

COMPARATIVE STUDY OF PERCEPTION AND AWARENESS ABOUT GENERIC VS BRANDED MEDICINES IN RURAL AND URBAN AREAS OF KOLHAPUR

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ABSTRACT

Typically, pharmaceutical companies create two different drugs from a single ingredient. One product, known as branded medicine, is heavily advertised and supported by doctors, retailers, and chemists. Another option, known as generic medicine, is not advertised or promoted. So the Government of India is taking lot of steps to promote the availability of generic medicines both in rural and urban areas and also taking steps to aware people that it is equally safe and effective as that of branded medicines. The survey is about perception towards generic medicines and branded medicines and current scenario of branded and generic medications in rural and urban areas of Kolhapur. This study was conducted to find out the different factors that could influence the use of generic and branded medicines among people from rural and urban areas of Kolhapur. The study was carried out among 100 people from rural areas and 100 from urban areas of Kolhapur. From the above survey it is found that Branded medicines from each category were widely used in Rural and Urban areas of Kolhapur compare to the Generic medicines. People found less aware about the difference between the Generic and branded medicines in Rural area than the Urban area.

KEYWORDS

Branded medicines, Generic medicines, perception, Urban and Rural areas

INTRODUCTION

Nowadays, Pharmacists' responsibilities extended beyond the usual preparation and dispensing of pharmaceuticals by additionally influencing the prescribing procedure and providing pharmaceutical care services, which has increased their involvement in patient care. Prior definitions of

the duty of the chemist have included "the responsible provision of medication for the aim of

achieving definite outcomes to enhance patients' quality of life" (Hepler & Strand, 1990). Pharmacy professionals have the knowledge and abilities to identify, address, and prevent drug-related issues. Additionally, according to Merten et al. (2013), chemists can advise patients on pharmacological therapy and suggest cost effective treatments.

• **Drug:** A drug is defined as "A substance recognized by an official pharmacopoeia or formulary, intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease."

• **Generic drugs:** A generic drug is a medication created to be the same as an already marketed brand name drug in dosage form, safety, strength, route of administration, quality, performance characteristics, and intended use. In other words, you can take a generic medicine as an equal substitute for its brand name.

• **Branded drugs:** A drug sold by a drug company under a specific name or trademark and that is protected by a patent. Brand name drugs also known as innovator drugs.

The Indian government is doing a lot to increase the accessibility of generic medications in both urban and rural areas, as well as to educate the public about their safety and efficacy on par with that of branded medications. Generic medications are produced by a large number of pharmaceutical businesses and distributed through retail retailers. E-pharmacies are operating and distributing generic medications to customers' homes. The government has established thousands of Pradhan Mantri Bhartiya Janaushadhi Kendra's (PMBJK) all over the nation where people can obtain generic medications for a much reduced price.

Typically, pharmaceutical companies create two different drugs from a single ingredient. One product, known as branded medicine, is heavily advertised and supported by doctors, retailers, and chemists. Another option, known as generic

medicine, is not advertised or promoted. Interesting fact: Similar molecules are used to create both medications. As a result, although the two medications' formulas are comparable, the price of the branded drug is significantly greater. This survey is based on the current scenario of branded and generic medications. To learn more about their understanding of generic and branded medications, a survey was conducted to Kolhapur residents in both urban and rural areas. In terms of the quantity of medications exported, the Indian pharmaceutical industry is ranked third. India is referred to as the "pharmacy of the world" by other nations because it exports a significant amount of medications to different regions of the globe.

Similarity between generic and branded drugs –

- It must have the same active ingredients.
- The dose form must be the same.
- Their performance and quality are comparable.
- Its administration method must be consistent.
- Generic medications are just as safe as branded ones.
- Its bioavailability is exactly the same.

Differences between generic and branded medicines

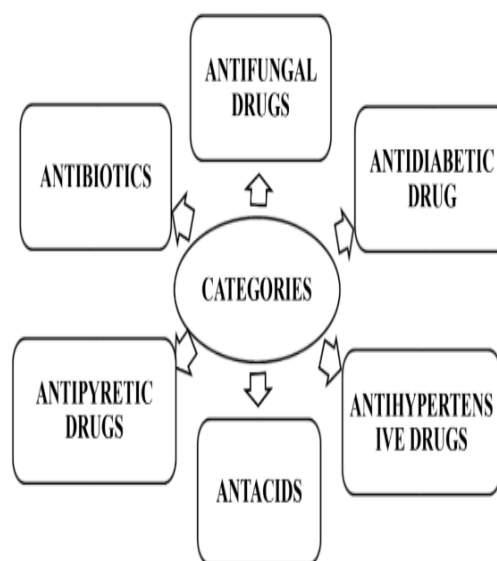
PARAMETER	BRANDED MEDICINES	GENERIC MEDICINES
Patents	Patent protected	Off-patent
Trade name	Marketed under a unique proprietary name given by the company	Marketed under the generic name of the drug
Manufactured by	Developed and manufactured by an innovator company	Manufactured by several pharmaceuticals' companies after patents expiration of the relevant brand name drug
Name variation	Same or different brand names in different countries	Same generic drug name in any country
Cost/price	Higher in cost	Lower in cost

Appearance/look	Drugs are standard in size, colour, packaging etc.	Packaging and the drug itself may look different
Excipients	Uses acceptable excipients	Same or altered but acceptable excipients

Table no. 01 : Difference between generic and branded medicines

Drug categories we selected:

Fig no. 01: Drug categories we selected



Material and Methods This is an observational study. we conducted a pilot survey of 200 people 100 from Rural and 100 from urban area of Kolhapur district. Survey research may use a variety of data collection methods with most common being questionnaire and interviews. The data was collected during the year 2022-2023.

Study population: Various people from rural and urban areas of Kolhapur from the villages like Kalambe, Bhamate, Kale and urban areas like Mangalwar peth, Mahalaxmi Nagar, Jawahar nagar, etc in Kolhapur are selected and interviewed. **Sample size:** Total 200 people were surveyed. In which 100 people were from urban areas and 100 from rural areas of Kolhapur.

Study design: This cross sectional study was conducted among various people of rural and urban areas of Kolhapur. Each individual patient was provided with questionnaire regarding generic and branded medicines. Everyone was asked information on health condition, their perception and use of generic and branded medicines, its differences and similarities, etc.

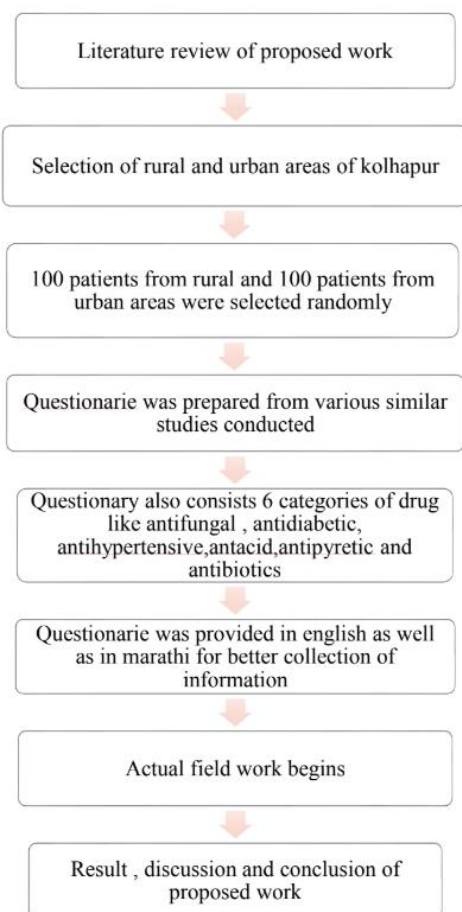


Fig no. 02: Methodology

The questionnaire was collected. The data obtained was subjected to statistical analysis using appropriate method.

Scope of design: The result obtained will help to create awareness about use of generic and branded medicines and its knowledge among people from urban and rural areas of Kolhapur. Data obtained will help to compare how much percent of people from urban and rural areas are aware about knowledge regarding generic and branded medicines and their use. And it will help to awareness among them by such program.

Collection of data: Collection of data done through door-to-door visit

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NAME- _____ AGE- _____ GENDER- _____

QUESTIONS

1) Have you ever heard about generic medicines ?
तुम्ही कधी जेनेरिक आणि ब्रॅण्डेड औषधांबद्दल ऐकलेय का ?
Yes ☐ No ☐

Source of information
1 Pharmacist ☐
2 Physician ☐
3 Publicity ☐
4 Other ☐

2) Do you know difference between generic and branded medicine?
तुम्हाला ब्रॅण्डेड आणि जेनेरिक औषधांमधील फरक माहिती आहे का?
Yes ☐ No ☐

3) Do you know which type of medicine does Indian government promote?
भारत सरकार कोणत्या प्रकारच्या औषधांना प्रोत्साहन देते?
Generic ☐ Branded ☐ Don't Know ☐

4) Are you aware of government rules regarding generic and branded medicine ?
तुम्हाला जेनेरिक आणि ब्रॅण्डेड औषधांबद्दल सरकारी नियमांची माहिती आहे का?
Yes ☐ No ☐

5) What type of medicine do you prefer?
तुम्ही कोणते औषध वापरता...? जेनेरिक की ब्रॅण्डेड....?
IF GENERIC ☐ IF BRANDED ☐
Why? Why?

6) If doctor prescribes you any medicine do you know whether medicine is generic or branded?
डॉक्टरने लेहून दिलेले औषध जेनेरिक आहेत का ब्रॅण्डेड तुम्हाला कळत का?
Yes ☐ No ☐

7) If doctor prescribes you branded medicine do you take same brand or prefer generic medicine?
जर डॉक्टरांनी तुम्हाला ब्रॅण्डेड औषधे लिहून दिली असतील तर तुम्ही ब्रॅण्डेड घेता का जेनेरिक घेता?
Generic ☐ Branded ☐

8) Do you think there is difference in price of generic or branded medicine?
तुम्हाला वाटत का ब्रॅण्डेड आणि जेनेरिक औषधांच्या किमती मध्ये काही फरक आहे का?
Yes ☐ No ☐
If Yes
1. generic medicine have higher price than branded ☐
2. Generic medicine have lower price than branded ☐
3. Generic medicine has same price that of branded medicine. ☐

9) Have you ever requested your doctor to prescribe generic medicine ?
तुम्ही कधी तुमच्या डॉक्टरांना जेनेरिक औषध लिहून देण्यास सांगितले आहे का....?
Yes ☐ No ☐

10) Do you know their is difference in the quality of generic medicines as compared to branded?
ब्रॅण्डेड औषधे आणि जेनेरिक औषधांच्या गुणवत्तेत तुम्हाला काही फरक वाटतो का?
Yes ☐ No ☐
A. Generic medicine have better quality than branded ☐
B. Generic medicine have lower quality than branded ☐
C. Generic medicine have same quality as branded ☐

11) Which type of medicine either branded or generic, do you consider should be promoted?
ब्रॅण्डेड किंवा जेनेरिक यापैकी कोणत्या प्रकारच्या औषधांना प्रोत्साहन केला पाहिजे ?
Generic ☐ Branded ☐

Fig no.03: Questionnaire for survey

Some Examples of Generic and Branded medicines available in Market: Table no. 02:
Some Examples of Generic and Branded medicines available in Market Drug Category : ANTI-HYPERTENSIVE

Catego ry	Branded	Generic
Amlod ipine	Amlokind/Amlsaf e/Amlovas/ Amlogard/Amodep	Amlip/Lupidip /Amlotex/Tenlod ip

Telmisartan	Telmikind/Telma/Telista/Tazloc/Temsan	Telsun/Telgo/Ste ltan /Dazteli
Enalapril	Envas/ Enam / napril / Nuril	Vasopril/Lepril/ Anapril/Enaril- s
Rosuvastatin	Rosuvastatin/Roseday/Novastat/Rozat/Rozavel	Rosumit/Rostaf/Rosuline/Rosudoz
Atorvastatin	Storvas/Atorva/Aztor/Atocor/Stator	Atrovin/Peditor/Atrovast/Lipvas

Drug Category : **ANTACID**

Category	Branded	Generic
Pantoprazole	Pantopran/Pan/Glanpan / Nicopenta	Pantosec/Paneth/Emtop/
Omeprazole	Omez/ Ocid- IT / Omicap	Omzid/Aciphex/Omee/Omelezo
Esomeprazole	Esoz/Nexpro/Esomac	ES-Od / Esomroz / Esodol
Rabeprazole	Cyra/Rekool/Rabemac/Rabekind	Rubyzol / Remitrx 20/ Rabidiv/Rablist

Drug Category : **ANTI-FUNGAL**

Category	Branded	Generic
Clotrimazole	Candid/Canesten / Candiderma/Cwin	Clocip/Widezole/ Clomits/Rizole-DS
Ketoconazole	Ketostar /Zykt /Kz/Keraglo	Ketoactive/ketokem/Ketocip/Ketolechem
Fluconazole	Zocon/Onecan	Flucos /Flumet /Flulor-B/Fluka

Itraconazole	Candiforce/Itrasy/Syntran/IT-Mac	Itrado-200/Itranaz/Mouzo l/Necitra
Terbinafine	Terbicip/Terbinaforce/Terbinol/TRFY	Terbifex /Trenol /Termax/Terbicrom

Drug category : **ANTI-DIABETIC**

Category	Branded	Generic
Metformin	Glyciphage/Glycomet/Glimy/Glimet-DS	Okamet-500/Fortamet-500/Wellmet 500
Glimipride	Tribet-2/Amaryl-1/GP-1	Zesky-m1/Glimics
Sitagliptin	Januvia-100mg/ Janumet-100mg/ Istavel-100mg	Glipsi-50 / Salvaglip-50 /Sitaliptin-50
Glipizide	Glucotrol/Minodib/Glynase	Acitizide-M/Bimode-M/ Biacon-M
Voglibose	Vobosee-0.2/Vogobose-0.2/Volibose-0.3	Vogliboz/Amibose/Kardem-0.2

Drug Category : **ANTIPYRETIC**

Category	Branded	Generic
Paracetamol	Dolo / Crocin /Fepanil / Doliprane	Paracip / Mepar
Ibuprofen	Imol / Combiflam /Ibugesic / Brufen	Ibruwell /Brufex
Diclofenac	Dynapar/ Voveran/Enzoflam/ Diclomol	Diclogen/ Reactin/Dolofresh/ Omnee
Nimesulide	Nise / Nobel / Sumo	Nicip / Nimket /NP-425/Nodard

Tramadol	Ultracet / Tramazac/ Megaflam/ Zeredol-PT	Ultramed
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Drug Category : **ANTIBIOTICS**

Category	Branded	Generic
Azithromycin	Azee/ Azithral/ Zathrin/ATM	Azicip / Zubithro /Azilay/ Aziryl
Amoxicillin	Novamox/Blumox/ Mox	Omniclav / Saltip/Merryclav
Cefixime	Zifi/taxim o / Cefolac/Safexim	Cefix / Amicefi /Cefrax / Cefex
Doxycycline	Doxit/ Minicycline/Microdox/ Doxicip	Doxisept LB/ Welldox/ Doxicip /Doxypius
Moxifloxacin	Moximac / Mahaflox /Miliflox/ Moxif	Moxiyst/Eustomox/Radixme/Moxiflox

Observations and Results -

The survey is conducted in people from rural and urban areas of Kolhapur in order to check the perception and knowledge about generic and branded medicines. The information obtained from survey has been tabulated as follows:

Observation obtained from Rural and Urban areas of Kolhapur :

In present study 100 people from rural area and 100 people from urban area of Kolhapur were participated in survey.

Table no 04 observations obtained from rural and urban areas of Kolhapur QUESTION 01

Have you ever heard about generic medicines ?	YES	NO
RURAL	56%	44%
URBAN	80%	20%

QUESTION 02

Do you know difference between generic and branded medicine?	YES	NO
RURAL	41%	59%
URBAN	66%	34%

QUESTION 03

Do you know which type of medicine does Indian government promote?	GENERIC	BRANDED	DON'T KNOW
RURAL	30%	13%	57%
URBAN	52%	5%	43%

QUESTION 04

Are you aware of government rules regarding generic and branded medicines?	YES	NO
RURAL	07%	93%
URBAN	15%	85%

QUESTION 05

What type of medicine do you prefer?	GENERIC	BRANDED
RURAL	15%	85%
URBAN	30%	70%

QUESTION 06

If doctor prescribes you any medicine do you know whether medicine is generic or branded?	YES	NO
RURAL	25%	75%

URBAN	49%	51%
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QUESTION 07

If doctor prescribes you branded medicine do you take same brand or prefer generic medicine?	GENERIC	BRANDED
RURAL	18%	82%
URBAN	29%	71%

QUESTION 08

Do you think there is difference in price of generic or branded medicine?	YES	NO
RURAL	68%	32%
URBAN	70%	30%

QUESTION 09

Have you ever requested your doctor to prescribe generic medicine?	YES	NO
RURAL	11%	89%
URBAN	24%	76%

QUESTION 10

Do you know there is difference in the quality of generic medicines as compared to branded?	YES	NO
RURAL	52%	48%
URBAN	56%	44%

QUESTION 11

Which type of medicine either branded or generic, do you consider should be promoted?	GENERIC	BRANDED
RURAL	47%	53%
URBAN	41%	59%

As per Question No. 05 reasons to use generic / branded medicines in urban and rural areas of Kolhapur:

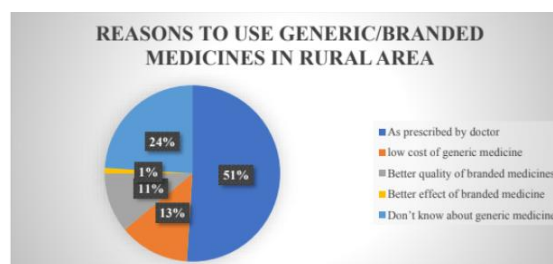


Fig no.06 Reasons to use generic/branded medicines in rural area

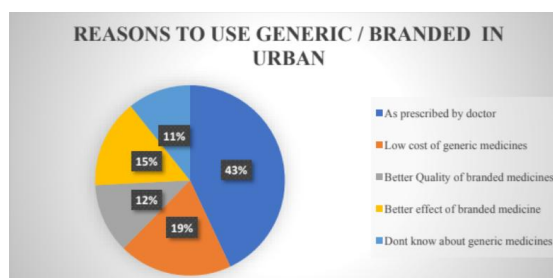


Fig no.07 Reasons to use generic/branded medicines in urban area

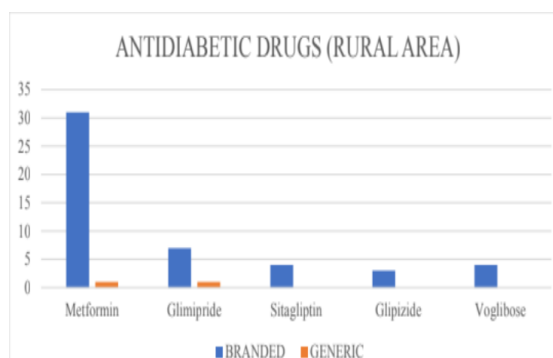


Fig no. 08 Use of Antidiabetic drug in rural area

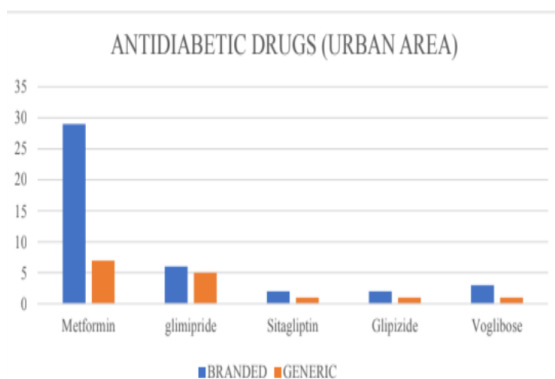


Fig no. 09 Use of Antidiabetic drug in urban area

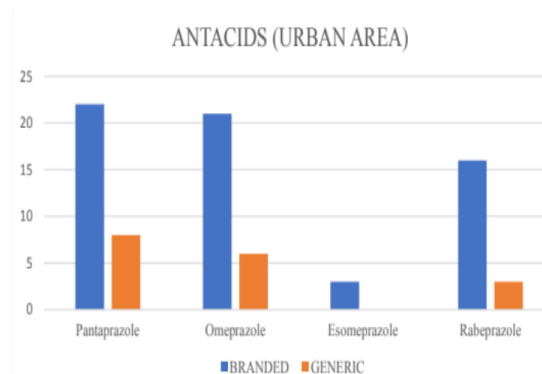


Fig no. 13 Use of Antacids drug in urban area

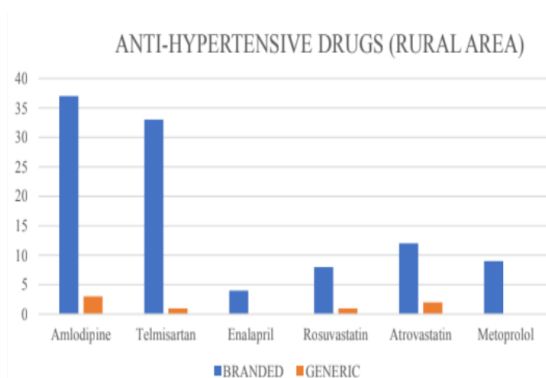


Fig no. 10 Use of Anti-hypertensive drug in rural area

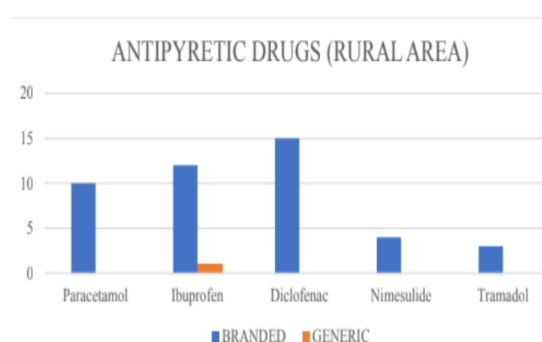


Fig no. 14 Use of Antipyretic drug in rural area

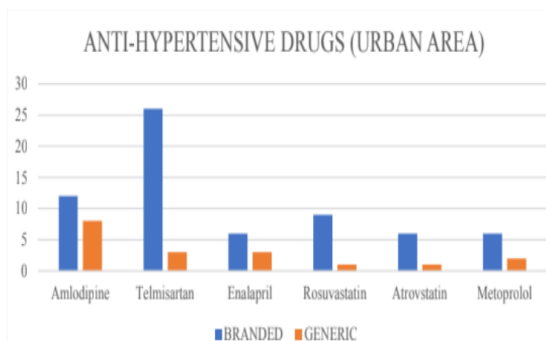


Fig no. 11 Use of anti-hypertensive drug in urban area

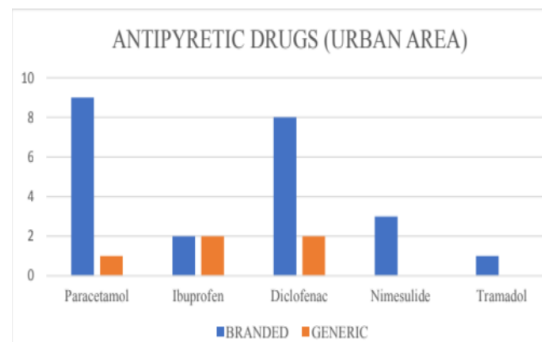


Fig no. 15 Use of Antipyretic drug in urban area

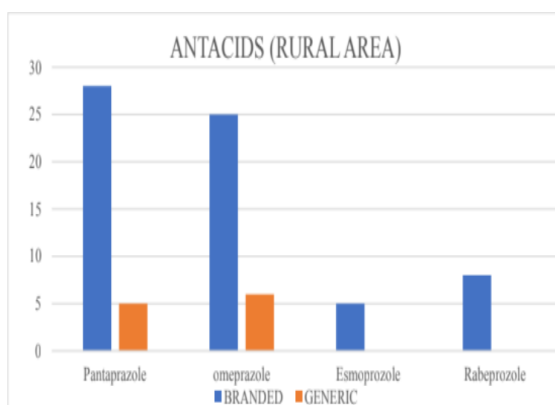


Fig no. 12 Use of Antacids drug in rural area

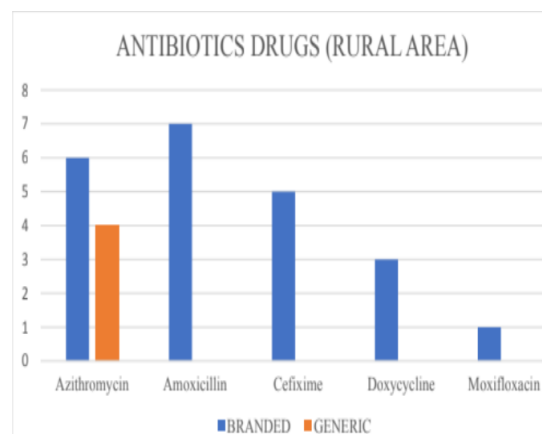


Fig no. 16 Use of Antibiotic drug in rural area

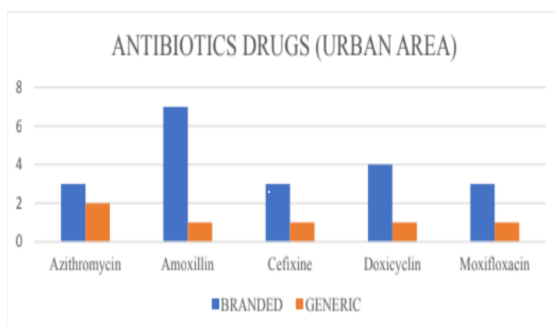


Fig no. 17 Use of Antibiotic drug in urban area

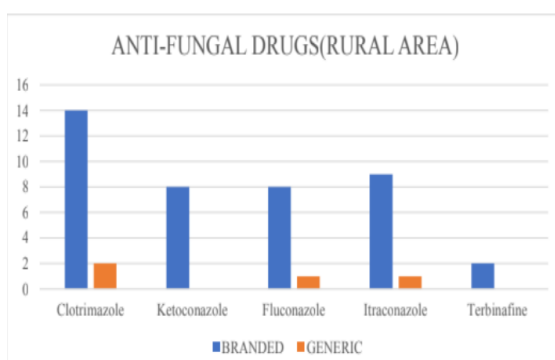


Fig no. 18 Use of Anti-fungal drug in rural area

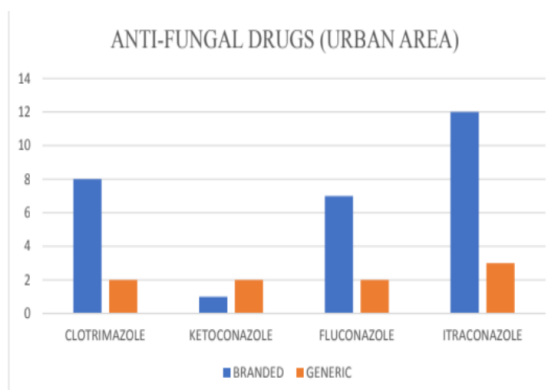


Fig no. 19 Use of Anti-fungal drug in urban area

Mostly used drugs in urban and rural areas of Kolhapur:

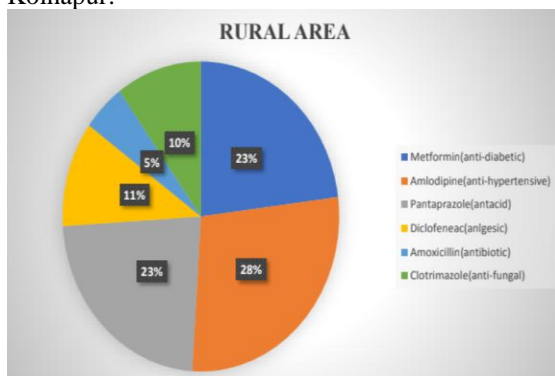


Fig no.20 Mostly used drugs in rural areas of Kolhapur

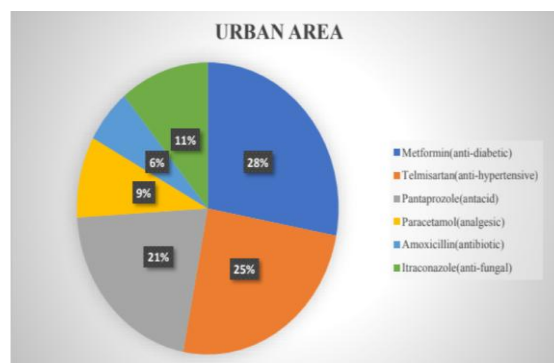


Fig no.21 Mostly used drugs in urban areas of Kolhapur

RESULTS

From the above survey it is found that Branded medicines from each category were widely used in Rural and Urban areas of Kolhapur compare to the Generic medicines. People found less aware about the difference between the Generic and branded medicines in Rural area than the Urban area. Therefore they prefer the medicines which prescribe by the physician. They have idea about the price difference between the both still they prefer the branded medicines. People from urban area knows the quality of branded medicines is higher than the generic medicines therefore they prefer the Branded medicines. Branded medicines were widely used in all categories of a Drugs in Rural and Urban areas of Kolhapur than generic medicines.

DISCUSSION:

Present study states that the use of generic drug is less than branded drugs in both rural and urban areas of Kolhapur. It was observed that large number of people (59%) from rural area were not knowing about difference between generic and branded medicines, whereas from urban area of Kolhapur most of people (66%) were knowing about difference between generic and branded medicines. 57% people from rural area don't know about which type of medicine Indian government promote, while 52% people from Urban area answered Indian government promote generic medicines. Observation was found almost similar that 93% people from Rural area and 85% people from Urban area not aware of government rules regarding generic and branded medicines.

Both Rural and Urban area of people prefer Branded medicine over Generic medicines. 75% people from Rural and 51% from urban area don't know about which type of medicine doctor prescribe. Both Rural and Urban area of people prefer Branded medicine. Maximum people from Rural (68%) and Urban (70%) area already aware about there is price difference in between generic and branded medicine. No one requested their doctor to prescribe generic medicine over branded. There is some

quality difference between generic medicines as compared to branded medicines suggest 52% from Rural and 56% from urban areas of Kolhapur.

Still lots of studies are needed to work on to increase the awareness of people regarding the generic medicines they must know about the quality factor of generic and branded medicines is same. If they got to know about the Indian Regulations regarding the generic medicines it will more beneficial to them considering the cost, quality and availability of medicine.

Comparative study of perception and awareness about Generic vs Branded medicines in Rural and Urban areas of Kolhapur

ACKNOWLEDGEMENT:

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REFERENCE:

- 1) Gamil qasem othman, mahfoudh a.m. Abdulghan, assessment of knowledge and perceptions of generic medicines among pharmacy students in yemeni universities, pharmacy education,(2015) 15 (1) 93 - 98
- 2) Ghanwat ashlesha, Mangesh atakale ,anjinkya shinde, vishal yedge. Generic drugs vs branded drugs: view of public. Current trends in pharmacy and pharmaceutical chemistry. (2020) 3)
- Bushra majaz, a study on consumer preference towards generic medicines in nasik city. International journal of creative research thoughts .(2021).
- 4) Shailesh tripathi, sudip bhattacharya, patient perception about generic vs. Branded medicines prescribed in a tertiary care hospital in northern india -a descriptive study. Indian journal of pharmacy practice, vol 11, issue 2.(2018).
- 5) Prof. Sarda. R. R, shinde khanderao, comparative study of generic and branded products, journal of emerging technologies and innovative research (jetir), volume 8, issue 8(2021).
- 6) Suzanne s. Dunne* and colum p. Dunne, what do people really think of generic medicines? A systematic review and critical appraisal of literature on stakeholder perceptions of generic drugs, dunne and dunnebm medicine (2015).
- 7) Yuxitian , bertholdreichardt, danieladunkler , milanhrnsky, wolfgangc.winkelmayer, anna bucsics, susannestrohmaier&georgheinze ,

comparative effectiveness of branded vs. Generic versions of antihypertensive, lipid-lowering and hypoglycemic substances: a population-wide cohort study, scientific reports (2020)

8) N. A. Tanna.& r. S. Srivastava a survey based study on current scenario of generic medicine, international journal of current medical and applied sciences, 2022, february 33(3), 20-26