
Original Study

Assessment and Evaluation of the Problem of Self-Medication among First Year Medical Students of Skims Medical College, Bemina

Sajad Hamid

Assistant Professor, Department of Anatomy, SKIMS Medical College, Bemina, Srinagar.

Corresponding Author:Dr. Sajad Hamid, Assistant Professor, SKIMS MC Bemina

Abstract:

BACKGROUND:Self-medication is a state when a person uses a substance to self-administer treatment for physical or mental ailments. There are some drugs in the market that one can buy without a prescription. These are safe and effective when taken as per the directions on the label and as directed by the General Practitioner. The most widely self-medicated substances are these over-the-counter drugs. The Self medication is quite common practice in general and particularly among medical students. However self-medication can be quite harmful as well.

AIM : To assess and evaluate the problem of self-medications among the medical students of first professional MBBS in SKIMS Medical College, Bemina, Srinagar.

SUBJECTS AND METHODS : This is a questionnaire-based, descriptive study. A prevalidated questionnaire was prepared and each student was asked to fill up the Proforma and then the data was analyzed. A total of 100 First year medical students of SKIMS medical college participated in the study after taking proper verbal consent.

RESULTS: Out of the 100 respondents, 50 (50%) were males and 50 (50%) were females. The age group affected was 12-19 years. 74% of students practiced Self medication and the source of medication was local chemist (52%) or from drug pharmacy (22%). 55% of the affected students are aware of side-effects of self medication as most of them read the leaflet before taking medicine (67%). However, 72% of the affected students take advice from others before taking the medicine. The reason for self medication by medical students is due to mild illness (43% cases) and past experience (27% cases) and the students found self-medication providing quick relief in common illnesses. Headache (66%) followed by common cold (30%), sore throat (25%), fever (23%) Acidity (22%) etc were the most common symptoms for which self medication was taken. Among drugs Paracetamol (58%) followed by anti-cold (23%), antibiotics (22%), cough syrup (21%), antacids (20%) were the main self medicated medicines. Most common age of students for starting self-medication were 16 years (26%) followed by 15 years (21%), 18 years (12%) etc. Only 15% of the students have some knowledge about trade name, course and dosage of drugs. Only 31% of students are aware about completing full course of antibiotic. About 47% students had a view that they are influenced by medical knowledge for self-medication. The Students' knowledge about the benefits and risks of self-medication was adequate although it was relatively poor so far as adverse effects of overall drugs were concerned (43%). Important disadvantages of self-medication mentioned were the risk of using inappropriate drugs, dosage, course and adverse effects of drugs.

CONCLUSION: self-medication seen in present study among the first year medical students is about (74%) and is more or less comparable to studies from other parts of the world. The result emphasizes the amount of problem in the young medical students about self-medication and lack of awareness about dosage, course of drugs & side effects. Hence more strict regulations are needed to avoid more healthcare problems and have a responsible pattern of self-medication.

Key words: Self-medication, medical students, SKIMS medical college, pattern and incidence.

INTRODUCTION

Self-medication is use of medicines by the individuals themselves without proper prescription for the treatment of self-diagnosed conditions. WHO has pointed out that practice of responsible self-medication is an effective way of treating minor ailments and it also reduces burden on health care services. (1) Self-medication is an age old problem prevalent world-wide & taking medications without consulting doctor for common ailments like fever, common cold, cough, allergy,

as infection, acidity, headache, diarrhea, constipation etc. (2) These medications are generally available over the counter (OTC). Essentially use of medication by a patient on his own initiative or on the advice of chemist or any other layman instead of consulting a medical practitioner, is called as self-medication.

Self-medication is affected by various factors some of them being socioeconomic (e.g. educational level, socioeconomic

status, access to medical information, non-availability of health services, awareness about health etc), accessibility to medicine and health care facilities, health sector reforms among others (3). Improvement in peoples' general knowledge, level of education, socioeconomic status, and development of new technologies (e.g. internet and related communication) is promoting self-medication worldwide (4).

There can be many reasons for increased likelihood of self-medication among medical students like easy access and senior student's advice, easy access to physician samples, from pharmacist/chemist shops.(5)

Self-medication has both benefits and risks. Responsible self-medication can save scarce medical resources from being wasted on minor conditions, reduce the burden on health care facilities, and decrease the cost and time people spend to visit health care facilities for minor symptoms (4,6). However, inappropriate self-medication can have a number of potential risks for example delay in seeking appropriate medical advice; failure to recognize or self-diagnose contraindications, interactions with prescribed medicinal products; failure to report current self-medications to the prescribing physician (risk of double medication and/or harmful interaction); inappropriate duration of use of medicine; risk of dependence and abuse etc (4).

Despite of growing interest of research in this area little is known about self-medication among medical students especially in SKIMS medical college, bemina ,srinagar.

Therefore we believe that this research study will show the impact of this problem in medical students in particular and hence will reflect the amount of this problem in general population as well.

Therefore the necessary precaution, control and awareness can be initiated by the concerned authorities as well as the people at large.

MATERIAL AND METHODS

A pre-prepared questionnaire Performa was designed and after proper understanding and verbal consent ,100 medical students of first professional MBBS of SKIMS Medical College Bemina Srinagar were involved in the study in the age group of 17-20 years.

The choice of questions was based on various previous studies. Questions were objective and structural in nature. Students were asked not to write their name or roll number on the questionnaire sheet to ensure full anonymity.

On completion of the questionnaire the data was organized, tabulated and analyzed.

Sample questionnaire Performa for the study.

| s.no. | QUESTIONS | ANSWERS |
|-------|---|---------|
| 1 | Age | |
| 2 | Sex | |
| 3 | Residence | |
| 4 | Religion | |
| 5 | Have you ever taken any of medication of your own without a prescription from doctor(Yes, No,can't say) | |
| 6 | Where did you get these medications from...Chemist/pharmacy | |
| 7 | Are you aware of the side effects of these self-medications... Yes/No | |
| 8 | Do you always read the information leaflets before taking any of these medications... Yes/No | |
| 9 | Do you take any advice from anyone before taking such medications... Yes/No | |
| 10 | Why do you take self-medications... Mild illness , Past Experience , Convenience , Time Saving ,Trial , Multiple Responses | |
| 11 | What was the common reason for use of these medications... Headache/Pain abdomen/ Acidity/Fever/Commoncold/Cough/Vomiting/ Diarrhoea/Backache/Sore throat/ Skin problem/allergy/toothache/motion sickness | |
| 12 | Most common type of self-medications used.....Paracetamol/analgesics/antacids/muscle relaxant/cough syrup/anti-cold/anti-emetics/anti-allergic/anti-diarrhoeal/anti-spasmodic/ antibiotics/calcium/multivitamin | |
| 13 | Age at starting Self Medication | |
| 14 | Knowledge about Generic, Trade name, Course and Dosage of Drugs, | |
| 15 | Aware of Completing full course of antibiotic, | |
| 16 | Recommendation of drugs to other family members | |
| 17 | Aware of side effects of drugs used | |
| 18 | Influence of medical knowledge towards self-medication | |
| | | |

RESULTS

A total of 100 medical students of first year voluntarily participated in this study, Out of which , 50 (50%) were males and 50 (50 %) were females. Their age range was (17-20 years). Out of 100 students 74% of students confessed taking Self medication at some stage and the source of medication

was local chemist (52%) or from drug pharmacy (22%).55% of the affected students are aware of side –effects of self medication as most of them read the leaflet before taking medicine (67%). However, 72% of the affected students take advice from others before taking the medicine.The reason for self medication by medical students is due to mild illness (43%) and past experience (27%) and the students found self-medication providing quick relief in common illnesses. Headache (66%) followed by common cold (30%) , sore throat (25%) , fever (23%) Acidity (22%) etc were the most common symptoms for which self medication was done.Among drugs Paracetamol (58%) followed by anti-cold(23%),antibiotics(22%), cough syrup (21%) , antacids(20%) were the main self medicated medicines.Most common age of students for starting self-medication were 16 years(26%) followed by 15 years(21%) ,18 years(12%)etc. Only 15% of the students have some knowledge about trade name , course and dosage of drugs.Only 31% of students are aware about completing full course of antibiotic.. About 47% students had a view they are influence by medical knowledge for self –medication..The Students' knowledge about the benefits and risks of self-medication was adequate although it was relatively poor so far as adverse effects of overall drugs are concerned(43%). Important disadvantages of self-medication mentioned were the risk of using inappropriate drug ,dosage, course and adverse effects of drugs

DISCUSSION

Self-medication is defined as use of drugs or medication without proper prescription, guidance or follows up by clinician.(7) In developing countries like India, most episodes are treated by Self Medication due to easy availability of non-prescription drugs & is becoming a routine practice nowadays especially by undergraduate medical students(8 - 13).

The present study revealed that 74% of students accepted Self Medication practices . However,the other similar type of studies have reported different figures ranging from 43.2 to 91 91% (8-16). The variation may be due to different demographic profile. The percentage of students who confessed self medication vary amongst different years of students and found increasing from first year to final year as final year student is having more knowledge of medicine (9-16). Conversely, a study carried out in Maharashtra reported more prevalence in first year students (17). Also, the Self Medication practice was found more in female students as compared to male students which is in concordance with previous works (10,13,15- 18), whereas few studies reported similar proportion in both sexes[8] and slightly higher in males as compared to females (11,16,19). In another study it was found that prevalence of self-medication was higher among educated class (20)as compared to uneducated class. Most common reason for self-medication is the people's belief that they can take good care of themselves.

The commonest illnesses that led to Self Medication in this study (headache, common cold, sore throat, fever & acidity) were also reported similarly in other studies(17,18,21-

23).Various researchers (21-23) revealed antipyretics as commonly used drugs for Self Medication which, is in agreement with the present study whereas, the study carried out in a tertiary care medical college of West Bengal reported antibiotics to be the most commonly used drugs (15).

Regarding the source of drug procurement the local chemists followed by pharmacy were the most common source which is similar to the results of previous studies (9- 12,17). The reason being easy availability .

Most common reasons for Self Medication reported in our study were mild illness & is comparable with the findings in literature(11,13,15,17,21), however other workers reported previous expertise(8- 10,12), lack of time to consult doctor (14,19), quick relief(18), and time saving (22) as common ailments.

The observations regarding reading leaflet information before taking medicine is in accordance with earlier studies (7,8,12,17,18,23).

Majority of the students irrespective of the year of the study reported that they were aware of adverse effects of medicines used by them which, are analogous with the findings of other workers (22,23). Findings related to adverse effects of medicines are in agreement with the studies conducted in Egypt and India (16,17), but differ from previous studies (11,19). A Good number of students agreed that medical knowledge is necessary for administration of medicine by self which, is in accordance with other studies (8,12).

CONCLUSION

Thus our study demonstrates that Self Medication is highly prevalent in first year medical students of SKIMS Medical college,bemina.Thus education of the youth to ensure safe practices is the need of the hour & measures be taken to discourage such practices. If action is not taken, the danger of interactions and adverse effects could increase. The need of hour is to sensitize the students regarding the irrational use of medicines in terms of self medication and will also guide in the designing various health education strategies which, are required to educate the students and the community in large. We also suggest that population should be made aware of the problems and dangers associated with it.

People should also be made aware of the responsible self-medication through proper education, advertisement (Print and electronic media).

More strict and stringent laws are needed to avoid the problems associated with self-medication. as well.Therefore the potential problems of self-medication should be emphasized to all the students' especially medical students.

REFERENCES

1. World Health Organization. The role of the pharmacist in selfcare and self-medication: Report of the 4th WHO Consultative Group on the Role of the

- Pharmacist. The Hague, Netherlands; 26–28 August 1998
- Sanjeev Badiger, Rashmi Kundapur,, Animesh Jain, et.al. Self-medication patterns among medical students in South India. *Australas Med J.* 2012; 5 (4): 217–220.
 - The role of the pharmacist in self-care and self-medication [internet]. WHO [Cited 2015AugAvailablefrom: <http://apps.who.int/medicine/docs/pdf/whozip32e/whozip32e.pdf>.
 - World Health Organization (WHO) WHO Guidelines for the regulatory assessment of medicinal products for use in self-medication. WHO druginformation. 2000;14(1):18–26.
 - James H, Handu SS, Khaja KA, et al. Influence of medical training on self-medication by students. *Int J Clin Pharmacol Ther* 2008; 46: 23-29.
 - Klemenc-Ketis Z, Hladnik Z, Kersnik J. Self-medication among healthcare and non-healthcare students at University of Ljubljana, Slovenia. *Med Princ Pract.* 2010;19:395–401.[[PubMed](#)]
 - Sontakke SD, Bajait CS, Pimpalkhute SA, Jaiswal KM, Jaiswal SR. Comparative study of evaluation of self-medication practices in first and third year medical students. *Int J Biol Med Res.* 2011;2:561–4.
 - James H, Handu SS, Al Khaja KA, Otoom S, Sequeria RP. Evaluation of the knowledge, attitude, and practice of self-medication among first-year medical students. *Med Princ Pract.* 2006;15:270–5. [[PubMed](#)]
 - Abay SM, Amelo W. Assessment of self-medication practices among medical, pharmacy, and health science students in Gondhar University, Ethiopia. *J Young Pharm.* 2010;2:306–10.[[PMC free article](#)] [[PubMed](#)]
 - Gutema GB, Gadisa DA, Kidanemariam ZA, Berhe DF, Berhe AH, Hadera MG, et al. Self-medication practices among health sciences students: The case of Mekelle University. *J Appl Pharm Sci.* 2011;1:183–9.
 - Girish HO, Divya HM, Prabhakaran S, Venugopalan PP, Koppad R. A cross-sectional study on self medication pattern among medical students at Kannur, North Kerala. *J Evol Med Dent Sci.* 2013;2:8693–700.
 - Patel PM, Prajapati AK, Ganguly B, Gajjar BM. Study on impact of Pharmacology teaching on knowledge, attitude and practice on self-medication among medical students. *Int J Med Sci Public Health.* 2013;2:181–6.
 - Kumar N, Kanchan T, Unnikrishnan, Rekha T, Mithra P, Kulkarni V, et al. Perceptions and practices of self-medication among medical students in coastal South India. *PLoS One.* 2013;8:e72247. [[PMC free article](#)] [[PubMed](#)]
 - Kumari R, Kiran, Kumar D, Bahl R, Gupta R. Study of knowledge and practices of self-medication among medical students at Jammu. *J Med Sci.* 2012;15:141–4.
 - Banerjee I, Bhadury T. Self-medication practice among undergraduate medical students in a tertiary care medical college, West Bengal. *J Postgrad Med.* 2012;58:127–31. [[PubMed](#)]
 - El Ezz NF, Ez-Elarab HS. Knowledge, attitude and practice of medical students towards self medication at Ain Shams University, Egypt. *J Prev Med Hyg.* 2011;52:196–200. [[PubMed](#)]
 - Mumtaz Y, Jahangeer SM, Mujtaba T, Zafar S, Adnan S. Self-medication among university students of Karachi. *J Liaquat Univ Med Health Sci.* 2011;10:102–5.
 - Pandya RN, Jhaveri KS, Vyas FI, Patel VJ. Prevalence, pattern and perceptions of self-medication in medical students. *Int J Basic Clin Pharmacol.* 2013;2:275–80.
 - Gaikwad NR, Patil AB, Khan TA. Comparative evaluation of knowledge, attitude and practice of self-medication among first and second year medical students. *J Datta Meghe Inst Med Sci Univ.* 2010;5:157–62.
 - Zafar SN, Waqar S, Zubairi AJ, et al. Self-medication amongst university students of Karachi: prevalence, knowledge and attitudes. *J Pak Med Assoc* 2008; 58: 214-17.
 - Bashir MS, Bansod KA, Khade A, Konnoju M, Rani U, Vadala KK. Self-medication A comparative study between 2nd and 3rd year medical students. *Int J Basic App Med Sci.* 2013;3:1–7.
 - Badiger S, Kundapur R, Jain A, Kumar A, Patanashetty S, Thakolkaran N, et al. Self-medication patterns among medical students in South India. *Australas Med J.* 2012;5:217–20.[[PMC free article](#)] [[PubMed](#)]
 - Shukla AK, Anand M, Chugh Y, Sharma A, Yadav VS, Charausia RC. Self-medication pattern among medical students in MLN medical college, Allahabad. *Indian J Pharmacol.* 2008;40(Supp S2):S61–2.