

A Study to Assess the Effect of Media in Promoting Self-Medication Use

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ABSTRACT

Self-medication is the use of drugs to treat self-diagnosed disorders, symptoms or the intermittent or continued use of prescribed drug for chronic or recurrent disease or symptoms. Today, self-medication is one of the biggest socio-health and economic problems. This study aimed to find out the importance of media in promotion of self-medication. In this community based survey, a pretested questionnaire was circulated through social media to the general population and the data's were collected based on the inclusion and exclusion criteria. After analyzing the responses we found that females were practicing self-medications more than males. Self-medication is influenced by many factors such as family, friends, availability of drugs, low perception of risk associated with use of drugs, knowledge of drugs, easy access to internet, and wider media coverage on related health issues. Approximately 190 of the participants admitted to the use of self-medication practice. Most of them were self-medicating for fever, cough and headache. More than half of the respondents had used paracetamol for self-medication. Media plays an important role in the reception of health risks; thus, media competence is important in self-medication. Majority of participants use social media to obtain information on self-medication.

Keywords: Self-medication, Media, Knowledge

INTRODUCTION

Self-medication can be defined as self-consuming of medication without getting any advice from a registered physician for either diagnosis or treatment. It is a global phenomenon though its prevalence varies from country to country. [1] It becomes an important component of health care system.

Advent of media have caused massive changes in the society as a whole, of which one of the major growing trends seen today is the self-medication people employ nowadays. Internet is widely used in healthcare, which has a significant impact on research, training and patient care. Self-medication thus becomes myriad for a couple of misfortunes. [3]

The idea of self-medication can't be completely ruled out. Without consulting you become prey for your own self-diagnosis which may be a product of your biased thinking and thus you start treating yourself for the wrong condition bringing yourself into a morbidity loop from which cure is drastically dangerous. Once you follow the pursuit there is no stopping. Biased and encouraged reliability of the internet medication method is passed on from one to other and soon it, affects a whole community. [5] Awareness regarding this is very essential and much needed in today's society. Most percentage of internet surfers are today's youth, along with misconception that google knew everything, education parameters also play an important

role, daily wage workers, monthly wage workers, busy business men also follow the same pursuit.^[8] Lack of time, convenience and awareness parameters along with biased thinking pave way today's never ending loop of self-medication and its undesirable consequences.

MATERIALS AND METHODS

STUDY SITE: The study was an online survey which was conducted among the community.

STUDY DESIGN AND SAMPLING: A Community based survey was conducted.

STUDY DURATION: The study was conducted for a duration of four months from 18-04-2021 to 18-08-2021.

SAMPLE SIZE: The study was limited for a sample of 300 based on the time schedule allotted for the project including other circumstances.

STUDY CRITERIA

INCLUSION CRITERIA:

1. Subjects in age group between 18-60 years.
2. Participants who possess smartphones with internet connection.
3. Participants who are comfortable in English
4. Participants who don't have doctor's prescription

EXCLUSION CRITERIA:

1. Subjects less than 18 years and above 60 years of age
2. Participants who do not possess smartphones with internet connections.
3. Participants who take medication using doctor's prescription.

METHODS

An online survey was conducted with the help of questionnaire in order to collect the data from the general population. Articles were collected from the online sources such as PUBMED, WHO, FDA and GOOGLE SCHOLAR and questionnaires were prepared by using these articles. The data

obtained from this survey was analysed, assessed and interpreted.

METHOD OF COLLECTION OF DATA

DATA COLLECTION PROCEDURE

Data were collected through online surveys using structured questionnaire adapted from previous studies 1, 2 and modified to suit our purpose. Questionnaire was prepared in English language including all relevant variables based on the objectives of study.

The tools used have four sections designed to address;

1. Socio-demographic characteristics,
2. Knowledge,
3. Lifestyle practices

DATA PROCESSING AND ANALYSIS

Sample characteristics was computed including frequencies and percentage and was presented using tables and figures.

RESULT

DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

In the present study 300 respondents participated who met inclusion criteria out of which 148 (49.3%) were males and 152 (48.4%) were females. The result obtained reviewed that majority of participants (150) were of 18-24 years age group, 90 participants of 25-35 age groups and 60 participants above 35 years of age. 190 (63.3%) of responders were married and remaining 110 (36.6%) were single. A high prevalence of self-medication practice was seen among students (35.3%). 28% were self-employed, 20% were working in private sectors and 16% were unemployed. Of the total 300 participants, 60 participants had primary education, 70 had secondary education and majority were college and above.

Table 1 (a): Socio- demographic characteristics of respondents- gender

Characteristics	Frequency	Percentage (%)
Male	148	49.4
Female	152	50.6
Total	300	100

Table 1 (b): Socio- demographic characteristics of respondents- age

Characteristics	Frequency	Percentage (%)
18-24 years	150	50
25-35 years	90	30
35 years and above	60	20

Table 1 (c): Socio demographic characteristics of respondents –Education level

Characteristics	Frequency	Percentage
Primary	60	20
Secondary	70	23.3
College and above	170	56.6

Table 1 (d): Socio-demographic characteristics of respondents –occupation

Characteristics	Frequency	Percentage (%)
Private sector	60	20
Self employed	84	28
Unemployed	50	16.6
Students	106	35.3

SOURCE OF INFORMATION FOR SELF MEDICATION

The result revealed that, 56.8% of people obtained information on self-medication from media. 20% were advised by friends, family. The third source of information were the advice of pharmacist and fourth source of information is the use of left over medicine already been known by the participants.

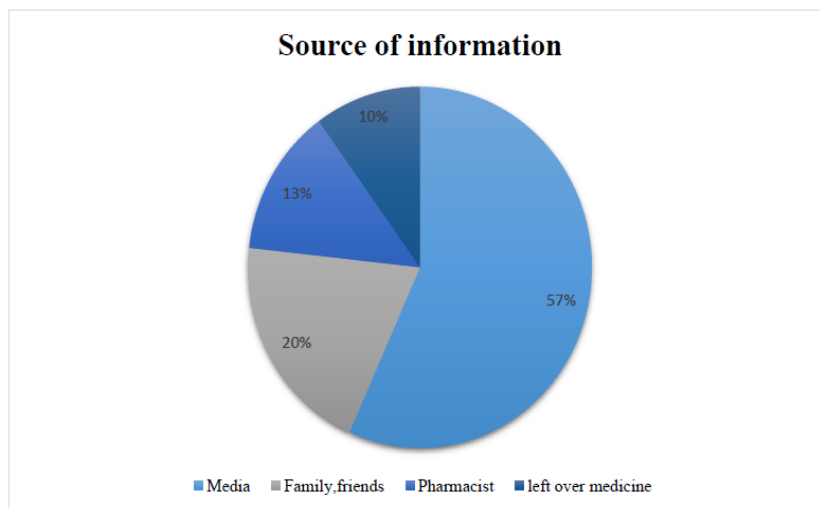


Figure 1: Source of Information

REASONS FOR PRACTICING SELF MEDICATION

Reasons for practicing self-medication were analysed. Among the most common reasons

for SMP were perception of mildness of illness, previous knowledge about the drug, self-medication is inexpensive and time constraints.

Table 3: Reasons for Self-Medication

Reasons for SMP	Frequency	Percentage (%)
Minor illness	140	47
Confidence on the knowledge of the drug	80	27
Time constraint	30	10
Self-medication is inexpensive	50	16
Long wait at health facilities	10	3

SELF MEDICATION UNDER MEDIA INFLUENCE

Overall, 56.6 % (170 participants) of responders use media to obtain information on self-medication. Due to the popularity

gained and the widespread of knowledge through media, the newer trends of self-medication seen include the increase use of various energy supplements in the present study.

Table 4: Self-medication under media influence

Characteristics of participants on self-prescription and media influence	YES		NO	
	Number (n)	Percentage (%)	Number (n)	Percentage (%)
Use of antipyretics for fever/headache	5	2.9	120	70.5
Use of antacids	60	35.2	80	47.05
Use of analgesics	8	4.7	95	55.8
Use of energy supplements	90	52.9	80	47.05
Weight loss/ weight gain	75	44.1	65	38
Beauty and cosmetic products	80	47.05	75	44.1

CATEGORIES OF DRUGS COMMONLY SELF-PRESCRIBED

The most frequently used category of drugs in this study were antipyretics (100),

analgesics (80), antihistamines (75), and the least used were other drugs such as eye drops, ear drops and nasal drops.

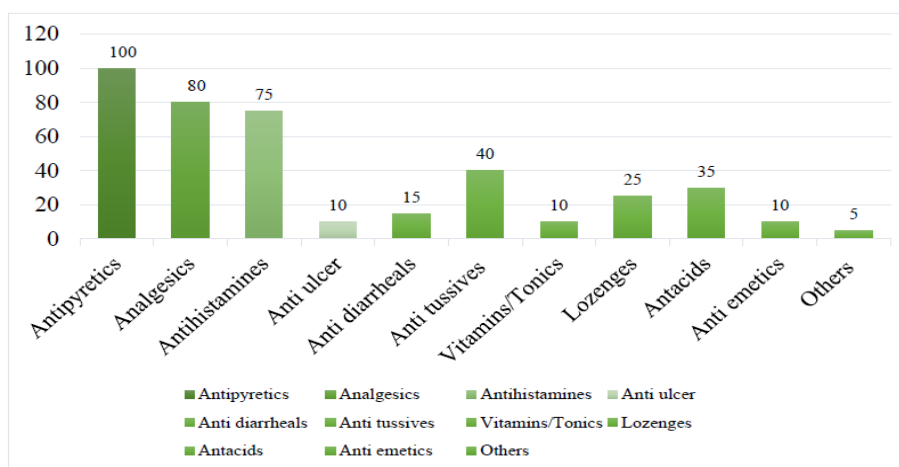


Figure 2: Categories of drugs commonly self-prescribed

INDICATION FOR SELF MEDICATION

In the present study, among the various indications for self-medications reported by the general population, headache (80) was the most common followed by fever (70), menstrual pain (68), cough, cold, and sore throat (50), digestive problems (25), allergies, nausea and vomiting, skin problems and diarrhea.

Table 5: Indication for Self medication

Indication	Total Number
Fever	70
Headache	80
Menstrual Pain	68
Diarrhea	6
Digestive Problems	25
Allergies	15
Cough, cold, sore throat	50
Nausea and Vomiting	10
Skin Problems	8

FREQUENTLY USED MEDIA PLATFORMS

Google was the most common surfed by participants followed by Instagram, TV advertisement, YouTube, magazines, newspaper and Facebook for obtaining information on self-medication.

Table 6: Frequently used media platforms

Media Platforms	Number
Google	120
YouTube	45
Newspaper	20
Magazines	35
TV Advertisement	50
Instagram	75
Facebook	15

LIST OF ADVERTISEMENT APPEARING IN DIFFERENT MEDIA PLATFORMS

From the current study, it was found that 9 categories of drugs were mostly advertised in the media and they claimed for hair problems, menstrual problems, weight loss,

weight gain, diabetes, arthritis, height gain, sexual problems and blood pressure. Most of the claims were based on safety and efficacy of the drug. Superlative claims were commonly used without any further scientific evidence.

Table 7: List of advertisement appearing in different media platforms

Systems	Total No of advertisement
Hair Problems	120
Weight Gain	35
Weight Loss	45
Menstrual Problems	53
Diabetes	12
Height Gain	9
Arthritis	10
Blood Pressure	4
Sexual Problems	5

KNOWLEDGE ON SELF-MEDICATION

Majority of the responders believe that there is lack of information on self-medication and can increase the risk of side effects of drugs.

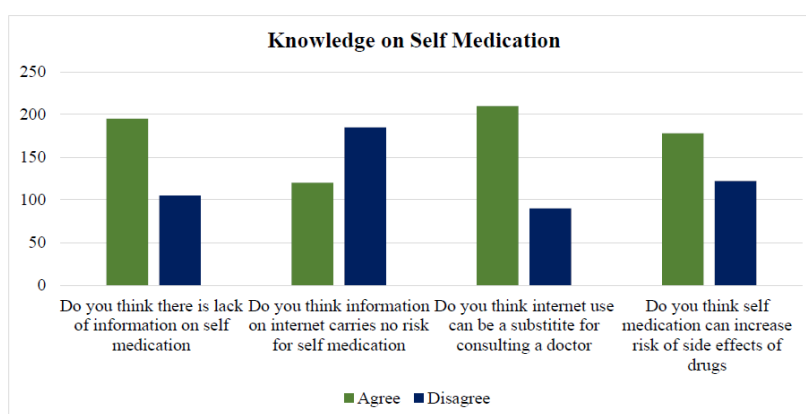


Figure 3: Knowledge and use of self-medication

DISCUSSION

Self-medication is the use of drugs for self-treatment without consulting a registered physician, either for diagnosis, prescription, surveillance or treatment. It can lead to drug abuse and drug dependency which is very severe in the current era. Irrational use of medicine without proper medical guidance can result in greater probability of inappropriate, incorrect or undue therapy, pathogen resistance and increased morbidity.^[6]

The present study aimed to assess the effect of media in promoting self-medication use. A total of 380 valid responses were obtained. Out of 380 responses, after scrutinizing the data based on exclusion criteria, data was extracted from 300 responses.

Most of the people use self-medication under the age of 18-24 years followed by the age group 25-35 years and 35 years and above. Majority of the college students are using self-medication, because of time constraint and stress similar results were obtained from the study conducted in Hyderabad.^[8]

In the present study female were practicing self-medication more than males which is similar to the study conducted among college students in Gujarat where female participants are more. Out of 300 who participated a high prevalence of self-medication practice was seen among students (35.3%). 28% were self-employed, 20% were working in private sectors and 16% were unemployed. Of the total 300 participants, 60 participants had primary education, 70 had secondary education and

majority were college and above.^[3] Similarly, a study conducted shows that people use more of analgesic drugs without any prescription. Self-medication has influenced people that disease can be cured by self-treatment. i.e.; in our study, it showed that majority of the respondents opted for other categories of drugs, antipyretics was widely used among students. This is because they believed that the drug is non-toxic and can be used any time, irrespective of its dose. People use antipyretics followed by analgesics, antihistamines, antitussives, antacids, anti-diarrhoea and anti-emetics very commonly in the current study.^[7]

Out of this 300 participants 170 are using media platforms to obtain information about self-medication. Increased the use of energy supplements, beauty and cosmetic products, weight loss and weight gain, use of antacids was observed which is similar to a study conducted in Punjab university.^[3]

According to our study survey, most people gathered information from media, i.e. 56.8% of the study participant obtained information from media, 20% were advised by friends, family. The third source of information were the advice of pharmacist and fourth source of information is the use of left-over medicine already been known by the participants.

According to the occupation category students are practicing self-medication more followed by self-employed, private sector and unemployed employees, similar study was conducted among the UG students which is considerably higher than our study.^[3]

Prior to the study, more than half of the participants are using self-medication for headache followed by fever, menstrual pain, cough, gastric problems, allergies, nausea and skin problems. Similar reports were found, in a study conducted among the students Kerala University.^[9]

Around half of the test population in the study said that they undertake medicines without any proper prescription. And the reason for this might be most of the people

think that they are only suffering from mild illness and secondly confidence on the knowledge of the medicine, some suggested visiting physician is time consuming, and may also be due to the expense to consult a physician. Similar studies were conducted among UG students, which is considerably higher than our study.

Nowadays most of the people are violating Indian law by advertising using movie stars as spokesperson by using the adjectives like side effects, safest, trusted, offer money back guarantee. And these are regulated by the Magic Remedy Act. Most of the drugs advertised in the study claimed for menstrual pain, hair problems, eye related, blood problems.

The pharmaceutical industries primary aim is to maintain the profit to sell all their products either by attempts to generate more prescription from the physician on direct-to-consumer advertising of its products through media.^[3]

In our opinion, self-medication can be dangerous even for simple illness, if it is done with insufficient knowledge. Media has an important role in promoting self-medication as they can help to self-diagnose and self-medicate, it can also result in misinterpretation and use of information wrongly.^[10]

CONCLUSION

The present study concluded that most of the participants employ self-medication under the influence of media. Consumers prefer to manage their common health problems using self-medication as it is easier, cost effective and time efficient.

Major problem with self-medication is the deleterious outcomes due to inappropriate use of medications. Public are becoming more aware about the usage of certain medications for management of ailments. Care should be taken, as the social media may circulate certain misinformation, misinterpretation where self-medication seems doubtful.

The misleading advertisements continue to appear in media, sometimes celebrities

endorsing these products. The government has to enforce strict rules to protect innocent people from claims proposed by the pharmaceutical companies with fake claims or statements in newspaper, magazines and electronic media

Conflict of Interest: None

REFERENCES

1. Darshana Bennadi. Self-medication: A current challenge. *Journal of Basic Clinical Pharmacology*. 2014 January; 5(1): 19-23.
2. Schweim H, Ulmann M. Media influence on risk competence in self-medication and self-treatment. *German Medical Science*. 2015; 13-18.
3. Jain S, Malxi R, Jeetendra K. Concept of self-medication: A review. *International Journal Pharm Biol Arch*. 2011 Jan; 2 -10.
4. Shah K, Halder S, Shabbir S. Assessment of knowledge, perception, and awareness about self-medication practices among university students in Nepal. *Heliyon*. 2021 January; 7(1):20-29.
5. Selvaraj K, Ganesh S, Ramalingam A. Prevalence of self-medication practices and its associated factors in urban Puducherry, India. *Perspective in clinical research*. 2014 March; 5(1); 32-36.
6. Tesfamariam S., Anand I.S., Kaleab G., Berhane S., Woldai B., Habte E. Self-medication with over-the-counter drugs, prevalence of risky practice and its associated factors in pharmacy outlets of Asmara, Eritrea. *BMC Publ. Health*. 2019; 19(1):1-9.
7. Malik M, Tahir MJ, Jabbar R, Ahmed A, Hussain R. Self-medication during covid-19 pandemic: Challenges and opportunities *Drugs & Therapy Perspectives*. Springer International Publishing. 2020; 15-23.
8. Kumar N, Kanchan T, Unnikrishnan B, Rekha T, Mithra P, Kulkarni V, et al. Perceptions and practices of self-medication among medical students in coastal South India. *PLOS ONE*. Public Library of Science. 2021; 56-61.
9. Solhi M, Jormand H, Gohari MR. Application of media literacy education for changing attitudes about self-medication of slimming supplements. *Europe PMC*. *Medical Journal of the Islamic Republic of Iran*. 2021; 31-38.
10. Biswas M, Roy MN, Manik MIN, Hossain MS, Tapu SMTA, Moniruzzaman M, et al. Self-medicated antibiotics in Bangladesh: a cross-sectional health survey conducted in the Rajshahi City. *BMC Public Health*. 2014; 14: 1-7.
11. G, Selvaraj K, Ramalingam A. Prevalence of self-medication practices and its associated factors in Urban Puducherry, India. *Perspect Clin Res*. 2014; 5: 32.
12. Shankar PR, Partha P, Shenoy N. Self-medication and non-doctor prescription practices in Pokhara valley, Western Nepal: A questionnaire-based study. *BMC Fam Pract*. 2002; 3: 1-7.
13. Tabassum R. Health Paradox of Indigenous people in Bangladesh: Unravelling aspects of mass media campaigns in changing health behaviors to prevent non-communicable diseases. *South East Asia J Public Heal*. 2016; 6: 17-22.
14. Khan TA, Mohammed T, Tavrekar SKR, Kondal S, Saravan K. Evaluation of Self-Medication Practice among Tribal District Students of South India. *J Contemp Med Dent*. 2014; 2: 65-68.
15. Van Ha T, Nguyen AMT, Nguyen HST. Self-medication practices among Vietnamese residents in highland provinces. *J Multidiscip Healthc*. 2019; 12: 493-502.
16. Aziz MM, Masood I, Yousaf M, Saleem H, Ye D, Fang Y. Pattern of medication selling and self-medication practices: A study from Punjab, Pakistan. *PLoS One*. 2018; 13-20.
17. Skliros E, Merkouris P, Papazafiropoulou A, Gikas A, Matzouranis G, Papafragos C, et al. Self-medication with antibiotics in rural population in Greece: A cross-sectional multicenter study. *BMC Fam Pract*. 2010; 11-19.

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