



Self-medication in nursing students

Automedicación en estudiantes de Enfermería

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ABSTRACT

Objective: to determine the prevalence and factors associated with the practice of self-medication among undergraduate nursing students at a private institution in the city of Buenos Aires, Argentina. **Methodology:** descriptive, quantitative, and cross-sectional study. The sample consisted of 99 nursing students who were administered a self-medication instrument. **Results:** a total of 99 students aged between 25 and 35 years were interviewed. Most of them were female (82,83 %) and in their first year of study (29,29 %). The prevalence of self-medication was 100 %. Television and social networks were the main sources of information about medicines; the symptoms that motivated self-medication were pain and cold, and consequently the most used medicines were analgesics (82,83 %) and anti-influenza medicines (78,79 %). When asked where they obtained the medicines, 79,80 % obtained them from pharmacies and 48,48 % from relatives. **Conclusions:** the prevalence of self-medication was high and was mainly related to the availability of economic resources to access medicines and the possibility of buying them at the pharmacy without a prescription. It is necessary to implement activities to guarantee the responsible use of medicines among nursing students.

Keywords: Self Medication; Nursing Students; Self Care; Drug Utilization.

RESUMEN

Objetivo: determinar la prevalencia y los factores relacionados con la práctica de automedicación en los estudiantes de la carrera de Licenciatura en Enfermería de una institución de carácter privado de la Ciudad de Buenos Aires, Argentina. **Metodología:** estudio descriptivo, cuantitativo y transversal. La muestra fueron 99 estudiantes de enfermería a quienes se les aplicó un instrumento ex profeso de automedicación. **Resultados:** se encuestaron 99 estudiantes con edades comprendidas entre los 25 y 35 años, que fueron mayormente de género femenino (82,83 %) y del primer año del plan de estudios (29,29 %). La prevalencia de automedicación fue del 100 %. La televisión y las redes sociales representaron los espacios proveedores de información sobre los medicamentos, los síntomas que motivaron la automedicación fueron el dolor y el resfriado, y en consecuencia los medicamentos más usados fueron los analgésicos (82,83 %) y los antigripales (78,79 %). Al indagar sobre dónde obtuvieron los medicamentos se halló que el 79,80 % los obtuvo de la farmacia y el 48,48 % respondió haberlos obtenido de parte de familiares. **Conclusión:** la prevalencia de la automedicación fue alta y se vinculó principalmente al contar con recursos económicos para acceder a los medicamentos y a la posibilidad de comprarlos en la farmacia sin receta médica. Se requiere de la implementación de actividades para garantizar el consumo responsable de los medicamentos en los estudiantes de enfermería.

Palabras clave: Automedicación; Estudiantes de Enfermería; Autocuidado; Utilización de Medicamentos.

INTRODUCTION

Self-medication, conceived as a self-care habit, is defined as the consumption of medications to treat self-recognized symptoms and diseases without medical indication or advice.(1,2,3) Medications are effective chemical compounds to protect and restore people's health; however, their incorrect consumption can negatively affect health.(4) According to the World Health Organization,(5) half of preventable harms in healthcare are closely related to medication, a quarter of which are considered serious. Furthermore, it is estimated that the costs derived from irresponsible or erroneous medication amount to 42,000 million dollars annually worldwide.

Several studies have indicated that in the case of students of health disciplines such as those pursuing a nursing degree, the knowledge acquired during training promotes the practice of self-medication, which explains why this practice is so frequent in this population (3,6,7).

One study conducted in Mexico (7) that included 305 health sciences students found a prevalence of self-medication of 88 %, and this habit was linked to lack of time (42,1 %), easy access to medications (37,4 %), and economic reasons (14,4 %). Meanwhile, a study conducted in Colombia (8) found a prevalence of self-medication of 97 %, mainly due to the consideration that symptoms were mild (74,7 %), easy access and convenience (50,4 %), and the desire not to go to the doctor (34,1 %).

In nursing, it is important to address the topic of self-medication among students, bearing in mind that it is considered a risky practice and given that among their responsibilities as future professionals will be the management of care, including education for the responsible use of medications.(3)

Based on the above, it becomes essential to investigate self-medication in nursing students, also considering the scarcity of studies that allow determining the magnitude of the problem in this population in the Argentine Republic. Therefore, one study was designed with the aim of determining the prevalence and factors related to the practice of self-medication among students of the Bachelor of Science in Nursing program at a private institution in the City of Buenos Aires, Argentina.

METHODS

Descriptive, cross-sectional, and quantitative study. The population consisted of 130 students from the Nursing degree program, of whom 101 agreed to participate in the study by signing the informed consent. Purposive sampling was implemented.

Included were nursing students from the first to the fourth year of the curriculum, enrolled in the second term of 2022, who agreed to complete the instrument voluntarily. Two instruments that were completed incompletely were excluded, resulting in a final sample of 99 observations (76.15%).

For data collection, a purpose-designed instrument was used consisting of 10 closed-ended questions, 3 of which were aimed at sociodemographically characterizing the sample (age, sex, and year of the study program being pursued) and the remaining 7 sought to investigate the prevalence of self-medication and the factors related to this practice (accessibility, availability of economic resources, sources of information, source of medications, type of drug consumed, and reasons for self-medication). The instrument was similar to those used in studies analyzing the practice of self-medication in a similar population.(8)

Data were collected during class hours to increase student participation. The survey was delivered in paper format to those who agreed to participate in the study.

For data analysis, the completed instruments were entered into a database in Microsoft Excel and were analyzed using the Infostat/L software. The calculation of absolute (n) and relative (%) frequencies was performed. Graphs and tables were designed to facilitate the comprehension of the information. The chi-square test (X²) was used to identify association between the variables. A significance level of $p < 0.05$ was set.

Regarding ethical aspects, the study was approved by the University Research Protocol Ethics Committee of the Instituto Universitario del Hospital Italiano de Buenos Aires under project resolution No. 0021-22, record No. 1, folio 81, dated 6 October 2022. Written informed consent was implemented, and data collection did not include the collection of personal data such as names, surnames, identification numbers, or file numbers, nor any other information that could link the respondent to the completed instrument. Ethical aspects were respected in the writing of this research work.(9)

RESULTS

A total of 101 students were surveyed, of which 2 observations were excluded due to poorly completed instruments. The 99 students in the sample were aged between 25 and 35 years, and were mostly female (82.83%) and in the first year of the curriculum (29.29%) (Table 1).

Table 1. Sample characterization.

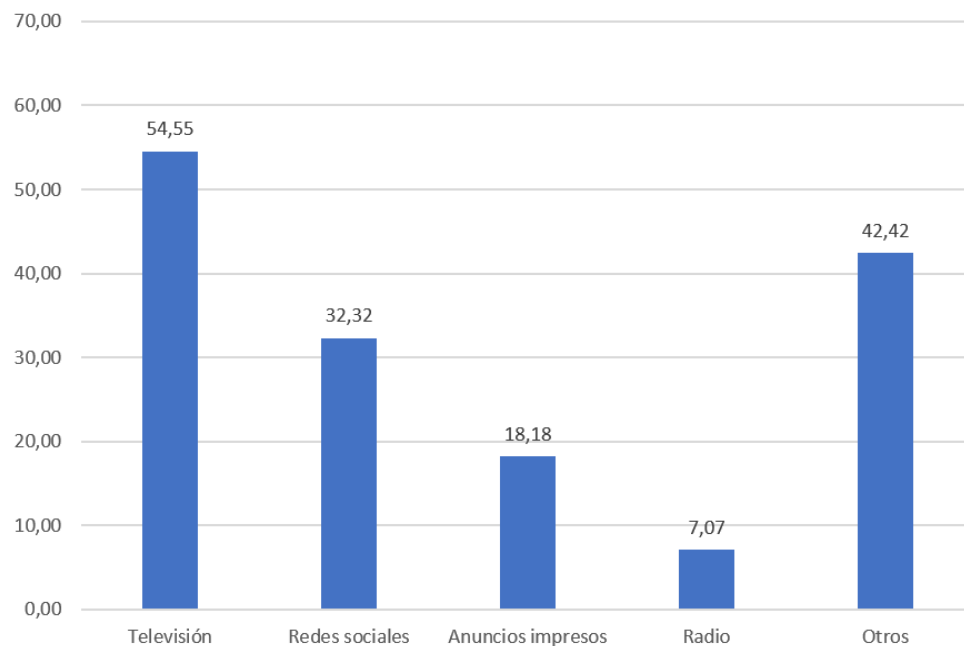
Variable	Categories	No.	%
Gender	Female	82	82,83
	Male	17	17,17
Curriculum year	First	29	29,29
	Second	28	28,28
	Third	23	23,23
	Fourth	19	19,19
Total	99	100	

Source: Survey on self-medication among nursing students.

It was found that 100 % of the respondents reported having consumed medications without medical prescription, which was mainly linked to the students' socioeconomic level (97,98 %) and the possibility of purchasing the drugs (88,89 %).

Regarding the sources of information, in addition to the degree program contents, the students reported receiving information mainly from television advertisements (54.55%), followed by social media (32.32%), and, to a lesser extent, the radio (7.07%) (Figure 1). It should be noted that multiple response options were allowed.

Figure 1. Source of information on medicines.



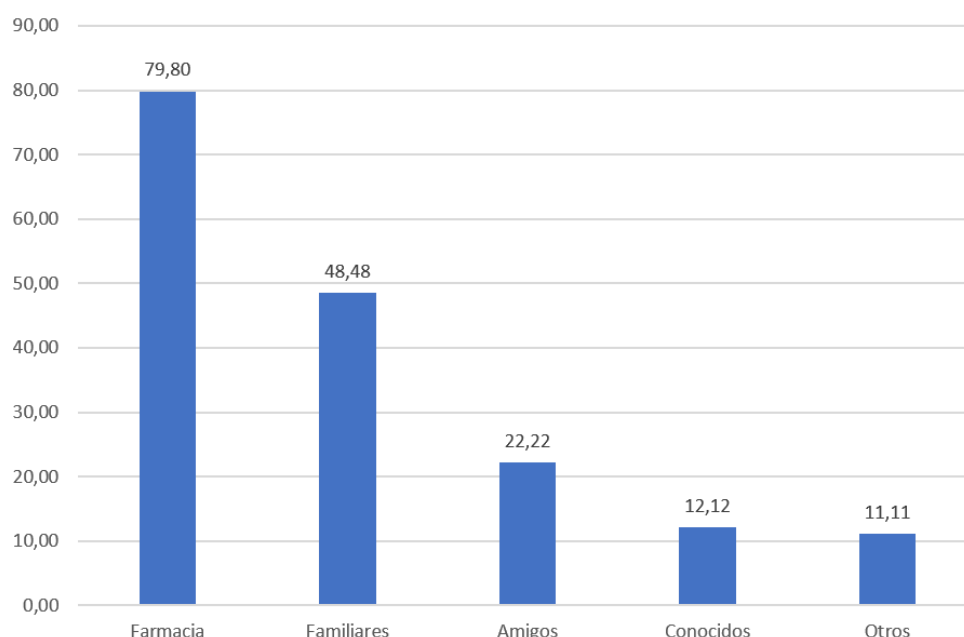
Regarding the drugs most consumed without medical indication, students reported using mostly analgesics (82.83%), followed by cold medications (78.79%) and, to a lesser extent, antibiotics (40.40%). Complete data are shown in Table 2. When inquiring about the most common symptoms for which they self-medicated, students responded that it was mainly for pain (81.82%) and for colds (66.67%).

Regarding where they obtained the medications, 79.80% of students reported obtaining them from the pharmacy, and 48.48% reported obtaining them from relatives. The complete data are shown in Figure 2.

Table 2. Types of drugs consumed without medical prescription

Drug type	No.	%
Analgesics	82	82,83
Antiflu	78	78,79
Anti-inflammatory drugs	60	60,61
Antipyretics	49	49,49
Antibiotics	40	40,40
Others	16	16,16

Source: Survey on self-medication in nursing students.

Figure 2. Sources of obtaining medications

Source: Survey on self-medication in nursing students.

In the inferential analysis, no relationship was identified between age and the characteristics of self-medication. Regarding gender, men were more influenced by radio in the selection of medications to consume without medical indication ($X^2:3.49$, $p:0.047$) and had a higher consumption of cold medications ($X^2:2.89$, $p:0.05$).

Regarding the year of study, first-year students showed a higher consumption of medications advertised on the radio ($X^2:7.11$, $p:0.05$) and a higher use of anti-inflammatories ($X^2:7.70$, $p:0.049$), while third- and fourth-year students showed a higher use of analgesics ($X^2:17.32$, $p:<0.001$) and antipyretics ($X^2:12.59$, $p:<0.001$).

DISCUSSION

Self-medication represents a major public health problem, since strict control of access to drugs would negatively impact the workload of healthcare institutions, whereas insufficient attention to it would lead to an increase in the number of health problems resulting from adverse effects of medication, the generation of dependence, and the increase in antibiotic resistance (10,11). Therefore, it is necessary to have an educated population that practices self-medication responsibly, and nursing staff have a role in providing information in this regard. Thus, it is appropriate that, from their training, they have the necessary knowledge and tools to provide accurate information and educate by example, so that care recipients follow their instructions, seeing them as role models (12).

Some studies have aimed to analyze the prevalence and factors associated with self-medication among students in health disciplines, since they have the training, information, and, in many cases, access to various medications, which raises questions about the appropriate use of these medications by this population.(13) The present study sought to establish a precedent on this issue in the Argentine Republic, given the scarcity of studies on the subject.(14)

In the present study, a high prevalence of self-medication was identified, encompassing the entire sample. This finding is consistent with several investigations (8,15,16,17) that describe prevalence rates ranging from 97% to 100%, although it differs from the results of Castro-Cataño et al. (3), who found a lower prevalence of close to 69%. The differences may be related to aspects such as the study location, culture, population, and the regulations of each country.

Regarding the reasons for self-medication, respondents mostly reported self-medicating for pain management and cold symptom management. According to various studies, pain, especially headache, and flu are among the symptoms that most motivate self-medication (3,18). In our study, the high use of cold and pain medications could be linked to the fact that the data collection period coincided with spring, when there are a large number of seasonal flu and allergy cases, including symptoms such as headache, nasal congestion or discharge, cough, and sore throat (19).

Regarding the source of recommendation for self-medication, pharmacists and family members were the most frequently reported. This finding is consistent with other studies in which pharmacy staff (or the place where medications are acquired) and family members represented the source of information for knowing what to consume (3,20,21).

The limitations of the present study include that it was conducted with students from a single private institution in the City of Buenos Aires. For future studies, we suggest making comparisons between institutions (public and private) and with students from other health disciplines.

CONCLUSIONS

Self-medication is a deeply rooted practice among nursing students, with a prevalence reaching 100%. Likewise, it was found to be related to drug advertising, especially on social media (Facebook, Instagram, or X) and in media such as radio. First-year students chose drugs they had seen on social media, and students in higher years showed higher consumption of analgesics and antipyretics.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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