Internship Training
At
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Knowledge, attitude and practice (KAP) of Physicians towards generic medicines and thus to reduce the gap between them-a cross-sectional study in a multi-specialty hospital in india

By
Shivangi
PG/21/098

Under the Guidance of
Dr. Sukesh Bhardwaj

PGDM (Hospital & Health Management)
2021-2023

IIHMR
DELHI

International Institute of Health Management Research
New Delhi

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COGNITIO ANALYTICS

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First floor, Plot no.81, Sector-44,
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01-Jun-2023

TO WHOM IT MAY CONCERN

This is to certify that **Shivangi Agarwal**, in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Delhi has successfully completed her internship at Cognitio Analytics India Pvt.Ltd. during **20-Feb-2023 to 31-May-2023**.

Since her appointment, **Shivangi** delivered very good quality work on the assigned tasks whileadhering to timelines. It was a pleasure working with her.

Warm regards,

For, Cognitio Analytics

KRITI BAINS
Digitally signed by KRITI BAINS
Date: 2023.06.02 19:54:34 +05'30'

Kriti Bains
AVP

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Shivangi** student of PGDM (Hospital & Health Management) from International Institute of Health Management Research, New Delhihas undergone internship training at **Cognitio Analytics** from **20.02.2023 to 31.05.2023.**

The Candidate has successfully carried out the study designated to her during internshiptraining and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course

requirements.I wish her all success in all her future

endeavors.

Dr. Sumesh Kumar
Associate Dean, Academic and Student Affairs
IIHMR, New Delhi

Mem

IIHMR, New Delhi

Certificate of Approval

The following dissertation titled "**KNOWLEDGE ,ATTITUDE AND PRACTICE OF PHYSICIANS TOWARDS GENERIC MEDICINES AND THUS TO REDUCE THE GAP BETWEEN THEM-A CROSS-SECTIONAL STUDY IN A MULTI SPECIALTY HOSPITAL IN INDIA**" is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **PGDM (Hospital & Health Management)** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee
for evaluation of dissertation.

Name	Signature
PRAVEEN KUMAR	
VINAY TRIPATHI	
HIMANSHU TOLANI	

Certificate from Dissertation Advisory Committee

This is to certify that **Ms. Shivangi Agarwal**, a graduate student of the **PGDM (Hospital & Health Management)** has worked under our guidance and supervision. She is submitting this dissertation titled **"Knowledge, attitude and practice of physicians towards generic medicines and thus to reduce the gap between them -a Cross-sectional Study in a mutli-specialty hospital in India"** at **"Cognitio Analytics"** in partial fulfillment of the requirements for the award of the **PGDM (Hospital & Health Management)**.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Dr. Sukesh Bhardwaj
Assistant Professor and Mentor
IIHMR Delhi

Ms. Shweta Vilatia
Manager
Cognitio Analytics

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **"Knowledge , attitude and practice (KAP) of Physicians towards generic medicines and thus to reduce the gap between them-a cross-sectional study in a multi-specialty hospital in India."** and submitted by (Name) : **Ms. Shivangi ,** Enrollment No. : **PG/21/098**

under the supervision of **Dr. Sukesh Bhardwaj** for award of PGDM (Hospital & Health Management) of the Institute carried out duringthe period from **20.02.2023 to 31.05.2023** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature

FEEDBACK FORM

Name of the Student: Shivangi Agarwal

Name of the Organisation: Cognitio Analytics

Area of Dissertation: Healthcare Analytics

Attendance: Regular

Objectives achieved: Yes

Deliverables: Project Deliverables

Strengths:

- Problem Solving Skills
- Communication Skills
- Team Player

Suggestions for Improvement:

Suggestions for Institute (course curriculum, industry interaction, placement, alumni):

Ms. Shweta Vilatia
Signature of the Organisation Mentor (Dissertation)

Date: 17-06-2023
Place: Gurugram

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1.Introduction

The exorbitant expense of medications in India has rendered the treatment of numerous illnesses inaccessible to the underprivileged and has imposed a considerable financial burden on middle-class individuals. Ensuring the provision of top-quality medicines is paramount for the well-being of patients. This predicament poses a substantial economic obstacle, particularly in developing nations. (1)

Governments initiated the exploration of generic drug alternatives as a means to alleviate the financial strain, focusing on strategies to offer medications of the utmost quality at reduced expenses. (2)

A generic drug refers to a pharmaceutical product that possesses identical composition, quality, safety, and efficacy as the innovator product. Furthermore, it is therapeutically equivalent to the original drug product (3)

Generic drugs are priced lower compared to brand-name drugs as part of an effort to minimize medication costs. (4)

Due to the reduced expenses associated with generic drugs, the innovator product is unable to sustain longer periods of patent exclusivity. Once these patents expire, generic drug manufacturers can produce the product without requiring extensive investments in activities such as drug discovery, preclinical studies, and clinical trials. (5)

Usually, generic goods cost 20–80 percent less than name-brand medicines. (6)

According to reports, pharmaceutical companies offer some doctors sizable incentives to recommend their branded products. Patients face heightened financial exploitation when they are prescribed costly branded

generics or even more expensive brand-name medications. (7)

Several recent studies have been conducted to enhance understanding and raise awareness regarding the benefits associated with utilizing generic medications. Healthcare professionals are actively advocating for the use of generic drugs. Consequently, this study aims to investigate the knowledge, attitude, and practice (KAP) of physicians towards generic medications, with the objective of bridging the gap between physicians and patients.

2.Keywords

Brand drug, Generic drug, Physicians, Knowledge, Attitude and Practice.

3.Objective

The purpose of this study is to examine the knowledge, attitude, and practice (KAP) of physicians regarding generic drugs with the objective of narrowing the existing gap.

4.Methods

A multispecialty hospital in India was the setting for the study.

4.1 Study Design

This cross-sectional study used a questionnaire and was conducted in a private multispecialty hospital. All of the physicians practicing in the multispecialty private teaching hospital from May 2023 to June 2023 served as the study's primary participants. 19 questions are included in the questionnaire for this study that ask about the demographic information of the participating doctors as well as their knowledge, attitudes, and use of generic medicine

4.2 Development, and distribution of survey questionnaire

Using references from a study of a comparable nature, a questionnaire-based cross-sectional survey with 19 questions in English was developed to examine physicians' understanding of, attitudes towards, and use of generic medications. Demographic information about physicians as well as their knowledge, attitudes, and use of generic medications were covered by the survey.

4.3 Sampling

Convenience sampling (non-probability) was the sampling technique used.

Using Open Epi software, sample size was calculated. Mentioned in Table 1.

Sample Size for Frequency in a Population

Population size(for finite population correction factor or fpc)(*N*):	90
Hypothesized % frequency of outcome factor in the population (*p*):	37%+/-5
Confidence limits as % of 100(absolute +/- %)(*d*):	5%
Design effect (for cluster surveys-*DEFF*):	1

Sample Size(*n*) for Various Confidence Levels

ConfidenceLevel(%)	Sample Size
95%	73
80%	57
90%	67
97%	75
99%	79
99.9%	83
99.99%	85

Table 1

4.4 Content of survey questionnaire

There were 19 closed-ended questions in total, and it took about 10 minutes to complete the survey. Three sections of the survey were broken down into knowledge, attitude and practice-related questions about brand-generic medication.

4.5 Data Collection

Data collected using a google questionnaire.

4.6 Statistical analysis

Descriptive statistics were used to analyse the participant demographics and their responses to the various questionnaire categories.

5.Results

There were 90 questionnaires distributed in total, and 73 doctors (or 81% of them) have returned them. 33 BDS doctors and 40 MBBS doctors in total have taken part in this study. Table 2 and 3 provides an illustration of the study participants basic demographic information. Table 2 give the entire detail information and Table 3 gives summarize demographic information of the participants.

Table 2

Qualification?	Age?	Years of Experience?	Area of Specialisation
BDS	25	1	Orthodontics
BDS	25	1	Dental Surgery
MBBS	25	1	Paediatrics
BDS	26	2	Periodontist
BDS	27	3	Dental Surgery
BDS	27	1	Dental Surgery
MBBS	27	7	Radiology
MBBS	27	1	Ophthalmology
BDS	27	2	Oral cavity
BDS	27	3	Oral cavity
BDS	27	2	Dental Surgery
BDS	27	3	Oral cavity
BDS	27	2	General dentistry
BDS	27	1	Dental Surgery
BDS	27	2	Periodontist
MBBS	28	1	Gynaecology

BDS	28	2	Dental Surgery
BDS	28	2	Prosthodontics
BDS	28	2	Periodontist
MBBS	29	1	Cardiology
MBBS	29	2	Gynaecology
BDS	29	3	Dental Surgery
BDS	29	4	Dental Surgery
BDS	29	3	Crowns and Bridges
BDS	29	2	Dental Surgery
BDS	30	2	Dental Surgery
BDS	30	3	Crowns and Bridges
BDS	30	4	Orthodontics
MBBS	32	10	Oncology
MBBS	32	5	Cardiology
MBBS	32	5	Orthopaedics
MBBS	32	2	Medicine
MBBS	32	1	Dermatologist
MBBS	32	1	Dermatologist
MBBS	32	1	Orthopaedics
MBBS	32	1	Medicine
MBBS	32	1	Medicine

BDS	32	3	Oral and Maxillofacial Surgery
BDS	32	5	Dental Surgery
BDS	32	4	Dental Surgery
BDS	32	6	Periodontist
MBBS	33	9	Interventional Radiology
MBBS	33	5	Pulmonary medicine
BDS	33	5	General dentistry
MBBS	35	4	Internal medicine
MBBS	36	12	Emergency medicine
BDS	37	3	Oral and Maxillofacial Surgery
MBBS	39	7	General Physician
MBBS	40	15	Anaesthesia
MBBS	40	18	Orthopaedics
BDS	42	9	Dental Surgery
MBBS	42	20	Radiology
MBBS	42	10	Ophthalmology
MBBS	42	5	Surgery
MBBS	42	3	Cardiology
BDS	42	7	Orthodontics

MBBS	43	8	Surgery
MBBS	43	6	Radiology
MBBS	43	5	Ophthalmology
MBBS	45	20	Internal medicine
MBBS	45	7	Radiology
MBBS	45	7	Internal medicine
MBBS	45	4	Orthopaedics
MBBS	45	6	Paediatrics
BDS	45	13	Oral and Maxillofacial Surgery
BDS	45	4	Dental Surgery
MBBS	47	20	General Physician
MBBS	48	20	Medicine
BDS	52	25	Crowns and Bridges
MBBS	52	13	Radiology
MBBS	52	13	Radiology
MBBS	54	15	Surgery
MBBS	55	9	Internal medicine

Parameters	Demographic Information	Count
Qualification	MBBS	40
	BDS	33
Age	25-35	45
	35-45	21
	45-55	7

Table 3

5.1 Knowledge Assessments

The study reveals the proportion of doctors who think brand-name drugs adhere to higher safety standards than generic drugs, how knowledgeable they are about the Jan Aushadhi Scheme and the Indian Medical Council (IMC) Act, and how satisfied they are with the regulatory agency's quality control procedures for generic drugs. Table 4 displays the relevant answers to knowledge-based inquiries.

According to the study, 53% of the doctors who participated in the survey think that generic medications have more side effects than name-brand medications. This finding indicates a significant proportion of doctors who hold concerns about the safety profile of generic medications. It raises questions about the reasons behind this perception and highlights the need for further research and education to address any misconceptions or knowledge gaps that may contribute to such beliefs.

Brand-name medications adhere to higher safety standards than generic medications, according to about 77% of the doctors polled. This perception reflects a prevailing notion among a majority of the respondents that name-brand medications are associated with a greater level of safety and quality assurance. It suggests a potential bias towards brand-name drugs and underlines the importance of enhancing awareness and

understanding of the rigorous regulatory processes that generic medications undergo to ensure their safety and efficacy.

Almost 84% of doctors were informed about the Jan Aushadhi Scheme, according to the study. This finding suggests that the respondents were very familiar with the Indian government initiative that aims to make generic medications accessible to the general public. The awareness of such schemes is crucial in promoting the use of generic drugs and expanding access to cost-effective healthcare options.

Regarding the knowledge of the Indian Medical Council (IMC) Act, the study found that about 70% of the medical professionals surveyed were aware of this regulatory framework. The IMC Act governs the practice of medicine in India and sets guidelines for ethical conduct and professional standards. The relatively high level of awareness among doctors signifies their understanding of the regulatory landscape within which they operate, ensuring adherence to established norms and practices.

Furthermore, nearly 62% of the doctors expressed satisfaction with the regulatory authority's quality control measures for generic medications. This finding shows that the majority of respondents have faith in the reliability and security of generic medications as guaranteed by the regulatory system. It highlights the role of effective quality control mechanisms in building trust and ensuring the integrity of generic medications in the market.

Table 4 complements the paragraph by presenting the responses to knowledge-based queries in a structured format. The table provides a concise overview of the responses, facilitating easy comparison and

interpretation of the findings related to doctors' knowledge.

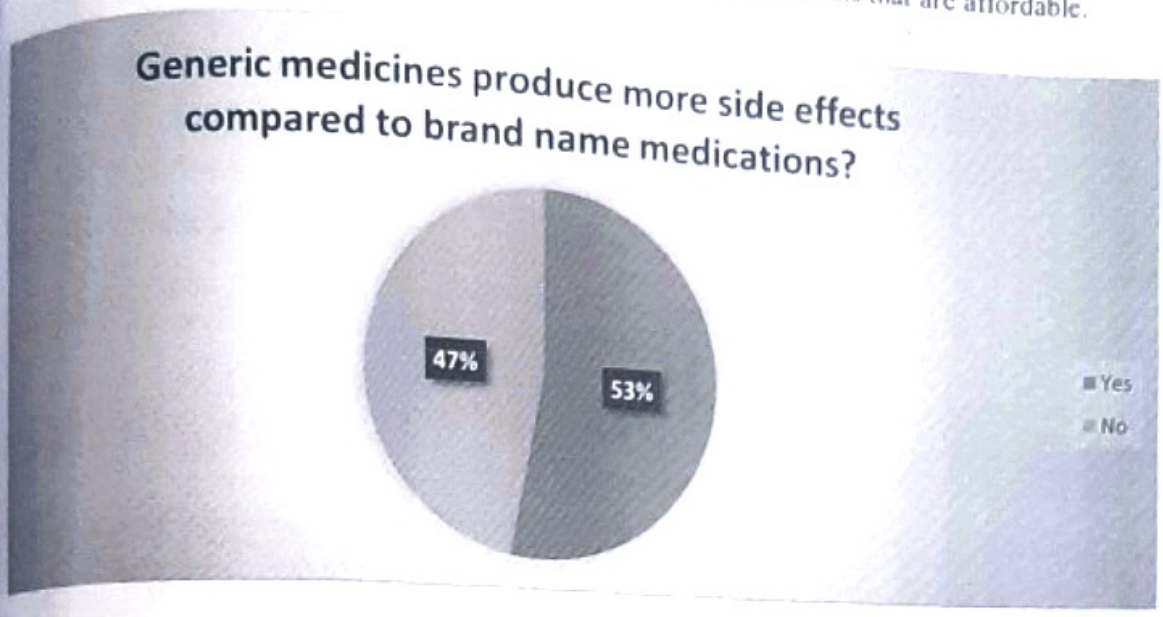
In summary, the paragraph and Table 4 provide insights into doctors' perceptions and knowledge regarding generic drugs. The study findings highlight the concerns held by a significant portion of doctors regarding the potential side effects of generic medications. The perception that brand-name drugs adhere to higher safety standards suggests the need for education and awareness campaigns to address any misconceptions and promote trust in generic medications.

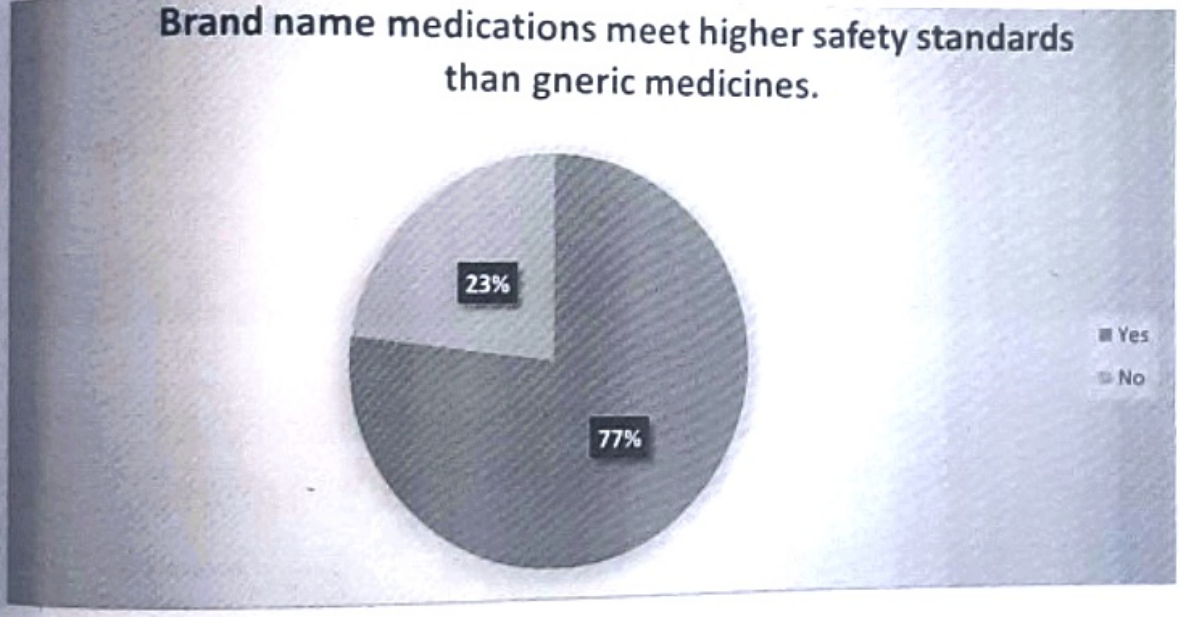
The high level of awareness about the Jan Aushadhi Scheme reflects the effectiveness of government initiatives in promoting affordable access to generic drugs. The familiarity with the IMC Act indicates doctors' understanding of the regulatory framework governing their profession, ensuring ethical conduct and professional standards.

The majority of doctors' satisfaction with the regulatory body's quality control measures highlights the value of rigorous oversight and monitoring to guarantee the security and effectiveness of generic medications. It instills confidence in the healthcare system and encourages the use of cost-effective alternatives to brand-name drugs.

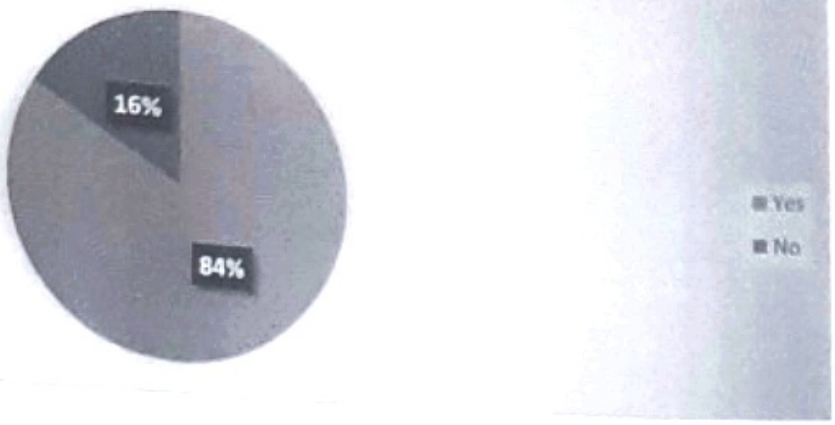
In conclusion, the findings presented in the paragraph and Table 4 shed light on doctors' perceptions and knowledge regarding generic drugs. The study results emphasize the importance of addressing concerns, promoting awareness, and ensuring the quality and safety of generic medications. Patients and healthcare systems as a whole can gain from improving education and awareness among medical professionals since it

can promote trust and promote the right use of generic pharmaceuticals that are affordable.

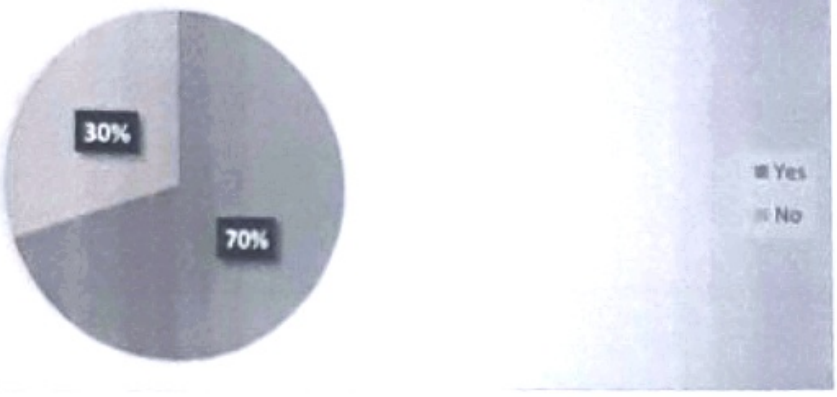




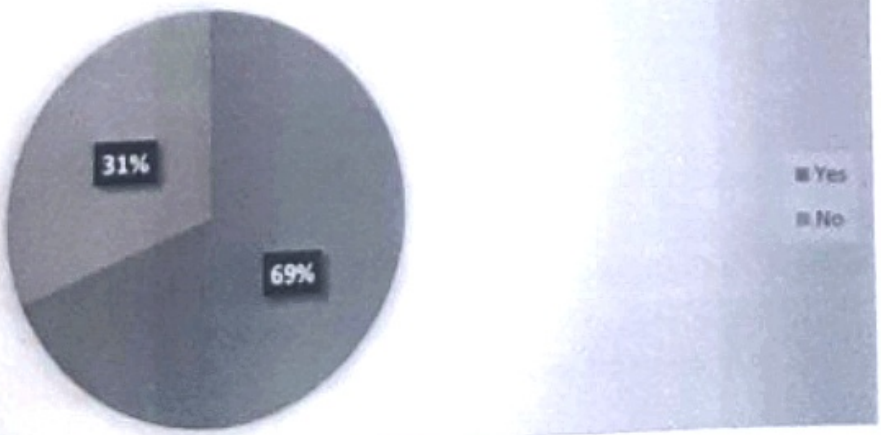
Are you aware of the scheme of goverment of India called Jan Aushadi?



Are you aware about the Indian medical council(IMC) Act to prescribe drugs with generic names?



Are you satisfied with the quality control measure of generic medicines by the regulatory authority?



	Generic medicines produce more side effects compared to brand name medications?		Brand name medications meet higher safety standards than generic medicines.		Are you aware of the scheme of government of India called Jan Aushadi?		Are you aware about the Indian medical council(IMC) Act to prescribe drugs with generic names?		Are you satisfied with the quality control measure of generic medicines by the regulatory authority?	
	Count	Frequency	Count	Frequency	Count	Frequency	Count	Frequency	Count	Frequency
Yes	39	53%	56	77%	61	84%	51	70%	45	62%
No	34	47%	17	23%	12	16%	22	30%	28	28%

Table 4

5.2 Attitude Assessments

The provided paragraph presents a range of findings from a survey conducted on the perspectives and opinions of respondents regarding the usage and perception of generic medications. The survey results highlight the percentage of respondents who believe in the positive impact of cooperation between prescribers and chemists, the importance of providing sufficient information to patients about generic drugs, satisfaction with the quality control measures of generics, the influence of cost differences on prescription decisions, and attitudes towards the availability of generic medications in hospitals. The frequencies of responses to attitude-related questions are presented in Table 5.

According to the survey, an overwhelming 82% of the participants agreed that patients can effectively use generic medications if prescribers and chemists collaborate. This consensus indicates that cooperation between these healthcare professionals is seen as a crucial factor in ensuring the proper utilization and efficacy of generic drugs. It highlights the significance of effective communication and coordination among prescribers and pharmacists to enhance patient understanding and adherence to generic medication regimens.

The survey also revealed that a significant portion of respondents emphasized the need to provide sufficient information to patients about generic medications. This viewpoint underscores the importance of patient education and empowerment. Ensuring that patients have a comprehensive understanding of the medications they are taking helps build trust, facilitates informed decision-making, and promotes optimal health outcomes.

More than half of the respondents expressed satisfaction with the quality control measures associated with generic drugs. This finding indicates a level of confidence in the safety and efficacy of generic medications. It suggests that the majority of respondents perceive generic drugs to meet appropriate quality standards, reassuring both healthcare professionals and patients about their reliability and effectiveness.

Interestingly, about 73% of doctors reported that the significant cost difference between generic and brand-name medications often compels them to prescribe generic alternatives. This statistic highlights the economic aspect of prescription decisions, demonstrating the role that cost considerations play in healthcare practices. Generic drugs offer a more affordable option for patients, and the survey results indicate that doctors frequently consider this factor when selecting a medication for their patients.

Another noteworthy finding is that nearly 21% of respondents strongly disagreed with the notion that every hospital should have a pharmacy selling generic medications. This dissenting opinion suggests a divergence in perspectives regarding the universal availability of generic drugs within hospital settings. It implies that a subset of respondents may hold reservations or concerns about the practicality or benefits of such an arrangement. This variation in viewpoints calls for further examination and consideration of factors influencing attitudes towards generic medication availability in hospitals.

Table 5 complements the paragraph by providing the frequencies (%) of responses to questions related to attitudes. The tabular representation facilitates a comprehensive overview of the various percentages, enabling easier comparison and interpretation of the respondents' viewpoints.

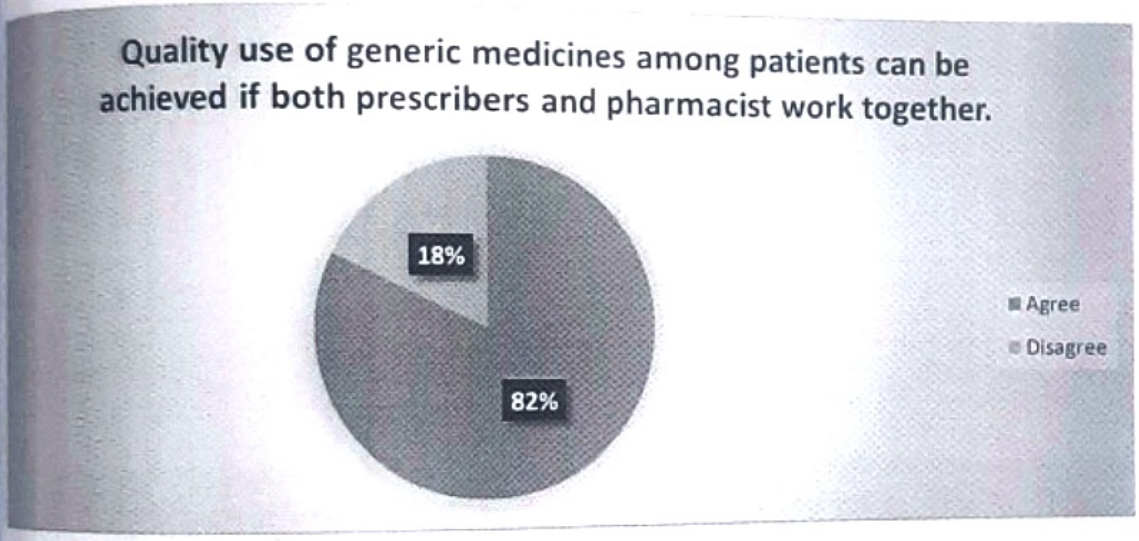
Taken together, the survey findings presented in the paragraph and Table 5 underscore the importance of cooperation between prescribers and chemists, patient education, quality control measures, cost considerations, and the availability of generic medications within healthcare facilities. These factors contribute to enhanced patient care, informed decision-making, and cost-effectiveness in healthcare practices.

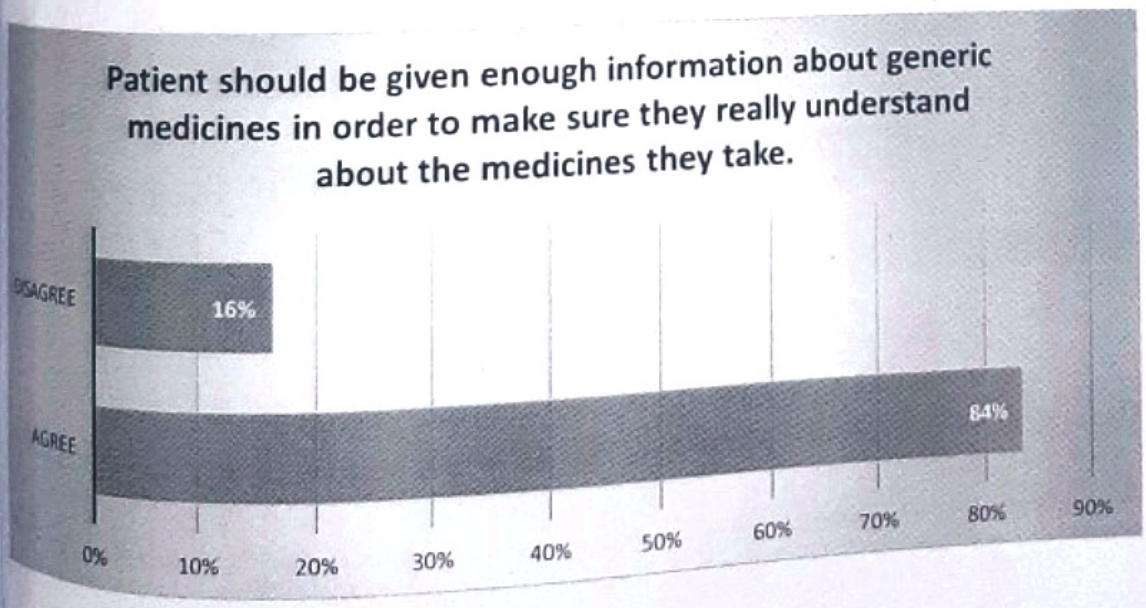
The survey results indicate that a significant majority of respondents believe in the potential benefits of using generic medications when prescribers and chemists collaborate effectively. The emphasis on providing sufficient information to patients reflects the importance of empowering individuals with knowledge and ensuring their understanding of the medications they are prescribed. Satisfaction with quality control measures instils confidence in the safety and efficacy of generic drugs.

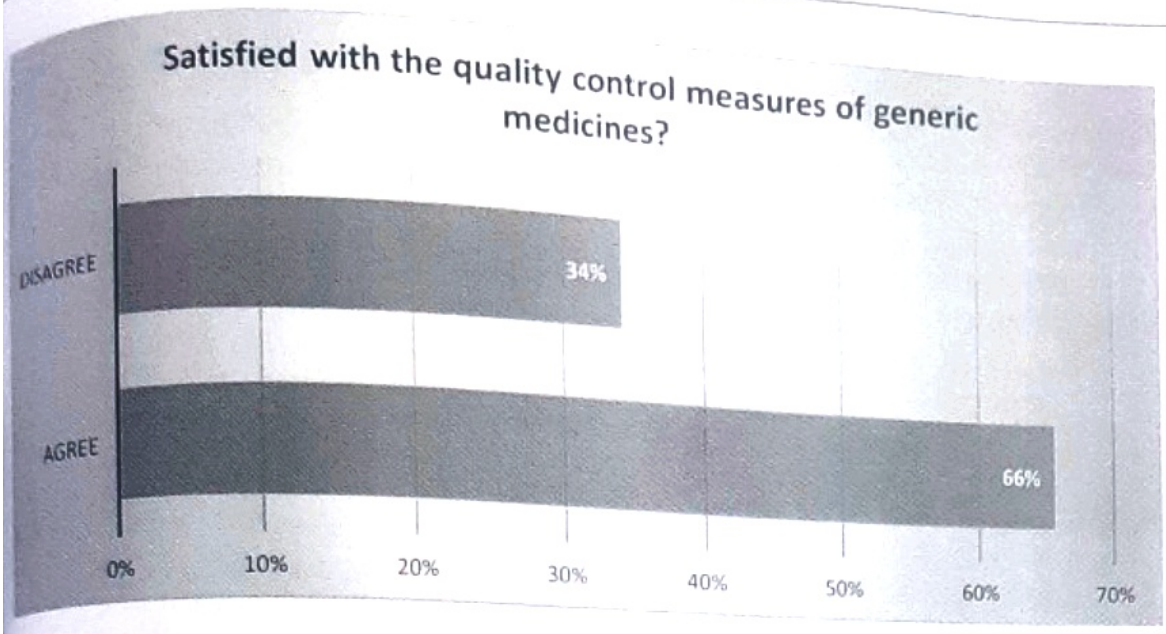
The recognition of cost differences as a determining factor in prescription decisions highlights the economic implications of healthcare choices and the role that generics play in providing more affordable options. The varying attitudes towards the availability of generic medications in hospitals suggest the need for further

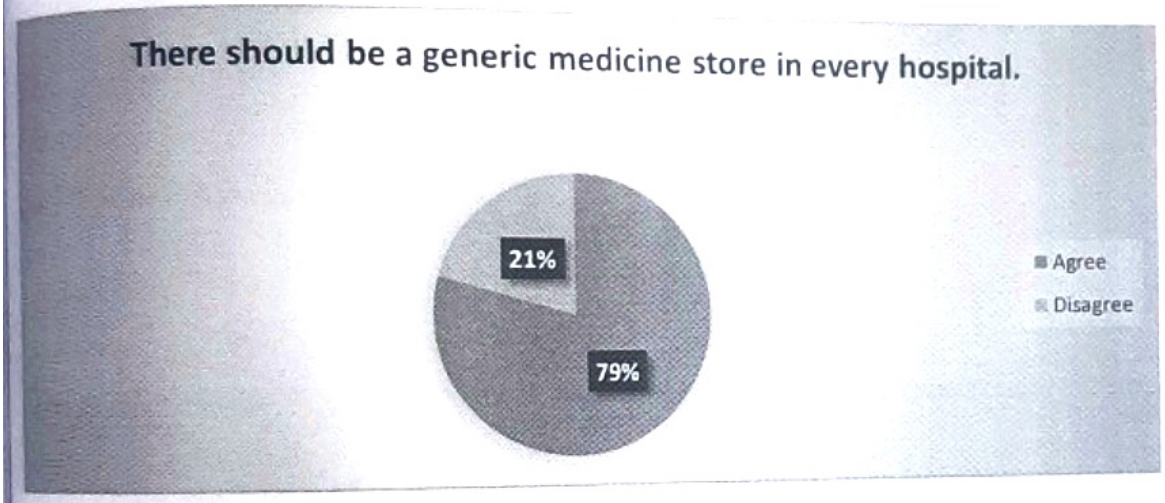
exploration of the factors influencing these perspectives, considering the practicality and potential benefits of such arrangements.

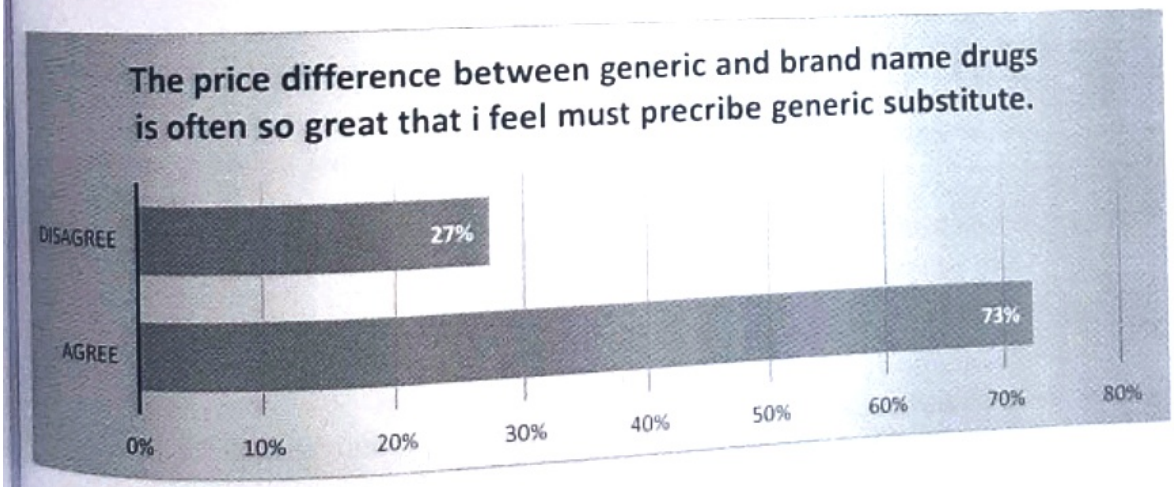
In conclusion, the paragraph and accompanying table shed light on the attitudes and opinions of respondents regarding generic medications. The survey findings underscore the significance of cooperation.






Satisfied with the quality control measures of generic medicines?
DISAGREE
AGREE
34%
66%
0%
10%
20%
30%
40%
50%
60%
70%


There should be a generic medicine store in every hospital.
21%
79%
Agree
Disagree


The price difference between generic and brand name drugs is often so great that i feel must precribe generic substitute.
DISAGREE
AGREE
27%
73%
0%
10%
20%
30%
40%
50%
60%
70%
80%

	Quality use of generic medicines among patients can be achieved if both prescribers and pharmacist work together.		Patient should be given enough information about generic medicines in order to make sure they really understand about the medicines they take		Satisfied with the quality control measures of generic medicines?		The price difference between generic and brand name drugs is often so great that I feel must prescribe generic substitute.		There should be a generic medicine store in every hospital.	
	Count	Frequency	Count	Frequency	Count	Frequency	Count	Frequency	Count	Frequency
gree	60	82%	61	84%	48	66%	53	73%	58	79%
sagree	13	18%	12	16%	25	34%	20	27%	15	21%

Table 5

.3 Practice Assessments

The provided paragraph, along with the data presented in Table 6, highlights several intriguing insights into the usage and perception of generic medication among doctors. It reveals the percentage of doctors who have never used generic drugs, those who have received free samples of name-brand medications, those who believe in the potential impact of switching to generics, those who consider socioeconomic status when prescribing, and those who have engaged in discussions about generic medications with their patients.

Starting with the statistic that approximately 51% of doctors have never used generic medication, it suggests a significant portion of healthcare professionals who have not explored this cost-effective alternative. This finding raises questions about the reasons behind their preference for name-brand drugs and whether it is based on concerns about efficacy, safety, or other factors.

An equally interesting observation is that nearly half of the respondents acknowledged receiving free samples of name-brand medications. This suggests a potential influence on prescribing habits, as pharmaceutical companies often provide such samples as a marketing strategy. It prompts further examination of whether these samples contribute to doctors' familiarity and subsequent preference for name-brand drugs.

Moving on, the data reveals that almost 67% of doctors believe that switching patients from a brand name medication to a generic version could alter the course of therapy. This finding highlights concerns among a significant majority of doctors regarding potential differences in efficacy, safety, or patient response between brand name and generic drugs. It indicates the need for further research and education to address these concerns and ensure confidence in the therapeutic value of generic medications.

In contrast, nearly 33% of doctors do not think that their prescription decisions are influenced by the socioeconomic status of their patients. This finding reflects a positive aspect, suggesting that these doctors strive for impartiality in their practice and prioritize medical need over financial considerations. It emphasizes the importance of equal treatment and access to medication regardless of a patient's socioeconomic background.

Moreover, nearly 61% of respondents agreed that they had discussed generic medications with their patients. This finding highlights the willingness of doctors to engage in conversations about cost-effective treatment options. It shows that patients should be involved in collaborative decision-making processes and that generic medications may offer some benefits.

Table 6 complements the paragraph by visually representing the practice-related questions and their corresponding percentage responses. This table provides a clear overview of the data, making it easier to interpret and compare the various statistics presented in the paragraph.

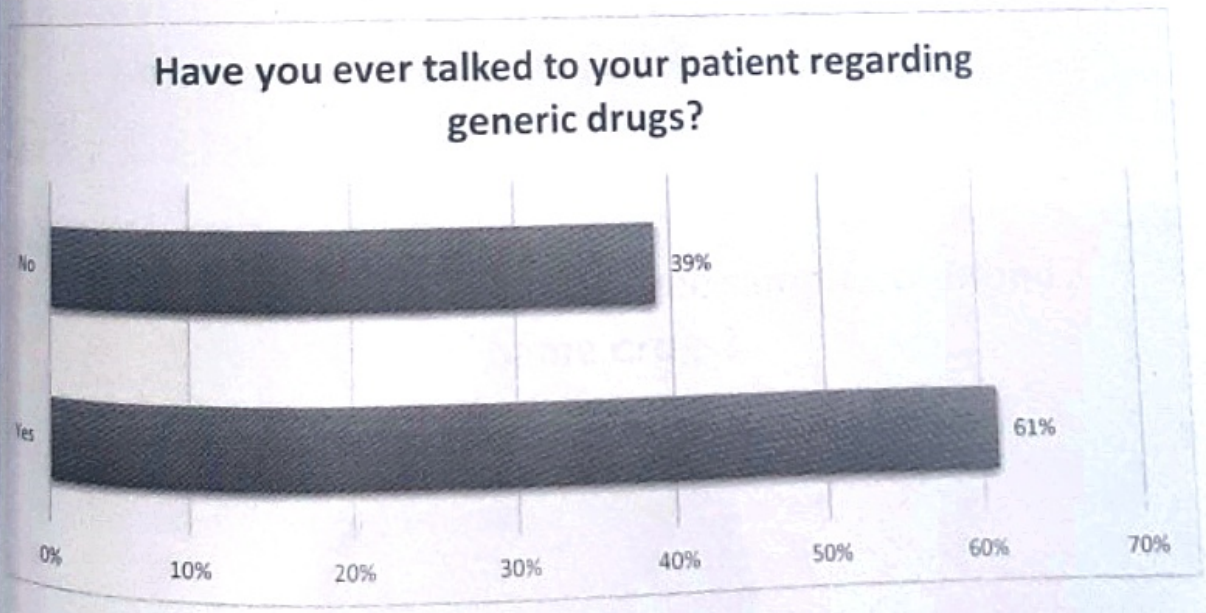
The findings presented in the paragraph and Table 6 collectively underscore the significance of addressing concerns, promoting awareness, and fostering open communication between doctors and patients regarding generic medications. The relatively high percentage of doctors who have never used generics suggests the need for educational initiatives to increase familiarity with these drugs and dispel any misconceptions. Additionally, the disclosure of doctors receiving free samples highlights the potential influence of pharmaceutical marketing on prescribing practices, warranting further exploration of its impact.

There should be more conversations and research to provide evidence-based information about the effectiveness and safety of generic pharmaceuticals given that doctors believe switching to generics could change the results of therapy. Furthermore, the acknowledgment that socioeconomic status does not influence prescription decisions emphasizes the importance of equitable healthcare practices and the ethical responsibilities of healthcare providers.

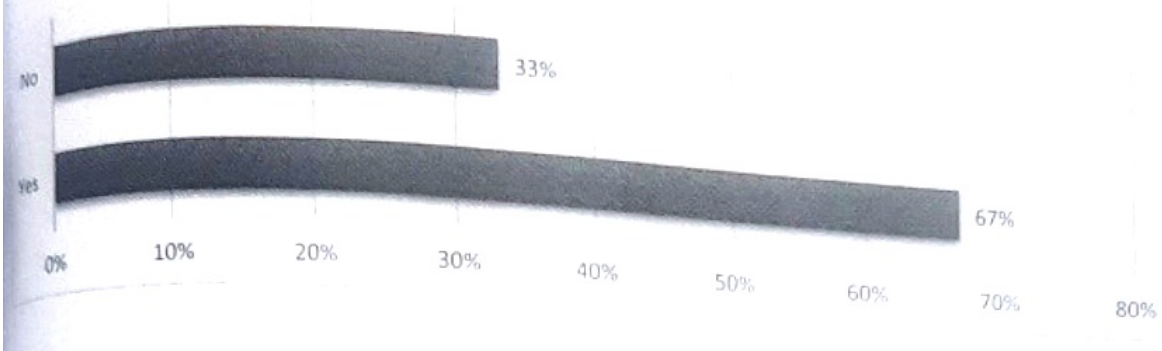
The advantage is that it shows a dedication to cost-effective treatment options and educated decision-making when doctors discuss generic drugs with their patients. This patient-centered approach encourages shared

decision-making, enabling patients to actively participate in their treatment plans and consider affordable alternatives without compromising quality of care.

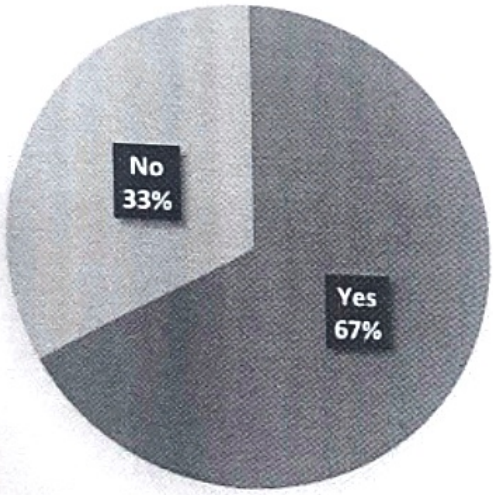
In summary, the paragraph and accompanying table shed light on the perspectives and practices of doctors regarding generic medications. The data presented prompts further exploration of the reasons behind doctors' preferences, the influence of pharmaceutical marketing, the potential impact of switching to generics, and the importance of open communication between doctors and patients. Addressing these factors can contribute to more cost-effective and accessible healthcare, ultimately benefiting patients and the healthcare system as a whole.



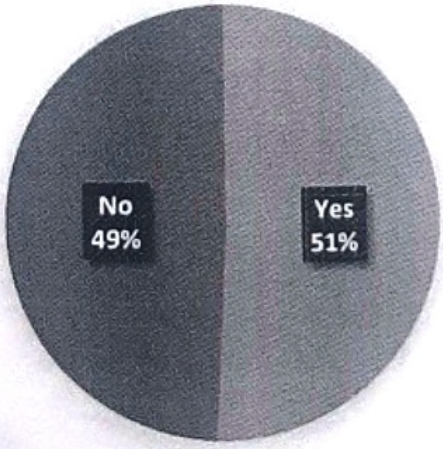
Do you think that switching all patients from a brand name to generics may change the outcome of the therapy?

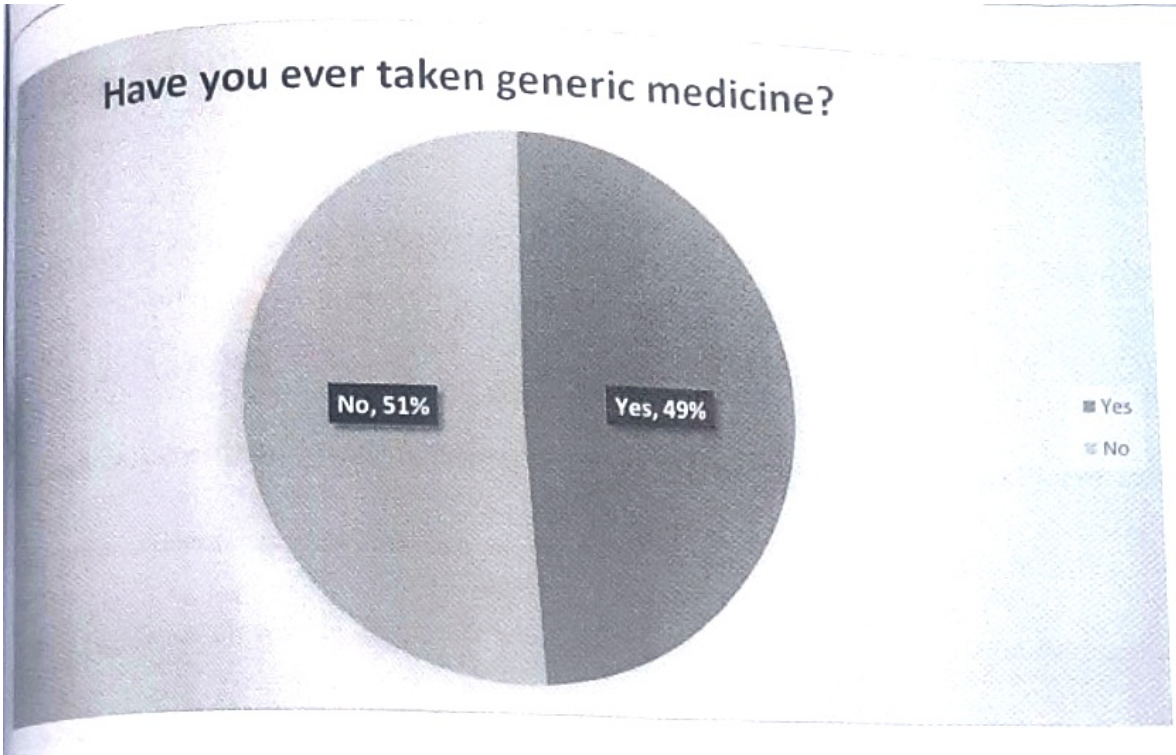


Does the socio economic condition of your patient influence your prescription?



Have you ever recieved free samples of brand name drugs?





	Have you ever taken generic medicine?		Have you ever received free samples of brand name drugs?		Do you think that switching all patients from a brand name to generics may change the outcome of the therapy?		Does the socio economic condition of your patient influence your prescription?		Have you ever talked to your patient regarding generic drugs?	
	Count	Frequency	Count	Frequency	Count	Frequency	Count	Frequency	Count	Frequency
Yes	36	49%	37	51%	49	67%	49	67%	45	61%
No	37	51%	36	49%	24	33%	24	33%	28	39%

Table 6

6. Discussion

The majority of participants in this study believe that generic drugs have more side effects than name-brand drugs.

The study indicates that a considerable number of respondents, specifically almost 66%, expressed dissatisfaction with the quality control procedures of generic drugs. This finding aligns with a previous study where a significant proportion of doctors, around 72%, held the belief that generic products are manufactured with lower quality compared to brand-name medications. (8)

The perception of lower quality in generic medications can be influenced by various factors. One possible factor is the misconception that generic drugs are inferior because they are often priced lower than their brand-name counterparts. Some people could conclude that generic medications are of poorer quality or less effective due to the price disparity. Additionally, there might be concerns about the variability in the manufacturing processes and standards across different generic drug manufacturers, which could contribute to doubts about their quality control procedures.

It is important to note that these perceptions are not necessarily reflective of the actual quality of generic medications. The exact same high criteria set by regulatory agencies apply to brand-name and generic medications. Before they can be approved for sale, generic medications undergo thorough testing to demonstrate their bioequivalence to the brand-name version in terms of safety, efficacy, and quality. By

doing this, it is ensured that generic medications deliver the same therapeutic advantages as their name-brand equivalents.

Furthermore, it is essential to consider the impact of generic medications on healthcare costs and accessibility. Generic drugs are typically more affordable than brand-name drugs, which can significantly reduce healthcare expenses for individuals and healthcare systems. The lower prices of generics do not imply compromised quality but are a result of cost savings achieved through streamlined manufacturing and reduced research and development expenses.

To address the concerns and perceptions regarding the quality of generic drugs, it is crucial to promote accurate information and education among healthcare professionals and the general public. Providing healthcare providers with comprehensive knowledge about the regulatory processes and standards for generic medications can help dispel any misconceptions they may hold. Emphasizing the bioequivalence of generics and their rigorous testing procedures can help build confidence in the quality and safety of these medications.

Additionally, regulatory bodies play a crucial role in ensuring the quality control procedures of generic drugs. Continued efforts to strengthen and enforce stringent regulations and oversight can further enhance the quality assurance of generic medications. Collaboration between regulatory authorities, healthcare professionals, and pharmaceutical manufacturers is essential to maintain and improve the quality control standards of generic drugs.

all, while perceptions regarding generic drug quality control procedures exist, it is important to address through education, accurate information, and a comprehensive understanding of the regulatory sses in place. By promoting awareness and trust in the rigorous standards governing generic cations, it is possible to overcome misconceptions and ensure the appropriate use of cost-effective ric drugs in healthcare systems.

he present study, it was found that 70% of doctors demonstrate awareness of the Indian Medical Council C) Act. The findings from our research show substantial improvement compared to previous studies nducted in Bahrain (10.2%), Belgium (2.8%), Malaysia (12.7%), and the USA (2%-22%). However, our sults align closely with earlier studies conducted in the UK (83%) and Thailand (73.9%). (9,10)

he higher awareness among doctors regarding the Indian Medical Council (IMC) Act, which mandates the rescription of medications using generic names, could be a contributing factor. This practice is instilled arly in medical school and promotes the use of generic prescribing. Similar efforts have been observed in urope, where several initiatives and measures have been adopted to enhance the utilization of generic nedications. (11,12,13). A notable proportion of physicians actively engage in prescribing generic drugs, nd a majority of doctors possess commendable knowledge and positive attitudes towards generic nedications. However, there is still a need for additional information among doctors, particularly regarding the quality aspects of generic drugs, in order to further enhance their prescription rate. (14)

The survey revealed that most doctors were cognizant of the substantial price disparity between generic and brand-name products. Consistent with previous reports, the cost of generic medications can be up to 91%

lower compared to brand-name medications. (15,16,17). The escalating cost of healthcare poses a significant challenge for the global healthcare system, particularly in developing countries like India, where the availability of affordable and high-quality medicine remains a major concern. To address this issue, the Indian government initiated the "Jan Ausadhi" project, which establishes Jan Ausadhi stores to provide convenient access to essential, cost-effective generic medications. In this study, approximately 84% of the doctors demonstrated awareness of the Jan Aushadhi program implemented by the Indian government. Over half of the respondents believed that transitioning patients from brand-name medications to generic versions could potentially impact the treatment course. Despite the overall positive understanding and attitudes towards generic medications among the majority of doctors, the study indicated the necessity for additional information to bridge the gap and facilitate a greater adoption of generic medications over brand-name counterparts.

7. Limitations

While this study provides valuable insights into the perspectives, understanding, attitudes, and practices of doctors regarding the prescription of generic medications, there are certain limitations that need to be acknowledged.

The small sample size in this study is one of its potential flaws. All of the respondents were patients at the single multispecialty hospital where the study was conducted. This restricts the generalizability of the findings to a larger population of doctors. The sample may not be representative of the broader medical community, as doctors from different hospitals or regions may have varying perspectives and practices

d to generic medications. Therefore, caution should be exercised when extrapolating the results of this

to other healthcare settings.

tionally, focusing solely on the doctor's perspective may limit the comprehensive understanding of the

cription of generic medications. While doctors play a crucial role in prescribing medications, other

eholders such as patients, pharmacists, and healthcare administrators also influence the utilization and

eptance of generic drugs. Including multiple perspectives could provide a more holistic view of the

llenges and opportunities associated with generic medication prescription.

rthermore, it is important to consider the potential biases and limitations associated with self-reported

ta. The study relies on doctors' self-reported responses, which may be influenced by recall bias or social

sirability bias. Doctors may have provided responses they perceived as more socially acceptable or

ligned with professional norms. Therefore, the findings should be interpreted with caution, and future

esearch could consider utilizing objective measures or including a combination of self-report and

bservational data.

To overcome these limitations, future studies could employ larger and more diverse samples, involving

doctors from various healthcare settings and regions. It would also be beneficial to include perspectives from

other stakeholders involved in the prescription and use of generic medications. Additionally, utilizing a

mixed-methods approach that combines qualitative and quantitative data could provide a more

comprehensive understanding of the complex factors influencing the prescription of generic drugs.

In conclusion, while this study provides valuable insights into the doctor's perspective on generic medication prescription, the limited sample size, the inclusion of respondents from a single hospital, and the exclusive focus on doctors are potential drawbacks that need to be considered. Addressing these limitations in future research would contribute to a more comprehensive understanding of the topic and help inform evidence-based strategies for promoting the appropriate use of generic medications.

8. Conclusion

Physicians being well-informed about generic drug products during their academic careers is crucial for several reasons, including their ability to make informed decisions about prescribing medications. By gaining a comprehensive understanding of generic drugs, physicians can effectively evaluate their efficacy, safety, and cost-effectiveness in comparison to brand-name medications. This knowledge has a significant financial impact on the healthcare industry as it enables physicians to make cost-conscious decisions that contribute to overall healthcare cost reduction.

Government health agencies have a responsibility to run awareness campaigns about generic drugs to rationalize prescribing practices and enhance understanding among both clinicians and consumers. These campaigns can serve to dispel misconceptions and address concerns related to generic drugs. By providing accurate information about the quality, safety, and effectiveness of generic medications, government agencies can foster a better understanding of their value and encourage their appropriate use.

One of the key objectives of promoting the use of generic drugs is to reduce healthcare costs. Generic drugs are typically more affordable than brand-name drugs, offering potential cost savings for both patients and healthcare systems. Clear standards for the substitution of generic drugs can play a vital role in achieving

this objective. By establishing guidelines and protocols for the appropriate substitution of brand-name medications with their generic equivalents, healthcare providers can confidently prescribe cost-effective options without compromising patient safety or quality of care.

The creation of clear standards for generic drug substitution helps ensure that healthcare providers have a standardized framework to follow when considering the use of generic medications. These standards may include criteria such as bioequivalence, therapeutic interchangeability, and robust quality control measures. By setting clear guidelines, healthcare systems can streamline the substitution process and facilitate the widespread adoption of generic drugs, ultimately leading to significant cost savings in the healthcare industry.

Apart from the financial advantages, the utilization of generic drugs also fosters competition within the pharmaceutical market, thereby potentially resulting in more significant price reductions and enhanced availability of essential medications. The presence of affordable generic alternatives enhances affordability and accessibility for patients, especially in developing countries where access to expensive brand-name medications might be restricted.

Overall, ensuring that physicians are well-informed about generic drugs, running awareness campaigns, and establishing clear standards for their substitution are essential steps towards reducing healthcare costs and promoting the appropriate use of cost-effective medications. These efforts contribute to a more sustainable healthcare system that provides affordable and accessible healthcare for all individuals.

9. Conflict of Interest

Conflicts of interest are non-existent.

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