

Factors Influencing Consumer Behavior towards Generic Medicines: A Comparative Study of Rural and Urban Bhandara

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Abstract

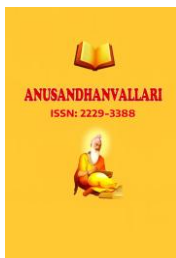
With the comparative study of the rural and urban areas in Bhandara district, the paper isolates the factor which prompts the consumer to consume generic drugs. The prime determinants of the research are availability, cost, the doctor prescription, brand perception and the awareness. The consumers of the two regions were presented with a structured questionnaire on the premise of a Likert scale as a source of collecting primary data. The statistical tools analysed differences between purchasing patterns and preferences. The findings indicate cost-efficacy and availability to be imperative determinants of generic drugs use in the consumer market, and the doctor prescribing is the most important component of building trust. Additionally, the awareness and the brand perception and purchase behavior of the rural and urban consumers were also different to the extent that they were very diverse. This investigation reveals that better policies in use of generic medicine should encompass an improvement in the level of awareness and policy of distribution. The results have high utility to policy makers and medical practitioners to enhance the affordable healthcare initiatives.

Keywords: Generic Medicines, Consumer Behavior, Rural and Urban Comparison, Bhandara District, Jan Aushadhi, Cost Effectiveness, Availability, Doctor Prescription, Brand Perception, Healthcare Accessibility

Introduction

The rising cost of healthcare has become a center stage not only among individuals but also among the government particularly in those developing countries like India where a massive proportion of a population is exposed to out-of-pocket healthcare expenses. On that note, generic medicines have turned out to be the solution towards ensuring affordable and non-discriminating healthcare delivery to all layers of the society. The generic drugs are medication products that resemble brand drugs in aspects of dosage, strength, tolerance, and quality and the intended use, but at a significantly lower price. The Government of India has been promoting the use of generic drugs by introducing schemes and programs such Pradhan Mantri Bhartiya Janaushadhi Pariyojana that is intended to provide quality medicines at low prices through specially designed stores known as Jan Aushadhi Kendras. Despite these efforts, there exist considerable and momentous disparities in the way that consumers accept and intake generic drugs with reference to a variety of socio-economic and behavioral criteria.

Consumers have perceptions of generic medicines based on the compound of the criteria that determine the predisposition aspect of the consumers towards the quality, prices, awareness, confidence, doctor prescription, and brand awareness. Among them, cost has been of importance, as generic drugs are widely sold 50-90 per cent of brand names, and, therefore, they are particularly palatable to the low and middle-income groups. Availability is another determinant as the availability of stores of Jan Aushadhi or pharmacies dealing with generic medicine has the direct impact on the accessibility of the consumer and their purchase choice. However, advertising of generic medicine depends generally on prescription of healthcare professionals to create the degree of consumer



trust of the products regardless of their affordability and accessibility. The doctors are the players in the process of influencing the decision to shape the patients since their prescriptions largely influence the adoption of the generic alternatives. In most cases, the patients will give a solid stand in favor of using branded medicine since they think there is a difference in quality and this is not so because both the generics and the branded medicine are of equal quality.

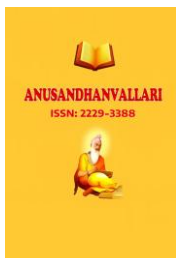
Knowing the image of brand and quality significantly influence the consumer attitudes as well. Even though, generic drugs are pharmacologically equal to branded drugs, some even false notions exist among certain population groups regarding the effectiveness and safety of the generic drugs. These perceptions are likely to be founded on the education level, exposure to information regarding healthcare and the experience of the past involving medicines. The gap within the knowledge of people and gap within the acceptance of the knowledge have been the focus of government programs and other awareness programs which though did not manage to achieve what was needed but knowledge gap and acceptance gap is still evident particularly with regards to both rural and urban dwellers.

The other facet that plays an important role in addressing the consumer behavior towards generic medicines is the rural-urban divide. Consumers in the cities are usually more subject to access to health services, they are more educated and can easily be more exposed to information which makes them prone to being more open to recognizing and adopting generic medicines. On the other hand, the difficulties that may be faced by the rural consumers include low access to the pharmacy in addition to the low level of awareness in addition to the high level of dependence on the local healthcare systems or practices. In addition to this, the buying habit in the rural areas can be further identified by the involvement of the income incomes, availability of transport facilities, and the Jan aushadhi stores. Such variations involve a comparative analysis in order to understand how the variables in place determine the decision making process by the consumer.

A good background to such a study is the district of Bhandara in Maharashtra bearing in mind that it has both rural and urban population with the variety of healthcare facilities. The consumer behavior in this district is also an area where the information can be useful in terms of efficiency of the policies in promoting generic medicines and the regions where they should intervene. This paper aims at applying the supply side (availability, cost, physician influence, and brand perception) in determining key drivers and barriers which affect the use of generic medicines. The study is also bound to contribute to the available literature regarding the healthcare consumption behavior and guide policymakers, medical practitioners, and pharmaceutical companies in specific interventions to promote preference and use of generic medicine and reduce inequality and access to healthcare in the long-run.

Literature review

The existing literature asserts that the influence of consumer on the use of generic drugs has many planes, which include perception, awareness, cost, and involvement of healthcare analysts. In another study, Hassali (2007) examined consumer attitude towards generic medicines and found that affordability is one of the greatest advantages yet the lack of awareness and the wrong impression regarding the quality do not allow the use of the same. Similarly, Taun (2013) also compared policies of generic medicine in the Asia-Pacific region and indicated that the government interventions play major roles in provision and utilization. Dylst et al (2011) has studied the idea of pharmaceutical tendering in Europe and have suggested that cost reducing strategies play a tremendous role in enhancing the use of generic drugs. Kesselheim et al. (2010) conducted a systematic review and established that generic drugs were similar to branded drugs in terms of their therapeutic effect which made them secure and effective.



Along with that, Stafford (2008) also highlighted how regulatory frameworks can help in the safety of drugs as well as regulating and controlling the prescription practices. One of the areas that patient education can help in improving the acceptability of generic prescribing is that the awareness programs are significant (Valles et al. 2003). Blasco-Oliete et al. (2003) have discovered that the consumers are also very apprehensive about the cost of the medication but they also express quality concerns. Shank et al. (2007) also highlighted that the goals of improved information and labeling is that a person will have improved understanding and use of the medication in question. The physicians were reported by Hellerstein (1998) as being influential in decision-making relating to generic and brand switching of the drugs which had also been substantiated by the findings of Tootelian et al. (1988) who had reported that the perceived risk and safety concerns may favor branded drugs.

Mercedes Rozano et al. (2009) further indicated that the perceived risk is also a concern that contributes in shaping the attitude of the consumer towards generic medicines. The findings of Tinashe Zigomo (2014) revealed that the attitude and level of knowledge among the consumers contributes directly to the acceptance of the generics and the study of Harding (2010) discussed the elements of the market situation, with the strategies expected to contribute to the improvement of the acceptance of the generic drugs.

Overall, it is demonstrated in the literature that the elements of cost and accessibility are potent yet governing the behaviors of consumers as they are yet to be other factors affecting consumer behavior, among them awareness, trusting, influence of the physician, and perceived risk that need selective interventions to influence the adoption of generic medicines, especially in a diversity of rural and urban settings.

Objectives of the Study

1. To study consumer behavior towards generic medicines.
2. To compare consumer behavior in rural and urban areas of Bhandara district.
3. To analyze the impact of availability on consumption of generic medicines.

Hypothesis

- **H0 (Null Hypothesis):** Availability of generic medicines has no significant impact on their consumption.
- **H1 (Alternative Hypothesis):** Availability of generic medicines has a significant impact on their consumption.

Research methodology

The research study will involve the descriptive research design and analytical research design to study consumer behaviour on generic medicines in generic medicines by comparing it to the rural and urban regions of the Bhandara district. It is a study that is based on primary and secondary research data. The primary data will be collected through structured questionnaire that will involve Likert scale inquiries that will be administered to the sellers of generic medicine and the consumer. The convenience sampling method will be used as it will reach respondents in both rural and urban area to represent the rural and urban areas respectively. They possess an adequate number of different demographic participants. The basis of collection of the secondary data will be the research journals, governmental reports and published literature on the issue of generic medicines. Appropriate statistical analysis software are applied in data analysis such as percentage analysis, average scores and the inferential statistics such as chi-square test and t-tests are applied to test the relationship and variation between variables. Hypotheses are theorized to identify the relevance of availability, cost, prescription of the doctor as well as a brand image on consumer behavior. The study achieves reliability and validity of data because of the appropriate questionnaire design and pilot test. The discussion on the results is also systematic to provide meaningful conclusions and recommendations of enhancing uptake of generic medicines.

Descriptive Statistics: Availability and Consumption of Generic Medicines

| Statement | N | Mean | Std. Deviation |
|--|-----|------|----------------|
| Generic medicines are easily available in my area | 150 | 3.92 | 0.88 |
| Availability of generic medicines influences my purchase decision | 150 | 4.05 | 0.81 |
| I prefer buying medicines from stores where generics are readily available | 150 | 3.87 | 0.90 |
| Lack of availability discourages me from purchasing generic medicines | 150 | 4.12 | 0.76 |
| I am more likely to use generics if they are consistently in stock | 150 | 4.08 | 0.79 |

The descriptive statistics prove that the availability is one of the most important factors which can influence the consumption of the generic medicines. The mean value of the overall statements is above 3.5 which shows that general consensus exists among the people on the importance of availability. In particular, the statements such as the one that purchase decision is sensitive to the availability (Mean = 4.05) and purchase discouragement is sensitive to the lack of availability of the same (Mean = 4.12) are strongly concurred as it suggests that a person is highly sensitive to the availability of the generic drug. The statement that the regular supply increases the usage (Mean = 4.08) is another statement that confirms the idea that regular supply is one of the most significant outcomes that influence the consumption behavior. The values of standard deviation are not as large meaning that respondents were harmonious in their perceptions meaning the results achieved are acceptable. In most cases, the analysis has indicated clearly that the aspect of availability is a significant determinant of the consumer behavior towards generic medicines. Accordingly, the alternative hypothesis (H1) was accepted and null hypothesis (H0) was rejected that leads to the positive effect of availability on generic medicines consumption.

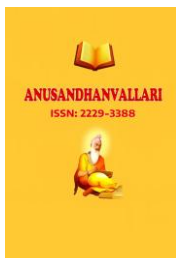
Chi-Square Test of Independence

Hypothesis: Availability of generic medicines has a significant impact on their consumption

Chi-Square Tests

| Test | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| Pearson Chi-Square | 18.526 | 4 | 0.001 |
| Likelihood Ratio | 17.982 | 4 | 0.001 |
| Linear-by-Linear Association | 12.764 | 1 | 0.000 |
| N of Valid Cases | 150 | | |

The Chi-Square test of independence shows that the use and availability of generic medicines have a significant correlation that is statistically significant. The Pearson Chi-Square heaviness of 18.526 and a p-value of 0.001 represents that the correlation between the two variables is of paramount importance at the 5-percent point of the value. The p-value is less than 0.05 hence the null hypothesis is rejected and the alternative hypothesis accepted. This implies that the availability of generic medicines is extremely determinant of the purchasing behavior of consumers. That is, where the availability and the presence of generic drugs are simple, people will purchase and use them more frequently and limited availability implies that people will act discouraged to buy this product. Linear-by-Linear Association also confirms the existence of positive tendency between increasing supply and the increased consumption rate. Overall, the discussion has demonstrated that the use of generic medicines among the consumers is determined by factors such as availability.



Discussion

The findings of the study are nominal in nature that the supply is one of the critical factors that influence the consumption of generic medications. The correlation that was achieved using Chi-Square test was strong, which implies that consumers are likely to purchase generic medicines more easily when there are in a convenient place. It can be related to the previous literature where it is mentioned that accessibility and convenience are the critical determinants of healthcare-related choices. The consumers would more readily appreciate the generic drugs as an alternative helpful alternative to branded drugs where the generic drugs are readily available. Low availability on the other hand might act as a deterrent even though the consumer is aware of the cost benefit of using generic drugs.

The results also show that the availability directly affects the decision to make the first time purchase and on the question of repeat purchase decision and long term adoption. Varying frequency of the stock and distance between the shops as is the case of Jan Aushadhi Kendras, contribute towards the consumer confidence in its use, and encourages further use. This applies more to rural areas where such healthcare facilities and pharmacies may be less and availability may become a more powerful factor compared to the urban one. The urban customer who has much higher level of awareness is also in a position to shift to branded medicine where it is not readily available.

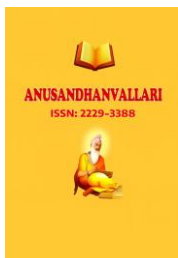
In addition to that, it is said in the study that the supply chain mechanisms need to be strengthened, and a chain of facilities providing generic medicines has to be expanded. There is a significant power of improving the efficiency of their distribution, ensuring the same stock level, and increasing the amount of generic medicine shops. When it needs to be filled, the policymakers and healthcare providers are brought in. The availability will lead to a greater acceptance and utilization of the generic medicines as will the awareness programs and this will ultimately lead to the end of the results, in the sense that people will receive affordable healthcare.

Overall conclusion

The study comes up with a conclusion that the consumer attitude towards the use of generic medicines in urban and rural or Bhandara district, has complex additive summation of the core factors which are availability, price, doctor prescriptions and brand impression or attitude. Two of these are more crucial and determinant, availability and cost are therefore more determined when the majority of the consumer population becomes more predisposed to use the generic medicines as these are readily available and affordable. Doctor persuasion is also one of the factors that significantly relate to consumer confidence in making a purchase or brand perception although consumer confidence in the urban environment remains intact.

Based on the comparison, one can observe that the rural and urban consumers have some noticeable differences. The rural consumers will be price-sensitive and availability-dependent where the urban consumers are characterised by high brand image perception and quality image. Although, the government has been keen in ensuring there is a move in promoting the use of generic drugs, some negative awareness gaps and accessibility still exist especially in the rural locality.

Overall, the study mentions that the access to generic drugs should be increased, the educational initiatives should be strengthened, and the doctors should be instructed to prescribe generic drugs. They might be at one more level of acceptance through bettering the channels of distribution and eliminating the false ideas about quality. The findings are very educative to the policy makers, medical practitioners and pharmaceutical interests in making sure that the majority of people accept the use of generic drugs and provide quality healthcare services to all at affordable costs.



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