

## SELF-MEDICATION PRACTICES AMONG UNIVERSITY STUDENTS AND THE IMPACT OF THE COVID-19 PANDEMIC: A CROSS-SECTIONAL STUDY

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### Introduction

Self-medication, highly widespread in Brazil, if not well oriented, can bring health risks, such as the development of adverse drug reactions (ADRs), drug interactions, aggravation of diseases and intoxications<sup>1,2</sup>. Moreover, during 2019 coronavirus disease pandemic (COVID-19), surrounded by fear and the flood of false news about the effectiveness of using drugs without scientific evidence for the treatment and/or prevention of this disease, this habit has even become most notorious and common<sup>3-5</sup>. In this context, the purpose of this study was to evaluate the profile of self-medication, and the impact of the COVID-19 pandemic on this practice, among students of undergraduate courses in pharmacy and engineering at a public university of Brazil.

### Material and Methods

A cross-sectional study was conducted from August to September 2020 among graduate pharmacy and engineering students in a public university in the state of Rio de Janeiro, Brazil. Data on self-medication practice and its associated factors was collected using an electronic self-administered questionnaire. Data analysis was done using Excel and explained with descriptive statistics. In this study, the data was used provided that the confidentiality of all participants is preserved. The study was approved by the Scientific Researches Ethics Committee of Salgado Oliveira University (Decision date: July 8<sup>th</sup>, 2020; Decision number: 4.143.946).

### Results and Discussion

Data were collected from 133 university students (87 enrolled in the pharmacy course and 46 in engineering courses). The data obtained showed that, in general, students maintained the habit of self-medication, without significant distinction between courses, as it was before they started their undergraduate course, with the prevalence of the use of analgesics (39%). Most generally reported seeking information about it before using a medication, the package inserts being the main source, but research on the internet and with friends and/or family members was more frequent among students of exact grades. Most students justified self-medication because they had previously been treated with the medication (77%), and even with the low incidence of ADR reports, drowsiness was the main related adverse effect (61%). It was also observed the habit of self-medication in the pandemic, with reports of medication use not yet scientifically proven, but listed as early treatment of COVID-19 (15% among engineering students and 2% of pharmacy students), being the main one of these, ivermectin, present in 8 out of 9 cases, including a reported adverse effect.

### Conclusion

Although adherence to self-medication was low during the beginning of the COVID-19 pandemic by the students participating in this study, most of them performed this practice in 2020, a habit that can lead to the indiscriminate use of different types of drugs. These results are suggestions of the need to apply preventive and educational measures to the academic community and the population

in general in order to raise awareness about the risks caused by self-medication and the importance of pharmaceutical care in promoting the rational use of medicines.

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