

Study of self-drug administration among MBBS professional medical students**Karmakonda Anil Kumar¹, M. Anil Kumar², Durga Kannapa³, Asra Tayyab^{4*}**¹*Associate Professor, Dept. of Community Medicine, Dr.V.R.K. Women's Medical College, Ranga Reddy, Telangana, India*²*Associate Professor, Dept. of Community Medicine, Chalmeda Anand Rao Institute of Medical Sciences, Bommakal, Karimnagar, Telangana, India*³*Associate Professor, Department of Obstetrics & Gynaecology, Ayaan Institute of Medical Sciences, Ranga Reddy, Telangana, India*⁴*Associate Professor, Department of Physiology, Dr.V.R.K. Women's Medical College, Ranga Reddy, Telangana, India***Received: 30-11-2021 / Revised: 12-12-2021 / Accepted: 01-01-2022****Abstract**

Background: Self-medication involves obtaining medicines using old prescriptions to purchase medicines or without a prescription, sharing medicines among each other or using leftover medicines from previous illness. The present study was conducted to assess self-drug administration among MBBS professional medical students. **Material and methods:** The study was conducted among 130 students from first, second and final year MBBS. All selected students were asked to fill the details of questionnaire. The questionnaire was in two parts. The first part contained questions on demographic information. Socio-economic variables were covered in second part of questionnaire. The data were recorded in MS excel and analyzed using Graph pad prism version 6. **Results:** In the present study total participants were 130 in which, 56.15% were male and 43.84% were female. In first year 65.90% were male and 34.09% were female, while in second 46.93% were male and 53.06% were female. Likewise in final year 56.15% and 43.84% were male and female respectively. Maximum participants were of age group 18-20 yrs(43.84%). In first and second year maximum participants were of age group 18-20yrs. In final year maximum participants were of age group 24-26yrs. Likewise in final year 56.15% and 43.84% were male and female respectively. Maximum students takes self-medication for headache all groups. Maximum students takes Tablet paracetamol as self-medication. **Conclusion:** The present study concluded that Self-medication had been widely practiced among medical students.

Keywords: self-drug administration, MBBS medical students, prescription.

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Introduction

Self-medication is defined as the use of medication by a patient on his own initiative or on the advice of a Pharmacist or a lay person instead of consulting a medical practitioner (WHO guidelines, 2000)[1]. The World Health Organization (WHO) advocated that responsible self-medication can help in prevention and treatment of diseases that do not require medical consultation and provides a cheaper alternative for treating common ill-nesses[2-4]. It has been observed that medical and paramedical students are commonly involved in the practice of self-medication, without complete knowledge about the therapy they are taking[5]. Although in developed countries it is mainly restricted to over the counter medicine but in developing countries it may occur with both over the counter medicine and prescription only medicine[6,7]. Patients acquire medicines for self-medication by using old prescriptions, sharing medicines among relatives and friends, left over medicines from previous illness and medical stores which don't require prescriptions and also home remedies[8,9]. Among college students, medical, dental and midwives have shown an increased use of medications because of direct advertisement of pharmaceutical companies in advertisements in prime television channels, magazines and internet[10,11]. The present study was conducted to assess self-drug administration among MBBS professional medical students.

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Material and methods

The study was conducted among 130 students from first, second and final year MBBS. Students were selected by convenience sampling method. The study duration was 6 months. Before the commencement of the study ethical approval was taken from the Ethical committee of the institute. The inclusion criteria were students of first, second and final year present in the lecture hall willing to fill the questionnaire. Students unwilling to participate were excluded from the study. All selected students were segregated in lecture hall and requested to sit at gap of two chairs. They were made clear about details of questionnaire and asked for clarification of any confusion they had. The help of two third year students were taken to collect the questionnaires and to assure the filled data are mutually exclusive and not influenced by the other fellow participants. They were asked for their written consent in initial part of questionnaire and those who gave consent were provided with written as well as verbal instructions to fill up the questionnaire. The data were collected in the form of filled questionnaire forms and the time given to fill up the form was 30 minutes. The questionnaire was in two parts. The first part contained questions on demographic information of the respondents such as age, gender and year. Socio-economic variables such as health seeking behavior, names and sources of drugs used for self-medication, type of illness, factors influencing self-medication practices and strategies that may help reduce self-medication practices were covered in second part of questionnaire. The questionnaire consisted of close-ended and open-ended questions. The data were recorded in MS excel and analyzed using Graph pad prism version 6.

Results

In the present study total participants were 130 in which, 56.15% were male and 43.84% were female. In first year 65.90% were male and 34.09% were female, while in second 46.93% were male and 53.06% were female. Likewise in final year 56.15% and 43.84% were male and female respectively. Maximum participants were of age

group 18-20 yrs(43.84%). In first and second year maximum participants were of age group 18-20yrs. In final year maximum participants were of age group 24-26yrs. Likewise in final year 56.15% and 43.84% were male and female respectively. Maximum students takes self-medication for headache all groups. Maximum students takes Tablet paracetamol as self-medication.

Table 1: Demographic details of the participants

Variables	No. of students of First year	No. of students of Second year	No. of students of Final year	Total
Age groups(yrs)				
18-20	30(55.55%)	27(58.69%)	0(0%)	57(43.84%)
21-23	24(44.44%)	19(41.30%)	10(33.33%)	53(40.76%)
24-26	0(0%)	0(0%)	20(66.66%)	20(15.38%)
Total	54(41.53%)	46(35.38%)	30(23.07%)	130(100%)
Gender	No. of students of First year	No. of students of Second year	No. of students of Final year	Total
Male	29(65.90%)	23(46.93%)	21(56.75%)	73(56.15%)
Female	15(34.09%)	26(53.06%)	16(43.24%)	57(43.84%)
Total	44(33.84%)	49(37.69%)	37(28.46%)	130(100%)

Table 2: Self-medication done by students for various ailments.

Ailments	No. of students of First year	No. of students of Second year	No. of students of Final year
Headache	35	34	20
Cough and cold	20	18	13
Fever	32	31	11
Loose motion	31	20	11
Vomiting	22	12	8
Skin infection	35	11	4
Acidity	22	13	15

Table 3: Different medicines used for self-medication

Medicines	No. of students of First year	No. of students of Second year	No. of students of Final year
Tablet paracetamol	38	32	15
Capsule amoxicillin	34	29	9
Tablet metronidazole	35	31	12
Capsule omeprazole	37	32	11
Tablet domperidon	22	12	5
Neosporin ointment	23	32	13

Discussion

Self-medication is the use of medicines by people on their own initiative without consultation with a physician. In recent years, self-medication is being considered an element of self-care[12]. People have always been keen to accept more personal responsibilities for their health status if provided with adequate knowledge. Self-medication has pros and cons depending upon who and what the patient chooses to self-medicate with[13].

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The practice self-medication was found more in first year students followed by final year and second year students which is not in congruence with the previous studies that showed progressive increment in practice of self-medication as student progresses from first to final year[14,15].

Self-medication is the utilization of medicines by persons on their own without any proficient medical supervision. In developing countries like India, most episodes are treated by selfmedication due to easy availability of non-prescription drugs. It is more likely to be inappropriate without complete knowledge although it is becoming a routine practice nowadays especially by undergraduate medical

students[16]. The prevalence of self-medication varied amongst different years of students and found increasing from first year to final year and the reason might be the knowledge of medicines in final year students which is comparable with the findings of previously conducted studies[17].

Most of the students take medications symptomatically, common symptoms observed are fever, cold and cough, headache, pain, etc., and commonly consumed medicines are antipyretics, analgesics and anti-inflammatory, cough suppressants, antihistamines, etc. Most common use of antipyretics and analgesic (esp paracetamol) in our study was consistent with most parts of India and across the world like costal part (74%)[8] Gujarat (43%)[18], Nagpur (80.6%)[19], Iran[20], and Ethiopia[21,22].

Conclusion

The present study concluded that Self-medication had been widely practiced among medical students.

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