



AWARENESS AND PRACTICE OF SELF-MEDICATION: A COMPARATIVE STUDY BETWEEN RURAL AND URBAN POPULATION.

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RGUHS

Abstract:

Short title: Self-medication practices and about its awareness: A comparative study.

Background and objectives:

The World Health Organization (WHO) defines self-medication as the use of pharmaceutical or therapeutic products to address ailments or symptoms that a person has discovered on their own without a doctor's prescription. Every day, we take care of our health by self-medicating. This study's primary goals are to compare the prevalence of self-medication in rural and urban areas and to evaluate the awareness and understanding of self-medication among these populations.

Materials and methods:

This comparative study carried out in rural and urban area for a period of 6 months. This self-medication includes of all adult patient (≥ 18 years of age) of both genders needed to be assessed is included in the study.

Results:

In our study of 90 participants, the majority were in the age group of 28–37 (26%), with 13 from urban areas and 10 from rural areas who were aware of self-medication. A smaller group, aged 58–67 (7%), included 6 people from rural areas who were least aware of self-medication. Self-treatment can lead to adverse effects, misdiagnoses, and possibly worsen other medical conditions

Interpretation and Conclusion:

This comparative study on self-medication practices between rural and urban populations highlights significant differences in awareness, sources of information, and attitudes towards self-treatment. Urban participants generally showed higher awareness of self-medication and its risks, possibly due to higher education levels and greater access to information sources. The study reveals that while self-medication can provide immediate relief for mild illnesses, there is a chance that it will be misdiagnosed, have side effects, and cause delay in treatment.

KEYWORDS: self-medication, Rural and urban area, over the counter drugs, Attitude towards self-medication.

INTRODUCTION

According to the World Health Organization (WHO), self-medication is when people use pharmacological or therapeutic goods to treat illnesses or symptoms they have identified on their own without a prescription from a physician. We self-medicate on a daily basis as a way to take care of our health. ⁽¹⁾

The taking of drugs, herbs, or home remedies on one's own initiative, or on the advice of another person, without consulting a physician," is the classic definition of self-medication. ⁽³⁾

Self-medication frequently comes from friends, family, neighbors, the pharmacy, a previously prescribed prescription, or recommendations from ads in newspapers or popular periodicals. The "desire and ability of people/patients to play an intelligent, independent and informed role, not merely in terms of decision-making but also in the management of those preventive, diagnostic and therapeutic activities which concern them" is how self-medication should be viewed today. ⁽³⁾⁽⁴⁾⁽⁵⁾

WHY DO PEOPLE USE SELF-MEDICATION

Self-medication is widespread and can be attributed to a variety of factors. ⁽⁶⁾ The growing tendency of self-medication is caused by a number of factors, including the need for self-care, empathy for ailing family members, a lack of time, a lack of health services, financial constraints, misinformation, misconceptions, widespread advertising, and the availability of pharmaceuticals outside of pharmacies. ⁽⁷⁾

In India, it is very common to see self-medication practice and which is emerging challenge to health care providers maintaining their own health and are frequently capable of managing (uncomplicated) chronic and recurrent illnesses.

The government should therefore take the required actions to control responsible self-medication. This can be achieved by providing safe medications, appropriate usage instructions, and, if necessary, medical advice. ⁽⁸⁾⁽⁹⁾

In India around 53.6% of the population engages in self-medication. Notably, self-medication rates in Western India's rural and urban areas are documented as 51.5% and 29.1%, respectively. ⁽¹⁰⁾

POST COVID 19 STUDY:

Healthcare activities, such as community healthcare, clinical visits, and routine check-ups with doctors, were restricted as a result of the COVID-19 epidemic. As a result, more and more people and their families are using self-medication techniques without consulting medical specialists. ⁽¹²⁾

The best place to get prescription drugs is from a pharmacy. ⁽¹³⁾ The main reason for self-medication has been found to be fear of getting the virus, together with the experience of fever and milder symptoms. ⁽¹⁴⁾

There is, however, a dearth of research on the prevalence and trends of self-medication following the COVID-19 pandemic. As a result, the current study attempts to close this gap by evaluating the variations in self-medication prevalence and trends. ⁽¹⁵⁾

Focus on India:

There is no over-the-counter (OTC) category in India, and pharmacists are only allowed to sell medications with a qualified physician's prescription. To regulate the selling of medications without a prescription, the Central Drugs Standard Control Organization (CDSCO) in India implemented schedule H1 on March 1, 2014. There are currently 46 medications listed in schedule H1. ⁽¹⁹⁾⁽²⁰⁾ Twenty-four antibiotics, including third and fourth generation cephalosporins, carbapenems, antituberculosis medications, more recent fluoroquinolones, and several pharmaceuticals that can cause addiction, are on the H1 list. ⁽¹⁹⁾ The required Schedule H1 warning is placed on the label of these medications' packaging, which is a red-bordered box with the Rx sign in red.

WHAT ARE OTC DRUGS?

In contrast to physician-endorsed drugs, which may only be available to customers with a significant prescription, over-the-counter (OTC) pills are pharmaceuticals that are legally sold to a customer without a valid prescription from a medical service provider. However, the term "over-the-counter" drug is not actually recognized in India, where any drugs that are not prescribed are referred to as OTC drugs. ⁽²¹⁾ Self-medication medications are frequently purchased over-the-counter (OTC) and are available at pharmacies without a prescription from a professional. ⁽²²⁾

MATERIALS AND METHODS.

This comparative study carried out in rural and urban area for a period of 6 months. This self-medication includes of all adult patient (≥ 18 years of age) of both genders needed to be assessed is included in the study. Comparative observational study between rural and urban population and depending on the study area, a representative sample size has been calculated. Total of 90 patients from various rural and urban areas of Bangalore.

COLLECTION OF DATA.

The data was collected of the period of April 2024 to September 2024. Demographic details (name, age, history, etc.) prescribed detail of diagnosis, prescription of drugs and allow with the prepared questionnaires are recorded in the predetermined patient from.

INCLUSION AND EXCLUSION CRITERIA;

The inclusion criteria for the study included in the study were adults aged 18 years and above, who were permanent residents of the selected rural or urban area, having lived there for at least the past five years. They were required to provide informed consent to participate in the study and have self-medicated at least once in the past 12 months. Additionally, they needed to be proficient in understanding and responding to the questionnaire in the local language or the language in which it was administered.

The exclusion criteria for the study included individuals below 18 years of age, healthcare professionals such as medical, pharmacy, or allied professionals who may have a biased understanding of self-medication, and individuals with mental or cognitive impairments that hinder their ability to provide reliable information or informed consent. Temporary residents, such as students or seasonal workers without a permanent connection to the community, and non-responders who either did not complete the survey or withdrew consent during the study, were also excluded.

RESULTS

1. AWARENESS OF SELF MEDIATION:

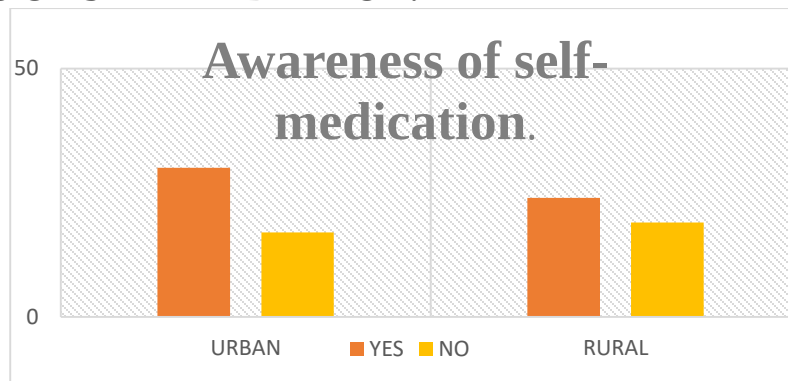


Figure no 1: Graphical representation of awareness of self-medication.

2. SELF MEDICATION AWARENESS SOURCE:

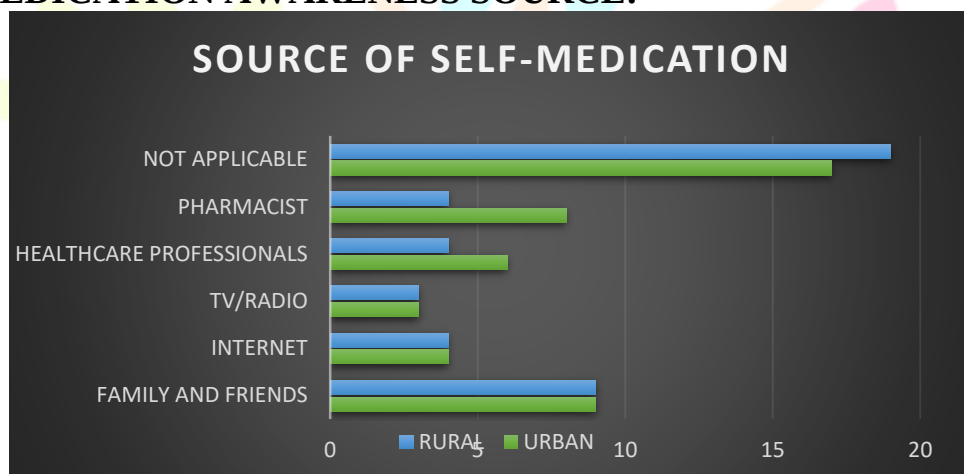


Figure no2: Graphical representation of information source of self-medication.

3. AWARENESS OF POTENTIAL RISK:

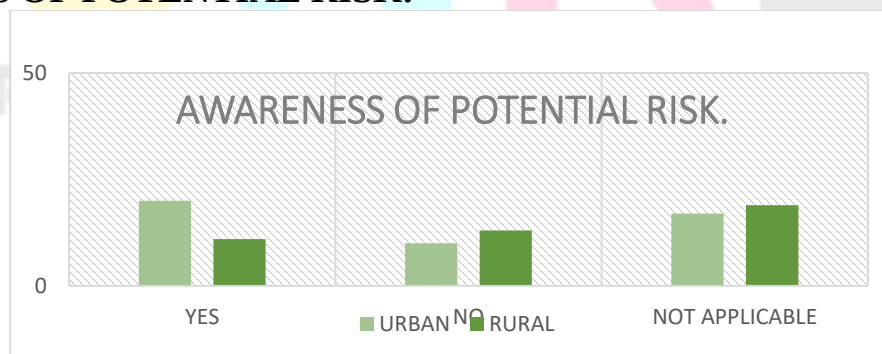


Figure no 3: Graphical representation of awareness of potential risk.

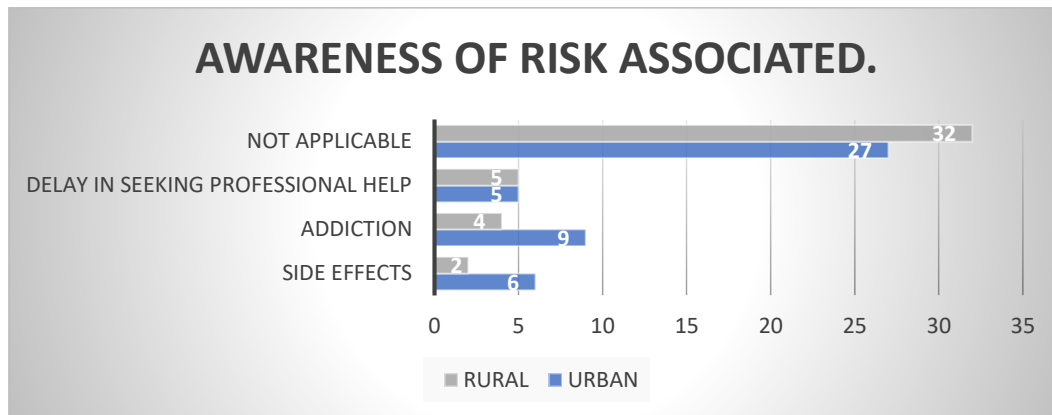
4. AWARENESS OF RISK ASSOCIATED:

Figure no 4: Graphical representation of awareness of risk associated.

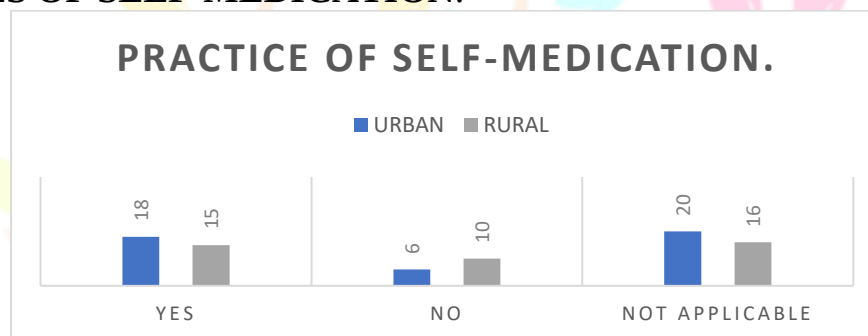
5. PRACTICES OF SELF-MEDICATION:

Figure no 5: Graphical representation of practice of self-medication.

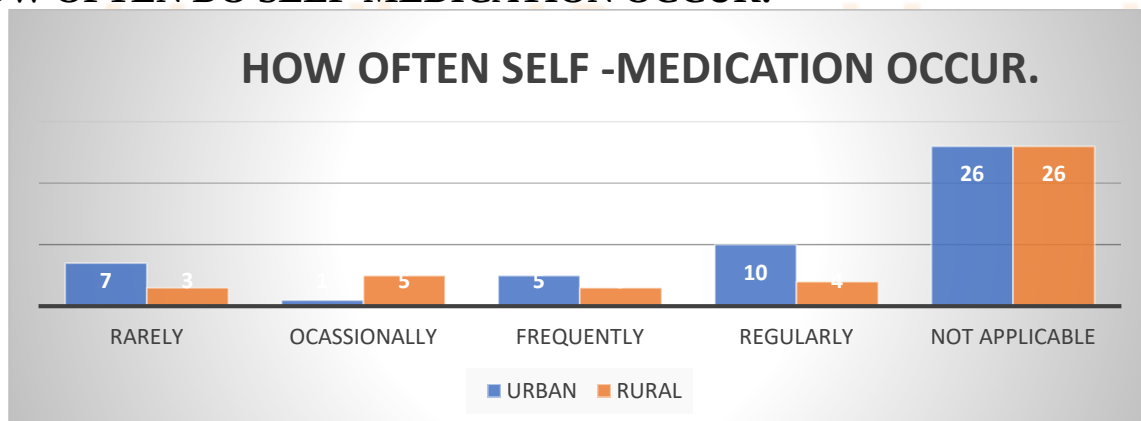
6. HOW OFTEN DO SELF-MEDICATION OCCUR:

Figure no 6: Graphical representation of how often self-medication occur.

7. TYPE OF MEDICATION:

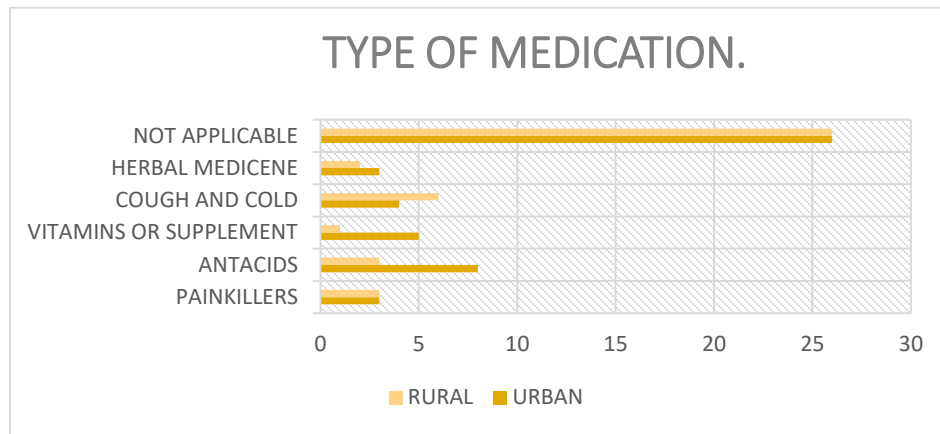


Figure no 7: Graphical representation of type of medication.

8. MAIN REASON FOR SELF- MEDICATION:

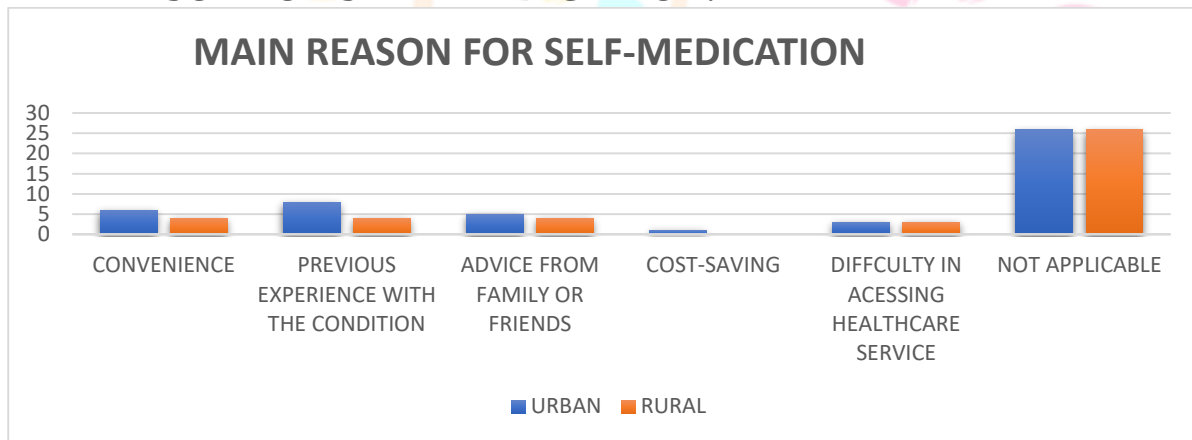


Figure no 8: Graphical representation of main reason for self-medication.

9. MEDICINE SOURCE:

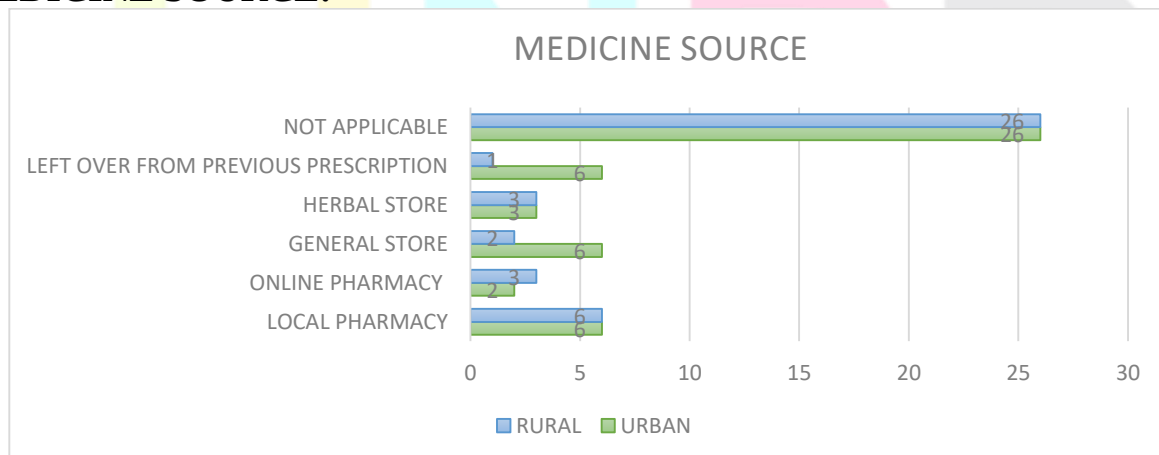


Figure no9: Graphical representation of medicine source.

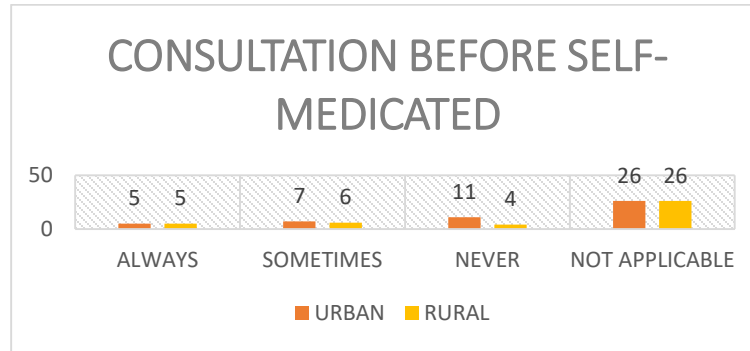
10.DO YOU UNDERGO CONSULTATION:

Figure no10: Graphical representation of consultation.

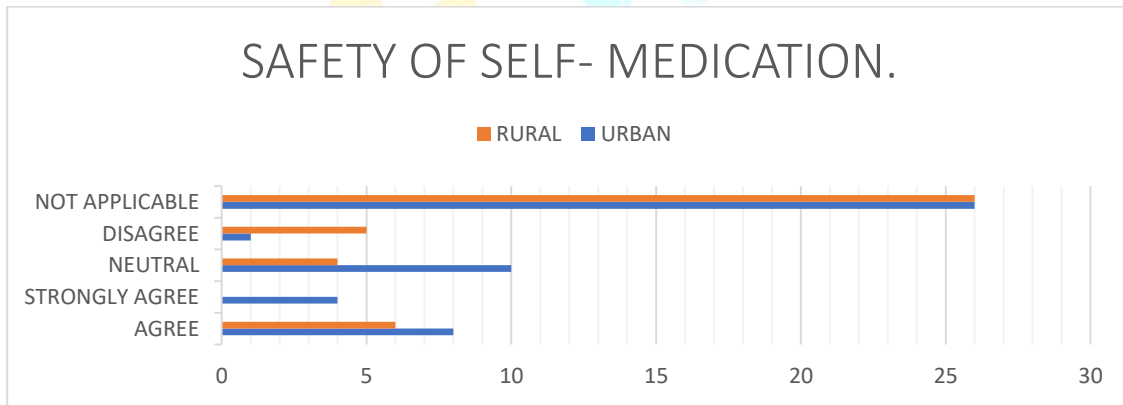
11.DO YOU BELIVE IN SAFETY OF SELF-MEDICATION:

Figure no11: Graphical representation of safety of self- medication.

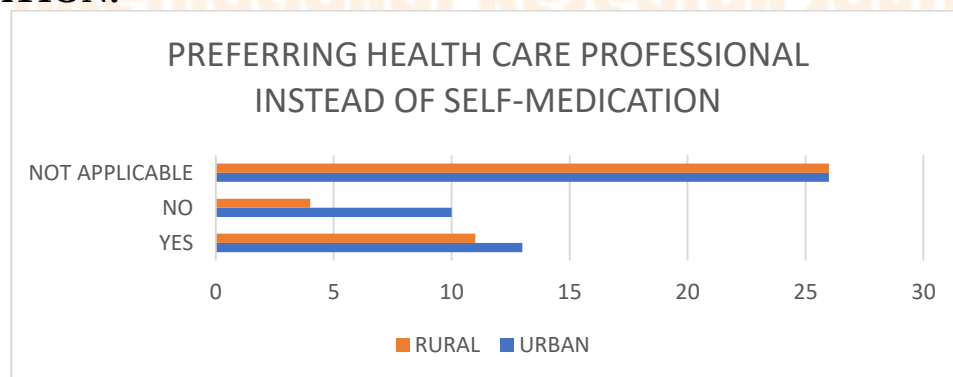
12. WOULD YOU PREFER HEALTH CARE PROFESSIONAL INSTEAD OF SELF-MEDICATION:

Figure no 12: Graphical representation of preferring health care professional instead of self-medication.

13.DO YOU THINK MORE PUBLIC AWARENESS IS NEEDED:

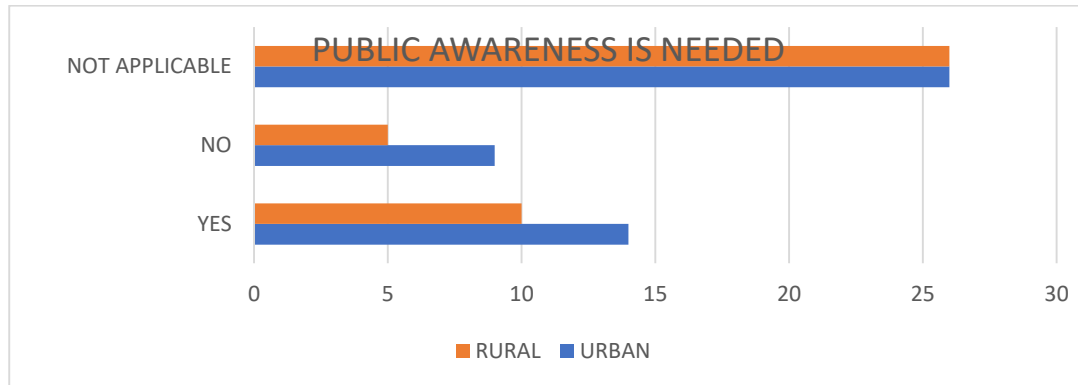


Figure no 13: Graphical representation of public awareness is needed.

14.MEASURES TO BE TAKEN:

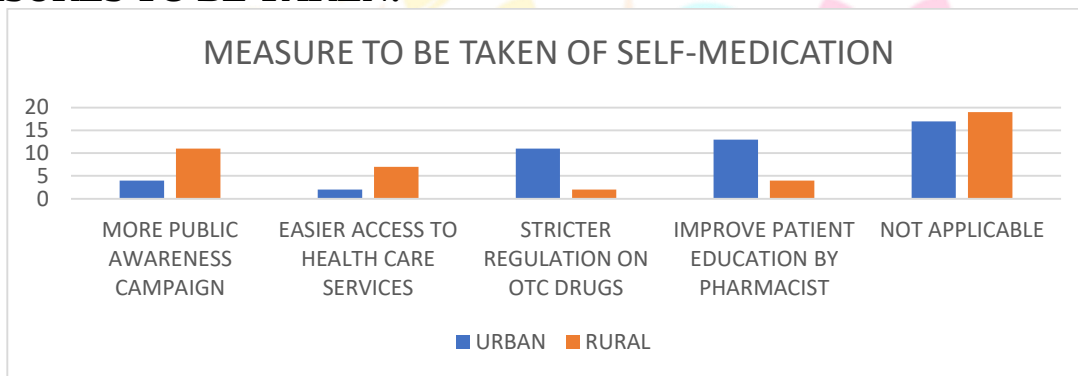


Figure no 14: Graphical representation of Measure to be taken of self-medication.

DISCUSSION

Self-medication is traditionally defined as "the use of drugs, herbs, or home remedies on one's own initiative or on the advice of another person, without consulting a doctor." In this study, a representative sample size was calculated based on the study area, and a total of 90 patients from various rural and urban areas in Bangalore participated. Consent was obtained from the patients using a consent form, prepared in both English and Kannada, after thorough information was provided.

Data was collected through demographic details, patient medication prescriptions along with case report forms (CRFs), and patient assessments using prepared questionnaires. The collected data was then subjected to statistical analysis, and the results are presented in suitable graphical formats.

In our study of 90 participants, the majority were in the age group of 28–37 (26%), with 13 from urban areas and 10 from rural areas who were aware of self-medication. A smaller group, aged 58–67 (7%), included 6 people from rural areas who were least aware of self-medication.

Regarding gender, out of 90 participants, 53 (59%) were female, including 26 from urban areas and 27 from rural areas, while 37 (41%) were male, with 21 from urban areas and 16 from rural areas. In terms of education, the largest group, 26 (29%), held postgraduate degrees, while the smallest group, 7 individuals (8%), had no formal education. Among the participants, 47 (53%) resided in urban areas, while 43 (47%) were from rural regions.

Concerning professional background, the largest group consisted of 21 professionals (24%), while the smallest group included 16 unemployed individuals (18%). When it comes to self-medication awareness, 54 participants (60%)—30 from urban areas and 24 from rural areas—reported being aware, whereas 36 (40%)—17 from urban areas and 19 from rural areas—were not aware of self-medication.

The primary source of self-medication awareness was "not applicable" for 36 individuals (40%), with 17 from urban areas and 19 from rural areas. The least cited source of awareness was family, with 18 individuals (20%)—9 each from urban and rural areas. Furthermore, 23 individuals (26%)—10 from urban and 13 from rural areas—were unaware of potential risks. Additionally, 8 individuals (9%)—6 from urban and 2 from rural areas—acknowledged drug-related side effects, and 16 individuals (18%)—10 from rural and 6 from urban areas—had not engaged in self-medication practices. According to the study of S. Kayalvizhi and dr. R. Senapati, eighty-five percent of the respondents were in favor of self-medication while compared to our study it shows only 40% respondents were favor of self-medication who were aware about it. ⁽²⁶⁾

Occasional self-medication was practiced by 6 individuals (7%), with 1 from an urban area and 5 from rural areas. Another 5 individuals (5%)—3 from urban and 2 from rural areas—used herbal medicines, while 52 individuals (58%) fell into the "not applicable" category. The least common reason for self-medication was cost-saving, cited by only 1 individual (1%). Comparing our study with Prasanna Samuel babu et al, our study shows a difference of 36% with their results on the self-medication practiced by the individuals. ⁽²⁷⁾

Additional sources included herbal stores, reported by 6 individuals (7%)—3 each from urban and rural areas—while 10 individuals (11%)—5 each from urban and rural areas—always sought consultation, and 4 individuals (4%), all from urban areas strongly on the safety of self-medication Furthermore, 14 individuals (15%)—10 from urban and 4 from rural areas—preferred self-medication over consulting healthcare professionals, while another 14 individuals (15%)—9 from urban and 5 from rural areas—felt no need for increased awareness about self-medication.

Raising awareness about self-medication and its hazards is essential. It is crucial for people to understand the potential harm of taking drugs without consulting a specialist. Self-treatment can lead to adverse effects, misdiagnoses, and possibly worsen other medical conditions. This knowledge empowers individuals to be cautious about self-medication and prioritize seeking appropriate medical advice, thereby promoting safer health practices within the community.

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Conflict of interest:

None.

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