



SELF-MEDICATION: CONSUMPTION, GUIDANCE AND KNOWLEDGE AMONG NURSING STUDENTS

AUTOMEDICAÇÃO: CONSUMO, ORIENTAÇÃO E CONHECIMENTO ENTRE ACADÊMICOS DE ENFERMAGEM

AUTOMEDICACIÓN: CONSUMO, ORIENTACIÓN Y CONOCIMIENTO EN ESTUDIANTES DE ENFERMERÍA

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ABSTRACT

Objective: to analyze the consumption, guidance and knowledge on self-medicated medicines by students of an undergraduate program in Nursing. **Method:** descriptive study, conducted in a public university in the State of Minas Gerais, Brazil, with a sample of 68 students, making a total of 66% from a population of 103 students, using an adapted questionnaire and the descriptive analysis of the data. This study was approved by the Ethics Committee, under the Protocol No. 2841/2011. **Results:** the following issues stood out: consumption of analgesics: 60 (88%) students; pain as main reason: 61 (90%) students; guidance received: 52 (76%) students; and doubt as to the guidance received: 35 (51%) students. We also observed the lack of knowledge on self-medicated medicines by 27 (40%) interviewees. **Conclusion:** the seriousness of the situation was evident at the institution in which the study was conducted with respect to the characterization of consumption, guidance and knowledge. **Descriptors:** Self-medication; Nursing; Students.

RESUMO

Objetivo: analisar o consumo, a orientação e o conhecimento acerca dos medicamentos autoadministrados por acadêmicos de um curso de graduação em Enfermagem. **Método:** estudo descritivo, realizado em uma universidade pública no interior do Estado de Minas Gerais, Brasil, com amostra de 68 acadêmicos, perfazendo um total de 66% da população de 103 estudantes, utilizando um questionário adaptado e a análise descritiva dos dados. Este estudo foi aprovado pelo Comitê de Ética, sob o protocolo 2841/2011. **Resultados:** destacaram-se o consumo de analgésicos: 60 (88%) acadêmicos; dor como motivo principal: 61 (90%) acadêmicos; recebimento de orientação: 52 (76%) acadêmicos; e dúvida quanto à orientação recebida: 35 (51%) acadêmicos. Observou-se também o desconhecimento do medicamento autoadministrado por 27 (40%) entrevistados. **Conclusão:** revelou-se a gravidade da situação na instituição em que ocorreu o estudo quanto à caracterização do consumo, orientação e conhecimento. **Descritores:** Automedicação; Enfermagem; Estudantes.

RESUMEN

Objetivo: analizar el consumo, la orientación y el conocimiento sobre medicamentos autoadministrados por estudiantes de un curso de grado en Enfermería. **Método:** estudio descriptivo, realizado en una universidad pública en el Estado de Minas Gerais, Brasil, con 68 estudiantes, haciendo un total de 66% de una población de 103 estudiantes, usando un cuestionario adaptado y el análisis descriptivo de los datos. Este estudio fue aprobado por el Comité de Ética, bajo el Protocolo N° 2841/2011. **Resultados:** se destacaron el consumo de analgésicos: 60 (88%) alumnos; dolor como motivo principal: 61 (90%) alumnos; recibir orientación: 52 (76%) alumnos; y la duda al respecto de la orientación recibida: 35 (51%) alumnos. También observamos la falta de conocimiento de los medicamentos autoadministrados por 27 (40%) entrevistados. **Conclusión:** se reveló la gravedad de la situación en la institución en la que el estudio se llevó a cabo en cuanto a la caracterización de consumo, orientación y conocimiento. **Descriptor:** Automedicación; Enfermería; Estudiantes.

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INTRODUCTION

Self-medication is defined as the use of industrialized or homemade medicines that have not been prescribed by a trained and authorized healthcare professional. Currently, in most homes, a large number of diseases are initially treated with easily obtained medicines in order to relieve symptoms, such as headaches, colds and muscle aches, among others.¹

Intrinsically, medicines have a symbolic value, which expresses the desire to modify the natural course of diseases. In this scenario, self-medication emerges from an attempt to mitigate harms to health and it can generate an irrational consumption, as well as consequences such as intoxication and poisoning cases.² In turn, massive propaganda and the ease of access to medicines in drugstores make believe that medicines are risk-free products. In addition, the indiscriminate use is encouraged, which do not always result in positive effects, besides leading to errors such as the use of inappropriate drugs, inadequate doses and frequencies, and insufficient or longer than recommended consumption periods, in addition to inappropriate combinations with other drugs, which may cause unwanted interactions.³

In Brazil, about 35% of marketed, prescribed or dispensed medicines are inappropriately consumed and as a consequence about 20 thousand people die each year.⁴ The poor quality of medicines provision, non-compliance with the requirement of presenting medical prescriptions for all types of medicines, the lack of information and education of the general population justifies the concern with the quality of self-medication practiced in the country.³ it is clear that this habit may have consequences such as undesirable effects, iatrogenic illnesses and masking of progressive diseases, therefore representing problems to be prevented.⁵⁻⁶

It is also noteworthy that there is an increase of over-the-counter medicines sales and that self-medication is present in the general population: workers; housewives; and college students, especially those in the area of health, which is an alarming fact because they have more access to information about health and medicines.⁷

In view of this scenario, this study is justified since we believed that the characterization and analysis regarding the consumption of medicines in the population under study can subsidize intervention

projects and training programs aimed at maximizing the understanding of university students with respect to medicine self-administration. Bearing in mind the aforesaid, we aimed at analyzing the consumption, orientation and knowledge on self-medicated medicines by students of an undergraduate program in Nursing.

METHOD

This is a descriptive study. It aims to describe the characteristics of a particular population or phenomenon, or the establishment of relationships between variables by using standard techniques of data collection, including a questionnaire.⁸ It was conducted in a undergraduate program in Nursing of a public university in the State of Minas Gerais, Brazil. This institution had four classes of that course. The first had 29 students, the second 15, the third 28 and the fourth 31, totaling 103 students.

Data collection was carried out after the approval of the study by the coordination of the program and by the Ethics Committee of the State University of Montes Claros, MG, under the Protocol No. 2841/2011. The data were collected with a questionnaire adapted from a study.⁹ The following data were collected: identification of the subjects (gender, age, worker or scholarship holder, and family income); characterization of medicine consumption (type and purpose); guidance on the use; and knowledge on the medicine used. Data analysis was descriptive, presented in tables and based on the literature.

Regarding ethical aspects, it is noteworthy that participants received explanations on the project and the participants of the study were only those individuals who agreed to participate, by means of signing an Informed Consent Form for participation in research. The ethical aspects of reliability and privacy of the research were protected in accordance with Resolution No. 196/96, about research involving humans.¹⁰

RESULTS

The frequency of students that made use of self-medication was 68, making a total of 66% of the 103 students of the Undergraduate Program in Nursing. The identification data of the participants are presented below in Table 1.

Table 1. Distribution of identification data of students from the Undergraduate Program in Nursing that made use of self-medication. Diamantina, MG, 2011.

Variables		No.	%
Gender	Male	11	16
	Female	57	84
Age	18 - 22 years	39	57
	23 - 27 years	23	34
	28 years or more	6	9
Marital status	Single	63	93
	Married	5	7
Worker or scholarship holder	Yes	17	25
	No	51	75
Family income	Under 1 minimum wage	9	13
	1 minimum wage	15	22
	2 - 4 minimum wages	34	50
	5 - 7 minimum wages	10	15

It is worth noting that 84% (57 individuals) of the sample was composed by female students. It is known that self-medication have higher prevalence in this gender, both in the academic environment and the general population. In relation to age, 39 (57%) interviewees had between 18 and 22 years of age.

With regard to work, 51(75%) of the interviewees did not work and did not have scholarships, depending, therefore, on the financial support of the family. We also found that 24(35%) participants had an income equal to or less than a minimum wage.

Analgesics were the most used medicines by the population under study (60-88%). Eventually, these medicines may trigger physical dependence, high blood pressure, gastritis and hepatitis. The second most used therapeutic class refers to anti-inflammatory drugs (40-59%), followed by antipyretics (14-

20%), antihistamines (9-13%) and contraceptive (6-9%), indicating that, in general, the habit of self-medication is mainly associated with pain relief.

The percentage of 189 is justified, since more than one medicine was consumed by every student, what brings us to drug interaction, which can enhance the therapeutic effects, reduce the effectiveness, contribute to different degrees of adverse reactions or yet do not cause the desired effects.

With respect to the reasons for the practice of self-medication, pain stood out as the most cited reason (61-90%), especially headaches and muscle pains, followed by inflammation (53-78%) and insomnia (34-50%). Symptoms from infection and hyperthermia were mentioned as reasons for consumption of analgesics. With regard to guidance on the use of medicines, data are shown in Table 2.

Table 2. Guidance on self-administered medicines for students from the Undergraduate Program in Nursing. Diamantina, MG, 2011.

Variables		No.	%
Received guidance on the use of medicines	Yes	52	77
	No	16	23
Considers guidance important	Yes	56	82
	No	12	18
Doubts about the treatment	Yes	35	51
	No	33	49

It should be noted that 52(77%) students had received guidance as to medicines, and 56 (82%) considered it important. However, 35 (51%) had doubts. This way, it is evidenced that there is a possibility of doubts regarding the quality of the information received.

Still, with regard to guidance, 25(37%) students had been informed by the families, 12(18%) by pharmacists, 15(22%) by friends, and 16(23%) had not receive guidance. This way, we observe that the lack of monitoring regarding medicines does not become a hindrance for self-medication, which can lead to dependency, poisoning and even death.

Regarding the importance of guidance, the following issues stood out: 'higher security' 40 (59%); 'to avoid excessive consumption' (37-

54%); 'to reduce the side effects of medicines' (32-47%); 'to promote conscious use' (29-43%); 'to know the contraindications' (26-38%); 'to reduce the risk of poisoning' (20-29%); and 'not to cause addiction' (15-22%). The fact that the sum of the percentages reached 292% is justified because more than one reason to classify the importance of guidance was reported in the interviews. It should be noted that the expressions cited are exactly as stated by the respondents.

With respect to the knowledge of the medicines consumed, 46 (68%) knew their therapeutic effects, 36 (53%) reported to know the contraindications, 31 (45%) knew the side effects, 19 (28%) did not know about the medicine consumed, and 8 (12%) reported that

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the medicines improved the health state. This item also exceeds 100% due to the same reason above mentioned. We also noted that 27(40%) students were totally unaware about the self-medicated medicine, which can interfere directly in drug therapy.

DISCUSSION

With regard to the characterization of the sample of this study, it is observed that in relation to data referring to gender, the results can be explained in part by the greater exposure of females to medication in all stages of life, greater demand for medical care and targeted campaigns to that gender.¹¹

With respect to age, the results of this study are supported by the literature⁷, revealing that self-medication among young people stands out due to the high prevalence in this age group. In this respect, it should be noted that young students are in general more susceptible to self-medication practice due to the social situation to which they are subject. However, they abuse of medicines for not always being prepared to take overload of studies, rhythm of life, lack of time for leisure and rest, distance from family, irregular eating habits, and high requirements imposed by the university.¹²⁻³

Regarding marital status, we did not find data in the literature that would corroborate with those obtained in this study, which indicates the need for further studies in order to enable comparisons. With regard to work, we could note the influence that the financial conditions cause on the practice of self-medication, since the students did not have own resources for medical consultation and most of them chose self-medication, maximizing thus the risks to their health.

It is known that the time expended with numerous academic activities, with a view to a full-time course, decreases the chances of working. This fact leads to financial difficulties that can generate other aggravations, triggering decreased reasoning ability and school performance decline. This has been corroborated by a study developed with teenagers from public and private schools of the city of Fortaleza.¹⁴

The facts described above demonstrate a confluence between self-medication and some factors identified in this study as female gender, young chronology and scarce income, in accordance with studies found in the literature.¹⁴⁻⁵

With regard to the consumption of self-medicated medicines, it is worth noting that analgesics contain high doses of caffeine in

their composition. Therefore, the lack of caffeine can cause headache, being necessary a correct monitoring for its removal.¹⁶ Another research¹⁷ also highlights analgesics and anti-inflammatories as respondents' preference regarding self-medication. Therefore, the results suggest that students' practice of self-medication occurs in response to the morbidity profile installed, to the detriment of the perception that they resource to medicines in order to prevent morbidities or to resolve problems of clinical significance.

With respect to the reasons for the practice of self-medication, it should be noted that the habit of self-medication is associated with pain relief. However, it is worth mentioning that the symptoms caused by infection and hyperthermia, mentioned as reasons for analgesic consumption, do not fit in the indications for treatment with this medicine.¹⁶ It is extremely serious that students of an undergraduate program in Nursing use medicines seeking to minimize symptoms that should be minimized with other classes of medicines, since such students should already have knowledge on the pharmacological action of these medicines, because they have already attended the course on Pharmacology. It is therefore necessary, for the structuring of an educational plan, to provide clarification regarding medicines, as well as possible side effects and their damage to the population under study.

As for guidance on self-medicated medicines, the expressive number of students who still had doubts is relevant and the reevaluation of the methods employed to promote guidelines on the use of medicines in this sample becomes necessary. The results of this study are in agreement with literature data which show that 63% of the students agree that the correct guidance and support of the health team contribute to the maximization of the understanding of the effects, in addition to the clinical observation with regard to the evolution throughout the treatment.¹⁸

A study¹⁹ highlights the contribution of teachers in guidance and the creation of ties with the students in order to increase confidence, safety and knowledge regarding drug treatment. In this way, also the role of nurses as well as the nursing staff is noteworthy with respect to users of self-medication. It is essential that these professionals provide their expertise during guidance to students in a proper and safe way, so that conscious consumption can be reinforced.

With respect to knowledge of the medicines consumed, we observed that the limited knowledge on medicines comes from incomplete and generalist sources, reinforcing the fact that the absence of correct information brings negative consequences that can result in improper use of medicines. In this respect, a study²⁰ points out that by not complying with immediate improvement of the picture after starting treatment, they can stop it or increase the dose of the drug in order to obtain the effects desired.

It is appropriate to point out that the study sample was composed by students of an undergraduate program in Nursing, who should be prepared to guide patients in the use of medicines. In the face of the reality mentioned, it is observed that a significant number of students had insufficient knowledge to be an orientation and care reference for the society. Another study²¹ shows this finding as worrisome, considering that these students will be the future professionals and caregivers, being in part responsible for the treatment, recovery and rehabilitation of patients. In this context, the study of the relationship between medicines and academic performance becomes critical. It is hoped that this study will help to alert teachers and students about self-medication in this sample, highlighting the importance of the quality of guidance and follow-up by health professionals, emphasizing that the alliance between students, teachers and health staffs can and should contribute by assisting in the construction of a health process of excellence for society.

CONCLUSION

The characterization and analysis of consumption, guidance and knowledge on self-medication performed by students of an undergraduate program in Nursing revealed the severity of the situation observed at the institution where the study on characterization of consumption, guidance and knowledge took place.

Analgesic and anti-inflammatory drugs were the most used medicines, highlighting headache and muscle pain as main reasons. It is noteworthy that the students had doubts about the treatment, in which family members, pharmacists and friends were responsible for the guidelines with regard to medicines. We also observed that the knowledge on the medicines consumed was limited and insufficient, a fact that may interfere directly in the drug therapy.

Therefore, it is necessary to implement educative strategies, aiming to enhance students' knowledge regarding the high range of deleterious effects of self-medication, as well as its severity. Given the extensive relationship between students and teachers, we highlight the extreme importance of deepening the discussion on the role of the teacher, with the support of the family, in the effective guidance on the consumption of medicines. This is based on the fact that through educational actions there will be a deeper knowledge on the part of the students regarding medicines consumed and thus the optimization of therapy.

This study presented limitations arising from the application of the questionnaire only in one educational institution. In this way, we believe that the development of other studies focusing on this crucial subject in other universities is of extreme relevance.

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Submission: 2012/12/19
Accepted: 2013/04/30
Publishing: 2013/06/01

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