

Knowledge and Practice on Over-the-Counter Medicines among Undergraduate Nursing Students of Rapti Academy of Health Sciences, Ghorahi, Dang

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Abstract

Introduction: OTC Medications are those medications that can be obtained over the counter without prescription. OTC medicines is not always safe, as it may be related to incorrect self-diagnosis.

Methods: This study's primary goals were to evaluate participants' knowledge and practice of over-the-counter medications, among undergraduate nursing students of Rapti Academy of Health Sciences in which descriptive cross-sectional study design was utilized among 116 nursing undergraduates pursuing a Bachelor of Science in Nursing (BSc Nursing) and Bachelor of Nursing Science (BN). The study area was chosen using a non-probability purposive sampling technique, and the respondents were chosen using an enumerative sampling technique. A structured questionnaire and self-administered technique was utilized for data collection and data analysis was done by utilizing SPSS 20.0 version.

Results: Larger part of respondents belongs to age group 18 to 26 years with Mean \pm SD=21.92 \pm 3.992. More than fifty percent (68.1 %) respondents had adequate knowledge and more than one third (31.9%) had inadequate knowledge and more than fifty percent (52.2%) had inappropriate practice and less than fifty percent (44.8%) had appropriate practice. Result showed that there was significant association between level of knowledge and age group, marital status and level of students. There was no significant association between level of practice and independent variables and between level of knowledge and level of practice.

Conclusion: Level of knowledge is appropriate but level of practice is inappropriate. There is need of making aware to the respondents about practicing OTC medicines.

Keywords: Knowledge, Practice, over-the-counter, undergraduate

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Introduction

Far from ordered medicine, which can only get with a doctor's note, Over-The-Counter (OTC) medicine can be bought directly by anyone without needing a prescription from a pharmacist.¹ OTC pharmaceuticals, as defined by the United States Food and Drug Administration (FDA) (2018), are OTC medicines are drugs that we can buy without a doctor's prescription.² In Nepal, drugs are sorted into three groups according to the Drug Act: "KA (a)", "KHA (b)", and "GA (c)".³

Contrary to prescription medications, which can only be distributed in accordance with a valid prescription from a

doctor, over-the-counter (OTC) medicines are therapeutic goods that pharmacies or retail establishments offer directly to customers.⁴⁻⁷

The cross-sectional study was conducted among 276 of the 295 medical students of Manipal College of Medical Sciences, Nepal, where the mean (SD) knowledge was 74.54 (6.92). 82 percent of participants admitted to self-medicating in the session before the study, and 149 respondents (54%) said that prior use of the drug was one of their sources of information.⁶ The likelihood of drug intolerance, adverse effect, and undesirable effect rises when OTC medications are freely or unrestrictedly available on the market.⁸

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According to a survey of 115 participants, 94.8% thought that the directions on the medication's label should be followed, and 78.3% agreed that over-the-counter medications could interact with prescription medications.⁹ From another research conducted in India, 69% of respondents were aware of OTC medications. The majority of participants (100%) most frequently used analgesics and antipyretics as self-medication, followed by antacids (81%). It was found that the larger part of ponder members every so often perused the bearings given on the item name and in case of checking the expiry date of the sedate some time recently utilize 39% continuously check the expiry date.¹⁰

Methods

116 undergraduate nursing students participated in a descriptive cross-sectional study. This study's primary goals were to evaluate participants' knowledge and practice of over-the-counter medications, measure the association between their knowledge and a few independent variables, measure the association between their practice and a few independent variables, and measure the relationship between their knowledge and practice of OTC medications. 116 nursing undergraduates pursuing a Bachelor of Science in Nursing (BSc Nursing) and Bachelor of Nursing Science (BN) provided the data. The study region was chosen using a non-probability purposive sample technique, and the respondents were chosen using an enumerative sampling technique. After receiving ethical approval from the IRC, a structured questionnaire self-administered technique was employed to collect data. SPSS 20.0 version was utilized for data analysis. Following data collection, the accuracy, correctness, and completeness of the data were examined. The suggested SPSS 20 version software was used to process the data. Descriptive and inferential statistics were used to assess the collected data in light of the study's goals. Sociodemographic data, as well as knowledge and practice of over-the-counter medications, were analyzed using descriptive statistics and displayed as frequency, percentage, mean, and standard deviation. In terms of inferential statistics, association was measured using the chi-square test. The mean was used as the reference range to determine the level of knowledge and practice. Less than the mean was classified as inappropriate knowledge and inappropriate practice, whereas the mean and greater than the mean were classified as adequate knowledge and appropriate practice.

Results

A total 116 undergraduate nursing students were the part of this study. Table 1 shows that majority with 85.3 % were 18 to 26 years old. Regarding gender, majority (98.3%) of the respondents were female. Regarding ethnic group 41.4 % of the respondents were Brahmin. Regarding religion, majority with 96.6% were Hindu. Regarding marital status,

majority with 81.0 % were unmarried. Table 2 describe that, from 116 participants, 60.3 % were studying BSc nursing and 39.7 % were studying BNS. Regarding year of study, 39.7 % were studying in 1st year, whereas, 60.3 % were studying in 2nd year. Regarding family type, majority of respondents with 69.8% belongs to nuclear family. Regarding education of mother, 39.7 % were educated up to secondary level and 14.7 % can read and write only. Regarding education of father, 44.8 % were educated up to secondary level and higher secondary level and above and 1.8 % can read and write only.

Table 1: Age group, Gender, Ethnic Group, Religion, Marital Status of respondents n=116

Variables	Frequency	Percentage
Age group		
17 years and below	3	2.6
18 years to 26 years	99	85.3
Above 26 years	14	12.1
Mean ±SD=21.92±3.992, Min=17, Max=37		
Gender		
Male	2	1.7
Female	114	98.3
Ethnic Group		
Brahmin	48	41.4
Chhetri	28	24.1
Janjati	30	25.9
Others (Thakuri, dalit, madhesi, dashnami)	10	8.6%
Religion		
Hindu	112	96.6
Muslim	1	0.9
Christain	2	1.6
Buddhist	1	0.9
Marital Status		
Married	22	19.0
Unmarried	94	81.0

Figure 1 illustrate that among 116 respondents, more than half (68.1%) had adequate knowledge whereas, 31.9 % had inadequate knowledge with mean ±SD =9.8966±1.42267 (Figure 1). (n=116)

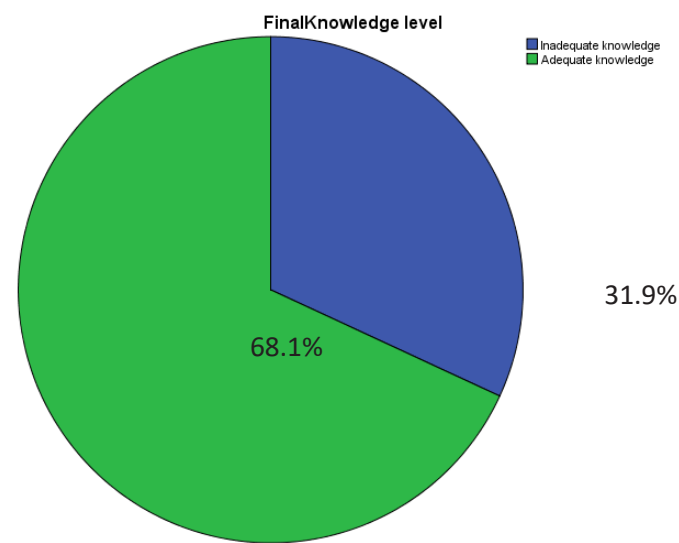


Figure 1: Level of Knowledge on OTC medicines

Table 2: Educational level, Year of study, Family type, Education of mother, Education of father of respondents n=116

Variables	Frequency	Percentage
Educational level		
Bsc Nursing	70	60.3
BNS	46	39.7
Academic Year		
First year	46	39.7
Second year	70	60.3
Type of family		
Single family	81	69.8
Extended family	35	30.2
Education of mother		
Can read and write only	17	14.7
Primary level	20	17.2
Secondary level	46	39.7
Higher secondary level and above	33	28.4
Education of father		
Can read and write only	2	1.8
Primary level	10	8.6
Secondary level	52	44.8
Higher secondary level and above	52	44.8

Figure 2 illustrates that among 116 respondents, 55.2 % had inappropriate practice and 44.8% had appropriate practice with Mean \pm SD=12.3362 \pm 3.18678. (n=116)

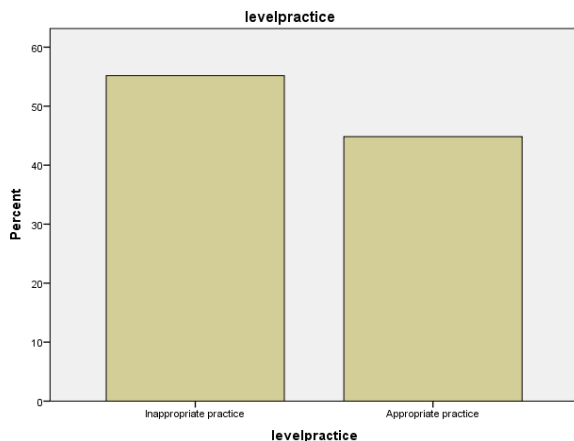


Figure 2: Level of Practice on OTC medicines

Table 4: Association between certain independent variables and practice level (n=116)

Variables	Practice level		Chi Square	P-value (<0.05)
	Inappropriate practice	Appropriate practice		
Marital status				
Married	14 (63.6%)	8 (36.4%)	0.786	0.375
Unmarried	50(53.2%)	44(46.8%)		
Educational level of respondents				
Bsc nursing	36 (51.4%)	34(18.6%)	1.000	0.317
BN	28(60.9%)	18(39.1%)		
Educational year of respondents				
1st year	22(47.8%)	24(52.2%)	1.663	0.197
2 nd year	42(60.0%)	28(40.0%)		
Family type				
Nuclear family	43(53.1%)	38(46.9%)	0.472	0.492
Joint family	21(60.0%)	14(40.0%)		

Table 3: Association between certain independent variables and knowledge level (n=116)

Variables	Knowledge level		Chi-square	P-value (<0.05)
	Inadequate knowledge	Adequate knowledge		
Age				
26 years and below	28 (27.5 %)	74 (72.5 %)	7.689	0.006
Above 26 years	9 (64.3 %)	5 (35.7%)		
Marital status				
Married	12 (54.5%)	10 (45.5%)	6.411	0.013
Unmarried	25 (26.6%)	69 (73.4%)		
Educational level of respondents				
Bsc nursing	15 (21.4%)	55 (78.6%)	8.905	0.003
BN	22 (47.8%)	24 (52.2%)		
Educational year of respondents				
1st year	13(28.3%)	33(71.7%)	0.464	0.496
2 nd year	24(34.3%)	46(65.7%)		
Family type				
Nuclear family	29(35.8%)	52(64.2%)	1.885	0.170
Joint family	8(22.9%)	27(77.1%)		

Table 3 demonstrates a significant association between students' educational level (p=0.003), age group (p=0.006), and marital status (p=0.013) and their knowledge level.

Table 4 demonstrates that there was no any significant association between practice level and, marital status, educational level of respondents, educational year of respondents and family type.

Table 5 illustrates no any significant association between knowledge level and practice level (p=0.066).

Table 5: Association between knowledge level and practice level

n=116

Variables		Knowledge level		Chi Square	P-value (<0.05)
		Inadequate knowledge	Adequate knowledge		
Practice level	Inappropriate practice	25 (39.1%)	39 (60.9%)	3.375	0.066
	Appropriate practice	12 (23.1 %)	40 (76.9%)		

Discussion

According to the current study, of the 116 respondents, the majority (85.3%) are between the ages of 18 and 26. The smallest percentage (2.6%) are between the ages of 17 and under. According to Malla & KC's 2021 study in Nepal, which involved medical and dentistry students at Gandaki Medical College Teaching Hospital, nearly half of the participants (46.1%) were 19 years old.⁹

In terms of gender, women made up the majority of responses (98.3%), while men made up the least (1.7%). Comparable to Malla & KC's 2021 study in Nepal, which involved medical and dentistry students at Gandaki Medical College Teaching Hospital, the study found that over half (60.9%) of the participants were female. In addition, all of them were single.⁹

Regarding ethnic group, 41.4 % of the respondents were Brahmin. Regarding religion, majority with 96.6% were hindu and least with 0.9% were muslim and Buddhist. Regarding marital status, majority with 81.0 % were unmarried and least with 19.0 % were married.

Present study showed that among 116 respondents, 60.3 % respondents were studying BSc nursing and 39.7 % were studying BN. Regarding year of study, 39.7 % were studying in 1st year, whereas, 60.3 % were studying in 2nd year. Regarding family type, majority of respondents with 69.8% belongs to nuclear family and minority with 30.2 % of respondents belongs to joint family. Regarding education of mother, 39.7 % were educated up to secondary level and 14.7 % can read and write only. Regarding education of father, 44.8 % were educated up to secondary level and higher secondary level and above and 1.8 % can read and write only.

With mean \pm SD = 9.8966 \pm 1.42267, the current study found that of the 116 respondents, more than half (68.1%) had adequate knowledge and more than one third (31.9%) had inadequate knowledge. It is supported by a 2017 study by Sharma et al. that found that 43% of respondents had average knowledge, 3% had poor knowledge, and 54% of respondents had strong knowledge about over-the-counter medications.¹¹

In Brunei Darussalam, a study of university and college students revealed a similar outcome: more over half (53.4%) of the students had strong knowledge.⁷ In contrast to this finding, a cross-sectional research of medical and dentistry students at Gandaki Medical College

Teaching Hospital in Nepal by Malla & KC, 2021, revealed that the majority of them (90.4%) knew how to use over-the-counter medications responsibly.⁹ With a mean \pm SD=12.3362 \pm 3.18678, the current study found that of the 116 respondents, 55.2% had inappropriate practice and 44.8% had appropriate practice. According to a study by Malla & KC, 2021, among medical and dentistry students at Gandaki Medical College Teaching Hospital in Nepal, 37.4% of the students demonstrated good practice in the prudent use of over-the-counter medications.⁹

The current study found no significant association between practice level and independent variables, although there was a significant association between knowledge level and age group (p=0.006), marital status (p=0.013), and student level (p=0.003). The current investigation found no significant association between practice level and knowledge level (p=0.066).

Conclusion

The purpose of the descriptive cross-sectional study was to evaluate undergraduate nursing students' knowledge and practice of over-the-counter medications. The study's findings indicate that, of the total respondents, the majority are between the ages of 18 and 26. According to the current study, out of 116 respondents, more than half had adequate knowledge, more than one-third had inadequate knowledge, more than half had inappropriate practice, and fewer than half had appropriate practice. The current study found no significant association between the practice level and independent variables and between the knowledge level and practice level, although there was a significant association between knowledge level and the age group, marital status, and student level. While the practice level is inappropriate, the knowledge level is appropriate. Respondents must be informed about the use of over-the-counter medications.

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