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# Branded Drugs Over Generic Drugs - A Cross Sectional Study

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#### **Abstract**

**Background:** The rising health-care expenses remain a serious issue for the health-care system worldwide. Medicines consume major proportion of money spent on healthcare. Generic drugs are copies of brand-name drugs that have exactly the same dosage, intended use, effects, side effects, administration route, risks, safety and strength similar to the original drug.

**Aims & Objectives:** 1. To assess the knowledge of patients on generic drugs.

2. To know the perspective of pharmacists and doctors on generic drugs and branded drugs.

**Material & Methods:** The present study is a cross sectional study on 200 randomly selected OPD patients, 200 randomly selected pharmacists and 200 randomly selected doctors in Indore for 4 months by random selection. Ethical clearance from the college committee was taken. Written informed consent was taken from the participants. The study tool is a pre designed semi structured questionnaire.

**Results:** 78% of the study population were not aware of the generic drugs. Only 20% patients were aware that the efficacy of branded drug and generic drugs were equal.82% of the pharmacists sold generic drugs while 18% did not sell generic drugs at all. 56% of the pharmacists agreed that the potency and efficacy of branded drugs and generic drugs were the same.40% doctors preferred generic drugs whereas 60% doctors preferred branded drugs. 70% doctors considered the economic status of their patients before prescribing drugs.

**Conclusion:** Health care costs continue to rise. Not only generic drugs are cost-effective, but also they are safe. Therefore consumers, providers and policymakers need to assess the best way to keep health care affordable.

**Keywords:** Generic drugs, branded drugs.

#### Introduction

The increasing health-care expenses remain a serious concern for the health-care system worldwide. Medicines consume major proportion

of net money spent on healthcare. According to WHO, in many developing countries out-of-pocket expenses may go up to as high as 80% of total health-care expenditures. (1)

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Therefore it will be necessary to reduce these expenditures to the lowest possible levels without affecting the quality of health care.

To deal with this problem, government has taken many steps. Under this, in 2008, the Government of India, through the Department of Pharmaceuticals, started a new initiative "Jan Aushadhi" (a Hindi word literally translated as "Medicine for People"). This program envisaged making unbranded quality medicines available to poor people in the country at a reasonable and affordable price through retail outlets' setup with the help of the government.<sup>(2)</sup>

On April 2017, the Medical Council of India released a notification which stated that it is mandatory for the physicians to prescribe the drugs by using generic names. (3)

Generic drugs are similar to branded drugs that they have exactly the same dosage, use, effects and side effects, route of administration, risks, safety, and strength as the branded drugs. (4)

Increased usage of generic medicines can improve affordability of the health care without compromising the quality. (5) Thus promotion of generic medicine is very essential for India as well as other developing countries for their healthcare policy.

Even though various agencies are promoting generic medicines, they are still under-utilized. Therefore it is important to know the attitudes and perceptions of physicians, consumers and pharmacists regarding the use of generic drugs.

### **Objectives**

- 1) To assess the knowledge of patients on generic drugs.
- 2) To know the perspective of pharmacists and doctors on generic drugs and branded drugs.

#### **Methods**

The present study was a cross sectional study done in OPD (Outpatient department) patients of Maharaja Yeshwantrao Medical College and Hospital, pharmacists and doctors in Indore from June 2019 to December 2019. 200 patients were selected from various OPDs who were willing to participate in our study. Every alternate patient coming in routine OPD hours who were stable and willing to give consent were selected. Patients aged less than 18 years and greater than 45 years were excluded from our study. Indore urban is divided into 4 zones (Sanyogitaganj, Malharganj, Nandanagar, Hukumchand). Hence we took 50 pharmacists and 50 doctors from each zone in our study.

Finally our sample size was 600, consisting of 200 OPD patients, 200 Pharmacists and 200 Doctors. Ethical clearance from the college committee was taken. In our study Informed consent in written was taken from all the participants. All the participants were assured that information would be kept confidential. The study tool was a Pre Designed Semi Structured Questionnaire. The questions were asked orally for those who were not able to read. Collection and Compilation of data was done. After the Analysis Interpretation, data was entered in Microsoft Excel sheet and analysed using SPSS Software. Appropriate statistical test was applied wherever necessary.

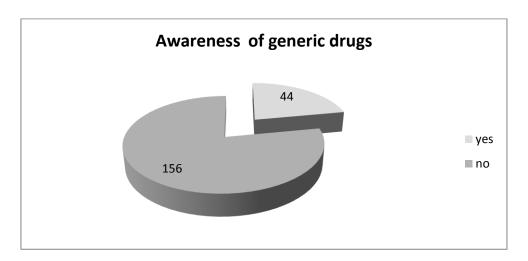
#### **Results**

In our study, we selected 200 OPD patients, 200 pharmacists and 200 doctors. Among 200 OPD Patients, 135 belonged to urban area and 65 were from rural area. Among patients, 120 were females and 80 males.60 patients belonged to the age group 18-30 years and 140 belonged to 31-45 years. According to education, 20 patients were educated below high school, 25 up to high school, 30 up to higher secondary, 90 were graduated and 35 patients were post graduates. According to Income, 40 patients were earning below Rs 15,000; 30 patients between Rs 16,000 to 25,000; 75 patients between Rs 26,000 to 35,000; 50 patients between Rs 36,000 to 45,000 and 5 patients were earning between Rs 46,000 to 55,000.

Among 200 pharmacists 20 were females and 180 were males. 60 pharmacists had diploma in pharmacy, 100 pharmacists had Bachelor degree in Pharmacy, and 40 pharmacists had Masters in Pharmacy.20 pharmacists earned below Rs 15,000; 80 pharmacists earned between Rs 15,000-30,000; 60 pharmacists earned between Rs 31-50,000 and 40 pharmacists earned greater than Rs 50,000.

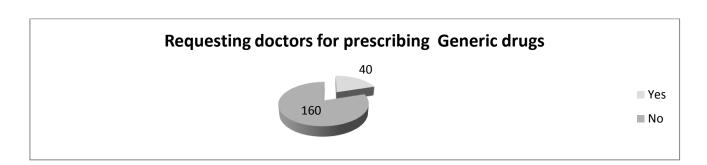
Among 200 Doctors 120 were M.B.B.S. and 80 were post graduate specialists. 135 doctors were males and 70 doctors were females.40 doctors had earnings below Rs 50,000 and 160 doctors had earning greater than Rs 50,000.

Among 200 OPD patients, 78% (156) of the study population were not aware of the generic drugs available as compared to a meager 22% (44) population who were aware.



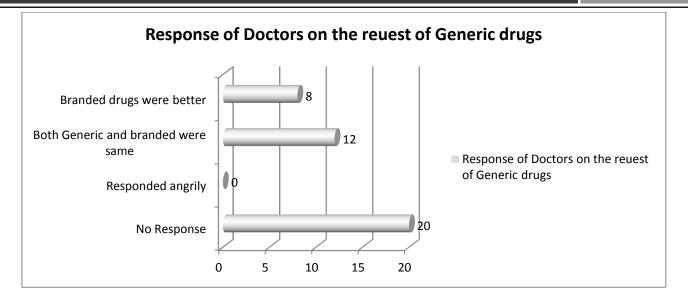
Out of 44 patients who were aware of generic drugs, 45.45%(20) of patients knew through TV/ads, 45.45%(20) heard about generic drugs from someone while 9.1% (4) were informed by their doctors.Only 20%(40) patients were aware that the efficacy of brand name and generic drugs were equal while a staggering 80%(160) were not

at all aware. Only 12% (24) patients were in favour of generic drugs while a whopping 88% (176) bought only branded drugs. Only 20%(40) patients requested their doctors to prescribe generic drugs while the remaining 80% (160) did not



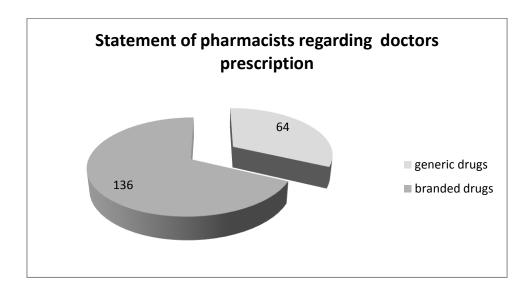
Out of 40 patients who had requested their doctors for generic drugs, only 20% (8)were informed that branded drugs were better, while 30%(12) were

informed that both the drugs were same. None of the doctors were angry with their patients and 50%(20) patients received no response.



36%(72) patients faced difficulty while buying medicines whereas majority 64% (128) of the patients did not face any issues.98%(196) of the patients desired for a medical store selling only generic drugs while 2%(4) had no desire.

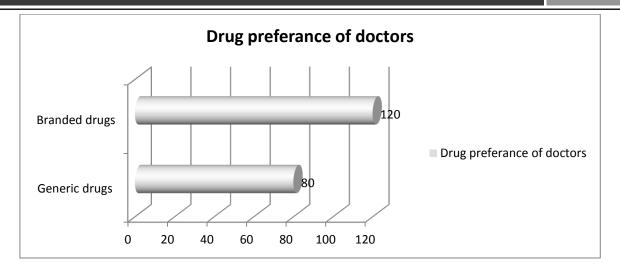
Among 200 pharmacists, 82% (164) sold generic drugs while 18%(36) did not sell generic drugs at all.68%(136) of the pharmacists stated that doctors prescribed more branded drugs whereas only 32%(64) received prescriptions having generic drugs.



Only 56%(112) of the pharmacists were requested by their customers for generic drugs while 44% (88) were not. About 66% (132) of the pharmacists preferred branded drugs over generic drugs whereas 34%(68) were in favour of generic drugs. 56% (112) of the pharmacists agreed that the potency and efficacy of branded drugs and generic drugs were same and they had conveyed this to their customers too. But 44% (88)disagreed with this.statement.68%(136) provided the customers with the generic drugs written in the

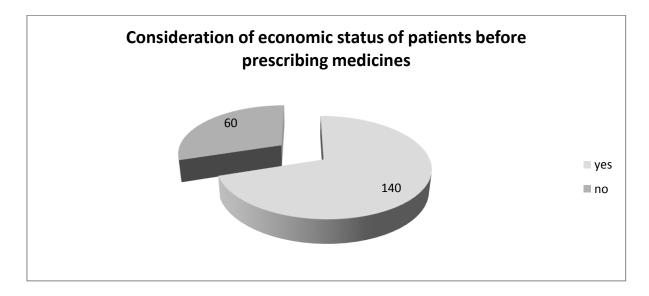
prescriptions whereas 32% (64)provided branded drugs.70% (140) pharmacists were aware of the government initiative "Jan Aushadhi Kendra" while 30%(60) pharmacists were unaware of this.

Majority 90% (180) of the doctors stated that they prescribed generic drugs while 10% (20)doctors did not.40%(80) doctors preferred generic drugs whereas 60%(120) doctors preferred branded drugs.



96%(192) doctors believed that generic drugs differ from the FDA standards whereas 4%(8) doctors believed that they complied with the standards. About 70%(140) doctors believed that generic drugs were more effective as compared to branded drugs while the remaining 30%(60)

opined that branded drugs were more effective and they conveyed this to their patients too. About 70% (140) doctors considered the economic status of their patients too before prescribing drugs while 30%(60) did not.



96%(192) doctors were aware of the new rule of prescribing generic drugs to their patients while a meagre 4%(8) were not aware of this rule.96%(192) of the doctors felt that it was their responsibility to prescribe generic drugs while 4%(8) of the doctors did not feel that way. 90%(180) doctors felt that prescribing generic drugs would improve the economic status of our country while 10%(20) disagreed. 90%(180) doctors agreed that their patients had asked them for cheaper drugs/generic drugs while 10%(20) doctors had no experience of this sort. About 94%

(188) doctors felt that prescribing generic drugs would increase patient's compliance whereas 6%(12) felt that prescribing generic drugs would make.no.difference.40%(80) doctors have seen patients suffering by not using branded drugs as compared to 60%(120) doctors who reported that they did not see their patients suffering by not using branded drugs.

#### Discussion

This study was done in OPD (Outpatient department) patients of Maharaja Yeshwantrao

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Medical College and Hospital, pharmacists and doctors in Indore.200 patients were selected from various OPDs. Indore urban is divided into 4 zones, hence we took 50 pharmacists and 50 doctors from each zone for our study.

The findings in this study have been compared and contrasted with the findings of other such studies done in different parts of India and other countries.

In our study,78% (156) of the study population were not aware of the generic drugs, while in another study done by Sahana K. Hebbar et al,95% of the patients did not knowabout it. (6) It indicates poor knowledge and awareness about generic drugs among consumers. Hence, by increasing the consumer awareness (through media - newspaper, television etc.) the hurdles for generic drug can be overcomed.

In this study only 20% (40) of the patients requested their doctors to prescribe generic drugs, while the remaining 80%(160) did not. In another study done by Sahana K. Hebbar et al, 58% of them never asked their physicians for generic drugs. (6) The reasons sighted are increased work load in M.Y. Hospital by which it is not possible to satisfy all the queries of patients.

In our study only 20%(40) patients were aware that the efficacy of branded and generic drugs were equal, while another study done by Manisha Das Department of Pharmacology, College of Medicine and Sagore Dutta Hospital, Kolkata, West Bengal, India 90% of the patients believed that generic drugs were as effective as branded drugs<sup>(7)</sup>. This is because of the fact that Kolkata is a metropolitan city and educational status of people is much better. The reasons behind poor awareness in our study is the lack of knowledge among the selected subjects.

In our study only 36%(72) patients faced difficulty in buying medicines .While in another study, 40% of generic drug users faced problem while purchasing due to non-availability of the medicines concerned<sup>(7)</sup>. This is an issue of concern and it is because of comparatively limited stock of generic drugs.

In our study40%(80) doctors preferred generic drugs whereas 60%(120) doctors preferred branded drugs, while in another study Manisha Das 80% doctors always preferred generic drugs<sup>(7)</sup>.

In our study 56% (112) of the pharmacists agreed that the potency and efficacy of branded and generic drugs were same. In a similar study done by S. C. Basak,63.6% of the pharmacists and drug retailers agreed that generic medicines can be considered therapeutically equivalent to the branded ones<sup>(8)</sup>. Lack of knowledge may negatively affect the community of pharmacists towards generic medicines in India. The World Health Organization (WHO) defines a "generic" as a bioequivalent to a branded drug<sup>(9)</sup>. So we should increase awareness regarding this.

In our study 70% (140) doctors considered the economic status of their patients before prescribing drugs, while 30% (60) did not. In a similar study done by Sadiq on Knowledge, attitude, and practices toward Jan Aushadhi scheme almost all doctors (83.3%) agreed that the economic condition of the patients should be considered before prescribing generic medicines<sup>(10)</sup>.

#### Conclusion

Health care costs continues to rise. Therefore consumers, providers, and policymakers need to assess the best way to keep health care affordable. Not only are generic drugs cost-effective, but also they are safe. Generic drugs are bioequivalent to branded drugs. We conclude that some of the doctors are still not convinced about the efficacy and promptness of generic medicines. Hence, the doctors should be encouraged to use more of generic medicines and patients should also be educated about this.

## Recommendation

1) Patients should be told about the generic drugs and myths should be solved that "costlier drugs will be more effective."

- <sup>2)</sup> We should increase the awareness that the "generic" drugs are bioequivalent as branded drugs.
- 3) Government should increase the supply of generic drugs to fulfill the demand.
- 4) We should ensure pharmacists store generic drugs in sufficient quantity, so that no consumer suffers from the lack of availability of generic drugs.

### **Limitation of the Study**

- The findings are based entirely upon the study conducted only in OPDs of MY Medical college of Indore city.
- 2) The sample size of doctors and pharmacists was limited.
- 3) The time duration of study was limited.
- 4) Socioeconomic status of patients also affects the study results among OPD patients.
- 5) The results are entirely based on questionnaires, so there is possibility that some questions may be misinterpreted or intentionally wrongly answered.

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