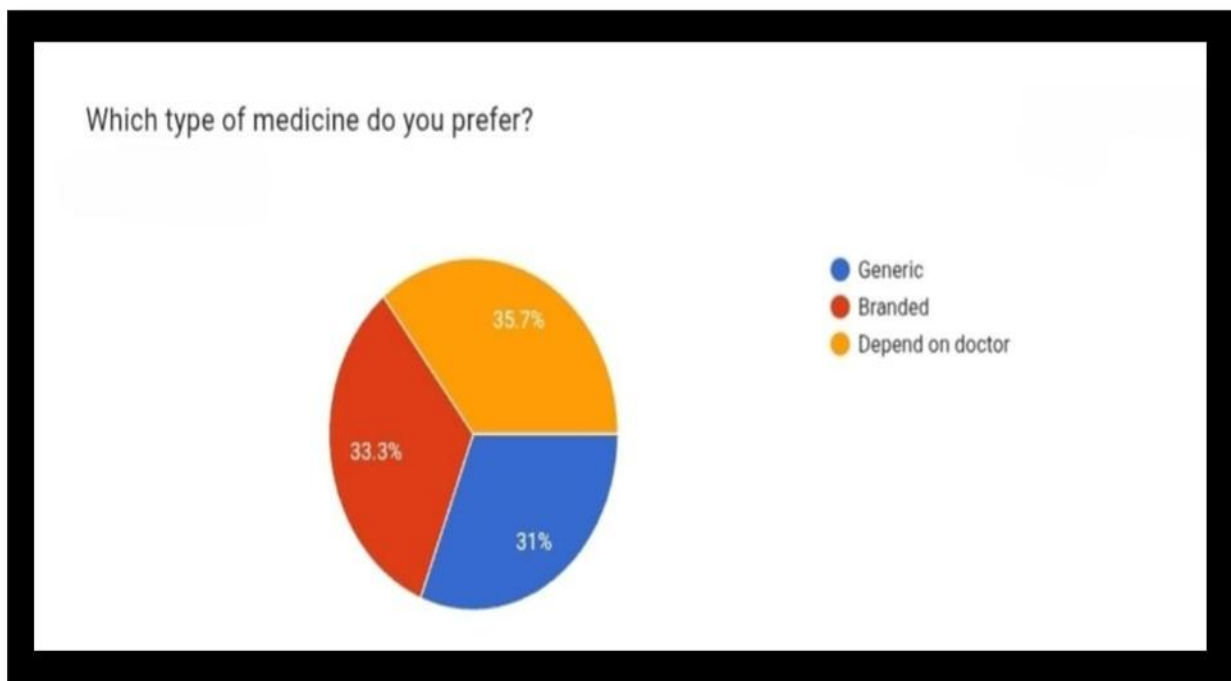


More than half of the Participants believed that generic and branded medicines have the same therapeutic effect

### 3.7 Medicine Preference

Table 3.7: Medicine Preference

Preference	Number	Percentage
Generic Medicines	40	31%
Branded Medicines	44	33.3%
Depends on Doctor	48	35.7%

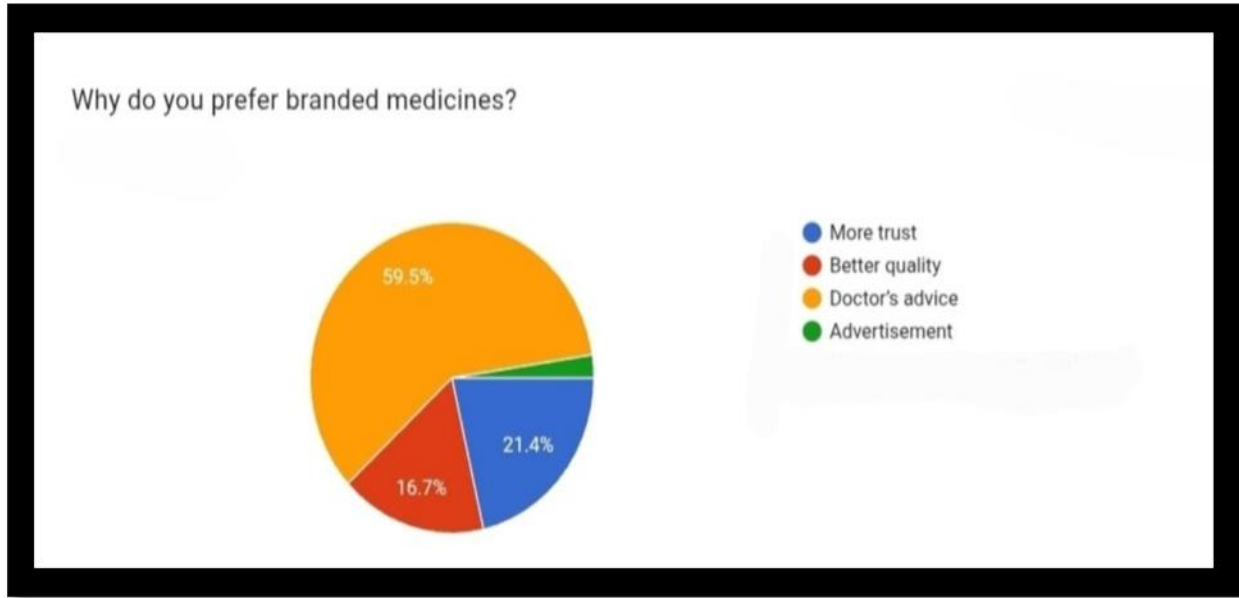


Most participants preferred medicines based on doctor recommendation

### 3.8 Reasons for Preferring Branded Medicines

Table 3.8: Reasons for Preferring Branded Medicines

Reason	Number	Percentage
Doctors Advice	78	59.5%
Better Quality	22	16.7%
More Trust	28	21.4%
Advertisement	4	2.4%

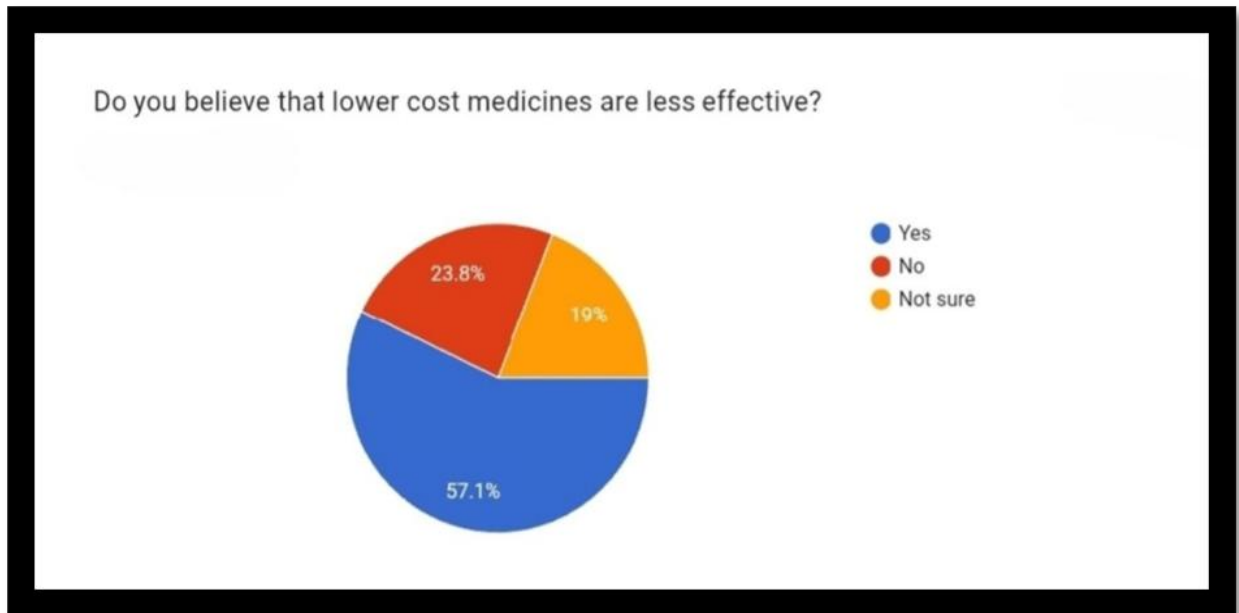


Doctor's advice was the most common reason for preferring branded medicines.

### 3.9 Belief about Low-Cost Medicines

Table 3.9: Belief about Low-Cost Medicines

Response	Number	Percentage
Yes	76	57.1%
No	32	23.8%
Not Sure	24	19%

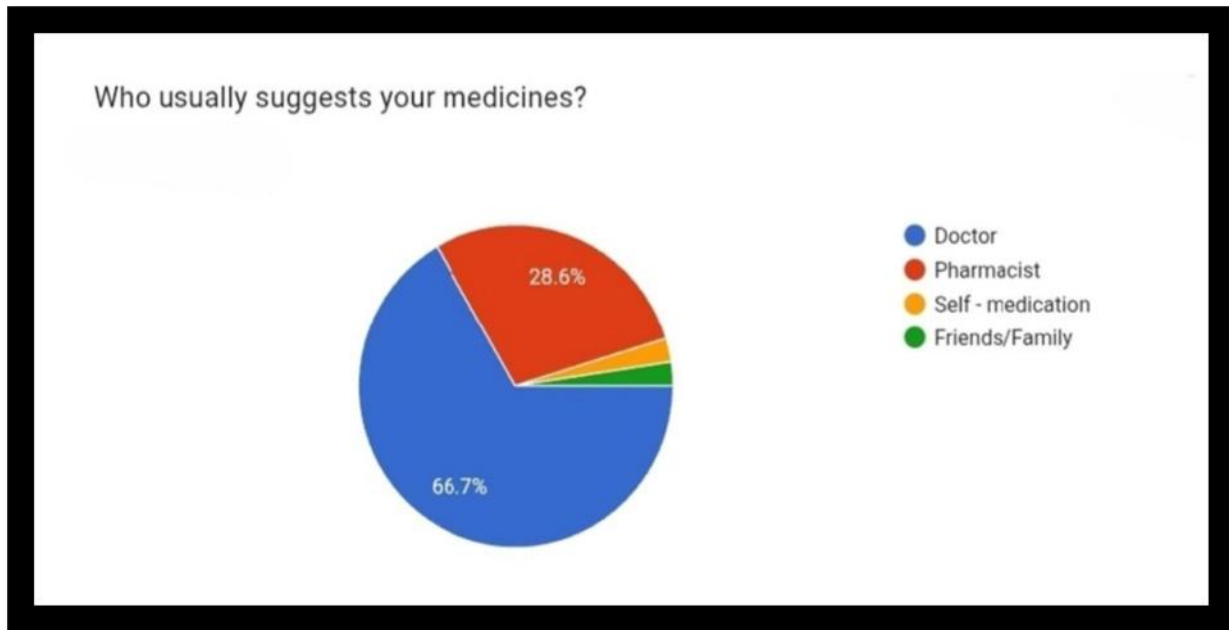


Nearly half of the participants believed that lower-cost medicines are less effective.

### 3.10 Source of Medicine Suggestion

Table 3.10: Source of Medicine Suggestion

Source	Number	Percentage
Doctor	88	66.7%
Pharmacist	38	28.6%
Self-medication	2	2.35%
Friends/Family	4	2.35%

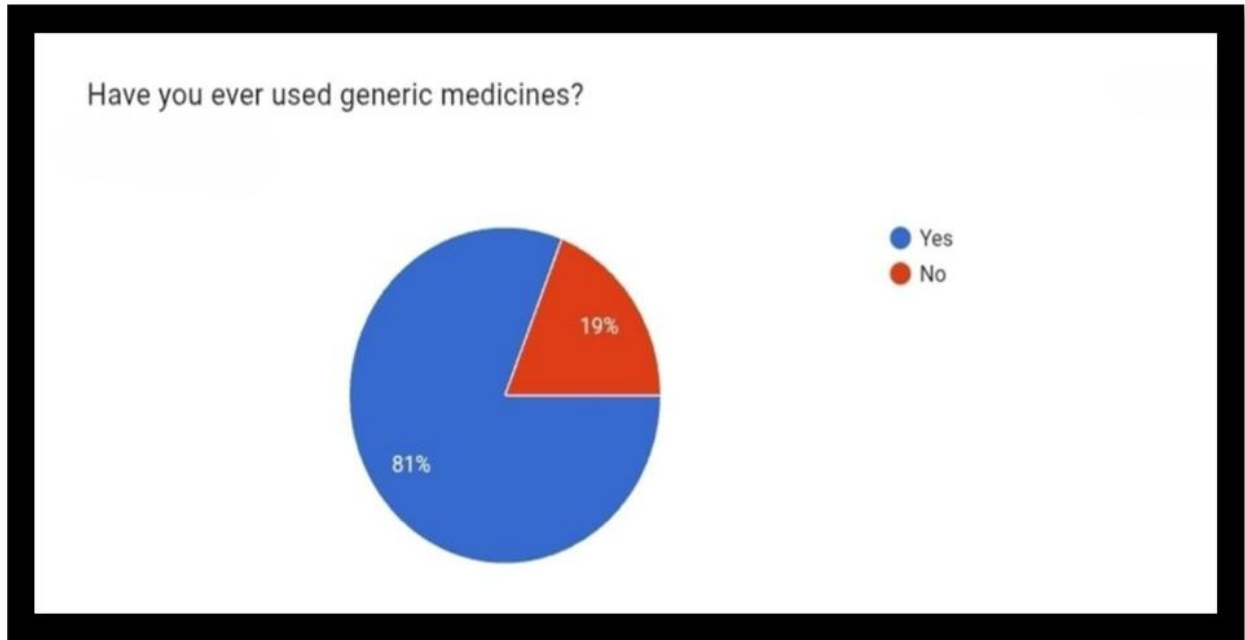


Doctors were found to be the primary source of medicine recommendation among participants.

### 3.11 Use of Generic Medicines

Table 3.11: Use of Generic Medicines

Response	Number	Percentage
Yes	106	81%
No	26	19%

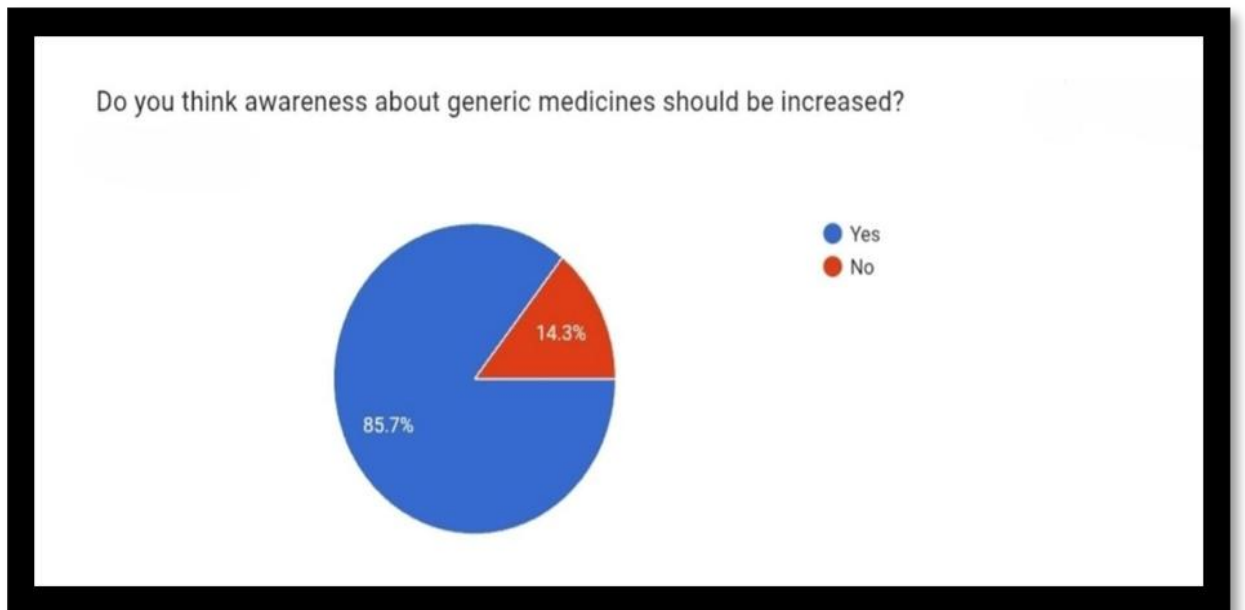


The majority of participants reported that they had used generic medicines.

### 3.13 Need for Awareness about Generic Medicines

Table 3.13: Need for Awareness about Generic Medicines

Response	Number	Percentage
Yes	114	85.7%
No	18	14.3%



The majority of participants believed that awareness regarding generic medicines should be increased.

#### IV. DISCUSSION

The present study was conducted to compare generic and branded medicines in the Chalisgaon region with respect to awareness, preference, perception, and acceptance among the general public. The findings of the study provide useful information regarding people's understanding and attitude toward generic medicines.

The demographic analysis showed that the majority of participants were males and most respondents belonged to the age group of 18–25 years. This indicates that young adults were more active in participating in the survey. A large proportion of respondents were students, which may have contributed to a comparatively better awareness level regarding medicines and healthcare-related topics.

The study revealed that a high percentage of participants had heard about generic medicines. This indicates that awareness regarding generic medicines is gradually increasing among the public. Increased exposure through educational institutions, internet sources, healthcare professionals, and government awareness programs may be responsible for this improved awareness. However, awareness alone does not necessarily mean complete understanding about generic medicines.

One of the important findings of the study was related to the cost difference between generic and branded medicines. Most participants were aware that generic medicines are cheaper than branded medicines. This shows that people recognize the economic advantage of generic medicines. Affordable medicines are especially important in developing countries like India, where many patients have to bear healthcare expenses personally. Lower-cost medicines can reduce financial burden and improve treatment adherence among patients suffering from chronic diseases.

The present study also evaluated public perception regarding the therapeutic effect of generic and branded medicines. More than half of the participants believed that generic medicines and branded medicines have the same effect. This is a positive finding because generic medicines are scientifically proven to be therapeutically equivalent to branded medicines. However, a considerable percentage of respondents either disagreed or were uncertain. This indicates that misconceptions and doubts regarding the effectiveness and quality of generic medicines still exist among the public.

Another significant finding was related to medicine preference. Most participants preferred medicines based on doctor recommendation, while fewer participants directly preferred generic medicines. This suggests that doctors play a major role in influencing medicine selection. Patients

generally trust medical professionals and follow their advice regarding treatment. Therefore, doctors can strongly contribute to promoting the use of generic medicines by prescribing them more frequently.

The study also identified the reasons why people prefer branded medicines. Doctor's advice was found to be the major reason, followed by trust and perception of better quality. This reflects the common belief that branded medicines are superior in quality and effectiveness. Many people associate higher price with better results, which influences their purchasing decisions. Such perceptions may reduce acceptance of generic medicines despite their affordability and therapeutic equivalence.

The findings further showed that a large percentage of participants believed that low-cost medicines are less effective. This misconception is an important barrier to the wider acceptance of generic medicines. People often judge medicine quality based on price rather than scientific evidence. Therefore, educational programs and proper counseling by healthcare professionals are necessary to improve confidence in generic medicines.

The study also revealed that doctors were the primary source of medicine suggestion for most participants, followed by pharmacists. This highlights the importance of healthcare professionals in shaping public opinion regarding medicines. Pharmacists can also play an important role by educating patients about generic alternatives and encouraging cost-effective treatment options.

A significant majority of participants reported that they had used generic medicines. This indicates that generic medicines are already being used by many people in the community. Furthermore, most participants expressed willingness to switch to generic medicines if recommended by a doctor. This finding again emphasizes the strong influence of doctors in improving acceptance of generic medicines.

The study additionally showed that most respondents felt there is a need to increase awareness about generic medicines. This suggests that people recognize the importance of proper knowledge regarding medicine quality, effectiveness, and affordability. Public awareness campaigns, educational programs, and healthcare counseling may help in reducing misconceptions and promoting greater use of generic medicines.

Overall, the findings of the present study suggest that although awareness regarding generic medicines is relatively good, preference for branded medicines still exists due to trust issues, misconceptions, and dependence on doctor recommendations. Strengthening public education and encouraging healthcare professionals to actively support generic prescribing can improve acceptance and utilization of generic medicines, ultimately helping to reduce healthcare costs and improve accessibility of treatment.

## V. CONCLUSION

The present study was conducted to compare generic and branded medicines in the Chalisgaon region with respect to awareness, perception, preference, and acceptance among the general public. The findings of the study indicate that awareness regarding generic medicines is fairly good among the participants, as most respondents had heard about generic medicines and were aware that they are cheaper than branded medicines.

The study also revealed that more than half of the participants believed that generic and branded medicines have the same therapeutic effect. However, a significant number of respondents still had doubts regarding the quality and effectiveness of generic medicines. Many participants preferred medicines based on doctor recommendation, showing that healthcare professionals play an important role in influencing medicine selection.

Doctor's advice was found to be the major reason for preferring branded medicines, while trust and perception of better quality were also important factors. In addition, many participants believed that low-cost medicines are less effective, which reflects the presence of misconceptions regarding generic medicines.

The majority of participants had used generic medicines and were willing to switch to generic alternatives if recommended by a doctor. Furthermore, most respondents agreed that awareness regarding generic medicines should be increased.

Overall, the study concludes that although awareness about generic medicines is increasing, misconceptions and trust-related concerns still affect their acceptance. Proper educational programs, public awareness campaigns, and active promotion by doctors and pharmacists can improve confidence in generic medicines. Increasing the use of generic medicines may help reduce healthcare costs and improve accessibility and affordability of treatment for the general population.

## REFERENCES

- [1] Petersen MC, Shulman GI. Mechanisms of insulin action and insulin resistance. *Physiology Rev.* 2019;99(1):213–222.
- [2] Kesselheim AS, Misono AS, Lee JL, et al. Clinical equivalence of generic and brand-name drugs used in cardiovascular disease: A systematic review and meta-analysis. *JAMA.* 2008;300(21):2514–2526.
- [3] Dunne SS, Shannon B, Dunne C, Cullen W. A review of the differences and similarities between generic drugs and their originator counterparts. *BMC Pharmacol Toxicology.* 2013;14:1.

- [4] Shrank WH, Cox ER, Fischer MA, et al. Patients' perceptions of generic medications. *Health Aff (Millwood)*. 2009;28(2):546–556.
- [5] Haas JS, Phillips KA, Gerstenberger EP, Seger AC. Potential savings from substituting generic drugs for brand-name drugs. *Ann Intern Med*. 2005;142(11):891–897.
- [6] Das M, Choudhury S, Maity S, et al. Generic versus branded medicines: An observational study among patients with chronic diseases. *J Nat Sci Biol Med*. 2017;8(1):26–31.
- [7] Gupta SK, Nayak RP, Vidyasagar S. A study on awareness of generic drugs among patients. *Int J Pharm Sci Rev Res*. 2016;36(1):10–14.
- [8] Patel H, Prasad S, Bhatt P. Knowledge, attitude and practice of generic medicines among patients. *Int J Basic Clin Pharmacol*. 2012;1(2):85–90.
- [9] Chua GN, Hassali MA, Shafie AA, et al. A survey exploring knowledge and perceptions of general practitioners towards generic medicines. *Med J Malaysia*. 2010;65(2):113–117.
- [10] Srinivasan K, Kumar R. Prescribing pattern of drugs in India: Influence of pharmaceutical marketing. *Int J Pharm Pharm Sci*. 2015;7(6):1–4.
- [11] Singh A, Gupta R, Sharma P. Doctors' perception and prescribing pattern of generic medicines. *J Clin Diagn Res*. 2018;12(5):FC01–FC04.
- [12] Alrasheedy AA, Hassali MA, Stewart K, et al. Pharmacists' views on generic medicines. *Int J Clin Pharm*. 2014;36(5):1021–1028.
- [13] Jamshed SQ, Ibrahim MI, Hassali MA, et al. Knowledge, perception and attitude regarding generic medicines among pharmacists. *Saudi Pharm J*. 2012;20(3):229–236.
- [14] Kumar R, Gupta SK. Awareness and use of generic medicines among Indian population. *Int J Pharm Sci Res*. 2014;5(3):987–991.
- [15] Shah R, Patel M. Awareness of Jan Aushadhi scheme among general population. *Int J Res Med Sci*. 2016;4(6):2074–2078.
- [16] Davit BM, Nwakama PE, Buehler GJ, et al. Comparing generic and innovator drugs: Review of bioequivalence data. *Ann Pharmacother*. 2009;43(10):1563–1597.
- [17] Colgan S, Faasse K, Martin LR, et al. Perceptions of generic medications: A systematic review. *Health Psychol*. 2015;34(10):1038–1047.
- [18] India's largest private generic pharmacy retail chain Dava India Generic Pharmacy Optimistic about Cost-effective medication for all. iBG News, India. [Internet]. 2023 June 3. Available: [www.ibgnews.com](http://www.ibgnews.com)
- [19] India Generic Drugs Market Analysis, Competition, Forecasts & Opportunities 2018-2021 & 2022-2028. Research and Markets, Dublin (Ireland); 2022. [Internet]. Available: [www.globenewswire.com](http://www.globenewswire.com)
- [20] Indian Pharmaceutical Industry 2021: future is now. Federation of Indian Chambers of Commerce and Industry (FICCI), India; 2021.
- [21] India Generic Drugs Market Size, Share, Growth, Revenue, Demand, Future Potential, and Forecast from 2022 to 2030. MarketWatch News Department, Illinois, USA.

- [22] Tonin FS, Aznar-Lou I, Pontinha VM, Pontarolo R, Fernandez-Llimos F. Principles of pharmacoeconomic analysis: the case of pharmacist-led interventions. *Pharmacy Practice (Granada)*. 2021;19(1):2302.
- [23] Thomas D, Hilgemann M, John D, Al Ahdab OG, Li H. Pharmacoeconomic Analyses and Modeling. *Clinical Pharmacy Education, Practice and Research*. 2019;261-275.
- [24] About Generics - Industry Overview [Internet]. The British Generic Manufacturers Association (UK); 2023. Available: [www.britishgenerics.co.uk](http://www.britishgenerics.co.uk)
- [25] Phillips PWB, Castle D, Smyth SJ. Evidence-based policy making: determining what is evidence. *Heliyon*. 2020;6(7), e04519.
- [26] Indian Pharmaceutical Industry. ICRA Limited (India); 2023. [Internet]. Available: [www.icraresearch.in](http://www.icraresearch.in)