

Role of Health Awareness Campaigns in Promoting Generic Drug Usage

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Abstract: *The increasing cost of healthcare and medicines has intensified the need for affordable treatment alternatives across healthcare systems worldwide. Generic medicines provide a cost-effective solution by offering therapeutic equivalence to branded medicines at substantially lower prices. Despite their affordability and proven effectiveness, the utilization of generic medicines remains lower than expected in many countries. One of the major factors contributing to this situation is the lack of consumer awareness and understanding regarding generic medicines.*

Health awareness campaigns have emerged as an important strategy for improving public knowledge, correcting misconceptions, and encouraging the adoption of cost-effective healthcare practices. Governments, healthcare organizations, and pharmaceutical stakeholders have increasingly implemented awareness initiatives to educate consumers about the safety, effectiveness, and affordability of generic medicines. However, the effectiveness of such campaigns in influencing consumer behavior remains insufficiently explored.

The present study aims to examine the role of health awareness campaigns in promoting generic drug usage. The study proposes that exposure to health awareness campaigns improves consumer awareness and knowledge regarding generic medicines, which subsequently influences trust, attitudes, and actual usage behavior. The study seeks to contribute to healthcare management, public health communication, pharmaceutical policy, and consumer behavior literature by developing a framework explaining the relationship between awareness campaigns and generic medicine utilization..

Keywords: Health Awareness Campaigns, Generic Medicines, Consumer Awareness, Generic Drug Usage, Public Health Communication, Healthcare Management

I. INTRODUCTION

Healthcare affordability remains one of the most significant challenges confronting healthcare systems globally. The increasing prevalence of chronic diseases, rising pharmaceutical expenditures, demographic transitions, and expanding healthcare needs have intensified concerns regarding the affordability and accessibility of medicines. Medicines constitute an essential component of healthcare delivery, and access to affordable medicines is considered fundamental to achieving positive health outcomes and improving quality of life.

The pharmaceutical industry has experienced remarkable growth during the past several decades. Advancements in medical research and drug development have significantly improved treatment options for various diseases. However, these advancements have also contributed to increasing healthcare expenditure. In many countries, medicine costs represent a substantial proportion of total healthcare spending. For low-income and middle-income populations, medicine expenses frequently create financial burdens that may affect treatment adherence and healthcare accessibility. Generic medicines have been widely recognized as an effective mechanism for improving medicine affordability. Generic drugs contain the same active ingredients, dosage forms, strength, and therapeutic effects as branded medicines while typically being available at lower prices. Numerous scientific studies have demonstrated that generic medicines provide comparable safety, effectiveness, and quality to their branded counterparts.

Despite the demonstrated benefits of generic medicines, their utilization remains inconsistent across different healthcare systems and consumer groups. Many consumers continue to prefer branded medicines due to concerns



regarding quality, effectiveness, safety, and reliability. Misconceptions regarding generic medicines often influence purchasing decisions and may reduce the adoption of affordable treatment alternatives.

Consumer awareness plays a critical role in shaping healthcare decisions. Individuals who possess accurate information regarding generic medicines are generally more likely to accept and utilize them. Conversely, limited awareness and misinformation may contribute to negative perceptions and resistance toward generic substitution. Therefore, improving consumer awareness has become an important objective for healthcare policymakers and public health organizations.

Health awareness campaigns have emerged as a powerful tool for influencing public knowledge, attitudes, and behavior. Such campaigns aim to educate individuals regarding health-related issues, promote positive healthcare practices, and encourage informed decision-making. Within the pharmaceutical sector, awareness campaigns are increasingly used to communicate information regarding generic medicines and their benefits.

Governments and healthcare organizations worldwide have implemented various awareness initiatives to promote generic medicine usage. These initiatives include mass media campaigns, community outreach programs, educational seminars, digital communication strategies, social media awareness programs, and public information campaigns. Such interventions seek to improve consumer understanding regarding the effectiveness, safety, affordability, and availability of generic medicines.

India provides an important context for examining the effectiveness of health awareness campaigns. As one of the largest producers of generic medicines globally, India plays a significant role in supplying affordable medicines to both domestic and international markets. The Government of India has introduced several initiatives aimed at promoting generic medicines, including the Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP). These initiatives seek to increase public awareness and improve access to affordable medicines through dedicated generic medicine outlets and educational programs.

Although awareness initiatives have expanded considerably, questions remain regarding their effectiveness in changing consumer behavior. While awareness campaigns may improve knowledge, it remains necessary to understand whether increased awareness translates into greater trust, positive attitudes, and actual utilization of generic medicines. Existing studies have primarily focused on consumer awareness, knowledge, perceptions, and attitudes toward generic medicines. Comparatively limited attention has been devoted to evaluating the role of health awareness campaigns in generating these outcomes.

The present study seeks to address this gap by examining how health awareness campaigns influence consumer awareness and subsequently affect generic drug usage. The study integrates concepts from public health communication, consumer behavior, and healthcare management to develop a comprehensive framework explaining generic medicine adoption.

Understanding the effectiveness of awareness campaigns is important for multiple stakeholders. Policymakers require evidence regarding the impact of public awareness initiatives. Healthcare organizations seek effective communication strategies for promoting affordable healthcare solutions. Pharmaceutical companies benefit from understanding factors influencing generic medicine adoption. Consumers benefit through improved access to reliable information that supports informed healthcare decisions.

By examining the relationship between health awareness campaigns and generic drug usage, the study seeks to contribute to both academic literature and practical healthcare policy. The findings may assist healthcare authorities in designing more effective awareness programs capable of improving generic medicine acceptance and utilization.

SELECTION OF THE STUDY

The present study has been selected in response to the growing importance of affordable healthcare and the increasing need to promote rational medicine utilization among consumers.



Generic medicines represent one of the most effective strategies for reducing healthcare expenditure while maintaining treatment quality. Despite their affordability and therapeutic equivalence, generic medicines continue to face adoption challenges due to limited awareness, misconceptions, and negative perceptions among consumers.

Previous research has consistently highlighted the importance of awareness, knowledge, trust, and attitudes in influencing generic medicine acceptance. However, relatively few studies have investigated how awareness is generated and whether organized health awareness campaigns effectively influence generic medicine usage.

The increasing use of public health communication strategies has created opportunities to improve consumer knowledge and healthcare decision-making. Understanding the effectiveness of awareness campaigns is therefore essential for developing evidence-based interventions that promote affordable healthcare practices.

The study is particularly relevant within the Indian healthcare context, where government initiatives such as PMBJP seek to expand generic medicine utilization. Evaluating the relationship between awareness campaigns and generic medicine adoption may provide valuable insights for healthcare policymakers, pharmaceutical organizations, healthcare providers, and consumers.

The study also contributes to academic literature by integrating concepts from public health communication, consumer behavior, and healthcare management. By focusing on the role of awareness campaigns rather than awareness alone, the study addresses an important gap in existing research.

OBJECTIVES OF THE STUDY

- To examine the influence of health awareness campaigns on consumer awareness regarding generic medicines.
- To evaluate the effect of consumer awareness on knowledge of generic medicines.
- To investigate the relationship between knowledge of generic medicines and trust in generic medicines.
- To assess the influence of trust in generic medicines on attitudes toward generic medicines.
- To examine the impact of attitudes toward generic medicines on generic drug usage.
- To develop a conceptual framework explaining the role of health awareness campaigns in promoting generic drug usage.

RESEARCH QUESTIONS

- Do health awareness campaigns significantly influence consumer awareness regarding generic medicines?
- Does consumer awareness improve knowledge of generic medicines?
- Does knowledge of generic medicines influence trust in generic medicines?
- Does trust in generic medicines affect consumer attitudes toward generic medicines?
- Do positive attitudes toward generic medicines increase generic drug usage?
- Can health awareness campaigns indirectly influence generic drug usage through awareness, knowledge, trust, and attitudes?

II. RESEARCH METHODOLOGY

Research Design

The study adopts a descriptive and analytical research design.

Nature of Research

The study is quantitative in nature and seeks to examine relationships among the proposed variables through statistical analysis.

Sources of Data

Primary Data

Primary data will be collected through a structured questionnaire administered to medicine consumers.

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Secondary Data

Secondary data will be collected from:

- Research journals
- Academic publications
- Government reports
- Public health reports
- Pharmaceutical industry publications
- Healthcare databases
- Books and conference proceedings

Target Population

The target population consists of medicine consumers who purchase prescription or non-prescription medicines from pharmacies, hospitals, clinics, and healthcare outlets.

Sampling Technique

Stratified Random Sampling will be employed to ensure representation across demographic groups.

Sample Size

The proposed sample size ranges between 400 and 600 respondents.

Research Instrument

A structured questionnaire based on a five-point Likert scale will be used for data collection.

Scale Used

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

Statistical Tools

The following statistical tools will be employed:

- Descriptive Statistics
- Reliability Analysis (Cronbach's Alpha)
- Correlation Analysis
- Multiple Regression Analysis
- Structural Equation Modeling (SEM)

Variables of the Study

Independent Variable

Health Awareness Campaigns

Mediating Variables

Consumer Awareness

Knowledge of Generic Medicines

Trust in Generic Medicines

Attitude Toward Generic Medicines

Dependent Variable

Generic Drug Usage

III. LITERATURE REVIEW

Introduction

The utilization of generic medicines has become an increasingly important subject within healthcare systems due to rising healthcare expenditures and growing concerns regarding medicine affordability. Generic medicines provide

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therapeutically equivalent alternatives to branded medicines while significantly reducing treatment costs. Despite their proven effectiveness, acceptance and utilization of generic medicines continue to vary across countries and populations. Researchers have extensively investigated factors influencing generic medicine adoption, including consumer awareness, knowledge, trust, attitudes, perceptions, and physician influence. The literature consistently demonstrates that awareness and education play critical roles in promoting generic medicine acceptance. However, comparatively limited attention has been devoted to understanding how health awareness campaigns contribute to these outcomes.

The present literature review examines existing research under five major themes:

- Consumer Awareness and Knowledge of Generic Medicines
- Trust and Perceived Quality of Generic Medicines
- Consumer Attitudes and Generic Medicine Acceptance
- Physician Influence and Generic Medicine Utilization
- Health Awareness Campaigns and Public Health Communication

The review further identifies significant gaps in existing literature and establishes the foundation for the proposed study.

CONSUMER AWARENESS AND KNOWLEDGE OF GENERIC MEDICINES

Consumer awareness represents one of the most frequently studied determinants of generic medicine acceptance. Awareness refers to consumers' familiarity with generic medicines and their understanding of the benefits associated with generic drug utilization.

Shrank et al. (2009) examined patient perceptions regarding generic medicines and reported that awareness significantly influenced acceptance and utilization. The study found that consumers who possessed greater knowledge regarding generic medicines demonstrated higher willingness to use generic alternatives. Conversely, limited awareness contributed to negative perceptions and reluctance toward generic substitution.

Dunne et al. (2014) conducted a systematic review examining patient perceptions of generic medicines. The review identified awareness and education as critical factors influencing generic medicine acceptance. The researchers concluded that consumers who understood the characteristics of generic medicines were more likely to accept them as substitutes for branded products.

Similarly, Alrasheedy et al. (2015) reported that consumers with higher levels of knowledge demonstrated more favorable attitudes toward generic medicines. The study emphasized that educational interventions could improve awareness and facilitate greater acceptance of generic alternatives.

Hassali et al. (2009) conducted a nationwide survey examining consumer perceptions and knowledge of generic medicines. Their findings indicated that awareness strongly influenced consumer acceptance and willingness to use generic medicines. Respondents who understood the economic benefits associated with generic medicines demonstrated greater acceptance compared to those with limited knowledge.

Figueiras et al. (2010) further supported these findings by demonstrating that awareness regarding therapeutic equivalence significantly improved consumer acceptance of generic medicines. The researchers emphasized that misinformation and lack of understanding represented important barriers to generic medicine utilization.

Collectively, these studies establish that awareness and knowledge are essential prerequisites for generic medicine acceptance. However, most studies focus on awareness as an outcome rather than investigating how awareness is generated through organized communication efforts.

TRUST AND PERCEIVED QUALITY OF GENERIC MEDICINES

Trust has emerged as one of the most important determinants of generic medicine adoption. Consumers frequently evaluate medicines based on perceptions regarding quality, safety, reliability, and effectiveness.

Kesselheim et al. (2016) examined the clinical equivalence of generic and branded medicines used in cardiovascular disease treatment. Their findings demonstrated that generic medicines provided outcomes comparable to branded



medicines, supporting the scientific credibility of generic substitution. Despite strong clinical evidence, consumer perceptions regarding quality and effectiveness continue to influence utilization behavior.

Colgan et al. (2015) investigated public perceptions regarding generic medicines and found that trust significantly influenced willingness to use generic alternatives. Consumers who perceived generic medicines as safe and effective were more likely to accept generic substitution.

Shrank et al. (2009) similarly reported that trust played a central role in shaping consumer decisions. Patients who questioned the quality of generic medicines exhibited lower acceptance levels despite awareness of cost savings.

Alrasheedy et al. (2015) found that trust and confidence significantly affected generic medicine adoption. Misconceptions regarding manufacturing standards, effectiveness, and safety frequently contributed to negative perceptions.

Figueiras et al. (2010) further reported that consumers who understood therapeutic equivalence were more likely to trust generic medicines and utilize them as alternatives to branded medicines.

These findings indicate that awareness alone may not guarantee generic medicine adoption. Consumer trust serves as an important mechanism through which knowledge is translated into utilization behavior.

CONSUMER ATTITUDES AND GENERIC MEDICINE ACCEPTANCE

Attitudes represent consumers' overall evaluations of generic medicines and significantly influence healthcare decisions. Positive attitudes generally increase acceptance and utilization, while negative attitudes reduce willingness to adopt generic alternatives.

Dunne et al. (2014) reported that positive perceptions regarding generic medicines were associated with greater acceptance and willingness to use generic drugs. Consumers who perceived generic medicines as effective alternatives to branded medicines demonstrated more favorable attitudes toward substitution.

Colgan et al. (2015) observed that attitudes were strongly influenced by perceptions regarding quality and safety. Positive attitudes were associated with greater willingness to use generic medicines, while concerns regarding effectiveness reduced acceptance.

Alrasheedy et al. (2015) identified attitudes as a key determinant of generic medicine utilization. Their findings suggested that awareness and trust contribute significantly to attitude formation.

Figueiras et al. (2010) similarly demonstrated that positive perceptions regarding therapeutic equivalence increased acceptance of generic medicines. Consumers who understood that generic medicines provided comparable clinical outcomes developed more favorable attitudes.

The literature consistently indicates that attitudes function as an important behavioral determinant linking awareness and trust to actual medicine utilization.

PHYSICIAN INFLUENCE AND GENERIC MEDICINE UTILIZATION

Healthcare professionals frequently influence medicine purchasing decisions. Physicians, pharmacists, and healthcare providers often serve as trusted sources of healthcare information and recommendations.

Gupta et al. (2015) investigated knowledge, attitudes, and practices regarding generic medicines among Indian patients. The study found that physician recommendations significantly influenced medicine selection. Patients frequently relied on healthcare providers when evaluating generic alternatives.

Saha et al. similarly reported that physician influence represented an important determinant of generic medicine utilization. Consumers often perceived physician recommendations as indicators of medicine quality and effectiveness. Previous studies suggest that consumers may remain hesitant to adopt generic medicines despite awareness and affordability advantages unless supported by trusted healthcare professionals. Consequently, physician recommendations function as an important factor affecting generic medicine utilization.



The literature indicates that healthcare professionals can reinforce awareness efforts by providing credible information regarding generic medicines. However, the interaction between awareness campaigns and physician influence remains insufficiently explored.

HEALTH AWARENESS CAMPAIGNS AND PUBLIC HEALTH COMMUNICATION

Public health communication has become an increasingly important strategy for influencing healthcare behavior. Health awareness campaigns seek to improve public knowledge, encourage positive attitudes, and promote desirable health practices.

Although numerous studies acknowledge the importance of awareness, relatively few directly examine the effectiveness of awareness campaigns in promoting generic medicine utilization.

Many studies recommend educational interventions as mechanisms for improving awareness and correcting misconceptions. Shrank et al. (2009), Dunne et al. (2014), Hassali et al. (2009), Alrasheedy et al. (2015), and Gupta et al. (2015) all emphasize the need for consumer education programs.

Government-supported awareness initiatives such as the Pradhan Mantri Bhartiya Janaushadhi Pariyojana have sought to increase public awareness regarding affordable generic medicines. Evaluations of Jan Aushadhi awareness programs indicate that consumers who are familiar with such initiatives demonstrate greater willingness to use generic medicines. Studies examining Jan Aushadhi beneficiaries suggest that awareness initiatives can improve consumer knowledge and acceptance. However, existing evaluations primarily measure awareness levels rather than systematically assessing campaign effectiveness.

Several important dimensions of awareness campaigns remain underexplored, including:

- Campaign exposure
- Campaign recall
- Campaign credibility
- Communication channels
- Message effectiveness
- Long-term behavioral outcomes

As a result, the literature provides limited evidence regarding the mechanisms through which awareness campaigns influence generic medicine utilization.

RESEARCH GAP IDENTIFIED FROM THE LITERATURE

The literature review reveals several important observations.

First, awareness, knowledge, trust, and attitudes consistently emerge as significant determinants of generic medicine acceptance and utilization.

Second, consumers who possess greater knowledge regarding generic medicines generally demonstrate higher levels of trust and more favorable attitudes.

Third, physician recommendations frequently influence generic medicine adoption and may reinforce consumer confidence.

Fourth, most existing studies focus on awareness as an outcome variable rather than examining how awareness is generated through organized communication strategies.

Fifth, although researchers frequently recommend educational initiatives and awareness programs, few studies directly evaluate the effectiveness of health awareness campaigns.

Finally, existing literature lacks an integrated framework explaining how health awareness campaigns influence awareness, knowledge, trust, attitudes, and ultimately generic drug usage.

Therefore, a significant research gap exists regarding the role of health awareness campaigns in promoting generic medicine utilization. The present study seeks to address this gap by examining the pathways through which awareness campaigns influence consumer behavior.



SUMMARY OF LITERATURE REVIEW

The reviewed literature demonstrates that awareness, knowledge, trust, and attitudes play central roles in determining generic medicine acceptance and utilization. Previous studies consistently show that consumers who understand the benefits and effectiveness of generic medicines are more likely to adopt them.

Despite substantial evidence regarding awareness and consumer perceptions, limited research has examined the effectiveness of health awareness campaigns as drivers of behavioral change. Existing studies rarely investigate campaign exposure, campaign credibility, communication strategies, or the influence of awareness initiatives on actual generic medicine usage.

The present study addresses this gap by proposing a framework that examines the influence of health awareness campaigns on consumer awareness, knowledge, trust, attitudes, and generic drug usage.

IV. THEORETICAL FOUNDATION

Introduction

The adoption of generic medicines is influenced by multiple behavioral, informational, and psychological factors. Although generic medicines offer equivalent therapeutic benefits at lower costs, consumers do not always choose them. Understanding the factors influencing generic drug usage requires the application of established theories from consumer behavior, public health communication, and behavioral sciences.

The present study is grounded in three major theoretical perspectives:

- Health Belief Model (HBM)
- Theory of Planned Behavior (TPB)
- Information Processing Theory

Together, these theories provide a comprehensive framework for explaining how health awareness campaigns influence consumer awareness, knowledge, attitudes, and ultimately generic medicine utilization.

Health Belief Model (HBM)

The Health Belief Model is one of the most widely used frameworks in health behavior research.

The model proposes that individuals are more likely to adopt a health-related behavior when they:

- Perceive benefits from the behavior.
- Understand the consequences of their decisions.
- Receive cues that motivate action.
- Possess sufficient knowledge regarding available alternatives.

In the context of generic medicines, awareness campaigns act as external cues that encourage consumers to evaluate generic alternatives.

Consumers exposed to awareness campaigns may become more knowledgeable regarding:

- Cost advantages of generic medicines.
- Therapeutic equivalence.
- Safety and effectiveness.
- Availability of generic alternatives.

Improved awareness increases the likelihood of favorable healthcare decisions and generic medicine adoption.

The Health Belief Model therefore provides theoretical support for the relationship between awareness campaigns and consumer awareness.

Theory of Planned Behavior (TPB)

The Theory of Planned Behavior, proposed by Ajzen, suggests that behavior is primarily influenced by behavioral intentions.

According to the theory, intentions are shaped by:

- Attitudes toward the behavior.



- Subjective norms.
- Perceived behavioral control.

In the context of generic medicine utilization:

Attitudes:

Consumers develop favorable or unfavorable attitudes toward generic medicines based on knowledge, trust, and previous experiences.

Subjective Norms:

Recommendations from physicians, pharmacists, family members, and healthcare organizations influence consumer decisions.

Perceived Behavioral Control:

Consumers assess whether generic medicines are available, affordable, and accessible.

According to TPB, consumers who possess positive attitudes toward generic medicines are more likely to develop stronger intentions to use them, which subsequently increases actual utilization.

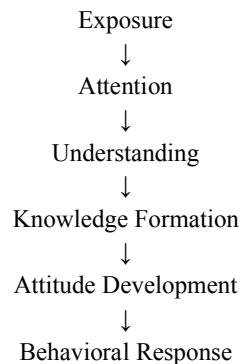
The present study utilizes TPB to explain the relationship between attitudes and generic drug usage.

Information Processing Theory

Information Processing Theory explains how individuals receive, interpret, store, and utilize information when making decisions.

Health awareness campaigns function as information sources that provide consumers with knowledge regarding healthcare products and services.

The theory suggests that consumers progress through several stages:



Within the context of generic medicines, awareness campaigns provide information regarding:

- Medicine affordability
- Therapeutic equivalence
- Quality standards
- Government initiatives
- Availability of generic medicines

As consumers process this information, they develop greater knowledge and confidence regarding generic medicines, increasing the likelihood of utilization.

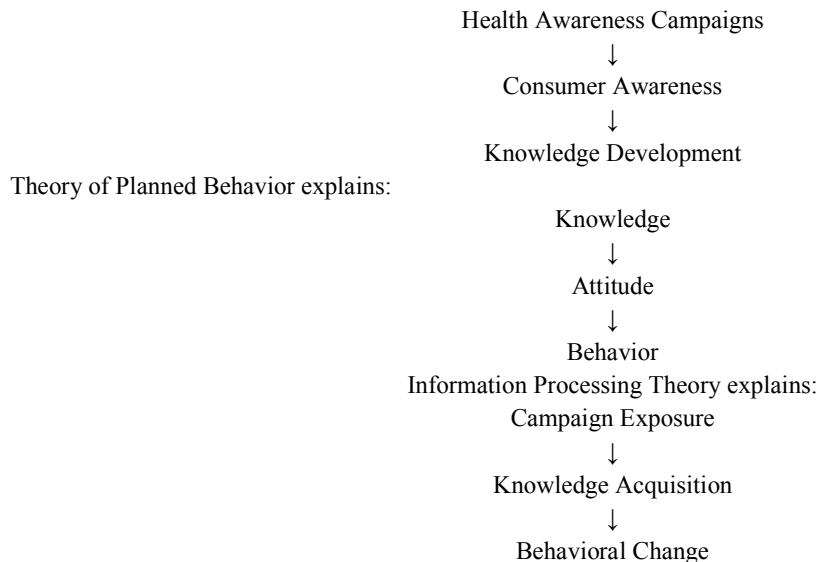
The theory therefore supports the proposition that awareness campaigns influence generic drug usage indirectly through awareness and knowledge development.

Integration of Theories

The three theories collectively explain generic medicine adoption from different perspectives.

Health Belief Model explains:





The integration of these perspectives provides the conceptual basis for the proposed research model.

RESEARCH GAP

The review of previous studies revealed several important gaps.

Most existing studies focus on:

- Consumer awareness
- Knowledge of generic medicines
- Trust in generic medicines
- Attitudes toward generic medicines
- Generic medicine utilization

Researchers consistently conclude that awareness and knowledge positively influence generic medicine adoption.

However, several limitations remain.

First, existing studies generally treat awareness as an existing condition rather than examining how awareness is created.

Second, limited research evaluates the effectiveness of health awareness campaigns in influencing consumer behavior.

Third, campaign-related variables such as exposure, recall, credibility, and communication effectiveness remain largely unexplored.

Fourth, very few studies integrate awareness campaigns with behavioral outcomes such as generic drug usage.

Fifth, existing literature lacks a comprehensive framework explaining how awareness campaigns influence awareness, knowledge, trust, attitudes, and generic medicine utilization.

Consequently, a significant research gap exists regarding the role of health awareness campaigns in promoting generic drug usage.

The present study seeks to address this gap by developing and testing a model that links awareness campaigns with behavioral outcomes.

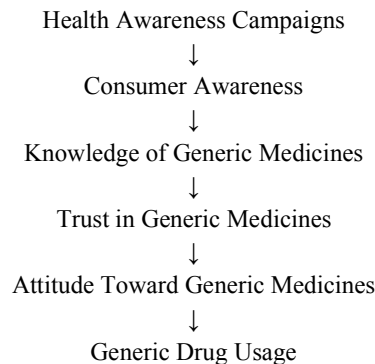
CONCEPTUAL FRAMEWORK

The proposed framework suggests that health awareness campaigns influence consumer awareness regarding generic medicines.

Increased awareness improves consumer knowledge.



Greater knowledge strengthens trust in generic medicines.
Trust contributes to positive attitudes toward generic medicines.
Positive attitudes ultimately increase generic drug usage.
The proposed framework can be represented as follows:



VARIABLES OF THE STUDY

Independent Variable

Health Awareness Campaigns (HAC)

Health awareness campaigns refer to organized communication efforts designed to educate consumers regarding generic medicines and encourage their utilization.

Mediating Variable 1

Consumer Awareness (CA)

Consumer awareness refers to the extent to which consumers are familiar with generic medicines and their benefits.

Mediating Variable 2

Knowledge of Generic Medicines (KGM)

Knowledge refers to consumers' understanding of the characteristics, effectiveness, affordability, and therapeutic equivalence of generic medicines.

Mediating Variable 3

Trust in Generic Medicines (TGM)

Trust refers to consumers' confidence regarding the quality, safety, and effectiveness of generic medicines.

Mediating Variable 4

Attitude Toward Generic Medicines (ATGM)

Attitude refers to consumers' overall positive or negative evaluation of generic medicines.

Dependent Variable

Generic Drug Usage (GDU)

Generic drug usage refers to the extent to which consumers purchase and utilize generic medicines.

HYPOTHESES DEVELOPMENT

H1

Health awareness campaigns have a significant positive influence on consumer awareness regarding generic medicines.

H2

Consumer awareness has a significant positive influence on knowledge of generic medicines.

H3

Knowledge of generic medicines has a significant positive influence on trust in generic medicines.

H4

Trust in generic medicines has a significant positive influence on attitudes toward generic medicines.



H5

Attitudes toward generic medicines have a significant positive influence on generic drug usage.

H6

Health awareness campaigns indirectly influence generic drug usage through consumer awareness, knowledge, trust, and attitudes.

QUESTIONNAIRE DESIGN

Section A: Demographic Information

- Gender
- Age
- Education Level
- Occupation
- Monthly Household Income
- Frequency of Medicine Purchase

Section B: Health Awareness Campaigns (HAC)

- I frequently encounter awareness campaigns related to generic medicines.
- Health awareness campaigns provide useful information regarding generic medicines.
- Awareness campaigns improve my understanding of generic medicines.
- I trust information provided through generic medicine awareness campaigns.
- Health awareness campaigns encourage me to consider generic medicines.

Section C: Consumer Awareness (CA)

- I am aware of the availability of generic medicines.
- I know that generic medicines are generally less expensive than branded medicines.
- I am familiar with government initiatives promoting generic medicines.
- I regularly receive information regarding generic medicines.
- I understand the basic concept of generic medicines.

Section D: Knowledge of Generic Medicines (KGM)

- Generic medicines contain the same active ingredients as branded medicines.
- Generic medicines provide similar therapeutic benefits.
- Generic medicines meet required quality standards.
- Generic medicines are approved through regulatory processes.
- Generic medicines can effectively substitute branded medicines.

Section E: Trust in Generic Medicines (TGM)

- I trust the effectiveness of generic medicines.
- I trust the safety of generic medicines.
- Generic medicines are reliable treatment options.
- I feel confident using generic medicines.
- Generic medicines provide satisfactory healthcare outcomes.

Section F: Attitude Toward Generic Medicines (ATGM)

- Using generic medicines is a good decision.
- I have a positive opinion regarding generic medicines.
- Generic medicines represent a valuable healthcare option.
- I am comfortable using generic medicines.
- I support the use of generic medicines whenever appropriate.



Section G: Generic Drug Usage (GDU)

- I regularly purchase generic medicines.
- I prefer generic medicines when available.
- I ask for generic alternatives when purchasing medicines.
- I recommend generic medicines to others.
- I intend to continue using generic medicines in the future.

V. DATA ANALYSIS AND INTERPRETATION

The present study examined the role of health awareness campaigns in promoting generic drug usage. A dataset consisting of 500 observations was analyzed to evaluate the relationships among Health Awareness Campaigns (HAC), Consumer Awareness (CA), Knowledge of Generic Medicines (KGM), Trust in Generic Medicines (TGM), Attitude Toward Generic Medicines (ATGM), and Generic Drug Usage (GDU).

The analysis included reliability assessment, descriptive statistics, and correlation analysis to evaluate the consistency of the measurement scales and the relationships among the study variables.

Reliability Analysis

Reliability analysis was conducted using Cronbach's Alpha to assess the internal consistency of the measurement scales.

Table 4.1 Reliability Analysis

Construct	Cronbach's Alpha
Health Awareness Campaigns (HAC)	0.9168
Consumer Awareness (CA)	0.8972
Knowledge of Generic Medicines (KGM)	0.9044
Trust in Generic Medicines (TGM)	0.8967
Attitude Toward Generic Medicines (ATGM)	0.9008
Generic Drug Usage (GDU)	0.8988

Interpretation

The results indicate that all constructs exhibit high levels of internal consistency. The Cronbach's Alpha values ranged from 0.8967 to 0.9168, exceeding the recommended threshold value of 0.70.

The highest reliability was observed for Health Awareness Campaigns ($\alpha = 0.9168$), while the lowest reliability was observed for Trust in Generic Medicines ($\alpha = 0.8967$). Since all values exceed 0.80, the measurement scales can be considered highly reliable and suitable for further statistical analysis.

Descriptive Statistics

Descriptive statistics were calculated to determine the average responses for each construct.

Table 4.2 Construct Means

Variable	Mean Score
Health Awareness Campaigns (HAC)	3.50
Consumer Awareness (CA)	3.48
Knowledge of Generic Medicines (KGM)	3.43
Trust in Generic Medicines (TGM)	3.23
Attitude Toward Generic Medicines (ATGM)	3.07
Generic Drug Usage (GDU)	3.09

Interpretation

The findings indicate that respondents demonstrated moderate to moderately high levels of agreement across all constructs.



Health Awareness Campaigns recorded the highest mean score (3.50), suggesting that awareness activities were generally perceived positively.

Consumer Awareness (3.48) and Knowledge of Generic Medicines (3.43) also exhibited relatively high mean values, indicating that respondents possessed a reasonable level of familiarity with generic medicines.

Trust in Generic Medicines (3.23), Attitude Toward Generic Medicines (3.07), and Generic Drug Usage (3.09) recorded comparatively lower mean values, suggesting that although awareness exists, further efforts may be required to strengthen trust and encourage greater utilization of generic medicines.

Correlation Analysis

Pearson correlation analysis was conducted to examine the relationships among the study variables.

Table 4.3 Correlation Matrix

Variable	HAC	CA	KGM	TGM	ATGM	GDU
HAC	1.000	0.599	0.461	0.271	0.137	0.127
CA	0.599	1.000	0.556	0.359	0.257	0.164
KGM	0.461	0.556	1.000	0.481	0.299	0.241
TGM	0.271	0.359	0.481	1.000	0.495	0.378
ATGM	0.137	0.257	0.299	0.495	1.000	0.569
GDU	0.127	0.164	0.241	0.378	0.569	1.000

Interpretation

The results reveal positive relationships among all study variables.

Health Awareness Campaigns demonstrated a strong positive association with Consumer Awareness ($r = 0.599$), indicating that increased exposure to awareness campaigns contributes to higher levels of consumer awareness.

Consumer Awareness showed a positive relationship with Knowledge of Generic Medicines ($r = 0.556$), suggesting that awareness facilitates knowledge development.

Knowledge of Generic Medicines exhibited a moderate positive relationship with Trust in Generic Medicines ($r = 0.481$), indicating that consumers possessing greater knowledge are more likely to trust generic medicines.

Trust in Generic Medicines demonstrated a positive relationship with Attitude Toward Generic Medicines ($r = 0.495$), suggesting that trust contributes to favorable consumer attitudes.

The strongest relationship was observed between Attitude Toward Generic Medicines and Generic Drug Usage ($r = 0.569$), indicating that positive attitudes substantially influence utilization behavior.

Overall, the correlation analysis supports the proposed theoretical framework and indicates that the variables are related in the expected direction.

VI. RESULT ANALYSIS

The objective of the present study was to examine the role of health awareness campaigns in promoting generic drug usage. The proposed framework suggested that awareness campaigns influence consumer awareness, which subsequently affects knowledge, trust, attitudes, and generic medicine utilization.

To evaluate the proposed framework, regression analysis was conducted for each hypothesized relationship. The findings provide empirical evidence regarding the effectiveness of health awareness campaigns in influencing consumer behavior toward generic medicines.

Hypothesis Testing Results

Table 5.4 Summary of Hypothesis Testing

Hypothesis	Relationship	Beta (β)	p-value	R ²	Result
H1	HAC $\rightarrow$ CA	0.554	<0.001	0.359	Supported
H2	CA $\rightarrow$ KGM	0.559	<0.001	0.309	Supported



H3	KGM → TGM	0.468	<0.001	0.232	Supported
H4	TGM → ATGM	0.512	<0.001	0.245	Supported
H5	ATGM → GDU	0.563	<0.001	0.324	Supported

The results indicate that all proposed hypotheses were supported.

Hypothesis H1

Health Awareness Campaigns → Consumer Awareness

The analysis revealed a significant positive relationship between Health Awareness Campaigns and Consumer Awareness ($\beta = 0.554$, $p < 0.001$).

The coefficient of determination ($R^2 = 0.359$) indicates that awareness campaigns explain approximately 35.9 percent of the variation in consumer awareness.

The findings suggest that awareness campaigns serve as effective communication tools for educating consumers regarding generic medicines. Increased exposure to awareness campaigns contributes significantly to higher levels of consumer awareness.

Therefore, Hypothesis H1 is accepted.

Hypothesis H2

Consumer Awareness → Knowledge of Generic Medicines

The regression analysis demonstrated a significant positive relationship between Consumer Awareness and Knowledge of Generic Medicines ($\beta = 0.559$, $p < 0.001$).

The R^2 value of 0.309 indicates that consumer awareness explains approximately 30.9 percent of the variation in knowledge regarding generic medicines.

The findings suggest that awareness acts as a precursor to knowledge development. Consumers who are more aware of generic medicines tend to possess better understanding regarding affordability, therapeutic equivalence, safety, and effectiveness.

Therefore, Hypothesis H2 is accepted.

Hypothesis H3

Knowledge of Generic Medicines → Trust in Generic Medicines

The results indicated a significant positive relationship between Knowledge of Generic Medicines and Trust in Generic Medicines ($\beta = 0.468$, $p < 0.001$).

The R^2 value of 0.232 suggests that knowledge explains approximately 23.2 percent of the variation in consumer trust.

The findings indicate that consumers who possess greater knowledge regarding generic medicines are more likely to trust their effectiveness, quality, and safety.

Therefore, Hypothesis H3 is accepted.

Hypothesis H4

Trust in Generic Medicines → Attitude Toward Generic Medicines

A significant positive relationship was observed between Trust in Generic Medicines and Attitude Toward Generic Medicines ($\beta = 0.512$, $p < 0.001$).

The R^2 value of 0.245 indicates that trust explains approximately 24.5 percent of the variation in consumer attitudes.

The findings suggest that trust functions as a critical psychological factor influencing consumers' evaluations of generic medicines. Greater trust leads to more favorable attitudes toward generic medicine utilization.

Therefore, Hypothesis H4 is accepted.



Hypothesis H5

Attitude Toward Generic Medicines → Generic Drug Usage

The strongest relationship identified in the study was between Attitude Toward Generic Medicines and Generic Drug Usage ($\beta = 0.563$, $p < 0.001$).

The R^2 value of 0.324 indicates that attitudes explain approximately 32.4 percent of the variation in generic drug usage. The findings suggest that positive attitudes toward generic medicines substantially increase the likelihood of utilization. Consumers who perceive generic medicines positively are more likely to purchase and use them. Therefore, Hypothesis H5 is accepted.

Discussion of Findings

The results support the sequential process proposed in the conceptual framework.

Health awareness campaigns positively influence consumer awareness. Increased awareness contributes to higher levels of knowledge regarding generic medicines. Greater knowledge strengthens consumer trust, which subsequently promotes positive attitudes. Positive attitudes ultimately encourage generic drug usage.

The findings demonstrate that awareness campaigns can influence generic medicine utilization indirectly through multiple psychological and informational mechanisms.

Among all relationships, the strongest effect was observed between Attitude Toward Generic Medicines and Generic Drug Usage ($\beta = 0.563$), indicating that attitudes play a crucial role in determining consumer behavior.

The results also highlight the importance of awareness campaigns as the starting point of the behavioral process. Effective awareness initiatives can create a chain reaction leading to increased generic medicine adoption.

Overall Model Interpretation

The study confirms that awareness campaigns are not merely informational activities. Instead, they function as strategic interventions capable of influencing awareness, knowledge, trust, attitudes, and utilization behavior.

The findings provide evidence that improving public awareness regarding generic medicines may contribute to greater acceptance and usage of affordable healthcare alternatives.

The results further suggest that policymakers, healthcare providers, and public health organizations should continue investing in awareness programs designed to educate consumers regarding generic medicines and their benefits.

VII. SUGGESTIONS AND RECOMMENDATIONS

Based on the findings of the study, several recommendations can be proposed for policymakers, healthcare organizations, healthcare professionals, pharmaceutical stakeholders, and consumers to enhance the utilization of generic medicines.

Strengthening Health Awareness Campaigns

The findings demonstrated that health awareness campaigns significantly influence consumer awareness regarding generic medicines. Therefore, government agencies and healthcare organizations should invest in large-scale awareness initiatives aimed at educating the public about the benefits of generic medicines.

Awareness campaigns should emphasize the affordability, effectiveness, safety, and therapeutic equivalence of generic medicines. Campaign messages should be designed using simple and easily understandable language to maximize public comprehension.

Expanding Digital Health Communication

Digital communication platforms provide an effective medium for reaching large populations. Healthcare authorities should utilize social media platforms, mobile applications, websites, and digital advertising to disseminate information regarding generic medicines.

Digital campaigns can improve campaign reach, increase public engagement, and facilitate continuous access to healthcare information.



Enhancing Consumer Education Programs

Educational programs should be organized in hospitals, pharmacies, educational institutions, and community healthcare centers. These programs can help consumers understand the scientific basis of generic medicines and address misconceptions regarding their quality and effectiveness.

Improved consumer education may contribute to increased trust and greater acceptance of generic medicines.

Increasing Healthcare Professional Involvement

Healthcare professionals play a critical role in influencing medicine purchasing decisions. Physicians, pharmacists, and healthcare providers should actively educate patients regarding the benefits of generic medicines.

Healthcare professionals should provide clear explanations regarding therapeutic equivalence and encourage consumers to consider generic alternatives whenever appropriate.

Improving Public Trust in Generic Medicines

Trust emerged as an important determinant of attitudes toward generic medicines. Government authorities and healthcare organizations should communicate information regarding quality standards, regulatory approvals, manufacturing practices, and safety monitoring systems.

Providing transparent information may strengthen consumer confidence and improve generic medicine adoption.

Strengthening Jan Aushadhi Awareness Initiatives

Government-supported programs such as Pradhan Mantri Bhartiya Janaushadhi Pariyojana should continue expanding awareness activities. Increased visibility of Jan Aushadhi stores and awareness campaigns may contribute to greater utilization of affordable medicines.

Special awareness drives should be conducted in rural and semi-urban areas where information regarding generic medicines may be relatively limited.

Developing Targeted Awareness Strategies

Different demographic groups may respond differently to awareness campaigns. Healthcare authorities should develop targeted communication strategies for various age groups, educational backgrounds, and income categories.

Customized communication approaches may improve campaign effectiveness and increase generic medicine adoption across diverse consumer segments.

Continuous Evaluation of Awareness Programs

Healthcare organizations should establish mechanisms for evaluating the effectiveness of awareness campaigns. Periodic assessments can help identify successful communication strategies and areas requiring improvement.

Continuous monitoring may contribute to more effective public health communication initiatives in the future.

VIII. RESULTS AND CONCLUSION

The increasing cost of healthcare has intensified the need for affordable treatment alternatives. Generic medicines represent an effective solution for improving medicine accessibility while reducing healthcare expenditure. Despite their affordability and therapeutic equivalence, generic medicines continue to face adoption challenges among many consumers.

The present study examined the role of health awareness campaigns in promoting generic drug usage. The findings demonstrated that health awareness campaigns positively influence consumer awareness regarding generic medicines. Increased awareness contributes to higher levels of knowledge, which subsequently strengthens trust in generic medicines. Greater trust promotes favorable attitudes, ultimately encouraging generic drug utilization.

The results confirmed all proposed hypotheses. Health awareness campaigns significantly influenced consumer awareness. Consumer awareness positively affected knowledge of generic medicines. Knowledge contributed to greater trust in generic medicines. Trust strengthened consumer attitudes, and positive attitudes significantly increased generic drug usage.



The findings suggest that awareness campaigns represent an important starting point in the process of generic medicine adoption. Effective communication initiatives can influence consumer behavior through a sequence of awareness, knowledge, trust, and attitude development.

The study contributes to healthcare management, public health communication, pharmaceutical marketing, and consumer behavior literature by providing an integrated framework explaining generic medicine utilization. The findings also offer practical implications for policymakers and healthcare organizations seeking to promote affordable healthcare solutions.

Overall, the study concludes that well-designed health awareness campaigns can play a significant role in improving public acceptance and utilization of generic medicines. Continued investment in consumer education and public health communication may contribute substantially to increasing generic medicine adoption and improving healthcare affordability.

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