

PREVALENCE AND FACTORS ASSOCIATED WITH SELF-MEDICATION IN NURSING

STUDENTS

PREVALÊNCIA E FATORES ASSOCIADOS À AUTOMEDICAÇÃO EM ACADÊMICOS DE ENFERMAGEM
PREVALENCIA Y FACTORES ASOCIADOS A LA AUTOMEDICACIÓN EN ACADÉMICOS DE ENFERMERÍA

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ABSTRACT

Objective: to know the prevalence of self-medication and the factors associated with this practice among nursing students. *Method*: This is a quantitative, descriptive and cross-sectional study, in which 143 questionnaires were evaluated and tabulated by the Excel Program. Figures were presented for the synthesis of the results. *Results*: the prevalence of self-medication was 97.9%, with analgesics/antipyretics (50.71%), anti-inflammatory drugs (18.57%) and anti-allergic drugs (12.86%) were the most used therapeutic classes. The most common complaints as reasons for self-medication were headaches (53.57%), allergies (18.57%) and throat infections (17.14%). *Conclusion*: a high prevalence of self-medication was observed and demonstrated the need to strengthen university education for the rational use of drugs to preserve their own safety and their future patient's safety. *Descriptors*: Self-Medication; Adverse Reactions; Pharmacoepidemiology.

RESUMO

Objetivo: conhecer a prevalência da automedicação e os fatores associados a essa prática entre os acadêmicos do curso de Enfermagem. **Método:** trata-se de um estudo quantitativo, descritivo e transversal, no qual foram avaliados 143 questionários, tabulados pelo Programa Excel. Apresentaram-se figuras para a síntese dos resultados. **Resultados:** identificou-se que a prevalência da automedicação foi de 97,9%, sendo os analgésicos/antitérmicos (50,71%), os anti-inflamatórios (18,57%) e os antialérgicos (12,86%) as classes terapêuticas mais utilizadas. Apurou-se que as queixas mais apontadas como motivos para a automedicação foram as dores de cabeça (53,57%), as alergias (18,57%) e as infecções de garganta (17,14%). **Conclusão:** observou-se alta prevalência da automedicação e se demonstrou a necessidade de se fortalecer a educação dos universitários para o uso racional de medicamentos a fim de se preservar a sua própria segurança, bem como a dos seus futuros pacientes. **Descritores:** Automedicação; Reação Adversa; Preparações Farmacêuticas; Anti-inflamatórios; Estudantes de Enfermagem; Farmacoepidemiologia.

RESUMEN

Objetivo: conocer la prevalencia de la automedicación y los factores asociados a esa práctica entre los académicos del curso de Enfermería. *Método*: se trata de un estudio cuantitativo, descriptivo y transversal, en el cual 143 cuestionarios fueron evaluados, tabulados por el Programa Excel. Se presentaron figuras para la síntesis de los resultados. *Resultados*: se identificó que la prevalencia de la automedicación fue de 97,9%, siendo los analgésicos/antitérmicos (50,71%), los anti-inflamatorios (18,57%) y los antialérgicos (12,86%) las clases terapéuticas más utilizadas. Se observó que las quejas más destacadas como motivos para la automedicación fueron los dolores de cabeza (53,57%), las alergias (18,57%) y las infecciones de garganta (17,14%). *Conclusión*: se observó una alta prevalencia de la automedicación y se demostró la necesidad de fortalecerse la educación de los universitarios para el uso racional de medicamentos para preservarse su propia seguridad, así como la de sus futuros pacientes. *Descriptores*: Automedicación; Efectos Colaterales; Preparaciones Farmacéuticas; Antiinflamatorios; Estudiantes de Enfermería; Farmacoepidemiogía.

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INTRODUCTION

Self-medication is the practice of using medications without the prescription of a duly qualified professional with the purpose of treating or alleviating symptoms perceived by the patient. Self-medication can be recognized as a phenomenon of self-care with health, and sometimes inevitable; however, this practice may be potentially harmful to health, both individual and collective, mainly because no medication is innocuous to the organism.

The risk of drug intoxication and its consequences are highlighted, both for the individual and for the public health services. These authors also cite data from the World Health Organization (WHO), showing that 15% to 20% of hospital costs are applied in the treatment of complications caused by self-medication.

Self-medication is associated with several factors such as previous experience with the symptom or disease; the feeling of knowledge about the disease; the attitude of the individual with the disease and the ease of access to the drugs.⁵

Self-medication among health students is considered an extremely important public health problem due to its epidemiological magnitude and its negative impact.⁶

OBJECTIVE

• To know the prevalence of self-medication and the factors associated with this practice among nursing students.

METHOD

This is a quantitative, descriptive, cross-sectional study conducted with students of the Nursing Course (first, third, fifth, seventh and ninth periods) in the night shift of the Gorutuba Valley College (FAVAG), located in the municipality of Nova Porteirinha, in the interior of the State of Minas Gerais, in the Serra Geral micro-region.

Data were collected in the first semester of 2017, after approval of the project by the Research Ethics Committee, under the opinion 1,960,295 and the CAAE 64592317.1.0000.5146.

The non-probabilistic sample had 195 students aged 18 years old or over, who consented to their participation by signing the Informed Consent Term (ICF). The inclusion criteria were students duly enrolled in the Nursing course, consenting to participation and being present at the date of data collection. The exclusion criteria were those students aged less than 18 years old or not consenting to participate in the research.

The data were collected through a structured questionnaire with questions about the academic

profile, such as gender, age, course, period, private health insurance, and self-medication issues (it was sought to know if the participants complaints at some point in their lives, including during the last 30 days, the type of medication used and the factors that influenced the practice of self-medication).

Before applying the questionnaires, the students were informed of the research objectives and procedures and answered promptly to the questions. Those students who accepted to participate signed the ICF. Before presenting the research to the students, the institutional director granted the researchers authorization by signing the Term of Institutional Consent (TIC), respecting the ethical and legal aspects defined by the Ethics Committee in Research (CEP).

In the first stage of the data processing, the questionnaires were analyzed to verify if they were completed. Those questionnaires not completed in their entirety were excluded. In the second stage, the data were tabulated in a computerized system (Excel 2010) to analyze the results in percentage. Finally, the data were studied, discussing them from the literature.

RESULTS

The participation of 195 students who answered the questionnaire was verified. Fifty-two were excluded because they were incomplete, with 143 valid questionnaires remained.

Regarding the gender, most of the interviewees (123; 86.01%) were female and 20 (13.99%) students were male. Most of them (98; 68.53%) were between 18 and 23 years old, 23 (16.08%) between 24 and 30 years old, 14 (9.79%) between 31 and 36 years old, seven (4.90%) were between 37 to 42 years old and only one student (0.70%) were over 42 years old.

Regarding the marital status of the participants, 101 (70.63%) were single, 32 (22.38%) were married, one (0.70%) was widowed, five separated/divorced, and four (2.80%) reported being in other situations.

When asked about having a private health plan, it was verified that only 23 (16.08%) reported having it and 120 (83.92%) said they did not have this service.

Regarding using non-prescription medications at some time in their lives, 140 (97.90%) nursing students reported this situation (Figure 1). Regarding this practice in the last 30 days, a prevalence of 51.75% (74) was observed (Figure 2).

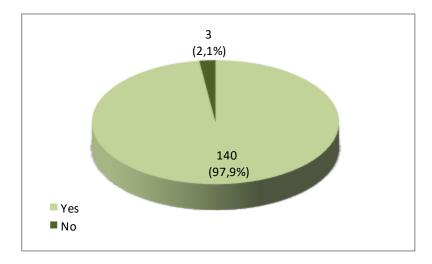


Figure 1. Prevalence of self-medication at some point in life, in FAVAG nursing students. New Porteirinha (MG), Brazil, 2017.

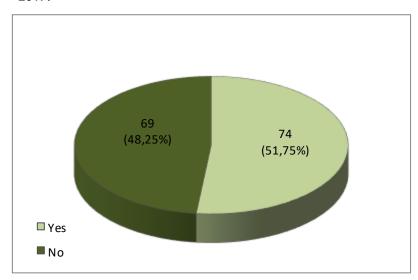


Figure 2. Prevalence of self-medication in the last 30 days, in FAVAG nursing students. New Porteirinha (MG), Brazil, 2017.

Analgesics and antipyretics (71; 50.71%), followed by anti-inflammatory drugs (26; 18.57%) and anti-allergic drugs (18; 12.86%) were among the most used therapeutic classes by the students (Figure 3). In this study, the drugs less frequently mentioned in self-medication were antibiotics (11, 7.86%), cough syrups (8, 5.71%), nasal decongestants (4, 2.86%) and antiasthmatic (two, 1.43%) (Figure 3). The most self-reported complaints were headaches (75; 53.57%), allergies (26; 18.57%), throat infections (24; 17.14%) and colds (nine, 6.43%) (Figure 4).

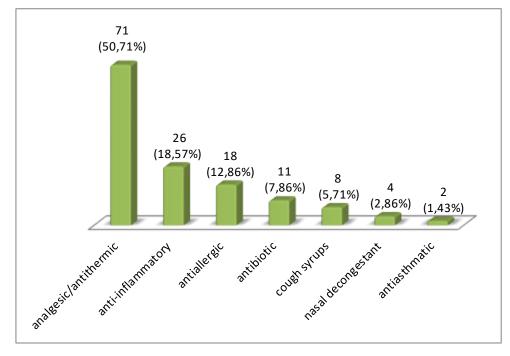


Figure 3. Pharmacological groups used without prescription by FAVAG nursing students. New Porteirinha (MG), Brazil, 2017.

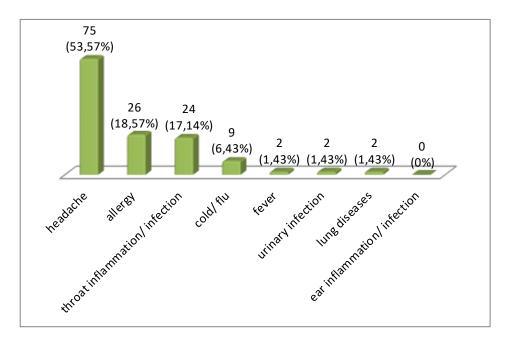


Figure 4. Complaints that motivated self-medication in FAVAG nursing students. New Porteirinha (MG), Brazil, 2017.

Forty-one students (29.29%) used the medication only one day, 25 (17.86%) used them two days, 41 (29.29%) used them three to five days and 33 (23.57%) for more than five days. When investigating whether the instructions in the package leaflet were followed, most of them (79; 56.43%) answered not to follow it.

In the students who have asked the pharmacist or clerk for advice on the purchase of over-the-counter medicines, 86 (60.14%) answered that they had done this practice and 77 (53.85%) stated that they had already received unsolicited advice at the pharmacy.

When comparing the influence of third parties on the practice of self-medication, 90 (62.94%) students have already requested advice from third parties, of which 42 (46.67%) requested it to relatives, 19 (21.11%) to pharmacy clerks, 14 (15.56%) to friends, two (2.22%) to neighbors and 13 (14.44%) to others (Figure 5).

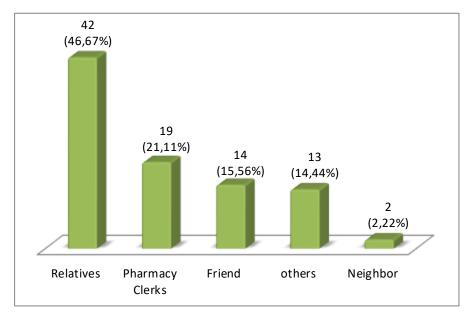


Figure 5. Influence of third parties on self-medication in FAVAG students. New Porteirinha (MG), Brazil, 2017.

In the use of old medical prescriptions, 66 (46.15%) students stated that they had relied on them, 43 of them (65.15%) in their own income and 23 (34.85%) in other people's recipes.

Regarding the knowledge about the possible risks of self-medication, 133 (93.01%) students said they knew them, while only ten (6.99%) stated that they did not know about the topic.

Also, 125 students (87.41%) answered that there was no problem with self-medication (adverse reaction and/or interaction with another drug) and there were no complications, and a small part of the students (18; 12.59%) reported having some problem due to self-medication. Six (4.20%) students reported being diabetic or hypertensive and 25 (17.48%) admitted to taking some continuous medication.

DISCUSSION

Most of the investigated students were female, a similar result found in another study,⁶ with a greater number of female participants, corresponding to 80.3%. A large number of women in health courses is common⁷, while a higher prevalence of men is generally perceived in the exact science courses.

In terms of age, most of the students were between 18 and 23 years old, followed by those between 24 and 30 years old. A similar result was found⁸ in a study that sought to investigate the self-medication among students of the health courses of a university in the South of Brazil, in which the age group from 19 to 30 years old was more common (85.1%). Other authors⁹ also observed a tendency towards joviality, with the predominance of students up to 30 years old, in a study with university students in the municipality of Cornélio Procópio (PR).

In the marital status, a predominance of single students in the study population was observed. In a study⁸ with university health students from a southern Brazilian university, they also identified

a predominance of unmarried individuals (80%) in the researched population; however, some authors have reported⁹ in their research, that there is no relationship between the practice of selfmedication and marital status.

In this study, there was a large number of university students who do not have private health insurance. It is understood that in Brazil, where access to public health care is difficult and most people do not have the financial means to pay for a private health plan, the practice of self-medication becomes quite common. 10 However, only the financial factor does not explain this practice, showing also the influence of factors such as school level, social class, access to information about medicines and, mainly, the cultural factor.

There was a high prevalence of self-medication in FAVAG nursing students, similar to studies in which the authors^{3,11-2} showed the presence of this practice in the university population.

In a study³ with nursing students from the State of São Paulo, 86.5% of students in the first grade and 100% of the students in the fourth grade practiced self-medication, suggesting a statistical relationship between this practice and the course progress. Most of the university students of the city of Mogi Guaçu (SP) (137; 98%) also practice self-medication.¹¹

The prevalence of self-medication in the last 30 days was 57.1% of students in Biomedicine, 57.1% of students in Biology and 40% of students in Electrical Engineering.¹²

In this study, the most commonly reported therapeutic classes in the practice of selfmedication were analgesics and antipyretics, followed by anti-inflammatories and antiallergics. These findings are similar to those found in a study⁹ in which the most commonly used drugs were analgesics, antipyretics, and antiinflammatories. Although the percentage identified may not seem quantitative enough, its

indiscriminate use has been responsible for the emergence of super-resistant bacteria, a major and serious health problem nowadays. In this sense, the need for specific regulation for the commercialization of antibiotics, RDC 20/2011,¹³ of the National Agency of Sanitary Surveillance (ANVISA), which prohibits the sale of antibiotics without prescription has been noted.

The headaches, allergies, throat infections and colds/flu were highlighted among the complaints aimed at justifying the use of medications without prescription. In their research, the main reasons identified were: headache (75.9%), colds (50.2%), sore throat (40.5%), and fever (35%). These results showed that the most frequent complaints are in agreement with the therapeutic classes most used in this study, which also coincides with the easily acquired drugs. As far as allergies are concerned, it is believed that this complaint can be justified by the climatic conditions of the region, characterized by low humidity throughout the year, favoring the development of allergic conditions. The second of the region of the region of the development of allergic conditions.

Most of the students claimed to have used the medication for a day or three to five days. In a study carried out with students from health courses, 86 students (43.9%) used the drug for three days, 52 (26.5%) for one day, 36 (18.4%) for two days and the others for more than three days. ¹⁶

The importance of the correct use time of the drugs for a safe and successful therapy is emphasized. Thus, the use of medications without prescriptions may compromise the quality and safety of the treatment. It is evaluated that, as in the case of antibiotic treatments, it is common for people to interrupt the use of the drug when symptoms improve, which may favor emergence of super-resistant bacterial strains. Also, the use of drugs for a time higher than recommended can also harm the health of the individual. Thus, self-medication acetylsalicylic acid (ASA) can lead to gastric bleeding, even at low therapeutic dosages, and at high doses can lead to "salicylism", which includes nausea, dizziness, deafness and compensated respiratory alkalosis. 17-8

Reading the package leaflet is fundamental for the understanding and correct use of the medicines; however, most of the researched population neglects its importance. In their research, they verified that, although the prevalence of self-medication was high, only 46.1% of university students reported having a habit of reading the package leaf.¹⁴

It was found that more than half of the students surveyed said they had already asked for advice from the pharmacist or clerk for the purchase of medicines without prescriptions or received unsolicited advice from the pharmacy. In

a similar way¹⁹, when investigating the prevalence of self-medication in students of the State University of Goiás, most of the interviewees affirmed to be advised by pharmacy clerks, being 71.3%, by the nursing students and 56.5%, by the students of the course of Information Systems. In the unsolicited advice, the authors identified an index of 64.4% in the Nursing course and 32.6% in the Information Systems course. It is understood that these findings point to the role of these professionals in influencing the practice of self-medication.

The factor of the influence of third parties influences the practice of using non-prescription medicines, and relatives, pharmacy clerks, and friends were the most highlighted. Corroborating with these results,²⁰ the practice of selfmedication is influenced by indications from third parties, as well as old prescriptions. It is pointed out that in a similar study⁵, with nursing students from the state of Amazonas, inferred that, despite the formation process, which, theoretically, can provide subsidies for more conscious decision making, there is also the influence of third parties self-medication. In this sense, transforming importance of the university is emphasized to overcome paradigms, with the rupture of the cult of medicalization passed down through the generations.

Although most nursing students reported having knowledge about the risks of using nonprescription medications, most of them practiced it. In a study with students from a higher education institution in Goiás, 14 52.1% said they knew about the risks and dangers of the practice. It was reported by these authors that the reasons why people self-medicate are very diverse, pointing to the role of drug advertisements, in contrast to the timid campaigns that try to clarify the dangers of self-medication. There is also the difficulty and cost of obtaining a medical consultation, easy access to information on medicines obtained through the World Wide Web and other means of communication and the lack of regulation and supervision in the sale of medicines.

The health students will be the future health professionals and what is expected is that these professionals show an attitude appropriate to their training and consistent with their daily practice and prepared to guide the rational use of medicines and carry out this practice in their daily lives. Thus, the need for health education and the adoption of educational interventions during graduation are evident.

In a similar way to this result⁹⁻²¹, most of the students stated that they had presented some problem due to self-medication. However, the possibility that adverse reactions may have gone unnoticed cannot be ruled out. The importance of

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these cases is emphasized, although in the population minority, considering its financial impact on health services and the magnitude of self-medication as a public health problem.

Although the population declared in this study as diabetic or hypertensive does not represent a high percentage, it is a group highly susceptible to drug interactions and serious adverse reactions that may even endanger the lives of these patients. It is also verified that²² the risk of drug interactions for diabetics and hypertensives are important and the need for health education to prevent aggravations resulting from the irrational use of medications are emphasized. In this perspective,²³ the risk of the use of nonprescription drugs by diabetic patients are highlighted, emphasizing the risks of the use of non-steroidal anti-inflammatory drugs (NSAIDs). Also, anti-inflammatories are one of the most commonly reported therapeutic classes in selfmedication by the investigated population, evidencing the risk of possible drug interactions.

CONCLUSION

From this study, it is observed that there is a high prevalence of self-medication among nursing students of the Vale do Gorutuba College (FAVAG), reinforcing the idea that this practice represents a serious public health problem and is also present, in the university population.

The need to strengthen the education of these university students for the rational use of medicines is remarkable, considering the risks from this practice and also their economic implications in the management of public health. The importance of responsible medication management is emphasized to preserve the safety of these students and their future patients' safety.

By the influence of third parties on self-medication, the need for education aimed at the rational use of medicines beyond the university environment is also demonstrated. In this sense, the relevance of public health strategies that minimize the prevalence of self-medication, such as health education and regulations for the advertising and commercialization of medicines should be emphasized.

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