



Public Awareness, Utilization, and Perception of Generic Medicines: A Cross-Sectional Study of Demographic and Socioeconomic Determinants

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Article Received: 15-04-2026

Revised Version: 20-06-2026

Accepted: 05-07-2026

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Abstract: This cross-sectional study investigates public awareness, utilization patterns, and perceptions of generic medicines, focusing on demographic and socioeconomic determinants. We conducted a questionnaire-based survey among 300 respondents recruited via convenience sampling from rural and urban areas, covering diverse age groups, genders, educational backgrounds, and occupations. The structured instrument included close-ended questions on awareness, sources of information, preference for generic versus branded medicines, perceived effectiveness, cost comparison, availability, healthcare professional recommendations, satisfaction, trust, side effects, and knowledge of government schemes. Data were analyzed using descriptive statistics, including frequency distributions and percentages. Our results indicate that 71.3% of respondents were aware of generic medicines, with doctors (28.7%) and media/internet (27.0%) serving as primary information sources. Furthermore, 66.0% recognized that generic medicines are less expensive than branded alternatives. Preference for generic medicines was reported by 48.0%, while 36.3% preferred branded products. Regular use of generic medicines was observed in 34.3% of participants, and 55.7% found them easily available. Perceived effectiveness was high, with 57.3% considering generic medicines effective, and satisfaction was expressed by 60.3%. Trust in generic medicines was reported by 56.3% of respondents. However, awareness of government generic medicine schemes remained limited to only 40.7%. Doctor and pharmacist recommendations were received by 52.3% and 58.7% of participants, respectively. Side effects were experienced by 24.0% of users, and 54.3% reported self-medication with generic medicines.

Keywords: Generic medicines, Public awareness, Medication utilization, Perception, Socioeconomic determinants.

Introduction

The escalating costs of healthcare globally have placed significant strain on both public health systems and individual household finances. A widely advocated strategy to mitigate these expenses is the promotion of generic medicines, which are bioequivalent to their branded counterparts but are typically available at a substantially lower cost (Alrasheedy et al., 2014). Despite their economic advantages, the adoption of generic medicines is not uniform across populations and is influenced by a complex interplay of factors within the broader healthcare ecosystem (Viswanadham, 2021). This ecosystem includes not only the pharmaceutical market and regulatory frameworks but also the behaviors and attitudes of key stakeholders such as physicians, pharmacists, and patients themselves (Wu et al., 2019). For instance, the prescribing habits of doctors and the dispensing recommendations of pharmacists are critical determinants of patient access to generics (Qu et al., 2022). Furthermore, societal factors, including public trust, awareness of government health schemes, and cultural perceptions of medication quality, play a pivotal role in shaping consumer acceptance (Dunne & Dunne, 2015).

Previous research has extensively documented the knowledge and attitudes of specific populations towards generic drugs. Studies conducted in Lebanon (Hatem et al., 2023), Latvia (Kulikowska et al., 2019), and New Zealand (Babar et al., 2010) have revealed moderate to high levels of awareness but also persistent concerns regarding the perceived quality and efficacy of generics compared to branded products. These studies often highlight that while cost is a significant motivator, factors such as physician endorsement and personal experience with side effects are equally influential (Hassali et al., 2009). However, there remains a gap in understanding how these perceptions and utilization patterns vary across diverse demographic and socioeconomic strata within a single population, particularly in regions where both public and private healthcare systems coexist. The influence of government-led generic medicine schemes, which are designed to improve access and affordability, is also an under-explored area in many contexts (Chen & Shao, 2023).

The primary objective of this study was to conduct a comprehensive assessment of public awareness, utilization patterns, perception, accessibility, and acceptance of generic medicines among a diverse sample of the general population. We hypothesized that while generic medicines are increasingly recognized for their cost-effectiveness, significant barriers—including a lack of trust, limited awareness of government schemes, and insufficient recommendations from healthcare professionals—continue to hinder their widespread adoption. The significance of this research lies in its potential to identify specific demographic and socioeconomic determinants that influence generic medicine use, thereby providing actionable insights for policymakers and healthcare providers. By highlighting the gaps between awareness and actual practice, this study aims to inform the design of targeted educational interventions and policy reforms that can foster more rational and equitable use of generic medications.

The remainder of this paper is organized as follows: Section 2 details the methodology employed, including the survey design, sampling strategy, and data analysis techniques. Section 3 presents the key results from the survey, focusing on awareness, preferences, and behavioral patterns. Section 4 provides a discussion of these findings in the context of existing literature and the broader healthcare ecosystem, exploring the implications for public health policy. Finally, Section 5 concludes the paper by summarizing the main contributions and offering recommendations for future research and practice.

Methodology

Study Design and Setting

We employed a descriptive cross-sectional survey design to evaluate the awareness, utilization patterns, perception, and acceptance of generic medicines among the general population. This design was

selected to capture a snapshot of current knowledge and practices at a single point in time, enabling the identification of prevalent attitudes and behaviors across diverse demographic groups (Hunziker & Blankenagel, 2024). The survey was conducted using a structured, self-administered or investigator-assisted questionnaire, a method widely recognized for its efficiency in collecting primary data on health-related knowledge and practices (Kishore et al., 2021). Respondents were recruited from both rural and urban areas to ensure representation across different socioeconomic and geographic contexts, thereby enhancing the generalizability of the findings.

Sampling Strategy and Participants

A total of 300 participants were enrolled in the study using a convenience sampling technique. This non-probability sampling method was chosen due to practical constraints related to accessibility and respondent willingness, a common approach in exploratory health surveys (Golzar et al., 2022). The sample was designed to include individuals across a wide spectrum of age groups (18–30 years, 31–45 years, 46–60 years, and above 60 years), genders (male, female, and other), educational qualifications (ranging from no formal education to postgraduate degrees), and occupations (including students, employed individuals, self-employed, homemakers, and retirees). This diversity was intended to capture the heterogeneity of the general population and to allow for the exploration of demographic and socioeconomic determinants of generic medicine use.

Data Collection Instrument

Data were collected using a structured questionnaire comprising 14 distinct sections that covered demographic characteristics, awareness of generic medicines, sources of information, preference for generic versus branded products, perceived effectiveness, cost comparison, availability, satisfaction, trust, side effects experienced, frequency of purchase, healthcare professional recommendations, knowledge of government schemes, and self-medication practices. The questionnaire consisted entirely of close-ended questions with standardized response options such as “Yes,” “No,” “Always,” “Sometimes,” and “Rarely.” This format was chosen to facilitate uniform data collection and ease of analysis while minimizing response bias (Fischer, 2021). The instrument was developed based on a review of existing literature on generic medicine perception and utilization, with questions adapted from validated surveys (Hatem et al., 2023) to ensure content validity. The demographic section recorded age, gender, educational level, occupation, and area of residence (rural or urban). The remaining sections assessed knowledge and behaviors through binary and categorical responses.

Data Collection Procedure

Prior to data collection, potential participants were verbally informed about the objectives, procedures, and confidentiality of the study. Verbal consent was obtained from each respondent before their inclusion, a practice consistent with ethical guidelines for low-risk survey research (Länsimies-Antikainen et al., 2010). Participants were assured of their anonymity and the voluntary nature of their participation, with the option to withdraw at any time without consequence. Questionnaires were distributed in paper format. Respondents who were literate completed the forms independently, while those requiring assistance received help from a trained investigator who read the questions aloud and recorded responses without offering interpretation or influencing answers. Data collection took place over a period of [Number] weeks, and all completed questionnaires were reviewed for completeness before being entered into the database.

Statistical Analysis

The collected data were entered into a Microsoft Excel spreadsheet and subsequently cleaned to check for inconsistencies or missing entries. Descriptive statistical methods, including frequency distribution and percentage analysis, were employed to summarize the data. For each questionnaire item, we calculated the count and proportion of respondents selecting each response option. No inferential statistical tests were applied, as the primary objective was to describe the overall prevalence of awareness, utilization, and perception patterns across the sample. Results were organized into tables for clarity, with each table presenting the frequency and percentage for a specific variable or set of related variables. This descriptive approach is appropriate for cross-sectional surveys where the goal is to generate hypotheses and identify trends rather than to establish causal relationships (Etchegaray & Fischer, 2009).

Results

The survey yielded responses from 300 participants, providing a comprehensive dataset on public knowledge and behaviors regarding generic medicines. The results are presented across six subsections, beginning with the demographic profile of the sample and progressing through awareness, utilization patterns, perceptions, healthcare professional influence, and self-medication practices.

Demographic Characteristics of Respondents

The demographic composition of the survey sample is presented in Table 1, which details the distribution of respondents by gender, age group, educational background, and occupational status. This profile provides the foundational context for interpreting subsequent findings on awareness and utilization of generic medicines.

Regarding gender distribution, among the 300 respondents, males constituted the highest proportion at 39.3% (n = 118), followed closely by females at 34.7% (n = 104). Respondents identifying with other gender groups accounted for 26.0% (n = 78) of the sample. This distribution, while not perfectly balanced, captures perspectives across gender categories and aligns with the demographic heterogeneity observed in similar community-based health surveys (Macdonald et al., 2010).

Table 1. Demographic Characteristics of Survey Respondents (N = 300)

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	118	39.3
	Female	104	34.7
	Other	78	26.0
Age Group	Below 18 years	58	19.3
	18–30 years	82	27.3
	31–45 years	71	23.7
	46–60 years	56	18.7
	Above 60 years	33	11.0
Educational Level	No formal education	45	15.0
	Primary school	62	20.7
	Secondary school	88	29.3

Characteristic	Category	Frequency (n)	Percentage (%)
	Graduate	72	24.0
	Postgraduate	33	11.0
Occupation	Student	54	18.0
	Employed (government)	48	16.0
	Employed (private)	71	23.7
	Self-employed	52	17.3
	Homemaker	41	13.7
	Retired	34	11.3

In terms of age distribution, the largest proportion of respondents belonged to the young adult age bracket of 18–30 years, representing 27.3% (n = 82) of the total sample. The next most common age group was 31–45 years, comprising 23.7% (n = 71), followed by those below 18 years at 19.3% (n = 58). Respondents aged 46–60 years accounted for 18.7% (n = 56), while the smallest cohort was those above 60 years, who constituted 11.0% (n = 33). This age profile suggests a relatively young sample, with over half of the respondents (50.6%) falling within the economically active age range of 18–45 years. Such a distribution is relevant, as younger adults are often more exposed to health information via media and internet sources, which may influence their awareness patterns (Zhao et al., 2022).

Educational attainment varied across the sample, as detailed in Table 1. The largest subgroup comprised respondents with secondary school education, representing 29.3% (n = 88), followed by graduates at 24.0% (n = 72). Primary school education was reported by 20.7% (n = 62), while those with no formal education constituted 15.0% (n = 45). Postgraduates formed the smallest educational cohort at 11.0% (n = 33). This range of educational backgrounds ensures representation across different levels of health literacy, a known predictor of medication-related knowledge and behavior (Zhang et al., 2014).

Occupational diversity was also evident in the sample. The most common occupational category was private sector employees, comprising 23.7% (n = 71), followed by students at 18.0% (n = 54) and self-employed individuals at 17.3% (n = 52). Government employees accounted for 16.0% (n = 48), while homemakers represented 13.7% (n = 41), and retirees constituted 11.3% (n = 34). This occupational mix provides insights into how different employment contexts, which may determine access to healthcare benefits and exposure to medication-related information, could shape perceptions of generic medicines. Overall, the demographic profile of respondents reflects a heterogeneous sample that captures a broad spectrum of the general population, thereby supporting the exploratory aims of this descriptive cross-sectional study.

Awareness and Knowledge Regarding Generic Medicines

The assessment of public awareness and knowledge regarding generic medicines revealed a generally high level of recognition among the surveyed population, though notable gaps in understanding persisted. As presented in Table 2, the majority of respondents, 71.3% (n = 214), reported being aware of generic medicines, while 28.7% (n = 86) indicated a lack of awareness. This finding suggests that generic medicines have achieved a moderate to high level of penetration into public consciousness, a trend consistent with observations from similar cross-sectional surveys conducted in other regions (Hatem et al., 2023) (Kulikowska et al., 2019). However, the fact that nearly one-third of respondents

remained unaware highlights a significant knowledge gap that could impede the broader adoption of cost-effective therapeutic alternatives.

Table 2. Awareness Regarding Generic Medicines (N = 300)

Response	Frequency (n)	Percentage (%)
Yes	214	71.3
No	86	28.7
Total	300	100.0

The sources through which respondents acquired information about generic medicines were diverse, as detailed in Table 3. Doctors emerged as the most frequently cited source, reported by 28.7% (n = 86) of participants, followed closely by media and internet platforms at 27.0% (n = 81). Pharmacists were identified as a source by 24.7% (n = 74) of respondents, while friends and family accounted for 19.6% (n = 59). This distribution underscores the dual role of healthcare professionals and mass media in shaping public knowledge. The prominence of doctors as a primary source aligns with the established trust patients place in physician recommendations regarding medication choices (Qu et al., 2022). Simultaneously, the substantial contribution of media and internet sources reflects the growing influence of digital health information, particularly among younger demographics who are more likely to engage with online content (Zhao et al., 2022).

Table 3. Source of Information About Generic Medicines (N = 300)

Source	Frequency (n)	Percentage (%)
Doctors	86	28.7
Pharmacists	74	24.7
Media/Internet	81	27.0
Friends/Family	59	19.6
Total	300	100.0

Beyond basic awareness, the study assessed specific knowledge regarding the cost differential between generic and branded medicines. A substantial majority of respondents, 66.0% (n = 198), were aware that generic medicines are less expensive than their branded counterparts, while 34.0% (n = 102) did not possess this knowledge. This finding indicates that cost-related knowledge is relatively high, which is encouraging given that price is a primary driver for generic medicine adoption (Alrasheedy et al., 2014). However, the fact that over one-third of respondents were unaware of the cost advantage suggests that economic literacy regarding pharmaceutical options remains incomplete. This gap may be particularly pronounced among individuals who rely primarily on informal information sources, such as friends and family, rather than professional healthcare advice. Overall, the results from this subsection demonstrate that while general awareness of generic medicines is widespread, deeper knowledge regarding their economic benefits and the specific roles of different information channels requires further strengthening through targeted educational initiatives.

Utilization and Preference of Generic Medicines

The utilization patterns and preferences regarding generic medicines were assessed through several key indicators, including knowledge of cost differences, stated preference, purchase frequency, and

perceived availability. These metrics provide a comprehensive view of how theoretical awareness translates into actual behavior in the marketplace.

Knowledge about the cost difference between generic and branded medicines was a foundational factor influencing utilization. As shown in Table 4, a majority of respondents (66.0%, $n = 198$) were aware that generic medicines are generally less expensive than branded alternatives, while 34.0% ($n = 102$) lacked this awareness. This relatively high level of cost-related knowledge is consistent with findings from other cross-sectional studies, which have identified price as a primary motivator for generic medicine adoption (Alrasheedy et al., 2014). However, the presence of a substantial minority who were unaware of the cost advantage indicates that economic literacy regarding pharmaceutical options remains incomplete, potentially limiting the uptake of generics among price-sensitive consumers.

Table 4. Knowledge About Cost Difference Between Generic and Branded Medicines ($N = 300$)

Response	Frequency (n)	Percentage (%)
Aware	198	66.0
Not Aware	102	34.0
Total	300	100.0

When asked about their preference for generic versus branded medicines, the responses revealed a divided landscape, as detailed in Table 5. Nearly half of the respondents (48.0%, $n = 144$) expressed a preference for generic medicines, while 36.3% ($n = 109$) indicated a preference for branded products. A notable proportion of 15.7% ($n = 47$) reported having no specific preference. This distribution suggests that while generic medicines have achieved considerable acceptance, a significant segment of the population remains loyal to branded alternatives. The persistence of brand preference may be attributed to factors such as perceived higher quality, trust in established pharmaceutical companies, or concerns about the efficacy of generics, which have been documented in previous research (Dunne & Dunne, 2015).

Table 5. Preference for Generic Medicines ($N = 300$)

Response	Frequency (n)	Percentage (%)
Prefer Generic Medicines	144	48.0
Prefer Branded Medicines	109	36.3
No Specific Preference	47	15.7
Total	300	100.0

The frequency of purchasing generic medicines, as presented in Table 6, further illustrates the utilization patterns. A majority of respondents (45.7%, $n = 137$) reported purchasing generic medicines “sometimes,” indicating occasional use rather than consistent adoption. Regular use was reported by 34.3% ($n = 103$) of participants, while 20.0% ($n = 60$) stated that they rarely purchased generics. This pattern suggests that while generic medicines are integrated into the medication routines of many individuals, they have not yet become the default choice for a substantial portion of the population. The high proportion of occasional users may reflect situational factors, such as availability, physician recommendation, or price sensitivity at the point of purchase, which can vary across different healthcare encounters (Hassali et al., 2009).

Table 6. Frequency of Purchasing Generic Medicines ($N = 300$)

Frequency	Frequency Count (n)	Percentage (%)
Regularly	103	34.3
Sometimes	137	45.7
Rarely	60	20.0
Total	300	100.0

Perceived availability of generic medicines in pharmacies is a critical logistical factor that can either facilitate or hinder utilization. As shown in Table 7, a majority of respondents (55.7%, n = 167) reported that generic medicines were easily available in their local pharmacies. However, 30.3% (n = 91) indicated that they were only sometimes available, and 14.0% (n = 42) stated that they were rarely available. This finding suggests that while access is generally good, there are still significant barriers related to supply and distribution, particularly in certain geographic areas or pharmacy types. Inconsistent availability can undermine patient confidence and force consumers to revert to branded alternatives, even when they prefer generics (Viswanadham, 2021).

Table 7. *Availability of Generic Medicines in Pharmacies (N = 300)*

Response	Frequency (n)	Percentage (%)
Easily Available	167	55.7
Sometimes Available	91	30.3
Rarely Available	42	14.0
Total	300	100.0

Overall, the findings from this subsection reveal a nuanced picture of generic medicine utilization. While cost awareness is high and a plurality of respondents express a preference for generics, actual purchase behavior is characterized by occasional rather than regular use. The persistence of brand preference among over a third of respondents, coupled with availability challenges for a notable minority, indicates that multiple barriers—ranging from psychological factors to supply chain issues—continue to impede the full realization of generic medicine adoption. These patterns underscore the need for multifaceted interventions that address both consumer attitudes and systemic access issues.

Perception and Satisfaction Regarding Generic Medicines

The perception and satisfaction regarding generic medicines were evaluated through three key dimensions: perceived effectiveness, overall satisfaction, and trust. These factors collectively shape consumer acceptance and willingness to continue using generic alternatives.

As shown in Table 8, the majority of respondents (57.3%, n = 172) considered generic medicines to be effective for treatment purposes. A further 29.7% (n = 89) rated them as moderately effective, while only 13.0% (n = 39) perceived them as not effective. This distribution indicates that over three-quarters of the sample held a positive or at least neutral view of generic medicine efficacy, a finding that aligns with previous research demonstrating growing public confidence in the therapeutic equivalence of generics (Dunne & Dunne, 2015). The relatively small proportion of respondents who considered generics ineffective suggests that negative perceptions, while present, are not dominant.

Table 8. *Perceived Effectiveness of Generic Medicines (N = 300)*

Response	Frequency (n)	Percentage (%)
Effective	172	57.3
Moderately Effective	89	29.7
Not Effective	39	13.0
Total	300	100.0

With respect to satisfaction, Table 9 reveals that a considerable proportion of respondents expressed satisfaction with the quality and effectiveness of generic medicines. Specifically, 60.3% (n = 181) reported being satisfied, while 24.7% (n = 74) were neutral and 15.0% (n = 45) were dissatisfied. This satisfaction level is encouraging, as it suggests that the majority of users have had positive experiences with generics, which is likely to reinforce their continued use and potentially influence their social networks through word-of-mouth recommendations (Hassali et al., 2009). The neutral group, representing nearly a quarter of respondents, may indicate a population that is neither strongly convinced nor opposed, representing a target for educational interventions that could shift their attitudes toward more definitive acceptance.

Table 9. Satisfaction with Generic Medicines (N = 300)

Satisfaction Level	Frequency (n)	Percentage (%)
Satisfied	181	60.3
Neutral	74	24.7
Dissatisfied	45	15.0
Total	300	100.0

Trust in generic medicines as reliable alternatives to branded products was reported by more than half of the respondents. As detailed in Table 10, 56.3% (n = 169) indicated that they trusted generic medicines, while 43.7% (n = 131) did not. This trust level, while not overwhelmingly high, represents a solid foundation upon which to build further acceptance. The significant minority who expressed distrust may be influenced by concerns about manufacturing standards, perceived inferior quality, or past negative experiences (Alrasheedy et al., 2014). This finding highlights the importance of regulatory oversight and transparent communication about bioequivalence standards to bolster public confidence (Chen & Shao, 2023).

Table 10. Trust in Generic Medicines (N = 300)

Response	Frequency (n)	Percentage (%)
Yes	169	56.3
No	131	43.7
Total	300	100.0

Taken together, these findings illustrate that while a majority of the surveyed population perceives generic medicines as effective, feels satisfied with them, and trusts their reliability, there remains a substantial segment of the population with neutral or negative attitudes. The consistency across these three indicators suggests that perceptions are coherent, with effectiveness and trust being closely linked to satisfaction. This coherence implies that interventions aimed at improving public understanding of

generic medicine equivalence and quality assurance could simultaneously enhance multiple dimensions of perception. Furthermore, the availability of generics in pharmacies, as previously noted in Table 7, may influence these perceptions, as consistent access can reinforce positive experiences and build trust over time.

Role of Healthcare Professionals and Government Awareness

The influence of healthcare professionals and the awareness of government initiatives are critical determinants in the adoption of generic medicines. This subsection examines the extent to which doctors and pharmacists recommend generic alternatives to patients, as well as the public's knowledge of government schemes designed to promote their use.

Regarding the role of physicians, the survey assessed whether respondents had ever received a recommendation from their doctor to use generic medicines. As presented in Table 11, a slight majority of participants (52.3%, $n = 157$) reported having received such a recommendation, while 47.7% ($n = 143$) indicated they had not. This finding suggests that while doctors are actively promoting generics in a significant proportion of consultations, nearly half of the patients are not receiving this guidance. Given that doctors are the most trusted source of health information, as evidenced by their prominence as an information source in Table 3, this gap represents a missed opportunity to influence patient behavior (Qu et al., 2022). The lack of recommendation may stem from various factors, including physician skepticism about generic quality, habitual prescribing of branded products, or insufficient time during consultations to discuss cost-saving options (Dunne & Dunne, 2015).

Table 11. Doctor Recommendation of Generic Medicines ($N = 300$)

Response	Frequency (n)	Percentage (%)
Yes	157	52.3
No	143	47.7
Total	300	100.0

Pharmacists, who are often the final point of contact before a medication is dispensed, also play a pivotal role in promoting generic medicines. As shown in Table 12, a higher proportion of respondents (58.7%, $n = 176$) reported receiving recommendations for generic medicines from their pharmacist, compared to 41.3% ($n = 124$) who did not. This rate is notably higher than that observed for doctors, suggesting that pharmacists may be more proactive in suggesting cost-effective alternatives at the point of dispensing. This finding aligns with the role of pharmacists as medication experts who are often more directly engaged with patients regarding drug costs and availability (Alqawasmeh et al., 2025). The higher recommendation rate from pharmacists may also reflect their greater awareness of generic product availability and pricing within their pharmacy inventory.

Table 12. Pharmacist Recommendation of Generic Medicines ($N = 300$)

Response	Frequency (n)	Percentage (%)
Yes	176	58.7
No	124	41.3
Total	300	100.0

Despite the relatively high rates of healthcare professional recommendations, awareness of government schemes and initiatives designed to promote generic medicines was notably limited. As detailed in Table

13, only 40.7% (n = 122) of respondents were aware of any government programs supporting generic medicine use, while the majority (59.3%, n = 178) were not aware. This finding reveals a significant disconnect between the availability of policy-level support and public knowledge of such initiatives. Government schemes, such as the Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) in India or similar programs in other countries, aim to make quality generic medicines affordable and accessible through dedicated outlets (Ugandar & Reddy, 2026). The low awareness level suggests that the reach and visibility of these programs are insufficient, potentially limiting their impact on public health outcomes.

Table 13. Awareness Regarding Government Generic Medicine Schemes (N = 300)

Response	Frequency (n)	Percentage (%)
Aware	122	40.7
Not Aware	178	59.3
Total	300	100.0

The combined findings from this subsection highlight a complex interplay between professional influence and policy awareness. While healthcare professionals, particularly pharmacists, are actively recommending generic medicines to a majority of patients, the lack of awareness about government schemes indicates that these recommendations are not being reinforced by broader public health messaging. This gap may be particularly detrimental for lower-income populations who could benefit most from subsidized generic options. The results underscore the need for integrated strategies that leverage both healthcare professional counseling and mass media campaigns to increase awareness of government initiatives, thereby creating a more supportive ecosystem for generic medicine adoption (Viswanadham, 2021). Furthermore, the fact that over 40% of respondents did not receive recommendations from either doctors or pharmacists suggests that there is room for improvement in professional education and practice guidelines to ensure that generic options are consistently presented to patients as a first-line choice.

Side Effects and Self-Medication Practices

The safety profile of generic medicines and the behavioral patterns of self-medication among users were also assessed. Understanding these aspects is crucial, as adverse experiences can significantly undermine trust and deter future use, while self-medication practices may indicate both the accessibility of generics and potential risks associated with unsupervised medication use (Hassali et al., 2009).

Regarding the experience of side effects, the survey asked respondents whether they had encountered any adverse effects after using generic medicines. As shown in Table 14, a relatively small minority of respondents (24.0%, n = 72) reported experiencing side effects, while the vast majority (76.0%, n = 228) indicated that they had not. This finding suggests that generic medicines are generally well-tolerated by the surveyed population, consistent with the established bioequivalence standards that ensure generic products have the same active ingredients, dosage form, and route of administration as their branded counterparts (Meredith, 1996). The low incidence of side effects likely contributes to the overall satisfaction and trust levels reported in the previous subsection, as negative experiences could otherwise fuel skepticism and brand preference (Dunne & Dunne, 2015). Nevertheless, the presence of side effects in nearly a quarter of users highlights the importance of continued pharmacovigilance and patient education regarding the management of adverse reactions, regardless of whether the medication is generic or branded.

Table 14. Experience of Side Effects After Using Generic Medicines (N = 300)

Response	Frequency (n)	Percentage (%)
Yes	72	24.0
No	228	76.0
Total	300	100.0

Turning to self-medication practices, the survey explored whether respondents had ever used generic medicines without a prescription or a formal medical consultation. The results, presented in Table 15, reveal that more than half of the participants (54.3%, $n = 163$) reported engaging in self-medication with generic medicines, while 45.7% ($n = 137$) stated that they did not. This high prevalence of self-medication is a noteworthy finding, as it suggests that generic medicines are not only used under professional guidance but are also readily obtained and consumed autonomously by the public. This behavior may be driven by several factors, including the lower cost of generics, easy availability over the counter, perceived familiarity with common ailments, or previous positive experiences with similar treatments (Ocan et al., 2015). While self-medication with generics can improve access to affordable treatment for minor conditions, it also carries inherent risks, such as incorrect self-diagnosis, inappropriate dosage, drug interactions, and delay in seeking professional care for serious underlying conditions (Perrot et al., 2019).

Table 15. Practice of Self-Medication Using Generic Medicines ($N = 300$)

Response	Frequency (n)	Percentage (%)
Yes	163	54.3
No	137	45.7
Total	300	100.0

The juxtaposition of low side-effect incidence with high self-medication rates offers an interesting perspective. The general tolerability of generics may inadvertently encourage self-medication, as users may feel confident in their safety based on past experiences (Hassali et al., 2009). Conversely, the high rate of self-medication also underscores the need for robust public health education on the appropriate use of medications, including the importance of consulting a healthcare professional before initiating any new treatment, even for commonly known conditions. This is particularly relevant given the limited awareness of government schemes reported in the previous subsection; without adequate knowledge of formal support systems, individuals may rely more heavily on self-directed purchasing behaviors. Overall, the findings from this subsection highlight a dual trend: generic medicines are perceived as safe due to a low side-effect profile, yet this perception may be accompanied by risky self-medication practices that warrant attention from both healthcare providers and policymakers.

Discussion

The findings from this cross-sectional survey illuminate a complex landscape of generic medicine uptake, revealing both encouraging trends and persistent challenges that have significant implications for healthcare practice and policy. The observed moderate-to-high awareness level of 71.3% aligns with global patterns reported in comparable settings (Hatem et al., 2023) (Kulikowska et al., 2019), yet the substantial minority lacking awareness underscores a critical gap that must be addressed systematically. From a practical standpoint, healthcare systems should prioritize embedding generic medicine education into routine patient encounters, perhaps through mandatory counseling protocols at pharmacies and the integration of cost-comparison information into electronic health records, thereby

enabling physicians to highlight generic alternatives during consultations without adding significant time burdens (Qu et al., 2022).

The persistence of brand preference among 36.3% of respondents despite high perceived effectiveness and satisfaction reveals a psychological barrier that transcends mere cost considerations. This finding suggests that consumers may harbor latent concerns about quality or manufacturing standards that are not fully captured by satisfaction metrics (Dunne & Dunne, 2015). To counter this, policymakers could invest in public awareness campaigns that transparently communicate the stringent regulatory requirements for bioequivalence approval, perhaps leveraging testimonials from healthcare professionals and satisfied users to build emotional resonance alongside factual messaging. Furthermore, the limited awareness of government schemes (only 40.7%) represents a missed opportunity for large-scale cost savings, particularly among lower-income populations who stand to benefit most from subsidized generic options (Ugandar & Reddy, 2026). We recommend that government health agencies collaborate with local pharmacies to prominently display information about such schemes at points of sale and during community health outreach programs, thereby bridging the gap between policy intent and public knowledge.

Several methodological limitations warrant careful consideration when interpreting these results. The use of convenience sampling from specified rural and urban areas may introduce selection bias, potentially overrepresenting individuals with higher health literacy or those who are more engaged with healthcare services, which could inflate awareness and acceptance rates compared to the general population. Additionally, the reliance on self-reported data introduces the possibility of recall bias, particularly regarding side effects and purchase frequency, and social desirability bias may have led respondents to overstate their preference for generics given the growing social awareness of cost-effective healthcare. The cross-sectional design captures only a single point in time, precluding any assessment of how attitudes and behaviors evolve in response to policy changes or personal experiences. Moreover, the sample size of 300, while adequate for descriptive analysis, limits the statistical power for subgroup comparisons across demographic categories, and the use of a structured questionnaire with predetermined response options may have constrained the depth of qualitative insights that could be gleaned from open-ended questions.

Building on these limitations, future research should explore several understudied directions to deepen our understanding of generic medicine adoption dynamics. There is a need for longitudinal studies that track individual attitudes and purchasing behaviors over time, particularly following exposure to targeted educational interventions or after the introduction of new government initiatives, to establish causal pathways rather than mere associations (Alrasheedy et al., 2014). Future research should also explore the specific reasons behind brand preference among the 36.3% of respondents who continue to favor branded products, employing qualitative methods such as in-depth interviews or focus groups to uncover nuanced motivations related to perceived quality, trust in manufacturers, or past negative experiences. Additionally, the high self-medication rate of 54.3% warrants dedicated investigation into the context and determinants of this behavior, such as whether it is driven by economic necessity, convenience, or a lack of access to primary care, and how it correlates with actual health outcomes. Comparative studies across different healthcare systems, such as those with mandatory generic substitution policies versus those with more permissive models, could provide valuable insights into the most effective regulatory levers for promoting generic adoption without compromising patient safety (Chen & Shao, 2023).

Conclusion

This descriptive cross-sectional study was designed to assess public awareness, utilization patterns, and perceptions of generic medicines and to identify demographic and socioeconomic determinants influencing these outcomes. Our findings demonstrate that while awareness of generic medicines is moderately high at 71.3%, and a majority of respondents recognize their cost advantage and report satisfaction with their effectiveness, a meaningful gap persists between theoretical knowledge and consistent adoption. The preference for branded medicines among over one-third of participants, coupled with the limited awareness of government schemes among nearly 60% of the sample, confirms that barriers related to trust, healthcare professional engagement, and policy visibility continue to hinder the full realization of generic medicine benefits. This research contributes to the existing literature by offering a comprehensive, multi-dimensional assessment of both cognitive and behavioral determinants across a heterogeneous socioeconomic spectrum, thereby clarifying the specific points at which interventions may be most impactful.

The findings carry several implications for future research and practice. Longitudinal studies are needed to track how attitudes and purchasing behaviors evolve over time, particularly in response to targeted educational campaigns or changes in regulatory frameworks, to establish causal mechanisms rather than mere associations. Qualitative investigations employing in-depth interviews could uncover the nuanced reasons behind persistent brand preference, potentially revealing deep-seated concerns about quality or manufacturing standards that quantitative surveys cannot fully capture. Ultimately, the moderate acceptance of generic medicines observed here represents a solid foundation for progress, but realizing their full potential requires coordinated action from policymakers, healthcare professionals, and public health educators to bridge the gap between awareness and sustained behavioral change.

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