

**SELF MEDICATION: KEY COMPONENT OF MEDICATION ERRORS****Hemalata Dol\*<sup>1</sup>, Vikram Shinde<sup>1</sup>, Sanket Gandhi<sup>2</sup> and Sangita Shelar<sup>1</sup>**<sup>1</sup>Late Adv. Dadasaheb Chavan Memorial Institute of Pharmacy (Diploma) At- Malwadi, Post - Masur, Tal. Karad, Dist. Satara (M.S.) India 415106.<sup>2</sup>Yashwantrao Bhonsale College of Pharmacy, Sawantwadi.**\*Corresponding Author: Hemalata Dol**

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**ABSTRACT**

Out of the several, the self-medication is one of the most important cause which leads to medication errors. Self-medication is defined as the activity of obtaining and consuming drugs without the advice of a physician either for diagnosis or surveillance of treatment. It moves patients towards greater independence in making decisions about management of minor illnesses, thereby promoting empowerment. A number of reasons could be enumerated for the rise of self-medication. These include: socioeconomic factors, lifestyle, illiteracy, ready access to drugs, the increased potential to manage certain illnesses, Advertisement on Television, newspapers, demographic and epidemiological factors. The most commonly available OTC medications are pain killers, antacids, cough and cold remedies, anti-allergy medicines, vitamins and energy tonics. Although these medications are considered risk free and useful for the treatment of common health problems, their excessive use can also lead to serious side effects and unfavourable reactions. There are several drug stores, which provide the medicine without any prescription and its percentage is increasing day to day in India. Presently the frequency is high of self medication by the young ones and literate people who do not have much time to go to physician. This conclude the benefit and drawback of drugs, their safe use and role of pharmacist as communicator, quality drug supplier, trainer and supervisor, collaborator and health promoter for safe self medication to ensure patient safety.

**KEYWORDS:** Self Medication (SM), Role of Pharmacist, OTC, medicines.**INTRODUCTION**

The National Patient Safety Agency Report 2004 (UK) and the IOM Report 2000 (USA) both highlighted that medical errors cause a large number of deaths each year. These reports recognised that the majority of errors were not the result of reckless behaviour on the part of health care providers, but occurred as a result of the speed and complexity of the medication-use cycle. Medication errors are broadly defined as any error in the prescribing, dispensing, or administration of a drug, irrespective of whether such errors lead to adverse consequences or not. Out of the several, the self-medication is one of the most important cause which leads to medication errors. Drug administration has long been associated with one of the highest risk areas in nursing practice, with the 'five rights' (giving the right dose of the right drug to the right patient at the right time by the right route) being the cornerstone of nursing education. Drug administration errors largely involve errors of omission where the drug is not administered for a variety of reasons. Other types of drug administration errors include an incorrect administration technique and the administration of incorrect or expired preparations. Self-medication is defined as the activity of obtaining and consuming drugs without the advice of a physician either for diagnosis or

surveillance of treatment. It includes use of medicinal products to treat self recognized disorder, symptoms, recurrent disease or minor health problems and moves patients towards greater independence in making decisions of minor illnesses. Medicines for self medication are often called Over the Counter (OTC) drug, which are available without a Doctor's prescription through pharmacies, mostly in the less developed countries.

**Motivators For Self Medication**

Self medication is very common and a number of reasons enumerated as urge of self care, feeling of sympathy towards family members in sickness, poverty, ignorance, misbelieves. The other motivators of self medication includes -

- Insist on self care for quick relief
- Lack of health services and health professionals in remote areas
- High consultant fee
- Ease and convenience to OTCs
- Poverty, ignorance, misbelieves; extensive advertisement and availability of drugs in other than drug shops.

### Sources for Self Medication Use

- Directly from pharmacy without prescription
- Prescription of previous illness
- Friend's prescription
- Television media
- Books, newspapers
- Demographic and epidemiological factors
- Product information leaflet
- Household members and relatives

### Common Indications for Self Medication Use

There is a wide variety of conditions, given in fig.1 in which OTC drugs are used. Most commonly available OTC medications are pain killers, cough and cold remedies, anti-allergy medicines, vitamins and energy tonics. Although these medications are considered risk-free and useful for the treatment of common health problems, their excessive use can also lead to serious side-effects and unfavorable reactions. Generally Consumers tend to utilize private pharmacies rather than public facilities for self medication.

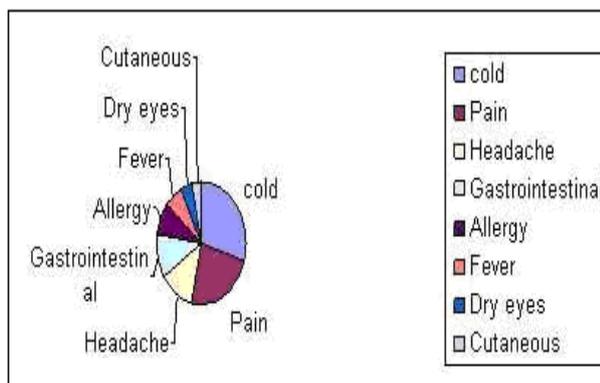


Fig.1.

### Drugs Preferred for Self Medication

Sr.no.	Category	Drugs
1	Cough and cold	D-Cold total , Corex, Benadryl
2	Analgesics	Saridon, Disprin, Nise, Diclofenac, Nimesulide
3	Antipyretics	Paracetamol, Ibuprofen Calpol, Crocin
4	Antiseptic	Dettol, Boroplus
5	Antibiotics	Ciprofloxacin, Norfloxacin Amoxicillin, Cefadroxil

### Growth of OTC Sales in India

The sale of analgesic rises 15.8% in 2009 which was 10.7% in 2008. Vitamins, minerals and other supplements are increased by 8.8% from 8.2%. Gastrointestinal drugs rises up to 10.4% and other OTC drugs increased by 38.9 %

### Shortcomings of Self Medication

Modern medicine have become absorbed rapidly in to the local custom through out the world, their ubiquitous

distribution, powerful marketing and poor control mean that they are used and misused for a wide range of applications. Misuse means using an OTC product for a legitimate medical reason but in higher doses or for a longer period than recommended, e.g. taking more of a painkiller than recommended to treat a headache. Reports have proven that paracetamol, an antipyretic and analgesic in large doses can cause liver failure. Paracetamol toxicity is, by far, the most common cause of acute liver failure in both the United States and the United Kingdom. It is also not a very greatly advertised fact that coffee consumed with Paracetamol or too much of alcohol consumption in association with the drug usage, can cause unprecedented liver failure rates. The other shortcomings includes-

- Misdiagnosing the illness

A minor health issue which could be resolved easily with the doctor's advice may become a major problem over time. Symptoms may subside temporarily with self-medication , but it would become difficult for a doctor to correctly diagnose and treat later.

- Habituation You could become addicted to prescription drugs such as antacids, cough syrups and pain relievers

- Allergic reactions:

Some antibiotics such as penicillin or sulpha drugs can cause severe reactions in the body for some people. These could be fatal.

- Risk of stroke

The most commonly misused medicines are painkillers. Analgesics can induce gastritis and can also increase risk of stroke by four times in patients with high BP.

- Drug Interaction and resistance

Some herbal drugs and medicines may cause drug-to-drug interactions and adversely affect the body.

- Self-medication by pregnant women adversely affects the unborn child causing congenital anomalies and birth defects.

### Role of Pharmacist In Self Medication

Duties of the pharmacist have been changing over the past two decades with self treatment increasing worldwide The pharmacist is no longer just a supplier of medicines and a concocter of medicinal products, but also a team member involved in the provision of health care in the hospital, the community pharmacy, the laboratory, the industry or in academic institutions. Pharmacists play a valuable role in identifying, solving, and preventing drug-related problems (DRPs), counselling patient for the purpose of achieving optimal patient outcomes and quality of life. Along with this pharmacist play integral role as follows:

#### As a communicator

In order to address the condition of the patient appropriately the pharmacist initiate dialogue with patient, he must ask key questions and pass on relevant information to patient. (e.g. How to take the medicines and how to deal with safety issues). Pharmasist should communicate following -

- Pharmacist must be prepared and adequately equipped to perform a proper screening for specific conditions and diseases, without interfering with the prescriber's authority;
- Pharmacist must provide objective information about medicines;
- The pharmacist must be able to use and interpret additional sources of information to satisfy the needs of the patient;

#### As a quality drug supplier

The pharmacist must ensure that the products he/she purchases are from reputable Sources and of good quality. The pharmacist must ensure the proper storage of these products.

#### As a trainer and supervisor

Pharmacist must be encouraged to participate in continuing professional development activities such as continuing education ensure up-to-date quality service. The pharmacist is often assisted by non-pharmacist staff and must ensure that the services rendered by these auxiliaries correspond to established standards of practice. To achieve this pharmacist develop a protocol for referral to the pharmacist, protocols for community health workers involved with the handling and distribution of medicines. The pharmacist promote the training and supervise the work of non-pharmacist staff.

#### As a collaborator

It is imperative that pharmacists develop quality collaborative relationships with

- other health care professionals;
- national professional associations;
- the pharmaceutical industry;

#### As a health promoter

As a member of the health-care team, the pharmacist must participate in health screening to identify health problems and those at risk in the community, participate in health promotion campaigns to raise awareness of health issues and disease prevention, provide advice to individuals to help them make informed health choices.

#### REMEDIES

- Awareness about self medication amongst people.
- Educate customer about intake and use of drug.
- It is desire to reduce the cost of health care services.
- Health care awareness through programs
- Misleading advertisement regarding various medicaments should be banned.
- There is need to strengthen existing laws regarding OTC drugs to ensure their rational sale and use.
- Specific pharmacovigilance is needed and the patient, pharmacist and physician must be encouraged to report any adverse events.

#### CONCLUSION

Self medication is a global phenomenon. It would be safe, if the people, who are using it, have sufficient

knowledge about its dose, time of intake, side effect on over dose; but due to lack of information it can be a source of serious effects. Though self medication is hard to eliminate but low enforcement and educating the people contribute in avoiding or minimizing self medication. Responsible self medication should be a cornerstone of healthcare provision and health policy. With increasing the literacy, the demand of self medication also increasing day by day. The ratio of literate people who are using the self medication is high as compared to that of illiterate people. Duties of Pharmacist should be maximised to ensure safe self medication.

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