International Journal Dental and Medical Sciences Research
Volume 3, Issue 6, Nov-Dec 2021 pp 199-203 www.ijdmsrjournal.com ISSN: 2582-6018

An Anonymous Questionnaire Based Study of the Knowledge, Attitude and Practice of Self-Medication among Second Year Mbbs Students.

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Submitted: 10-11-2021 Revised: 25-11-2021 Accepted: 28-11-2021

ABSTRACT:
Background: Self-medication is becoming very common in our routine life which is an unhealthy and risky practice. The present study was undertaken to determine the knowledge, attitude and practice of self-medication among second year MBBS students of Andhra Medical College, Visakhapatnam, to observe the impact of pharmacology teaching among them. Self-medication has special impact in MBBS students. They are commonly involved in the practice of self-medication without complete knowledge about the medications they are taking. **Materials and methods:**A pre validated questionnaire was prepared and sent to students via google forms. Data was collected and analyzed using Microsoft Excel and results expressed as counts and percentages. **Results:**Total 175 students participated in the study voluntarily and most common reason for taking self-medication was that there was no need to visit the doctor for minor illness. In maximum number of students, information of drugs used for self-medication was previous prescription and knowledge acquired from subject pharmacology and source of the drugs from hostel-mates and drug store.Most of the students took self-medication for headache followed by cough, cold and fever. Out of 175 students, most of the students took NSAIDs as self-medication followed by Antihistamines. **Conclusion:**This study showed that students of second year MBBS with Pharmacology as one of the subjects are more aware about the action of drugs and hence do not hesitate in taking self-medication which is a wrong practice. The intended use should be appropriate for self-medication. Use of the product should not unduly delay diagnosis and treatment of a condition requiring medical attention.

Key words: Self-medication, Knowledge, Attitude, Practice, Second year MBBS.

I. INTRODUCTION:

Self-medication can be defined as the use of drugs to treat self-diagnosed disorders or symptoms, or the intermittent or continued use of prescribed drug for chronic or recurrent disease or symptom.[1] Self-medication has special impact in MBBS students. They are commonly involved in the practice of self-medication without complete knowledge about the medications they are taking.

Acquiring medicines without proper prescription, sharing medicines with friends in the hostel room or taking guidance from senior students, or from parent's advice at home.

This kind of 'self-care' which the students follow has its own potential risks and benefits. In most of the studies it has been found that self-medication results in wastage of resources, increases resistance of pathogens and drug dependence [2-4] and adverse drug reaction and results in incomplete cure.

On the other hand if done appropriately, self-medication can readily relieve acute medical problems, can save the time spent in waiting to see a doctor may be economical and sometimes can even save lives in acute conditions.

Responsible self-medication can be beneficial for patients, Health care providers and government.[2] As medical students are exposed to knowledge of diseases and drugs, this present study was undertaken to determine the knowledge, attitude and practice of self-medication among second year MBBS students of Andhra Medical College, Visakhapatnam, Andhra Pradesh to observe the impact of pharmacology teaching among them.

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II. MATERIALS AND METHODS:

Study centre: This study was carried out in Department of Pharmacology, Andhra Medical College, Visakhapatnam.
Study Population: Second Year MBBS students
Sample size: 175 students
Study Design: It is a Cross-sectional Observational study
Study Duration: In the month of October 2021.

Inclusion criteria:
1. All students 233 in number of 2nd year MBBS of both sexes.
2. Whoever is willing to participate in the study.

Exclusion criteria:
1. First year, third and final year students.
2. Whoever absent for the class.

Methodology: An anonymous questionnaire-based study in all the medical students of 2nd year MBBS attending theory classes in the department of Pharmacology, of Government Medical College, Visakhapatnam, Andhra Pradesh.A brief description of the nature of the study and the procedure of completing the questionnaire was explained to students taking part in the study. Questionnaire was self-developed and pre validated consisting of thirteen closed ended questions.They were given 45 minutes of time to complete the questionnaire.These questions in google forms is sent to what's app number of all students in the class room.

III. RESULTS:

Out of 233 students in the class 7 students were absent and 18 student's google forms were incomplete. Total 175 students google forms were complete. Out of 175 students participated in the study, 79 (45%) were males and 96 (55%) were females. Mean age range was from 20 to 25 years. Total of 152 (86.9%) students took self-medication and rest 23 (13%) students have not taken Self-medication for the past 6 months.

Knowledge:

Most common reason for taking Self-medication were that there was no need to visit the doctor for minor illness (63%), it was time saving (52%), Self-medication provided quick relief (47%) and there was ease and convenience in taking Self-medication (43%). (Table 1)

The most common reasons for not taking Self-medication were that there was lack of knowledge about medicines (91%), risk of adverse effects (96%) and risk of using wrong drugs (78%) and risk of misdiagnosing (74%). (Table 2).

Table 1: Various reasons told by students in favour of Self-medication

Reasons	Number of Students
No need to visit doctor	110
Time saving	91
Quick relief	83
Convenient	75
Economical	52
To avoid crowd	50
Awareness about the action of drugs	23

Table 2: Various reasons told by students for not taking Self-medication

Reasons	Number of students
Lack of knowledge about medicines	21
Risk of adverse effects	22
Risk of using wrong drugs	18
Risk of misdiagnosing	17
Risk of using drugs wrongly	11
Risk of drug dependence	12
Any history of adverse drug reactions	9

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In 120 (69%) students source of information of the drugs used for Self-medication was previous prescription. In 98 (56%) students source of drug used for Self-medication was hostel-mates and from medical store.Also, in the recent report, having a history of the same disease was declared as another reason for self-medication.[5]

Attitude:

In our study we found that out of 175 students only 64 (37%) MBBS students accepted the fact, that they always visited a qualified practitioner whenever they fell ill, while 98 (56%) students said that they visited the doctor only sometimes and 13 (7%) students visited very rarely.

Practice:

Out of total 175 students, most of the students n = 96 (55%) took Self-medication for headache followed by upper respiratory tract infection n = 95 (54%) and fever n = 85 (49%). (Table 3)

Out of total 175 students, most of the students n = 122 (70%) took analgesics as Self-medication followed by antihistamines n = 92 (53%). (Table 4).

Out of 175 students total 152 (86.9%) students took self-medication and rest 23 (13%) students have not taken Self-medication ever till now. Among those students who took Self-medication 87 students sometimes practiced while 54 students rarely practiced and 11 students always practiced Self-medication.

Table 3: Various indications for Self-medication.

Indication	Number of students
Headache	96
Upper Respiratory Tract Infection	95
Fever	85
Gastritis	61
Diarrhea	55
Vomiting	23
Dysmenorrhea	32
Minor injuries	11

Table 4:Different drugs used for Self-medication.

Drug	Number of students
Analgesics	122
Antihistamines	92
Proton Pump Inhibitors (PPIs)	52
Cough syrups/ Lozenges	43
Antispasmodics	35
Antimicrobials	31
Multi vitamins	30

IV. DISCUSSION:

In our study, we found that female students were more interested in taking Self-medication as compared to male students, this may be due to the fact that the female students are more hesitant to go to the hospital or outpatient department for minor illness. Similar findings were there in the study done by Thadaniet al.[6]

Out of 175 students total 152 (86.85%) students took self-medication, which is supported by the studies done elsewhere reported 76% in Karachi, [7] 94.1% in Slovenia, [8] 76.9% in Bahrainby James et al.[9]

In our study females had Self medicated more commonly than males.[10, 11]

In our study, most of the students who took Self-medication gave some reasons in favor that there was no need to visit the doctor for minor illness (63%), it was time saving (52%), and self-medication provided quick relief (47%) and reasons given by rest of the students for not taking self-medication were that there was lack of knowledge about medicines (91%), risk of adverse effects (96%) and risk of using wrong drugs (78%). Similar findings were there in the study done by James et al.[9]

Regarding knowledge, only 12.9% of our students were able to correctly name three OTC drugs. The ratio of students who could recall 2 or more OTC drugs was 46.8%, and the rest of them knew either one or none of OTC drugs. This observation reflects the knowledge of action of drugs of students while studying Pharmacology. In a review study Isacsonet al. described an

association between drug knowledge and a positive attitude towards Self-medication.[12]

In our study, we found that source of information of the drugs used for Self-medication was previous prescription, this may be due to the fact that they had visited the doctor for same illness previously and do not found it necessary to again visit the doctor for the similar complaints.

We also found that major source of the drugs used for Self-medication was medical store; this may be due to ease and convenience, similar results were found in the study done by Klemencet al.[8]

We found that most of the students took self-medication for problem of headache, this may be due to the strain on eyes while studying and lack of sleep for which they had to take analgesics, most of the times which was self-administered. Similar findings were there in study done by Zafar et al.[7] and James et al.[9]

Analgesics were the most common group of drugs used for Self-medication in our study; similar findings were there in the study done by James et al.[9] and Thadaniet al.[6]and by Lee CH et al.[13]

Unwanted interactions between drugs, drugdependency, and choosing inappropriate drugs because of an incorrect diagnosis are among the factors threatening the health of those who self-medicate.[14]So medical students seem to need more education about the risks of irresponsible Self-medication.

Self-medication seems to be higher among students than the general population. This can be due to a variety of reasons such as students' higher pharmaceutical and clinical knowledge, their better access to the Internet and the media advertising pharmaceutical products, and the cost-effectiveness of self-medication for them.[15]

V. CONCLUSION:

The practice of self-medication on the basis of incomplete knowledge should be avoided by students but "responsible self-medication" can be beneficial to treat minor illness and can even save lives in acute conditions.

The intended use should be appropriate for self-medication. Use of the products should not unduly delay diagnosis and treatment of a condition requiring medical attention.

Acknowledgement: Dr. J. Sudha HOD Department of Pharmacology – General support

Declaration: 1) Funding – None
2) Conflict of Interest – None declared
3) Ethical approval – Not required

REFERENCES:

1. World Health Organization. Guidelines for the regulatory assessment of medicinal products for use in self-medication. World Health Organization; 2000.
2. Filho L, Antonio I, Lima-Costa MF, Uchoa E. Bambui Project: a qualitative approach to self-medication. Cad SaudePublica 2004;20:1661-9.
3. Hughes CM, McElnay JC, Fleming GF. Benefits and risks of self-medication. Drug Saf 2001;24:1027–37.
4. Kiyingi KS, Lauwo JAK: Drugs in home: danger and waste. World Health Forum 1993;14:381-4.
5. Karimy M, Rezaee-Momtaz M, Tavousi M, Montazeri A, Araban M. Risk factors associated with self-medication among women in Iran. BMC Public Health. 2019;19:1033.
6. Thadani S, Salman MT, Ahmad A. Knowledge, Attitude and Practice of Self-medication Among Second Year Undergraduate Medical Students. J Rational Pharmacother Res. 2013;1(3):131-4.
7. Zafar SN, Syed R, Waqar S, Zubairi AJ, Vaqar T, Shaikh M, et al. Self-medication amongst University Students of Karachi: Prevalence, Knowledge and Attitudes. J Pak Med Assoc. 2008;58(4):214-7.
8. Klemenc-Ketis Z, Hladnik Z, Kersnik J. Self-medication among healthcare and non-healthcare students at University of Ljubljana, Slovenia. Med PrincPract. 2010;19(5):395-401. doi: 10.1159/000316380. Epub 2010 Jul 14. [PubMed: 20639665]
9. 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.MedPrincPract. 2006;15(4):270-5. [PubMed: 16763393]
10. 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. 2013;8:e72247.
11. El Ezz N, Ez-Elarab H. Knowledge, attitude and practice of medical students towards self medication at Ain Shams University, Egypt. J Prev Med Hyg. 2011;52:196.
12. Isacson D, Bingefors K. Attitudes towards drugs--a survey in the general population. Pharm World Sci. 2002;24:104–10

13. Lee CH, Chang FC, Hsu SD, Chi HY, Huang LJ, Yeh MK. Inappropriate self-medication among adolescents and its association with lower medication literacy and substance use. PLoS One. 2017;12:e0189199.
14. Ruiz ME. Risks of self-medication practices. Curr Drug Saf. 2010;5:315–23.
15. Montastruc JL, Bondon-Guitton E, Abadie D, Lacroix I, Berreni A, Pugnet G, et al. Pharmacovigilance, risks and adverse effects of self-medication. Therapie. 2016;71:257–62.