

Assessing awareness on generic drugs among the Pharmacists and lower strata of Rural and Urban Kanpur Nagar District, U.P

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Abstract: The rural affordable health care safety is extremely fragile, and the rural populations with low per capita income are older, sicker and poorer. Sheer geographical conditions, sufficient shortages of providers and long-standing payment inequities, make the delivery of affordable health care in rural India extremely difficult and weak. Affordable health care is an important constituent of any rural area for being better health care. The rising health-care expenses remain a serious concern for the health-care system. One of the major components of this increased cost of healthcare related expenses is cost of medicines. Public awareness about generic medicines is highly lacking due to improper health care professionals, communication run-down and looting the financial incentives. Since 2012, Ministry of Health and Family Welfare has implemented the policy of "mandatory generic drug use" in government-funded hospitals. But Public awareness about generic medicines is highly lacking due to improper health care professionals, communication run-down and looting the financial incentives. There is a realistic need to create awareness among the rural or people of lower strata of our country in regard to generic medicine and let the poor people avail the benefits at large rather than a game of profiteering.

Keywords: Public health, affordable healthcare, Attitude, Generic medicines, Knowledge, Practice, attitude, effectiveness and efficacy

1. INTRODUCTION

India is the second most populous country (1.38 billion) in the world and is expected to surpass China by 2024 to become the world's most populous country.[1,2,3]. The tremendous increase in population density of India underscores the need for attention to population health in all age groups. Indian government was committed to provide 'affordable healthcare' services to all people of lower strata or rural areas, predominantly since independence through various schemes and programs. India currently faces a public health crisis. The country has the largest number of people without effective healthcare coverage in the world. WHO estimates that around 600 million people fail to access the health services they need, and 63 million Indians are living in poverty because of healthcare costs. As a result, India has the second lowest life expectancy in South Asia. This situation is not only damaging the health of the Indian people, but also a significant impediment to further social development and economic growth. The rising health-care expenses remain a serious concern for the health-care system. One of the major components of this increased cost of healthcare related expenses is cost of medicines. Medicines consume major chunk of total money spent on healthcare [4].

As we strive to provide a high-quality health-care system to the masses with limited resources, increased use of generic drugs can boost affordability of health care without losing quality. Generic drugs are manufactured in the majority of therapeutic categories in our country [5]. Despite the fact that these generic drugs are available at affordable cost, the majority of our country's population is still unable to afford them. A generic drug is a pharmaceutical drug that is equal to a brand-name product in dosage, strength, route of administration, quality, performance, and intended use [6]. They are commonly subjected to government protocols in the nation state where they are distributed. In India, all those medicines without brand name and less priced are called generic drugs. These drugs are manufactured by licensed authorities and are available at subsidized price. There are very less private medical shops which sell unbranded generics. A generic drug must encompass the same ingredients as that of original brand-name origination. But they are sold under the chemical names which are not familiar with the general public [7]. Then, there is another term called 'Branded generics', to connote medicines which are now off patent and sold under a brand name by companies. Most of the drugs available in the Indian market are patent expired branded generics (where the generic manufacturer gives a separate name to its product) and they do not provide any advantage in terms of cost to the patients. The unbranded generic drugs available at government agencies (Jan Aushadhi outlets and Govt. hospitals) are procured in their generic name for the public health system. They are less expensive than the branded ones as there is very less expenditure on their marketing.

So, in order to make it accessible to the general public, the government launched the 'Jan Aushadhi Scheme' in 2012, which was renamed 'PRADHAN MANTRI JAN AUSHIDHI YOJANA' in 2016, ensuring the availability of generic drugs and assisting in the acquisition of medicines at affordable rates [8]. These 'Jan Aushadhi' stores are located across the country, allowing for the availability of drugs at affordable prices and are licensed under the roof of pharmaceutical products of India. There are over 600 drugs available on the counter of the Jan Aushadhi stores [8]. Using unbranded generic drugs instead of branded ones might be an alternative way to reduce expenditure on drugs and thereby improve patient compliance.

Hence, the study was taken up to assess the awareness, attitude and preference for generic drugs among pharmacists and lower strata of rural and urban Kanpur Nagar District, U.P.

2. STATEMENT OF THE PROBLEM

There is a realistic need to create awareness among the rural or people of lower strata of our country in regard to generic medicine and let the poor people avail the benefits at large rather than a game of profiteering.

3. OBJECTIVES

The study has the following objectives.

- ✓ To understand the perception of pharmacists towards generic medicines.
- ✓ To study the awareness of generic medicines amongst lower strata of rural and urban Kanpur Nagar District.

4. METHODOLOGY

The approach of the study involves generation of database from three independent sources of information namely sample survey of rural and urban lower strata, general pharmacists and pharmacists of 'Jan Aushidhi Kendra'. All the three independent information sources are expected to lead to an authentic primary database. Generation of reliable database is an important consideration in this study. This study combines use of available secondary data with primary data, qualitative and quantitative methods and survey based on census sampling techniques, with a case study approach and focus group discussions. The primary data collection has been undertaken at various levels in the project area, which includes interactive sessions with general people and pharmacists; whereas the secondary data has been collected from census of Uttar Pradesh 2011, published work and webnet.

The main focus was at---

- Impact of implementations of PMAJY on spreading awareness of Generic Medicines.
- To locate failures and factors responsible.
- To suggest effective ways for it to spread awareness about Generic Medicines

STEPS :-

1. Visiting all 'Jan Aushidhi Kendras' for census survey.
2. Selection of sample of general medical stores providing generic medicines.
3. Selection of groups of participants (lower strata) visiting hospitals and medical stores.
4. Carrying out field survey in the selected sample units.
5. Data tabulation and preparation of the report.

SAMPLING DESIGN AND PROCEDURE:-

The study has been carried out in both rural and urban areas of Kanpur Nagar. The sampling design of the study is as follows (**Table 1**):

Table: 1 Sample design of the study.

Sample	Urban	Rural	Total	Type of Sample
Jan Aushidhi Kendra / Pharmacists of Jan Aushidhi Kendra	18	04	22	Census technique
General Medical Stores / Pharmacists of General Medical Stores	35	15	50	Random Sampling
People of lower strata	50	50	100	Random Sampling

MATERIALS AND METHODS :-

METHODS

The present study was a questionnaire-based, cross-sectional observational study conducted among pharmacists of Jan Aushidhi Kendra JAK, General Medical Stores GMS and people of lower strata in Kanpur urban and rural area. Assurance of confidentiality was also given to the participants. After explaining about the nature and purpose of the study, the participants were interviewed using structured questionnaire to assess the awareness about the generic drugs and to determine the knowledge, attitude and practice toward generic drugs. The appropriate instructions about filling questionnaire were given. The questions were asked orally for those who were not able to read them. The study period was one week (February2021).

Research Gap

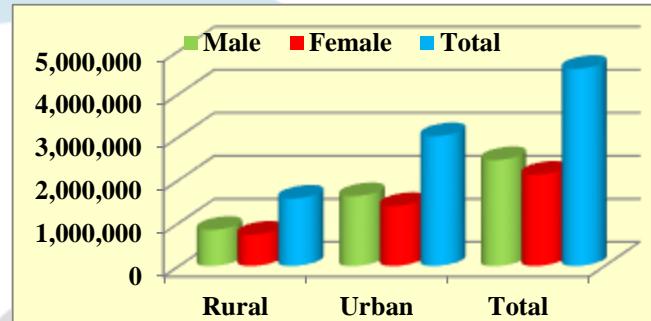
Based on preceding literature it is found that studies have been conducted in clinical aspect with high-end computation towards generic medicine. Literature review is found on perception module, attitudes and awareness among the common people, but in regard to the awareness among the lower illiterate people is lacking. This was the research gap identified. The present study is an endeavor to fill the gap and the need of an hour to educate the lower illiterate people, to attain not only knowledge about such social issues prevailing, can enhance them further practically by participating in various social services units and disseminating the information in and around.

THE UNIVERSE

The universe of the study undertaken is the district of Kanpur Nagar in Uttar Pradesh (U.P.) Kanpur Nagar district is one of the districts of the U.P. of India. It is a part of Kanpur division and its district headquarter is Kanpur. It is also known as the industrial capital of the state and situated on the south bank of river Ganga. Rural and Urban population of Kanpur Nagar is shown in **Fig.1**.

Figure 1: Rural and Urban population of Kanpur Nagar.

Population type	Male	Female	Total
Rural	8,37,260	7,28,363	15,65,623
Urban	16,22,546	13,93,099	30,15,645
Total	24,59,806	21,21,462	45,81,268



Source: Primary data

Table 2.Administrative division of Kanpur Nagar District

TEHSILS		DEVELOPMENT BLOCK	
Bilhaur		Ghatampur	Bilhaur
Ghatampur		Kalyanpur	Bhitargaon
Kanpur		Vidhuna	Chaubeypur
		Kakwan	Patara
		Sarsol	Shivrajpur

5. DATA ANALYSIS

Percentage analysis was used to compute the basic milieu of the respondents.

6. RESULTS

I. Assessment of awareness about generic medicines among pharmacists of 'Jan Aushidhi Kendra' and 'General Medical Stores'

Pharmacists are key players in the chain of medication distribution because one of their core professional roles is to ensure the manufacture, supply, and distribution of safe, effective, and quality medicines. Pharmacists can assist patients with obtaining the most cost-effective medicines, and this is considered a pharmaceutical care intervention that improves the access to medicines, adherence to therapy and healthcare outcomes. Understanding generic medicine practices and perceptions held regarding these issues is very important in establishing a sound generic medicine policy that will eventually lead to substantial savings in the government's health care expenditure and will improve access to essential medicines in this country.

i. Aim of the study:

- To determine the current knowledge of pharmacists in the district Kanpur Nagar regarding generic medicines.
- To explore the attitude and perceptions of pharmacists towards generic drug products, including quality, safety, and efficacy issues.
- To evaluate the pharmacists' current generic substitution practices and views about potential generic medicine policies that could be adopted in the future.

ii. Study design and participants

This was a cross-sectional, descriptive study using a self-administered paper-based survey that was conducted during Feb 2021. The study targeted currently practicing pharmacists (JAK, GMS) in the district of Kanpur Nagar (**Annexure 1**).

iii. Survey instrument development and implementation

The questionnaire used in this study was developed through an extensive review of available literature pertaining to knowledge, attitudes and practices of pharmacists and other healthcare professionals regarding generic medicines. The questionnaire contained questions pertaining to knowledge of generic medicine, eliciting participants' attitude towards generic medicine, and questions related to practice of generic medicine (**Fig.4**).

iv. **Findings of the study (based on questionnaire)**

A total of 72 medical shops were visited and 72 pharmacists were interviewed. The Census technique was adopted for all the 22 Jan Aushadhi Kedndra of Kanpur Nagar District because of small sample size.

Table 2: Medical Stores providing Generic Medicines in Kanpur Nagar

Type of stores	Urban	Rural	Total Stores
General Medical Stores	35	15	50
Jan Aushidhi kendra	18	04	22

Table 3: Summary of the pharmacists' perception, acceptance, knowledge, attitude and practice.

1. No. of Customers visiting per day						
	Jan Aushadhi Kendra			General Medical Stores		
Number of customers	Urban	Rural	Total	Urban	Rural	Total
0-25	03	00	03 (13.6%)	23	04	27 (54%)
25-50	04	02	06 (27%)	06	06	24 (22%)
50-75	04	01	05 (22.7%)	04	03	07 (14 %)
75 above	07	01	08 (36.3%)	02	02	04 (08%)

Awareness of pharmacists about generic medicine

2. Awareness of pharmacists about generic medicine							
	Jan Aushadhi Kendra (Total stores 22)			General Medical Stores (Total stores 50)			(Total stores 72)
	Urban	Rural	Total	Urban	Rural	Total	Grand Total
Aware about generic medicines	18	04	22 (100%)	33	13	46 (92%)	68 (94.4%)
Not effective as branded	01	0	01 (4.5%)	22	09	31 (62%)	32 (44.4%)
Generics are not as safe as branded drugs	0	01	01 (4.5%)	15	08	23 (46%)	23 (31.9%)
Cost less as they are inferior to brand-name drugs	02	01	03 (13.6%)	17	9	26 (52%)	29 (40.2%)
Generics are meant only for poor	15	04	19 (86.3%)	25	04	29 (58%)	48 (66.6%)

Pharmacists opinion about doctors support for generic medicines

3. Pharmacists opinion about doctors support for generic medicines							
	Jan Aushadhi Kendra (Total stores 22)			General Medical Stores (Total stores 50)			(Total stores 72)
	Urban	Rural	Total	Urban	Rural	Total	Grand Total
Prescribe generic medicines	01	01	02(9%)	03	01	04(8%)	06(8.3%)
Support but do not prescribe	01	00	01(4.5%)	02	00	02(4%)	03(4.1%)
Not support but prescribe due to govt. norms	04	02	06(27.3%)	07	03	10(20%)	16(22.2%)
Prescribe both generic and branded	01	00	01 (4.5%)	04	02	06(12%)	07(9.7%)

Give priority to branded drugs	07	04	11(50%)	15	08	23(46%)	34(47%)
Indifferent attitude (prescribe acc. to patients' choice)	01	00	01 (4.5%)	02	03	05(10%)	06(8.3%)

Recommending customers to substitute a branded medicine with generic medicine

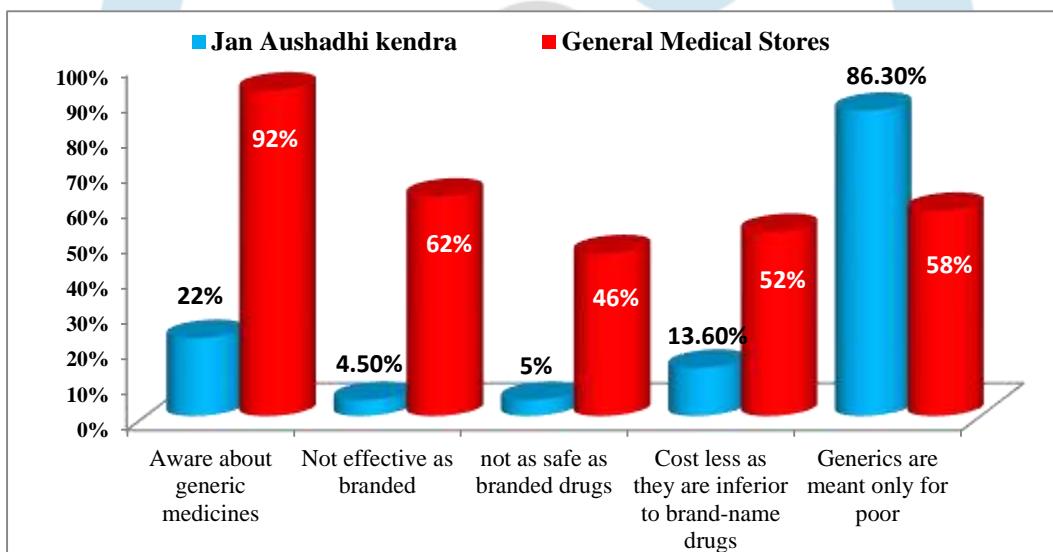
4. Recommending customers to substitute a branded medicine with generic medicine							
	Jan Aushadhi Kendra (Total stores 22)			General Medical Stores (Total stores 50)			(Total stores 72)
	Urban	Rural	Total	Urban	Rural	Total	Grand Total
Yes	13	01	14 (63.6%)	10	09	19 (38%)	33 (45.8%)
No	03	03	06 (27.2%)	12	04	16 (32%)	22 (30.5%)
Not interested	02	00	02 (9.1%)	13	02	15 (30%)	17 (23.6%)

Source: Primary data collection

b). Pharmacist's awareness towards generic medicines

Out of 72 chemists (GMS and JAK) about 94.4% were fully aware of generic medicines and their implications, about 5.5% had heard about generic medicines but didn't have full knowledge about such medicines. **Table 3** shows the opinions of pharmacists about generic medicines. About 45.8 % were of the opinion that generic medicines are not as effective as branded ones. 34.7% said that generic medicines are not safe as branded ones. However, 66.6% thought that generic medicines were meant especially for poor only (**Fig. 6**).

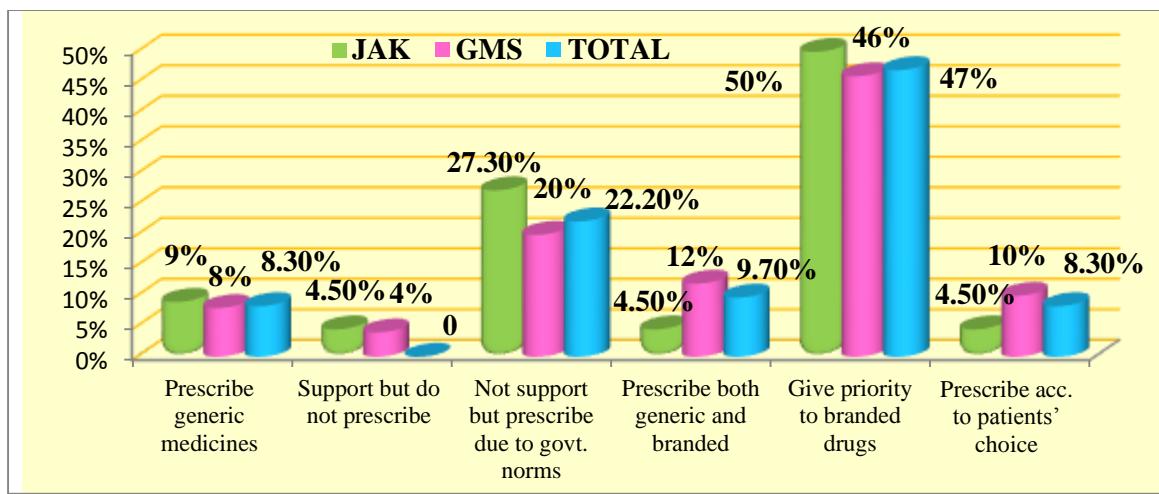
Figure 6: Awareness of Pharmacists for generic drugs



c). Pharmacist's opinions about doctors support for generic medicines

Only 8.3% pharmacists (both from JAK OR GMS) were of opinion that physicians support generic medicines by prescribing them. While 47% were supporting the fact that physicians give priority to branded medicines over generic drugs. Whereas, 22.2% of pharmacists were of opinion that physicians do not support generic medicines but prescribe due to government pressure (**Table 3; Fig.7**).

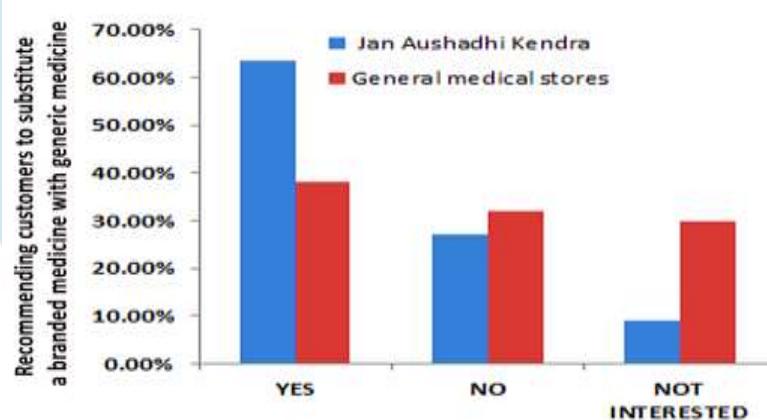
Figure 7: Pharmacist's opinions about doctor's support for generic medicines



d) Recommending customers to substitute a branded medicine with generic medicine

On question about practice followed by pharmacists for recommending generic medicines **45.8%** of pharmacists agreed that they recommend generic medicine to the customers who visit their shops. **30.5%** informed they never recommend. About **23.6%** were not interested giving any suggestions to the customers (**Table 3; Fig.8**).

Figure 8: Pharmacist's recommending customers to substitute a branded medicine with generic medicine.



ASSESSMENT OF AWARENESS ABOUT GENERIC MEDICINES AMONG COMMON PEOPLE OF LOWER STRATA

The objective was to evaluate the perception of common people of lower strata about generic and branded medicines.

i. Study design and participants

It was a cross-sectional study, and the study duration was one week. The study was conducted in the (Rural and Urban) Kanpur, with a sample size of 100. We used a convenient sampling method. They were interviewed with a pretested simple questionnaire about their perception about generic and branded medicines (**Fig.9**).

ii. Finding of the study (based on questionnaire)

A total of **150** people were interviewed. Random sampling technique was adopted because of large sample size (**Table 4**). Out of 150 participants **40** were daily wage earners and **40** belonged to low-income, 40 from lower-middle and 30 of middle-class categories,

Table 4: Economic profile of selected participants

ECONOMIC STRATA	URBAN	RURAL	TOTAL
Daily Wage Earners	25	15	40
Low Income	25	15	40
Lower Middle	25	15	40
Middle Class	25	05	30
TOTAL	100	50	150

Table 5: Summary of the respondents' perception, acceptance, knowledge, attitude and problems related to generic medicines in lower strata of (urban or rural) Kanpur Nagar.

1. Awareness about generic medicines			
	Urban	Rural	Total
Full knowledge	30	09 (18%)	39 (26%)
Little knowledge	21	13(26%)	34 (22.66%)
Have heard but not aware	15	12(24%)	27 (18%)
No knowledge	34	16(32%)	50(33.33%)
TOTAL	100	50	150

2. Source of awareness about generic medicines

SOURCE OF AWARENESS	URBAN	RURAL	TOTAL
Doctors	28	07	35
Chemists	42	18	60
Media	25	13	38
Asha / health workers	05	12	17
TOTAL	100	50	150

3. Awareness about 'Pradhanmantri Bhartiya Janaushidhi Pariyojana'

LEVEL OF AWARENESS	PMBJAY		JAK	
	URBAN	RURAL	URBAN	RURAL
Yes &High	69	21(42%)	35	27(54%)
No	31	29(58%)	65	23(46%)
Total	100	50	100	50

4. Source of purchase of generic medicines

Source	URBAN	RURAL	TOTAL
Doctors	26	14	40(26.6%)
Jan Aushidhi Kendra	32	23	55(36.6%)
General Medical	16	09	25(16.6%)
Others	26	04	30(20%)
TOTAL	100	50	150

5. Opinion about affordability of generic medicines

OPINION	URBAN	RURAL	TOTAL
Affordable	42	12	54(36%)
Expensive	13	14	27(18%)
No difference in cost	14	13	27(18%)
Not available easily	31	11	42(28%)
TOTAL	100	50	150

6. Do you trust generic medicines

RESPONSE	URBAN	RURAL	TOTAL
YES	51	07 (14%)	58 (36.6%)
NO	26	12 (24%)	38 (25.3%)
NOT SURE	23	31 (62%)	54 (36%)
TOTAL	100	50	150

7. Will you use and recommend generic medicines?

RESPONSE	URBAN	RURAL	TOTAL
YES/ SURE	48	07	55
NO	28	10	38
NOT SURE	24	33	57
TOTAL	100	50	150

8. Reason Of Disbelieve

REASONS	URBAN	RURAL	TOTAL
Not supported by doctors	48	36	84 (56%)
Less effective	53	39	92 (61.3%)
Low quality	58	28	86 (57.3%)
Lack of uniformity	42	25	67 (44.6%)
Not equivalent in dosage	64	31	95 (63.3%)

9. Problems in getting generic medicines

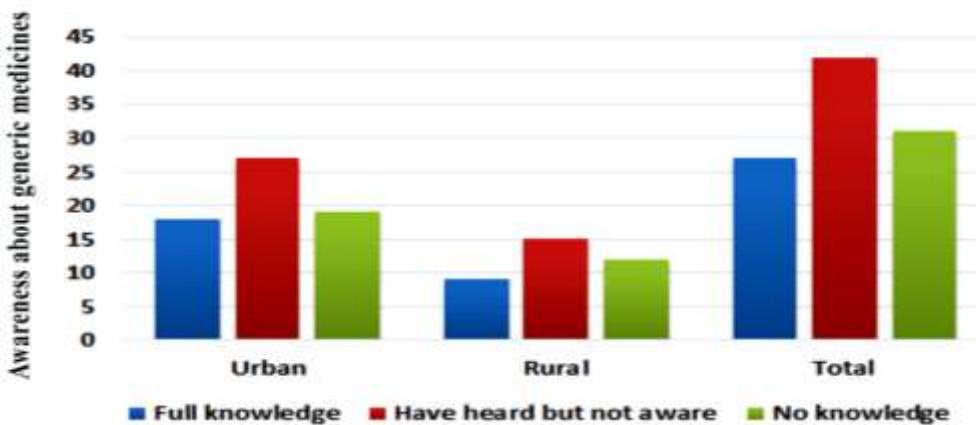
Problems	JAK		General Medical Stores	
	Urban	Rural	Urban	Rural
Out of stock	23 (15.3%)	19 (12%)	46	12
Proper stock is not maintained	11 (7.3%)	13 (8.6%)	32	14
unable to get all medicines	07 (4.6%)	22 (14.6%)	17	24
Available Only for common diseases	34 (22.6%)	21 (14%)	29	15
Non- co-operative attitude of pharmacist	17 (11.3%)	09 (6%)	26	18
Fear of fake /fraud medicines	14 (9.3%)	12 (8%)	21	00

Source: Primary data collection

a). Awareness about generic medicines

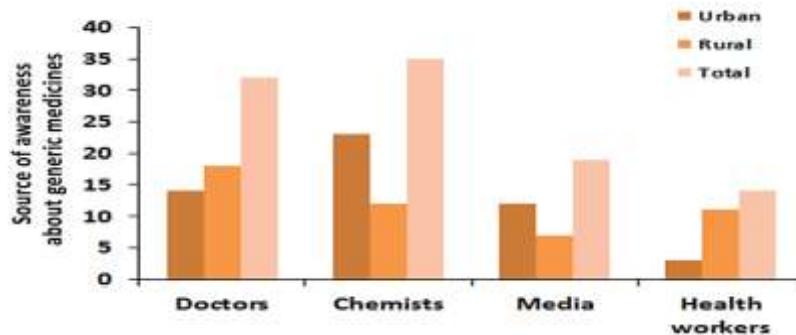
The awareness about generic medicines and frequency of response of the participants is shown in **Table 5**. About 42% of respondents (collectively from rural or urban area) have heard but not fully aware of generic drugs. Only 27% were fully aware and 31% of respondents did not know anything about generic drugs (**Fig. 11**). Respondents of urban areas were more informed in comparison to the respondents belong to the rural background.

Figure 11: Awareness of generic medicines among the lower strata of Kanpur Nagar

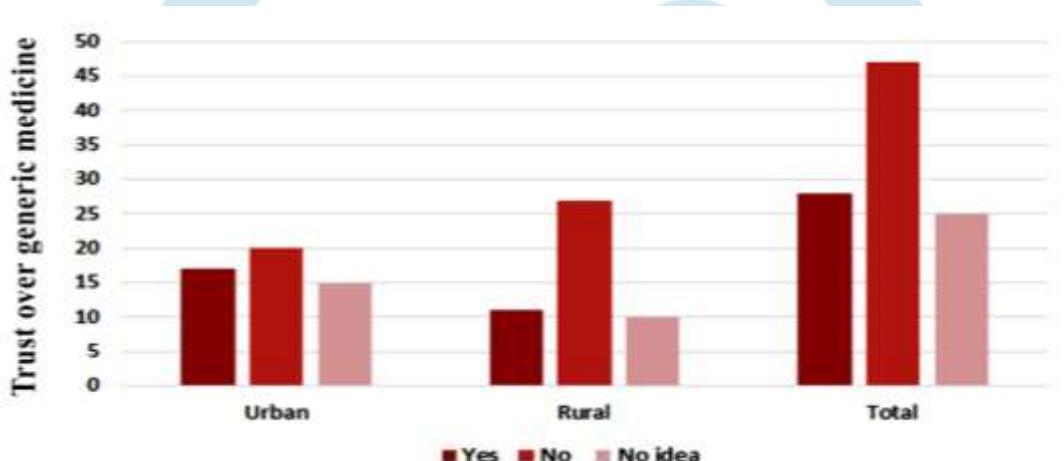


b). Source of awareness about generic medicines

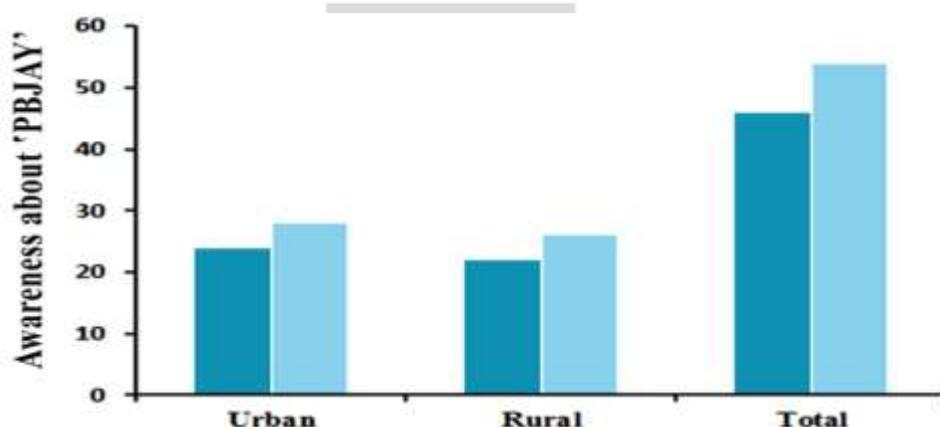
The source of awareness about generic medicines and frequency of response of the participants is shown in **Table 5**. A total of 35 % of respondents stated that the pharmacists were the source of generic information. Whereas, 32% of respondents said they were aware of generic medicines since their doctors prescribed them. According to respondents, 19% and 14% of them obtained information about generic drugs from the media or health workers, respectively.

Figure 12: Source of awareness of generic medicines among the lower strata of Kanpur Nagar.**c.) Trust over generic medicines**

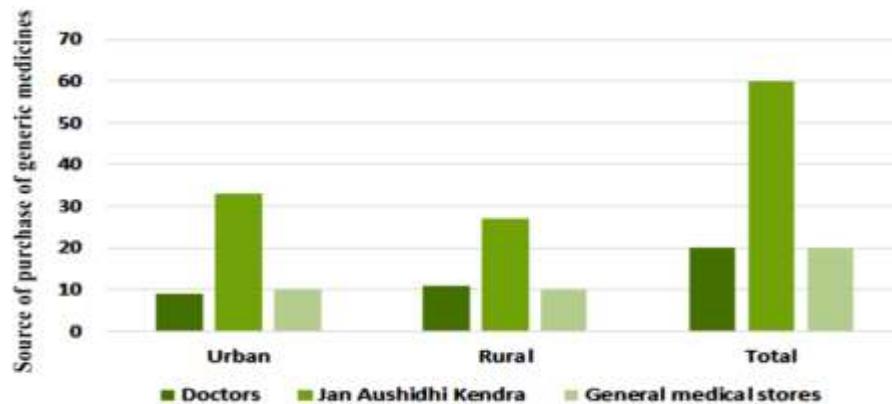
The responses of the participants regarding trust over generic medicines are summarized in **Table 4**. The survey found that 47% of respondents had no confidence in generic drugs. Only 28 % participants showed faith and agreed that generic medicines make a worthwhile investment. On the other hand, 25% participants did not show any interest.

Figure 13: Trust over generic drugs among the lower strata of Kanpur Nagar**d.) Awareness about 'Pradhanmantri Bhartiya Janaushidhi Pariyojana' (PBJP)**

The awareness of the participants about 'PBJP' is summarized in **Table 4**. The survey found that about 54 % of participants were aware of Jan Aushadhi scheme of Govt. of India whose purpose is to set up generic drug stores around the country. Remaining 46% of respondents did not know anything about 'PBJP'.

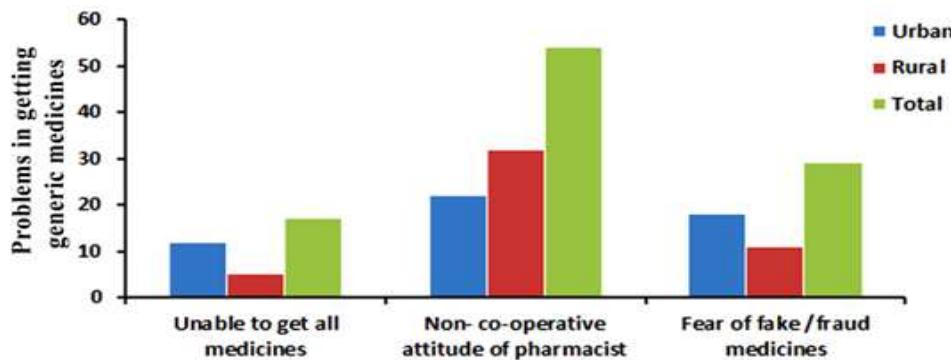
Figure 14: Awareness of 'PMBJAY' among the lower strata of Kanpur Nagar.**e.) Source of purchase of generic medicines**

The responses of the participants regarding source of purchase of generic medicines are summarized in **Table 4**. More than half (60%) of the respondents reported that they purchase generic medicine from 'Jan aushadhi kendras'. Whereas, 20% and 20% of participants purchased the same from doctors and general medical stores, respectively.

Figure 15: Source of generic medicines for lower strata of Kanpur Nagar.

f.) Problems obtaining generic medicines

The responses of the participants regarding problems obtaining generic medicines are summarized in **Table 4**. More than half (54%) of respondents said that pharmacists of GMS showed a non-cooperative attitude towards generic drugs and usually substituted branded medicines for generics. About 29 % of the respondents expressed concern about fake medicine or mistrust for generic drugs. Whereas, 17 % of respondents reported that pharmacists don't keep a stock of all generic medicines.

Figure 16: Problems obtaining generic medicines

10. DISCUSSION

Despite policymakers' encouragement, generic medicine use has yet to take off in India. The use of generic drugs has been confined in our country, largely to government facilities. The fact that generic drugs can save money is well-known and undeniable [9]. The limited availability, poor knowledge, and attitude of people regarding quality generic formulations act as bottlenecks to the widespread adoption of generic drugs in case of prescribing and dispensing activity.

Since 2012, Ministry of Health and Family Welfare has implemented the policy of "mandatory generic drug use" in government-funded hospitals [9]. At the same time, to ensure availability of generic drugs which are rarely available in the open market, the Jan aushadhi scheme has been launched in larger public hospitals across the state. This initiative aimed to create public awareness and to increase faith to generic medicines and prompted us to carry out a pilot study for assessment of the awareness of generic drug use among lower strata of Kanpur Nagar.

Public awareness about generic medicines is highly lacking due to improper health care professionals, communication run-down and looting the financial incentives. Safety and efficacy issues were viewed as major barriers to the acceptance of generic drug substitutions. The participants perceived that generics drug was less potent than branded ones. Many people also believed that generic drugs are not "real" medicines. However, poor people are forced to "settle" for generics due to low treatment cost. In our study, participants were socio-economically as well

as educationally constrained, but they still believed that generic drugs available from Jan Aushadhi were ineffective. Most of the participants did not become aware of the government rules about prescribing generic medicines.

The pharmacists (JAK) were concerned about customer confusion following substitution. They reported that it took time to instruct resistant customers and experienced frustration when the customer did not believe that the generic was equivalent to the branded medicine. They are also reported that physicians act as a significant barrier.

Broad community-based awareness programmes about the quality, safety, and efficacy of generic drugs and about the Jan Aushadhi schemes propagated by the government are urgently needed. Jan Aushadhi scheme should be established in interior sub rural areas for making the accessibility of the medicines and can serve the real purpose of the poor. Mandatory availability of

generic medicine is to be provided in the Governments hospitals as many poor people prefer going Primary Healthcare Centres. Educational institutions should take efforts to focus on creating level of awareness, refining the literacy ratio and eliminating the qualms or delusions about generic medications.

Based on the foregoing, the True Need of the Hour is to educate the general public in India about the “effectiveness and efficacy” of high-quality, low-cost medicines, and to convince them that they are just as effective as their branded counterparts, and that they must begin to believe in them.

References:

1. "World Population prospects – Population division". population.un.org. United Nations Department of Economic and Social Affairs, Population Division. Retrieved 9 November 2019.
2. Overall total population" – World Population Prospects: The 2019 Revision" (xlsx). population.un.org (custom data acquired via website). United Nations Department of Economic and Social Affairs
3. United Nations Department of Economic and Social Affairs, Population Division. Retrieved 9 November 2019.
4. India's population to surpass that of China around 2024: UN". The Times of India. 21 June 2017. Retrieved 16 January 2018.
5. Bakthavathsalam G. Generic drugs: cost effective alternative to branded drug, Health Administrator. 2006;19:16-19.
6. Alfonso-Cristancho R, Andia T, Barbosa T, Watanabe JH. Definition and Classification of Generic Drugs Across the World. Appl Health Econ Health Policy. 2015;13 Suppl 1(Suppl 1):S5-S11. doi:10.1007/s40258-014-0146-1.
7. <https://www.fda.gov/drugs/generic-drugs/generic-drug-facts>.
8. <https://www.fda.gov/drugs/questions-answers/generic-drugs-questions-answers>.
9. <https://www.india.gov.in/spotlight/pradhan-mantri-bhartiya-janaushadhi-pariyojana>.
10. Das M, Choudhury S, Maity S, et al. Generic versus branded medicines: An observational study among patients with chronic diseases attending a public hospital outpatient department. J Nat Sci Biol Med. 2017;8(1):26-31.



Annexure**List of 'Jan Aushidhi Kendra' in (Rural and Urban) Kanpur**

Sr. No.	Store Code	District	Kendra Address	Pin Code	Contact Person
1	PMBJK02453	Kanpur Nagar	128/367 H Block, Kidwai Nagar, Kanpur Nagar(Up)- 208011	208011	Sujeet Kumar Mishra
2	PMBJK02454	Kanpur Nagar	Plot No- 60A, Thakur Rp Complex, Panki Road, Kalyanpur, Kanpur(Up)-208017	208017	Deepak Gautam
3	PMBJK02455	Kanpur Nagar	Sonauli Road, 338A K Block Namak Factory Chauraha, Yashoda Nagar, Kanpur(Up)-298011	298011	Rajesh Kumar Maurya
4	PMBJK02458	Kanpur Nagar	20, Makdhikheda, Post - Khyora Nawabganj, Ps- Nawabganj, Kanpur Nagar, Uttar Pradesh, 208024	208024	Babita Yadav
5	PMBJK02459	Kanpur Nagar	37/16, Gillis Bazar, Shivala Behind Kotwali, Kanpur, Up-208001	208001	Balendu Kumar
6	PMBJK02460	Kanpur Nagar	111/415, Pranay Bhawan, Ashok Nagar, Po- Ramkrishna Nagar, Ps- Najeera Baad Thana, Kanpur Nagar, Uttar Pradesh 208012	208012	Deepak Kumar Chakroborty
7	PMBJK02461	Kanpur Nagar	133/49/Juhu O Block, Kidwai Nagar, Po. Tp Nagar Dist. Kanpur Nagar 208023	208023	Madhu Shukla
8	PMBJK02462	Kanpur Nagar	Bajrang Vihar Naubasta Bamba Road Jarauli Phase 1 Near Palace Dist. Kanpur Nagar 208021	208021	Ashish Pratap Singh
9	PMBJK03113	Kanpur Nagar	1, Singh Market, Panchkhura, Po- Ghatampur, Ps- Ghatampur, Kanpur Nagar, Uttar Pradesh	209206	Seemendra Pratap Singh
10	PMBJK03434	Kanpur Nagar	119A-10, Kheora, Surya Vihar Tiraha, Po- Nawabganj, Ps- Nawabganj, Kanpur Nagar, Uttar Pradesh	208002	Abhishek Mishra
11	PMBJK03723	Kanpur Nagar	Aathi Mohal, Utari Station Road, Kanpur Nagar, Uttar Pradesh	208002	Kuldeep Tripathi
12	PMBJK03973	Kanpur Nagar	Gsvm Medical College	208002	Rishabh Gupta
13	PMBJK03974	Kanpur Nagar	J K Cancer Institute	208019	Himanshu Baghel
14	PMBJK03975	Kanpur Nagar	U.H.M.District Hospital	208001	Ankur Kushwah
15	PMBJK03976	Kanpur Nagar	U.H.M District Female Hospital	208001	Raghvendra Dwivedi
16	PMBJK05290	Kanpur Nagar	15, Mahaveer Nagar, Panki Kanpur	208020	Ved Prakash Bajpai
17	PMBJK05872	Kanpur Nagar	128/100A, B Block, Kidwai Nagar	208011	Deepak Srivastava
18	PMBJK06868	Kanpur Nagar	Arazi No-313, Sri Bala ji Market, Mainawati Road, Singhpur Kachhar	208017	Ankit Porwal
19	PMBJK07716	Kanpur Nagar	133/50, Block-O, Hameerpur Road, Bara Devi Chauraha, Juhu	208014	Varun Verma
20	PMBJK07794	Kanpur Nagar	30, Hamirpur Road	208021	Raghvendra Dwivedi
21	PMBJK08039	Kanpur Nagar	H No: 4E-101/17, Ground Floor, Avas Vikas Scheme No-2, Hanspuram, Naubasta Galla Mandi	208021	Sanjeev Tripathi
22	PMBJK08281	Kanpur Nagar	128/543/24 K, Kidwai Nagar	208011	Ranjit Singh Chauhan