Introduction: Self-medication is a procedure fundamentally characterized by the sick person, or person responsible for his/her care, taking the initiative to obtain or produce and use a product they believe will bring benefits in the treatment of diseases or relief of symptoms. Dentists, together with doctors and veterinarians, comprise the professional classes that may and must prescribe medications for their patients. Therefore, it is believed that these individuals, as a result of their duties, are professionals that know, understand and make an ex-haustive study of medications. Objective and Methodology: Based on this, a research was conducted among the academic students of the dentistry course at Paulista University, Flamboyant campus – Goiânia, GO, Brazil, during which 209 questionnaires were applied among students from the 3rd to 8th periods. Results: The purpose of applying these questionnaires was to trace a profile with regard to the use of medications without medical prescription, and high incidence was found among academic students, both as regards the quantity of medications and variety of substances used. Conclusions: The result was an alert that irrespective of the individual's knowledge, whether it involved a layperson or professional qualified for prescription, this habit repeated it. This is an alarming fact, because if the professional him/herself, who should educate patients and dissuade them from this practice, is a habitual user, it becomes more difficult to aspire to the future inhibition and reduction of this practice that is so harmful to health.

Key words: Academic students. Self-medication. Use of medicines.

Introduction

Medications are an essential asset to health and an important therapeutic tool in the hands of doctors, dentists and other health professionals. Nevertheless, their irrational use, the consequences of this use and the practice of self-medication are one of the main causes of adverse reactions to medications.1-4.

In Brazil, as in other countries, self-medication is a widespread practice, and the majority of medications consumed by the population are sold without medical prescriptions.3-6. This concept of self-medication is valid only for medications exempt from prescriptions, also referred to as "over the counter medications" or “anodyne medications”. Thus, one observes that although there is an intrinsic natural risk when ingesting any medication, it is publicly recognized that to some extent, there is tacit official assent to the use of some drugs, recognized as having low toxicity, by the population.6-8.

There is growing concern about the consumption of medications, since the majority of these cause side effects that frequently are more serious than the original disease itself.5,8. In addition, the momentary relief of symptoms may mask the underlying disease and could aggravate it.2,8. Therefore, various medications that should be used only on medical prescription are indiscriminately sold.
by the drugstore, due to the fact that in Brazil, the pharmacy is not recognized as a health unit, but as a retail outlet for the sale of medications and correlated products\textsuperscript{6-8}.

There is a trend towards the prevalence of self-medication among persons with a higher educational level, taking into consideration that knowledge may make this practice safer\textsuperscript{6-9}. When this practice was analyzed among undergraduate students in the health area, who do a course in pharmacology during the period of their academic education, a high consumption of medications without a doctor’s prescription was observed\textsuperscript{6,10-14}. The reason for calling university students in the health area to task on this subject is mainly due to the responsibility they, as academic students and future professionals, should have with regard to adequate conduct in the face of certain situations, in addition to the need to serve as a model for their clients\textsuperscript{12,14-16}.

Starting from the presupposition that no pharmacologically active substance is innocuous to the body, self-medication could be prejudicial to individual and collective health\textsuperscript{7,14,15}. At least 35\% of medications are consumed by self-medication in Brazil, thus, for every two duly prescribed medications; at least one is consumed on the basis of the person’s or third party’s own experience, or by indication of the drugstore salesperson, advertising or advice of some other non-qualified professionals\textsuperscript{7,8}.

Dentists are responsible for prescribing medications, the majority of which are for systemic use, such as analgesics, nonsteroidal anti-inflammatory and antimicrobial drugs\textsuperscript{9-11}. As is the case with other health professionals, prescribing medications involves ethical and legal aspects that must be given due attention, as those responsible for doing so are subject to legislation for their control and the actions of sanitary vigilance\textsuperscript{11,12}. Nevertheless, a considerable number of dentists make use of prescriptions in the verbal instead of the written form\textsuperscript{8,10-12}.

Based on descriptions in the literature, considering that self-medication is a serious health problem in Brazil, and health science students and professionals, especially Dentists, contrary to what one would expect, are great collaborators with this practice, the proposal was to evaluate the practice of self-medication among academic students of dentistry at the Paulista University – UNIP, Campus Flamboyant, Goiânia-GO, Brazil, by means of questionnaires posing objective questions.

**Materials and methods**

A descriptive-analytical study was conducted, using a questionnaire containing objective questions as a data collection instrument, which was applied to academic students of the 3rd to 8th periods at the School of Dentistry of the Paulista University (FO - UNIP).

The criteria for inclusion in the study were: To be students duly enrolled in the above-mentioned periods and to have signed the Term of Free and Informed Consent. The study was submitted to the Ethics Committee of IES for approval and received a favorable report.

**Results and discussion**

A total of 209 questionnaires were randomly applied among the undergraduate dentistry students from the 3rd to 8th periods, in order to have a sample without preferences. Of the 209 undergraduates researched 6\% were between 30 and 40 years of age, 42\% were between 20 and 30 years of age and 52\% were under the age of 20 years. Of this total, 131 (62.68\%) students were women and 78 (37.32\%) were men.

As regards the distribution of students per corresponding period, it was observed that 43.06\% of the students were from the 3rd period, 30.14\% from the 5th period, 13.87\% of them were in the 6th period, 8.13\% in the 7th and 4.78\% in the 8th period. When analyzing the medications most used by the studied population group, analgesics accounted for 79.9\% of items mentioned, followed by anti-inflammatory drugs (23.92\%), antibiotics (22.49\%), antidepressive agents (3.34\%) and amphetamines (0.48\%).

In the present study 59.33\% of the interviewees reported having the medications in the house, while 34.92\% affirmed that they bought them whenever they needed them because they knew that this medication resolved their problem; only 5.26\% sought a consultation at a health unit to obtain a prescription to the medication. These results corroborated the affirmation that people always use the medications they “trust” whenever they presented the symptoms they had experienced in previous illnesses\textsuperscript{6,8,10-17}. This is frequently justified by a universal tacit agreement that these medications, such as analgesics and antipyretics, in the majority of instances are not very toxic and do not represent a great risk to health\textsuperscript{1-4}. Therefore, these medications are always kept in the house within people’s reach.

The improper use of medication or their use without professional guidance may cause many harmful effects, such as masking the true symptom or cause of the symptom, making it difficult to diagnose and even aggravating the underlying disease. Quite often people take more than one medication, not paying attention to the fact that there could be a medicamentous interaction that may be harmful to health. Generally the use of these medications is an immediate solution, which is practically summed up as taking away the pain\textsuperscript{2-5}. The majority of students interviewed think that self-medication may bring about some harm to health (79.42\%), where-
as only 20.58% of them did not think this practice does any harm to health. As the sampling field in this study comprised dentistry students, who have a pharmacology course in their curricular grid, it was expected that the majority of them would reply that self-medication would bring about some harm to health. However the lay population does not believe that this practice would lead to any harm to their health.\textsuperscript{2,6,15,16}

On the other hand, the indiscriminate use of medications without prescription could lead to the individual becoming chemically, physically and/or psychologically dependent on the substance. It could be observed that although the large majority of students made use of medications without prescriptions, only 11% considered themselves dependent on this self-medication, while 88.51% did not consider themselves dependent on it. It should be ratified that the same students revealed that among the drugs they most consumed without a doctor’s prescription, antidepressives and amphetamines were outstanding, which are known to have the potential to cause tolerance and chemical dependence.

An interesting datum is that the majority of the interviewees (88.51%) expect the dentistry course will provide them with adequate knowledge to know which remedy they should use. This result is in agreement with the findings of literature in which they affirmed that because undergraduates had the pharmacology course in their curricular grid, this greater degree of knowledge leads them to have more confidence to use medication without a doctor’s prescription.\textsuperscript{7,12,14-16}

In contradiction to this, a balance was observed when the question was whether the course provided the student with satisfactory knowledge about self-medication. Those who considered the knowledge acquired to be satisfactory and evaluated themselves as being capable of administering self-medication without there being any discomfort or harm to their health amounted to 45.45%; those who did not believe they were capable of proceeding with self-medication in an adequate manner, in spite of all the knowledge acquired during the course numbered 14.83%; lastly, 39.79% of the undergraduates believed that they did not yet have sufficient knowledge for administering self-medication.

Another serious problem mentioned in the literature was the practice of “suggestions and advice” given by drugstore salespersons during the sale of medications. It is not uncommon for these employees to offer medications with similar effects for financial reasons or for lack of the medication sought. It was observed that 70% (146 students) among those participating in the research had received unsolicited advice in the drugstore, whereas 30% (63 students) did not mention having received advice in the drugstore.

Both the spoken and written means of communication have an immense power of convincing people, and the pharmaceutical industry taking advantage of this, invests in advertisements in these media to divulge their products, and consequently encourage their use. The fact that possible consumers’ lack of knowledge about the products and their adverse effects is frequently exploited by these means of communication being stimulus for self-medication.\textsuperscript{13-14,16,17} In the researched sample it was observed that 62.20% of the students affirmed that the means of communication had no influence on their purchase of medications, whereas 37.80% of the students said that the advertisements did influence them to buy medications. It is interesting to note that as future opinion formers, the percentage of interviewees who said they were influenced by the means of communication was significant.

**Conclusion**

In the present research the rate of self-medication among persons with a higher degree of education, particularly among the undergraduate students in the health area was observed to be high, and this fully agrees with statements by various authors that this was due to the fact that the students have confidence in the knowledge they acquired in the pharmacology course during graduation. The result was an alert that irrespective of the individual’s knowledge, whether a lay person or professional qualified for prescription was involved, this habit repeated itself. This is an alarming fact, because if the professional him/herself, who should educate patients and dissuade them from this practice, is a habitual user, it makes it more difficult to aspire to the future inhibition and reduction in this practice that is so harmful to health.

**Resumo**

Introdução: A automedicação é um procedimento caracterizado fundamentalmente pela iniciativa do doente, ou de seu responsável, em obter ou produzir e utilizar um produto que acredita que lhe trará benefícios no tratamento de doenças ou alívio de sintomas. Os cirurgiões-dentistas, juntamente com os médicos e médicos-veterinários, compõem as classes profissionais que podem e devem prescrever mediaciones aos seus pacientes. Desse modo, acredita-se que esses indivíduos, em decorrência de seus deveres, são profissionais que conhecem, entendem e estudam de forma exaustiva as mediaciones. Objetivo e metodologia: Com base nisso, foi realizada uma pesquisa entre os acadêmicos do curso de Odontologia da Universidade Paulista – Goiânia, GO, campus Flamboyant, onde foram aplicados 209 questionários entre alunos do terceiro ao oitavo períodos. Resultados: Esses foram aplicados com o intuito de se traçar um perfil quanto ao uso de medicamentos sem receita médica e pôde-se constatar que a
incidência entre os acadêmicos é muito grande, tanto na quantidade de medicações quanto na variedade de substâncias utilizadas. Conclusões: O resultado nos alerta que, independentemente do conhecimento do indivíduo, leigo ou profissional capacitado para prescrição, esse hábito se repete. Tal fato alarmante, pois, se o próprio profissional que deveria educar e coibir essa prática é um habitual utilizador, torna-se mais difícil almejarmos para o futuro a inibição e a diminuição desta prática tão maléfica à saúde.


References


Corresponding adress:
Claudio Maranhão Pereira
Faculdade de Odontologia da Universidade Paulista, campus Brasília
Coordenação de Odontologia
SGAS Quadra 913, s/nº - Conjunto B - Asa Sul
70390-130 Brasília-DF/Brazil
Fone: (61) 2192 7080
E-mails: claudiomaranhao@hotmail.com e odontologibrasilia@unip.br