



A study on consumption awareness between Generic and Branded Healthcare Medicines among individuals in suburban areas of Mumbai City

¹ Mr. Mitesh Radheshyam Lohia, ² Miss Mahek Lalit Rai, ³ Miss Shubh Manav Sain

¹ Third Year student of Academic Year 2023-24, ¹ & ² First Year students of Academic Year 2023-24; ^{1,2} & ³ Department of Bachelors in Accounting & Finance at Thakur College of Science and Commerce, Shyamnarayan Thakur Marg, Thakur Village, Kandivali East, Mumbai – 400101.

Abstract:

The Pharmaceutical Healthcare Industry in India stands as a cornerstone, catering to approximately 1.5 billion consumers in the world's second-most populous country. This industry manufactures medicines utilizing combinations of drugs and chemicals, addressing a wide spectrum of health issues from common ailments to life-threatening diseases. These medicines are formulated in various forms and variants to effectively combat diseases. However, the efficacy of treatment is directly tied to the cost of manufacturing these medicines. In India, where a significant portion of the population resides in rural areas, acquiring highly expensive medicines from branded companies remains a challenge.

To offer a more inclusive healthcare solution, the Government of India, in collaboration with private manufacturers, has taken a progressive step by initiating the production of Generic Medicines. Under the Patent Act of 1970, pharmaceutical companies are granted a 20-year exclusive right to patent and market a drug. Following this period, the patent expires, permitting other companies to manufacture and sell the same drug, fostering a competitive market and providing more affordable alternatives in medicine production. This approach ensures a diverse range of healthcare options, addressing the economic constraints faced by a majority of the population.

Keywords: Consumers, Drugs, Healthcare, Medicines, Pharmaceutical

I. Introduction:

India's pharmaceutical industry plays a crucial role in the global healthcare landscape, offering affordable and high-quality medicines while contributing significantly to the country's economic development. There are two types of medicines: generic medicines and branded medicines. Generic medicines are pharmaceutical products that contain the same active ingredients as their branded counterparts. Branded medicines undergo rigorous testing to ensure their safety, efficacy, and quality; they are usually the first to enter the market. Generic medicines, on the other hand, are developed by pharmaceutical companies after the patent of branded medicine wears off. Branded medicines hold exclusive rights to the drug for a certain period, allowing them to recoup research and development costs. After this period, generic versions can enter the market, providing more affordable alternatives while maintaining the same therapeutic effects.

Generic Medicines:

Generic Medicines are copies of brand-name drugs with the same active ingredient, strength, dosage, and effectiveness but without the brand name, often available at significantly lower prices. They undergo rigorous government reviews to ensure safety and efficacy. Generics make essential medications more accessible and affordable for everyone, increasing competition and reducing costs for individuals and healthcare systems. This allows more people to get the treatment they need.

Global Generic Drug sales are estimated at over \$465 billion and are expected to grow steadily. Millions of prescriptions dispensed daily are generics, accounting for over 90% of prescriptions filled in some countries. Patent expirations of blockbuster drugs have slowed industry growth in recent years. However, Innovations in Biosimilars (copies of complex biologics) and Complex Generics offer new growth areas.

The Generic Medicine industry is crucial for promoting affordable healthcare access. Continued competition, regulatory advancements, and the development of complex generics will shape its future success in improving global health.

Branded Medicines:

Branded medicines, also known as proprietary or pioneer drugs, are developed and marketed by pharmaceutical corporations after extensive research and development. These medicines undergo meticulous testing to ensure safety and potency before gaining regulatory authorization. Branded medications often feature a specific brand name, trademark, and distinct packaging.

The key USP lies in the sole possession of the active ingredients, as branded drugs are initially protected by patents. This exclusivity grants the pharmaceutical corporation a period of market exclusiveness to recover development costs. Once the patent expires, generic versions with similar active ingredients can enter the market at lower prices. While branded medicines can be more expensive and fall into a premium range, they may offer reliable quality and consistency. Patients and healthcare providers often choose between branded and generic medications based on factors like cost, insurance coverage, and individual preferences.

II. Review of Literature:

Kaplan WA, Ritz LS, Vitello M, Wirtz VJ. (2012): This review looks at rules supporting the use of generic medicines in poorer countries from 2000 to 2010. Only 6.3% of the studies focused on these rules, with just 25% looking at poorer countries. Limited evaluations pointed out problems like negative views on generic medicines, financial rewards favoring expensive products, and legal challenges. The findings stress the need for clear rules, a fair market for generic medicines, and incentives that encourage using them in poorer countries.

Pichholiya M, Basu A, Yadav AK, Kothari N, Tahashildar J. (2015): The literature emphasizes the cost variations between branded and generic medicines, revealing that the same drug can be marketed under different brand names at distinct prices. The focus is on evaluating the rationality of prescribing generic versus branded medications. The study's approach mirrors the global discourse on healthcare affordability and the impact of patent expiry on generic medicine availability. The findings underscore the need for cost-conscious prescription practices and advocate for accessible information for healthcare professionals to make informed decisions in prescribing cost-effective medications.

Das M, Choudhury S, Maity S, Hazra A, Pradhan T, Pal A, Roy RK (2017): The literature indicates a global acceptance of generic prescriptions, but in India, challenges like non-availability and quality distrust persist. The Government of West Bengal's introduction of "fair price medicine shops" (FPMS) within government hospitals since 2012 aimed to address these issues. This study assesses patient experiences with generic drugs from FPMS. Results suggest comparable effectiveness, safety, and adherence between generic and branded drugs, emphasizing the potential positive impact of FPMS on healthcare accessibility in India.

Alam MM, Mittal A, Chawla D (2017): The literature review underscores a gap in understanding patient perceptions towards branded and generic medicines in emerging economies. Prior research lacks patient segmentation based on psychographics, making this study a pioneering effort. The approach aligns with global discussions on healthcare preferences. The cluster analysis introduces three distinct consumer categories—Branded Medicine Inclined, Generic Medicine Inclined, and Cost-Conscious. The significance of patient

segmentation in healthcare awareness programs is highlighted, emphasizing the potential impact on policy-making and tailored interventions for promoting generic medicine acceptance.

Dixit A, Kumar N, Kumar S. (2018): Existing literature highlights the global push for affordable healthcare, emphasizing the role of generic medicines. In India, healthcare expenses lead to significant poverty, with a considerable portion allocated to medicines. Debates arise from the government's mandate for doctors to prescribe generic drugs. Insights from the USA and Canada advocate for generic medicines, with India being a major supplier to the USA. The literature underscores the importance of addressing pharmaceutical inducements, ensuring generic drug availability, enhancing quality control, and educating healthcare professionals to promote the use of generic drugs.

III. Objectives:

1. To examine the preference and factors influencing the consumption of Generic and Branded Medicines.
2. To investigate the buying patterns of individuals concerning Healthcare Medicines in Mumbai.
3. To explore the usage patterns of Healthcare Medicines among individuals in Mumbai.

IV. Limitations:

1. **Area:** The data is limited to the suburban area of Mumbai City, potentially affecting the generalizability of the findings to a broader population.
2. **Time:** Due to time constraints, the research had a limited window for collecting sampling data, potentially impacting the depth and breadth of the study.
3. **Subjective Thinking:** Not every respondent may exercise utmost care in filling out a survey, introducing the possibility of response bias. The survey method may make it challenging to ensure that all respondents dedicate accurate time and attention to the questionnaire, potentially affecting data reliability.

V. Hypothesis:

HO₁: There is no significant relation between the consumers consuming Generic Medicines in Mumbai City.

H₁₁: There is a significant relation between the consumers consuming Generic Medicines in Mumbai City.

HO₂: The individuals in Mumbai do not prefer to buy Generic Medicines in Mumbai City.

H₁₂: The individuals in Mumbai prefer to buy Generic Medicines in Mumbai City.

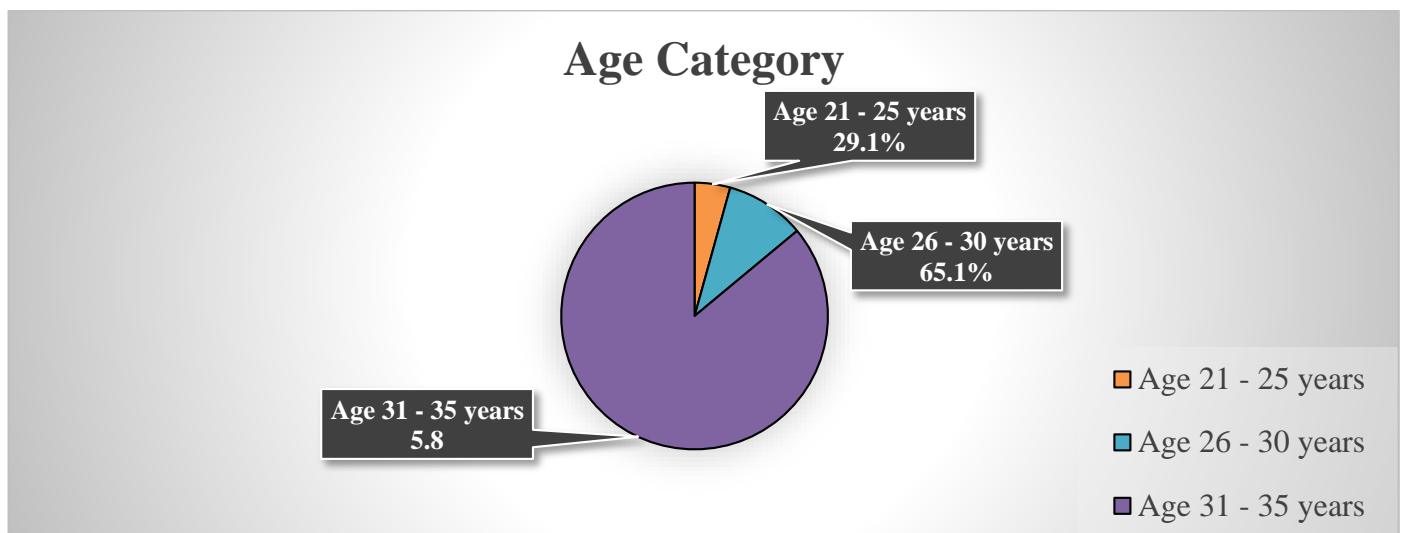
VI. Research Methodology:

1. **Research Category:** The research conducted is descriptive in nature, focusing on individuals in the suburban area of Mumbai City.
2. **Tools and Techniques Applied:** Statistical patterns and representations were employed to present primary data in the research paper. The data analysis included frequency and percentages to ensure accuracy.
3. **Sampling Method:** Simple random sampling was used to gather practical information. Respondents participated by answering a survey conducted through Google Forms, providing a snapshot of the opinions of individuals in the suburban area of Mumbai City. The use of Google Forms facilitated efficient data collection within the constraints of time.
4. **Sample Size:** The primary data for the research study consisted of 86 responses. This sample size was deemed sufficient for the research objectives while accommodating time limitations.

VII. Data Interpretation and Analysis:

(Primary Data: Question 1)

Age Category	FREQUENCY	PERCENTAGE (%)
Age 21 – 25 years	25	29.1%
Age 26 – 30 years	56	65.1%
Age 31 – 35 years	5	5.8%
TOTAL RESPONDENTS	86	100%

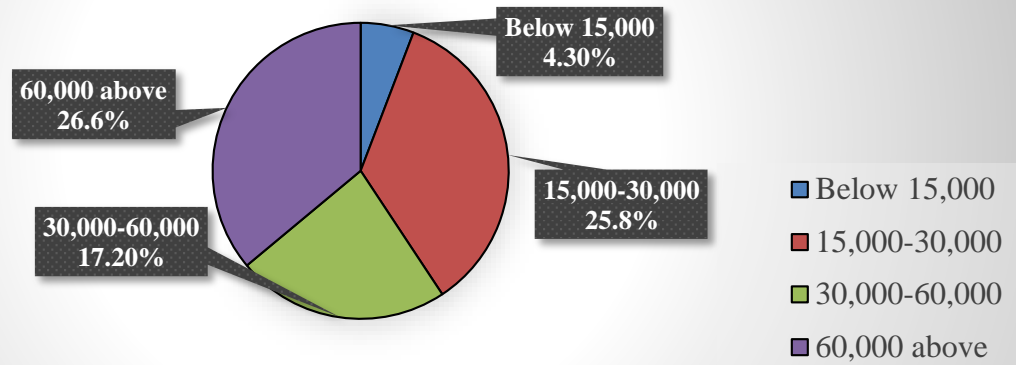


As per the data received from the survey, there are a total of 86 respondents who were individuals in the suburban area of Mumbai city. Out of these respondents, 65.1% were aged between 26 and 30 years, 29.1% were aged between 21 and 25 years, and 5.8% were aged between 31 and 35 years.

(Primary Data: Question 2)

Monthly Family Income (in Rupees)	FREQUENCY	PERCENTAGE (%)
Below 15,000	5	4.3%
15,000 - 30,000	30	25.8%
30,000 - 60,000	20	17.2%
60,000 above rupees	31	26.66%
TOTAL RESPONDENTS	86	100%

Monthly Family Income

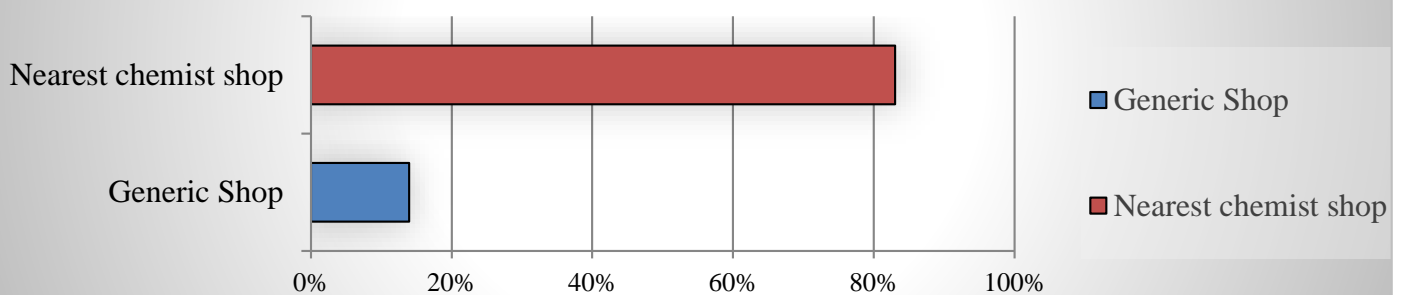


As per the data received from the survey, there are a total of 86 respondents who were individuals in the suburban area of Mumbai city. The monthly income of these individuals falls into specific groups as follows: 4.30% of the individual respondents earn an income below Rs. 15,000/- per month. 25.80% of the individual respondents earn an income ranging between Rs. 15,000/- and Rs. 30,000/- per month. 17.20% of the individual respondents earn an income ranging between Rs. 30,000/- and Rs. 60,000/- per month. Additionally, 26.66% of the individual respondents earn an income exceeding Rs. 60,000/- per month, marking them as the highest-earning individuals in the data.

(Primary Data: Question 3)

From which chemist shop have you purchased Medicines?	FREQUENCY	PERCENTAGE (%)
Generic Shop	15	14%
Nearest Chemist Shop	71	83%
TOTAL RESPONDENTS	86	100%

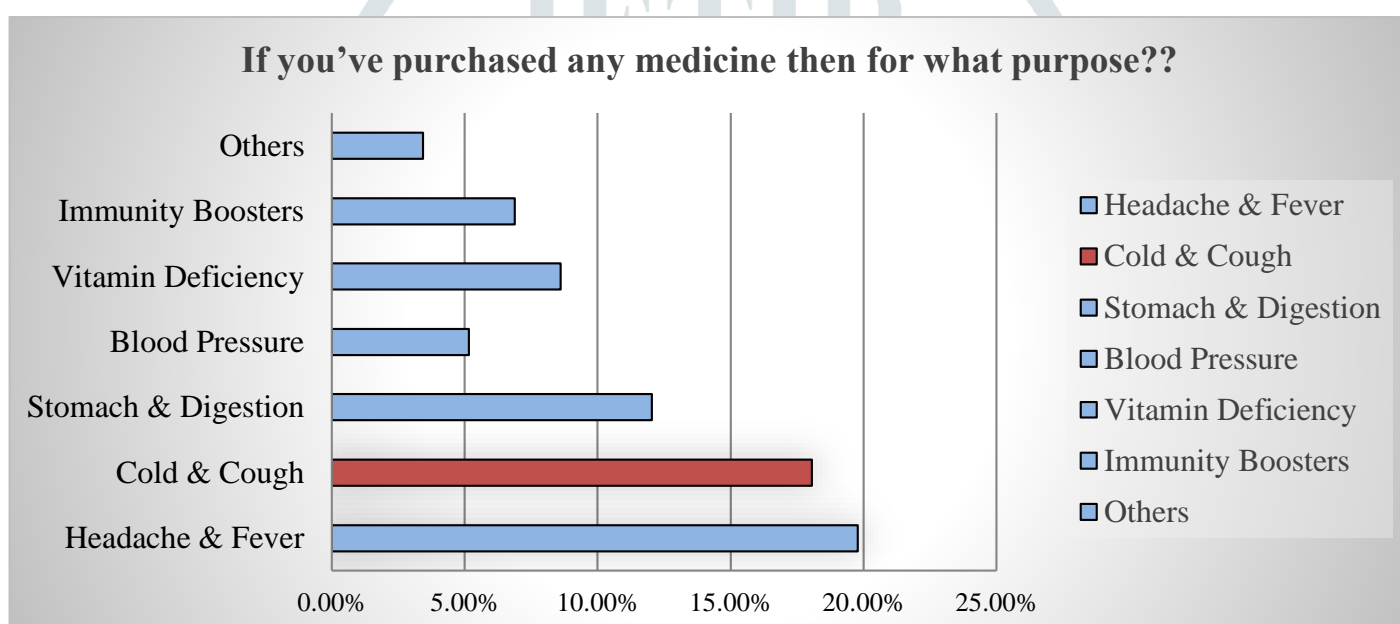
From which chemist shop have you purchased your medicine ?



As per the survey data, there are a total of 86 respondents who were individuals in the suburban area of Mumbai city. Of these respondents, 14% purchase medicines from generic medicine shops, while 83% usually buy their medicines from the nearest chemist shop.

(Primary Data: Question 4)

If you've purchased any medicine then for what purpose?	FREQUENCY	PERCENTAGE (%)
Headache & Fever	23	19.78%
Cold & Cough	21	18.06%
Stomach & Digestion	14	12.04%
Blood Pressure	6	5.16%
Vitamin Deficiency	10	8.6%
Immunity Boosters	8	6.88%
Others	4	3.44%
TOTAL RESPONDENTS	86	100%



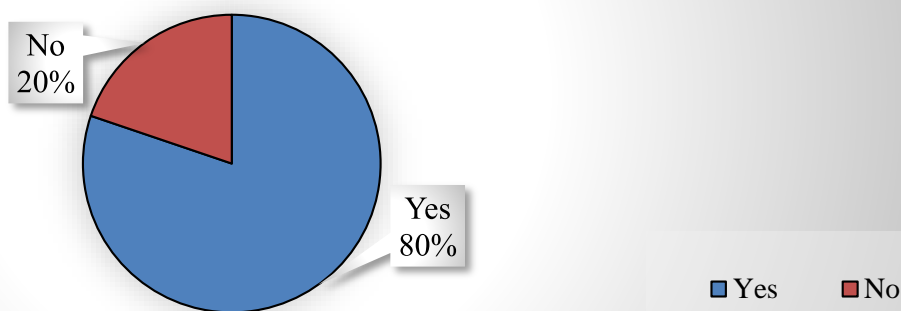
As per the survey data, there are a total of 86 respondents who were individuals in the suburban area of Mumbai city. Their reasons for purchasing medicines are as follows:

3.44% for other reasons, 6.88% for immunity boosters, 8.6% for vitamin deficiency, 5.16% for blood pressure, 12.04% for stomach and digestion, 18.06% for cold and cough, and 19.78% for headache and fever.

(Primary Data: Question 5)

Do you understand the difference between Generic and Branded Medicines?	FREQUENCY	PERCENTAGE (%)
Yes	69	80.2%
No	17	19.8%
TOTAL RESPONDENTS	86	100%

Do you understand the difference between Generic & Branded medicines?

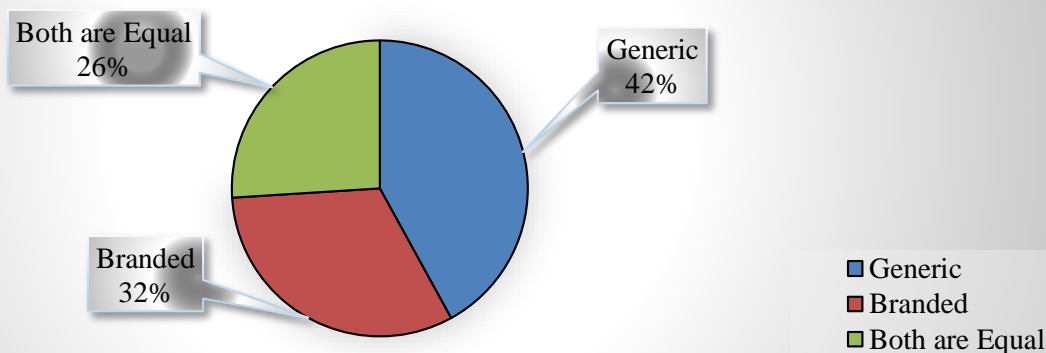


As per the survey data, out of 86 responses from individuals in the suburban area of Mumbai city, 80% of the respondents are aware of the difference between generic and branded medicine, while 20% of the respondents do not know the distinction between generic and branded medicine.

(Primary Data: Question 6)

Which medicine do you find cost effective?	FREQUENCY	PERCENTAGE (%)
Generic Medicine	36	41.9%
Branded Medicine	28	32.6%
Both are almost equal	22	25.6%
TOTAL RESPONDENTS	86	100%

Do you understand the difference between Generic & Branded medicines?

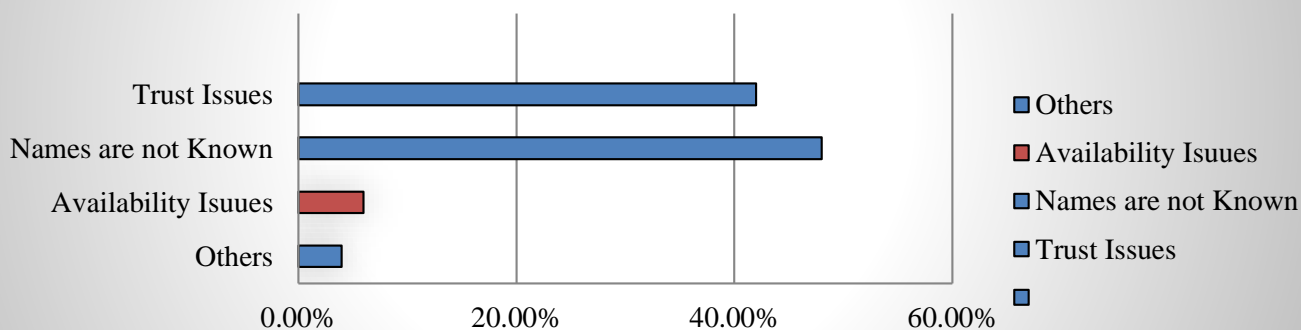


As per the survey data, there are a total of 86 respondents who were individuals in the suburban area of Mumbai city. Among them, 42% of the respondents find generic medicine cost-effective, 32% find branded medicine cost-effective, and 26% find both almost equal.

(Primary Data: Question 7)

According to you, what can be the reasons for not preferring Generic Medicines?	FREQUENCY	PERCENTAGE (%)
Trust Issues	36	42%
Names are not known	41	48%
Availability Issues	5	6%
Others	4	4%
TOTAL RESPONDENTS	86	100%

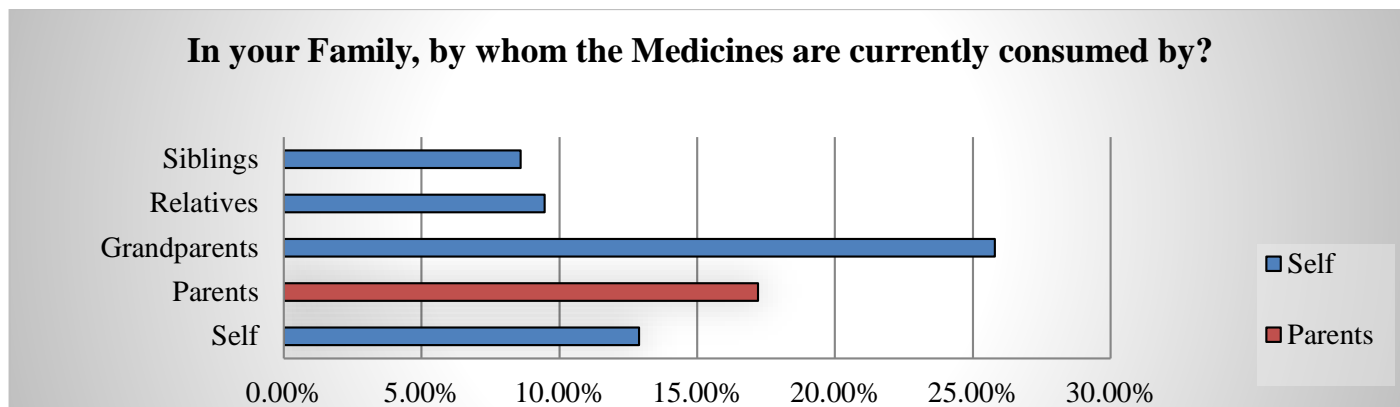
According to you, what can be the reasons for not preferring Generic Medicines?



As per the survey data, there are a total of 86 respondents who were individuals in suburban areas of Mumbai city. Their reasons for not preferring generic medicine are as follows: 48% of individuals believe it's because the names of these medicines are not known, 42% think it's due to trust issues, 6% attribute it to availability issues, and 4% cite other reasons."

(Primary Data: Question 8)

In your Family, by whom the Medicines are currently consumed?	FREQUENCY	PERCENTAGE (%)
Self	15	12.9%
Parents	20	17.2%
Grandparents	30	25.8%
Relatives	11	9.46%
Siblings	10	8.6%
TOTAL RESPONDENTS	86	100%



As per the survey data, there are a total of 86 respondents who were individuals in suburban areas of Mumbai city. In their families, the consumption of medicine is distributed as follows:

8.6% have siblings who consume medicines,

9.46% have relatives who consume medicines,

25.8% have grandparents who consume medicines,

17.2% have parents who consume medicines, and 12.9% of them consume medicines.

VIII. Conclusion:

The survey of 86 respondents in Mumbai's suburban area on medicine preferences and consumption patterns. Notably, 80% are aware of the generic versus branded medicine distinction. Reasons for avoiding generics include unfamiliarity (48%) and trust issues (42%). The data reveals diverse preferences in medicine consumption within families, ranging from siblings (8.6%) to relatives (9.46%), parents (17.2%), and self (12.9%). This variation suggests the importance of tailoring healthcare information to different age groups and family roles. As 26% find both generic and branded medicines equally cost-effective, there is an opportunity for education on the therapeutic equivalence of generics. Overall, these insights advocate for targeted health literacy initiatives to enhance understanding and foster confident healthcare decision-making in Mumbai's suburban population.

The survey highlights potential barriers to generic medicine acceptance, such as concerns about availability (6%) and other unspecified reasons (4%). This underscores the importance of addressing misconceptions and increasing accessibility to generic options. The significant proportion (80%) who recognize the generic versus branded difference signals a receptive audience for educational campaigns. In conclusion, a comprehensive approach that addresses awareness, accessibility, and trust issues can enhance healthcare decision-making, promoting cost-effective and informed choices among Mumbai's suburban residents.

The data reveals a significant preference for Generic Medicines among consumers in Mumbai, contradicting the initial hypothesis. This suggests a notable shift in consumer behavior, emphasizing the increasing acceptance of affordable alternatives in the pharmaceutical landscape of the city. The data shows that people in Mumbai prefer Generic Medicines, contrary to the initial idea. This suggests a change in how people choose medicines, possibly due to cost and awareness. It highlights a growing acceptance of affordable options, signaling a shift in healthcare preferences in Mumbai.

IX. Findings:

As per the Researcher's Findings: -

- 1. Awareness and Availability:** The survey reveals a lack of awareness regarding generic medicines, primarily attributed to availability issues.
- 2. Prevalence of Branded Medicines:** The majority of medicines available in local chemist shops are branded, emphasizing the need for increased awareness and accessibility of generic alternatives.

- 3. Family Medicine Consumption:** Findings indicate that in most families, at least one member consumes medicines with the primary goal of cost savings.
- 4. Income Disparity in Awareness:** Higher-income individuals demonstrate lower awareness levels regarding generic medicines, indicating a need for targeted educational campaigns within this demographic.

X. Economic Relevance:

- 1. More Generic Medical Stores:** Suggest the government opens more generic medicine shops in every part of India through the PM-JAY scheme. This way, many people can get affordable medicines for their health.
- 2. Saving Money with Generic Medicines:** Recommend using generic medicines for people who can't afford expensive ones. It helps them get better without spending too much money.

XI. Suggestions and Recommendations:

Promoting understanding of generic medicines is vital. Increased availability of Pradhan Mantri Jan Aushadhi Kendra's (PMJAK) is necessary nationwide. College seminars educate students on affordable healthcare, empowering them to share insights with their families. These endeavors strive to reshape perceptions and foster the broader adoption of budget-friendly generic medicines, aiming for a positive impact on healthcare choices.

XII. References:

Research Papers: -

1. Kaplan WA, Ritz LS, Vitello M, Wirtz VJ. Policies to promote use of generic medicines in low and middle income countries: a review of published literature, 2000-2010. *Health Policy*. 2012 Aug;106(3):211-24. doi: 10.1016/j.healthpol.2012.04.015. Epub 2012 Jun 12. PMID: 22694970.
2. Pichholiya M, Basu A, Yadav AK, Kothari N, Tahashildar J. An observational comparative study of cost between branded medicines and generic medicines. *Int J Basic Clin Pharmacol* 2015; 4:269-72. doi: 10.5455/231t9-2003.ijbcp20150418
3. Das M, Choudhury S, Maity S, Hazra A, Pradhan T, Pal A, Roy RK. Generic versus branded medicines: An observational study among patients with chronic diseases attending a public hospital outpatient department. *J Nat Sci Biol Med*. 2017 Jan-Jun;8(1):26-31. doi: 10.4103/0976-9668.198351. PMID: 28250671; PMCID: PMC5320819.
4. Alam MM, Mittal A, Chawla D. Evaluating patients' perception towards generic and branded medicines: A segmentation approach. *Journal of Generic Medicines*. 2017;13(4):184-192. doi:10.1177/1741134317737925
5. Dixit A, Kumar N, Kumar S. Use of Generic Medicines: Challenges and Benefits. *Journal of Health Management*. 2018;20(1):84-90. doi:10.1177/0972063417747747