

Self-medication among Nursing Students of a Tertiary Care Hospital of Jammu and Kashmir: Knowledge, Practice, and Attitude

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Abstract

Background: The practice of self-medication is common worldwide, and the irrational use of drugs is a cause of concern that may lead to drug resistance also. The prevalence rates are on the rise despite efforts to limit this problem.

Aims and Objectives: The objective of the study was to determine the prevalence, attitude, and knowledge of self-medication among nursing students.

Methodology: A cross-sectional study was carried out among nursing students of Government Medical College, Srinagar, from February 2020 to March 2020. The recorded data were collected through a self-administered questionnaire and compiled, entered in a spreadsheet (Microsoft Excel), and exported to data editor of SPSS v22.0 as Mean \pm SD and categorical variables were summarized as frequencies and percentages. Graphically, the data were presented by bar diagrams.

Results: Out of 86 students enrolled, only 67 completed the questionnaire. The majority of the students self-medicate due to the fact that they believe self-medication provide quick relief (53.7%), followed by the availability of the previous prescriptions (50.7%) and ease and convenience. The main symptoms, leading to self-medication, were headache (67.2%) and cough (46.3%) followed by diarrhea, and the most common group of drugs used for self-medication was antibiotics (67.2%) followed by analgesics and antipyretics.

Conclusion: The self-medication practices are very common for treating clinical conditions that are simple or previously experienced. Awareness regarding the advantages and disadvantages of practicing self-medication must be done through proper education and conducting seminars.

Key words: Over the Counter drugs, Pattern, Prescription, Prevalence, Questionnaire, Self-medication

INTRODUCTION

Self-medication is often considered as a component of self-care and is widely practiced worldwide.^[1] The WHO defines self-medication as the use of medication by a patient on his own initiative or on the advice of a pharmacist or a layperson instead of consulting a medical practitioner.^[2] Self-medication being practiced worldwide^[3-7] often lead to misuse of drugs^[8] and increasing chance of drug dependency and most of all masking the sign and

symptoms of the underlying disease, complicating the existing problem creating drug resistance, and delaying diagnosis.^[9-13]

Self-medication may lead to irrational drug use and delayed seeking medical advice and increased side effects and drug interactions.^[14] Self-medication includes acquiring medicines without a prescription, resubmitting old prescriptions to purchase medicines, sharing medicines with relatives or members of one's social circle, or using leftover medicines stored at home.^[15] In developing countries like India, not only Over the Counter (OTC) drugs, even prescription-only drugs are easily accessible without prescription in pharmacy outlets.^[16]

The various studies have established that the practice of self-medication is on the rise among nursing students.^[17]

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METHODOLOGY

This cross-sectional study was carried out among nursing students to evaluate the knowledge, practice, and attitude toward self-medication in the Department of Pharmacology, Government Medical College, Srinagar from February 2020 to March 2020 after obtaining due approval from the Institutional Ethics Committee. Data were collected through structured, validated questionnaire which was adopted from various similar studies conducted previously^[18-21] and after giving a brief description of the nature of the study and the procedure of completing the questionnaire was explained to them. The questionnaire included questions pertaining to demographic details, reasons for self-medication, symptomology, leading to self-medication, most common drugs used to self-medicate and frequency of self-medication during 1 year recall period, and sources of drug information.

Statistical Methods

The recorded data were compiled and entered in a spreadsheet (Microsoft Excel) and then exported to the data editor of SPSS Version 20.0 (SPSS Inc., Chicago, Illinois, USA). Continuous variables were expressed as mean ± SD and categorical variables were summarized as frequencies and percentages. Graphically, the data were presented by bar diagrams.

RESULTS

A total of 67 students successfully completed the questionnaire, of which 58.2% were female and 41.8% were male. The mean age and standard deviation of the study population were 19.8 years and 1.14, respectively. The prevalence of self-medication was 89.6% with a high frequency of 32.8% resorting to self-medication 2–3 times in a year closely followed by every few months 29.9%. In our study, 80.6% of the students were from rural area and 13% were from urban areas. It was found that headache (67.2%), cough (46.3%) followed by fever (44.8%), and diarrhea (20.9%) were the predominant morbidity, for which the students practiced self-medication. Other causes of morbidity prompting the students to self-medicate included dysmenorrhea, allergy, and lack of sleep. The most common group of drugs used for self-medication included antibiotics (67.2%), analgesics (64.2%) followed by antipyretics (49.3%), cough suppressants (34.3%), antiemetics (22.4%) followed by sedatives, antiulcer drugs, and antihelminthics. The majority of the students self-medicate due to the simple ailment (61.2%) provide quick relief (53.7%), followed by availability of previous prescriptions (50.7%), ease and convenience, and crowd avoidance. The important sources of information for self-medication were old prescription (74.6%), Internet (52.2%), and pharmacists. Regarding practice

toward self-medication, 64.2% of the students are of the opinion that it does not reduce the load on the medical services. About 97.1% of students are of the opinion that self-medication is not risk-free and 73.1% believe that it may lead to irrational drug use [Tables 1-3].

Table 1: Socio-demographic characteristics of the study subjects

Variable	Category	Frequency	Percentage
Age (years)	≤20	52	77.6
	>20	15	22.4
Gender	Male	28	41.8
	Female	39	58.2
Residence	Rural	54	80.6
	Urban	13	19.4

Mean age: 19.8 years; SD: 1.14; Range: 18–23 years

Table 2: Knowledge toward self-medication

Variable	Category	Frequency	Percentage	
Define self-medication	Yes	66	98.5	
	No	1	1.5	
Medicine taken by self	Yes	60	89.6	
	No	6	9.0	
	Do not know	1	1.5	
Reasons*	Simple ailment	41	61.2	
	Quick-relief	36	53.7	
	Availability of the previous prescription	34	50.7	
	Ease and convenience	20	29.9	
	Crowd avoidance	12	17.9	
	Busy lifestyle	11	16.4	
	Symptomology leading to self-medication*	Headache	45	67.2
		Cough	31	46.3
Fever		30	44.8	
Diarrhea		14	20.9	
Dysmenorrhea		14	20.9	
Allergy		12	17.9	
Lack of sleep		10	14.9	
Pain in the abdomen due to peptic ulcer		8	11.9	
Sore throat		5	7.5	
Common cold		3	4.5	
Most common drugs used	Antibiotics	45	67.2	
	Analgesics	43	64.2	
	Antipyretics	33	49.3	
	Cough suppressants	23	34.3	
	Antiemetics	15	22.4	
	Sedatives	6	9.0	
	Antiulcer drugs	5	7.5	
	Anthelminthics	5	7.5	
	Antihistaminics	3	4.5	
	Frequency	2–3 times in a year	22	32.8
Every few months		20	29.9	
Every few weeks		9	13.4	
Once		16	23.9	
Source of information*	Old prescription	50	74.6	
	Internet	35	52.2	
	Pharmacist	16	23.9	
	Pharmacology knowledge	13	19.4	
	Drug advertisement	11	16.4	
	Friends	7	10.4	

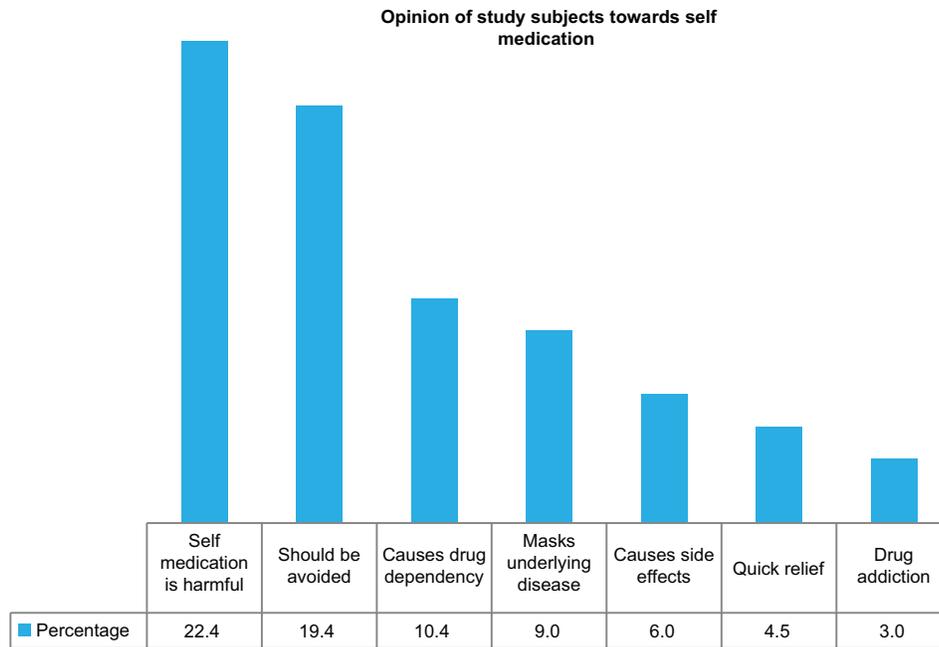


Table 3: Practice toward self-medication

Question	Response	Frequency	Percentage
Do you think self-medication reduces the load on the medical services	Yes	24	35.8
	No	43	64.2
Is self-medication risk free?	Yes	2	3.0
	No	65	97.0
Do you think self-medication may lead to irrational drug use	Yes	49	73.1
	No	18	26.9
Do you think self-medication may lead to drug dependency and mask the sign and symptoms of underlying disease	Yes	57	85.1
	No	10	14.9
Have you given prescription to someone else	Yes	12	17.9
	No	55	82.1

DISCUSSION

The present study was conducted to evaluate the practices, attitude, and perception of self-medication among nursing students. The study showed that self-medication is widely practiced (89.6%) by the nursing students of this tertiary care hospital. The reason for the increased prevalence of self-medication may be contributed to the easy access to almost all types of medications, almost any drug available in the market can be purchased as an OTC medication. The majority of the patients in developing countries prefer to purchase medications from pharmacies directly as they are easily accessible, time-saving, and less expensive than going to doctors clinic first, and these practices are more common in village areas, where medical services are in adequate.

The present study revealed that self-medication practices are very common among nursing students. The majority of the students practiced self-medication of one or more drug with varied frequency over 1 year. In our study, the most common reason for self-medication reported by students was that self-medication provides quick-relief and availability of previous prescriptions. These findings were in contrast to the study from Ethiopia, Karachi, and Malaysia, where the most common reason being was the illness too trivial and previous experience of the same illness.^[22-24] The findings were similar to the study from Punjab, where the most common cause of self-medication was the quick relief of symptoms.^[25] Regarding the condition/symptoms which prompted the students to practice self-medication, headache and cough were most common, followed by fever and diarrhea. This finding was similar to the study conducted in Karachi, where headache was the most common condition that leads to self-medication.^[26] Antibiotics were the most common (67.2%), followed by analgesics and antipyretics. This finding is in contrast to the study from Karachi and Bahrain were most frequently used drugs for self-medication were analgesics.^[27] Although it is true that self-medication can treat minor ailments, thus reducing the load on medical services, but can also lead to several adverse effects, including the global emergence of multidrug-resistant pathogens, drug addiction, and masking the symptoms of underlying diseases. Another problem with self-medication is the risk of using expired drugs, sharing them with friends, or taking medicines that have been originally prescribed for some other problem that can result in accidental drug poisoning.

CONCLUSION

The prevalence of self-medication is alarmingly high, so a holistic approach must be taken to prevent this problem from escalating which would involve awareness and education regarding the implications of self-medication and strategies to prevent the supply of medication without a prescription.

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