

SELF-MEDICATION AMONG UNIVERSITY STUDENTS: A PUBLIC HEALTH PROBLEM
AUTOMEDICAÇÃO EM ESTUDANTES UNIVERSITÁRIOS: UM PROBLEMA DE SAÚDE PÚBLICA
AUTOMEDICACIÓN EN ESTUDIANTES UNIVERSITARIOS: UN PROBLEMA DE SALUD PÚBLICA

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ABSTRACT

Introduction: Self-medication is a highly prevalent practice in Brazil, driven by ease of access, prior experiences, and family influence, with high rates among students in the health field. Although common, this practice involves significant risks, such as poisoning, allergies, and inappropriate use of medications, reinforcing the need to understand its associated factors and impacts on public health. **Objective:** To identify self-medication among university students as a possible new public health problem. **Methods:** This is a quantitative cross-sectional study conducted with university students from any course. The sample was investigated regarding the prevalence of self-medication, its frequency, reasons, and influences, using an electronic form. The data were analyzed using Jamovi software, and the study was approved by the Ethics and Research Committee. **Results:** There was a prevalence of females (67.5%) and a median age of 20 years, in addition to a predominance of self-medication among students not belonging to the health field (88.88%). Furthermore, 99.5% of the sample kept medications at home, and 94.7% reported having used medication in the last 12 months. Also, 69.2% of participants purchased medication without a prescription, and the main sources of guidance for self-medication were friends or family (48.6%). **Conclusion:** The study confirmed that self-medication is prevalent among university students, including those in health sciences, influenced by cultural factors, home storage of medications, and common symptoms such as pain and flu. The results point to the need for educational and institutional strategies that promote the rational use of medications, reducing this practice in academic environments.

Keywords: Self-Medication; Public Health; Epidemiology.

RESUMO

Introdução: A automedicação é prática altamente prevalente no Brasil, impulsionada pela facilidade de acesso, experiências prévias e influência familiar, com índices especialmente elevados entre estudantes da área da saúde. Embora comum, tal prática envolve riscos relevantes, como intoxicações, alergias e uso inadequado de medicamentos, reforçando a necessidade de compreender seus fatores associados e impactos na saúde coletiva. **Objetivo:** Identificar a automedicação em universitários como possível novo problema de saúde pública. **Métodos:** Trata-se de um estudo transversal quantitativo realizado com universitários de qualquer curso. A amostra foi investigada acerca da prevalência da automedicação, sua frequência, motivos e influências, por meio de formulário eletrônico. Os dados foram analisados no software Jamovi e o estudo foi aprovado por Comitê de Ética e Pesquisa. **Resultados:** Houve prevalência do sexo feminino (67,5%) e mediana de idade igual a 20 anos, além de predomínio da automedicação entre estudantes não pertencentes à área da saúde (88,88%). Além disso, 99,5% da amostra mantinha medicamentos em casa e 94,7% relataram ter utilizado fármacos nos últimos 12 meses. Também, 69,2% dos participantes compraram medicamentos sem prescrição médica e as principais fontes de orientação para a automedicação foram amigos ou familiares (48,6%). **Conclusão:** O estudo confirmou que a automedicação é altamente prevalente entre universitários, inclusive entre estudantes da área da saúde, influenciada por fatores culturais, armazenamento doméstico de fármacos e sintomas comuns como dor e gripe. Os resultados apontam para a necessidade de estratégias educativas e institucionais que promovam o uso racional de medicamentos, reduzindo essa prática em ambientes acadêmicos.

Palavras-chave: Automedicação; Saúde Pública; Epidemiologia.

RESUMEN

Introducción: La automedicación es una práctica ampliamente prevalente en Brasil, favorecida por la facilidad de acceso a medicamentos, experiencias previas y la influencia familiar, con tasas especialmente elevadas entre estudiantes de áreas de la salud. Aunque frecuente, implica riesgos importantes, como intoxicaciones, reacciones alérgicas y el uso inadecuado de fármacos, reforzando la necesidad de comprender sus determinantes y su impacto en la salud pública. El objetivo de este estudio fue identificar la automedicación entre estudiantes universitarios y discutirla como un posible problema emergente de salud pública. **Métodos:** Se realizó un estudio transversal cuantitativo con estudiantes de diversas áreas académicas. Se investigaron la prevalencia, frecuencia, motivos e influencias relacionadas con la automedicación mediante un cuestionario electrónico. Los datos fueron analizados con el software Jamovi, y la investigación contó con la aprobación del Comité de Ética. **Resultados:** La muestra presentó predominio femenino (67,5%) y mediana de edad de 20 años. La automedicación fue más frecuente entre estudiantes no pertenecientes a la salud (88,88%). La mayoría guardaba medicamentos en casa (99,5%) y los había utilizado en los últimos 12 meses (94,7%). Además, el 69,2% adquirió fármacos sin receta, siendo amigos y familiares las principales fuentes de orientación (48,6%). **Conclusión:** La automedicación mostró alta prevalencia entre universitarios, influenciada por factores culturales, disponibilidad doméstica de medicamentos y síntomas comunes. Los hallazgos refuerzan la necesidad de estrategias educativas e institucionales que promuevan el uso racional de medicamentos en contextos académicos.

Palabras clave: Automedicación; Salud Pública; Epidemiología.



INTRODUCTION

According to the 2021 report on adverse drug events by ANVISA, health can be defined as a “state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity”¹. This definition is broad and often difficult to achieve. In this context, self-medication has emerged as a common habit among the Brazilian population, who do not hesitate to recommend medicines to friends and family, making the country one of the leading consumers of non-prescribed medications².

Furthermore, although self-medication can offer individual benefits, the risks associated with the practice are undeniable, necessitating a careful assessment of the cost-benefit ratio. Notable among the issues involved is the incorrect application of polypharmacy, characterized by the inappropriate use of medications and drug combinations, as well as inappropriate self-medication¹. Thus, it is evident that self-medication, despite being easily accessible and simple to carry out, is becoming a common and sometimes indiscriminate practice, potentially posing risks to public health³. Moreover, while it often works and yields the expected results, self-medication is linked to serious adverse effects such as poisoning, allergies, drug resistance, and a false sense of cure; it is also directly associated with the worsening of medical conditions and, in some cases, can lead to death⁴.

It is also well known that self-medication is highly prevalent, particularly among the adult

population⁵. Illustrating this, indicators show that 8 out of 10 Brazilians practice self-medication routinely⁶. However, figures for young people and students, especially those in healthcare fields, are similarly high, reaching over 90% of this demographic; a study of medical students at an educational institution in Alagoas found that only 1.4% of respondents reported not practicing self-medication⁷. Thus, given the observed rise in this practice in recent years⁸, it is evident that investigating factors causing significant demographic impacts is crucial⁹.

At the same time, various reasons may lead to the use of medications in this manner. These include prior experience with the symptoms or the condition, uninformed opinions about the illness, a lack of access to medical care¹⁰, and family influence regarding which medications to use, a common occurrence that highlights the prevailing culture of self-medication⁴. An analysis of medical students' motivations revealed a confidence in self-medication rooted in the knowledge acquired during their studies¹¹.

Ultimately, various factors can drive self-medication; this study explored the practice among university students with the aim of identifying a potential new public health issue.

METHODS

This is a cross-sectional study involving university students from any field of study. The study was approved by the Research Ethics Committee of the University of Mogi das Cruzes.

Data collection was conducted virtually using a self-medication questionnaire hosted on Google Forms and distributed via closed WhatsApp groups. A non-probability sample of 203 participants was recruited using the "snowball" sampling method. Participants were undergraduate students aged 18 or older from any public or private higher education institution who agreed to complete the questionnaire and signed the Informed Consent Form (ICF). Individuals using chronic medication or undergoing continuous prescribed medical treatment were excluded, as these factors could interfere with the analysis of self-medication patterns.

The questionnaire began with the mandatory acceptance of the ICF, followed by simple questions regarding self-medication practices during the previous semester and details on medication use. This quantitative, cross-sectional study relied on the analysis of data collected via the forms. This analysis provided insights into self-medication habits within the study group and allowed for the profiling of the medications being used.

Data were organized and tabulated in Google Sheets and analyzed using Jamovi software. Initially, the normality of the distribution of quantitative variables was assessed using the Shapiro-Wilk test. For categorical variables, Pearson's chi-square test was employed, supplemented by Fisher's exact test when necessary (particularly in cases where expected frequencies in any cell were < 5). A significance level of 5% ($p < 0.05$) was adopted.

The study is registered under the Certificate of Presentation for Ethical Appreciation (CAEE) number 76028723.5.0000.5497.

RESULTS

A total of 203 responses meeting the inclusion criteria were obtained. Regarding gender (Q1), 137 participants were female (67.5%) and 66 were male (32.5%). Concerning age (Q2), the mean age was 21.7 years for women and 21.0 years for men. The overall age distribution did not follow a normal distribution (Shapiro-Wilk: $W = 0.642$; $p < 0.001$), with a median age of 20 years (Table 1).

Regarding the educational institution (Q3), 187 participants (92.1%) were students at the University of Mogi das Cruzes, and 17 (7.9%) were from other universities in the State of São Paulo. As for the field of study (Q4), a higher prevalence of self-medication was observed among students outside the health sciences (88.88%) compared to health sciences students (64.55%). The most represented health-related majors were Medicine (48.3%) and Psychology (14.3%) (Table 2). A difference was also observed based on the semester of study (Q5): first-semester students reported higher rates of self-medication (38.7%) compared to seventh-semester students (23%).

The majority of the sample kept medications at home (99.5%), and 94.7% reported having used medication within the last 12 months (Q6–Q7). The most common complaints associated with medication use (Q8) were pain (41.7%), flu-like symptoms (19.9%),

and fever (4.7%). Regarding medication acquisition (Q9), 135 participants (69.2%) reported purchasing medication without a medical prescription. The main sources of guidance for self-medication (Q10) were friends or family (48.6%), previous prescriptions (30.8%), and non-physician healthcare

professionals (11.6%). Only 5% reported that the medication used did not resolve the initial complaint (Q12).

The majority stated they knew what self-medication is (97.5%), and 88% reported being aware of the risks associated with the practice (Q13–Q14).

Table 1 - Sociodemographic and behavioral characteristics of the sample participants

Variables	n(%)
Gender	
♀	137(67,5)
♂	66(32,5)
Age	
Medium	21,4
Average	20
Fashion	20,0
Standard deviation	4,61
Minimum-Maximum	18-46
Educational Institution	
UMC	187(92,1)
Others	17(7,9)
Keep medicines at home	
Yes	202(99,5)
No	1(0,5)
Was this medication prescribed by a doctor?	
Yes	60(30,8)
No	135(69,2)
How did you find out about the medication?	
Friends/Family	71 (48,6)
Previous prescription	45 (30,8)
Another healthcare professional	17 (11,6)
Media	5 (3,4)
They are aware of the risks of self-medication.	
Yes	178(87,7)
No	25(12,3)
Do you know what self-medication is?	
Yes	198(97,5)
No	5(2,5)

Source: Matuzaki et al., 2025

Table 2 - Main courses in the sample

Healthcare Sector	n(%)	Other courses	n(%)
Self-medication	103(64,77)	Self-medication	32(88,88)
Medicine	98(59,3)	Architecture and Urban Planning	7(18,4)
Psychology	29(17,5)	Systems Analysis and	6(15,7)
Nursing	15(9,0)	Law	5(13,1)
Other health-related courses	23(13,9)	Others	20(52,6)
Total	165(100)	Total	38(100)

Source: Matuzaki et al., 2025

DISCUSSION

Self-medication, that is, the use of medications without a medical prescription—is a common practice among university students¹². The study revealed that, of the 203 undergraduates who responded to the survey, 69.2% use non-prescribed medications; this trend was also observed in a study¹³ that identified the practice in 88.3% of the students interviewed. Anti-inflammatories and antihistamines were among the most frequently used classes of medication, consistent with the 45.97% rate reported in studies conducted with university students in Alagoas⁷.

The research also highlighted that only 30.8% of the medications used had been prescribed by a physician, underscoring the high prevalence of self-medication. Social influence from friends and family was identified as the primary driver for using medications without a prescription—a finding that corroborates recent studies⁴. Guidance based on previous prescriptions also emerged as a significant factor. Conversely, sources such as the media, non-physician healthcare professionals, the

Whitebook tool (a prescribing aid), and knowledge acquired during academic training played a significantly smaller role in triggering this practice.

Among participants who reported self-medicating, the influence of digital media (3%) and decision-making based on personal research or scientific inquiries (4%) occurred at similar rates. Although actively seeking information and consulting scientific sources reflects a more critical and potentially better-informed approach¹⁴, the data show that, in practice, this influence on medication choice is comparable to the impact of digital media. This finding suggests that in the current landscape, characterized by the widespread circulation of health-related content on digital platforms¹⁵ both individual research and media exposure exert similar levels of influence on the decision to self-medicate. It is important to highlight that the academic environment fosters physical and emotional illness among students—particularly those in health-related fields¹² due not only to heavy workloads but also to the difficulty of the curriculum and intense peer competition, all of

which generate anxiety and stress. Furthermore, the university years involve profound transformations as individuals transition from adolescence to the responsibilities of young adulthood¹⁶; these changes, combined with academic demands, family issues, learning difficulties, and psychological conflicts, can encourage or reinforce the practice of self-medication.

Consistent with this, the literature indicates that antidepressants¹⁷ medications that act directly on the central nervous system—are the primary class of drugs used by students to alleviate the distress caused by the fatigue inherent in the transition to higher education. In the present study, out of the 203 students who responded to the survey, 13 (6.4%) stated they had used psychotropic medications, including anxiolytics, hypnotics, antidepressants, antipsychotics, psychostimulants, and opioids. Of these, only 4 individuals reported using the medication under medical prescription, and 9, in addition to using central nervous system-acting drugs, also self-medicated with drugs from other classes.

Thus, it is undeniable that this approach to treating anxiety and depressive disorders requires caution; alongside the use of these medications, non-pharmacological treatments, such as psychotherapy, are also necessary. Furthermore, these drugs can cause side effects and pharmacological interactions that may be harmful to the user¹), especially when combined with self-medication for other conditions or symptoms.

Among the symptoms cited, generalized body pain was the most prevalent, accounting for approximately 46.7% of the total reported symptoms (Table 3). This aligns with findings from a study¹⁹ involving higher education students in health-related fields, which showed a prevalence of 29% within the sample, demonstrating that generalized symptoms like pain are the most common reasons for this practice. Additionally, in that same study, symptoms such as fever and inflammation (associated with the flu) showed a prevalence of 24.4%, consistent with the 23.4% reported in the present research, a finding that warrants further analysis.

Table 3 - Main complaints and medications reported

Complain	n(%)	Medicine	n(%)
Pain	177(46,7)	Analgesics and Antipyretics	151(32,9)
Fever	18(4,7)		
Rhinitis	24(6,2)	Antihistamines	19(4,1)
Flu	30(7,8)	AINEs	25(5,4)
Allergies	18(4,7)	Others medications	263 (57,4)
Other symptoms	114(29,9)		
Total	381(100)	Total	458(100)

Source: Matuzaki et al., 2025

Finally, while certain aspects of self-medication, such as the incidence and influence of using medications not prescribed by healthcare professionals, remain consistent with previous studies^{4,13}, other factors have changed over time, such as the primary complaint prompting self-medication¹⁹, as previously noted.

CONCLUSIONS

This study demonstrated that self-medication is a highly prevalent practice among higher education students, regardless of their field of study. It was observed that the majority of the sample reported using medications without a medical prescription in the past 12 months, and a prevalence of home medication storage, a factor directly linked to the practice of self-medication, was identified²⁰.

Furthermore, the data reveal that health science students exhibit similar, and in some cases even higher, rates of self-medication, despite possessing greater technical knowledge regarding the associated risks. The primary complaints prompting self-medication in the sample were pain, flu-like symptoms, and fever, reinforcing the pattern described in the literature for young populations, as previously discussed. Additionally, a large proportion of students obtained medications due to the influence of friends, family members, or old prescriptions, highlighting the persistence of cultural and behavioral factors that sustain this practice²¹.

Moreover, the research showed that self-medication among university students remains a

frequent practice, influenced both by exposure to digital media and by the active search for personal scientific information, with both factors appearing in similar proportions. This balance between different information sources underscores the impact of the contemporary digital environment, where health-related content circulates widely and influences decisions regarding medication use.

In addition, emotional and academic factors specific to the university experience, particularly among health science students—play a significant role in this behavior. Heavy workloads, the pressures inherent in professional training, and the changes typical of the transition to adulthood contribute to stress, anxiety, and psycho-emotional distress, fostering a search for quick solutions such as self-medication. The increasing use of psychotropic drugs, such as antidepressants, is a significant indicator of this scenario and reinforces the need for greater attention, given that such medications require professional monitoring and integration with non-pharmacological interventions. Thus, the findings align with the literature on the subject^{21, 22} and reinforce the need for institutional and educational strategies that promote the rational use of medicines and raise awareness regarding the risks associated with self-medication, particularly in university settings. Interventions targeting the early stages of academic programs, as well as ongoing guidance initiatives, can contribute to reducing self-medication and promoting safer health practices among students²³.

REFERENCES

1. ANVISA. Notificação de eventos adversos a medicamentos. 003/2021. Brasília-DF: GGMON; 2021.
2. Silva EC dos S, Senna Junior VA de. A automedicação na sociedade brasileira e o papel do farmacêutico. REASE [Internet]. 2023 Mai 29 [citado 2024 Abr 18];9(4):9519-30. Doi: <https://doi.org/10.51891/rease.v9i4.9832>
3. Arrais PS, Fernandes ME, Pizzol TD, Ramos LR, Mengue SS, Luiza VL, et al. Prevalence of self-medication in Brazil and associated factors. Rev Saude Publica. 2016;50(suppl 2):13s. Doi: <http://dx.doi.org/10.1590/S1518-8787.2016050006117>
4. Bohomol E, Andrade CM. Prática da automedicação entre estudantes de enfermagem de instituição de ensino superior. Cienc Cuid Saude. 2020;19:e48001. Doi: <https://doi.org/10.4025/ciencuidsaude.v19i0.48001>
5. Filler LN, Abreu EB de, Silva CB da, Silva DF da, Montiel JM. Caracterização de uma amostra de jovens e adultos em relação à prática de automedicação. Psicodebate [Internet]. 22º de dezembro de 2020 [citado 8º de dezembro de 2025];6(2):415-29. Doi: <https://doi.org/10.22289/2446-922X.V6N2A27>
6. Galato D, Madalena J, Pereira GB. Automedicação em estudantes universitários: a influência da área de formação. Ciência & Saúde Coletiva. 2012;17(12):3323-30. Doi: <https://doi.org/10.1590/S1413-81232012001200017>
7. Nascimento CS do, Araújo KMM de, Gusmão DBM de, Souza PM, Santos JA dos. Avaliação da automedicação entre estudantes de medicina de uma instituição de ensino de Alagoas. Rev Med. 2019;98(6):367-73. Doi: <https://doi.org/10.11606/issn.1679-9836.v98i6p367-373>
8. Melo JRR, Duarte EC, Moraes MV, Fleck K, Arrais PSD. Automedicação e uso indiscriminado de medicamentos durante a pandemia da COVID-19. Cad Saúde Pública. 2021;37(4):e00053221. Doi: <https://doi.org/10.1590/0102-311X00053221>
9. Impacto das redes sociais na automedicação: uma revisão integrativa no contexto brasileiro. REMUNOM [Internet]. 2025 Nov. 19 [cited 2025 Dec. 8];20(2):1-9. Doi: <https://doi.org/10.61164/3scja124>
10. Gama ASM, Secoli SR. Automedicação em estudantes de enfermagem do Estado do Amazonas - Brasil. Rev Gaúcha Enferm. 2017;38(1):e65111. Doi: <https://doi.org/10.1590/1983-1447.2017.01.65111>
11. Moraes LG, Bernardina L, Andriato LC, Dalvi LR, Loyola YC. Automedicação em acadêmicos de Medicina. Rev Soc Bras Clin Med. 2018;16(3):167-70.
12. Leite Lessa Araujo AF, Cristina Ribeiro M, Dias Vanderlei A. Automedicação de psicofármacos entre estudantes universitários de odontologia e medicina. Rev. Inter. Educ. Sup. [Internet]. 28 fev 2021 [citado 2025 Dez 08];7:e021037. Doi: <https://doi.org/10.20396/riesup.v7i0.8659934>.
13. Silva LB, Pivete LN, Giroto E, Guidoni CM. Consumo de medicamentos e prática da automedicação por acadêmicos da área de saúde da Universidade Estadual de Londrina. Rev Espaço para Saúde. 2015;16(2):27-36. Doi: <https://doi.org/10.22421/15177130-2015v16n2p27>
14. Fernandes PC, Faria GG, Pereira DL. A importância do uso racional de medicamentos nas políticas de atenção farmacêutica e a prevenção da automedicação da população. Sci Elec Arch. 2020;13(5). Doi: <http://dx.doi.org/10.36560/1352020947>
15. Suarez-Lledo V, Alvarez-Galvez J. Prevalence of health misinformation on social media: systematic review. J Med Internet Res. 2021;23(1):e17187. doi: <http://dx.doi.org/10.2196/17187>
16. Souza JF, Silva FJ, Silva Júnior AAS, Araújo PGS. Prevalência da prática de automedicação entre estudantes de psicologia: um estudo transversal. Braz J Dev. 2020;6(12):98105-16. Doi: <https://doi.org/10.34117/bjdv6n12-343>.



17. Use of antidepressants and anxiolytics among pharmacy course students in a private and public institution in the interior of Bahia. RSD [Internet]. 2021 Jul. 12 [cited 2025 Dec. 10];10(8):e29610817177. Doi: <https://dx.doi.org/10.33448/rsd-v10i8.171771>
18. Luz PB, Ramos S, Geisler SA. Efeitos adversos do uso de antidepressivos por estudantes da área da saúde. Revista JRG [Internet]. 28e maio 2024 [citado 2025 Dez 10];7(14):e141149. Doi: <https://doi.org/10.29327/257411>
19. Príncipe F, Oliveira A, Silva C, Silva D, Silva D, Silva T. Automedicação nos estudantes do ensino superior da saúde. Rev Investig Inov Saúde. 2020;3(2):21-28. Doi: <https://doi.org/10.37914/riis.v3i2.82>
20. Souza Lisboa Filho L de, Sherman Pereira Lima A, do Amaral Noronha de Figueiredo Gomes B, Amaral Rodrigues de Oliveira M, Lins e Silva Barbosa S, Barbosa Rodrigues de Souza M. Automedicação: impactos no tratamento médico e diagnóstico da doença. Braz. J. Implantol. Health Sci [Internet]. 29 dez 2023 [citado 2025 Dez 08];5(5):6564-82. Doi: <https://doi.org/10.36557/2674-8169.2023v5n5p6564-6582>
21. Ferreira F das CG, Luna GG de, Izel ICM, Almeida ACG de. O impacto da prática da automedicação no Brasil: Revisão Sistemática/ The impact of the practice of self-medication in Brazil: Systematic Review. BASR [Internet]. 2021 Jun. 14 [cited 2025 Dec. 8];5(3):1505-18. Doi: <https://doi.org/10.34115/basrv5n3-016>
22. Rojas SMM, Roa SLR, Pérez DGS, Castellanos MNJ. Panorama de la automedicación en estudiantes de educación superior: una mirada global. Rev Cienc Cuidad. 2022;19(2):99-111. Doi: <https://doi.org/10.22463/17949831.3312>
23. Freitas BF de, Moreira YC. Intervenções Farmacêuticas e Estratégias Educacionais na Redução da Automedicação em Pediatria: uma Revisão de Literatura. COGNITIONIS [Internet]. 27 nov 2024 [citado 2025 Dez 08];7(2):e571. Doi: <https://doi.org/10.38087/2595.8801.571>

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