

General Perception Regarding The Generic and Branded Medicines among the Visitors of the Turaif General Hospital

NAWAF ALOTAIBI¹¹Department of Clinical Pharmacy, Faculty of Pharmacy, Northern Border University, Rafha, 91911, Kingdom of Saudi Arabia.Correspondence to: Nawaf Alotaibi, Email: nawa-12@hotmail.com

ABSTRACT

Background: The utilization of generic drugs in Saudi Arabia is under development. Many studies concerning generic drugs and their utilization by the consumers and promotion by health care professionals have been conducted in Saudi Arabia. Most of these studies revealed general unawareness of generic medicines among the Saudi people.

Objective: The objective of this study was to evaluate the general perception regarding the generic medicines and branded medicines among the visitors of the Turaif general hospital.

Methods: This cross-sectional study was carried out from December 29, 2019, to January 23, 2020, at Turaif General Hospital, Turaif, Kingdom of Saudi Arabia using a questionnaire. The questionnaire was shared with the visitors (N = 527) of the hospital after their agreement, and the data were collected. The obtained data were statistically analyzed by Statistical Product and Service Solutions (SPSS) version 16.

Results: The results of this study revealed that more than 50% of the participants were unaware about generic medicines and branded medicines; preferred imported generic medicines over local generics; agreed that the imported generic medicines are of high quality, more effective, and expensive as well. However, almost 50% of the participants were not sure about the quality, efficacy, safety, price, and side effects of the branded medicine.

Conclusion: It has been concluded that there is a need to provide awareness programs about branded medicine, imported generic medicine, and locally manufactured generic medicines.

Keywords: Branded drugs, Generic drugs, Awareness, Turaif, Saudi Arabia.

INTRODUCTION

A branded or innovator drug is a medicine that is invented and marketed by a pharmaceutical company¹. Whenever a new drug is invented, the company files a patent application and claims the ownership of the drug as well as its intended marketed dosage forms. This is followed by the filing of the New Drug Application to get the marketing approval by the Food and Drug Administration. At this stage, the new drug has two names, a scientific/generic name, for example, rivaroxaban, and a marketed name/brand name, for example, rivaroxaban's marketed brand name is Xarelto². The patent ownership gives the innovator a monopoly for a specified time .i.e. 20 years from the date of the filing of the patent application. During this time the FDA does not allow another company to market the same drug. However, on the expiration of the drug patent, the FDA starts allowing another company as a generic drug³. A generic drug is a medication that has the identical drug, safety, strength, route of drug administration, quality, bioavailability, and performance characteristics as the branded or innovator drug. Local generics are the generic drugs produced by the local manufacturers of the country. An imported generic is a generic drug that is imported from another country, preferably from the innovator drug country¹⁻³.

Brand-name drugs are generally expensive, and they increase the total healthcare cost in a particular country. Generic drugs play an important role in reducing and controlling this total healthcare cost⁴. According to published reports, generics can reduce the total health care cost by 60%. Therefore, the use and promotion of generic drugs instead of branded drugs have become an effective and important tool in controlling the high prescription drug costs⁵. In well-developed healthcare systems, pharmacists and physicians play a vital role in the promotion of generic drugs. The promotion of the generics is attributed to its quality, and the participation of the pharmacists, and the physicians in its promotion⁶⁻⁷.

The utilization of generic drugs in Saudi Arabia is under development. Many studies related to generic drugs and their utilization by the consumers and promotion by the health care professionals have been conducted⁸⁻¹⁵. Most of these studies revealed general unawareness of generic medicines among the Saudi people. This may be attributed to some differences among branded and generic medicines; for example, they may have different marketed names, sizes, colors, shapes, markings, inactive ingredients, and costs. Because of these differences,

consumers have different perceptions, knowledge, and attitude towards generic drugs and branded drugs¹⁶. To the best of our knowledge, no data has been published related to the general perception regarding the generic medicines and branded medicines among the visitors of the Turaif general hospital. Therefore, the authors had decided to perform this study among the visitors of the Turaif general hospital.

METHODOLOGY

This cross-sectional study was carried out from December 29, 2019, to January 23, 2020, at Turaif General Hospital, Turaif, Kingdom of Saudi Arabia. A questionnaire was developed based on the existing literature. The content of the questionnaire can be understood from the tables provided in the result section of this article. The questionnaire was shared with the visitors of the hospital after their agreement, and the data were collected face to face by the trained pharmacy student. Participants who were less than 18 years old were excluded from this study. The obtained data were statistically analyzed by Statistical Product and Service Solutions (SPSS) version 16.

DISCUSSION

The demographic characteristics of the participants (N = 527) are mentioned in Table 1.

The demographic characteristic of the participants revealed that the majority of the participants were male (61.5%); the age of the majority of the participants was between 20-40 years (66.6%); most of the participants (53%) were having University education, and the monthly salary of most of the participants (46.3%) was more than 5000 SAR.

The general knowledge of the participants (N = 527) about branded, generic, and imported medicines are mentioned in Table 2.

It is evident from table 2 that about 50% of the participants were aware of generic medicines, and branded medicines, while 50% were not aware of these medicines. The participants, who were not aware of these terms might be having education less than secondary school. Similarly, about 50% of participants, mainly educated people, prefer imported generic medicines. This may be due to the quality issues of the local generic manufacturers, and the trust of most of the participants (82.5%) that the cost is not an issue if their condition is treated well. Accordingly, it is foresighted

that quality improvement of the generic manufacturers will increase the trust among the Saudi people.

The beliefs of the participants (N = 527) regarding the imported generic medicines are mentioned in Table 3.

Table 1: Demographic characteristic of participants (N=527)

Variable	Categories	Frequency	Percentage (%)
Sex	Male	324	61.5%
	Female	203	38.5%
Age	<20 years	80	15.2%
	20-30 years	211	40%
	31-40 years	140	26.6%
	41-50 years	70	13.3%
	>50 years	26	4.9%
Education	Not educated	3	0.6%
	Primary education	17	3.2%
	Intermediate education	38	7.2%
	Secondary education	190	36.1%
	University education	257	48.8%
	Master or doctorate	22	4.2%
Monthly income	Less than 1000 SR	161	30.6%
	1000-5000 SR	122	23.1%
	5001-10000 SR	126	23.9%
	10001-20000 SR	84	15.9%
	>20000 SR	34	6.5%

Table 2: General knowledge of the participants (N = 527) about the branded, generic, and imported medicines

S. No	General knowledge	Answers	Number of Participants	Percentage (%)
1	Do you know what is meant by generic medicines?	Yes	334	63.4%
		No	193	36.6%
2	Do you know what is meant by brand medicines?	Yes	236	44.8%
		No	291	55.2%
3	Which generic medicine do you prefer?	Locally produced	265	50.3%
		Imported	262	49.7%
4	Cost is not an issue as long as my condition is treated.	Yes	435	82.5%
		No	92	17.5%

Table 3: Beliefs of the participants (N = 527) regarding the imported generic medicines

S. No	Beliefs	Agree No. (%)	Disagree No. (%)	Not sure No. (%)
1.	Imported medicines are of higher quality medicines	265 (50.3%)	84 (15.9%)	178 (33.8%)
2.	Imported medicines are more effective	269 (51%)	97 (18.4%)	161 (30.6%)
3.	Imported medicines are more expensive	314 (59.6%)	83 (15.7%)	130 (24.7%)
4.	Imported medicines produce fewer side effects	182 (34.5%)	111 (21.1%)	234 (44.4%)
5.	Imported medicines are more prescribed by physicians	165 (31.3%)	163 (30.9%)	199 (37.7%)
6.	Imported medicines are recommended more by pharmacists	184 (34.9%)	151 (28.7%)	192 (36.4%)
7.	Imported medicines are more advertised	255 (48.4%)	139 (26.4%)	133 (25.2%)

According to the data of table 3, most of the participants (50.3%) agreed that the imported generic medicines are of high quality; more effective (51%); and expensive (59.6%). This data indicates that most people are interested in quality medicine irrespective of its cost. The main factor that might have played an important role in this belief is that the imported generic medicines are more advertised (48.4%) than the local generic medicines. One belief among 34.5% of the participant was that imported generic medicines produce fewer side effects. It was also observed that about 31.3% of the physicians and about 34.9% of pharmacists also recommend imported generic medicines. This misconception of the general people that imported generic medicines produces fewer side effects that need to be rectified by providing generic medicine awareness programs. These programs should also be implemented on the physicians and pharmacists to increase their awareness about generic medicines. These types of programs will help in the development of the local generic medicine manufacturers.

The beliefs of the participants (N = 527) on various aspects of the branded medicines are mentioned in Table 4.

Table 4: Beliefs of the participants (N = 527) on various aspects of the branded medicines

S. No	Beliefs	Agree No. (%)	Disagree No. (%)	Not sure No. (%)
1.	Quality of brand medicine is higher	158 (30%)	113 (21.4%)	256 (48.6%)
2.	Brand medicine is more effective	167 (31.7%)	98 (18.6%)	262 (49.7%)
3.	Brand medicine is safer	146 (27.7%)	110 (20.9%)	271 (51.4%)
4.	Brand medicine is more expensive	177 (33.6%)	93 (17.6%)	257 (48.8%)
5.	Brand medicine produces fewer side effects	144 (27.3%)	97 (18.4%)	286 (54.3%)

The data in table 4 reveals that almost 50% of the participants were not sure about the quality, efficacy, safety, price, and side effects of the branded medicine. As per this information, there is a need to provide awareness programs about branded medicine, imported generic medicine, and locally manufactured generic medicines.

CONCLUSION

This study has revealed that most of the visitors of Turaif General Hospital were unaware of generic medicines and branded medicines. This is because of the lack of awareness among these people about generic and branded drugs. Another contributing factor in unawareness is that most pharmacists and physicians fail to promote the use of generic drugs. It was also observed that most of the aware people prefer imported generics because of their quality, efficacy, and high prices. This indicates that the local generic drug manufacturers have failed to gain the trust of people concerning the quality of their medicines. This issue may be rectified by proper advertisements by the local generic drug manufacturers. Finally, there is a need to provide awareness programs about branded medicine, imported generic medicine, and locally manufactured generic medicines among the Saudi population, pharmacists, and physicians.

Limitations Of The Study: This study has some limitations. This study was carried out in one hospital only, and the number of participants was also small (N = 527). Although our results comply with the previously published data, we can not generalize our findings to the whole population. Therefore, it is advised to conduct this type of research on a larger group of participants in the different cities of Saudi Arabia.

REFERENCES

- Howard JN, Harris I, Frank G, Kiptanui Z, Qian J, Hansen R. Influencers of generic drug utilization: A systematic review. Res

- Social Adm Pharm. 2018;14(7):619-627. doi: 10.1016/j.sapharm.2017.08.001.
- 2 Chen J, Luo X, Qiu H, Mackey V, Sun L, Ouyang X. Drug discovery and drug marketing with the critical roles of modern administration. *Am J Transl Res.* 2018;10(12):4302-4312. PMID: PMC6325519.
 - 3 Thakkar KB, Billa G. The concept of Generic drugs and patented drugs vs. brand name drugs and non-proprietary (generic) name drugs. *Front Pharmacol.* 2013;4:113-113. doi:10.3389/fphar.2013.00113.
 - 4 Mishuk AU, Qian J, Howard JN, Harris I, Frank G, Kiptanui Z, Hansen R. The Association Between Patient Sociodemographic Characteristics and Generic Drug Use: A Systematic Review and Meta-analysis. *J Manag Care Spec Pharm.* 2018;24(3):252-264. doi: 10.18553/jmcp.2018.24.3.252.
 - 5 Kesselheim AS, Avorn J, Sarpatwari A. The High Cost of Prescription Drugs in the United States: Origins and Prospects for Reform. *JAMA.* 2016;316(8):858-71. doi: 10.1001/jama.2016.11237.
 - 6 Toverud EL, Hartmann K, Håkonsen H. A Systematic Review of Physicians' and Pharmacists' Perspectives on Generic Drug Use: What are the Global Challenges? *Appl Health Econ Health Policy.* 2015;13 Suppl 1:S35-45. doi: 10.1007/s40258-014-0145-2.
 - 7 Kesselheim AS, Gagne JJ, Eddings W, Franklin JM, Ross KM, Fulchino LA, Campbell EG. Prevalence and Predictors of Generic Drug Skepticism Among Physicians: Results of a National Survey. *JAMA Intern Med.* 2016;176(6):845-7. doi: 10.1001/jamainternmed.2016.1688.
 - 8 Alkhuzaee FS, Almalli HM, Attar AY, Althubiani SI, Almuallim WA, Cheema E, Hadi MA. Evaluating community pharmacists' perspectives and practices concerning generic medicines substitution in Saudi Arabia: A cross-sectional study. *Health Policy.* 2016;120(12):1412-1419. doi: 10.1016/j.healthpol.2016.09.018.
 - 9 Salhia HO, Ali A, Rezk NL, El Metwally A. Perception and attitude of physicians toward local generic medicines in Saudi Arabia: A questionnaire-based study. *Saudi Pharm J.* 2015;23(4):397-404. doi: 10.1016/j.jsps.2015.01.014.
 - 10 Albadr Y, Khan TM. Factors influencing community pharmacist decision to dispense generic or branded medicines; Eastern Province, Alahsa, Saudi Arabia. *Saudi Pharm J.* 2014;23(2):143-146. doi: 10.1016/j.jsps.2014.07.002.
 - 11 Alrasheedy AA, Hassali MA, Aljadhey H, Al-Tamimi SK. The need to cover generic medications and generic substitution practice in the curricula of pharmacy colleges in Saudi Arabia. *Am J Pharm Educ.* 2014;78(5):108. doi: 10.5688/ajpe785108.
 - 12 Alghasham AA. Generic drug prescribing in central Saudi Arabia: perceptions and attitudes of physicians. *Ann Saudi Med.* 2009;29(1):24-29. doi: 10.4103/0256-4947.51819.
 - 13 Gebran N, Al Haidari K. Assessment of prescribing information for generic drugs manufactured in the Middle East and marketed in Saudi Arabia. *Ann Saudi Med.* 2006;26(3):192-199. doi: 10.5144/0256-4947.2006.192.
 - 14 Asiri YA, Al-Yamani MJ. Issues with generic drugs in Saudi Arabia. *Ann Saudi Med.* 2006;26(3):183-183. doi: 10.5144/0256-4947.2006.183.
 - 15 Alsultan AS, Hakeam HA. Withdrawal of two generic clopidogrel products in Saudi Arabia for non-bio-equivalence. *Ann Saudi Med.* 2018;38(3):233-234. doi: 10.5144/0256-4947.2018.233.
 - 16 Kesselheim AS, Gagne JJ, Franklin JM, Eddings W, Fulchino LA, Avorn J, Campbell EG. Variations in Patients' Perceptions and Use of Generic Drugs: Results of a National Survey. *J Gen Intern Med.* 2016;31(6):609-14. doi: 10.1007/s11606-016-3612-7.