



Research Article

The Prevalence Of Self-Medication And OTC Medicine In Our Community

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ABSTRACT

Self-medication is a widespread healthcare practice where individuals diagnose, treat, and manage their health conditions without consulting a healthcare doctor. OTC also known as over-the-counter includes the medicine one can legally buy without a prescription. Currently, self-medication and improper dosing are increasing in our community. In dissenting, in other foreign countries government agencies guide the proper utilization of medications to be sold. They aim to safeguard public well-being. OTC medications are associated with potential harm. To reduce this in people we started an awareness program by conducting a survey on self-medication and OTC medicines. We considered 300 samples from Maharashtra a state in India, Feedbacks were collected in the form of a questionnaire. The subjects were studied on various parameters. The data was analyzed and proper interpretations were deduced. This research provides a broad understanding of self-medication, and its risks, to public health. The practice also extends to chronic conditions, mental issues, etc. In conclusion, self-medication is a complex phenomenon of benefits and risks.

INTRODUCTION

Self-medication is a common practice of consuming OTC (Over-the-counter) drugs without consulting physicians or doctors for diagnosis or prescription of the treatment required for any diseased condition. Over-the-counter (OTC) drugs are the effective medicines that are considered as safe for consumption by the general public without any medical prescription Such drugs are widely

available in pharmaceutical stores as well as non-pharmaceutical outlets such as grocery stores, supermarkets, etc. Self-medication patterns differ from population to population and are affected by many factors such as age, gender, income, self-care orientation, education level, medical knowledge, and perception of illness. It has been found that self-medication practices are followed by almost all the age groups in a community to

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save time and money.(Dedy Almasdy et al..2011) .Taking medications inappropriately without any consultation from a health professional might result in the recurrence of the disease/symptoms, an increase in pathogen resistance, and can also lead to serious health conditions. The misuse of non-prescription drugs in the community is becoming a serious problem as people reach out to various medicines through increasing pharmaceutical advertisements, family, friends, neighbours, or previously prescribed drugs, and many more common sources of self-medication (Dnyanesh Limaye et al..2017). The practice of self-medication is associated with AMR (Antimicrobial Resistance) and is a current problem worldwide, particularly in developing countries where antibiotics are easily accessible to people without any medical consultation. Speaking about the use and availability of antibiotics more specifically, the recent COVID-19 pandemic made its use inappropriate and more frequent as a large number of people used antibiotics such as azithromycin due to misinformation in treating COVID-19 infection. According to the World Health Organization (WHO), it has been pointed out that responsible self-medication can prevent and treat ailments that do not need any special medical consultation and provide cost-effective alternatives for the treatment of common illnesses. It can readily relieve acute medical problems but is associated with a certain risk. The global increase in self-medication practices makes it necessary to study the knowledge and behavior of OTC medicines and their effects on human health. This research focuses on the survey carried out for self-medication practices among a community including 300 subjects, considering various factors such as age, gender, most commonly consumed OTC drugs, conditions for which such drugs are used, etc. (Sweileh W. M. 2021)

METHODOLOGY

Self-medication is a worldwide phenomenon that reflects public health problems because of antibiotic resistance, hazardous side effects, reciprocation of drugs, and disease masking. *(Daniela Baracaldo - Santamaria et al., 2022). A self-formed questionnaire was issued online in a company of the general population in Maharashtra. The study encompassed individuals from the general public aged 14 to above 60 years. The main objectives of this survey were the currency of self-medication practices and its data collection, socio-economic factors, signs and symptoms, category of medications used, and the purpose for self-medication. A detailed research was executed under the medical subheading self-medication, OTC drugs in the format of Google Forms. The additional permanent citation was received from the reference list by understanding of all the articles.

● **Descriptive details -**

The information about the community for whom the questionnaire was prepared to gather the data was recorded.

● **Statistics components -**

Analytical information such as age, gender, education, and health was reported in the questionnaire.

● **Self-medication practices -**

The questionnaire comprises of self-medication practice purpose, its sources, OTC drugs used on a regular basis, antibiotic resistance awareness, and its hazardous side effects.

● **Execution characteristics -**

The detailed information regarding where and how the questionnaire for the survey was used. The information about if the survey was carried out in person via interview, mail, or self-administration was recorded.

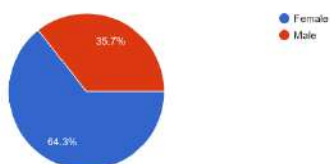
FINDINGS

Results represent the outcomes based on the analysis carried out by considering 300 samples



received through a survey among communities with different age groups and educational statuses. All the subjects considered have self-medicated themselves. Among these about 64.3% of members are females and 35.7% of members are males that self treated themselves with OTC medications.

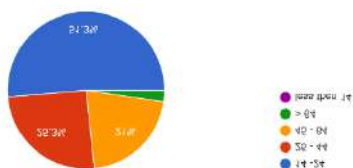
Gender
300 responses



The graph shows the percentage of females and males who have self-medicated

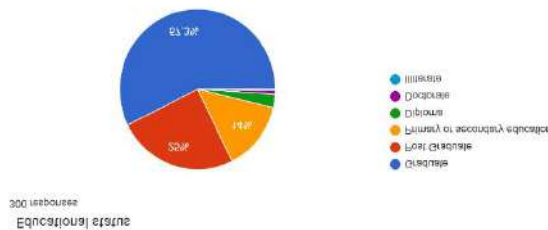
The highest percentage of members following self-medication (51.3%) is in the age group/category of 14-24 years. The moderate percentage (25.3%) is found in the age group/category of 25-44. years and the lowest percentage has been observed among the members of the age group/category that are less than 64 years and in between 45-64 years.

Age Group
300 responses



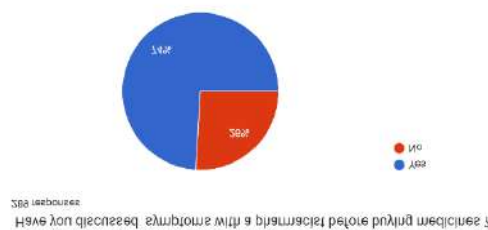
The graph shows the age distribution of the subjects

Considering the educational status of the community, the highest percentage of self-medication practice is followed by the members who are graduates i.e. 57.3%, and postgraduates i.e.25%.



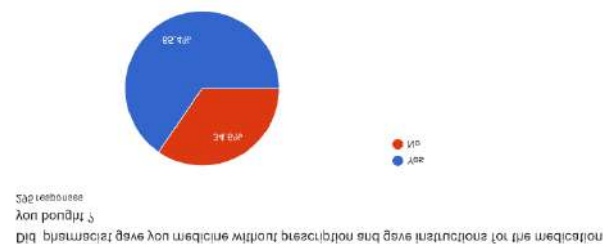
The graph shows the educational status of people who have self-medicated

About 74% of the members discussed/ consulted a pharmacist before taking OTC drugs_ and about 26% of members self-treated themselves without any consultation with a pharmacist.



The graph depicts the percentage of people who discussed symptoms with pharmacists before buying the medicines

Only almost 65% of subjects received proper instruction from the pharmacist regarding the usage of the drugs



The graph depicts the percentage of people who received instructions from pharmacists regarding the usage of the meds

The most commonly used OTC medicines are Paracetamol, Azithromycin, and ayurvedic medicines as these are taken with high a percentage of 82.6%, 19.8%, and 24.2% respectively.

Most commonly used OTC medications by you?

298 responses

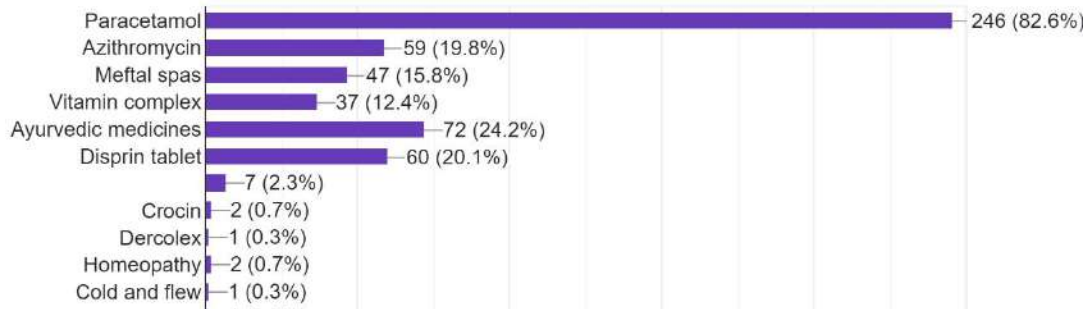


Chart representing most commonly used OTC medications by the patients

Considering the most common health conditions for which these OTC medicines/drugs are used are fever (62%), headache (68.4%), acidity (43.8%) and also other conditions such as sore throat, constipation, menstrual cramps, etc are self treated but are with less percentage.

You self-medicated yourself in response to

297 responses

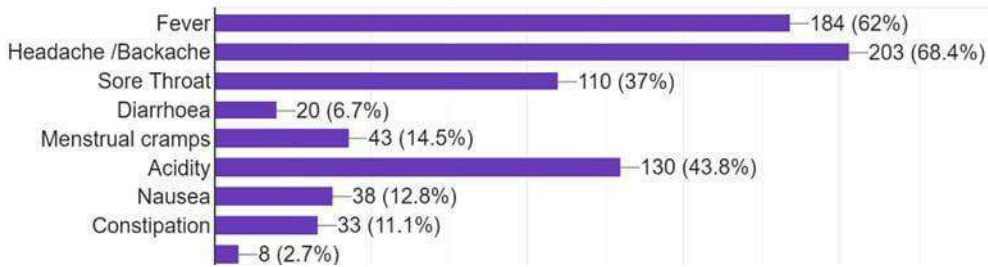
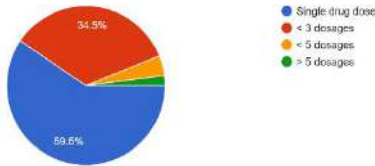


Chart representing the illness in response to which people self-medicated themselves

Considering the doses consumed by the members, 34.5% of members have taken less than 3 doses and 59.5% have taken a single dose. disappeared while some did it after a few days of recovery.

How many times you take the medicine ?

296 responses



The graph depicts the dosage of OTC medicines consumed by the patients.

A significant amount of people nearly 63% have stopped self-medicating after the symptoms



The graph depicting the time at which patients discontinued the medicines

Most people did not show immediate side effects of self-medication whereas almost 20% showed some.

Did you ever experience any side effects from self-medication / OTC?

296 responses



Chart representing side effects of self-medication seen in the patients

Furthermore, the most frequently used drugs by the subjects are painkillers followed by ointments and antibiotics.

Most frequently used drugs?

300 responses

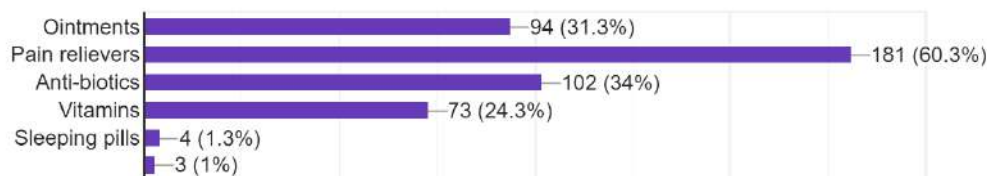


Chart representing the most frequently used drugs by the subjects to self-medicate

58.6% of the members self-treated themselves with OTC medicines/drugs because of its easy accessibility, 21.7% of people did it in order to save time, and 17.3% of members self-medicated because they found this method much cheaper.

What are the reasons for self-medication?

295 responses

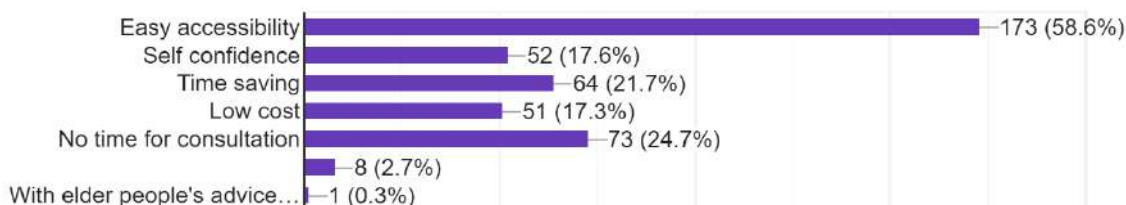


Chart representing reasons regarding why people self-medicated themselves

DISCUSSION

We considered 300 subjects for our study. Data was collected in the form of a questionnaire provided to the subjects through Google Forms. We found that the majority of self-medicated subjects were female including 64.3% and the remaining 35% were male.

It was suspected that the young people in the community form the majority in self-medication including the age group of 14 to 24 with 51.3%.

About 25.3% of people who have self-medicated are from the age group 25 to 44 and only 21% are from the age group 45 to 64 significantly less amount of old age people coming under the age group more than 64 have self-medicated themselves. It is clear from the survey that the majority of self-medicated people were educated about 60% of subjects were graduates, 25% of subjects were postgraduates, 14% of subjects had primary or Secondary Education and only some of



the subjects had diplomas or were illiterate. It is clear from the data that out of the people who have responded only 26% have not discussed symptoms with pharmacists before buying the medicines on the contrary 74% of people have discussed their symptoms.

Regarding the instructions received from the pharmacist which broadly signify the maximum amount of dosage of a medicine or the do's and don'ts while consuming specific medicines was given to 65% of the subjects rest almost 35% did not receive any instructions. In addition to that most commonly used OTC medicine is paracetamol followed by Ayurvedic medicines, Azithromycin, Disprin, painkillers, and Vitamin complex majority of which include antibiotics. Looking at the details most people self-medicated in response to headaches which were 203 out of the total 297 responses received, the second highest self-medication was seen during fever which was about 184 people, third highest was seen during acidity including 130 subjects, up next was sore throat including 110 people followed by for menstrual cramps by almost 45 people followed by 38 people self-medicated themselves for nausea, 33 for constipation and for diarrhea, 20 people self-medicated remaining 8 self-medicated themselves in response to various other symptoms. Out of the 296 responses, 59.5% of people had self-medicated with only one drug dose, a small number of people have self-medicated themselves with 5 or more than 5 dosages rest about 34.5% have self-medicated themselves with less than 3 dosages of medicines

. it is seen in the pie chart that about 62.6% stopped self-medicating after symptoms disappeared 24.5% did it after a few days of recovery remaining few did it after they ran out of medication only some did it after the doctor's permission. Out of the people who responded majority amount of people which is 259 did not show any side effects of self-medication almost 40

people showed certain side effects. In addition to that most frequently used drugs were painkillers by 181 people followed by antibiotics by 102 people, ointments by 94 people 73 people frequently used vitamins, and 4 people also used sleeping pills. Furthermore, People gave various reasons for self-medication, the highest amount of people which is 173 out of 295 said that they self-medicate due to easy accessibility almost 50 people said that they are self-confident about the medicines they take without a prescription by doctors, 64 people say that self-medication is time-saving rather than approaching doctors .51 people say that self-medication is cheap as compared to seeing a doctor during illness, almost 8 people have various other responses including elders advice etc.

CONCLUSION

The conclusion of this survey was, the participants had little knowledge about the awareness and danger of misuse of OTC medications. Hence there is a need to educate the society regarding hazardous side effects of self-administration of OTC drugs. General professionals should keep track of the records of their patients using OTC medications so that prior care can be taken and possible side effects can be avoided. The result portrayed that the concept of over-the-counter drugs is still not clear to participants. Discussion should be carried out with the doctor before the use of OTC drugs, their side effects, and care to be taken to control the problem. Law formulation should be made by the government to execute and make possible the prescription system. Therefore, spreading awareness among common people regarding OTC medications is very important.

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