Self-medication Practice Among Undergraduate Medical Students in Nepalgunj Medical College, Chisapani

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ABSTRACT

Introduction: Self-medication forms an essential part of the self-care. Since medical students are being exposed to the knowledge of diseases and drugs, would assume a special significance to assess the self-medication practice among them.

Methods: This was a cross-sectional study conducted from March to April 2018 in 200 preclinical medical students of Nepalgunj Medical College (NGMC), Chisapani. A structured questionnaire was used for data collection and the students who took self-medication within last two months were included.

Result: Out of 200 students, 123 (61.5%) were found practicing self-medication. Majority of students (47.97%) were taking Non-steroidal Anti-inflammatory Drugs (NSAIDs) for fever (18.70%), headache (17.89%) and abdominal pain (13.01%). 21.14% of students were consuming paracetamol for these health ailments. 44.72% of students reported that they were practicing self-medication because of the mild nature of illness.

Conclusion: Students are widely practicing self-medication, particularly NSAIDs group of drugs. In this situation, awareness about the pros and cons of self-medication should be must in the medical students.

Key words: Self-medication, medical students, NSAIDs, NGMC

INTRODUCTION

Most illness are treated by self-medication, yet very little is known about the appropriateness of self-medication[1]. It involves the use of medicine by the people who want to treat self-recognized symptoms by themselves[2]. Thus, Self-medication forms an essential part of self-care which also includes; non-drug self-treatment, social support in illness and first aid in everyday life[3]. Moreover, it is widely practiced among undergraduate medical students. In this situation, we should educate the students about advantages and disadvantages of self-medication[4].Responsible self-medication can help prevent and treat diseases and other minor ailments especially when resources are limited[5]otherwise self-medication if not based on authentic medical information can lead to irrational use of drugs, wastage of resources, increased resistance of pathogens and can lead to serious health hazards such as adverse drug reaction and prolonged morbidity[6]. Present study was to explore the different dimensions on self-medication being practiced among undergraduate medical students. This study broadens the awareness level regarding the rational use of drugs by medical students.

MATERIALS AND METHODS

This cross sectional study was carried out among the undergraduate preclinical medical students (Batch 2016/2017) of Nepalgunj Medical College, Chisapani from March to April 2018. A total number of 200 medical students were included, out of which 123 students were found to be practicing self-medication.

All the data were collected after obtaining an informed consent and all the data were kept confidential. A pre designed, structured questionnaire were used to collect the data on demographic information (age, sex, year/ batch of MBBS) and clinical information (drug/drug group being taken as self-medication, symptoms or indication for which it is being taken and reasons behind the self-medication). Data were analyzed and presented as counts and percentages using SPSS 25 and expressed in table and bar charts.

RESULTS

Out of 200 students, 123 (61.5%) were found practicing self-medication within last two month i.e. the month of March/

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April. Mean age of students was 20.05±0.99 years. Table I shows the distribution of self-medication practice among male and female students. Among them, 71 (57.7%) were males and 52 (42.3%) were females. Graph I shows majority of students were practicing self-medication for fever (18.70%) followed by headache (17.89%), cough & common cold (16.26%), abdominal pain (13.01%), allergies (11.38%), diarrhea (8.94%), heartburn/peptic ulcer (8.94%) and for other ill-health conditions (4.88%). Graph II and graph III depicts that NSAIDs (47.97%); particularly paracetamol (21.14%), mefenamic acid (8.13%), ibuprofen (7.32%) and diclofenac (7.32%) were the most frequently used drug as self-medication. Results in graph IV showed that 44.72% of students were practicing self-medication assuming that the nature of illness was mild. It was followed by 24.39% of students practicing it to save time, 23.58% thought it would be cost effective and 7.32% took these drugs in urgency.

Table I: Distribution of self-medication practice

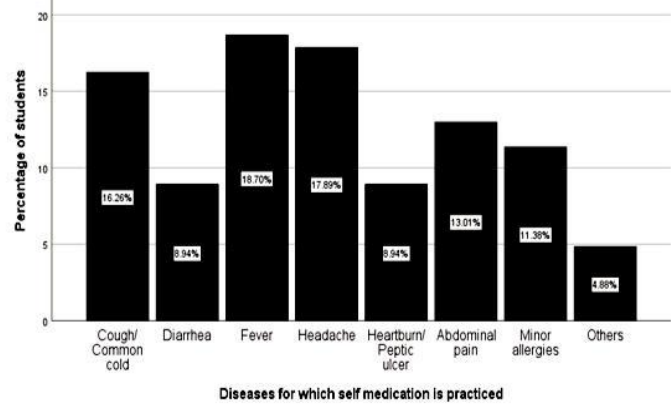| Gender	Self-medication	No self-medication	Total students number
Male	71	41	112
Female	52	36	88
Total	123	77	200

Figure 1: Diseases for which self-medication is practiced
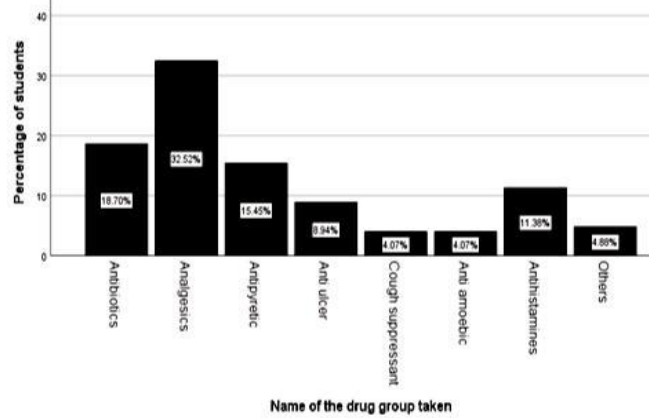

Figure 2: Drug group taken as self-medication

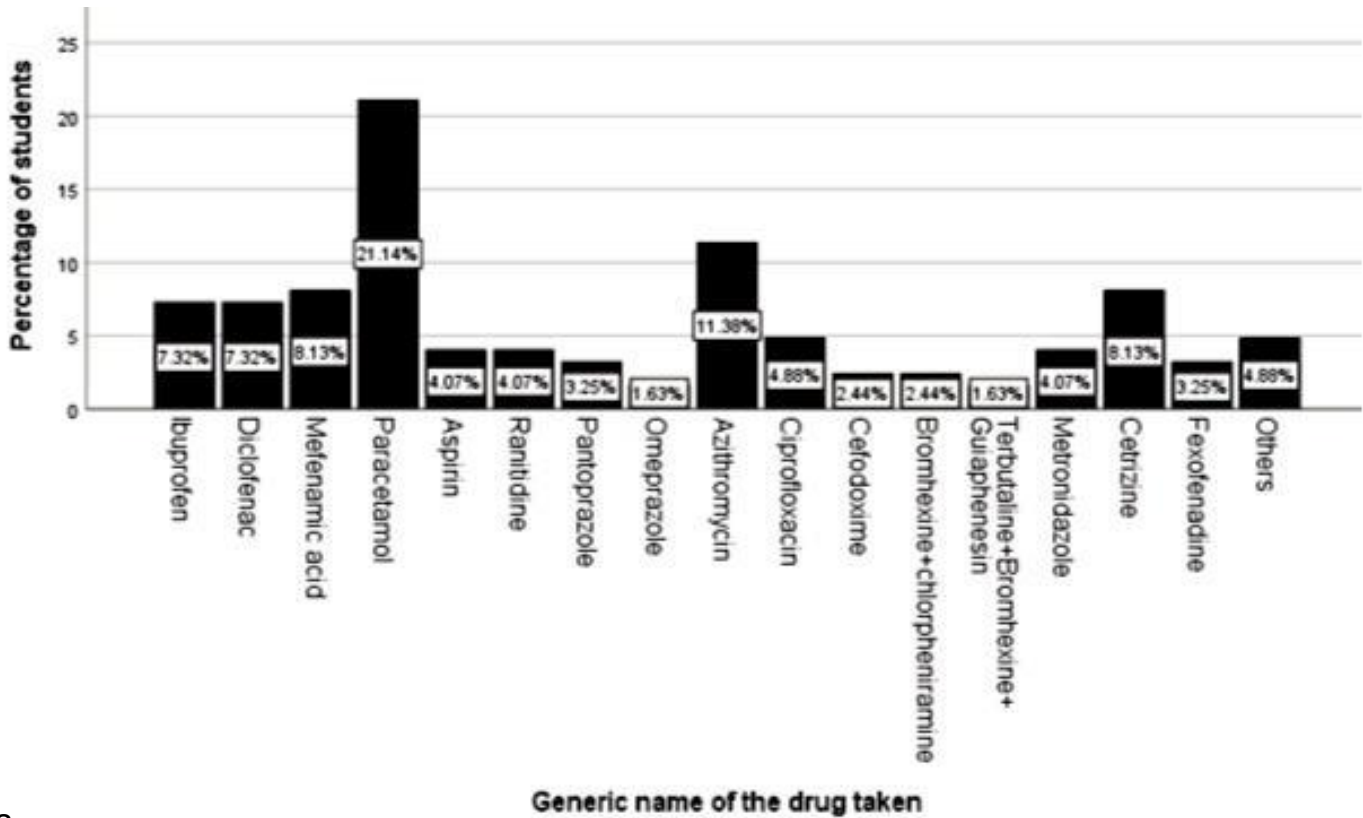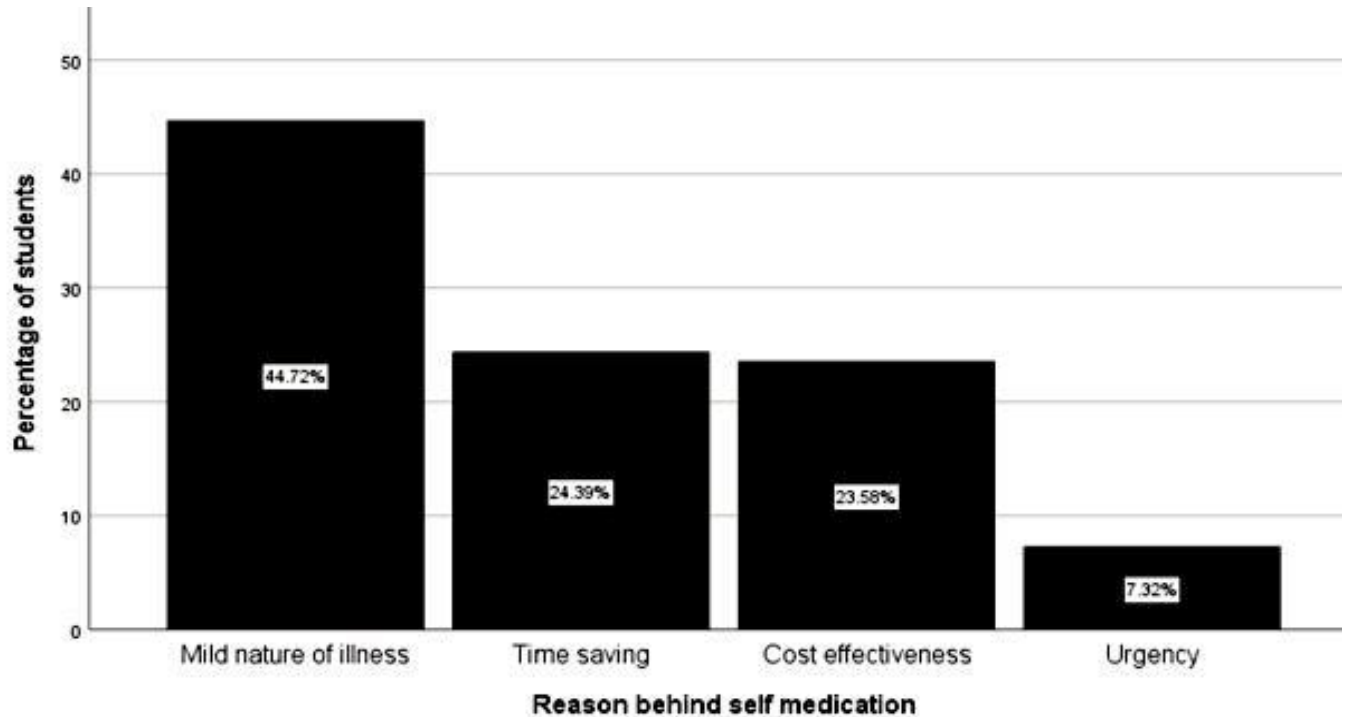**Figure 3: Drug taken as self-medication**

Figure 4: Reason behind self-medication

DISCUSSION

In this study, the prevalence of self-medication among undergraduate medical students was 61.5%. Patil et al[4] conducted a study in Karnataka, India where the prevalence of self-medication among undergraduate medical students was 88.18%. Similarly, the prevalence was 57.05% in West Bengal[6] and 78.6% in Mangalore[7].

Present study confirms that most common indication for self-medication was fever (18.70%) followed by headache (17.89%), cough & common cold (16.26%), abdominal pain (13.01%), allergies (11.38%), diarrhea (8.94%), heartburn/peptic ulcer (8.94%) and for other conditions (4.88%). which is different from the study by Patil et al[4] and Banerjee et al[6] where they concluded that cough and cold were the most common indication for self-medication. However, a study conducted in Ethiopia[8] reported most common illnesses were fever and headache (24.8%) followed by cough and common cold (23.9%).

Non-steroidal Anti-inflammatory drugs (NSAIDs) 47.97%; Paracetamol (21.14%) and other NSAIDs (26.83%) were most frequently used by students in our study which was concomitant to the study by Shankar P et al[2] in Pokhara valley; Paracetamol and other Non-Steroidal Anti Inflammatory Drugs (NSAIDs) were used by 43.1% and 23.1% respectively. A study conducted in Karachi[9] and Bahrain[10] also reported analgesics to

be the most commonly used drug group i.e. 88.3% and 81.3% respectively. 18.70% were on self-medication with antibiotics in our study while 31.09% were using antibiotics in a study done in West Bengal[6] and 39.3% in Coastal South India[7]. Similarly, Kumar N et al[7] studies concluded that antipyretics were the most common class of drugs which were self-medicated by the majority of the participants (74.8%), followed by Antitussives (68.2%) and Analgesics (65.8%). Present study also reveals that 44.72% of students practiced self-medication because they felt that the nature of illness is mild which is similar to a study of West Bengal (47.19%)[6]. Hallas J et al[11] in a study reported that the self-medication was largely characterized by poor medication, uncontrolled use, polypharmacy, treatment of epigastric pain with aspirin and the patient's unawareness of potential adverse reactions. In our present study, the chances of epigastric pain, even peptic ulcer with the use of NSAIDs and irrational use of antibiotics which might lead to drug resistance were totally overlooked by the students.

CONCLUSION

Self-medication is widely practiced among undergraduate medical students. A relatively responsible picture of self-medication among medical students has emerges. However, some of them have overlooked the short term and long term adverse effects of drug. So, knowledge of appropriate self-medication is a must for our medical students.

LIMITATIONS

Larger sample size targeting many medical colleges and general population can provide more valuable data reflecting the self-medication practice all over Nepal. Furthermore, self-medication of antibiotics can be a valuable study as the rational use of antibiotics is particularly important due to increasing drug resistance.

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