



Indiscriminate use of weight-loss medications by nursing professionals in the Northwest region of Paraná.

Uso indiscriminado de medicamentos para emagrecer por profissionais da enfermagem no noroeste do Paraná

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ABSTRACT

In Brazil and around the world, self-medication is practiced for various health problems, including obesity. The use of these drugs can cause several health problems, increasing their severity when nursing professionals resort to this resource to lose weight. The objective of the study was to analyze self-medication for weight loss among nursing professionals, in addition to identifying which medications were used. 303 nursing professionals were interviewed, from 01/21/2022 to 04/24/2022, after approval by the CEP. Among the professionals who stated that they resort to this practice for weight loss purposes, 25% are nurses and 75% nursing technicians. The most cited drugs were sibutramine 24.62%, herbal medicines 21.54% and bupropion 18.46%. The results reveal a serious public health problem among these professionals, who are responsible for caring for and guiding the population, making it necessary to adopt public policies aimed at nursing care.

Keywords: Self-medication. Slimming. Nursing. Pharmacoepidemiology

RESUMO

No Brasil e no mundo a automedicação é praticada para diversos problemas de saúde, e dentre esses está a obesidade. O uso desses fármacos pode causar diversos problemas de saúde, aumentando sua gravidade quando os profissionais de enfermagem, recorrem a esse recurso para emagrecer. O objetivo do estudo foi analisar a automedicação para emagrecimento entre os profissionais de enfermagem, além de identificar quais os medicamentos utilizados. Foram entrevistados 303 profissionais de enfermagem, no período 21/01/2022 à 24/04/2022, após aprovação do CEP. Dentre os profissionais que afirmaram recorrer a essa prática para fins de emagrecimento, 25% são enfermeiros e 75% técnicos de enfermagem. Os fármacos mais citados foram a sibutramina 24,62%, os fitoterápicos 21,54% e a bupropiona 18,46%. Os resultados revelam um grave problema de saúde pública dentre estes profissionais, os quais são responsáveis por cuidar e orientar a população, sendo assim é necessário a adoção de políticas públicas que visem o cuidado da enfermagem.

Palavras-chave: Automedicação. Emagrecimento. Enfermagem. Farmacoepidemiologia.

INTRODUCTION

Self-medication is a practice adopted by people worldwide and can be defined as the intake of industrialized medicines, homemade remedies, or herbs, on their own initiative or through the influence of another person, without a medical prescription¹. There are several reasons that lead to self-medication, including socioeconomic factors, lifestyle, ease of access to medication, potentiated by drugs that do not require a prescription to be purchased (OTC drugs – over the counter drugs), among others².

During the COVID-19 pandemic, driven by fear, misinformation, and false news spread on social media, searches related to medications increased and, consequently, self-medication also rose^{3,4}. Research shows that individuals with higher levels of instruction are more likely to self-medicate. Additionally, women are more frequent in the practice, both before and after the declaration of the pandemic^{5,6}.

Nursing professionals appear on a large scale in the self-medication ranking because they deal directly with all types of medications, know their handling, actions, and effects, and have easy access to drugs. It has also been found that the indiscriminate use of medications brings consequences and undesirable effects to the health of nursing professionals, such as masking progressive diseases⁷.

Obesity is defined as a chronic disease that causes excessive accumulation of fat in the body, affecting all age groups. In recent decades, it has been growing exorbitantly, currently representing a serious public health problem worldwide⁸. According to the study by Santos et al.⁹ (2018), people use anorectic medications or other drugs with the aim of losing weight, hoping that their appetite will decrease or that calorie burning will increase, as an excuse to maintain sedentary lifestyle and poor eating habits. Because it is easier to resort to drugs than to change their habits.

Among the side effects are insomnia, dry mouth, constipation, headache, nausea, palpitations, dizziness, excessive sweating, irritability, tachycardia, arterial hypertension, anxiety attacks, depression, and chemical dependency¹⁰. Even drugs that are considered harmless, such as herbal remedies, if used indiscriminately for weight loss, can have more risks than benefits, such as compromising renal and hepatic functions, among others¹¹.

In this interim, the present study aims to analyze self-medication for weight loss among nursing professionals, as well as to identify which medications are used.

METHODOLOGY

This study is descriptive in nature, non-experimental, and was conducted from January 21, 2022, to April 24, 2022. The research was carried out with Nurses and Nursing Technicians from the Municipal Hospital of Maringá (HUM), Memorial Hospital, the Emergency Care Units (UPA Zona Norte), and in Basic Health Units (UBS) of Maringá/PR, Sarandi/PR, and Mandaguaçu/PR.

A digital questionnaire (using the Google Forms platform) was administered as well as printed forms, and the Nursing team was approached at their workplace during the daytime shift, after obtaining informed consent. It was not possible to collect data from all professionals due to vacations, sick leaves, night shifts, and refusals.

After data collection, variables such as profession, gender, age, years of professional experience, self-medication use, and medications used were considered. The data were then entered into an Excel spreadsheet, where statistics were performed, including quantity, percentage, and proportion, which were represented in tables and graphics. Rates were calculated based on the total number of nursing professionals who participated in the study.

In the statistics, only the professionals who declared using medications indiscriminately for weight loss were included. This study

conducted research involving human subjects after approval from the ethics committee, as per CAEE 52267021.8.0000.5220, opinion number 5.083.023. In accordance with the approval terms, data collection was carried out.

RESULTS

The study was conducted with 303 nursing professionals (nurses and nursing

technicians) from the Public Health System (SUS) in the cities of Maringá-PR, Mandaguaçu-PR, and Sarandi-PR. The respondents were aged between 22 and 69 years old. Of the total participating professionals, 29.37% were nurses, with an average age of 38.46 years and an average experience in the profession of 14.30 years, while 70.63% were nursing technicians, with an average age of 43.33 years and an average experience in the profession of 14.77 years.

Chart 1. Age of professionals and years of experience in the profession.

Age	Time of experience (years)					n %
	0 a 10	11 a 20	21 a 30	31 a 40	41 a 50	
Professionals						
Nurses						
21 a 30	23					23 (7,59)
31 a 40	14	16				30 (9,90)
41 a 50	2	10	7			19 (6,27)
51 a 60		1	6	2		9 (2,97)
61 a 70			3	1		4 (1,32)
Nursing technicians						
21 a 30	22					22 (7,26)
31 a 40	27	39				66 (21,78)
41 a 50	16	35	14			65 (21,45)
51 a 60	11	11	19	3		44 (14,52)
61 a 70	1	2	4	2	1	10 (3,30)
n %	117 (38,61)	114 (37,62)	54 (17,82)	8 (2,64)	1 (0,33)	303 (100,00)

Source: the authors. The table was constructed based on the statements of the nursing professionals interviewed.

The obtained data also revealed that the majority (87.46%) of the nursing professionals participating in the study are female, while only 12.54% are male.

Chart 2. Total of interviewees by gender.

Professionals	Female	Male
	n %	n %
Nurses	77 (25,41)	12 (3,96)
Nursing technicians	188 (62,05)	26 (8,58)
Total	265 (87,46)	38 (12,54)

Source: the authors. The table was constructed based on the statements of the nursing professionals interviewed.

The present study revealed that among the total interviewed nursing professionals who engage in indiscriminate use of drugs for weight loss, 25.00% are nurses and 75.00% are nursing technicians. Those who do not self-medicate for

weight loss include 30.22% nurses and 69.78% nursing technicians. Professionals who did not respond to this question comprise 18.18% nurses and 81.82% nursing technicians.

Chart 3. Percentage of total professionals who self-medicate for weight loss.

Professionals	No	Yes	Did not answer	Total
Nurses	30,22%	25,00%	18,18%	29,37%
Nursing technicians	69,78%	75,00%	81,82%	70,63%
Total	100,00%	100,00%	100,00%	100,00%

Source: the authors. The table was constructed based on the statements of the nursing professionals interviewed.

The most commonly used medications by the study participants are: sibutramine 24.62%; herbal remedies 21.54%; bupropion 18.46%; fluoxetine 7.69%; saxenda 4.62%; ozempic 3.08%; and sertraline 3.08%. They also reported

using: dietary supplements 1.54%; nutritional diet 1.54%; orlistat 1.54%; diabetes medications 1.54%; thermogenics 1.54%; trulicity 1.54%; and victoza 1.54%.

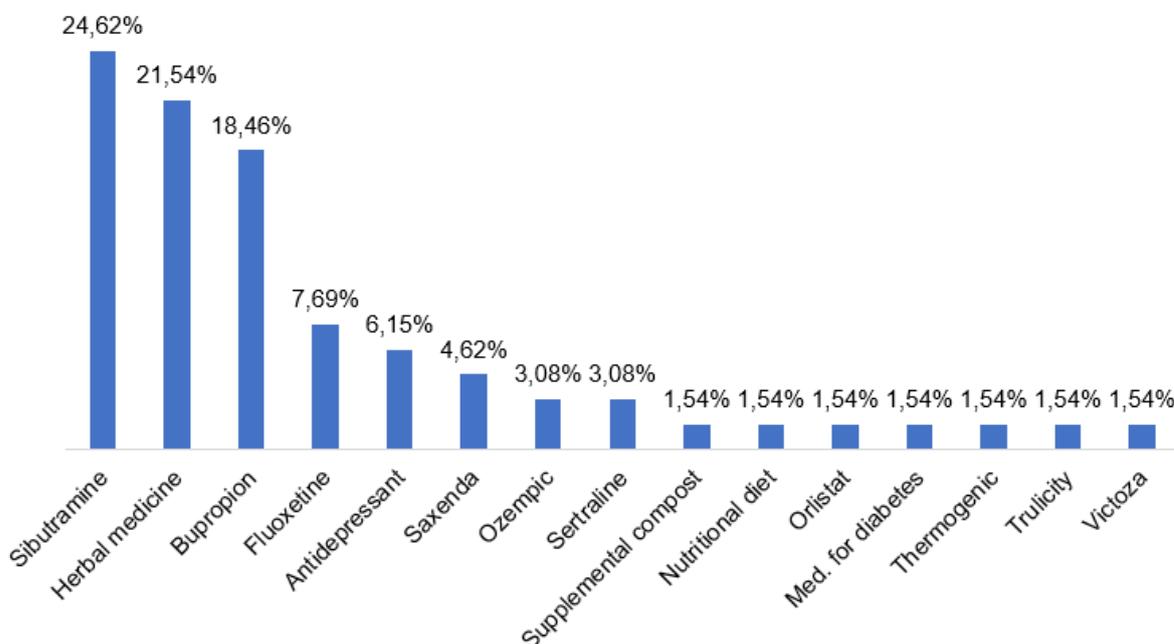


Figure 1. Weight loss medications that were used indiscriminately by the participants.

Source: The authors. The graph was constructed based on the statements of the nursing professionals interviewed.

DISCUSSION:

In line with the obtained results, studies conducted with nursing professionals, MACIEL et

al¹². (2014) found that the majority of participants had an average age of 36.4 years. Similarly, MACHADO et al.⁷ (2020) observed in their research that among their target audience, 46%

were aged between 31 and 40 years, 30% were over 41 years old, and 24% were between 20 and 30 years old⁷.

In 2019, a study was conducted with 900 nursing professionals, and it was observed that 40.2% of the respondents had been working in the profession for between 8 and 14 years, with an average of 12.8 years¹³.

The prevalence of women may be related to the definition of the word “nursing,” which has always been associated with women, as it was originally created to encompass maternal care for children. These care aspects include nurturing, guiding, and maintaining. Nurturing involves protecting, strengthening, maintaining, and alleviating. Guiding refers to showing a path, a way to help someone integrate into society. And maintaining emphasizes inclusion and ensuring harmonious unity. This presumed feminine tendency has been assigned the role of caring for sick individuals¹⁴.

Mondini et al.¹² (2019) also observed in their research that among nursing professionals, the highest prevalence is among females (77.92%). Similar data were obtained by Maciel et al.¹⁵ (2014), where the majority of participants in their study (nursing professionals) were female, accounting for 76.9%^{16,17}.

According to a survey conducted by the Federal Nursing Council regarding the nursing profile, it was noticed that there is a female prevalence among professionals in this class, totaling 84.6%. The study indicates that 15% are male¹⁶.

Machado et al.⁷ (2020), in their epidemiological studies, found that the indiscriminate use of drugs is common among nursing professionals and that this practice is related to their pharmacological knowledge and daily handling of medications. When investigating the prevalence of self-medication among their target audience, they found that 36% of nursing technicians and 30% of nurses adhere to this practice to alleviate their health complaints

resulting from excessive workloads.

From the same perspective, Bittar, Gontijo¹⁷ (2015) conducted their research in a hospital in Uberaba/MG with 142 nursing professionals. However, they concluded that the habit of self-medication was higher among nurses, at 66%, while among nursing aides and technicians, the percentage was 54%.

Among the drugs most used by the participants in this study, sibutramine is one of the most widely used anorexigenic drugs due to its effectiveness in weight reduction. However, caution should be exercised in asserting its safety, as it has shown several adverse effects, especially cardiovascular ones¹⁸.

Regarding herbal remedies, these medications are composed of substances contained in plants. They have both benefits and risks to health. If used correctly and with medical or pharmaceutical supervision, herbal remedies promote positive results in the weight loss process, in a non-abrasive manner and with reduced costs. However, their self-medication can cause various side effects. Additionally, when the herbal remedy has dubious origins, it may contain chemical substances in its composition or only cause a placebo effect¹⁹.

Bupropion is an antidepressant indicated for weight loss as it helps reduce cravings. However, it should only be prescribed if diet and physical activity have not been effective for weight loss¹⁰.

In addition to the risk of acquiring cardiovascular diseases when using the drug, it can also alter the normal parenchyma of reproductive tissues⁸. This is a significant result for nursing professionals to guide women of childbearing age who use the medication.

In recent years, audiovisual communication has impacted contemporary society and has influenced the population with irrational thoughts about the cult of aesthetics, a slim body, which has become synonymous with beauty and the main goal of the individual,

without considering that some of the products sold for weight loss contain chemicals that sometimes lead to dependence on the part of the consumer, which often results in abuse of these products¹⁰.

CONCLUSION

In light of the above, it was concluded that nursing professionals engage in indiscriminate use of weight loss medications, with a more significant prevalence among nursing technicians. Furthermore, the results indicate that the most commonly used medication is sibutramine.

Due to the importance of this topic for the health and well-being of nursing professionals, who provide relevant services from primary health care to high-complexity care, there is a need for further studies to assist in the development of public awareness policies and improvements in the work environment. This aims to discourage the indiscriminate use of medications, promoting health among these professionals. Given the significance of these professionals for the well-being of the population, it is crucial to focus on initiatives that prioritize their health and safety.

REFERENCES

1. Anwar I, Minimol K, Narasimhaiah M. Self-Medication Practices among Medical and Non-Medical Students. *J Evol Med Dent Sci*. 2020 Oct;9(40):2976–80. Available from: <http://dx.doi.org/10.14260/jemds/2020/652>.
2. Haroun MF, Al-kayali RS. Self-medication Among Undergraduate Medical Students In Two Universities In Syria. *Int J Pharm Sci Res [Internet]*. 2017 Apr 1;8(4):1881–6. Available from: [http://dx.doi.org/10.13040/IJPSR.0975-8232.8\(4\).1881-86](http://dx.doi.org/10.13040/IJPSR.0975-8232.8(4).1881-86).
3. Onchonga D, Omwoyo J, Nyamamba D. Assessing the Prevalence of Self-Medication among Healthcare Workers Before and During the 2019 SARS-CoV-2 (COVID-19) Pandemic in Kenya. *Saudi Pharm J*. 2020 Aug;28(10):1149–54. Available from: <http://dx.doi.org/10.1016/j.jsps.2020.08.003>.
4. Tejedor S, Portalés-Oliva M, Carniel-Bugs R, Cervi L. Journalism Students and Information Consumption in the Era of Fake News. *Media Commun*. 2021 Mar 3;9(1):338–50. Available from: <http://dx.doi.org/https://doi.org/10.17645/mac.v9i1.3516>.
5. López JJ, Dennis R, Moscoso SM. Estudio sobre la Automedicación en una Localidad de Bogotá. *Rev. salud pública*. 2009 Jun;11(3):432-42. Available from: <http://dx.doi.org/10.1590/s0124-00642009000300012>.
6. Sharma R, Verma U, Sharma CL, Kapoor B. Self-medication among urban population of Jammu city. *Indian J Pharmacol*. 2005 Feb;37(1):37-45. Available from: <http://dx.doi.org/10.4103/0253-7613.13856>.
7. Machado J, Da Silva CM, Peder LD. Concepções Sobre Automedicação Entre Profissionais de Enfermagem. *RPBeCS*. 2020 May;7(13):10-15. Available from: <http://dx.doi.org/10.6084/m9.figshare.12838025>.
8. Ministério da Saúde. Promoção da Saúde e da Alimentação Adequada e Saudável. Excesso de Peso e Obesidade. Brasília (DF); 2021 (updated in 2023) [accessed on 2024 Apr 25]. Available from: <https://www.gov.br/saude/pt-br/composicao/saps/promocao-da-saude/excesso-de-peso-e-obesidade>.
9. Pereira dos Santos K, Eduardo da Silva G, Ribeiro Modesto K. Perigo dos Medicamentos para Emagrecer. *Rev Inc Cient Ext*. 2019;2(1):37-45.
10. Souza MA de, Costa G de S, Franco JVV, Varela GG, Nestor ICN, Andrade ÍD de, et al. Riscos da automedicação com fármacos anorexígenos para o tratamento da obesidade: revisão integrativa. *Res, Soc*

- Dev. 2022 Sep 9;11(12):e133111234459.
Available from: <http://dx.doi.org/10.33448/rsd-v11i12.34459>.
11. Rebelo IC, Barbosa SM, Oliveira CMS. Riscos Associados à Automedicação de Fitoterápicos no Processo de Emagrecimento. REASE. 2022 Nov 30;8(11):2647–55. Available from: <http://dx.doi.org/10.51891/rease.v8i11.7854>.
 12. Maciel, MED, de Oliveira, FN. Qualidade de vida do profissional técnico de enfermagem: a realidade de um hospital filantrópico em Dourados-MS. Rev Psicol Saúde [Internet]. 2014 Jun [cited 2024 Mar 26];6(1):83-89. Available from: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S2177-093X2014000100011&Ing=pt.
 13. Garbin K, Pasqualotti A, Chambel MJ, Moretto CF. The age as a differential in the engagement of nursing professionals. Psic: Teor e Pesq. 2019 Jan 1;35. Available from: <http://dx.doi.org/10.1590/0102.3772e35516>.
 14. Passos, E. De anjos a mulheres: ideologias e valores na formação de enfermeiras. 2nd ed. Salvador: EDUFBA; 2012. 196p.
 15. Mondini CCSD, Cunha ICKO, Trettene ADS, Fontes CMB, Bachega MI, Cintra FMR. Authentic leadership among nursing professionals: knowledge and profile. Rev Bras Enferm. 2020;73(4). Available from: <http://dx.doi.org/10.1590/0034-7167-2018-0888>.
 16. Conselho Federal de Enfermagem (COFEN). Pesquisa inédita traça perfil da enfermagem. Brasília (DF); 2015 [accessed on 2023 Jun 21]. Available from: <https://www.cofen.gov.br/pesquisa-inedita-traca-perfil-da-enfermagem/>.
 17. Bittar CML, Gontijo IL. Automedicação entre as trabalhadoras de enfermagem de um hospital de Uberaba-MG. Rev. G&S [Internet]. 2015 Jun 1 [cited on 2024 Mar 26];6(2):1229-38. Available from: <https://periodicos.unb.br/index.php/rgs/article/view/>
 18. Alves M., Teixeira AL, Anastácio LB, Alves GCS, Baldoni NR, Chequer FMD. Análise dos efeitos adversos associados ao uso do anorexígeno sibutramina: revisão sistemática. J Health Biol Sci. 2018 Jul 2;6(3):313-326. Available from: <http://dx.doi.org/10.12662/2317-3076jhbs.v6i3.1588>.
 19. de Oliveira ED, Ramos RS, Salomão PEA, Kokudai RLN. Automedicação de Fitoterápicos para Emagrecer: Orientação Farmacêutica na Drogaria. RMNM [Internet]. 2023 Aug 10 [cited on 2024 Mar 26];9(1). Available from: <https://revista.unipacto.com.br/index.php/multidisciplinar/article/view/1420>.

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