



A STUDY ON PREVALENCE OF SELF MEDICATION AND ITS ASSOCIATED FACTORS AMONG MBBS STUDENTS IN GOVERNMENT MEDICAL COLLEGE, SRIKAKULAM

Community Medicine

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ABSTRACT

BACKGROUND: Self-Medication is quite a prevalent public health problem and widely practiced in every part of the world, especially in developing countries like India. Self – Medication can be defined as the use of drugs to treat self – diagnosed disorders or symptoms, or the intermittent or continued use of a prescribed drug for chronic or recurrent disease or symptoms. Medical students are in a unique position for wide practice of self-medication. The current study aimed to assess the prevalence of self-medication and its associated factors among MBBS students. A cross-sectional questionnaire-based study was conducted among 2nd year to 4th year MBBS students in the month of December, 2024. Participants were recruited by universal sampling after taking informed consent. Total 405 students were included and were analyzed using MS Excel. Results showed that Self-medication practice was highly prevalent among the MBBS students with 78.7% (319) and was more prevalent among female students than male. Fever (58.3%) was the most frequently reported illness for which self-medication was practiced by the students. Antipyretics (49.2%) were the most common drugs used by students for self-medication. The most common reason adduced for self-medication was their belief that they have sufficient information and knowledge, and they know what to take for minor ailments (31.3%). Pharmacist (37.9%) was the major source of drugs for self-medication reported by students. 21.9% students reported adverse events following self-medication. The practice of self-medication begins early in the Career of medical students and is carried forward into their future. Hence there is an urgent need to educate them regarding the dangers of irrational drug use along with the implementation of stringent regulations regarding the sale of drugs without a valid prescription.

KEYWORDS

Medical Students, Prevalence, Self-medication

INTRODUCTION

Self-Medication is quite a prevalent public health problem and widely practiced in every part of the world, especially in developing countries like India. Self-Medication is defined as the use of drugs to treat self – diagnosed disorders or symptoms, or the intermittent or continued use of a prescribed drug for chronic or recurrent disease or symptoms.^{1,2} Medical students are in a unique position for wide practice of self-medication because they are newly entering into the medical field and they are over confident that became a future practitioner. Self-medication provides a lower cost-alternative for people who cannot afford the cost of clinical service. Now a days self-medication is rapidly increasing due to a number of factors such as education, family, society, law, availability of drugs and exposure to advertisements etc.³ And the wrong self-diagnosis leads to delayed treatment, unnecessary out of pocket expenditure, adverse drug reactions due to incorrect dosage, drug interactions, incorrect route of administration, and drug dependence etc. The younger population is highly influenced by the media and internet, which guided wrongly to self-medication behaviour. It has been observed that medical students are commonly involved in the practice of self-medication, without having sufficient knowledge on the drugs taken.⁴ Self-medication is highly prevalent in India both urban as well as rural community varying from 32.5% to 81.5%. In India, health care services became highly expensive, but with the emergence of increased number of noncommunicable diseases (NCDs) most of which may modified by self-medication and reducing risk factors, responsible use of self-medication with over the counter (OTC) drugs as part of self-care.^{5,6} A 2020 systematic review and meta-analysis of university students worldwide found that the prevalence was 97.2% among medical students, compared to 44.7% among non-medical students. Medical students typically self-medicate for minor, self-diagnosed ailments. Common conditions include that headache, fever, common cold and flu, Gastrointestinal issues (e.g., acidity, diarrhoea). Most commonly used drug classes for self-medication are analgesics and antipyretics (e.g., paracetamol, ibuprofen), antihistamines, antacids and antibiotics etc. The several factors contribute to the high rates of self-medication among MBBS students such as Perceived minor illness, Lack of time, Easy access to information, Peer influence, and Misplaced confidence, Cost and convenience. The current study aimed to assess the prevalence of self-medication and its associated factors among MBBS students.

MATERIALS AND METHODS

A cross-sectional questionnaire-based study was conducted among 2nd year to 4th year MBBS students in the month of December, 2024 at Government Medical College, Srikakulam. Participants were recruited by universal sampling after taking informed consent. Total 405 students were included. Data was collected using a semi structured, pre-tested questionnaire and was analyzed using MS Excel.

RESULTS

The study results of 405 MBBS students showed that the 59.5% were female and 40.49% were male.

Mean age was 21.3 YEARS

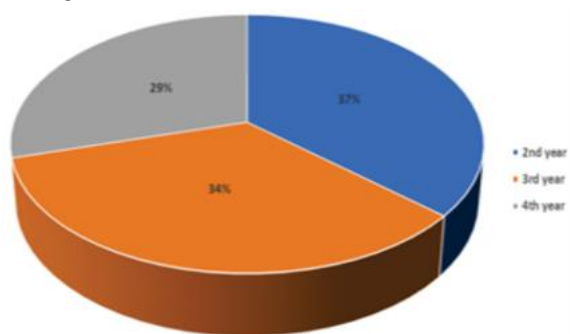


FIG 1: DISTRIBUTION OF STUDY POPULATION ACCORDING TO ACADEMIC YEAR

TABLE 1: DISTRIBUTION OF STUDY POPULATION BASED ON SOCIODEMOGRAPHIC DETAILS

VARIABLES	SUBGROUP	N (%)
GENDER	MALE	164 (40.49%)
	FEMALE	241 (59.5%)
RESIDENCE	URBAN	293 (72.3%)
	RURAL	112 (27.6%)
RELIGION	HINDU	339 (83.7%)
	CHRISTIAN	45 (11.1%)
	MUSLIM	21 (5.18%)

TYPE OF FAMILY	NUCLEAR	360 (88.8%)
	3 GENERATION	22 (5.43%)
	JOINT	23 (5.67%)
SOCIO ECONOMIC STATUS	UPPER	33 (8.1%)
	UPPER MIDDLE	165 (40.7%)
	LOWER MIDDLE	88 (21.7%)
	UPPER LOWER	110 (27.1%)
	LOWER	9 (2.2%)

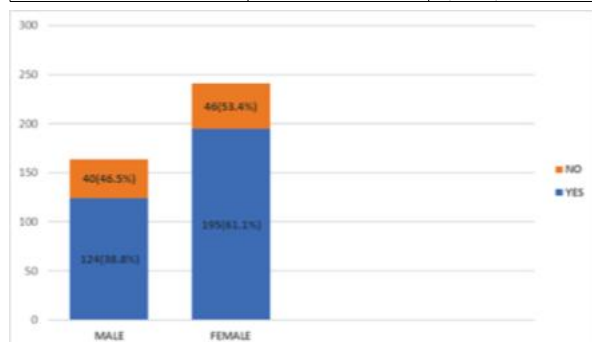


FIG 2: DISTRIBUTION OF STUDY POPULATION (GENDER WISE) BASED ON SELF MEDICATION HISTORY IN PAST 1 YEAR

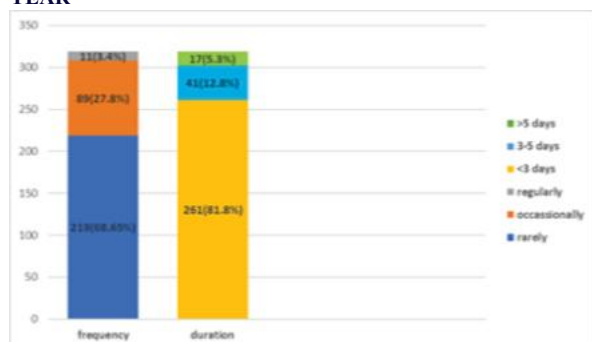


FIG 3: DISTRIBUTION OF STUDY POPULATION ACCORDING TO FREQUENCY AND DURATION OF SELF MEDICATION

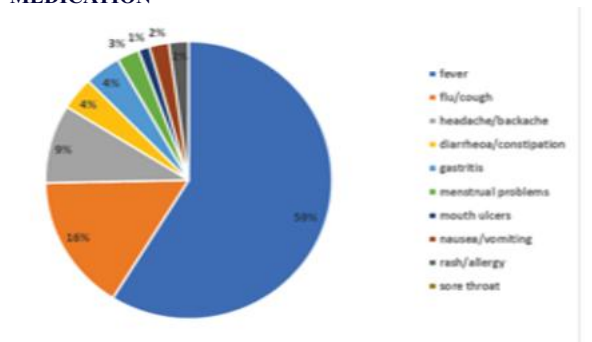


FIG 4: INDICATIONS FOR SELF MEDICATION

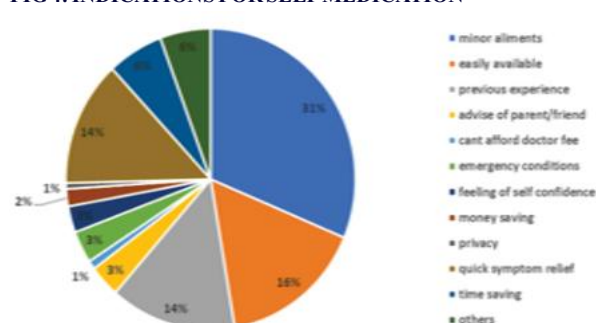


FIG 5: REASONS FOR SELF MEDICATION

FIG 6: GROUP OF DRUGS USED FOR SELF MEDICATION

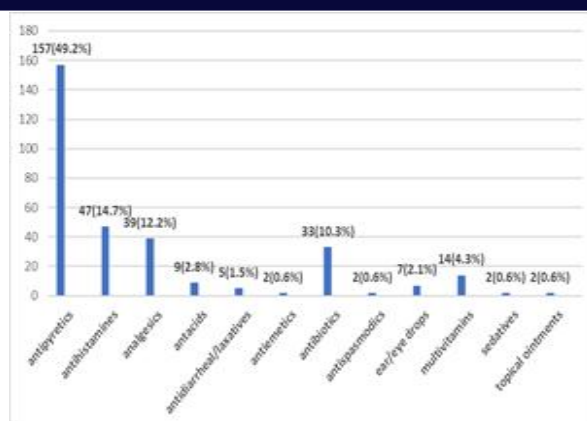


FIG 7: SOURCE OF DRUGS FOR SELF MEDICATION

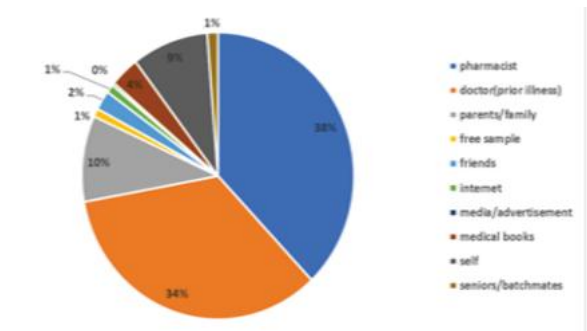
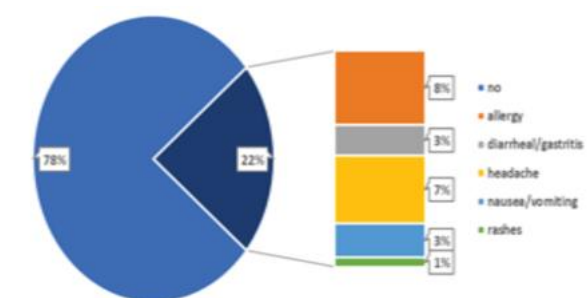


FIG 8: ADVERSE EVENTS FOLLOWING SELF MEDICATION



DISCUSSION

Self-medication was highly prevalent among MBBS students in the present study (78.7%), consistent with findings from Rasania et al. (72.1%)¹, Shah et al. (80.58%)³, and Nithin Kumar et al. (78.6%)⁷. It was more common among females, similar to observations by Rasania et al.¹, Nandini et al.⁸, and Kanyari et al.². Fever (58.3%) was the most common indication for self-medication, in line with Patil et al. (74%)⁴, Himanshu et al. (66%)⁵, and Kasulkar et al.⁹. Antipyretics (49.2%) were the most frequently used drugs, as also reported in multiple studies including Rasania et al.¹, Kumar et al.¹⁰, Kanyari et al.², and Nithin Kumar et al.⁷. The primary reason for self-medication was the belief of having adequate knowledge to treat minor ailments (31.3%), which agrees with findings from Shah et al.³, Patil et al.⁴, and Tarapdhar et al.⁶. Pharmacists (37.9%) were the main source of medications, similar to Nandini et al.⁸, while other sources included old prescriptions and the internet by Himanshu et al.⁵. Adverse events were reported by 21.9% of students, higher than those observed in Patil et al.⁴, where fewer cases of side effects, drug interactions, and symptom recurrence were noted.

CONCLUSION

Self-medication is highly prevalent among MBBS students, particularly among females and urban residents. While it is commonly practiced for minor ailments due to convenience and prior knowledge, the occurrence of adverse events highlights associated risks. Therefore, there is a need to promote awareness about rational drug use and encourage seeking professional medical advice to ensure safe practices.

RECOMMENDATIONS

Educational interventions on rational drug use should be incorporated into the curriculum. Awareness programs are needed to highlight the risks of self-medication and promote seeking professional advice. Regulation of over-the-counter drug sales should be strengthened, especially through pharmacists. Students should be encouraged to use institutional healthcare services instead of relying on old prescriptions or online sources. Pharmacovigilance awareness must be improved to enhance reporting of adverse events. Targeted strategies, particularly for female students, and behavioral interventions like peer education may help reduce self-medication practices.

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