



# Assess the practice of self-medication among nursing students in selected nursing institutions, Bengaluru

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## ABSTRACT:

**Background:** Medication plays a vital role in health care, and it is an important therapeutic tool in the hands of health care professionals. Self-medication is defined as the use of drugs to treat self-diagnosed disorder or symptoms, or the intermittent or continued use of a prescribed drugs for chronic or recurrent disease or symptoms. Self-medication is not only prevalent in the general population but is also common among health care providers. Because they exposed to the knowledge of drugs, the pattern and incidence may however be different as compared to general medication. **Objective:** The purpose of the study is to assess the practices of self-medication among 100 nursing students. **Materials and methods:** A quantitative research approach, a non-experimental descriptive design was conducted to assess the practices of self-medication among 100 nursing students In Selected Institution, Bengaluru. Demographic proforma and non-observational checklist were used to collect data among 100 Nursing Students. **Result:** The result revealed that Out of 100 nursing student assessment, about 14(14%) of the nursing students have adequate practices, 75(75%) of the nursing student have moderate practices, 11(11%) nursing student have poor practices. The association finding of the study shows that demographic variables such as level of course, source of information for self-medication, drugs used for self- medication, indication for self- medication. shows statistically significant association among Nursing students regarding self-medication at  $p < 0.05$  **Conclusion:** Based on the findings the researcher concluded revealed that 75 (75%) of nursing students have moderate practice, 14 (14%) of nursing students have adequate practice, and 11 (11%) have poor practice.

## INTRODUCTION

Self-medication is also defined as an obtaining and consuming one or more drugs without the advice of a physician either for diagnosis, prescription or surveillance of treatment. In practice, it also includes the use of the medication of family members, especially where the treatment of children or the elderly is involved.<sup>1</sup>

The World Health organization (WHO) has emphasized the need for responsible self-medication for the prevention and the treatment of common illnesses. This responsible self-medication is however, restricted to the over the counter (OTC) drugs, for the conditions that are self-recognizable and at the same time only if the user has the information of how to take the drugs, when to take, how long to take, its possible side effects, and drugs interactions and when to consult the doctor.<sup>1</sup>

There are many reasons which may contribute to self-medication. These students can easily get information and knowledge from drug indices, literature and other students and lectures to self-diagnose and self-medicate some of the reasons for such common practice include non-licensed provides of medicines in open market, actions of unregistered practitioners, use of leftovers and medicines obtained from family member or friends with previous similar symptoms.<sup>2</sup>

OTC drug addiction is extremely serious and sometimes fatal. If an individual is addicted to any type of OTC medication, they should seek drug treatment as a solution to this problem without delay. Antimicrobial resistance is a worldwide problem, particularly in Indian where antibiotics are of often available without a prescription. Use of self-medication is highly prevalent in both urban and rural communities varying from 32.5% to 81.5%.<sup>3</sup>

In a country like India there is a wide range of disease occurrence coupled with in adequate provision of health medication with antibiotic has been widely reported leading. WHO to call attention to the dangers of self-medication as a cause of antibiotics resistance<sup>4</sup>

**OBJECTIVES OF THE STUDY**

1. To assess the practices of self-medication among nursing students
2. To associate the practice of self-medication among nursing students with their selected demographic variables.

**MATERIALS AND METHOD**

Nonexperimental descriptive design was adopted for the study. The study was conducted at AVK College of nursing, Bengaluru among 100 nursing students. The Ethical clearance was obtained from the Ethical committee college of nursing, Bengaluru. Nonprobability convenience sampling technique was used for selecting nursing students. The tool used for data collection was Demographic proforma and non-observational checklist to assess the level of practice of self-medication. The investigator obtained consent from the subject. A self-administered structured questionnaire was used to assess demographic data for 10mins. A non-objectional checklist was administered for 20 mins to assess the practice of self-medication. The data obtained was analyzed using Descriptive and Inferential Statistics.

**RESULT AND DISCUSSION****SECTION A: Frequency and percentage distribution of participants according to their demographic variables.**

Table 1: Frequency and percentage distribution of demographic variables of Nursing Students.

n=60

Demographic Variables	Frequency(f)	Percentage (%)
<b>Age in years</b>		
17–19 years	4	4
20–22 years	59	59
23–25 years	37	37
<b>Gender</b>		
Male	42	42
Female	58	58
<b>Course</b>		
GNM	88	88
B.Sc (N)	12	12
<b>Level of course</b>		
2 <sup>nd</sup> gnm	19	19
3 <sup>rd</sup> gnm	70	70
2 <sup>nd</sup> B.Sc (N)	3	3
3 <sup>rd</sup> B.Sc (N)	3	3
4 <sup>th</sup> B.Sc (N)	5	5
<b>Qualification</b>		
PUC with science	15	15
PUC with arts	77	77
Graduate	8	8
<b>Area of living</b>		
Rural	45	45
Urban	55	55
<b>Type of family</b>		
Nuclear	76	76
Joint	23	23
Extended	1	1
<b>Source of information for self-medication</b>		
Mass media	11	11
books	23	23
friends	5	5
Parents and family	24	24
Previous prescription	37	37
<b>Reason for self-medication</b>		
Time saving	9	9
Minor ailment	22	22

Confidence in self-diagnosis	19	19
urgency	13	13
Quick relief	38	38
<b>Drugs used for self-medication</b>		
antipyretics	38	38
analgesics	14	14
antacids	1	1
antibiotics	43	43
antihistamine	2	2
Topical ointment	1	1
Eye/ear drop	1	1
<b>Indication for self-medication</b>		
fever	56	56
headache	21	21
Cough & cold	10	10
acidity	2	2
Nausea & vomiting	1	1
diarrhea	5	5
Skin problems	4	4
Eye /ear problems	1	1
<b>Self-medication taken in last one year</b>		
no	41	41
yes	59	59

Age wise distribution shows that the maximum number 59 (59%) of the subjects were in the age group of 20-22 years, 37(37%) of them were in the age group of 23-25 years and 4(%) were in the age group of 17-19 years.

Gender wise distribution shows that the majority i.e 58(58%) of the subjects were females and 42(42%) of them were males.

Regarding course, maximum numbers 88 of subjects were GNM and 12 were B.Sc(N).

In relation to level of course, maximum 70 of subjects were in 3<sup>rd</sup> year gnm, 19 was in 2<sup>nd</sup> year GNM .5 were in 4<sup>th</sup> year B.SC (N), 3(3%) of them were in 2<sup>ND</sup> AND 3<sup>RD</sup> B.SC (N) respectively .

Regarding qualification, the maximum number 77(77%) had done PUC with arts, 15(15%) had done PUC with science and 8(8%) did graduation

About the area of living. The maximum number 55 were from rural areas and 45 were from urban area

In relation to type of family, maximum number 76 belong to nuclear family ,23 (23) to joint family and 1 to extended grading the source of drug information, maximum number 37 had got information from previous doctor prescription. 24 from parents and family members, 23 from books 11 from mass media and 5 from friends

In relation to self-medication, maximum number 37 practiced self-medication for quick relief, 22 due to minor ailments, 19(19%) due to confidence in self-diagnosis ,13 due to urgency and 9 for time saving.

Regarding drugs used for self-medication, maximum number 56 used to treat fever, 21 for headache ,10 for cough and cold ,5 for diarrhoeas, 4 for skin problems, 2 for acidity and 1 for nausea and vomiting and ear/eye problems each respectively.

Regarding the self-medication taken in last one-year maximum number 59 report of self-medication whereas 41 denied of practice

Section 2 distribution of nursing students according to their level of practice self-medication in nursing institute.

Sl No	Level of Practice	No	%
1	Poor practice (<50%)	11	11%
2	Moderate practice (50% - 75%)	75	75%
3	Adequate practice (>75%)	14	14%
	<b>Total</b>	<b>100</b>	<b>100%</b>

The above table depicts that among 100 nursing students, maximum number 75(75%) of them were having moderate practice, 14(14%) of them have adequate practice and 11(11%) of them have poor practice.

### SECTION 3

Association of practices of nursing students with their selected demographic variables.

Sl no	Demographic Variables	Categories	Sample (n=100)		Knowledge		X <sup>2</sup> -value	p-value
			No	%	≤ median	>median		
1	Age	17-19 years	4	4	2	2	2.732	Non-significant
		20-22 years	59	59	34	25		
		23-25 years	37	37	21	16		
2	Gender	male	42	42	52	36	4.857	Non-significant
		female	58	58	5	7		
3	Level of course	Gnm	89	89	40	49	24.923	Significant
		b.sc(n)	11	11	6	5		
4	qualification	PUC with science	15	15	8	7	3.283	Significant
		PUC with arts	77	77	46	31		
		graduate	8	8	4	4		
5	Area of living	rural	45	45	27	18	0.439	Non-significant
		urban	55	55	30	25		
6	Type of Family	nuclear	76	76	39	37	8.602	Non-significant
		joint	23	23	6	17		
		extended	1	1	1	0		
7	Source of drug information	Mass media	11	11	7	4	19.709	Significant
		books	23	23	15	8		
		friends	5	5	3	2		
		Parents and family members	24	24	9	15		
		Previous doctor's prescription	37	37	23	14		
8	Reason for self-medication	Time saving	9	9	6	3	9.216	Non-significant
		Minor ailments	22	22	8	14		
		Confidence in self-diagnosis	19	19	15	4		
		Urgency	13	13	8	5		
		Quick relief	37	37	20	17		
9	Drugs used for self-medication	antipyretics	38	38	21	17	45.146	Significant
		analgesics	14	14	5	9		
		Antacids	1	1	1	0		
		antibiotic	43	43	17	26		
		Topical ointment	1	1	1	0		
		Eyes/ear drops	1	1	1	0		



### **The first objectives to assess the practices of self- medication among nursing students:**

Out of 100 nursing student assessments. About 14(14%) of the nursing students have adequate practices, 75(75%) of the nursing students have moderate practices, 11(11%) nursing students have poor practices.

The above finding is supported by a descriptive study that was undertaken to determine the knowledge, attitude and practice of self-medication among second-year nursing students of the NRIIMS, Visakhapatnam. A revalidated questionnaire, containing open-ended and close-ended questions, was administered to the subjects. Data was analyzed using MS-Excel and the results were expressed as counts and percentages. The result was Out of the 35 respondents; everyone responded with one or the other drug. The respondents' knowledge about appropriate self-medication was poor, but knowledge of the benefits and risks of self-medication was adequate. The respondents found self-medication to be timesaving, economical, convenient and providing quick relief in common illnesses. The important disadvantages of self-medication mentioned were the risk of making a wrong diagnosis, inappropriate drug use and adverse effects. The majority (40%) of the respondents had a positive attitude favoring self-medication. The most common indications for self-medication were to relieve the symptoms of headache (31.43%), fever (31.43%), cough & cold (22.83%). Analgesics were the most common drugs used for self-medication. Knowledge about appropriate self-medication was adequate, attitude towards self-medication was positive, and the practice of self-medication was common and often inappropriate.<sup>5</sup>

### **Second objectives to associate the practice of self-medication among nursing students with their selected demographic variables:**

The chi square analysis was carried out to determine the association of practice of self-medication with the selected demographic variables such as age, gender, level of course, qualification, areas of living, type of family, source of drug information, reason for self-medication and drugs used for self-medication. The result of chi-square analysis present indicates that there is significant association of practice with selected demographic variables such as level of course, source of information for self-medication, drugs used for self-medication, indication for self-medication. The demographic variables which are not significantly associated with practice such as age, gender, course, qualification, areas of living, type of family, and reason for self-medication. Hence Hypothesis 1 is accepted ie there is significant association between the practices of nursing students regarding self-medication with their selected demographic variables

The above finding is supported by a cross-sectional study that was done to evaluate the Assessment of Self-Medication Practice and Its Determinants Among Undergraduate Health Science Students of College of Medicine and Health Sciences, Bahir Dar University, Northwest Ethiopia. 241 students took part in the study from September to November 2021. Using a recall time of four weeks, a quantitative descriptive cross-sectional study was utilized to evaluate the practice of self-medication and associated factors. Interviews and structured questionnaires were used to collect the data. Data were analyzed using SPSS version 25. the result was Overall, 246 students were approached. The questionnaire received responses from 241 students, for a 98% response rate. Self-medication was used by 58.1% of students over the course of the previous four weeks. Analgesic and antipyretic medications were the most often utilized pharmacological category (57.1%), followed by antibiotics (42.1%). The most frequent (50%) complaints involving SM were headaches and fever. The mildness of the sickness was the primary factor in the study participants' practice of self-medication (50%). Self-medication is linked to gender (AOR: 3.415; 95% CI: 1.014– 11.503), poor monthly income (AOR: 0.007; 0.0003– 0.175), pharmacy student status (AOR: 52.603; 4.371– 633.098), and medical laboratory student status (AOR: 0.037; 0.002– 0.631). It was concluded that Self-medication was common among health science students. Students frequently use over the counter and prescription-only medications for SM. Sex, field of study and monthly income are independent predictors for SM use. Though it is not absolutely discouraged, awareness on the associated risks should be created.<sup>6</sup>

## **CONCLUSION**

The present study assessed the practice of self-medication among nursing students. The result revealed that 75 (75%) of nursing students have moderate practice, 14 (14%) of nursing students have adequate practice, and 11 (11%) have poor practice. Demographic variable such as level of course, source of information for self-medication, indication for self-medication and drugs used for self-medication shows significant association with the practice of nursing student regarding self-medication, except age, gender, course, area of living, type of family and reason of self-medication have no influence.

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