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Consequences and what the Risks of Automedication

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Keywords— Overdose, Pharmacists, Drugs, Intoxication.

Abstract— Self-medication is seen as the use of pharmaceuticals without medical advice, where patients use drugs in an irregular manner, not taking into account doses or time of correct treatment. Brazil occupies the fifth place in drug consumption in Latin America, with high rates of hospitalization and death due to overdose and intoxication. Thus, the objective of the research is to highlight the consequences and main health risks arising from the self-medication of drugs, highlighting the possibility of using drugs of lower impact from the orientation of pharmacists. Authors report that among the major problems to reduce self-medication in Brazil are the governmental problems, such as the lack of resources for the Unified Health System (SUS), and insufficient number of within doctors health units. These factors make people who go through periods of pain, seek drugs in an inappropriate way, without worrying about possible health risks. The problem of self-medication reaches even children and the elderly, who are endangered by the use of pharmaceutical drugs often incompatible with their body. An alternative to the problem is the performance of the pharmaceutical professional who can guide the correct use of the drugs, reducing risks by self-medication. However, the need to implement strategies to raise awareness among the population shows the risks to health through self-medication.

I. INTRODUCTION

Self-medication can be defined as the use of products without medical recommendation or supervision, being characterized by the patient's own initiative in consuming pharmaceutical drugs, aiming to treat or alleviate symptoms or diseases in the promotion of health (NAVES et al., 2010; VITOR et al., 2008).

Self-medication practices include purchasing medicines without a prescription, sharing medicines with other members of the family or social circle, reusing leftover medicines from previous treatments, using old prescriptions and prolonging a treatment indicated by the doctor (CARVALHO et al. al., 2008).

The use of indiscriminate use of medicines is

considered worrying by authorities in several countries. According to the World Health Organization (WHO), the percentage of hospital admissions resulting from adverse reactions to pharmaceutical drugs exceeds 10%, as 50% of medications are incorrectly prescribed, dispensed and sold, with half of patients using them incorrectly. In Brazil, the Ministry of Health's Medicines Policy alerts the population to the risks of self-medication and seeks to raise awareness about the correct way to use these products, as the country is one of the main consumers of medicines (CASTRO et al., 2013; DOMINGUES et al., 2015).

In Brazil, the medicine market reaches 22.1 billion dollars annually, and their availability increases the possibility of irrational use, promoting health risks instead of adequate treatments. The country still ranks fifth in the

world consumption of over-the-counter drugs, being the first in Latin America (SOUZA et al., 2011).

According to Vitor et al. (2008) in some countries with a poorly structured healthcare system, going to the pharmacy represents the first option to solve a health problem. Most medicines are sold without a prescription and are easily available in pharmacies, drugstores and even supermarkets.

Among the most common symptoms resulting from self-medication are respiratory infections, headache and poor digestion. However, studies carried out show that people who use medications indiscriminately have not stopped self-medicating due to the convenience, speed of action, high tolerability over time, safety and effectiveness of the drugs (NASCIMENTO, 2003).

However, some authors report that self-medication can be carried out in a responsible and beneficial way when selected as a therapeutic alternative with the help and guidance of a pharmacist. Therefore, it may be suitable for the patient when at the appropriate dose, concentration and treatment time (CASCAES et al., 2008).

Therefore, the objective of the study is to highlight the consequences and main health risks arising from selfmedication of drugs, highlighting the possibility of using lower-impact medications through the guidance of pharmacists in health promotion.

II. MATERIAL AND METHODS

To develop the study, a bibliographical survey was adopted in electronic databases, scientific books and Brazilian legislation. The databases used were: Scientific Electronic Library On-line (Scielo), Medical Literature Analysis and Retrieval System Online (MEDLINE) and journals from the Coordination for the Improvement of Higher Education Personnel (CAPES).

In order to expand the results, words in Portuguese and English were used, namely: self medication, consequence and health risk, drug utilization, pharmaceuticals and medical prescription.

To this end, the study separated main research in order to report health risks arising from the incorrect use of pharmaceutical drugs, reporting cases with children, adolescents, adults and the elderly. Research also refutes the possibility of pharmacists acting to reduce patients' self-medication with their help.

III. DISCUSSION AND RESULTS

According to the Medicines Statute published in Decree-Law no 176/2006, medicine is understood as:

Any substance or association of substances presented as having curative or preventive properties for diseases in humans or their symptoms or that can be used or administered to humans with a view to establishing a medical diagnosis or, exerting a pharmacological, immunological or metabolic action, to restore, correct or modify physiological functions (BRASIL, 2006).

The medicine must therefore promote safety and effectiveness for the treatment of different ailments. However, in modern society, with the countless advances in science and the increase in the number of drugs, the objective of relieving pain has become a means of producing false well-being, even leading to high levels of dependence (BARROS, 1995; AQUINO et al., 2010).

In these aspects, self-medication arises, identified as the use of industrialized products without a medical prescription with the aim of treating self-recognized symptoms or health problems (SOUZA et al., 2011).

There are different reasons that lead people to self-medicate, the main one being pain. Individuals who experience a painful experience seek relief through medical advice, complementary therapies and even self-medication with drugs. A study carried out in Spain shows that of 1,964 people, of different ages and of both sexes, faced with a feeling of pain, 27.6% self-medicate, without thinking about seeking medical attention (BASSOLS et al., 2002).

In Brazil, Campos et al. (1985) reports that the lack of resources allocated to the Unified Health System (SUS), as well as the insufficient number of doctors in the units, leads people to self-medicate, considering that when they are in pain, they cannot simply ignore the fact.

Among the population that self-medicates, there are not only adults. Children, adolescents and the elderly are widely affected by the incorrect use of drugs, and these, in most cases, are not used independently, but are medicated by family members.

Regarding children's self-medication, research carried out by Beckhauser et al. (2010) when interviewing those responsible for children aged between 0 and 14 years, 77.5% responded that at some point they had already self-medicated their children, of which 63.9% reused old prescriptions or medicines they already had at home.

In other research related to children, Pereira et al. (2007) demonstrate that 56.6% of guardians have already medicated students with drugs, 51% of which were administered by mothers. Among the medications mentioned by those interviewed in the study, the authors report analgesics/antipyretics and non-hormonal anti-

inflammatory drugs (52.9%); medications that act on the respiratory tract (15.4%); gastrointestinal (9.6%) and; systemic antibiotics (8.6%).

Among the harmful effects arising from self-medication on children's health are the induction of bacterial resistance, masking of diseases and drug intoxication (GOULART et al., 2012). Implementing educational strategies, with the aim of raising awareness among parents and/or guardians about the possible risks to children's health, is extremely necessary, as incorrect use of these causes the loss of medicinal therapeutic activity, as well as jeopardizing the safety of themselves in danger (TELLES FILHO and PEREIRA JUNIOR, 2013).

In adult self-medication, the main cause is related to types of pain. Lopes (2001) reports that 23.3% of those interviewed in his research use medication for headaches; flu, cold and cough account for 24.6%; infections and inflammations 10%; 4.3% due to digestive or intestinal problems and; 3.2% with people who have insomnia, feel anxiety or tiredness.

Also according to the Institute of Research and Postgraduate Studies for the Pharmaceutical Market (ICTQ), the self-medication rate in Brazil was 76.4% in 2017, with only 23.6% consuming medication only with a medical prescription., dentist or pharmacists. For ICTQ, the most consumed medications in adult self-medication are analgesics, anti-inflammatories, antiallergics, antibiotics and anxiolytics (ICTQ, 2016) (Figure 1).

Analgesics, which are the drugs most used in self-medication, are also prominent among the elderly, being most used to treat pain and inflammation, symptoms that are quite common at this stage. Adverse reactions arising from self-medication in the elderly are three times higher than in young people, with an annual incidence of 26 per thousand hospitalized patient beds (OLIVEIRA et al., 2012).

Cascaes et al. (2008) explain that interviewing 77 elderly people, 80.5% of them self-medicated, especially with over-the-counter medicines, such as painkillers and medicinal plants. They also state that the majority were medicated by friends, neighbors and family. For Sá et al. (2007) the most common reasons given in relation to symptoms are pain, fever, diarrhea, high blood pressure and cough, and in the study, 77.2% of elderly respondents use over-the-counter medications when they have a clinical complaint.

The disadvantages for the elderly, in addition to the risk in seeking treatments, are unnecessary expenses, delayed diagnoses that are masked by adverse symptoms, and inefficient and inadequate therapy, which can lead to

serious bacterial resistance and intoxication (OLIVEIRA et al., 2012).

For the Brazilian Association of Pharmaceutical Industries (ABIFARMA), around 80 million people self-medicate. For ABIFARMA, the main causes are the poor quality of the supply of medicines, non-compliance with the mandatory presentation of medical prescriptions, as well as the lack of information and education among the general population about the risks of self-medication (ARRAIS et al., 1997).

One of the alternatives raised is the possibility of pharmaceutical professionals acting to reduce self-medication. The population in general has easy access to pharmacists, who are qualified to act as health agents, with a function not only of dispensing, but also being able to use their extensive knowledge in favor of the patient (VIDOTTI and HOEFLER, 2006). Therefore, qualified pharmaceutical assistance is necessary, ensuring easy access for the population to quality and safe medicines.

Self-medication guided by pharmacists is seen as an irreversible reality, being an integral part of healthcare systems. The action of pharmacists brings greater autonomy on the part of the population in promoting health and collaborates with governments to the extent that unsustainable numbers of medical consultations are avoided (CIM, 2007).

To achieve this, it is necessary that pharmacists are qualified and can provide instructions efficiently, avoiding health risks caused by medication poisoning. The name of the drug, the duration of treatment and its dose must be respected by patients to avoid complications, such as overdoses. Hudson et al. (2008) highlights that among the pharmacist's activities is the ability to provide assistance, aiming to make patients aware of the correct use of medicines when possible or to encourage the search for doctors when the individual reports more extreme pain or for long periods.

In this way, the practice of self-medication can be reduced in Brazil, however, there is a need for greater awareness among people regarding health and the risks arising from inadequate treatments, periods and doses. Without knowledge of the actions of drugs on the body, patients can suffer from overdose or intoxication, putting their lives at risk.

IV. FINAL CONSIDERATIONS

Among the most common practices for purchasing medicines is purchasing drugs without a medical prescription. In Brazil, the act of self-medication can be considered a public health problem, since children,

adolescents, adults and the elderly are affected by this type of action.

Several studies demonstrate the risks of selfmedication, mainly in overdose and intoxication with inappropriate drugs, use of high doses and long periods of treatment.

Among the factors that lead people to self-medicate are the lack of resources allocated to the Unified Health System (SUS), and an insufficient number of doctors within health units. People who go through periods of pain, resort to the use of pharmaceutical drugs, often guided by family, neighbors or people in their social circle, without medical prescriptions, reuse leftover drugs from previous treatments, use old prescriptions and prolong treatments in a erroneous.

Studies state that the pharmaceutical drugs most consumed in self-medication in Brazil are analgesics, antiinflammatories, antiallergics, antibiotics and anxiolytics, which, when used without a medical prescription, can often lead to patient hospitalization and even death.

One of the alternatives highlighted to reduce the problem of self-medication is the role of the pharmaceutical professional, who among his functions can help patients to use drugs correctly, reducing risks caused by self-medication. It is also important to highlight the need to implement strategies to raise awareness among the population, showing the health risks of self-medication, which can serve to alert people, encouraging the search for medical help or, in certain cases, the assistance of pharmacists.

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