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A Comparative Study to Assess the Self-Reported Practices of Over-the-Counter Medications Uses among Adults in Urban and Rural Community

Jaya John Varghese[1]*, Shinde Sonal[2], D'souza Joanita[3], Attar Nilofar[4], Thange Pratibha[5] and Awate Asha[6]

[1]Associate Professor, Sadhu Vaswani College of Nursing, Pune India

Greentree Group

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ABSTRACT

Self medication is a human behavior in which an individual uses a substance or any exogenous influence to self administer treatment for physical or psychological ailments. The most widely self medicated substances are over–the-counter drugs used to treat common health issues at home. Self-medication is often seen as gaining personal independence from established medicine and it can be seen as human right, implicit in or closely related to the right to refuse professional medical treatment. In India, though the phrase 'over the counter drugs' has no legal recognition, so all the drugs not included in the list of 'prescription drugs' are considered as OTC drugs

Objectives:

1. Assess the self reported practices of over-the- counter medication uses among adults in urban and rural community.
2. To categorize the common medications used among adults in urban and rural community.
3. To compare & categorize the common medications used among adults in urban &rural community.

Setting: Urban community of Yerwada and rural community of Loni Kalbhore.

Participants: Adults (18-60 years) of urban and rural community , 500 participants from each community. The sample were chosen according to non -probability purposive sampling.

Methods: The tool, questionnaire was prepared to collect the data related to self-reported practices of over-the- counter medication uses. The tool consists of semi-structured questionnaire, which has two sections. After obtaining the informed consent, All participants were given the questionnaire related to demographic data and practices of over-the- counter medication uses among adults

Results: Age of starting self-medication: The age of using self-medication in urban community is (32%) at 18-20yrs, whereas (25%) in rural community.

Common ailments of use of self-medication: Regarding the use of OTC for self-medication, adults were mostly prompted due to cough/ cold and headache were the most common, followed by pain and fever . This could have been because of cough/cold / headache are the most common symptom that we encounter in day to day life of urban community where as Pain and fever were the most common symptoms in rural community .

Commonly use drugs for self-treatment : The drugs which were frequently used for self-medication in our study were antipyretic and analgesic followed by cough expectorant were in urban and rural community. The commonly used drug for self-treatment in our study was crosin (32%) in urban community (24%) in rural community ,followed by cough syrup.

Treatment Modalities : Apart from treatment prescribe by general practitioner other treatment modalities are Traditional healers (33%) in urban community whereas (27%) in rural community followed by homeopathy in both communities

Conclusion: This study shows that majority of the participants were aware of OTC drugs and self-medication is widely practiced among them. Cough/Cold/ Headache were the most common ailments for seeking self-medication and analgesics, antipyretics were the most common drugs used. Confidence in self-medication, finding difficulty in going- to doctor where the some of the reasons for using OTC drugs. Majority of the participants used media advertisements as the source of information to know about OTC drugs. Large number of Adults was aware of package insert/prescription label and also they followed label instructions while self-medicating. There is a need to create awareness and educate students regarding advantages and disadvantages of self-medication by the teaching faculties in the institutions.

KEYWORDS
Self - reported, Practices, Over -the- counter (OTC) Drugs, Self administration

INTRODUCTION

Self-medication is defined as procure and consuming medications without the consult of healthcare professionals for prevention, diagnosis and treatment. The history of self-medication practice is very old from global perspective, with significant influence in developing countries like India. Self-medication is generally called 'non-prescription' or 'over the counter'(OTC) medications and can be obtained without a physician prescription from the retail pharmacies and some from non- pharmacy retail outlets. In India, few important causes for increase in self-medication are showing sympathy toward their ill relatives or friends, healthcare services not easily available specially in rural areas, poverty, unawareness, misbelieves, too much drug advertisements given by pharmaceutical companies, and easy access to medications from pharmacies because full time pharmacist is not available, pharmacy run without pharmacists and common drugs can be attained from kirana shops (other than pharmacy).

A patient with milder illness such as fever, cold/cough, diarrhea, indigestion or wound infection etc, may receive advice like a healthcare professional from their own friends, family members or some time from strangers regarding pharmaceuticals specially about scheduled medications like antibiotics, NSAIDs etc. In India, Schedule H (prescription drugs) and Schedule H 1 (antibiotics and other restricted medications) can be sold by a legally qualified registered pharmacist upon presentation of valid prescription as per Drug and Cosmetics Act of 1943[1].

A majority of the population when they fall ill not consult with the healthcare professionals especially in rural or small cities In India. However, they do consult directly to the pharmacy and/or retail drug store and can easily get medications for oneself and for friend, family members or a neighbour. In India, advertisement in media or in any other form regarding drugs and diseases are banned under Drug and Magic Remedies Act and Schedule under drug and cosmetics act but pharmaceutical companies do advertise their products such as sexual products, baldness or prevent hair hall, cancer, heart diseases and others related to women health etc. Retail pharmacy owner also advertise or show their products especially antimicrobial and other prescription products to increase their sale. Furthermore, for self medication or OTC medications, practices are promoted

by World Health Organization (WHO) without physician consultation for useful and rapid relief of symptoms to decrease the load on common people health care related expenses specially in rural and remote areas where already developing countries facing shortage of trained health care professional. The customers identify his/her own diseases or problem and take a specific drug to treat it.

Non prescription (OTC) drugs or products give symptomatic relief for specific symptoms that do not need always medical involvement. In developed countries, OTC medications have been used widely to fight behavioral and psychological problems such as smoking. Their counseling regarding OTC medicines have positively influenced millions of people to reduce the risk of various types of diseases . On the other hand, developing countries are concerned about irrational use of drugs specially the trained healthcare professionals. Additionally in developing countries including India, a wide range of medications are easily available without prescriptions and insufficient healthcare budget or health related services are provided by the state .

Even though all OTC products used for self-medication are already well- known for their safety and efficacy but their inappropriate use due to lack of information such as their adverse effects, interactions with other drugs or food have severe complications especially in the pediatrics, geriatrics and during pregnancy and lactation. There is always a risk of unpredictable interactions between OTC (active ingredient) product, other prescription drugs and other medications like alternative system of drugs that is practice by patients. Previous literatures have reported that the prevalence of self medication antibiotics in rural India is 37% and in urban India, 31.3% Abram et al (2014) conducted a study at rural north Indian population and reported self medication practices to be 50%. Overall very few studies focused on self medication practices in rural and urban area in north India[2]

The mechanisms by which individuals can obtain medicines include not only their traditional prescribing by doctors, but also the ability to purchase medicines directly. The most obvious example of this is the community or retail pharmacy, where the metonymic term over-the-counter (OTC) originates and is used to describe such medicines. Such availability has been argued to offer benefits in terms of convenient access to, and choice of, medicines as well as involving individuals as active participants in their own health and the treatment

Specific objectives were to identify the different types of OTC medicines implicated, the scale of OTC abuse, the characteristics of those affected, harms associated with OTC medicine abuse.

The practice of self-medication is very common in developing countries like India. Several problems have been reported to be associated with self-medication like wastage of resources, adverse drug reactions and antimicrobial resistance. Not many studies in past have explored the differences regarding the knowledge, attitude and practice of self- medication in rural and urban population of India.

LITERATURE REVIEW

Across sectional survey was conducted on 200 participants randomly selected from the coastal regions of south India. Each participant underwent a face to face interview with the help of a structured questionnaire the result reported self medication use by 71% of the subjects, which ranged from a frequency of at least one time to a maximum of 5 times and above. Lack of time (41.5%), minor illness (10.5%) and quick relief (10%) were cited as the most common reason for self medication use. The majority of the participants (93.5%) were not aware about the side effects[4] .

Another study was conducted to evaluate the self-medication of self-prescribed antibiotics among government doctors in the Hassan district, Karnataka[6]. A close and open-ended questionnaire was used to collect data from a sample of 160 government doctors, randomly chosen from Hassan district. Data was collected using a self assessing questionnaire. Out of 160 doctors only 97.5% filled and returned the questionnaires. the result showed that most used antibiotics for self medications are Penicillin (68%) and Amoxicillin (32%)

Similarly a descriptive study was conducted about self-medication among children and adolescents in Germany[7] to investigate the prevalence and correlates of self-medication .17450 children aged 0–17 years participated in the 2003-2006 German health interview and examination survey for children and adolescents. The result was 25.2% of participants reported self-medication. Self-medication accounted for 38.5% of total medicine use and included all medication classes. Use of self-medication was closely related to older adolescent ages of between 14 and 17 years, children with a poor health status, with no immigration background, from families with a higher household income and with mothers with a higher educational level. The conclusion was self-medication

use is highly prevalent in Germany, particularly among children and adolescents from families with a higher socioeconomic status[5].

A cross-sectional study was conducted to assess the prevalence of antibiotic misuse among boarding secondary school students in Dares Salaam, Tanzania[6]. A randomized sample of students was recruited from at least 3 secondary schools from each of the three municipalities. The result was a total of 424 randomly selected students with a mean age of 20 years were interviewed, of those 150 were females and 274 were males. Prevalence of antibiotic usage among the students was high (69%). Of 293 students who had used antibiotics, 73% of them had procured the drugs on prescription. The conclusion was that the study revealed inadequate knowledge on antibiotics among the respondents and that pharmacy played a major role on easy availability of antibiotics as over-the-counter drugs attributing to high rate of irrational use of antibiotics[7].

A cross-sectional study was conducted to evaluate the knowledge and behavior towards antibiotic self-medication among medical and non-medical university students in Iran. Study sample included 200 randomly chosen students from a medical and a non-medical university in Ahwan. A total of 195 university students participated in the study. But there were no significant variation between male and female students in self- medication pattern. About 42.2% of medical students and 48% of non-medical students of study population had used antibiotics without a prescription or medical advice. Among penicillin's, amoxicillin was the most frequently used in self-medication for non-medicals students. The factors responsible for self- medication include their academic medical knowledge (50%) among the medical group and previous experience with prescribed medication (32.6%) in the non-medical group[8].

A cross-sectional study was conducted to assess the extent of self-medication practice among random sample of an-najah national university students, Palestine. It included 1581students of different academic levels enrolled at different faculties. A pre-validated questionnaire with several open-ended and closed-ended questions was administered to the students. The result was sixty three percent of respondents were females enrolled at non-medical schools. The mean age of respondents was 19.9 years. Ninety-eight percent of respondents reported practicing self-medication. Analgesics, decongestants, herbal remedies, and antibiotics were the most common classes reported in self-medication[9].

A narrative study was conducted to review the literature relating to self-medication practice with non-prescription medication among university students in university Sains Malaysia library. The result was that eleven studies were identified. In general, the review showed that self-medication practice with non-prescription medication was highly prevalent among university students. The common medications were analgesic, antipyretic products, cough and cold remedies, anti allergy and vitamins or minerals. The sources of the medicines were pharmacy, home medicine cabinet, supermarket/shop and other person such as family, friend, neighbors and classmates. The sources of drug information were family member, previous experience pharmacy salesman, doctor or nurse, advertisement and others . The review also showed that the self-medication practice could have many problems[10].

A descriptive study was conducted to assess the self-medication practices and the factors influencing self medication practices among the people living in Ghulam Mohammad Abad, Faisalabad. By simple random technique a sample of 369 people were selected. A pre-tested questionnaire was filled by interviewing each individual. The result was prevalence of self medication found in study group was 61.20%. An increase pattern of self medication practices were found in the younger age group (15-35 years) which were 64.8 %. Self medication practice was found more in male (64.5%) as compared to female (58.5%). The unmarried persons as compared to married were involved 8% more in self-medication. Similarly 11% increase pattern of self medication was observed amongst the respondents belonging to nuclear family (66.9%) as compared to extended type of family status (55.9%). There were 13.60% more practices of self medication in urban population (64.2%) as compared to rural (50.6%) and self medication was observed in illiterate (50.4%) and in metric level education (62.3%) and person's having education above metric (74.4%). The prevalence of self medication was more among skilled labor (75.9%) as compared to (54.9%) in unskilled labor[11].

As we know medicines are essentially foreign substances to human body and if not used with utmost care they can harm our normal physiology . Hence, medicines need to be of good quality, safety and besides this should be used rational. If the medicines are used in irrational mode they may prove wide spread health hazards like unsafe treatment, prolonged illness, adverse drug reactions, loss of patient's

confidence in health system. On the other hand rational use of medication saves lives, makes sense and saves cents. It limits undesired toxicity and adverse events and maximizes on the benefits that can be derived from optimal use of medications. Patients are encouraged to always obtain advice from healthcare professionals to interpret symptoms of an illness and the appropriate remedy thus helping patients to adhere to treatment through effective and widely available enhancing flow of knowledge and information regarding rational use of drugs12.

Self medication can result in a number of psychological health conditions, such as anxiety, depression and bipolar disorders. There are mental conditions which one can suffer due to over reliance on self medication. There are numerous hazards due to self medication. The key hazard is addiction not only adults, teenagers are also at risk of self medication.

STATEMENT OF PROBLEM

A comparative study to assess the self reported practices of over-the- counter medication uses among adults in urban and rural community.

OBJECTIVES OF THE STUDY

1. Assess the self reported practices of over-the- counter medication uses among adults in urban and rural community.

2. To categorize the common medications used among the adults in urban and rural community..

3. To compare and categorize the common medications used among the adults in urban and rural community.

Assumption: The study assumes that

OTC medications is a global behaviour for minor ailments in adults

Adults of 18-60 years are more conscious about self help and health of family members

OTC medications are easily available even in general stores

Delimitations : The study is limited to,

- Study was limited to 1000 samples
- Data were collected from one urban and one rural community
- Adults below 18 and above 60 years are excluded
- Adults who are on regular treatments for medical conditions are excluded

MATERIALS AND METHODS

Research approach:

This study is descriptive in nature, which aims at finding out the self reported practices of over-the- counter medication uses among adults of rural & urban community

Research design:

Variable: Self reported practices of over-the counter medication uses is the invariable of this study

Research setting:

Urban community of yerwada, Pune and rural community of Loni -Kalbhore, Pune

Population: The population for the present study is all the **a**dults (18-60 years) of urban and rural community

Sample:

The sample consisted of adults (18-60 years) of urban and rural community,500 participants from each community

Sampling technique:

Non- probability purposive sampling technique is used for the study.

Development of tool:

Semi- structured questionnaire was prepared to collect the data related to self -reported self reported practices of over-the-counter medication uses.The tool was constructed by the investigator in the light of the literature reviewed and her experience in the clinical field to ensure the adequacy and validity of the content.

Description of the tool: Study instruments used by the researcher consisted of two sections:

Section I: demographic data: It contains five items for obtaining information regarding age, education ,occupation, monthly income and type of family .

Section II: Semi structured questionnaire.

It consisted of 25 questions on self reported practices of OTC medications

Questionnaire to assess the self reported behaviours regarding self reported practices of OTC medications and its uses such as most preferred medicine system, source of drug information, most common symptoms and common drugs .General opinions such as age at which OTC medications are started ,reasons for , source or availability .how to calculate the dosage ,when to stop etc. self reported practices such as checking the instructions in the package ,change the dosage , switch the drugs during course of self treatment, common adverse reactions of self medications. Tools are prepared in English and translated into Marathi.

Data collection procedure:

The formal permission was obtained from Nagar-Sevakh of Yerwada Urban community and Sarpanch of Loni-Khalbhore rural community. The study was conducted on 3rd - 30th November 2016 in urban community and from 30th January to 25th February 2017 in rural community. The investigator approached the study subjects, explained to them the purposes of the study and obtained the consent after assuring the subjects about the confidentiality of the data. The

questionnaire was explained, all the doubts in the community regarding the questionnaire were clarified. The average time taken to fill the questionnaire was one hour.

Plan for data analysis

The data analysis was planning to include descriptive and inferential analysis. The descriptive analysis would be used for analysis of the demographic data and section A. Comparative study was done to assess the practices of over the counter medication uses among adults in urban and rural community.

RESULTS

Section I Description of Demographic Variables

Table 1 Age distribution of adults N-1000

Demographic variable	Categories	frequency		Percentage	
		Urban	Rural	Urban	Rural
Age	18-21	170	140	34	28
	21-30	240	130	48	26
	31-40	60	130	12	26
	41-60	30	100	06	20

Present study shows majority (48%) of urban community participants were in age group 21-30 years, whereas (34%) of them belongs to 18-21 years, (12%) of them 31-40 years, were (06%) of them 41-60 years. Whereas majority of rural population (28%) were in 18-21 age group years whereas (26%) of them belongs to 21-30 years, (26%) of them in 31-40 years and (20%) of them in 41-60 years.

Table 2 Educational status adults **N-1000**

Sr no.	Demographic variable	Categories	frequency		Percentage	
			Urban	Rural	Urban	Rural
2	Educational status	Illiterate	30	50	6	12
		10^{th}	230	140	46	28
		12^{th}	135	225	27	45
		Graduated	105	85	21	17

Present study shows, Majority (46%) of the total population in urban community has completed 10^{th} , (27%) has completed 12^{th} ,(21%) has done graduation and (6%) are illiterate whereas in the rural community Majority (45%) of the total population samples has completed 12^{th} , (28%) has completed 10^{th} ,(17%) has done graduation and (12%) are illiterate.

Table 3 Occupation distributions of urban adult **N-1000**

Sr no.	Demographic variable	Categories	frequency		Percentage	
			Urban	Rural	Urban	Rural
3	Occupation	Professional	75	35	15	7
		Service	255	112	51	22.4
		Self employed	135	268	27	52.6
		Unemployed	35	85	7	17

Majority (51%) of urban community adults are doing service whereas Majority (52.6%) of rural community adults are having their own business. in urban

community 7% are unemployed whereas in rural community (17%) are unemployed.

Table: 4 Type of family **N-1000**

Sr no.	Demographic variable	Categories	frequency		Percentage	
			Urban	Rural	Urban	Rural
4	Type of family	Single/separated	17	03	3.4	0.6
		Join family	362	263	72.4	52.6
		Nuclear family	108	174	21.6	34.8
		Expanded family	13	60	2.6	12

Present study shows Majority of the participants are from Join family , (72.4% urban community and 52.6% in rural community. equally single/separated family (3.4%) are from urban in comparison with (0.6%) are from rural community

Table 5 Monthly income distributions of urban &Rural adults **N-1000**

Sr no.	Demographic variable	Categories	frequency		Percentage	
			Urban	Rural	Urban	Rural
5	Monthly income	3000-7000	35	165	07	33
		7001-12000	196	254	39.2	50.8
		12001-20000	193	70	38.6	14
		20001<	76	11	15.2	2.2

Majority of the participants are having 7001-12000/- income of per month, (39.2%) of urban community and (50.8%)of rural community. minority of the rural community are above 20001/- per month (2.2%) whereas (7%.) of the urban community are having 3000-7000 /- per

Section II

Self Reported Practices Of Over The Counter Of Medication Uses Among Adults

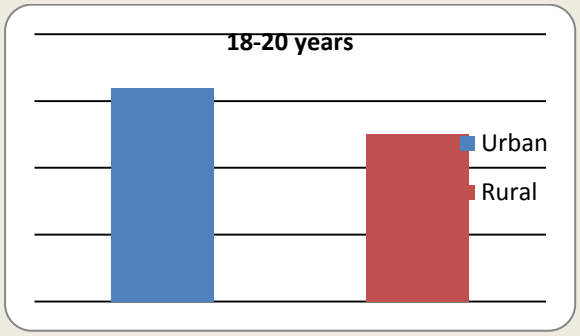

Fig 1 Age of inception of self medication

Figure 1: Bar graph shows the comparison of Age of starting self medications in urban and rural is 18-20 years. the urban population started earlier than rural population.

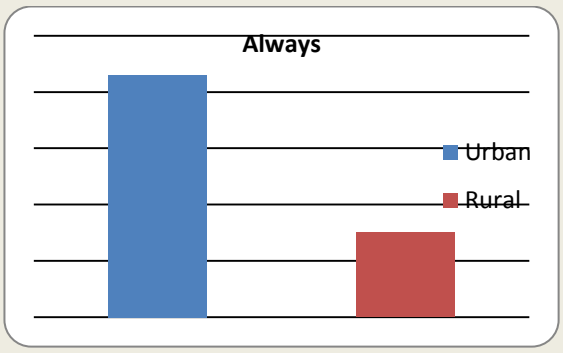

Fig 2 Checking the instruction in the package of drugs

The above Bar graph shows the description of practice of checking instruction on drug package in urban and rural population, the practice is more in urban than rural population.

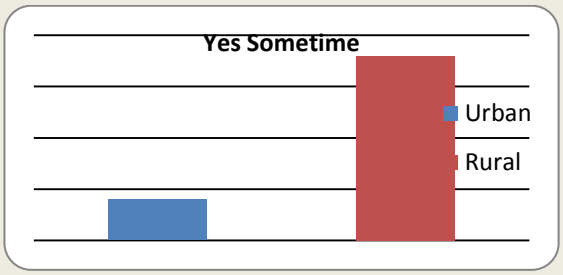

Fig 3 Changing drug during course of self medication

the above Bar graph shows the practice of changing drugs even in self medication . Rural population have high tendency of changing the drug sometime, during course of self medication than urban.

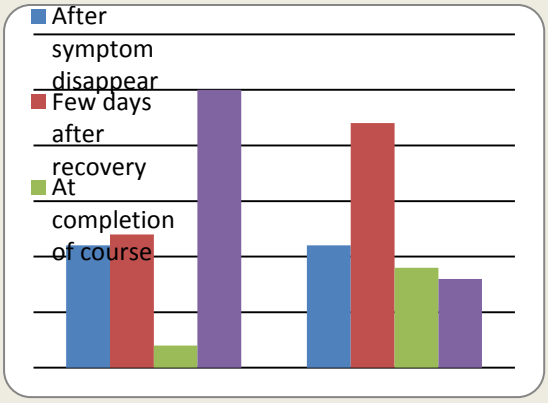

Fig 4 Stop taking self medication drug regardless of outcome

Above bar graph shows the comparison of practice of stopping self medication. After disappearance of symptoms are equal among both population. majority of the rural population stops after recovery than urban population.

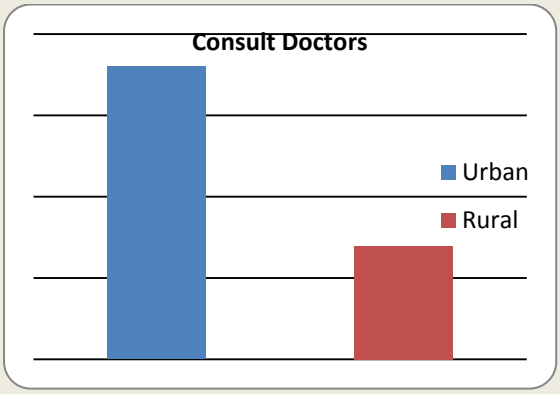

Fig 5 Practice for adverse reaction after self medication

Above graphical presentation shows the practice of adverse reaction resulting from self medication is consulting the doctor this practice also more in urban population than in rural population.

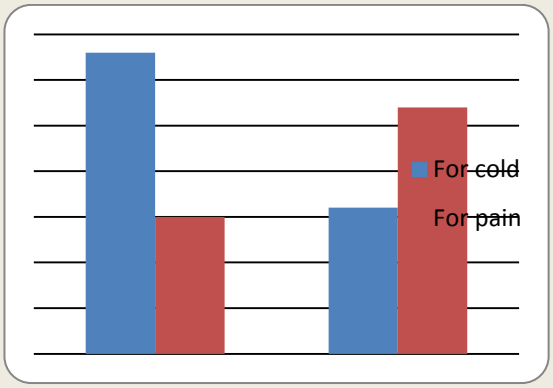

Fig:6 Taking self medication along with prescribed medicine

This graph shows the practice of using self medications along with prescribed medicine. For cold urban people use self medication more than rural population whereas for pain, rural population use self medications more than urban population.

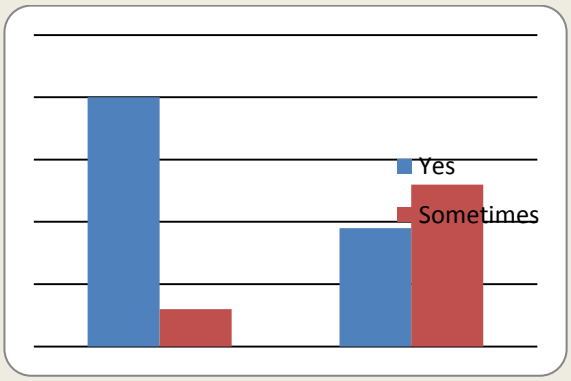

Fig 7 Checking the expiry date of medicine

This Bar graph shows the urban population is having the practice of checking the expiry date of medicine more than rural population .

SECTION III

Categorize and compare the medications of OTC among adults in urban and rural community

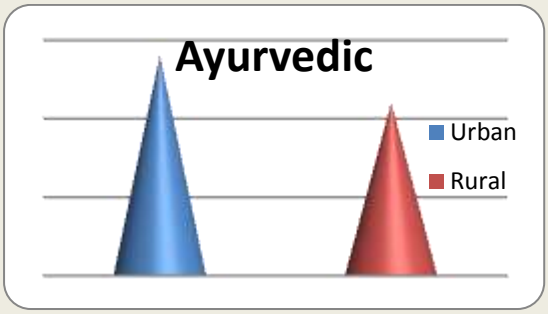

Fig 8 Type of medicine system

This graph shows the of trust on the systems of medications. Ayurvedic medicine system is the choice of trust. still urban community shows even more preference than rural community.

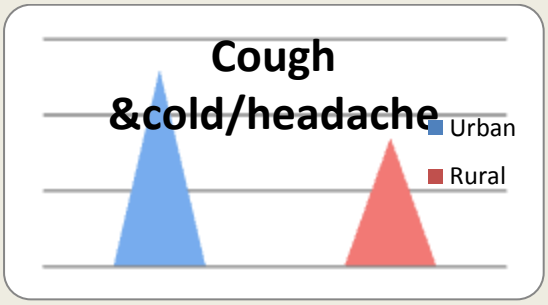

Fig 9 The most common symptoms that may lead to self medication

Above graph shows the use of self medication in common symptom is cough and cold & headache. Urban community people use more self medications than rural community people.

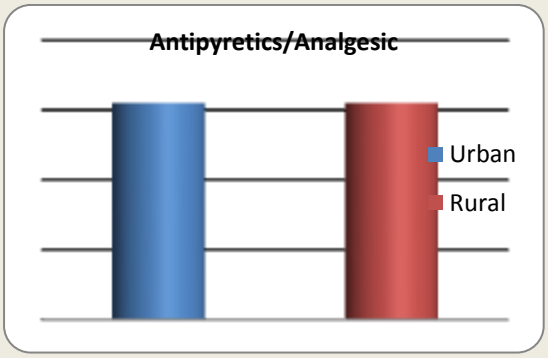

Fig 10 Most common classification of drug use in self medication

Above figure shows the common class of medication. Antipyretics & analgesic are equally self administered by both urban and rural community people.

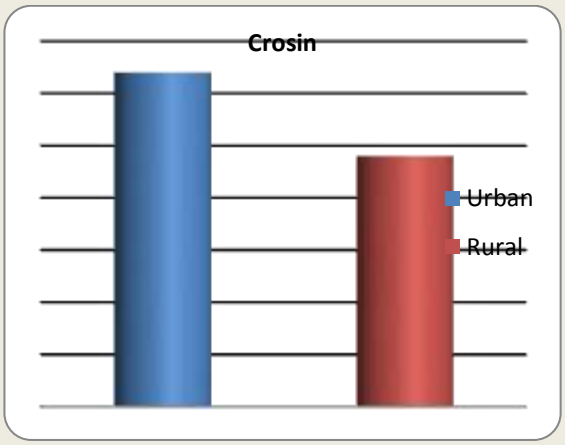

Fig 11 The common medicines for self treatment

This bar graph shows the most common medicine used for self treatment is crosin. Still the comparative use is higher in urban community people than rural community people.

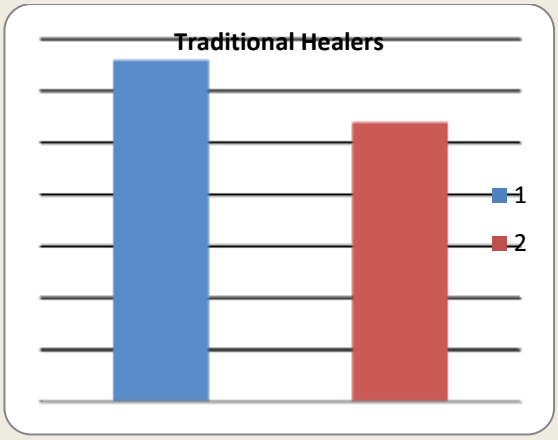

Fig:12 Preference of treatment modalities apart from prescribed treatment of general practitioner

Above graphical presentation shows the use of traditional healers is more in urban community people than rural community people

Conclusion of data analysis

Age of starting self-medication : as shown in figure -I the age of using self-medication in urban community is(32%) at 18-20yrs, whereas (25%) in rural community.

Common ailments of use of self-medication: Regarding the use of OTC for self-medication, as shown in Figure-9 adults were mostly prompted due to cough/ cold and headache were the most common followed by pain and fever . This could have been because of cough/cold / headache are the most common symptom that we encounter in day to day life of urban community where as Pain and fever were the most common symptoms in rural community .

Commonly use drugs for self-treatment : The drugs which were frequently used for self-medication in our study were shown in figure -10 are antipyretic and analgesic followed by cough expectorant in urban and rural community. The commonly used drug for self-treatment in our study was crocine (32%) in urban community (24%) in rural community, followed by cough syrup.

Treatment Modalities : As shown in figure -12 apart from treatment prescribe by general practitioner other treatment modalities is Traditional healer (33%) in urban community whereas (27%) in rural community followed by homeopathy in both communities

Trusted medicine system : The medicine which are commonly trusted are Ayurveda (28%) followed by Allopathic in both of these communities.

DISSCUSSION

The findings of the study have been discussed with reference to the objectives stated in chapter I and with findings of other studies. In our study it has been seen majority of participants were aware about OTC drugs.

Sarahroodi S, Jamshid AM, Sawalha AF, Mikaili P. conducted a randomized, cross-sectional study to assess the self medication practices among university students. The result was 76.6% of the students had used analgesics in self-medication in the previous 3 months. The frequency of analgesic use in the study period was once in 19.2% of the participants, twice in 22.2%, three times in 16.3% and more than three times in 35.5% of the participants, although 6.8% of them were not sure when they were used. Of all the respondents, 49.8% reported headache as the problem. This was the most common problem, after which came dysmenorrhoeal, headache and stomach ache. Bone and joint pains were other problems that led to the use of analgesics.

The most commonly used source of information for self-medication with analgesics was advice from friends and family (54.7%), previously prescribed medications (30.1%), their medical knowledge (13.3%) and recommendation of a pharmacist (1.9%).[16]

present study also shows practice of drugs use other than prescribed medicine is for cold is more in urban than rural and for pain is more in rural than urban. OTC for self medication in common symptom is cough and cold & headache is high in urban than rural. Common class of medication is antipyretics & analgesic equal in both urban and rural and the most common medicine use for self treatment is crosin high in urban than rural.

CONCLUSION

Over the counter use of self medication remains a common health care seeking in urban and rural community. While study show that questioner method has identified important factor associated with self medication finding here were constituent with other work that had identified common factor to over counter use of self medication. However, both the perceived severity and beliefs about level of understanding of a health problem were based on the symptoms being experienced. Common symptoms, such as colds, sore throat, and abdominal pain were usually thought to be associated with minor problems. Although the accuracy of common symptom-based self-evaluation was not assessed in this study, given its influential role on health-seeking behaviour, it would be appropriate to assume that self-medication behaviour may be problematic, if the accuracy of this symptom based self-diagnosis is poor. Pharmacy's roles in public health were still overlooked in the currently system. Most current existing regulations for pharmacies focused on the management procedures for pharmaceuticals, including the procedures of purchase, storage, and sales, rather than a broader view of the role pharmacies could play in the public health care system. To promote this developing formal policies and regulations, including staff training, referral systems between pharmacies and hospitals, and regular monitoring would be required. Should such efforts be made, the role of pharmacies could evolve from that of simple commercial businesses to an increasingly important aspect of the public health system.

Our study shows that majority of the participants were aware of OTC drugs and self-medication is widely practiced among them. Cough/Cold/ Headache were the most common ailments for seeking self-medication and analgesics, antipyretics

were the most common drugs used. Confidence in self-medication, finding it to go to doctor where the some of the reasons for using OTC drugs. Majority of the participants used media advertisements as the source of information to know about OTC drugs.

Large number of Adults was aware of package insert/prescription label and also they followed label instructions while self-medicating. There is need to create awareness and educate students regarding advantages and disadvantages of self-medication by the teaching faculties in the institutions.

Nursing Implications

The findings of the study of implications for mental health nursing practice, paediatric nursing practice, nursing education, nursing administration, nursing research. The finding of the study will help Community health and paediatric nurses in the following aspects:-

To indicate adolescents regarding healthy life style

To prevent health and social problems of adolescents

Nursing Education

Nursing education is developing rapidly in India and nurses from or country can be found all over the world providing care and education.The education curriculum as include imparting knowledge as well as emphasize on developing skills which are required to identify and prevent complications. As the needs of the society are constantly changing new components must be incorporated in the nursing curriculum. Nursing teachers can use the result of the study as an informative illustration for the student.

Nursing Administration

Nursing administrator plays an important part in the education of all nurses who work in their institution. The findings of the study should be used as basis of in-service education program the nurses to make them aware complications or hazards of self medication.

Nursing Research

Nursing research is essential aspects of nursing education as it uplifts the profession develops new nursing forms and enhance the body of nursing knowledge. It also improves the image and perception of nursing in society.

Recommendation

Based on the finding of the study the investigator wants to recommend for the studies

- It is suggested that the study may be conducted by using larger population
- It is suggested that the study may be replicated on different community
- The study may be done with various IEC technology

BIBLIOGRAPHY

1. Centers for Disease Control and Prevention. Youth risk behavior surveillance: National College health risk behavior survey-United States. MMWR. 46(SS-6):1–54.

2.Ara T, Rathore M.S. role of pharmacist in the rational use of drugs, an overview. 47th Annual conference of IHPA.2011. Tasneemara. 9 march 2011.[online]. Available from: URL:http://www.pharmainfo.net/tasneemara/publications/role-pharmacist-rational-use-drugs-overview//

3. Maambete KD.Irrational antibiotic usage in boarding secondary school settings in Dares Salaam. East Afr J Public Health. 2009; 6(2):202-204. Available from: http//www.ncbi.nlm.nih.gov/pubmed/20000030

5.Balmurugan E, Ganesh K.Prevalence and patterns of self-medication use in coastal regions of South India. BJMP. 2011; 4(3):428. Available from: http//www.bjmp.org.content/prevelance-and-pattern-self medication-use-coastal –regions-south-India

6. Nalini GK. Self-medication among Allopathic Medical doctors in Karnataka, India.BJMP. 2010; 3(2):325. Available from: http//www.bjmp.org/files/2010-3-2-325 pdf

7. DuY, Knopf H. Self-medication among children and adolescents in Germany: results of the National Health Survey for children and adolescents. BJMP. 2009; 68(4):599-608.Available from: http//www.ncbi.nlm.nih.gov/pubmed/19843063

8. Mc Cabe SE, Boyd CJ, Yang A. Medical and non-medical use of prescription drugs among secondary school students. J Adolescent Health.2007 Jan; 40(1):76-83. Available from: http//www.ncbi.nlm.nih.gov/pubmed/17185209.

9. Pereira FS, Bucaretchi F, Stephan C.Self-medication in children and adolescents.J Pediatr (Rio J). 2007; 83(5):453-458.Available from: http//www.ncbi.nlm.nih.gov/pubmed/17940684

10. Abay SM, Amelo W. Assessment of self-medication practices among medical, pharmacy and health science students in Gondar University Ethiopia. J Young Pharm. 2010; 2(3):306-310. Available from: http//www.ncbi.nlm.nih.gov/pubmed/21042491 22.

11. Boyd CJ.Adolescents' non-medical use of prescription medication and other problem behavior. J Adolescent Health.2009 Dec; 45(6):543-550.

12.S Sarahroude.A, Arc, 1. 2. 3. 4.

A.F.Sawalha, Ashtarinezhad. Antibioticself-medication among South and Iranian University students. International Journal of pharmacology.2010; 6(1):48-552. Available from: http//www.scialert.net/abstract/ doi-ijp.2010-48-52