Self-medication: practice among nursing...



# **ORIGINAL ARTICLE**

## SELF-MEDICATION: PRACTICE AMONG NURSING UNDERGRADUATES AUTOMEDICAÇÃO: PRÁTICA ENTRE GRADUANDOS DE ENFERMAGEM LA AUTOMEDICACIÓN: UMA PRÁCTICA ENTRE LOS GRADUANDOS DE ENFERMERÍA

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Objective: to verify the incidence of the practice of self-medication among undergraduates from a Nursing Course. Method: this is a quantitative study, exploratory and descriptive, performed with 100 students by means of a questionnaire, being the analysis with the aid of the statistical software SPSS, version 21.1. Present the results in the form of tables. Results: it is noted that 99.0% of the investigated reported practicing self-medication, while only 1.0% reported never having made use of medications without a prescription of legally qualified professionals. *Conclusion*: we found that the self-medication is a common practice among nursing students. It also emphasizes that the final consumer is not the only guilty in this situation, being necessary; therefore, actions of promotion and education in health in the researched institution, with a view to rational use of medicines. Descriptors: Self-Medication; Nursing; Students; Nonprescription Drugs; Risk; Health Education.

#### **RESUMO**

Objetivo: verificar a ocorrência da prática de automedicação entre acadêmicos de um curso de graduação em Enfermagem. Método: trata-se de um estudo quantitativo, exploratório e descritivo, realizado com 100 graduandos de Enfermagem por meio de um questionário, sendo a análise com o auxílio do software estatístico SPSS, versão 21.1. Apresentam-se os resultados em forma de tabelas. Resultados: constata-se que 99,0% dos investigados afirmaram praticar a automedicação, enquanto apenas 1,0% referiu nunca ter feito uso de medicamentos sem a prescrição de profissionais habilitados legalmente. Conclusão: verificou-se que a automedicação é uma prática comum entre os acadêmicos do curso de Enfermagem. Enfatiza-se, ainda, que o consumidor final não é o único culpado por esta situação, sendo necessárias, portanto, ações de promoção e educação em saúde na instituição pesquisada, com vista ao uso racional de medicamentos. Descritores: Automedicação; Enfermagem; Estudantes; Medicamentos sem Prescrição; Risco; Educação em Saúde.

## **RESUMEN**

Objetivo: verificar la existencia de la práctica de la auto-medicación entre académicos de un curso de pregrado en enfermería. Método: se trata de un estudio cuantitativo, exploratorio y descriptivo realizado con 100 estudiantes, por medio de un cuestionario, el análisis con la ayuda del software estadístico SPSS, versión 21.1. Presentados los resultados en forma de tablas. *Resultados*: se observó que el 99,0% de los investigados informó de practicar la automedicación, mientras que sólo el 1,0% reportó nunca haber hecho uso de medicamentos sin prescripción legal de profesionales cualificados. Conclusión: hemos encontrado que el medicamento es una práctica común entre los académicos del curso de Enfermería. También subraya que el consumidor final no es el único culpable en esta situación, siendo necesario, por lo tanto, acciones de promoción y educación en salud en la institución de investigación, con miras a la utilización racional de los medicamentos. Descriptores: Automedicación; Enfermería; Estudiantes; Medicamentos sin Prescripción; Riesgo; Educación en Salud.

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INTRODUCTION

Self-medication is defined as the use of

medications without prescription, direction and/or monitoring of a qualified professional.<sup>1</sup> It is understood that the prevalence of selfmedication is plural in the different social groups and makes no distinction as to the historical context, the cultural level or the economic and social position of the single, being a common practice, aiming to relieve or cure the symptoms considered simple and recurring.<sup>2-3</sup> Considers that this practice, when improperly, carried out can involve considerable risks to health, being necessary a rational use in order to ensure the safety of the person.

It is known that the main reasons that lead to self-medicate are experience with the symptom or disease, the lack of accessibility to health services, the limitation of financial resources intended to take care of health, the unavailability of time to seek medical help and the attitude of the individual to cope with the disease. In these aspects, addition to the great availability of products, the situation of advertisements of medicines free prescription in the media, the presence of "household little pharmacy" in households and the belief that the drugs solve everything. 4-5

There is, for the diffusion of self-medication in Brazil and in the world, that the data that demonstrate the epidemiological magnitude of this practice and its negative impacts have called attention to this growing public health problem, being that this practice becomes more worrying in the health academic area.<sup>6</sup>

Discusses that self-medication, performed in a responsible way, can bring benefits, helping to prevent and treat symptoms and diseases that do not require medical consultation, using medicines free of prescription (MFOP) which must have proven efficacy and safety when used rationally, may help to reduce the growing pressure on health services by means of the relief of minor illnesses, especially when the financial and human resources are limited. It is what is called the "responsible self-medication": the medicines in cases of of slight discomforts, such as colds and headaches, resulting in stress situations, abdominal cramps or menstrual, alerting that the patient see a doctor, if not cease the symptoms treated.7

It is self-medication, when performed in a responsible way, as an act of self-care; however, we must not forget the grave

Self-medication: practice among nursing...

consequences that happen when this practice is performed in an inadequate manner.8 Indicate the possible risks caused by selfmedication for the party's health: delaying the recognition of the disorder, with possible deterioration; the choice of inappropriate therapy; use too short or extended; increasing the error in the diagnosis of diseases; use of insufficient or excessive dosage; antimicrobial resistance; arrival of adverse reactions or allergic reactions; subsequent impairment of appropriate treatment of pathologies, by masking the true symptoms; superfluous expenses; risk of dependence; occurrence of adverse effects, which may result in increased risks; interaction with other medications that the patient is already hospitalization: making use: death increase in the use of financial resources in the health system. 6.9

It should be noted that approximately one third of hospital admissions going on in the country has as its origin the incorrect use of medications. It is, by means of statistics from the National Toxic-Pharmacological Information System (SINITOX) of the Oswaldo Cruz Foundation (FIOCRUZ) that the medicines account for 28.78% of the poisonings in Brazil, while 22.1% of the cases of death by poisoning are caused by medications.<sup>4, 10</sup>

It should be emphasized that, from this context, several studies indicate that the degree of education influences the practice of self-medication, as this activity is closely related to students of the area of health. It is known that the university students of the health area tend to self-medicate confidence based on the idea that they are privileged information holders of knowledge in relation to the rest of the population, in previous experiences successful and the belief that the knowledge acquired during training to maintain the correct selection of medicine for a given clinical picture. 4,11-13

This study was justified, before this scenario, because it is believed that the characterization and analysis about the consumption of medicines in the population under study can subsidize intervention projects and programs aimed at maximizing the understanding of university students regarding the self-administration of medicines.

### **OBJECTIVE**

• To verify the occurrence of the practice of self-medication among students from a Nursing undergraduate course.

#### **METHOD**

It is a quantitative study, exploratory and descriptive. The research was conducted at the Center for Health Sciences (CCS) of the Federal University of Paraiba (UFPB), Campus I, João Pessoa, State of Paraiba, Brazil, more specifically in classrooms with students of Nursing. It should be the choice of location to the criterion of accessibility, because both the responsible researcher, as the majority of participants (students and researchers) are part of the university.

It is known that the Nursing course of UFPB has approximately 380 students regularly enrolled in the current college semesters, which correspond to the entire course. Focus these students on Campus I of the institution. It was analyzed, for exploratory and investigative effect, a sample of 100 students, from a total of 380, already mentioned, which were willing, voluntarily, to participate in the research by signing the Informed Consent Form (ICF).

Defined as inclusion criteria for the selection of the sample: being a student of the Nursing undergraduate course (Bachelor's Degree/Degree) and be present in the classroom at the time of data collection. We adopted, as a criterion for exclusion, the fact that the student refuses to sign the ICF.

It was chosen as an instrument for data collection, a form composed of two parts, the first being referring to data from characterization of the sample and the second related to the practice of self-medication.

Started data collection after the approval of the project by the scientific commission of the DENC (Department of Clinical Nursing) and by the Committee for Ethics in Research of the CCS/UFPB under the CAAE: 67176317.6.0000.5188. Data collection was performed during the month of May 2017. when they were explained the objectives of the research and the importance of the participation of students, introducing the Free and Informed Consent Form (FICF), which was signed by the responsible researcher and the participants of the research.

The data were analyzed statistically by the quantitative method. There were all data presented by means of tables with the appropriate discussions, analyzed from a

Self-medication: practice among nursing...

database, with the aid of the statistical software SPSS (Statistical Package for Social Sciences, version 21.1).

There were respected, in this research, the ethical aspects advocated by Resolution 466/12 of the National Health Council, as well, which governs the Resolution 311/2007 by the Federal Nursing Council (COFEN, 2007), which deals with the Code of Ethics of the professionals.

#### **RESULTS**

It is noted that the data obtained from this study are alarming and show that nearly all of the investigated (more specifically, 99.0%) confirmed practicing self-medication, while only 1.0% reported never having made use of medications without a prescription of legally qualified professionals. It is also observed that the vast majority of respondents (91.0%) admitted having already indicated medicines for other people, while only 9.0% reported never having shown to others the use of any kind of medication without prescription of legally qualified professionals. Present the identification data of the sample in table 1.

Self-medication: practice among nursing...

Table 1. Socio-demographic characteristics of participants (N=100). João Pessoa (PB), Brazil. 2017.

Variables	N	%
Gender		
Male	16	16,0
Female	84	84,0
Age (in years old)		
17 - 20	40	40,0
21 - 25	48	48,0
26 - 30	8	8,0
31 - 35	3	3,0
36 or older	1	1,0
Family income		
1 minimum wage	18	18,0
1 to 2 minimum wages	35	35,0
2 to 3	20	20,0
3 or more	27	27,0

It stands out, in relation to the gender of the participants, that the vast majority of students surveyed (n=84; 84.0%) belongs to the female gender. Register, regarding age, the majority of respondents (n=88; 88.0%) had less than 26 years old.

It is evident that, when the participants are covered over by those who are instructed to perform the medication, the guidance itself is the main responsible for practice, with 71.0%; the guidance by parents responds by 62.0%; clerks of pharmacies, 25.0%; friends, 20.0%; information from the internet represent 15.0% and 8.0% said they have other sources of guidance.

Table 2. Students surveyed according to the form of getting, use, knowledge and the importance of self-medication (N=100). João Pessoa (PB), Brazil, 2017.

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Indicators of use of self-medication	N	%		
Use of medicines based on old prescription				
Yes	62	62,0		
No	38	38,0		
Use of medicines based on internet sites				
Yes	35	35,0		
No	65	65,0		
Use of medicines based on propaganda				
Yes	32	32,0		
No	68	68,0		
Use of drugs known in the course				
Yes	54	54,0		
No	46	46,0		

Table 3. The main drugs used by students (N=100). João Pessoa (PB), Brazil. 2017.

Medicines	N	%
Analgesics/Antipyretics	91	91,0
Cough syrups	77	77,0
Antiasthmatics	13	13,0
Ontological (drops for ears)	23	23,0
Antidiarrheals	39	39,0
Antacids	45	45,0
Systemic steroids (oral route)	8	8,0
Decongestants/Nasal vasoactives	63	63,0
Anti-inflammatories	83	83,0
Birth control pills	32	32,0
Antibiotics	31	31,0
Medicines for colds/flu	77	77,0
Laxatives	28	28,0
Vitamin complexes	65	65,0
Nasal steroids (nasal sprays with steroids)	14	14,0
Antiallergic/Antihistamines	44	44,0
Antifungals	01	1,00
Anti-anxiety drugs/weight loss	02	2,00
Increase appetite	01	1,00

It is observed that the great majority of respondents (95.0%) acknowledged the existence of these risks and only 5.0% responded negatively when asked about the possibility of the practice of self-medication cause damage to health. It is evident, knowing the social importance of this practice that almost all of the respondents (99.0%) recognizes the importance of the existence of discussions about the medication during undergraduation, and only 1.0% of the population responded negatively.

#### **DISCUSSION**

lt should be noted that the sociodemographic characteristics of the students surveyed are similar to other studies.14 It is confirmed, by means of the data relating to gender, which, even in the present day, Nursing still remains as a profession essentially feminine, considering that the percentage of men who seek this option professional is reduced. therefore, a majority of the number of persons of the female gender research participants. It is in relation to age, that the studied population is composed of individuals in full production phase, build family, with the expectation of progression intellectual, social and functional ascension. 14-5

It was recorded that certain groups are within a social setting on the question of the per capita income for the families, provoking a reflection on the purchasing power of those surveyed as representatives of a specific group of society, which suggests some risks as to the misuse of medicines, predisposed factor in self-knowledge of the subject about certain medications.<sup>2</sup>

It should be pointed out that the reason that leads students in the area of health to self-medicate is the fact they are holders of privileged information and knowledge in relation to the rest of the population. Indicates, in studies, that individuals with higher level of education are the ones who rely on medication. It is suggested, by these authors, that the accumulation of knowledge, whether purchased in educational institutions, especially in centers of higher studies directed to the health sciences, or life experiences, generates a greater confidence in those who self-medicate. 4,11-3

In addition to this, the central idea of the lack of time, by the part of the students, to consult a qualified professional, once, in the Brazilian public universities, students from the area of health, especially Nursing, meet a full academic schedule, an aspect that directly

Self-medication: practice among nursing...

impacts the daily life, reducing the availability of time to seek health care. 4,6,8

Perceives, among the ways in which the medication can be practiced, the acquisition of medications without prescription, the sharing of drugs with other members of the family or social circle, the reuse of waste medicines from previous treatments and the use of old prescriptions. It is important to also emphasize that the practice of self-medication, many times, is influenced by friends, clerks of pharmacies, and even family members. <sup>5-6,8,16</sup>

It is the guidance itself as the main responsible for the practice of selfmedication, influenced by the process of formation and of personal experiences, justifying the decision, but the orientations of countries are still an important factor in the choice of drugs, as revealed in other studies. 17 It is, also, a relationship between the influence of third parties and the average age of the students. It is said, according to the same studies about self-medication among nursing students, who influences this practice, especially, are the relatives and friends. It stands out, in this sense, the relevance of the transforming action of the university, in order to educate the individual about the practice of self-medication and overcome paradigms through the rupture of exaltation to the selfmedicalization passed between generations. 6,17

It is emphasized that a major problem related to self-medication is the reuse of old medical revenue, given that, many times, an individual may present signs and symptoms similar to those recorded during the period in which made use of a certain medication. It reinforces that the excessive use of medicines not prescrible can cause serious damage to pathological conditions, increasing the risk of contracting other diseases, which are not combative with medicines for casual use and routine, since the biochemical properties, in fact, will not effect and will not help in the recovery of the singular, but rather expand his sorrows and worsen his state of health. 16-8

It should be emphasized in studies, 19 that the medicinal products should be sold only by prescription, since they all have primary and secondary effects, i.e. have adverse conditions which, in the majority of cases, are not known by the population and, with it, the purchase of these by various members of the family, or even by friends, just by harming the health of an individual who is already compromised. Points out that the fact of patients do not know if the properties of the drug to be used far outweigh its effects or its

risks, i.e., the inappropriate use of one or more medications may mask the efficacy of same, change their effects and increase the risk effects and background, making a correct diagnosis and plausible to the problem.

Make it necessary, in view of the above, more complex treatments, invasive, expensive and with slow recovery, which is reflected in the costs for the health systems.

It is perceived that the results of this study corroborate the data from other studies involving students in the area of health<sup>3-6,8,11-14</sup> which proved that the majority of students enrolled in courses in the area of health practiced self-medication. It presents, also, line between the studies, respondents claim that the drugs most used by self-medicate students to should be analgesic/antipyretic drugs. It emphasized, moreover, that the problems that led to the practice of selfmedication are also in accordance with the study, 3,6,8,16 because the pain is also points out how a problem; soon after, come in large percentage, the complaints of fever.

It is understood, in this study, as well as in the survey conducted by these authors, 6,15,20 that the vast majority of respondents are already counseled with third parties before performing self-medication, being that these people are not empowered scientifically to provide such information to the population.

It is emphasized that self-medication is considered a problem of world order and it is necessary to warn the population about the risks that it offers, realizing it as the danger of this practice. It is suggested that educational institutions should engage in the training of professionals, offering a training policy with respect to its role as counselors of their patients, being necessary the creation of educational measures regarding the correct use of medications, preparing the professional to guide the society and encourage the pursuit of training, so that he can offer a quality pharmaceutical care.<sup>13</sup>

Stresses the importance of carrying out actions to interfere, both in practice and in teaching, in favor of promoting a rational use of medicines. Defends, as practice, that the population can be guided about the risks of irrational use of medicines, by means of educational actions; as to education, future doctors, nurses and pharmacists must realize the importance of rationality in the use of medications. Requires a political reflection in which refers to the criticality and the responsibility of what is being prepared in the process of understanding of human health.

Self-medication: practice among nursing...

### CONCLUSION

It is understood that there was a high rate of self-medication among nursing students, self-medicate themselves acknowledging the existence of risks of this practice. It was expected; however, that this is the future of health professionals, the consumption was smaller and rationalized. It is noted; however, that is the greater knowledge precisely medications that enables them to use them inappropriately. It was identified by this study, that the practice of self-medication was based primarily on their own guidance, using the knowledge learned on the course and the old medical prescriptions.

It was observed that, in self-medication, the medicines most used by the students were analgesic-antipyretic, anti-inflammatory, cough syrups, medicines for colds and flu, vitamin complexes and decongestants/nasal vasoconstrictors, and the main reasons reported were headaches, colds/flu, fever and infections/inflammations of the throat.

It should be noted that, without the proper prescription of a qualified professional, the practice of self-medicating, whether it is based on self-knowledge, or by any other means, is not reliable; therefore, knowledge about medications may not be a plausible argument for self-medication, which, in turn, is potentially full of risks. Alerts, then, for a political awareness regarding the use and/or improper handling of medicines, with focus on the Nursing students, which, in future, will be professionals who should encourage the correct use of medications.

It is emphasized that the final consumer is not the only guilty for this situation: pharmacies, health systems, the means of communication and society in general play a large and important influence on this practice. <sup>19</sup> It is, also, that there should be the deployment of actions of promotion and health education at the institution researched, with views to the rational use of medicines.

It is a heartening result that higher education students consider self-medication a harmful phenomenon for the single and the community, which enables the introduction of educational actions on the theme, offering a solution for the future.

#### **REFERENCES**

1. Pereira Júnior AC, Telles Filho PCP, Azevedo DSS. Self-medication: consumption, guidance and knowledge among nursing students. J Nurs UFPE on line. 2013

June;7(6):4472-8. Doi: 10.5205/reuol.4164-33013-1-SM.0706201321

- 2. Silva JAC, Gomes AL, Oliveira JPS, Sasaki YA, Maia BTB, Abreu BM. Prevalence of self-medication and associated factors among patients of a University Health Center. Rev Bras Clin Med [Internet]. 2013 [cited 2018 Oct 29];11(1):27-30. Available from: <a href="http://files.bvs.br/upload/S/1679-1010/2013/v11n1/a3385.pdf">http://files.bvs.br/upload/S/1679-1010/2013/v11n1/a3385.pdf</a>
- 3. Al Hussaini M, Mustafa S, Ali S. Self-medication among undergraduate medical students in Kuwait with reference to the role of the pharmacist. J Res Pharm Pract. 2014 Jan;3(1):23-7. Doi: 10.4103/2279-042X.132706
- 4. Aquino DS, Barros JAC, Silva MDP. Self-medication and health academic staff.. Ciênc saúde coletiva. 2010 Aug;15(5):2533-8. Doi: <a href="http://dx.doi.org/10.1590/S1413-81232010000500027">http://dx.doi.org/10.1590/S1413-81232010000500027</a>
- 5. Lukovic JA, Miletic V, Pekmezovic T, Trajkovic G, Ratkovic N, Aleksic D, et al. Selfmedication practices and risk factors for self-medication among medical students in Belgrade, Serbia. PLoS One. 2014 Dec;9(12):e114644. Doi: 10.1371/journal.pone.0114644
- 6. Gama ASM, Secoli SR. Self-medication among nursing students in the state of Amazonas Brazil. Rev Gaúcha Enferm. 2017 May;38(1):e65111. Available from: <a href="http://dx.doi.org/10.1590/1983-1447.2017.01.65111">http://dx.doi.org/10.1590/1983-1447.2017.01.65111</a>
- 7. Prado MAMB, Francisco PMSB, Bastos TF, Barros MBA. Use of prescription drugs and self-medication among men. Rev bras epidemiol. 2016;19(3):594-608. Doi: <a href="http://dx.doi.org/10.1590/1980-5497201600030010">http://dx.doi.org/10.1590/1980-5497201600030010</a>
- 8. Silva FM, Goulart FC, Lazarini CA. Characteristics of self-medication practice and associated factors among nursing undergraduate students Rev eletrônica enferm. 2014 July/Sept;16(3):644-51. Doi: http://dx.doi.org/10.5216/ree.v16i3.20850.
- 9. Jesus APGAS, Yoshida NCP, Freitas JGA. Prevalence self-medicated academic pharmacy, medicine, nursing and dentistry. Estudos. 2013 Apr/June;40(2):151-64. Doi:

### http://dx.doi.org/10.18224/est.v40i2.2718

10. Fundação Oswaldo Cruz. Instituto de Comunicação e Informação Científica e Tecnológica em Saúde. Sistema Nacional de Informações Tóxico-Farmacológicas. Dados de Intoxicação [Internet]. Rio de Janeiro: FIOCRUZ; 2013 [cited 2018 Nov 08]. Available

Self-medication: practice among nursing...

from: <a href="https://sinitox.icict.fiocruz.br/dados-nacionais">https://sinitox.icict.fiocruz.br/dados-nacionais</a>

- 11. Pilger MC, Dombrowski G, Rebelo M, Tomasi E. Self-medication among medical students of two medicine schools in Pelotas, South Brazil. Rev AMRIGS [Internet]. 2016 Jan/Mar [cited 2018 Nov 08];60(1):615-44. Available from: http://www2.isendlabs.com.br/iSendLabs/external/magazine.do?encrypt=ED859BEE75E6880 2A48119CA5AA3E653EE41EFE41D2BBE00F2F5E A4C3C5710048C7C31E2A17F4C0E149301932B79 24D1
- 12. Kumar N, Kanchan T, Unnikrishnan B, Rekha T, Mithra P, Kulkarni V, et al. Perceptions and practices of self-medication among medical students in Coastal South India. PLoS One. 2013 Aug;8(8):e72247. Doi: <a href="https://doi.org/10.1371/journal.pone.007224">https://doi.org/10.1371/journal.pone.007224</a>
- 13. Galato D, Madalena J, Pereira GB. Self-medication among university students: the influence of the field of study. Ciênc saúde coletiva. 2012 Dec;17(12): 3323-30. Doi: <a href="http://dx.doi.org/10.1590/S1413-81232012001200017">http://dx.doi.org/10.1590/S1413-81232012001200017</a>
- 14. Chaves ACTA, Alves LA, Rocha MNC, Souza MNR, Chaves VTA, Silva WS. Perfil de automedicação entre estudantes de enfermagem. Rev Saúde.com [Internet]. 2017 Oct/Dec [cited 2018 Apr 09];13(4):1016-102. Available from: <a href="http://www.uesb.br/revista/rsc/ojs/index.ph">http://www.uesb.br/revista/rsc/ojs/index.ph</a> p/rsc/article/view/523/507.
- 15. Oliveira AF, Teixeira ER, Silvino ZR, Christovam BP. Self-medication among healthcare workers: integrative review. J Nurs UFPE on line [Internet]. 2013 Oct [cited 2018 Nov 08];7(10):6254-61. Doi: https://doi.org/10.5205/1981-8963-v7i10a12264p6254-6261-2013
- 16. Silva JAC, Gomes AL, Oliveira JPS, Sasaki YA, Maia BTB, Abreu BM. Prevalence of self-medication and associated factors among patients of a University Health Center. Rev Bras Clin Med [Internet]. 2013 Jan/Mar [cited 2018 Nov 08];11(1):27-30. Available from: <a href="http://files.bvs.br/upload/S/1679-1010/2013/v11n1/a3385.pdf">http://files.bvs.br/upload/S/1679-1010/2013/v11n1/a3385.pdf</a>
- 17. Goel D, Gupta S. Self-medication patterns among nursing students in North India. IOSP J Dental Med Sci. 2013 Jan;11(4):14-7. Doi: 10.9790/0853-1141417}
- 18. Reis KP, Canfield JT. The use of medical prescription in the selfmedication. Rev Disciplinarum Scientia [Internet]. 2016 [cited 2018 Nov 08];2(1):137-47. Available from: <a href="https://www.periodicos.unifra.br/index.php/disciplinarumS/article/view/802/746">https://www.periodicos.unifra.br/index.php/disciplinarumS/article/view/802/746</a>

Self-medication: practice among nursing...

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Alves DRF, Abrantes GG de, Martins HKA et al.

19. Cruz PS, Caramona M, Guerreiro MP. A reflection on self-medication and nonprescription medicines in portugal. Rev Port Farmacoter [Internet]. 2015 [cited 2018 Nov 08];7(2):83-90. Available http://revista.farmacoterapia.pt/index.php/r pf/article/view/2/2.

20. Iuras A, Marques AAF, Garcia LFR, Santiago MB, Santana LKL. Prevalence of self-medication among students of State University of Amazonas (Brazil). Rev Port Estomatol Med Dent Cir Maxilofac. 2016 57 (2):104-11. Apr/June; https://doi.org/10.1016/j.rpemd.2016.01.001

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