

## A SURVEY OF UTILIZATION OF MEDICATIONS WITHOUT PRESCRIPTION AMONG IN DIFFERENT AGE GROUPS

G. RAGESH\*

Department of Pharmacy Practice, College of Pharmacy, SRM University, SRM Nagar, Kattankulathur, Kancheepuram (District) 603202, Tamil Nadu, India.

Received: 06 Sep 2013, Revised and Accepted: 09 Jan 2014

### ABSTRACT

**Objectives:** The concept of self-medication which encourages an individual's to look after minor ailments with simple and effective remedies have been adapted worldwide and patient knowledge in drug therapy and disease still remains poor. The objective of the present study was to explore the Perception, Attitude, Awareness and Utilization of medications without prescription among in different age groups.

**Methods:** This study was conducted in 2470 populations in and around Kanchipuram district. It's a Prospective and Observational study. Persons who are have past medical and medications histories and above the age of 65 they are excluded from this study. From the collected data the drugs are categorized on the basis of the Pharmacological activity.

**Results:** 64.8% (1603) of respondents consuming medications without prescription and 35.1% (867) of respondent's not consuming medications without prescription Unsupervised self-medication places patients at risk for medication misuse and may also unwittingly generate dangerous drug-drug and drug-food interaction. This practice will be observed in societies with high level illiteracy. Conclusion: Paracetamol and analgesics were the most commonly self-medicated class of drugs in the society. Pharmacists are the responsible person to give proper counselling to the patient regarding drugs and their usage then only the quality of the treatment will be improved.

**Keywords:** Analgesics, Drug Utilization Prescription, Perception and Self-medication,

### INTRODUCTION

Self-medication can be defined as obtaining and consuming drugs without the advice of a physician either for diagnosis, prescription or surveillance of treatment [1]. Drug use and abuse is a global phenomenon that follows sporting events worldwide. All OTC products must be labeled with a Drug Facts panel so patients can understand their medications. These must comply with a generic format so they are easy to comprehend. The labels must provide information on active ingredients, indications (i.e.: what the drug does), safety warnings, directions for use and inactive ingredients. Occasionally prescription products become over-the-counter drugs. Drugs make the switch to OTC typically once they've proven themselves safe and efficacious. Mostly products containing aspirin and other painkillers known as NSAID's like ibuprofen, ketoprofen and naproxen will warn of gastrointestinal bleeding. One study found that 15 death as a result of gastrointestinal bleeding for each 100,000 users of the medication, also known as NSAID's [2]. Patient's educational status also plays a critical role in facilitating patient's acceptance of their diagnosis and understanding behavioral changes required for active participation in treatment, so educational status is an important determinant of self-medication. Inadequate functional health literacy poses a major barrier to educating patients with chronic diseases, and current efforts to overcome this appear unsuccessful [3]. Public knowledge, attitudes and practices regarding the use of medicine influences the decision to seek health care, the use of medicine and ultimately the success of the treatment [4]. Most of the respondents have taken medications from the pharmacist only, which shows there is greater chance and opportunity for the pharmacists in guiding and providing proper education to the patients. Traditionally, retail pharmacies are the community pharmacies where OTC and non OTC products are sold for acute and chronic disease management. The pharmacist in-charge of community pharmacies, though theoretically well versed lack the necessary competencies and skills to educate the patient about the therapy received for the disease management and to provide pharmaceutical care through services like pharmacovigilance [5]. Generally both educated and un-educated populations are sold the medicine from the community pharmacies without prescription in different forms (like tablets, capsules, ointments and tonics etc.). In this type of practice in the community pharmacy will reduce the quality of life and also increase the drug

abuse in general population. During the chronic drug therapy of the patient used other medication for particular illness (without physician knowledge) will cause one drug is changed by presence of other drug(s), food, drink or environmental chemicals. When therapeutic combination could lead to an unexpected change in condition of the patient, this would be described as an interaction of potential clinical significance. The incidence of adverse drug reactions has been estimated [6]. Overuse and misuse of antibiotics influences the prevalence and distribution of antibiotic resistance in common pathogens. The focus of counseling to the patients regarding safe and proper use of medications & management of specific disease states rather than passive participation [7]. Factors influencing self-treatment include patient satisfaction with the healthcare provider, cost of the drugs, educational level, socioeconomic factors, age and gender. Decreased healthcare cost may be a major reason in developing countries. Interactions between prescribed drugs and the drugs taken for self-medication is an important risk factor of which healthcare providers must be aware off [1,8]. Herbal medicines are found in the forests around the villages and are also grown in the courtyards of houses. There are also cultural factors in play, since the respondents had been born into a culture where herbal medicines would have been experienced from an early age. Many respondents, while acknowledging the power of modern allopathic medicines, considered herbal remedies the more appropriate treatment of the cause of illness. Elderly persons in the households possessed knowledge of simple herbal remedies for common illnesses and these remedies were usually tried first. The medical shops also commonly stocked herbal and ayurvedic preparations, making these drugs easily accessible. Herbs were considered safe and devoid of adverse effects. This may not always hold true and the possibility of interactions should be kept in mind [9]. Educational intervention to help patients decide on the appropriateness of self-medication may be helpful.

### MATERIALS AND METHODS

It is a prospective and observational study. Both educated and uneducated (Age from 15 to 65 yr) people are included. Based on the Indian drug market, over the counter drugs (OTC) and herbal remedies were included. From collected information the drug names are categorized on the basis of their Pharmacological activity. Persons who are have past medical and medications histories they are excluded from this study. The population under study was also

verified during this period. Period of study was three month. All the collected data were analyzed tabulated and subjected to statistical analysis.

## RESULTS AND DISCUSSION

Male sex and age less than 40 years were associated with increased utilization of medication without physician knowledge. There is no exceptional, all occupational staturesd populations are taking self-medications. 64.8% (1603) of respondents consuming medications without prescription and 35.1% (867) of respondents not consuming medications without prescription. Compared with educated people (624-38.9%), uneducated people (979-61.0%) are consuming drugs without prescription and they sold the medicine directly from the community pharmacies. This type of practice commonly cause

drug-drug interaction, drug-food interaction and also with other drinks and environmental chemicals. Fever, headache, vomiting, cough, cold, body pain, were the most common reasons for non-doctor prescription. NSAID's (42.2%), Cough medicine (12%), anti-histamine (9.6%), anti-biotic (5.4%), anti-microbial (5.8%), anti-diarrhea (2.5%), food supplements (17.9%) and miscellaneous (4.4%) drugs are utilized by the populations without prescription. In this drug categories some of them OTC drugs (Non-prescriptional drugs) but, most of the drugs are prescriptional. Antibiotics are highly sensitive drug compare with other drugs categories [10]. Antimicrobials were not commonly used for self-medication but commonly sold drug directly from the community pharmacies [11]. Some of the respondents experienced the side effects of the particular drug, but due to illiteracy they unaware about the side effects and all.

**Table 1: Gender distribution between the different age groups**

S. No.	Groups	Age limit	Gender		Total.no.of population	Percentage % (n=2470)
			Male	Female		
1.	G <sub>1</sub>	15-25	276	203	479	19.3
2.	G <sub>2</sub>	25-35	354	278	632	25.5
3.	G <sub>3</sub>	35-45	486	344	830	33.6
4.	G <sub>4</sub>	45-55	173	124	297	12.0
5.	G <sub>5</sub>	55-65	143	089	232	9.3
6.	Total		1432	1038	2470	100

**Table 2: Drug consumption without prescription**

S. No.	Drug consumption	No. of population		Total	Percentage % (n=2470)
		Educated	Uneducated		
1.	Consuming drugs without prescription	624	979	1603	64.8
2.	Not consuming drugs without prescription	719	148	867	35.1

**Table 3: Utilization of drug without prescription**

S. No.	Drug category	No. of population	Percentage % (n=1603)
1.	NSAID's	677	42.2
2.	Cough medicine	193	12
3.	Anti-histamine	154	9.6
4.	Anti-biotic	087	5.4
5.	Anti-microbial	093	5.8
6.	Anti-diarrhea	041	2.5
7.	Food supplements	286	17.9
8.	Miscellaneous (Herbal remedies and others)	072	4.4

Residence in an urban area, according to this study results, Paracetamol and other NSAIDs were the drugs most commonly used for self-medication.

## CONCLUSION

Finally this study concludes paracetamol and analgesics were the most commonly self-medicated class of drugs, which is similar to findings in the literatures. Awareness is important aspects to the public to know about the appropriateness of physician advice. Cost effective treatment may helps to health care professionals to prevent the habit of self-medication to the society. Drugs especially antimicrobials and anti-biotic were not taken for the proper length of time during self medication but, it requires certain duration of clinical course for complete recovery.

Improper use of anti-biotic may develops tolerance. Most of the drugs abused through self-medication (Eg: Cough syrups). Overall the pharmacists are the responsible person to give proper counselling to the patient regarding drugs and their usage then only the quality of the treatment will be improved.

## REFERENCES

1. Montastruc JL, Bagheri H, Geraud T, Lapeyre Mestre M. Pharmacovigilance of Self-Medication. *Therapie* 1997; 52(2):105-110.
2. Stephanie Saul, Warnings Proposed for OTC Medication: *New York Times*, December- 20; 2006.
3. Mark V. Williams, D. David W. Baker, Relationship of Functional Health Literacy to patient's knowledge of Their Chronic Disease, *Arch Intern*, 1998; 13(12):791-798.
4. Nicky Britten, Patients Ideas about Medicines: A Qualitative Study in a General Practice Population, *British J of General Prac*, 1994; 44(387): 465-468.
5. Neelam Mahajan, Good Clinical Practice for Chronic Disease Management, *Indian J. Pharm. Pract*, 2009; 1(2): 18-20.
6. World health organization collaborating centre for International Drug Monitoring, World health organization, Geneva, WHO publication DEM/N/C/84.153 (E): 1984
7. Rekha Bisht, Bhattacharya S, Katiyar A, Utilization of Third Generation Cephalosporins in Multispeciality Teaching Hospital, Dehradun, *Indian J. Pharm. Pract*, 2009; 2(3):53-57.

8. Hebeeb GE, Gearhart JG, Common Patient Symptoms: Patterns of Self-treatment and Prevention. *J Miss State Med Assoc*, 1993; 34(6):179-181.
9. Calva J, Bojalil R, Antibiotic use in a Periurban Community in Mexico: A household and drugstore survey. *Soc Sci Med*, 1996; 42(8):1121-1128.
10. Shankar PR, Partha P, Shenoy N, Self-medication and non-doctor prescription practices in Pokhara valley, Western Nepal: a questionnaire-based study, *BMC Family Practice* 2002; 3:17 doi:10.1186/1471-2296-3-17.
11. Drug utilization research group, Latin America: Multicenter Study on Self-medication and Self-prescription in six Latin American Countries, *Clin Pharm Ther*, 1997; 61(4):488-493.