

Patient perception about generic and branded medicine at a tertiary centre in Bihar

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Abstract

Background: The branded medicines are a bit costlier than the generic ones and hence enhanced usage of generic medicines would reduce the costs without sacrificing the quality of the medicines. The present study was conducted to assess patient perception about generic versus branded medicine.

Aim and Objectives: The present study was conducted to compare the perception of patient about generic and branded medicine.

Materials & Methods: 140 patients of both genders were provided with a questionnaire about knowledge about difference between generic and branded medicines, attitude for buying generic medicines over branded medicines and practice of taking generic medicines.

Results: Out of 140 patients, 80 were male and 60 were female. 75% have heard about generic medicine, 65% knew there a difference in the quality of generic medicine and branded variant, 60% knew that there a difference in the price of generic and branded medicines, the type of medicines doctors prefer to prescribe was generic medicines in 28% and branded medicines in 72%, the drug chemist prefer to sell was generic medicines in 24% and branded medicines in 76%, generic medicines in 80% and branded medicines in 20% were prescribed in this hospital, Indian government promote generic medicines in 42% and branded medicines in 58%, 34% were aware of any government rules regarding generic or branded medicines. 62% knew that there is price difference between generic and branded medicine, 63% prefer buying generic medicines over branded medicines, 30% have ever asked their doctor to prescribe generic medicines, 32% have asked chemists to give generic medicines in place of branded medicines. The difference was significant ($P < 0.05$).

Conclusion: Subjects had poor knowledge and attitude about generic medicines.

Keywords: Attitude, branded, generic medicines.

INTRODUCTION

According to a nationally representative study, switching prescriptions from brand-name drugs to molecularly identical generics may result in an 11 percent decrease in overall drug expenses in the United States. To reduce healthcare expenses and financial burden, nations around the world, including the USA, Europe, India, and many low- and middle-income nations, are advocating for the use of generic medicines. Because they are less expensive and closely resemble the brand-name medication in terms of the active components, dosage, dosing form, and bioequivalence, generic medicines play a significant role in healthcare.¹ Another study found that prescribing in accordance with established national hypertension recommendations can increase the use of generic drugs, result in a 25% decrease in overall drug costs for hypertension medications, and result in higher-quality care.² The branded medicines are a bit costlier than the generic ones and hence enhanced usage of generic medicines would reduce the costs without sacrificing the quality of the medicines.³ Pharmaceutical companies hold international patent rights which give them the exclusive right to produce a new drug for a specific period, which may run into decades after its development.⁴ It is only after the lapse of the patent that generic formulations are allowed into the market according to the current drug production laws.⁵ World Health Organization (WHO) recommends the essential medicines should be freely accessible and affordable to the population but the literature search has revealed an unfavourable perception of patients regarding generic medicines.^{6,7}

Aim and Objectives: The present study was conducted to compare the perception of patient about generic and branded medicine.

MATERIALS & METHODS

The present prospective study comprised of 140 patients of both genders at Department of Pharmacology, Sri Krishna Medical College & Hospital, Muzaffarpur, Bihar, India, and Department of Pharmacology, Bhagwan Mahavir Institute of Medical Sciences, Pawapuri, Nalanda, Bihar (India) in the collaboration with Department of Medicine, after receiving approval from the institutional ethical committee. The study was done on 90 (Ninety) patients of both genders, men and women with type II diabetes. Written consent was acquired from everyone who participated in the study after they were given all of the relevant information. The study was conducted from May' 2018 to April' 2020.

Patients' particulars such as name, age, gender etc. was recorded. A questionnaire was designed which comprised of knowledge, attitude (attitude for buying generic medicines over branded medicines) and practice of taking generic medicines (asking doctor or pharmacist to prescribe generic medicines etc.). The response of each patient was recorded. Data thus obtained were subjected to statistical analysis by using SPSS software version 22 and Microsoft version 16. A p value less than 0.05 was considered significant.

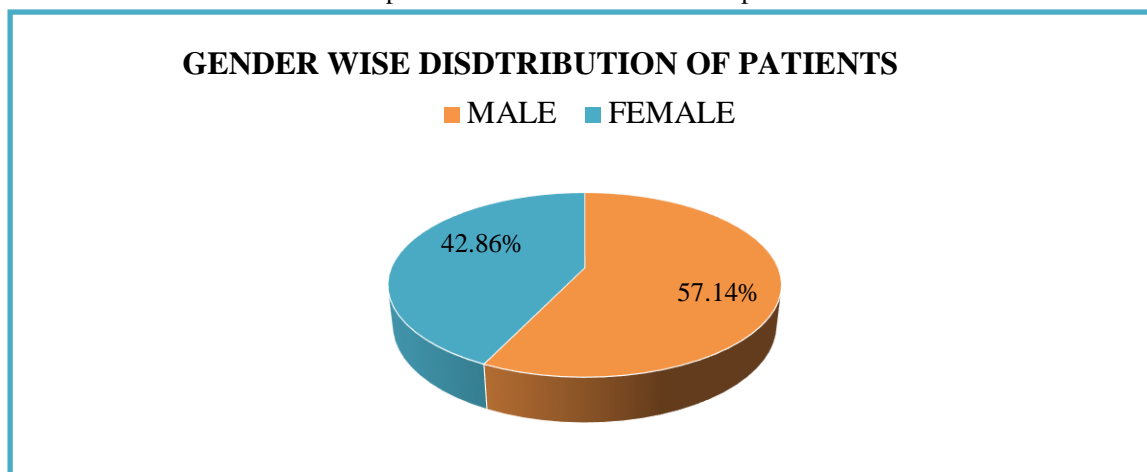
RESULTS

Current study shows the distribution of the patient according to the age and gender. The mean age (Mean \pm SD) of patients was 38.60 \pm 12.50 years.

Table I: Demographic details of patients

Total number of subjects=140	
Mean age (Mean \pm SD) in years	38.60 \pm 12.50
Gender	
Male	80(57.14%)
Female	60(42.86%)
Education	
Illiterate	02
Primary	20
Secondary	24
Higher secondary	40
Graduate	36
Postgraduate	18
Income(in rupees)	
<10000	56
10,000-15,000	30
16,000-25,000	28
>25,000	26

Graph I: Gender wise distribution of patients



Graph I show that out of 140 patients, males were 57.14% and females were 42.86%.

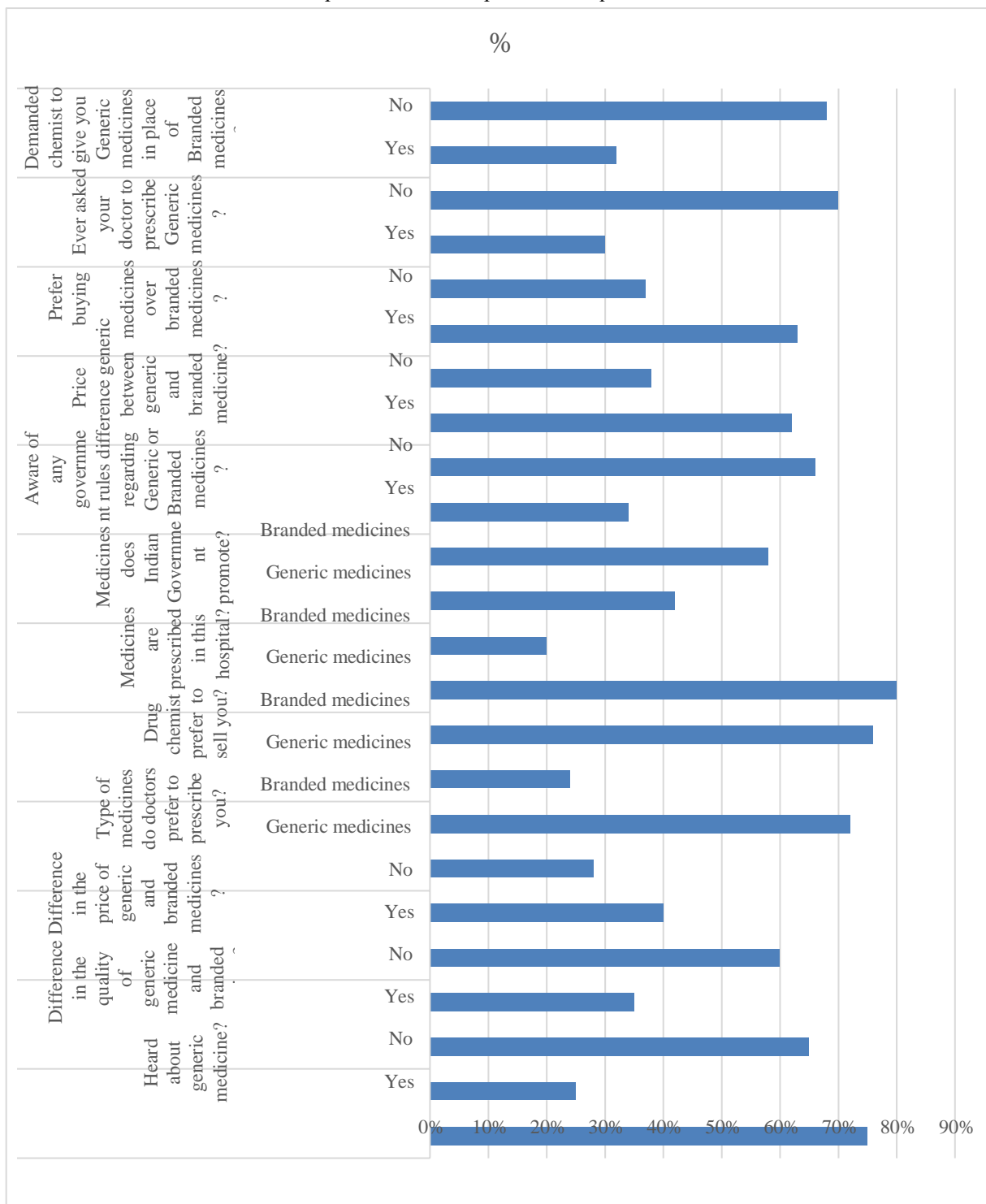
Table II: Patients' response about questionnaire

Questionnaire	Response	%	P value
Heard about generic medicine?	Yes	75%	0.01
	No	25%	
Difference in the quality of generic medicine and branded variant?	Yes	65%	0.02
	No	35%	
Difference in the price of generic and branded medicines?	Yes	60%	0.05
	No	40%	
Type of medicines do doctors prefer to prescribe you?	Generic medicines	28%	0.01
	Branded medicines	72%	
Drug chemist prefer to sell you?	Generic medicines	24%	0.03
	Branded medicines	76%	
Medicines are prescribed in this hospital?	Generic medicines	80%	0.01
	Branded medicines	20%	
Medicines does Indian Government promote?	Generic medicines	42%	0.18
	Branded medicines	58%	
Aware of any government rules regarding Generic or Branded medicines?	Yes	34%	0.04
	No	66%	
Price difference between generic and branded medicine?	Yes	62%	0.02
	No	38%	
Prefer buying generic medicines over branded medicines?	Yes	63%	0.03
	No	37%	
Ever asked your doctor to prescribe Generic medicines?	Yes	30%	0.02
	No	70%	
Demanded chemist to give you Generic medicines in place of Branded medicines?	Yes	32%	0.04
	No	68%	

Table II, graph II shows that 75% have heard about generic medicine, 65% knew there a difference in the quality of generic medicine and branded variant, 60% knew that there a difference in the price of generic and branded medicines, the type of

medicines doctors prefer to prescribe was generic medicines in 28% and branded medicines in 72%, the drug chemist prefer to sell was generic medicines in 24% and branded medicines in 76%, generic medicines in 80% and branded medicines in 20% were prescribed in this hospital, Indian government promote generic medicines in 42% and branded medicines in 58%, 34% were aware of any government rules regarding generic or branded medicines. 62% knew that there is price difference between generic and branded medicine, 63% prefer buying generic medicines over branded medicines, 30% have ever asked their doctor to prescribe generic medicines, 32% have demanded chemist to give generic medicines in place of branded medicines. The difference was significant ($P < 0.05$).

Graph II: Patients' response about questionnaire



DISCUSSION

Generic medicine is identical or bioequivalence to an innovator or product brand name drug in dosage, form, safety, strength, route of administration, quality, performance, characteristics and intended use.¹ Physicians often refer to original drugs by their brand names, resulting in these drugs being widely prescribed even when less expensive bioequivalent generic alternatives are available.¹¹ Health-care expenditure mainly owing to the escalating costs of drugs has been on the rise in most countries over the past few decades.⁸ Chua GN et al;⁹ found that 85.1 percent of those surveyed said they actively prescribed generic medications in their practice. However, only 4.6% of respondents correctly identified the bioequivalence standard for generic drugs used by Malaysia's National Pharmaceutical Control Bureau. The terms "bioequivalence," "efficacy," "safety," and "manufacturing standards" of generic medications were misunderstood by the respondents.

We found that 75% have heard about generic medicine, 65% knew there a difference in the quality of generic medicine and branded variant, 60% knew that there a difference in the price of generic and branded medicines, the type of medicines doctors prefer to prescribe was generic medicines in 28% and branded medicines in 72%, the drug chemist prefer to sell was generic medicines in 24% and branded medicines in 76%, generic medicines in 80% and branded medicines in 20% were prescribed in this hospital. We found that out of out of 140 patients, males were 80 and females were 60.

Prosser H et al;¹⁰ found that the prescription of new medications is not just influenced by biomedical assessment and critical appraisal; rather, it is also significantly influenced by the way in which pharmacological information is exposed to the public and by social factors that affect individual decision-making. Prescription variation is easier to grasp when put within this broad framework. These results have implications for the use of evidence-based medicine, which requires a multifaceted approach.

Tripathi et al;¹¹ observed that 72 % participants heard about generic medicines and 65% knew the difference between generic and branded medicines. 67% agreed that generic medicines are cheaper than branded medicines but only 35% of them preferred to buy generic medicines. Most (64%) of the patients never asked his/her doctor or pharmacist (59%) to prescribe/distribute generic medicines. Majority of them (61%) believed that generic medicines have lower quality than branded medicines. According to patients, 45% responded that doctors favoured branded medicines over generic medicines. 37% of patients in this hospital were given generic medicine. Most of them (67%) did not become aware of the government rules about prescribing generic medicines. Only 24% responded that government should promote generic medicines. More generic drug stores should be present in the hospital, according to 13% of patients. Interestingly, 45% of them suggested for the availability of generic medications in all medicine shops.

Charan et al;¹² assessed knowledge and perception of generics among 345 patients, only 33.6% reportedly heard about generics. 60% believed that generics are safe. Those who refused to take generic medications reported efficacy as their biggest concern. Out of various factors that may affect knowledge of generic drugs, young age and education and higher secondary were statistically significant.

Singh et al;¹³ found that 62% supported generic substitution for original drugs in most cases, 60 (30%) supported generic substitutions for original drugs in all cases where generics were available, and 16 (8%) opposed generic substitution for original drugs. One hundred and seventeen (58.5%) participants perceived that there was significant difference between price of generic and original brand drugs. Although 56% participants believed that generic drugs are as effective as originals, 56% participants also mentioned that they have experienced difference in the quality of generic drugs against original brand drugs.

We observed that Indian government promote generic medicines in 42% and branded medicines in 58%, 34% were aware of any government rules regarding generic or branded medicines. 62% knew that there is price difference between generic and branded medicine, 63% prefer buying generic medicines over branded medicines, 30% have ever asked their doctor to prescribe generic medicines, 32% of patients have requested chemist that generic medications be given in place of branded medications.

SAMPLE SIZE

The shortcoming of the study is small sample size.

CONCLUSION

This study shows that the participants had very poor and limited knowledge about the generic medicines. The attitude of patient about generic medicines were also deficient in this study.

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