

Socio-economics: a propensity of self-medication among OPD patients of a teaching hospital**Subha Sankar Chattopadhyay, Angana Datta*, Aritra Ghosh, Suvadip Biswas, Krishnendu Mandal, Supreeti Biswas**

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ABSTRACT

Background: Use of over the counter (OTC) drug is very much common in India. Not only medical professionals or educated urban population but also it is common in rural area and low educated person. This study was done to assess the extent of knowledge and practices of OTC drugs among OPD patients of a tertiary care hospital.

Methods: A questionnaire based study was conducted among 1680 Medicine OPD (outpatient department) patients.

Results: Among the participants, 62% patients taking OTC drugs at least once in their life. Most common symptoms for self-medication were fever (89%), cough and cold (78%), headache (67%), pain (53%), diarrhea (10%), vomiting (10%), indigestion (20%). Antipyretics (65%), analgesics (35%) among NSAIDs which were common used as OTC drugs. Others drugs were antacids (50%), cough and cold preparations (50%), Vitamins (30%), antiemetics (5%).

Conclusions: Awareness is necessary to use drugs rationally with proper prescription and know about harmful effects of OTC drugs.

Keywords: Awareness, NSAIDs, Over the counter drug, Proper prescription, Questionnaire

INTRODUCTION

‘Over the counter’ (OTC) drugs mean drugs legally allowed to be sold over the counters without prescription of a Registered Medical Practitioner.¹ In India CDSCO regulates import, manufacture, distribution and sale of drug and cosmetics by drugs and cosmetics act (DCA) and its subordinate legislation, drugs and cosmetic rules (DCR), 1940. All the non - prescription drugs which are sold over the counter to the general population also fall under these act and legislation. Prescription drugs fall under two schedules of the drug and cosmetics rule, 1945 schedule H and Schedule X. The Ministry of Health and Family Welfare in India published a notification in 2012 to incorporate a separate schedule H₁ under the drugs and cosmetics rule, 1945 for regulating sale of antibiotics, certain anti-TB drugs and habit forming drugs; to

decrease uncontrollable use of OTC drugs. Trend of using OTC drugs is high in India. Self medication increases the chances of illicit use of drugs and drug dependency.² Due to uncontrolled use of OTC drugs, signs and symptoms of underlying diseases are suppressed, hence incidence of delayed diagnosis, complications, treatment failure and drug resistance are increasing.³⁻⁶ In several studies it has been shown that resistance of pathogen, ADR and drug dependence increase due to inappropriate use of drugs without expert opinion.⁷⁻⁹

In our society it is a common practice to treat most illness by self medication. Due to lack of doctors in rural settings, low socio economic status and illiteracy many of our rural people buy OTC drugs from nearby medicine shops.¹⁰ Very commonly they use non-steroidal anti-

inflammatory drugs (NSAIDs) as OTC drugs for several ailments. Besides this, they also use other drugs (other than NSAIDs) as OTC drugs.

In this scenario we planned a study to assess the level of knowledge and practice of OTC drugs, principally NSAIDs and others among the patients in Medicine Outpatient Department (MOPD) of a tertiary care Government Medical College and Hospital.

Objectives

1. To assess knowledge, practices of self medication by OTC drug use among MOPD patients.
2. To assess the reasons of using OTC drugs most.
3. To know which groups of drugs mainly used by them.

METHODS

A cross-sectional questionnaire based descriptive study was conducted for a period of 4 months in the MOPD in Burdwan Medical College and Hospital from October 2015 to January 2016. Patients attending MOPD of Burdwan Medical College and Hospital were selected for this study. With prior consent, patients were administered open questions regarding use, reason of use, indications of use and type of OTC drugs used. Responses of the questions were noted in the questionnaire sheets. Data were entered in excel sheet and analysed with SPSS method.

RESULTS

Total 1680 patients in the MOPD during 3 months period were examined. Among them, 62% of patients (n=1042) taking OTC drugs.

Table 1: Demographic profile of the encountered in the MOPD regarding OTC drug use (N=1680).

Parameters	Encountered patients (N= 1680) No (%)	Users (n=1042) No (%)	Non users [(N-n) =638] No (%)
Residence			
Rural	1075(64)	729(69%)	128(21%)
Urban	605(36)	313(31%)	510(79%)
Sex			
Male	806(48)	468(45%)	351(55%)
Female	874(52)	574(55%)	287(45%)
Educational status			
Illiterate	538(32)	417(40%)	128(20%)
Primary	588(35)	365(35%)	191(30%)
Secondary<	554(33)	260(25%)	319(50%)
Employment status			
Day laborers	806(48)	625(60%)	128(20%)
Service holders	269(16)	104(10%)	319(50%)
Businessman	605(36)	313(30%)	191(30%)

On the contrary 38% (n=638) not taking any OTC drugs (Table 1).

Reasons of using OTC drugs are various. 64% of patients used OTC drugs due to lack of physicians in rural, 60% due to dependence of quack , 64% due to less time waste, 50% due to low socio economic condition, 40% due to loss of earning, only 16% due to ignorance (Table 2).

Table 2: Reasons for taking NSAIDs and others as OTC drugs (n=1042).

Reasons for using OTC drugs	Response no (%)
Lack of recognized physician in rural	667 (64)
Dependence on quack	625 (60)
Less time waste	667 (64)
Low socio economic condition	521 (50)
Loss of earning	417 (40)
Ignorance	167 (16)

So there are overlapping reasons for using OTC drugs.

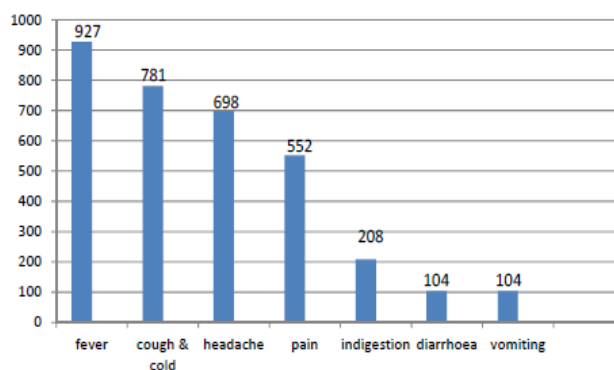


Figure 1: General Indications of OTC drugs (n=1042).

From Figure 1 it is seen that 89% (927) of them used OTC drugs due to fever, 75% (781) due to cough and cold, 67% (698) due to headache, 53% (552) due to pain, 20% (208) due to indigestion, 10% (104) due to diarrhea, 10% (104) due to vomiting.

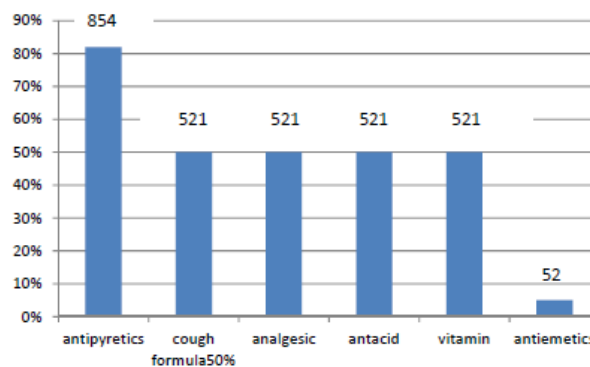


Figure 2: Class of commonly used OTC drugs (n=10420).

Figure 2 shows the class of commonly used drugs which were antipyretics (82%), drugs for common cold (50%), analgesics (50%), antacids (50%), vitamins (50%), antiemetics (5%) among OTC drugs.

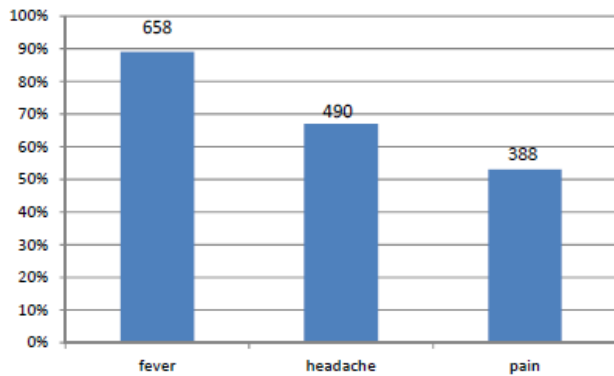


Figure 3: Indications for NSAIDs as OTC drugs (n1=732).

From Figure 3 indications of NSAIDs use are fever (89%), headache (67%), pain (53%). So it is seen there are considerable overlapping in indications of NSAIDs use.

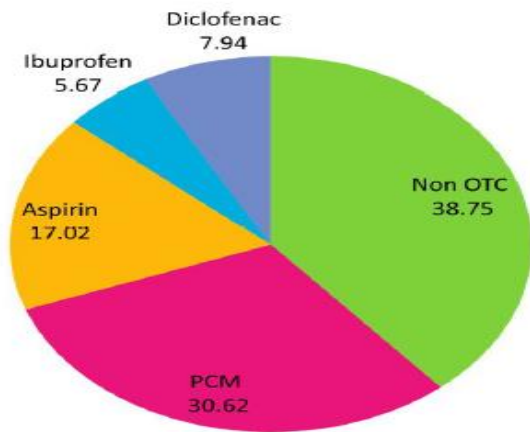


Figure 4: Specific OTC drugs used by the patients according to their generic name (N=1680).

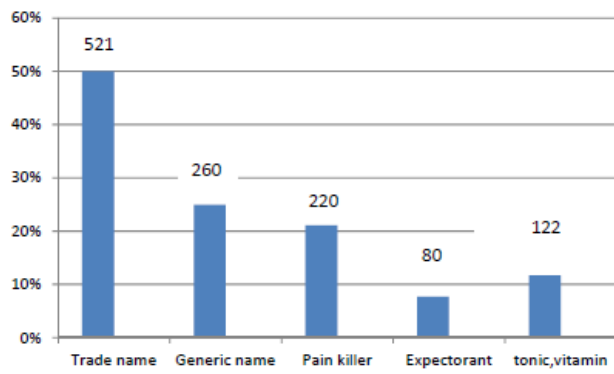


Figure 5: Nomenclature of drugs uttered by the patients (n=1042).

According to Figure 4 almost 7.94% use diclofenac, 5.67% use ibuprofen, 17.02% use aspirin, 30.62% use paracetamol.

According to Figure 5 almost 50% of patients (521) utter the trade name of OTC drugs, 24.9% (260) of patients utter even generic name, 21.1% (220) described as 'pain killer', 7% (80) described as expectorant. 11.7% describe OTC drug as 'tonic'.

DISCUSSION

Use of OTC drug and self-medication is becoming an increasingly important area within healthcare. WHO considers self-medication as part of self-care that helps efficient use of health care system.¹⁴ The recent trend is to expand the list of OTC medicines and to increase availability of controlled drug, this will give more liberty and choice to the people to take informed treatment decisions.¹² In this context the study was shown that it is prevalent in common people in rural settings. In our study it was found that more than half (62%) patients taking OTC drug. Impact of demographic profile on OTC drugs use is also done in our study. Along with 64% of rural and 36% of urban populations also use OTC drugs. The study showed female (52%) dominance in using OTC drugs. Educational status also affects OTC users. Lower educational status appear more incumbency in using OTC drugs 32% illiterate, 36% primary educated and 32% secondary educated patients use OTC drugs. Day labourer has highest propensity of using OTC drugs 48%. Whereas businessman 35% and service sector 16.2% use OTC drugs in their life. Reasons for using OTC drugs are lack of recognized physician (64%), dependence on quack (60%), less time waste (64%), only (16%) said they used due to ignorance. Low earning, lack of jobs and other socioeconomic factors play important role in using OTC drugs.

Results are more or less similar to those reported in other studies.^{11,13} In the study it was noticed that the classes of drugs that were commonly used were antipyretics (82%), cough and cold formula (50%), analgesics (50%), antacids (50%), vitamins (50%), antiemetics (5%). Among NSAIDs antipyretics 65% analgesics 35% were used. In more than 30% of cases patient utter the trade name of the drug. Almost 50% of patients taking OTC drugs under trade names.

Limitation

The limitations of this study include absence of a comparative group, such as subjects from another field, small sample size, not a prospective study and absence of interventions.

CONCLUSION

The cross sectional study shows that the use of OTC drugs is common among MOPD patients. More than half

of the patients use NSAIDS as OTC drugs. Though it was non comparative study, comparison between OTC drug users and non users could be possible. Restriction of sale of drugs with potentially harmful effects should be implemented efficiently with monitoring systems between physicians and pharmacists. Steps can also be taken to educate pharmacists on the need to cross check with the prescribing physician while dispensing such drugs. Awareness is necessary to use drugs rationally with prior prescription and not to take OTC drugs. Mass education and awareness to general people is required for rational drug use.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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