

Knowledge, Attitude and Practice of generic medicines- an explorative study among Interns of a Tertiary care teaching hospital of Central Karnataka

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Abstract

Background: Health care related expenditure is increasing with a rapid pace in which much proportion of expenses is on medicines. The expenditure can be reduced by prescribing generic medicines (Janaushadi). In India less prescription of generic medicines can be correlated to less knowledge. Hence this study was carried out among Interns who will be future practitioners to know their perception and practice about generic medicines.

Objectives: To assess the Knowledge, Attitude and practice of Interns regarding generic medicines.

Methodology: A cross sectional study was carried out among Interns using a pre-tested semi structured questionnaire containing questions related to their Knowledge, Attitude and their practice regarding generic medicines. Data was entered in MS Excel and analysed using SPSS version 20. Descriptive statistics were used.

Results: Among the study participants, majority (90%) knew the correct meaning of the generic medicine. 97% of them felt that generic medicines can be prescribed instead of branded medicines. Majority (92%) of the study subjects felt that there should be one Janaushadi (generic medicines) store at every government hospital. Not many (19%) were aware of the law in India for prescribing generic medicines but majority (87%) knew about the Janaushadi Scheme of Government of India. 87% of the Interns had prescribed generic medicines to patients and among them they (85%) felt that generic medicines are easy to prescribe than branded medicines.

Conclusion: This study showed that the Interns have good perception regarding generic medicines. Minor proportion of the study participants knew about the law in India for prescribing generic medicines. Majority of the participants have prescribed generic medicines to patients and felt that it is easy to prescribe generic medicines.

Key words: Interns; Generic medicines; Janaushadi

Introduction

Health care related expenditure is increasing with a rapid pace in which much proportion of expenses is on medicines. The expenditure can be reduced by prescribing generic medicines (Janaushadi^[1]). Medical council of India has mandated for the prescription of generic medicines^[2]. World health Organisation defined Generic drugs as a pharmaceutical product usually intended to be interchangeable with an innovator product that is manufactured without the license from the innovator company and marketed after the expiry date of the patent and other exclusive rights^[3]. Generic medicine is similar to brand medicine

in terms of dosage, route, efficacy and indication of use and quality. In India Generic medicines are available in Janaushadi stores. In India less prescription of generic medicines can be correlated to less knowledge. The belief that generic medicines are of poor quality can be reduced by educating practicing physicians and training students during the graduation phase about drug discovery, development, and regulations.^[4] Indian government had launched the Jan Aushadhi campaign in April 2008 by opening government-controlled centers in various states to provide quality generic medicines at lower prices to their counterpart branded ones to make them easily

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affordable to a common man^[4].

Previous studies were done among practitioners and pharmacists^[5,6]. Hence this study was carried out among Interns who will be future practitioners to know their Knowledge, Attitude and practice of generic medicines.

Objectives:

To assess the Knowledge, Attitude and practice of Interns regarding generic medicines.

Methods:

It was a cross sectional study which was carried out among the Interns at the tertiary care teaching hospital, Davanagere for a period of three months from June to August 2019. All the Interns who gave consent for the study and who have completed at least 2 months of their general medicine posting were included in the study and who did not give consent and who have not completed at least 2 months of general medicine posting were excluded from the study. A total of 152 participants participated in the study. A Semi-structured, pre-tested questionnaire was used for data collection. Ethical approval was taken from Institutional ethics committee. Informed consent was taken from the study subjects and their confidentiality was assured. The Questionnaire contained questions regarding Knowledge, Attitude and practice of Interns regarding generic medicines.

Data was entered in Microsoft Excel and analysed using SPSS Version 20.0. Data collected was analysed in the form of percentages and proportions.

Results: A Total of 152 participants took part in the study. 37% were males and 67% were females who participated in the study.

Sex Distribution of study participants

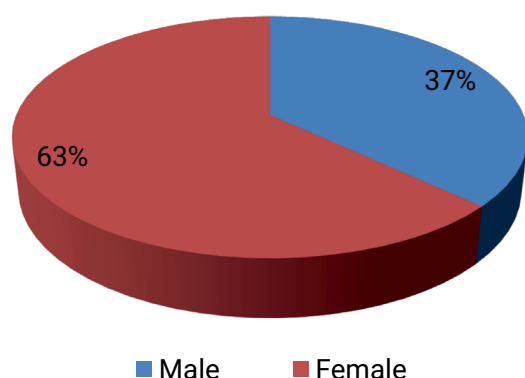


Figure 1: Sex Distribution of Study Participants

Table 1: Perceptions of Interns on Generic medicines (N=152)

Perceptions	Yes n(%)	No n(%)
1. Correct meaning	141(92.7)	11(7.2)
2. Use of generic drug	148(97.3)	4(2.6)
3. Marketed only after expiry	57(37.5)	95(62.5)
4. Same active substance	138(90.7)	14(9.2)
5. Dosage	126(82.8)	26(17.1)
6. Cost	135(88.8)	17(11.1)
7. Law	28(18.4)	124(81.5)
8. Pharmacist empowered to sell generic medicines	68(45.3)	84(55.2)
9. Source of knowledge		
A. Articles	34.2	
B. Others	65.7	
10. Safety	112(73.6)	40(26.3)
11. Effectiveness	101(66.4)	51(33.5)
12. Duration	149(98.02)	3(1.97)
13. Cost	32(21.05)	120(78.9)
14. Generic medicines (Janaushadi) should be located in all government hospitals	138(90.7)	14(9.21)
15. Should there be a Mandatory Law to Prescribe Janaushadi	58(38.1)	94(61.8)
16. Insurance preferences	75(49.3)	77(50.65)
17. Freedom to patients to choose generic medicines over branded medicines	110(72.3)	42(27.63)

Table 1 depicts the perceptions of the Interns regarding generic medicines. 141 (92.7%) knew the correct meaning of the generic medicines. 148 (97.3%) of the participants knew that generic medicines can be used in place of branded medicines for treatment of diseases. 138 (90.7%) knew about the active content of generic and branded medicines as same active substance. 135 (88.8%) had an idea regarding the cost of the generic medicines. 28 (18.4%) were aware of the law to prescribe generic medicines to the patients. 68 (45.3%) participants were aware that the pharmacist is empowered to sell generic medicines. The different sources of knowledge for the study participants regarding generic medicines were articles (34.2%) and others media (65.7%). 112 (73.6%) of the participants agreed that the generic medicines were safe enough to be prescribed to the patients. 101 (66.4%) perceived that generic medicines were equally effective as branded medicines. 149 (98.02%) agreed

that the duration of action of both generic medicines and branded medicines is same. 32 (21.05%) of the participants agreed that the generic medicines costs less. 138 (90.7) study participants felt the need to have one Generic medicine store (Janaushadi) at every government hospital. 58 (38.1%) of the participants felt the need to have a law mandating the prescription of generic medicines. 75 (49.3) agreed that insurance companies should prefer generic medicines in hospital bills re-embrocement process. 110 (72.3%) felt that patients should be given freedom to choose between generic medicines and branded medicines.

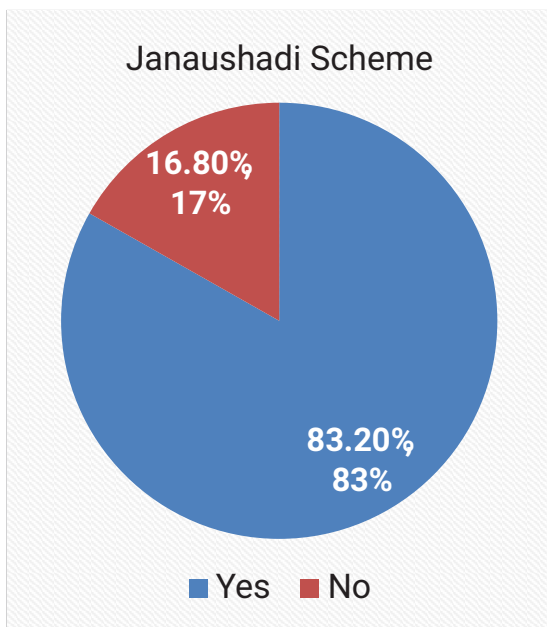


Figure 2: Perception regarding Janaushadi Scheme

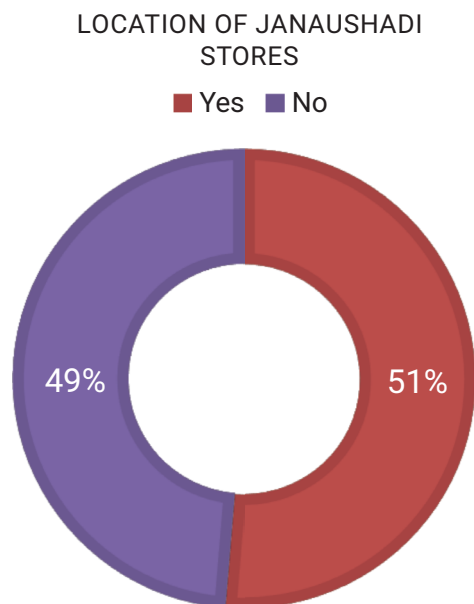


Figure 3: Knowledge regarding Location of Janaushadi store

Figure3depicts theknowledgeof thestudy participants regarding generic medicine (Janaushadi) scheme of the government. 83% of the study participants were aware of the Janaushadi scheme of the Government. Figure 3 depicts the knowledge regarding the location of the Janaushadi stores. 51% of the participants knew about the location of Janaushadi stores and 49% did not have any idea regarding location of the Janaushadi stores.

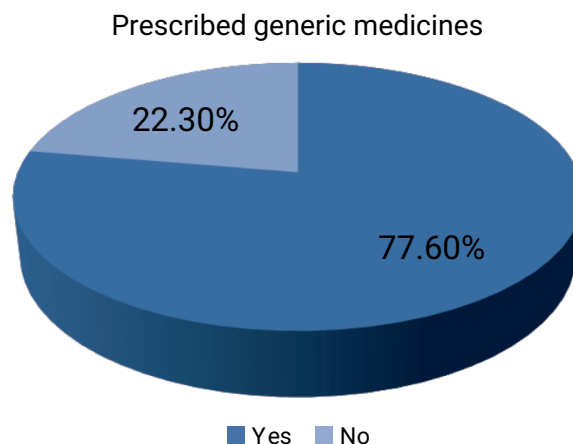


Figure 4: Practice of Interns regarding generic medicines

Figure 4 depicts the prescription of generic medicines by the study participants. 118 (77.6%) study participants have prescribed generic medicines earlier to the patients and 34 (22.3%) did not prescribe generic medicines to the patients. 130 (85%) study participants felt that the generic medicines are easier to prescribe when compared to branded medicines.

Discussion:

Around 152 Interns participated in the study among which 63% were females and 37% were males. In a similar kind of study done by Desai et al 70% were males who participated in the study. 92.7% of the participants knew the correct meaning of the word generic medicines^[7].

About 97.3% had the perception that generic drugs can be used in place of branded medicines. In a similar study done by Zaverbhai et.al. consistent findings were observed where 80.9% of the participants knew that generic medicines can be used in place of branded medicines^[8]. In a study done by Aruna Gurung et al. 45.6% of the participants were aware that generic medicines can be used in place of branded medicines^[10].

In the present study 90.7% knew that both the generic medicines and branded medicines have same active substance. 88.8% participants were aware of the cost of the generic medicines. Similar findings were observed in a study done by Desai et al where 89.5%

of the participants were aware of the cost of the generic medicines^[7].

In this study 18.4% of the participants were aware of the law to prescribe generic medicines and in a study done by Zaverbhai et.al. where in 73.5% of the participants were aware of the law to prescribe generic medicines^[8]. In an another study done by Chavda et al. 26.36% of the respondents were aware of the law to prescribe generic medicines^[9].

In a study done by Singh et al on Knowledge and perception of generic medicine among medical students it was observed that 74% of the interns knew that generic medicines and branded medicines contain same active substance^[4] where as in the present study the percentage is on a higher side with 90.7% participants were aware that both generic medicines and branded medicines have same content. In contrast in a study done by Desai et al where only 59.6% of the participants were aware of the concept that both the generic and branded medicines contain same active substance^[7]. In a study done by Chavda et al. it was observed that 70% of the respondents were aware that both generic and branded medicines contain same active substance^[9]. In a study done by Aruna Gurung et al. 56.2% of the study subjects knew that generic and branded medicines contain same active substance^[10].

In the present study 83.2% of the study participants were aware of the Janaushadi scheme of the government which is in contrast to the findings in the study done by Singh et al where in only 50% of the interns were aware of Janaushadi scheme^[4].

In the index study 51% of the participants were aware of the location of the Janaushadi stores and similar findings were in a study done by Desai et al where 59.6% of the study subjects were aware of the location of Janaushadi stores^[7].

In the present study it was observed that 73.6% of the participants agreed that generic medicines were safe to use. 66.4% agreed that generic medicines were as effective as branded medicines. 21.05% agreed that generic medicines costs less when compared to branded medicines. In a study done by Singh et al contradictory findings were found where in all participants believed that the cost of generic medicines is on higher side and 91% of the subjects were of the opinion that generic medicines were less safe^[4]. In a study by Aruna Gurung et al. 66.3% agreed that generic medicines were as safe as branded medicines^[10].

In 90% of the respondents were of the opinion that Janaushadi stores should be located in every government hospital. In a study done by Desai et al

77.1% of the participants were of the view that there should be increase in Janaushadi stores^[7]. In a study done by Chavda et al. 81.82% of the respondents opined that every government hospital should have a Janaushadi store^[9].

Around 49.3% of subjects were of the view that insurance companies should prefer generic medicines over branded medicines in insurance claim process. 72.3% opined that patient should be given to choose between generic medicines over branded medicines. In a study by Chavda et al. 64.5% of the subjects agreed that patient should be given freedom legally to choose generic medicines over branded medicines^[9]. In a study by Aruna Gurung et al. 86.18% agreed that patient should be given freedom to choose generic medicines over branded medicines^[10].

In the index study 77.6% participants had prescribed generic medicines to the patients in their clinical practice. In a study done by Zaverbhai et.al 68.9% of the respondents prescribed generic medicines^[8].

Conclusion:

This study showed that the study participants had good knowledge and attitude towards safety, effectiveness of generic medicines. Only minor proportion of study participants had a clue about the law to prescribe generic medicines. Significant number of the study participants knew about the Janaushadi scheme of government of India. Majority of participants felt that insurance companies should prefer generic medicines over branded medicines. Significant number of participants felt that the patients should be given freedom to choose between generic and branded medicines. Majority of participants had prescribed generic medicines.

Limitations: Data collection was done for a limited period of time. Extension of data collection could have led to more respondents. The study was done among only interns therefore findings can not be generalized.

Recommendation: As the present study shows good knowledge and attitude of participants towards generic medicines, to enhance their knowledge further, would like to recommend display of Janaushadi IEC Materials in the OPD Premises which will be helpful for both the practitioners and the patients. Strict implementation policy guidelines for prescription of generic medicines. Establishment of Janaushadi stores at all the tertiary care teaching hospitals. Awareness programmes to be organized to update Doctors, Students and Pharmacist about generic medicines.

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