

**Research Article****EVALUATION OF THE PRACTICE OF SELF MEDICATION AMONG COLLEGE STUDENTS IN WEST UTTAR PRADESH**

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Abstract

The objective of this study was to describe and examine the branded medicines used by college students, awareness, trust in medicine system, reasons behind self medication, drug information resources, danger findings and knowledge of drug profile. Samples of 253 young students belonging to different regions of West Uttar pradesh were randomly selected. An inclusion criterion was 17-25 years. A total of 22 students were excluded in accordance with the exclusion criteria like incomplete information. About 80.08% students had a positive trust in allopathic medicines, 83.12% students learn self medication from doctors prescriptions provided during their prior illness. 12.35% were alcoholic, 21.73% were smokers, 9.76% students with chronic problems, who were considered in danger findings. Only 46.93% students were aware about drug interaction. Most of the self medication was involved with headache and fever, cough & cold, gastrointestinal Infection, mouth ulcer & Throat infection. Respondents were using Schedule H drugs/potent drugs for minor illness. The results are based on feed backs which were provided by respondents included in study. The percentage of self medication might be change along with locality and region. The prevalence of self medication among college students in West Uttarpradesh is high. This descriptive survey shows that the majority of professional students had a poor knowledge about appropriate self medication while the knowledge of the benefits and risks was not adequate. A number of students consult pharmacists and follow advertisements on drug information. This issue needs to be addressed by the responsible authorities of State Pharmacy Council/Ministry of Health.

Keywords: Self medication, College students, Medicines, Pharmacists**Introduction**

It is common for people to feel unwell, and human beings have an inherent tendency to use herbs, potions, medications, etc. for treating themselves. Every day people throughout the world act on their own for their health; they practice self-care. In some instances, they do so through self-medication, which is now increasingly being considered as a component of self-care[1]. Some governments are increasingly encouraging self-care of minor ill-nesses, including self-medication[2]. Encouragement of self-care is seen as giving patients every opportunity to take responsibility and build confidence in their ability to manage their own health. Patient empowerment is viewed as a positive step in the development of the relationship between patient and healthcare provider and is considered as an important health policy concept[3].

Self-medication is defined as the use of medication, whether modern or traditional, for self-treatment. Studies done on

self-medication reveal that it is a fairly common practice, especially in economically deprived communities. It is a growing trend of 'self-care' which has its positive and negative aspects[4].

In several studies it has been found that inappropriate self-medication results in wastage of resources, increases resistance of pathogens and generally entails serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence[5]. 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 can even save lives in acute conditions[6]. It is now accepted that self-care in the form of responsible self-medication can be beneficial for patients, healthcare providers, the pharmaceutical industry and governments. The World Health Organization (WHO) has also pointed out that responsible self-medication can help prevent and treat ailments that do not require medical consultation and provides a cheaper alternative for treating common ill-nesses[7]. However, it is also recognized that self-medication must be accompanied by appropriate health information[8].

Studies on self-medication show that it is influenced by

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many factors, such as education, family, society, law, availability of drugs and exposure to advertisements[9]. A high level of education and professional status has been mentioned as predictive factors for self-medication[10]. The reasons for self-medication mentioned in the literature are mild illness, previous experience of treating similar illness, economic considerations and a lack of availability of healthcare personnel. The most common medications used for self-medication are analgesics and antimicrobials[11].

Self-medication is an area where governments and health authorities need to ensure that it is done in a responsible manner, ensuring that safe drugs are made available over the counter and the consumer is given ad-equate information about the use of drugs and when to consult a doctor[1,3,7]. Unlike other aspects of self-care, self-medication involves the use of drugs, and drugs have the potential to do good as well as cause harm. In this context, the pharmacist has an important role[1,3].

The present study was undertaken to evaluate the frequency of (i) branded medicines used by professional students, (ii) awareness, (iii) trust in medicinal system, (iv) reasons behind self medication.

Subjects and Methods

This study was a questionnaire-based survey approved by the Research and Ethics Committee of the College. A self-developed, prevalidated questionnaire consisting of both open-ended and closed-ended items were used. The study population comprised college students of the west U.P. These were young men and women, all Indian nationals, who had 1-4 years ago joined the professional college. All campus students who were willing to participate in the study were enrolled. A briefing was given about the nature of study, and the procedure of completing the questionnaire was explained. Consenting participants completed the questionnaire in the college campus.

Samples of 253 students were selected randomly from three institutions of west U.P. The inclusion criteria for the selection of students was 17 years and above. Out of all 22 students were excluded in accordance with the exclusion criteria like incomplete information. The questionnaire consisted of questions on type of medicine system, category of medicines and name of a particular medicine. The results are based upon the data obtained from 231 (91.3%) students. The prevalence of self medication was reported as percentages. The survey was descriptive and data was summarized as counts and percentages, some of the questions had multiple options to choose from, therefore the sum total of percentage is not always 100%.

Result

Baseline characteristics of participants

All the students (n=253) responded to the questionnaires, of whom 22 were excluded in accordance with the exclusion criteria like incomplete information. Remaining 231 (90.3%) student’s questionnaires were considered for evaluation.

Trust in medicine system

Most of the students had a trust in allopathic medicine system (80.08%) and the percentage of students favoring homeopathy and ayurveda were 20.77% and 11.68% respectively (Table 1).

Table 1: Trust in medicine system

Trust in medicine system	Respondents %
Allopathic	80.08%
Ayurvedic	11.68%
Homeopathic	20.77%
Unani	2.59%

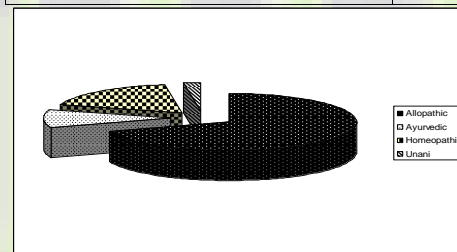


Fig-1: Trust in medicine system.

Reasons in favor of (advantages) self-medication

The respondents perceived several advantages of self-medication (table 2). The most important advantages were saving time (45.02%), doing away with the need to go to a doctor for a minor illness (12.55%), being economical (23.37%) and providing quick relief (6.92%).

Table 2: Reasons in favor of (advantages) self-medication

Reasons	Respondents %
Time saving	45.02
No need to visit doctor for minor illness	12.55
Economical	23.37
Quick relief	6.92
Learning opportunity	3.03
Ease and convenience	5.62
Crowd avoidance	9.09
Unavailability of doctor	11.25

Drug information

83.12% students learned self medication from doctors prescriptions provided during their prior illness. Friends, pharmacist, advertisements and books comprised 40.78%, 21.2%, 19.18%, 9.5% respectively, which provided/guided students for self medication (Table 3).

Table 3. Source of information about drugs used in self medication by students

Drugs informers	Respondents %
Doctors (from prior illness)	83.12%
Friends	40.78%
Advertisements	21.2%
Pharmacists	19.18%
Books	9.5%

(D) Danger findings

12.35% students committed they were alcoholic and 21.73% were smokers. About 9.76% students were with their chronic problems which were non communicable diseases. Awareness about drug interaction with alcohol, smoking, chronic diseases with self medicated medicines was only 46.93 % (Table 3).

Table 3. Dangers findings that might be dangerous in self medications

Dangers finding	Respondents %
Alcoholics	12.35%
Smokers	21.73%
Chronic Diseases	9.76%
Awareness about drug interactions	46.93%
Knowledge of drug profiles	0%

Prevalence of self medication

About 91.30% positive respondents committed that they were involved with self medication practices. Drugs which were taken by self medication in various diseases states are given below:

Drugs used in headache and fever: Maximum respondents 57.26% used Crocin for fever and headache. Disprin and Combiflam were used in 41% and 34% respectively. Remarkable thing was that Nice and Brufen were also used by students (Figure 2).

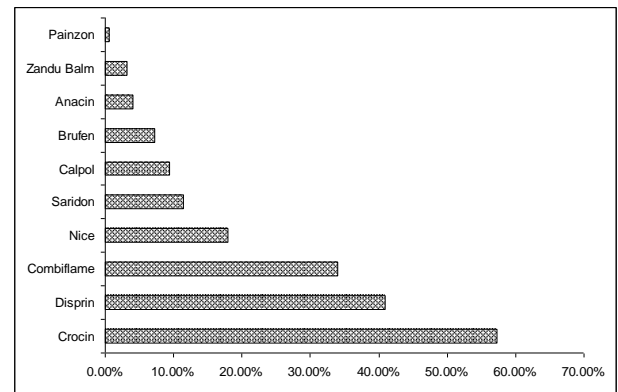


Figure 2: Drugs used in headache and fever

Drugs used in cough and cold: 38.56% students used D-Cold Total tablets which were maximum %. Corex was second drug of choice 21.85% and third drug of choice was Vicks Action-(500) 14.36% (Figure 3).

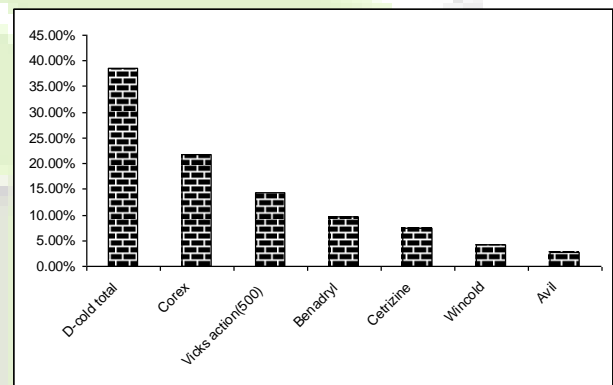


Figure 3: Drugs used in cough and cold

Drugs used in G.I. Infection/complications:

Metrogyl 24.67% were best drug of choice reported by study. Norflox-TZ 17.52% was considered as second drug of choice (Figure 4).

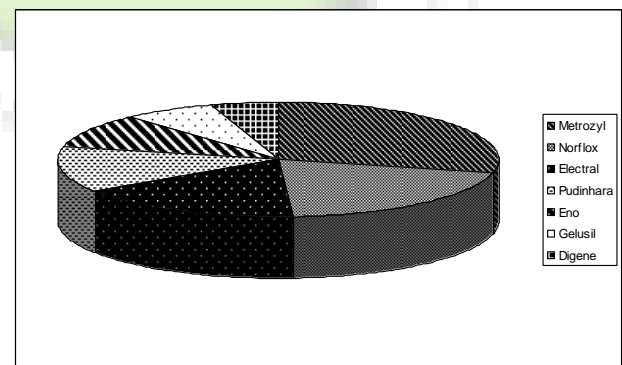


Figure 4: Drugs used in G.I. infection/complications

Drugs used in mouth ulcer and throat infection:

Maximum respondents 16.34% used Smile gel for mouth ulcers, Becosules 11.32% Glycerine 5.46% was second and third drug of choice. For Throat infection 10.30% students used Strepsils and Vicks 8.35% as second choice (Figure 5).

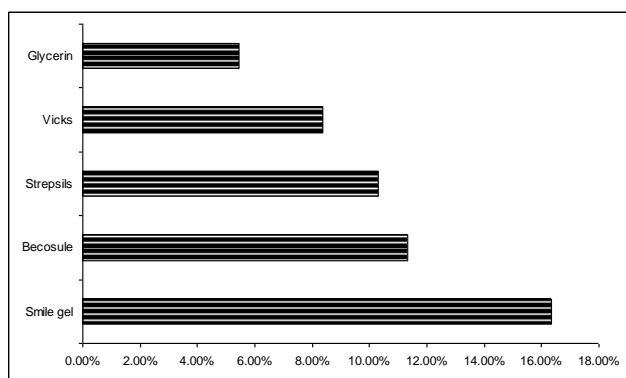


Figure 5: Drugs used in mouth ulcer and throat infection

Discussion

This type of study, using a self administered questionnaire, is largely dependent upon information given by respondents. Although students were encouraged to complete the questionnaire independently, mutual influence between pupils could not be entirely ruled out. However, given the high level of response, the results should closely approximate the behavior of the adolescent students in west Uttar Pradesh. Few students consulted pharmacists for information on drugs. The pharmacist's role is mainly seen as that of a drug salesman rather than that of a healthcare provider. Patient education and awareness campaigns are necessary to promote the role of the pharmacist in India. Students with a previous experience and with mild illness were more likely to practice self medication. This has implications, because many diseases have similar symptoms and a person using previous experience may be exposed to the dangers of misdiagnosis and consequently wrong treatment.

Out of 231 respondents not a single respondent had knowledge about complete profile of the drug which was taken up by self medication practice. They were not even aware of the dose of drug, duration of therapy, toxic dose of drug, active constituents, indications and side effects of commonly used medicine like Paracetamol used in self medication. Another alarming observation was that Nice and Brufen were also used by respondents to treat headache and fever, while these medicines are considered under Umbrella of Analgesic.

Most of the students used Corex syrup for cold and cough treatment which is most potent drug in initial therapy it is not a safe drug of choice. Second drug of choice was Benadryl. Both are scheduled H drugs and drugs should be taken only with prescriber's advice.

Major reasons of self medication at student level were time saving, did not need advice from prescriber for minor illness, economic, fear from crowd at clinic. Most of the respondent has positive attitude in self medication in minor

illness.

However, minor illness symptoms may cause major illness if not diagnosed properly. Most of the fatal diseases have symptoms like fever, body ache, and headache.

Conclusion:

This descriptive survey shows that the majority of professional students had a poor knowledge about appropriate self-medication while the knowledge of the benefits and risks was not adequate. Thus, to avoid or minimize the dangers of self medication,

Firstly the students should be educated about the dangers of indiscriminate use of drugs. Secondly, the physician should be more judicious in prescribing, and must insist on drugs being supplied by the chemist only on a valid prescription. Thirdly, a proper statutory drug control must be implemented, rationally restricting the availability of drugs to the public. These, three measures would definitely reduce the incidence of drug-related mishaps and help in maintaining good health of the individual and society.

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