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**INDISCRIMINATE
USE OF APPETITE
INHIBITORS: AN
INTEGRATIVE REVIEW**

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Abstract: Obesity is seen as a major public health problem, accounting for an increase in the morbidity and mortality rate, an element that has encouraged the pharmaceutical industry to develop drugs aimed at combating this pathology. So, the problem was: What are the risks of the indiscriminate use of appetite suppressants for the health of the individual? The general objective was to analyze the indiscriminate use of appetite suppressants. The methodology that contributed to the construction of this work consisted of a bibliographic research carried out through monographic research, articles, journals and books related to the topic, published between the years 2017 to 2021. It is observed that the use of anti-obesity drugs, without guidance professional, may have the following sequelae: tachycardia, palpitations, delusions, poor quality of life, and in more severe cases, death of the individual. This way, it is essential to have greater rigor in the sale of these products, with the provision of adequate guidance, and it is the responsibility of the pharmacist to offer consistent pharmaceutical care to users, in order to promote the correct use, in addition to disseminating information about the effects. side effects and health hazards.

Keywords: Obesity; Irrational Use; Pharmaceutical Care; Appetite Inhibitors.

INTRODUCTION

Obesity is a chronic disease of a non-communicable nature, with a multifactorial etiology, caused, in general, by excess caloric intake and reduced energy expenditure, or by environmental, genetic, metabolic and/or behavioral factors. It is a serious public health problem that affects Brazil, leading it to occupy the fifth place in the world ranking of people with a Body Mass Index (BMI) above 40 (MARQUES, 2015).

Weight reduction, whether for health reasons or the search for the ideal body,

influenced by the media and beauty standards, can be achieved through medical follow-up, non-drug treatments such as diets, food reeducation, physical exercises and changes in style. of the patient's life, as well as, it can be fought with pharmacological treatments and surgeries, in more severe cases (ANDRADE et al., 2019).

Among the therapeutic treatment, anorectic drugs are the most recurrent resources to suppress appetite, however, they are not recommended as a primary weight loss therapy, as their use, especially indiscriminate use, may cause side effects, in addition to health and health hazards. dependence (MOREIRA; ALVES, 2015).

However, the role of social media is currently a factor to be viewed with caution, due to the diversity of data imposed by it, related to health or not, are included as a work and sales tool, as well as the propagation of Fake-News (fake news), which is of concern to health professionals, as they propagate the idea of "fast weight loss", which is the desire of many people (MAGALHÃES; DINELLY; OLIVEIRA, 2016).

The pharmacist plays an essential role in controlling the irrational use of appetite suppressant drugs, since he must promote adequate guidance during the drug dispensing process, in which it must be carried out in a harmonious and responsible way (OLIVEIRA et al., 2014).

Thus, the following question was asked: What are the risks of the indiscriminate use of appetite suppressants for the health of the individual? In the present study, the objective was to analyze the indiscriminate use of appetite suppressants.

METHODOLOGY

This is an integrative literature review based on Lakatos and Marconi (2015), carried out between March and November 2021,

structured in six steps: 1) identification of the topic and elaboration of the research question; 2) establishment of inclusion and exclusion criteria; 3) categorization of selected studies; 4) evaluation of the studies included in the review and the results; 5) interpretation of results; 6) synthesized presentation of knowledge.

A search was carried out on articles published in national journals, available in the following databases: Latin American and Caribbean Literature on Health Sciences (LILACS), Medical Literature Analysis and Retrieval System Online/ Virtual Health Library (MEDLINE/ VHL) and Scientific Electronic Library Online (SciELO). For

this purpose, some Descriptors (DeCS) were used, namely: Obesity. Appetite Inhibitors. Pharmaceutical. Irrational Use.

Thus, 10 publications were found in the period from 2017 to 2021, as shown in Table 1.

RESULT AND DISCUSSION

At this stage of the construction of this study, a systematic reading of all selected articles was performed, shown in Table 2.

MOST USED APPETITE INHIBITORS.

Accordingly, Cunha et al., (2021) highlight in their work that sibutramine is among the most sold anorectics, being recognized as a

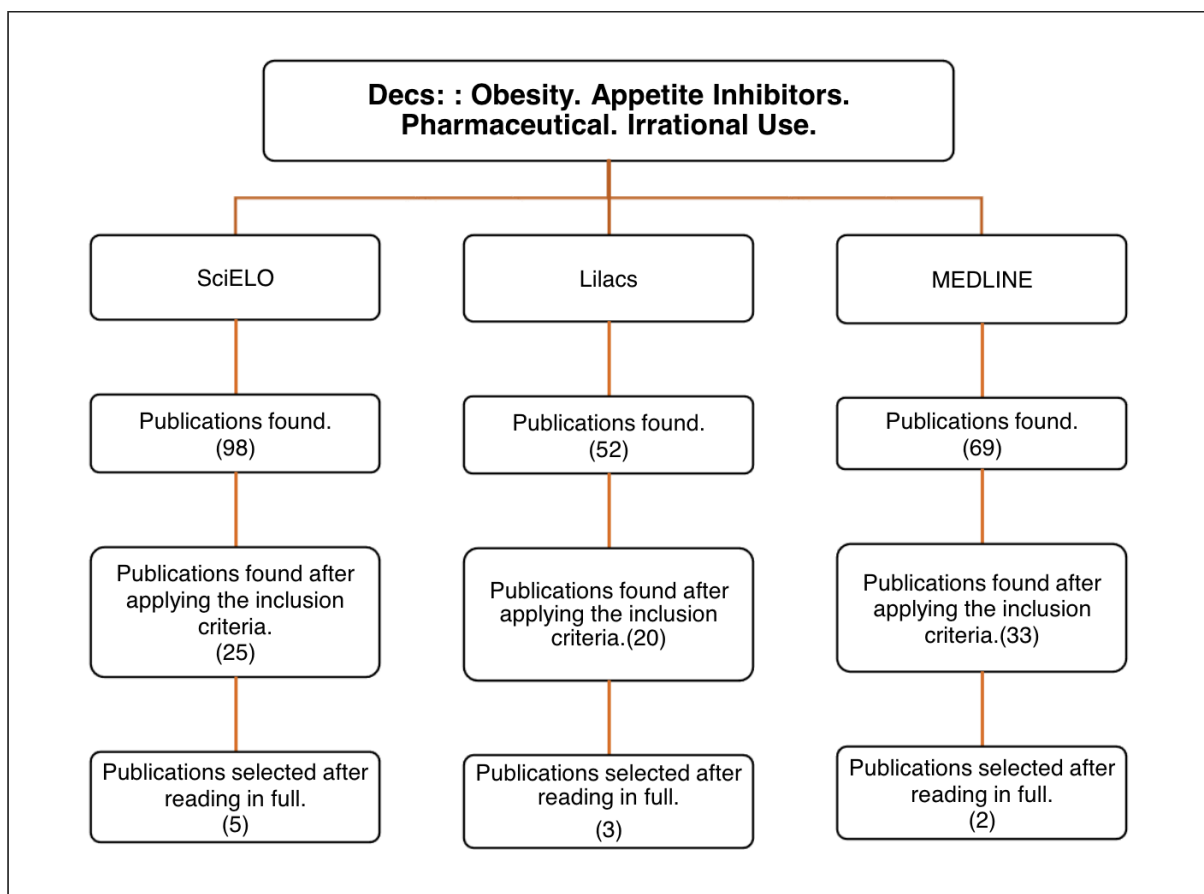


Table 1- Sample selection.

Source: Authors, 2022.

AUTHOR AND YEAR	TITLE	OBJECTIVE	TYPE OF STUDY	RESULTS
COSTA et al. (2020)	Evaluation of medication consumption for the treatment of obesity: a study carried out in pharmacies in the city of Teresina-Piauí	Identify which drugs for the treatment of obesity are most consumed in the city of Teresina-PI.	Descriptive, quantitative, qualitative and cross-sectional study	It was observed that the most commercialized drug for the treatment of obesity is Sibutramine, followed by Orlistat, Fluoxetine, Duloxetine and Topiramate. greater attendance was for female users, between 20 and 29 years old. It was observed in the study that part of the users do not always make the correct use of these drugs.
CUNHA et al., (2021)	Risks and side effects of the use of anorectics in women in the state of São Paulo	Assess and understand the main risks and side effects of the use of anorectics in women in the state of São Paulo	Qualitative study; described-reflective	The most sought drug was sibutramine with 41.94%. Low adherence to the association of pharmacological treatment with physical activities and dietary changes was also observed. The most common adverse effects are nausea, headache, diarrhea, mood swings and dry mouth.
DUARTE et al., (2020)	Use of amfepramone, fenproporex, mazindol and sibutramine in treatment of overweight or obese patients: analysis pharmacological and clinical	Identify the main impacts on the cardiovascular system of the use of appetite suppressants.	Study quantitative, descriptive, retrospective	It was observed that these drugs must be used with caution. Among the effects, there are: cardiovascular problems, central nervous system disorders, dizziness, diarrhea, dependence, morbidity and mortality.
GOMES; TREVISAN (2021)	The use of ozempic (semaglutide) as an off-label drug in the treatment of obesity and as an aid in weight loss	Explore the use of Semaglutide in the treatment for weight loss, analyze the drug of peripheral action in the control of weight loss, highlight the low rate of side effects of GLP1 analogues in the treatment of obesity and present the importance of the pharmacist in caring for the patient who uses these drugs	Qualitative study; described-reflective	Ozempic, developed for type 2 diabetes mellitus, is now used off-label to treat obesity, with greater appetite reduction, and weight loss and maintenance.
MARQUES; QUINTILIO (2021)	Pharmacology of obesity and risks of weight loss drugs.	Highlight the importance of pharmacology in obesity and the risks that the indiscriminate use of drugs to lose weight represent, at the expense of health and quality of life of the user.	Qualitative study; described-reflective	Pharmacology for the treatment of obesity brings great health risks, and can cause morbidity and mortality when not prescribed and monitored by qualified professionals.

MARTINS; MOURA; BRITTO (2020)	Evaluation of the consumption of slimming drugs dispensed in a drugstore	Investigate the outputs of the main weight loss dispensers, addressing the risks that this medication can cause	Study quantitative, descriptive, retrospective	The drug sibutramine as the only psychotropic anorectic dispensed with greater sales control. Therefore, the role of the pharmacist in dispensing these drugs is essential, alerting the risks that this class can cause to the health of the consumer.
OLIVEIRA; FATTORI (2020)	Risks of the indiscriminate use of anorectics for the treatment of overweight	Identify the risks of irregular consumption of anorectics for the treatment of obesity, reports the rampant consumption of drugs to lose weight	Study quantitative, descriptive, retrospective	The increase in the consumption of such drugs shows the growth of obesity cases in Brazil, which is a worrying disease and a risk factor for patients, in addition to favoring the development of comorbidities that require special care and specialized monitoring, as they are associated with obesity, can become an aggravating factor for health and life.
PORTO; PADILHA; SANTOS (2021)	Risks caused by the indiscriminate use of weight loss drugs	Describe the risks and adverse effects caused by the indiscriminate use of slimming drugs used to treat overweight/obesity	Qualitative study; described-reflective	There are cases in which drug treatment is necessary, and this being well oriented, prescribed and supervised, the benefits will be greater than the losses caused by the adverse effects. However, in reality, this well-guided and prescribed treatment is a utopia most of the time, so these adverse effects take greater proportions outweighing the benefits.
SEBOLD; LINARTEVICH (2021)	The risks of indiscriminate use of Femproporex as an appetite suppressant: a review.	To highlight the main risks of the excessive use of this drug, as well as the possible role of the pharmacy professional from the perspective of pharmaceutical care	Qualitative study; described-reflective	The public that most uses this drug are women and the most reported side effects are headaches, nausea, insomnia, tremors, among others. This way, it can be seen that the pharmacist is an extremely important professional, contributing to the dissemination of information and awareness of society, seeking to reduce indiscriminate use and consequently the damage arising from unrestricted use.
SILVA; ROSA; MORAIS (2021)	Dangers of consuming sibutramine as an appetite suppressant	To analyze the dangers of sibutramine in weight loss and the effects that occur in the body.	Qualitative study; described-reflective	Incorrect use causes many serious adverse effects. Therefore, before self-medicating, the patient must consult a doctor to start weight loss treatment.

Table 2– Data collection instrument covering the following aspects: database, title, author, type of study and research results.

Source: Authors, 2022.

side effect of this class of drugs, if consumed indiscriminately, high sweating, nausea, dry mouth, insomnia, anxiety, malaise, constipation, headache, changes in blood pressure, among others.

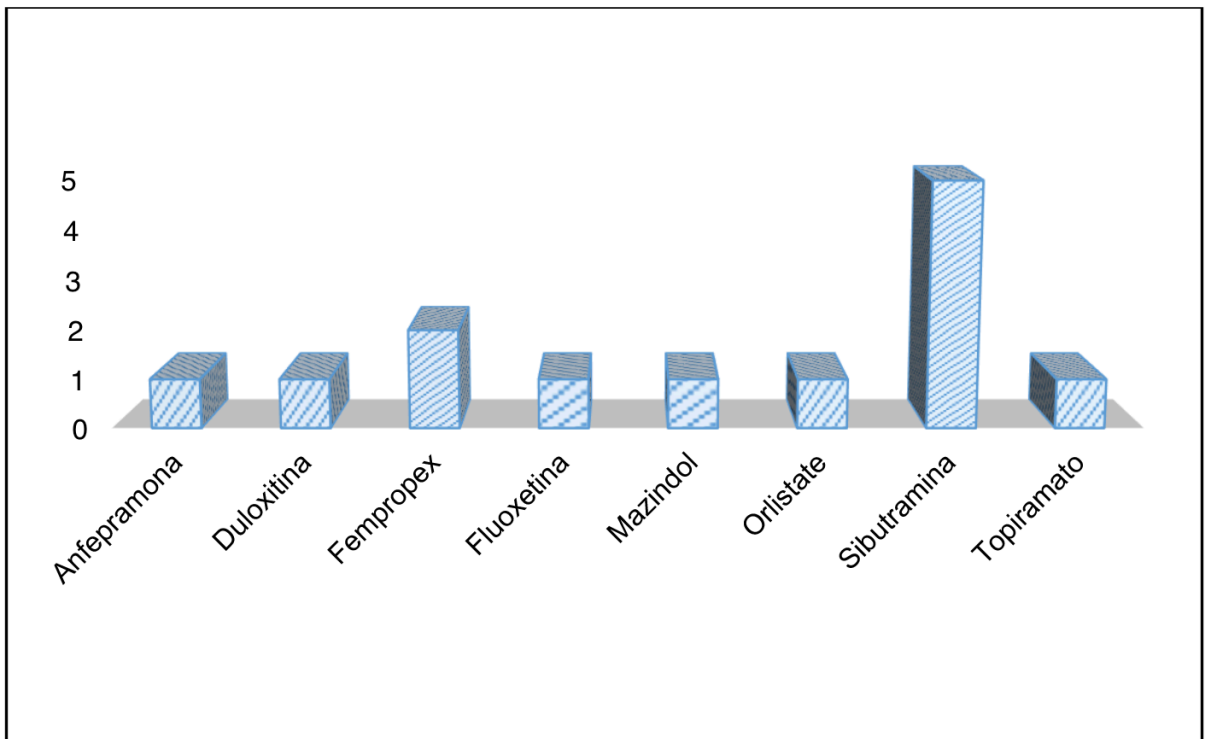
Duarte et al., (2020) argue that, due to the increase in the number of individuals affected with overweight and obesity, and which aims to achieve rapid weight loss is stimulated by health issues and/or aesthetic purposes, it affects uncontrolled consumption. and irrational of appetite suppressants, the most common being amfepramone, fenproporex, mazindol, satietogen and sibutramine.

It was observed that in Brazil, among the drugs with the function of inhibiting appetite, the most cited in the literature during the study period were sibutramine, followed by the drug called fenproporex, among others, as illustrated in Graph 1.

It is worth inferring that, in the studies by Porto, Padilha and Santos (2021), the drug sibutramine assumes a prominent position due to the following factors: advertising, affordable price, easy access, rapid weight loss, greater control of binge eating, among others (COSTA et al. al. 2020).

RISKS RELATED TO APPETITE INHIBITOR DRUGS

Marques and Quintilio (2021) complement, highlighting that such drugs have an extremely delicate activity in the body, having their direct action on the central nervous system, acting on the sensation of hunger, which is coordinated by the hypothalamus, however, acting on this mechanism may trigger effects. dangerous side effects, such as: palpitations, insomnia, increased blood pressure, chemical



Graphic 1– Appetite inhibitors most evident in Brazil.

Source: Authors, 2022.

dependence, which without adequate professional guidance may induce in the individual some practices that may put the patient's health and quality of life at risk.

Oliveira and Fattori (2020), point out the dangers of indiscriminate consumption of appetite suppressants, without adequate medical and pharmaceutical monitoring, they can cause physical health problems such as tachycardia, arterial hypertension, insomnia, irritability, in addition to harming emotional health, triggering crises of anxiety, depression, chemical dependence and various disorders, in which each type of medication may have different adverse effects.

FACTORS THAT CONTRIBUTE TO INDISCRIMINATE USE.

It is observed that, even with the ban on the marketing of appetite suppressant drugs, especially sibutramine, amfepramone, fenproporex and mazindol, through a law enacted in 2017 by the Federal Supreme Court (STF), there is now a black market for the sale of these drugs. products through websites, without the need to present a medical prescription, and in general, such medicines are smuggled from other countries, which only strengthens Anvisa's concern regarding the risks of these medicines significantly

outweigh the benefits, and may offer some risk or danger to those who consume them, becoming a serious public health problem (SILVA; ROSA; MORAIS, 2021).

It is clear that the work of Martins, Moura and Britto (2020) and Oliveira and Fattori (2020), present the same understanding, with regard to the increase in the consumption of over-the-counter weight loss products, even with the large number of side effects, the number of followers has increased because it allows a quick weight loss effect and results, without the need to practice physical activity or restrictive diets.

As it was shown in Table 1 below, the main factors described in the study were evidenced, which impact society in promoting the indiscriminate use of drugs considered to be slimming.

It is noted that social media praise the aesthetics of the perfect body, especially among young people who want acceptance, thus increasing the incessant search for the silhouette of dreams. Thus, the desire to lose weight quickly and easily is considered an alternative for society, making the search for appetite suppressant drugs an accessible choice for excess weight loss (SILVA et al., 2022).

FACTOR	STUDY
SEARCH FOR THE IDEAL BODY.	Andrade et al, 2019; Costa et al, 2020.
SOCIAL MEDIA SENSATIONALISM.	Oliveira et al, 2014; Araújo et al.,2022.
EASY ACCESS TO CLANDESTINE MARKETS.	Silva; Rosa; Morais, 2021.
IMMEDIATE RESULTS NEEDED.	Tavares; Angelo; Souza, 2017; Duarte et al., 2020.

Table 1: Factors that promote the indiscriminate use of anorectics.

Source: Authors, 2022.

It is worth mentioning that it is necessary to elaborate public policies for a better surveillance of borders, aiming at reducing the clandestine market of anorectic drugs.

PHARMACEUTICAL PRECAUTIONS REGARDING THE SAFE USE OF APPETITE INHIBITORS

It is noteworthy that the role of patient care and health care, with the pharmacist being the most competent professional with regard to medicines, cooperating with the effectiveness of pharmacotherapeutic treatment, promoting the rational use of the medicine, which will result in patient safety during drug therapy (RADAELLIM et al., 2016).

Porto, Padilha and Santos (2021) indicate that both the risks and benefits of drugs intended to inhibit appetite depend on the dosage, tolerance, time of use, the presence of non-therapeutic treatment together, patient history, among others. Thus, it will be necessary to provide more guidance regarding the use and greater supervision in the process of releasing anorectics.

Pharmaceutical professionals must repress indiscriminate use without prescription

and medical advice and value rational use, not ruling out any possibility of off-label treatment, as is the case with ozempic and victoza, which has been widely used as obesity control in recent years. years, given that they showed excellent results in terms of weight loss and appetite reduction, with few side effects (GOMES; TREVISAN, 2021).

Sebold and Linartevichi (2021) highlight that pharmaceutical care acts as a mechanism to raise awareness of individuals, with the dissemination of scientific information, in order to avoid potential harm to patients, in addition to adequately assisting the treatment, for greater effectiveness.

It was possible to identify strategies to combat indiscriminate use, highlighting the rational orientation in addition to making complaints to Organs inspection bodies of supposed establishments in which anorectic drugs are sold.

The conducts carried out by the pharmaceutical professional are fundamental tools to optimize treatment with anorectics, providing necessary guidance on adverse reactions, ensuring patient safety in addition to raising awareness of the risks and care around the therapy.

PHARMACEUTICAL ACTIONS REGARDING FIGHTING THE INDISCRIMINATE USE OF ANOREXIGENES.	STUDY
PHARMACEUTICAL GUIDANCE ON RATIONAL USE	Porto, Padilha and Santos 2021.
ADEQUATE DISPENSATION BY PRESCRIPTION	Freire et al, 2019.
DIRECTING ABOUT ADVERSE REACTIONS.	Martins, Moura and Britto 2020.
MAKE REPORT OF CLANDESTINE ESTABLISHMENTS.	Costa, 2016.

Table 2: Pharmaceutical actions to combat the indiscriminate use of anorectics.

Source: Authors, 2022.

FINAL CONSIDERATIONS

It is observed that the use of appetite suppressants, without professional guidance, may have the following sequelae: tachycardia, palpitations, delusions, poor quality of life, dependence, and in more severe cases, death of the individual.

It is essential to have greater rigor in the sale of such a product, with the provision of adequate pharmaceutical guidance. The pharmaceutical professional aims to ensure patient safety, through the adoption of the best practices to prevent complications arising from the administration of appetite suppressants.

The creation of public policies must be encouraged to curb the black market in medicines, strengthening the monitoring of the consumption of anorectics, reducing organized crime as well as diseases caused by indiscriminate use.

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