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# **Original Research Article**

# Assessment of awareness on generic drugs among health care professionals and laypersons

Sahana K. Hebbar\*, Nalini G. K., Deepak P., Sahana G. N., Jayashree V. Nagaral

Department of Pharmacology, Hassan Institute of Medical Sciences, Hassan, Karnataka, India

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# \*Correspondence to:

Dr. Sahana K. Hebbar, Email: sahanakhebbar@gmail.com

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#### **ABSTRACT**

**Background:** In the present day world the expenditure on medicines is very high. Most of the people in developing countries find it difficult to afford expensive medicines. One of the measures to cut down the expenditure on medicines is to use generic drugs. Hence the study was taken up to know the awareness, attitude and preference for generic drugs among medical and non medical persons.

**Methods:** The study was done on 290 participants. 60 medical interns, 30 doctors, 50 nurses, 50 non medical staff (clerks and attenders) and 100 patients were included. They were given a questionnaire to know the awareness and knowledge on generic drugs, willingness to prescribe (among doctors) and use it (non medical staff and patients).

**Results:** This study showed that all medical persons- doctors, interns and nurses knew about generic drugs whereas 60% of non medical staff and 95% of the patients were not aware about it. All doctors had good knowledge about generic drugs and 80% prescribed it always. 70% of the patients depended on what doctors prescribed for them and never asked for generic/ branded drugs in particular. 70% non medical staff preferred it only sometimes.

**Conclusions:** The awareness among non medical persons is poor than medical persons among the surveyed population. Hence adequate measures should be taken to increase awareness and knowledge among public so that they become imperative enough to ask their doctors to prescribe generic drugs.

Keywords: Awareness, Generic drugs, Non medical persons, Questionnaire

# INTRODUCTION

A new drug approved for use is protected under the patent law for sale. When patents are nearing expiration, manufacturers usually approach the government/Drug Control Department to sell generic versions of the new drug.<sup>1</sup>

Generic drug as defined by US Food and Drug Administration (FDA) is "A drug product that should have the same active ingredient, strength, dosage form, route of administration, quality, performance characteristics and intended use as the brand-name (new) drug". Generic manufacturers are able to sell their products for lower prices because they are not required to repeat the costly clinical trials of new drugs and generally

do not pay for costly advertising, marketing and promotion. In addition, multiple generic companies are often approved to market a single product; this creates competition in the market place, often resulting in lower prices.<sup>3</sup>

Around one third of the world's population encounters difficulties in accessing medications, due to high prices, with this proportion rising to 50% in the developing countries.<sup>4</sup> According to World Health Organization's Study on Global Ageing and Adult Health (WHO SAGE) 8% of the population in India, fall in poverty due to out of pocket health expenditure (OOPHE).<sup>5</sup>

One of the measures to decrease the expenditure on medicines is to promote the use of generic drugs.

In India, all those medicines without brand name and less priced are called generic drugs. These drugs are manufactured by licensed authorities and are available at subsidized price. There are very less private medical shops which sell unbranded generics. Most of the drugs available in the Indian market are patent expired branded generics (where the generic manufacturer gives a separate name to its product) and they do not provide any advantage in terms of cost to the patients. They are more expensive than the unbranded generics. The unbranded generic drugs available at government agencies (Jan Aushadhi outlets and Govt. hospitals) are procured in their generic name for the public health system. They are less expensive than the branded ones as there is very less expenditure on their marketing.

Using unbranded generic drugs (henceforth mentioned as generic drug in this article) instead of branded ones might be an alternative way to reduce expenditure on drugs and thereby improve patient compliance.

Hence, the study was taken up to assess the awareness on generic drugs (unbranded) among medical professionals and lay persons (non medical staff and patients).

#### **METHODS**

This questionnaire based cross sectional study was undertaken after getting ethical clearance from the institute and informed consent from study subjects. A total of 290 participants were included. Those willing to give consent were included in the study. They were given questionnaire to assess their knowledge, attitude and practice regarding generic drugs. The questions were asked orally for those who were not able to read them. 60 medical interns, 30 doctors, 50 nurses, 50 non medical staff (clerks and attenders) and 100 patients were included in the study and the study period was 2 months (June - July 2016).

# Statistical analysis

The results were expressed in percentage of the study group.

# **RESULTS**

This study showed that all medical persons- doctor, interns, nurses knew about generic drugs whereas 60% of non teaching staff and 95% of the patients did not know about it.

Most of the medical persons knew about generic drug store (Figure 1).

90% patients did not know whether they are approved drugs (Figure 2).

The response on the cost of generic drugs is shown in Figure 3. The results related to efficacy and safety of

generic drugs is shown in Figure 4 and Figure 5 respectively.

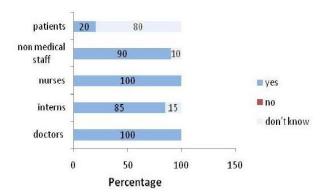


Figure 1: Generic drug store in your hospital.

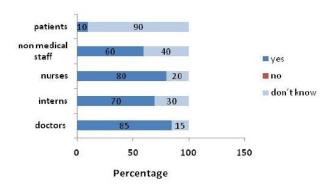


Figure 2: Generic drug approved or not.

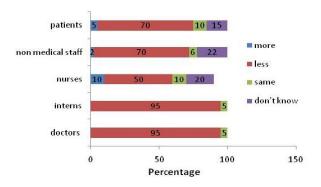


Figure 3: The cost of generic drug over branded ones.

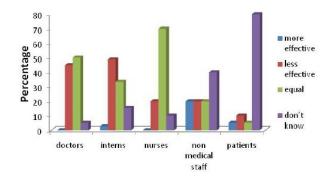


Figure 4: Effectiveness of generic drug.

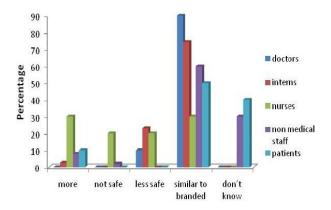


Figure 5: Safety of generic drug.

15% interns and 80% doctors always preferred to prescribe generic drugs to their patients and 85% interns opined to ask patient preference before prescribing. 20% doctors and 15% interns preferred it always for personal use.60% nurses preferred it always whereas 70% nonteaching staff preferred it only sometimes.

70% of the patients were dependent on what doctors prescribed for them and they never asked for generic/branded drugs in particular.

#### **DISCUSSION**

All medical persons in our study were aware about generic drug which is similar to other studies of Jyothi R et al (90.99%) and Hoshi et al (96.9%).<sup>3,6</sup>

Only 5% patients in our study knew about generic drugs but 55.6% patients attending public health facilities of Abidjan, 82.2% patients at Japan and 32.5% consumers at Malaysia knew about it.<sup>6-8</sup>

Study by Ahire et al in Pune, among educated but nonscience background showed 75% of population knew about the generic drugs. Most of the patients in our study were educated up to primary schooling and were from rural background. This could be one of the reasons for less awareness among them in our study.

Majority of the sampled population in our study both medical and non medical persons knew that generic drugs are less expensive than branded ones.

45% doctors and 48.72% interns in our study thought that generic drugs are less effective than branded drugs. Only 64.4% doctors in Gupta SK study thought they are as effective as branded ones and 32.43% doctors in Jyothi R study and 49.4% in Hoshi S study had concern about its efficacy.  $^{3.6,10}$ 

80% patients in our study did not know about the efficacy of generic drugs but 88.2% patients in Yayo SPO study and 79.1% in Lira study were confident about its efficacy.<sup>4,7</sup> In Ahire et al study among literates with

science background nearly 60% of individuals said that the generics are as effective as branded medicines but more than 58% of them never asked their physician for generic drug. In our study 70% patients depended on what doctors prescribe for them and never asked for generic/ branded drugs in particular.

80% doctors in our study prescribed generic drug always. Though most of the doctors in our hospital prescribe generic drugs, various studies on prescribing behaviours of doctors working in Primary health care centers, Government and private hospitals show that percentage of generic drug prescribing is very less in different Indian states. 11-15 Possible reasons for this could be irregularity in supply of generic drugs, less availability of medical stores selling generic drug, lack of availability of all the drugs in generic stores, lack of awareness among doctors and public, pressure from pharmaceutical company etc. Many doctors show concern on the efficacy of these drugs. Studies comparing efficacy and safety of generic drugs with their branded counter parts are seen in various countries but such studies are lacking in India. 16-19

Thus by addressing all these issues and by increasing the consumer awareness (through media - newspaper, television) the hurdles for generic drug can be overcome.

#### Limitations

The study was conducted on hospital staff and out patients of government hospital and did not involve staff and patients of private hospitals.

## **CONCLUSION**

Medical persons surveyed in this study had good knowledge about generic drugs and prescribed it most of the times but awareness among nonmedical persons is poor. Hence adequate measures should be taken to increase awareness and knowledge among public so that they become imperative enough to ask their doctors for generic drugs.

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Institutional Ethics Committee

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