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PREVALENCE OF SELF MEDICATION AMONG PATIENTS VISITING OUTPATIENT SERVICES OF EAR NOSE AND THROAT DEPARTMENT OF GOVERNMENT HOSPITAL OF EASTERN NEPAL

ABSTRACT

Introduction

A budding global concern, self medication, not only results in desirable benefits with lesser burden on health care delivery system, but might lead to prolonged suffering and has become a major health problem. We aimed to estimate the prevalence of self medication and identify the different factors influencing self medication, the most common symptoms and the most common drug groups self medicated with among the patients visiting ENT OPD of the Koshi Zonal Hospital (KZH), Biratnagar.

Methodology

A cross sectional descriptive study of two months duration using a predesigned semi-structured questionnaire was conducted on all patients visiting ear, nose and throat outpatient services of Koshi Zonal Hospital, Biratnagar. Information on bio-data, sources of health information, symptoms leading to and reasons for engaging in this practice and the category of the drugs self medicated with were obtained. Descriptive analysis of the data was done and it was summarized as counts and percentages.

Results

Overall 47.3% of the patients attending ear, nose and throat outpatient department practiced self medication and it was more prevalent among the males (59.5%) than females (40.5%). Majority (46.9%) depended on local pharmacy for the source of health information. Fever (15%), cough and common cold (14.9%), headache (14.6%) were the most common symptoms for which self medication was practiced. Analgesics and antipyretics (35.8%) and cough/ cold remedies (24.5%), antibiotics (22.1%) were the common drug groups self medicated with.

Conclusion

This study concludes that self medication is not responsibly practiced and the tendency of increasing in its prevalence is always a threat. The factors influencing self medication practice has been highlighted by this study and the need for public awareness and health education regarding responsible and safe self medication is felt.

Key words: ENT department, Government hospital, Self-medication.

INTRODUCTION

Self medication is the selection and use of medicines by individuals to treat self – recognized illness or symptoms.¹ It has become a common practice and an important health issue globally. In a developing country like Nepal, where access to medical services are difficult and shortage of medical personnel exist, the public may prefer the medical store as their source of medicine. Thus, self medication has been flourishing as a cheaper alternative for treatment of common illness.

WHO mentions that self medication involves the use of medicinal products by the patient on his own initiative or on the advice of a Pharmacist or a lay person instead of consulting a medical practitioner.² Despite of WHO's regular promotion of responsible self medication practice aimed towards the desirable benefits of the patient along with fewer burdens to the health care delivery system, self medication itself has both beneficial and harmful effects.³ Increased resistance to pathogens, development of antibiotic

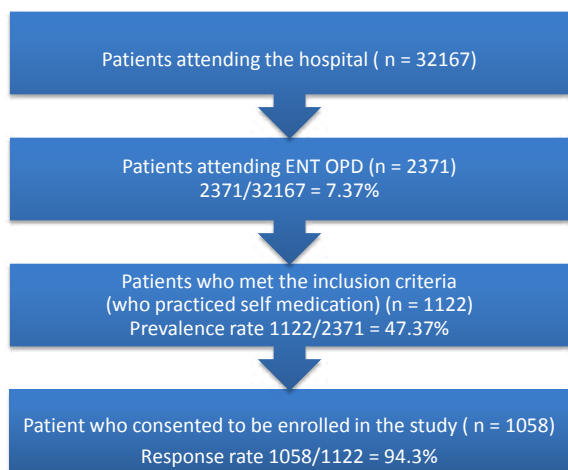


Figure 1: Study flow chart

resistance and adverse drug reaction, drug – drug interactions leads to prolonged suffering and are the major problems related to self – medication. Although no such research study based on the hazards related to self medication has been published so far in Nepal, the fact that self medication practice can be equally harmful for its users cannot be denied.

The use of self medication is highly prevalent in Nepal. A Community-based study conducted in Western Nepal revealed prevalence of self medication to be 59%.⁴ There are only few studies on self medication pattern done in Nepal and till date no such studies have been published focused on patients visiting Ear, Nose and Throat (ENT) outpatient department (OPD). We cannot deny the flawed belief amongst the general population that ear ailments are minor contributes to health related problems. Hence, patient tend to self medicate unless further risk and morbidity are perceived. Thus, this study has been planned to estimate the prevalence of self medication, factors that influence self medication, most common symptoms for practicing self medication and the most common drug groups self medicated among the patients visiting ENT OPD of the Koshi Zonal Hospital (KZH), Biratnagar. This city is popular not only as the industrial city of the country but is medically popular because of the presence of multiple tertiary care hospitals and two medical colleges of the country. But still a lot of patients get treatment from paramedics and pharmacists rather than coming to tertiary center for specialist doctors. Thus the results of this study would highlight the issues that provoke self medication practice among the general population and could

form the basis for future interventions to promote responsible self medication practice.

METHODOLOGY

This study was a cross sectional, descriptive study carried in a tertiary care hospital (KZH, Biratanagar) for duration of 2 months from 1st March to 1st May 2016. The ethics committee of the KZH approved the study. All the new patients visiting the ENT OPD of this hospital and who have practiced self medication were asked to participate in the study. Informed consent was

Table 1: Socio-demographic characteristics of the participants (n = 1058)

Character	Number	Percentage (%)
Gender		
Male	630	59.5
Female	428	40.5
Marital status		
Single	354	33.5
Married	668	63.2
Widow / (er)	28	2.6
Divorced /	8	0.75
Separated		
Age (in years)		
15-24	252	23.9
25-54	688	65.1
55-64	55	5.1
> 65	63	5.9
Years of schooling		
No formal education	213	20.1
Primary school	477	45.1
Secondary school	313	29.6
Higher secondary school	55	5.2
Occupation		
Student	97	9.1
Labour	130	12.3
Driver	115	10.8
Rickshaw puller	93	8.8
Tailor	87	8.2
Farmer	77	7.3
Foreign labor	50	4.7
Office	119	11.2
House	290	27.4

obtained from each participant before being enrolled in the study. Patient who did not give consent, patient with psychiatric illness, pediatric age group and patients on follow up visit were excluded from the study.

The total number of patients visiting the ENT OPD during the study period was noted to determine the incidence rate. All the consenting patients were interviewed using predesigned semi-structured questionnaire. The questionnaire consisted of information on bio-data, sources of health information, symptoms leading to and reasons for engaging in this practice and the category of the drugs self medicated with. Data was analyzed using MS Excel 2007. The survey was descriptive and data was summarized as counts and percentages. The sum of the percentage is not always 100% as some of the questions had multiple options.

RESULTS

The patients attending ENT OPD was 7.37% among the total number of patient visiting KZH and self medication was reported among 47.37 % of these patients. However, only 94.3% of the patients who practiced self medication consented to participate in the study. Self medication among the patients participating in this study was more common among the males (59.5%) as compared to females (40.5%) as shown in majority of the participants 688 (65.1%) belonged to the age group 25-54 years and only 55 (5.1%) participants belonged to the age group 55-64 years whereas 63 (5.9%) were 65 years or more. Only 55 (5.2%) participants have passed higher secondary level or more whereas 213 (20.1%) had no formal education, 477 (45.1%) were educated up to primary and 313 (29.6%) secondary schools level (Table1). Out of 1058 participants who responded 79% reported self medication within 3 months of recall period (Table 1).

Out of 428 female respondents, 252 (58.8%) called themselves as housewives. Among the male respondents, 357 (59.9%) were daily wage workers. Rests, 97 (15.4%) were students, 88 (13.9%) were office workers, 50 (7.9%) were foreign labors and others were 38 (6.1%).

Among all the participants, majority 496 (46.9%) depended on local pharmacy for the source of health information, followed by family members, friends and relatives (30%), old prescriptions 283

(26.8%), unused drugs at home 183 (17.3%) and advertisements in the media 178 (16.8%) as shown in total percentage exceeded 100 as the participants mentioned multiple options for a single question.

Our study observed that lack of time (31.4%) was the major reason for engaging in self medication. Majority (28.1%) also responded that previous experience helped them with the self medication. Also money constraint (27.7%) was another important reason of self medication. Participant's (24.4%) also responded that mild illness required no visit to the doctor for treatment and (10.6%) specified that since it was an emergency they had to practice self medication. Total percentage exceeded 100 as the participants mentioned multiple options for a single question.

As shown in fever (15%), cough and common cold (14.9%), headache (14.6%) were found to be the most common symptoms for self medication. Analgesics and antipyretics (35.8%) were the most frequently self medicated drugs followed by drugs used for cough/ cold remedies (24.5%) and antibiotics (22.1%). Total percentage exceeded 100 as the participants mentioned multiple options for a single question.

Regarding the number of active ingredients of the drugs self medicated with, majority of the respondents (62.5%) did not check for that, 25% said that the drug had only one active ingredient and others 12.4% did not even know there would be more than one active ingredient in a single composition. Regarding the labels and package inserts, 22.2% always read the label and followed the instructions before taking the medication whereas 64.5% followed what the pharmacist or the sales person would say rather than the labels or the package inserts and 13.3% did not even notice any labels or package inserts. Majority of the respondents (79.5%) did not know that the medicine bought by them for self medication required medical prescription by law or not whereas only 6 (0.6%) responded that medical prescription was needed and the rest (19.8%) denied any prescription would be needed for the drugs they self medicated with.

DISCUSSION

The objective of this study was to assess the prevalence of self medication practices and the various factors influencing this practice among

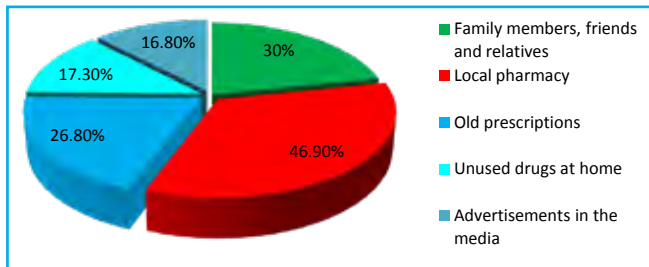


Figure II: Sources of information of drugs used for self medication

the patients visiting outpatient ENT department of KZH, Biratnagar.

The prevalence of self medication practice among the patients visiting ENT department of KZH was 47.37%. In our study, more males visited ENT OPD than females. Most of the males worked based on daily wages and most of the female participants were housewives. Of the respondents, 29.6% had education up to secondary school and only 5.2% had higher secondary education or more whereas 20.1% had no formal education and 45.1% had done their primary schooling. Education haunts health seeking attitude. In previous studies, self medication practices were found to be more prevalent in more educated respondents compared to the illiterate or people with low levels of education.⁵ Other studies reveal practice of self medication more among the illiterate one^{6,7} which is similar to the findings of our study. This could possibly be because educated and economically stable patients have better access to health care and prefer private nursing home and clinics than a government set up for prompt medical care.

Most of the patients belonged to the age group 25-54 years. This is the age when a person is challenged to be economically stable. Visit to a hospital or doctor is only then when self medication alone is not enough to combat the disease/ illness. In our study respondents concern about the time factor is an important reason for getting involved in self medication, which is in consistent with various other studies.^{8, 9, 10} However, economic stability also cannot be denied. Fear of expenses and the earnings missed by the daily wage workers for bided them to visit the hospital or a doctor for medical help and thus self medication was practiced. Also previous experience with doctors/ health service providers was another very important reason influencing this practice in our study which is consistent with

the findings of other studies.⁹ The confidence among the participants that mild illness needed no experts' opinion to be treated and that they could safely be managed by themselves based on the information/ suggestions received from family members, friends and relatives and local pharmacies was also revealed by our study. Study conducted by Marak et al¹¹ and Ahmed et al.¹² also reveals the same. This study reveal local chemists to be the second most common source of information which is in harmony to the study conducted by Marak et al¹¹. Despite the fact that the city Biratanagar is rich in institutions including both the government hospital and medical colleges and other superspeciality tertiary centers, patients still depend on the local pharmacy shop. This may be due to the high consultation charges in the private and the long waiting time in the government hospital which would ultimately cost them both time and money. Thus, major reason of practicing self medication in our study is economic rather than the non availability of health care facility.

Most common symptoms of self medication in our study were fever, common cold, cough and headache. Since these are the frequent health complains and are usually perceived as mild sickness needing no experts intervention, tendency to self medicate for these common illness are always high among the people. Kumar et al¹³ and Puwar B¹⁴ in their study also observed these to be the common symptoms for which self medication was practiced.

In concurrence with other study¹⁵ our study reveals analgesics and antipyretics to be the most common drugs self medicated with. Study conducted by Selvaraj et al.⁸ reveal NSAIDS and antibiotics to be the common drugs self medicated with. In this study, common cold and cough remedies followed by antibiotics were also frequently self medicated with. Analgesics, antipyretics, cough and cold remedies are usually over the counter drugs (OTC) and can be readily available in the local pharmacies without prescriptions thus can be frequently self medicated with. However, use of antibiotics without proper diagnosis, proper laboratory investigations/ evidences to support the diagnosis leads not only to emergence of resistance but is a complete threat to the global health as a whole. When asked about

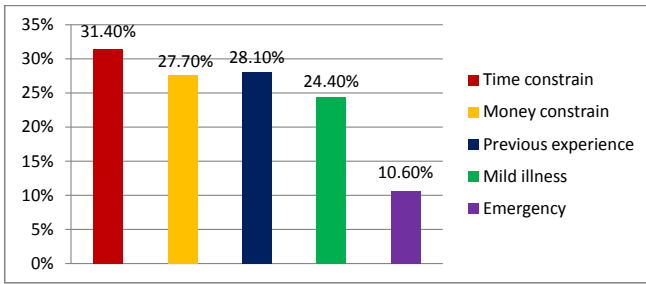


Figure III : Reasons for self medication

the information/ knowledge about the active ingredients and the labels and package inserts of the medicines, our study revealed that majority of the respondents had very inadequate information about it and hardly bothered to check for that. Also very insignificant number of participants (0.6%) had knowledge about

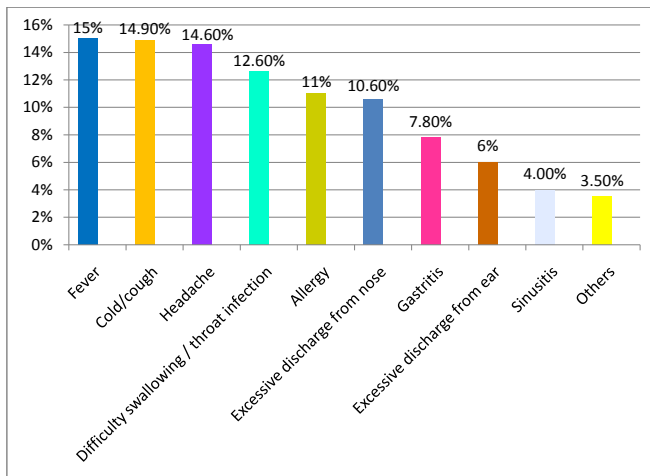


Figure IV: Most common symptoms for practicing self medication

the need of medical prescription in procuring drugs from pharmacies. This could probably be because of the low literacy rates of the participants in our study.

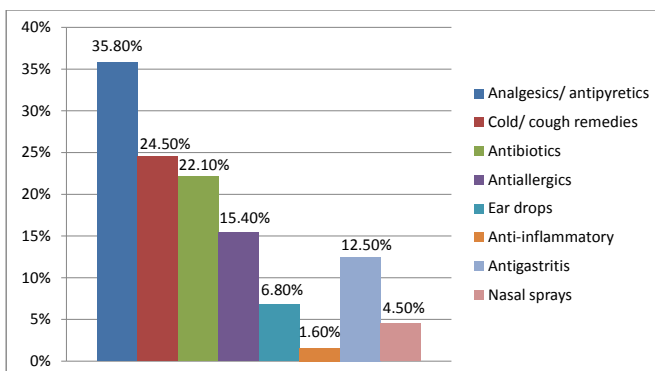


Figure V: Common groups of drug self medicated with.

CONCLUSION

The tendency to indulge in self medication can be related with many factors such as time and money constrains, easy access of medicines at the pharmacies even without medical prescriptions. Generally, ENT related complains are considered as minor ailments and the tendency to self medicate is higher, still it cannot be ignored as the possible drawbacks of this practice is always a threat. This is a need for public awareness and health education regarding the negative impacts and possible drawbacks of this practice when not vigilantly and considerately implicated.

RECOMMENDATIONS

Self medication is not free of risk. Health education focused on all categories of publics highlighting its adverse effects should be campaigned. There is a need to halt the uncontrolled access to drugs before too late. Also health service providers and pharmacist’s perception towards self medication should be considered and they should be encouraged towards motivating people/ patients in seeking expert’s advice as soon as possible. Drug dispensing without medical prescriptions should be strictly controlled.

STRENGTH AND LIMITATION OF THE STUDY

The study being conducted in a government set up reflects the actual scenario of the category of the population visiting a government hospital. The concern and attitude of these people regarding their health and health seeking behavior, their tendency of self medication and their knowledge and information about the medicines they self medicate with, gives us the baseline information about where we are positioned.

One of the major limitations of our study is that it was limited only among the patients visiting ENT OPD. There was always a chance of problem of recall accuracy, biasness and factual information providing by the respondents.

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