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ORIGINAL ARTICLE

Perception and Practice of 4th year MBBS students on self-medication

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ABSTRACT

Background: Self-medication practice is widespread in many countries and the irrational use of drugs is a cause of concern. It assumes a special significance among medical students as they are exposed to knowledge about diseases and drugs. Medical students must be able to distinguish about their drugs outcomes on body.
Aim: To assess perception and practice of self-medication among undergraduate medical students.
Methods: A descriptive study was carried out among 4thyear MBBS students of Lahore Medical & Dental College in January 2019. Students of 4th year MBBS were asked to engage in the study after getting voluntary informed consent. A structured questionnaire was used. Data was entered, analyzed in SPSS 20.
Results: In this study respondents 39.1% were male and 60.9% female. It was found that 77(67%) students practiced self-medication. The principal morbidity for seeking self-medication was headache as reported by 96(83.5%) students. NSAIDS were most commonly self-medicated as reported by 67(58.3%) students. Only 31(27%) students advised others for self-medication.
Conclusion: Self-medication is widely practiced among under- graduate medical students. In this situation, we should educate the students about advantages and disadvantages of self-medication.
Keywords: Self-medication, medical students, perception, practice.

INTRODUCTION

Self-medication is defined by WHO as use of medicine by a person based on his own knowledge or prescribed by pharmacist or by a lay man instead of consulting a medical practitioner[1]. Self-medication is basic part of self-care, which can be defined as primary public health resource in the health care system[2]. Medical students cannot prescribe medicine legally but as medical students may acquire knowledge of medicine and about its use as progressing through their medical studies, based on this knowledge they may consider themselves capable of using medicine rationally. As compared to a common man, medical students are found to be more habitual of self-medication due to different factors like easy availability of drugs, advertising of drug manufacturers, previous experience with same symptoms or disease [3], self-confidence about accurate drug knowledge, home-kept prescription drugs[4]. The practice of self-medication is more common in under developing countries where drugs are available over the counter without prescription of medical practitioner[3].

Other reasons for self-medication are the deficiency of time to visit a doctor, failure to urge a fast arrangement, gentle ailment, long separate of healing centres and clinics from domestic, and at last unreasonably expensive doctor's expenses. Additionally, extraction of much data from online sources, journal or newspaper makes individuals gusty around treating their claim sickness[5]. In any case, persons are imperilling their existence by carrying out self-medication as it can guide to addiction, deadly unfavourably susceptible responses, beneath dosage of medicine which may not lighten the side effect, additionally overdose that can stimulate collateral harm to distinctive organs[6].

Self-medication is found to be more common among medical and paramedical students[7]. A study from Nigeria has observed self-medication as a common practice among group of health workers that included dental, midwifery and nursing students[8]. Self-prescription is also prevalent among practicing physicians[9,10]. Self-medication was found to vary in medical students of different countries in earlier studies[11,12,13].

This study carried out to know the perception and practice of medical students on self -medication in LMDC.

METHODOLOGY

A descriptive cross-sectional study was conducted among all registered students of 4th year MBBS from the session 2018-2019 of Lahore Medical & Dental College Lahore in 2019. Non-probability Convenience Sampling was used. A structured questionnaire used and Data entered and cleaned in SPSS 20. Data was displayed in the form of tables and figures. The study was done after approval from LMDC ethical committee and verbal consent was obtained from each study participants.

RESULTS

Table 1: Self-medication is recommended in which illness? (n=115)

	Yes	No
Fever	80(69.6%)	35(30.4%)
Cold and cough	68(59.1%)	47(40.9%)
Headache	96(83.5%)	19(16.5%)
Body aches	55(47.8%)	60(52.2%)
Diarrhea	38(33%)	77(67.0%)
Vomiting	30(26.1%)	85(73.9%)
Lack of sleep	13(11.35%)	102(88.75%)

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Data collected from 115 students from Lahore Medical and Dental College, Lahore. The collected data was analyzed by descriptive statistics in terms of percentage in different tables.

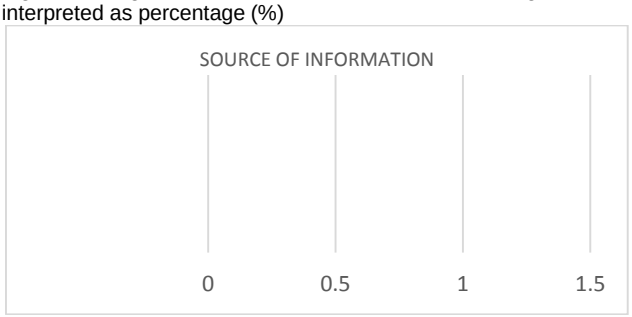
Table 1 shows out of 115 respondents, who practiced self-medication 80(69.6%) recommend medication for fever, 68(59.1%) for cold and cough, 96(83.5%) for headache, 55(47.8%) for body aches, 38(33%) for diarrhea, 30(26.1%) for vomiting and 13(11.35%) for lack of sleep.

Table 2: preferred drugs for self-medication?

	Yes	No
Nsaids	67(58.3%)	48(41.7%)
Antihistamines	38(33%)	77(67%)
Antispasmodics	10(8.7%)	105(91.3%)
Antacids	40(34.8%)	75(65.2%)
Antibiotics	37(32.2%)	78(67.8%)
Cough suppressants	55(47.8%)	60(52.2%)

Drugs or drug groups commonly preferred for self-medication among 115 respondents is shown in table 2. The most common drugs preferred are NSAIDS 67(58.3%), antihistamines 38(33%), antispasmodics 10(8.7%) antacids 40(34.8%) antibiotics 37(32.2%), cough suppressants 55(47.8%).the awareness about generic name, trade name, course and dosage of drugs among medical students, 67(58.3%) have awareness about them. the awareness about storage temperature for drugs among medical students, 67(58.3%) have awareness about them and 16(13.9%) do not, while 32(27.8%) do not have any opinion regarding it. And regarding the harmful effects caused by drugs in high doses in self-medication, 105(91.3%) think drugs in high doses can cause harmful effects, and 7(6.1%) do not have opinion that it could be harmful, while 3(2.6%) do not have any opinion. the opinion of 115 medical students regarding the time of taking drugs in self-medication, 40(34.8%) think ,self-medication can be taken at any time of the day , and 66(57.4%) do not, while 9(7.8%) don't know about it. And the awareness about specific side effects of drugs preferred for self-medication, among medical students, 72(62.6%) have awareness about them.

Figure 1: Origin of information on self-medicated drugs. Data is interpreted as percentage (%)



Out of 115 respondent, 63(54.8%) preferred previous prescription 15(13%) preferred package inserts , 25(21.7%) preferred pharmacists, 64(55.7%) preferred family members/friends, 5(4.3%) preferred print materials, 27(23.5%) preferred electronic media as source of information for self-medication .Regarding the advisability of prolonged use of self-medication, 4(3.5%) think, it Is advisable for prolonged use and 108(93.9%) do not think so, while 3(2.6%) don't know about it. In the opinion of 115 medical students regarding the better outcomes of self-medication under professional advice, 84(73%) think self-medication under professional advice give better outcomes, and 15(13%) thinks it does not give better outcomes, while 16(13.9%) don't know about it.

Table 3 : Self-medication is more common among?

	Yes	No
Illiterate people	54(47%)	61(53%)
Medical students	81(70.4%)	34(29.6%)
Doctors	62(53.9%)	53(46.1%)
Nurses/paramedics	42(36.5%)	73(63.5%)
Pharmacists	44(38.3%)	71(61.7%)

Table 3 shows the opinion of medical students regarding common users of self-medication, 81(70.4%) think it is common in medical students followed by 62(53.9%) in doctors, 54(47%) in illiterate people, 44(38.3%) in pharmacists and 42(36.5%) in nurses/paramedics. Medical students immediate response is when they fall sick, 41(35.7%) does self-medicate , followed by 37(32.2%) wait for symptoms to subside, 31(27%) consult doctor, 18(15.75%) ask for suggestions and giving their prescription to someone else having similar symptoms, 52(45.2%) have given while 63(54.8%) have not given their prescription to someone else with similar symptoms. medical students taking self-medication without professional advice, 77(67%) do whereas 38(33%) do not self-medicate without professional advice. Most of medical students on the appearance of unwanted effects during self-medication, 80(69.6%) consult a doctor, followed by 48(41.7%) discontinue the medicine and 7(6.1%) take another medicine. In advising medical student's self-medication to others. 31(27%) advice self-medication, while 84(73%) do not.

DISCUSSION

Self-medication is a widely practiced health seeking behavior. Last twenty years the world health organization (WHO) has specifically emphasized the availability of essential drugs as a health indicator in developing countries[14]. Concerning the demographic characteristics, the respondents were of age 21.75±0.981 years 45(39.1%) males and 70(60.9%) females medical fourth year students. Several studies have previously been done on self -medication but there are very few studies that have been conducted on medical students. Self-medication by itself has both pros and cons that depend on who and what one chooses to self-medicate[15].

The study on 4th year MBBS students showed that headache a leading factor, was the essential indication for usage of self- medicine in students and second most common factor is fever. Most commonly used drugs for self-medication was NSAIDS and second most common is cough suppressants. The use of antibiotics is not as common as NSAIDS it could be due to the knowledge regarding antibiotics resistance and its side effects. The respondents had a fine knowledge of the generic name

trade name course and dosage of the drugs. Most of the respondents aware of the storage temperature required for different medicines. An interesting finding found that most respondents think that self-medication cannot be taken at any time of the day. Mostly respondents aware of the specific reactions of self-medication. Over half of appellant motivated by relatives/ friends and surprisingly half had previous prescription as their source of information and this result was homologous to the data of the study supervise in India[16,17].

While the rest depend on electronic and print media, pharmacists and package inserts. Even though most of them also agreed that prolonged and high dose usage of drugs could be harmful and should be discouraged. The self- confidence may continue to promote the unnecessary and inappropriate self-medication practice. On the other hand many respondents responsibly believe that self-medication under professional advice gives better outcomes. According to the respondents self-medication were advised at the age of 20.85±4.840.The majority of the respondents believe that self-medication is more common in the medical students. In general the respondents felt that medical knowledge was making them more confident about self-medication and according to respondents medical students do wrong self-medication and almost thirty six percent respondents immediately resort to self-medication when they fall sick whereas less than half prefer consulting a doctor. Above seventy respondents used self- medication according to need and 45.2% have given own prescription to someone else that having similar symptoms. Above sixty five respondents take drugs for self - medication without any professional advice and if unwanted effects appear then mostly respondents consult a doctor .the positive finding of the results was more than half the respondents avoid advising self- medication to others.

Limitations: The sample size was not fairly large to generalize the result.

Recommendation: Awareness and education regarding the implications of selfmedication. Revisiting the definition and the scope of self- medication in our local setting .There should be a proper control over the sales of medicines especially in case of private firms.

CONCLUSION

Self-medication is widely practiced among under- graduate medical students. In this situation, we should educate the students about advantages and disadvantages of self-medication. The frequency of self - medication practices is alarmingly high in the educational youth of Pakistan.

Health professionals should actively participate to control the practice of self-medication through mass education. As the study was confined to the 4th year medical students, advance investigation is required to examine the predominance of self-medication habit among the common populace. More steps ought to be grasp to screen the medicate offering framework by shareholders particularly of those drugs with possibly hurtful impacts.

Conflict of interest: Nil

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