

An Empirical Study on Perception, Attitude and Practice of Generic Medicines among the Physicians of Primary Health Care Hospitals of Rural Gujarat

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Abstract: - The health-care expenses are boosting day by day and this has become a solemn apprehension for the health-care system universally. (Aday & Cornelius, 2006) WHO has reported that total health-care expenditures of developing countries have in many developing countries is 80% of out-of-pocket costs. The expense on the medicines is one of the key components in concern to expenditure. (Brains&Company, 2019) That is the reason of keeping the cost of medicine least, but this shouldn't have impact on the quality aspect of the medicaments. As we plan to provide a high notch health services framework to the society with restricted accessible assets, expanded utilization of generic prescriptions can bring moderateness of health care system without trading off the quality. (Chong, Hassali, & Bahari, 2010)

INTRODUCTION

As we realize that New Drug Development is a long and exorbitant procedure. New medications are granted patent licenses as a compensation for the discovery of the innovator organization, which permits them a time of exclusiveness of marketing. When the patent expires, various organizations are allowed for the production and marketing of Generic version of that inventive medicament only after verifying the bioequivalence. The bioequivalence is demonstrated to show identicalness between the innovative and the generic medicine. (Dhamija, Sharma, & Kalra, 2011) This is to be achieved by demonstrating the same results of preclinical and clinical testing performed on the innovative medicines. Bioequivalence is demonstrated when the rate and extent of absorption of generic medicine is significantly equal to that of the innovative medicament. When generic variant of the innovative medicine is launched, the cost of that specific medicine diminishes significantly, which gives more noteworthy access to more patients. (Jaykumar, 2010) The prescriptions containing generic medicines are bioequivalent to innovative medicines, are considered to be safe and biologically and economically effective.

The physicians in their prescriptions have critical consequence on the utilization of generic medicines, especially in developing nations where patients or family members checks every possibility to purchase absolutely what is prescribed by the physician. (Jamshed, Hassali, Ibrahim, Saffie, & Babar, 2010) In any case, Physicians' perception about Generic medications may represent a

definitive obstacle to enormous utilization of medicines and expanded medicinal services costs. (Eban, March, 2019) Doctors may support branded medicines in prescriptions on different accounts. Numerous specialists may accept that conventional meds are not as viable and protected as their image name partners. In addition to that generic medications in the past have been upbraided for being underneath quality standard for the most part because of poor adherence with Good Manufacturing Practice (GMP) rules. (Aday & Cornelius, 2006) Numerous Physicians may not be acquainted with the thorough guidelines imposed by the administrative body for demonstrating bioequivalence before a generic medicine is decided to be sanctioned. (Bera & Mukherjee, 2012) Therefore, understanding Physicians' Perception and knowledge about generic medicines prescriptions may help in perceiving potential hindrances to more prominent utility of generic medicines. Subsequently, primary objective of this study was to investigate the knowledge, attitude and practice (KAP) of Physicians toward generic medicines.

OBJECTIVE

The primary aim of the study is to analyse the knowledge, perception, attitude and practice of physicians of primary health care hospitals towards generic medicines among the Physicians of Primary health care hospitals of rural Gujarat.

METHODOLOGY

Background:

The study was conducted at ten villages and four towns of Central Gujarat from Ahmedabad, Nadiad and Gandhinagar districts. The survey instrument was verified by the research

guide for the ethical aspects of the study. The study was accomplished in the month of November 2019.

Survey Design:

It was a cross sectional study utilizing the pretested questionnaire in the ten villages and four towns of Central Gujarat from Ahmedabad, Nadiad and Gandhinagar district in the month of November 2019. The participants of the study were the physicians working at the primary health care centers. The questionnaire embraced 21 questions which are intended to analyse the knowledge, perception, attitude and practice of physicians of primary health care hospitals towards generic medicines. Pilot questionnaire was tested on the 8 doctors of primary health care hospitals of rural area of Surat.

Sample Size:

The sample size was calculated on the following factors;

- Population
- Error Margin
- Distribution of responsiveness
- Confidence interval

The total number of doctors working in the hospital at the

Data analysis And Result:

time of study (population size) was 135. Margin of error was 5% and confidence level was 95%. The expected frequency value of 50% was used as it produces largest sample size. The sample size was calculated with the help of www.surveysystem.com and www.raosoft.com websites. Putting the values of the factors mentioned earlier, the approximate sample size came out to be 100. Simple random sampling was followed while distributing the questionnaire to the doctors.

Data Collection:

75 self-administered questionnaires were randomly distributed among the physicians of primary hospitals. They were given a day to fill the form up and return.

Statistical Analysis:

The data was analysed by MS Excel using One sample T test,

Rate of response:

Out of distributed 75 questionnaires 63 questionnaires were filled and returned by the physicians. This makes the number of respondents 63 at the rate of response being 84%.

Demographic Characteristic	Category	Frequency	Percentage
Gender of Physicians	Male	49	77.72
	Female	14	22.28
	Total	63	100
Age	Below 30	11	17.46
	30-40	23	36.50
	40-50	16	25.39
	50-60	12	19.04
	Above 60	01	01.58
	Total	63	100
Education level	Doctor of alternative sciences	15	23.80
	MBBS	32	50.79
	Doctor of medicines	13	20.63
	Master of surgery specialty	03	4.76
	Total	63	100
Experience	1-5	16	25.39
	5-10	28	44.44
	10-15	12	19.05
	15-20	05	7.93
	More than 20	02	3.17
	Total	63	100

The following statements are to be responded to agreement based likert scale:
 (Strongly Agree, Agree, Neither Agree Nor Disagree, Disagree, Strongly Disagree)

n = 63

	n %= 100		
	A SA/ (%)	SD/D (%)	N (%)
The Generic and Branded Medicine have same Quality	72	23	05
The Generic and Branded Medicine have same Effectivity	82	12	04
The Generic and Branded Medicine have same Safety	73	15	12
The Generic and Branded Medicine have same Bioequivalence	94	06	00
The Generic and Branded Medicine have same Price	69	24	07
I would suggest my patients taking generic medicines in compared to branded medicines	67	12	21
If I were ill, I would not mind a generic medicines in comparison to originator medicines.	86	03	11

The exploratory research on the physicians of primary healthcare centers of Gujarat exhibited some diverse opinions about generic medicines. The survey result of professionally qualified physicians showed that the doctors had enough information about the quality difference between generic and branded medicines. Almost 72% of the physicians agreed on the equal quality aspect of generic medicines. Nearly 82% of the surveyed doctors said that the generic medicines have almost same Effectivity as branded medicines. The 73 and 95 are the respective percentages of the physicians agreeing on the safety indexes and bioequivalence of generic medications in India. More than 69% physicians found that there is a huge cost variance between generic and branded medicines. Approximately 67% of the physicians of primary health care centers of rural Gujarat responded positively on prescribing generic medicines to their patients irrespective of their disease conditions while 86% of them showed no hesitation in consuming generic medicines when they found to be ill. The war of generic medicines versus branded medications getting prevalent in country like India and electronic and print media is approaching to this concern considerably.

DISCUSSION:

Looking at the study, it can be said that really high figures of doctors have huge information on generic medications. They bring relatively assenting opinions for the quality, safety and efficacy of the medicines.

The current analysis suggests, a high percentage of doctors convey knowledge about generic medicines and they have positive attitude about the efficacy, safety, and quality of generic medicines in rural Gujarat; as majority of them agreed on prescribing generic medicines without much hesitation.

Our study has most of the participating physicians fully aware that generic medicaments need to have the same active pharmaceutical product and dose as the branded innovator

medicament. The generics can only be marketed after the expiry date of the patent of the innovator medicine. By analysis of bioequivalence doses and regulatory body's establishment, the generic medication may have the same physiological action as their corresponding innovator or reference medicine. Ominously high numbers of medics in this study agreed that generic drug manufacturers in India should be prerequisite to execute bioequivalence studies to show correspondence.

CONCLUSION:

In the rural Gujarat, selectively high sums of doctors have almost comprehensive facts about generic medicaments and most of them carry positive attitude in the direction of the same. The entire survey had unanimous retort for quality, efficacy and safety of the medicines, particularly when generics are prescribed. Physicians of primary healthcare centers prescribe generic medicines by the requirement and monetary state of patient and this has no correlation with the disease condition of any patient. It's seen that gradually but generic medicaments are overcoming hurdles of occurrence in day to day prescriptions. Though, constant edification vis-à-vis drug safety, drug regulations and medical prescription rules modifications should be encouraged by state or local government in order to cultivate a full-fledged health care structure in India. The state government has control for filtering the guidelines of non-patented medicines. This is how; Gujarat government administrations may propose an updated guideline on generic medicines to the physician every year. In addition to it, the government should incorporate a steady practice of prescribing generic medication in each of the prescription. Plus a noteworthy addition of generic medicine considering a part of syllabus during medical under graduation studies can be incorporated. The medical colleges with the institutional help of Gujarat government may design training programs of generic drug relevance and their boon in Indian health care structure. It is

supposed that health care is a subdivision where no consumer will take as the threat being of health and life, doctors only should take responsibility as a key opinion changer and awareness propagator to society regarding generic medicines.

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