

Study of knowledge, attitude, and practice of prescribing generic medicines by healthcare providers in tertiary care teaching hospital-BRIMS, Bidar

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Abstract

Introduction: Medicines play an important role in decreasing morbidity and mortality. But due to high cost factor achievement of good healthcare at door step has become impossible. Generic medicines are cost effective without compromising the quality.

Aims and Objectives: To evaluate knowledge, attitude, and practice (KAP) of generic medicines among the prescribers in a tertiary care teaching hospital -BRIMS, Bidar.

Materials and Methods: This was a cross-sectional, observational, and questionnaire-based study. A 14-item multiple choice questionnaires were distributed to the participants to assess their KAP regarding generic medicine.

Results: About 61.22% participants agreed that generic medicines differ from their innovator brand name drug in nature of excipients. 81.63% interns agreed that cost of generic medicines is lesser than the innovator brand name drugs. 81.63% interns agreed there should be a training program to increase the awareness regarding generic medicines among doctors. 31.61% interns stated that generic medicines can be switched over to the brand name drugs and vice versa. About 87.75% interns were ready to encourage patients to use generic medicines.

Conclusion: In the present study, we found that interns had good knowledge about generic medicines and Jan Aushadhi Yojana. Educational programmes like training, seminars, Continuous Medical Education (CME) can increase the significance of generic medicine prescription.

Keywords: Knowledge, Attitude and Practice, Generic Medicines.

Introduction

Medicines play a critical role in extending the life expectancy by decreasing the morbidity and mortality but, increasing cost of medicines is one of the hindrance in using them.^{1,2} It has become one of the obstacle for both patients and government. Hence, the priority is to keep the healthcare cost apparent without obstructing the access to quality healthcare.³ As we aim to deliver high quality healthcare system with the minimum available resources increased usage of generic medicines can achieve accessible healthcare without compromising the quality.⁴ A generic drug is defined as a medication that is produced freely after expiry of the patent protecting the branded product, necessarily being similar to the reference drug in bioequivalence in order to obtain same therapeutic effect. So use of generic medicines can be economical without compromising the quality.⁵

In spite of generic medicines having same therapeutic effects their prescription are very low in India as concluded by various studies.⁶ This could be due to lack of knowledge regarding the efficiency of generic drugs and poor stimulus among medical practitioners.⁷ It is necessary to educate and recognize the usage of generic medicines to the medical students and interns. Internship is the period during which they come along with medical representatives who try to force them to write branded medicines. It is necessary to correct these illusions before the start of professional practice. In spite of several advantages of generic medicines the knowledge perception and attitude of healthcare providers has been found to be an obstacle for the use of generic medicines.⁷ So the present study was planned to evaluate knowledge attitude and perceptions among the

interns on generic medications, who are our future healthcare providers.

Materials and Methods

A cross-sectional, observational, and questionnaire-based study was conducted among the interns of Bidar Institute of Medical Sciences, Bidar after taking permission from the Institutional Ethics Committee those who were willing to participate in the study were included in the study. A 14-item multiple choice questionnaires consisting of knowledge (6), attitude (4), and practice (4) are prepared and validated for study. More than one answer was allowed to mark in attitude and practice section. The time provided for solving the questionnaire was 30 min. Any clarification needed in understanding the questionnaire was provided.

Statistical analysis

The data were filled in Microsoft Excel and percentage was calculated.

Results

A total of 98 interns of Bidar Institute of Medical Sciences, Bidar participated in the study.

Knowledge-based questions

Of 98 participants 55.10% knew the difference between generic drugs and the generic name of the drug. About 61.22% had knowledge that generic medicine differs from their innovator brand names only in nature of excipients and around 51.02% of participants rightly knew that the generic medicine and the innovator brand-name drugs look different because of the difference in the coloring and flavoring agents. 81.63% knew that the generic medicine is cheaper in

cost and 71.42% knew that the cost difference is because multiple generic drug companies are approved to market a single generic. About 73.46% of participants knew that Jan Aushadhi Yojana promotes awareness about cost-effective drugs and their prescription. Overall, knowledge about generic medicine is 65.64%.

Attitude-based questions

Around 39.63% of participants had opined about the use of generic medicines should be promoted. About 80.63% feels that, to increase awareness regarding generic medicine, training program should be organized for the doctors. 34.69% think that pharmacist should be allowed to substitute the brand-name drugs with generic medicine for the over-the-counter drugs. 30.61% of the participants agreed that generic medicine can be substituted with a

brand-name drug and vice versa [Table 2]. The attitude of the participants revealed that there should be a training programme to increase the awareness regarding generic medicines and use of them should be promoted.

Practice-related questions

Only 33.67% of participants have read an article on comparison of safety and efficacy of generic medicine and brand-name drugs. Furthermore, around 36.73% of the prescribers said that they do not want the pharmacist to change their brand-name drugs with their generic counterparts. 84.69% of participants stated that patient demands do not influence their prescription. 87.75% of participants stated that they are willing to encourage the patient for using generic medicines [Table 3].

Table 1: Knowledge based questions and their correct responses

S. No	Questions	Responses (%)
1	Generic medicine and generic name of a drug are different	55.10
2	Generic medicine differs from their innovator brand name drug in nature of excipients	61.22
3	Generic medicine looks different because the coloring and flavoring agents are different	51.02
4	Cost of generic medicine is lesser than the innovator brand name drugs	81.63
5	Cost of generic medicines is different because multiple generic drug companies are approved to market a single, thus creating competition in the market	71.42
6	Jan Aushadhi Yojana promotes awareness about cost-effective drugs and their prescription	73.46

Table 2: Questions regarding attitude of favorable answers marked

S. No	Questions	Responses (%)
1	There should be a training program to increase the awareness regarding generic medicines among doctors	81.63
2	The use of generic medicine should be promoted	53.06
3	Pharmacist should be allowed to substitute the innovator drug with generic version of OTC drugs	34.69
4	Generic medicine can be switched over to the brand-name drugs and vice versa	30.61

Table 3: Responses of participants regarding practice of generic medicine usage

S. No	Questions	Responses (%)
1	Have read any article on comparison of safety and efficacy of generic medicine versus brand name medicines?	33.67
2	Do not want the pharmacists to change their brand name drugs with their generic versions	36.73
3	Prescription is not influenced by patient demand	84.69
4	Willing to encourage patients to use generic medicine	87.75

Discussion

Though the uses of generic medicine are cost effective but, still there are meager prescriptions from healthcare professionals, this could be due to lack of knowledge about the efficacy of generic medicines. This can be improved by encouraging training programmes for the healthcare professionals, opening of generic drug stores in every hospital and creating trust among the patients for use of generic medicines.

In the present study, majority of the participants had good knowledge regarding generic medicines. Participants had sensible attitude about safety, efficacy and quality of generic medicines, these findings are similar to that of Gupta SK et al.⁷

In our study around 81.63% of the participants knew that cost of generic drug is less than that of innovator medicines, similar to the findings of Jyothi et al.⁸ Only 33.67% had read an article on comparison of safety and efficacy of generic medicines versus brand name medicines. Almost 73.46% participants knew about Jan Aushadhi Yojana Scheme, which promotes the use of cost-effective drugs and their prescriptions in contrary to study conducted by Badwaik RT et al⁹ where only 17.6% participants knew about Jan Aushadhi Yojana Scheme. The reason for good percentage of participants knowing about Jan Aushadhi Yojana Scheme may be due to compulsorily use of generic drugs available at Jan Aushadhi Yojana store, in case the

required drugs not available at government hospital drug store.

In the present study about 71.42% participants believe that cost of generic medicines is different because multiple generic drug companies are approved to market a single, these creating competitions in the market.

Almost 81.63% participants believe that there should be a training programme to increase the awareness regarding generic medicines among doctors. And the best period is during initial phase of internship, as it is the period where they start prescribing the medicines and if we impart them about the significance of generic medicine with reference to cost and quality, they carry this knowledge on it throughout their professional carrier.

53.06% participants wanted the promotion of use of generic medicines. In the present study 84.69% participants stated that prescription is not influenced by patient demand which was in contrary to Jamshed SQ et al.¹⁰

About 30.61% participants think that switching from branded to generic or vice versa, does not change the outcome of the therapy which was similar to Gupta SK et al study.⁷ 87.75% participant wanted to encourage patients to use generic medicines.

Presently government has proposed an amendment to the Drug and Cosmetic Rules to make it mandatory for doctors to prescribe generic medicines. Government has made compulsory for all chemists to display generic medicines prominently as a part of a larger push to make healthcare affordable. Generic medicines are gaining popularity and available more easily in the mainstream channel. There is a need to differentiate these from branded generics. At times generic medicines too have a trade name and this leads to confusion. To address the issue the government is considering color codes and symbols on medicine packs.

The growing popularity of generic medicines has led to private companies entering a space once considered a stronghold of the government owned and operated Jan Aushadhi stores. Start ups such as Generic and Stay Happy Pharmacy are new entrants into this space, with plans for rapid expansion. These were few recent up-comings in promoting use of generic medicines.

Limitations of our study were we studied Knowledge, Attitude and Practice (KAP) of only newly joined interns. So the findings of this study cannot be generalized. It would be apt to analyze the Knowledge, Attitude and Practice of other healthcare professionals as well as patients.

Conclusion

Our study depicted that interns had good knowledge about generic medicines. Majority of them knew about Jan Aushadhi Yojana Scheme of Government of India. The most important action is to implement training programme to increase the awareness regarding generic medicines among the healthcare professionals and patients. The point

is to educate doctors during their internship or early in their career about the significance of prescribing generic medicine. Government should make mandatory to write only generic medicines and provide guidelines to the practitioners, so that they feel more confident about its usage leading to increased generic medicine prescription.

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Conflict of interest

None.

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