COMMUNITY BASED SURVEY OF SELF-MEDICATION USAGE IN ANDHRA PRADESH

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ABSTRACT
The objective of the study is to evaluate usage of self-medication in the community setup. A total of 100 self-medication prescriptions were analyzed during the study period in retail pharmacy and it was found that males 71% purchased self-medication from the pharmacy then female. We found that the highest incidence of self-mediation was in the age group (26-35) 39 cases, followed by other age group, and most of the patients who had purchased single medication were 69, in between (2-4) medications were 26 followed by others. We found that the 21 patients had social habits like smoking, alcoholic and tobacco that had purchased self-medication in the pharmacy. The most frequent complaints from the patients were fever (18), pain (16), headache (15), acidity (14), vomiting (11), infection (11) cough (9), and others. The most frequently purchased drugs were the Nonsteroidal Anti-Inflammatory Drugs (NSAIDs), Anti-ulcer agents like H2-receptor blocker and proton pump inhibitors (PPIs), Antibiotics, Antihistamines, Antiemetics and others. This survey shows that the majority of the people had a poor knowledge about appropriate self-medication while the knowledge of the benefits and risks was not adequate.
KEYWORDS: Community, Self-Mediation, Antibiotics

INTRODUCTION
Self medication is defined as the use of medication by a Patient on his own initiative or on the advice of a Pharmacist or a lay person instead of consulting a medical practitioner.[1] The reasons for self medication mentioned in the literature are mild illness, previous experience of treating similar illness, economic considerations and lack of availability of healthcare personnel. The most common medications used for self medication are analgesics and antimicrobials.[2,3] Potential risks of self-medication practices include: incorrect self-diagnosis, delays in seeking medical advice when needed, infrequent but severe adverse reactions, dangerous drug interactions, incorrect manner of administration, incorrect dosage, incorrect choice of therapy, masking of a severe disease and risk of dependence and abuse. Study on self medication shows that it is influenced by many factors such as education, family, society, availability of drugs and exposure to advertisements.[4,5] A high level of education and professional status has been mentioned as predictive factor for self medication.[6] Self medication involves the use of drugs, and drugs have the potential to do good as well as cause harm.

MATERIALS AND METHODS
A community based systematic plan of work which was carried out:-
Step 1: Collecting literature based evidences from books, journals and the internet.
Step 2: Fixing or preparation of standardized team for collecting patient data, with priority assigned to age, gender, social status, present complaints, past and current medication.
Step 3: Collection of patient data from all the patients who purchased drugs without prescription (self-medication). This work was done for period of 3 months
Step 4: Analysis of all the data obtained, comparison with, and observing the trends with existing literature.
Study Subjects: Any customer/patients purchasing medications without a prescription, with the sole intention of self-medicating.
Setting: Retail pharmacy in Warangal (Andhra Pradesh)

RESULTS AND DISCUSSION
Patients and Drug Characteristics

A total of 100 self-medication prescriptions were analyzed during the study period in retail pharmacy and it was found that males 71% purchased non prescription drugs from the pharmacy then female 29%, this finding was not consistence with the results of an earlier studies done , in which self-medication prevalence was higher among women. We found that the highest incidence of self-mediation was in the age group (26-35) 39 cases, followed by other age group, this was consistent with the study conducted on self medication practice amongst the population in Pokhara, Nepal [3] and most of the patients who had purchased single medication were 69, in between (2-4) medications were 26 followed by others. Polypharmacy is problematic for elderly because it is the greatest risk for adverse drug reactions and drug interactions, etc.[7] We found that the 21 patients had social habits like smoking, alcoholic and tobacco that had purchased self-medication in the pharmacy. Alcohol and smoking is associated with many drug interactions can occurs via pharmacokinetic and pharmacodynamic mechanisms, leads to increased risk of illness, injury, or death more commonly with alcohol consumption.[8] Patient characteristics of the results were summarized in the Table 1.

Common Presenting Complaints by the Patients

From the data collected, the most frequent complaints from the patients were fever (18), pain (16), headache (15), acidity (14), vomiting (11), infection (11) cough (9), and others. This was found to be consistence with the findings in the self medication epidemiology studies, where headache, fever, cough and diarrhea were common illnesses that lead to an increased incidence of self medication.[3,9] Complaints by the patients were expressed in the figure 1.

Drugs Purchased by the Patients

From the data collected, we found that the most frequently purchased drugs were the Nonsteroidal Anti-Inflammatory Drugs (NSAIDs), Anti-ulcer agents like H2-receptor blocker and proton pump inhibitors (PPIs), Antibiotics, Antihistamines, Antiemetic and others. Self medication usually involves common drugs which are freely available. It is questionable whether the benefits outweigh the potential hazards. In several studies, it has been found that inappropriate self medication results in wastage of resources, increases resistance to pathogens and generally entail serious health hazards such as ADRs, prolonged sufferings and dependence.[4] Drugs purchased by the patients of the results were summarized in the Table 2.

CONCLUSION

This survey shows that the majority of the people had a poor knowledge about appropriate self-medication while the knowledge of the benefits and risks was not adequate. Thus, to avoid or minimize the dangers of self medication, firstly they should be educated about the Dangers of indiscriminate use of drugs. Secondly, a proper statutory drug control must be implemented, rationally restricting the availability of drugs to the public. These, two measures would definitely reduce the incidence of drug-related mishaps and help in maintaining good health of the individual and society.

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Table 1: Patient Characteristics

Demographics	No. Patients	Demographics	No. Patients
Age		**Social Habits**	
18-25	19	Smoking	13
26-35	39	Alcoholic	6
36-50	27	Tobacco	3
51-65	11	**No. of Drugs**	
>65	4	0-1	69
Gender		2-4	26
Males	71	>4	5
Females	29		

Table 2: Drugs Purchased by the Patients

| Drugs	Classification of Drugs	No. of Patients
Diclofenac, Naproxen, Paracetamol, Aspirin	NSAIDs	39
Cetrizine, Levo Cetrizine, Dimenhydramine	Antihistamines	17
Ranitidine, Cimetidine, Famotidine	H2 receptors blockers	11
Pantoprazole , Omeprazole, Rabeprazole	PPIs	13
Ampicillin, Amoxicillin, Doxycycline, Gentamycin, Ciprofloxacin	Antibiotics	21
Dextromethorphan, codeine , morphine	Antitussives	9
Phenergan(Promethazine), Ondansetron	Antiemetic	11
Loperamide, Bismuth subsalicylate	Antidiarrheal	5
Metformin, Glibenclamide	Antidiabetic	8
Atenolol, Amlodipine, Clonidine	Antihypertensives	11
Prednisolone, Methyl prednisolone	Corticosteroids	5
Ethinyl estradiol , Norethisterone	Hormonal contraceptives	2
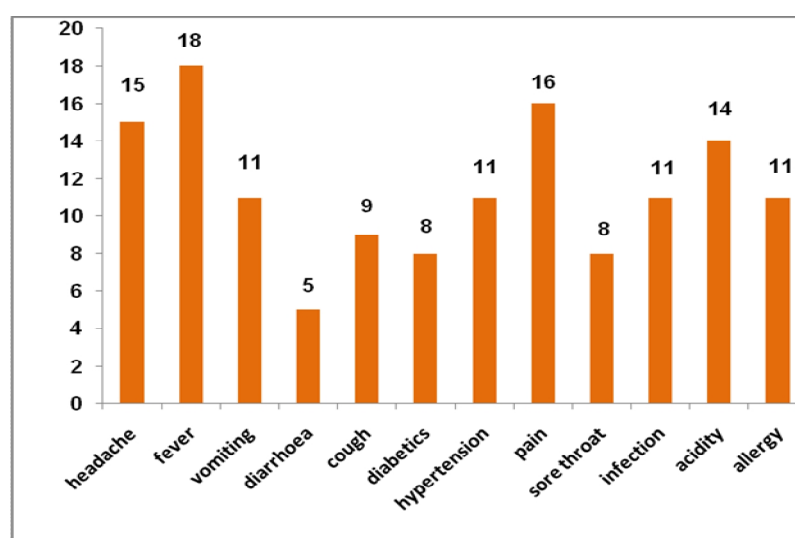
Figure 1: Complaints by the Patients