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OTC-MEDICINES AND RESPONSIBLE SELF-MEDICATION UNDER GOOD PHARMACY PRACTICE

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Abstract. *Responsible self-medication is a process by which individuals treat their minor illnesses and conditions that are either self-diagnosable or have been previously diagnosed by a physician using nonprescription, safe, high-quality medications. Over the counter (OTC) medicines are playing an increasingly crucial role in modern healthcare by promoting self-care, managing a broad spectrum of minor illnesses, and reducing the burden on healthcare systems. According to the requirements of the International Standard of Good Pharmacy Practice (GPP), the pharmacist plays a key role in ensuring effective pharmacotherapy. This role includes the management of drug therapy, monitoring treatment effectiveness, and providing patients with evidence-based information on the rational use of medicines. In addition, the pharmacist should assess the patient's health status and individual needs, taking into account personal characteristics and clinical factors*

Key words: *OTC-medicines, self-medication, Good Pharmacy Practice, pharmacist*

Introduction

Over the counter (OTC) medicines are playing an increasingly crucial role in modern healthcare by promoting self-care, managing a broad spectrum of minor illnesses, and reducing the burden on healthcare systems. Since they are safe, effective, and suitable for use without medical prescription or health professional's intervention, World Health Organization associates closely their use with the concept of self-medication and highlights the importance of responsible self-medication as one of the self-care interventions [1].

Main text

Responsible self-medication is a process by which individuals treat their minor illnesses and conditions that are either self-diagnosable or have been previously diagnosed by a physician using nonprescription, safe, high-quality medications. World Health Organization sets 3 basic criteria that should a medicinal product fulfills to be intended for self-medication. Firstly, the active ingredient at recommended dose should have low toxicity, it should present no risks like genotoxic

and carcinogenic properties or other risks related to human use unless these risks can be clearly addressed through labelling. Secondly, the intended use of the medicinal product should be suitable for self-medication and doesn't defer diagnosis or treatment of a condition needing doctor's intervention. Thirdly, the medicine should not have characteristics that make it unacceptable, or undesirable meaning it would therefore not be one that carries severe adverse effects and high risks of dependence and abuse, or present other limitations such as interactions with commonly used medicines or food that could lead to serious outcomes. Also, it must be used under the supervision of a health professional [2].

In developed countries, the concept of responsible self-medication is being further developed. Thus, in the United States, telemedicine allows receiving consultations and monitoring of patients remotely, especially for chronic diseases. A variety of applications and communication technologies encourage self-medication and facilitate health controlling, integrated with electronic health records [3].

In Canada , telemedicine has a potential effect to improve the health care system and ease of access to care by creating technology platforms, mobile devices which allow patients to perform medical tests and communicate with health care professionals their conditions and self-medicate themselves effectively [4]. In its turn, the European Union has taken efforts to increase the use of telemedicine in Europe and make it accessible to every European as well as creating online resources for self-medication and investing more than € 500 million in research funding on e-health tools development [5].

WHO points out self-medication as one of the self-care interventions which aim to encourage individuals and communities to manage their health and well-being. And it associates the self-medication with the use of OTC- medicines since they are sold directly to the patient without prescription and they are generally considered safe and suitable for use without a health professional's intervention.

OTC-medicines are characterized by efficacy and safety. They can be available over the counter if they are effective and safe for use. Many medicines have side effects but in the case of OTC the potential benefit must exceed the potential risk [6].

They are known for their rapid accessibility, cost effectiveness and availability, the patient can treat minor conditions (e.g. sharp headache, asthma attack or allergic rhinitis) only by getting an OTC drug from the pharmacy that can improve his condition.

OTC medicines are at a lower price than prescription medicines as well as the consumer saves money from fewer doctor visits. Also, they are available for each patient who can self-diagnose his minor ailments for example in case of allergic rhinitis, the patient can treat the symptoms by OTC antihistamines without a medical consultation [6].

OTC medications are commonly used in our society by all age groups. In Morocco, a cross-sectional observational study was conducted by M. Oirdi [7] shows that Self-medication by gender: 64.3% females and 35.6% males. By age group 68% between 20 to 60 years, 17% over 60 years of age, and 15% under 20 years old. As for the intended user of the medication, 79% was for the patient themselves, 16% for their children, and 5% for others. And, the most common therapeutic classes used in self-medication included mucolytic, analgesics/antipyretics, antibiotics, contraceptives, and anti-inflammatory drugs. In the United States, consumers spend almost \$2billion per year on cough and cold remedies alone [8]. These studies show that OTC drugs are very consumed by all the age groups and the consumers assume the responsibility of self-medication. Several Studies conducted worldwide have shown a large use of OTC analgesics, with 20% and 30% of patients reporting pain, depending on the countries. In the university in South Africa, a study was performed reveals the high prevalence of analgesic use. 80% of the respondents reported self-medicating with analgesics to manage their chronic musculoskeletal pain (CMSP), and the point prevalence was 57%. A larger proportion of females, 86%, self-medicated with analgesics but males only 69%. The most used analgesics were found to be nonsteroidal anti-inflammatory drugs 70%, followed by paracetamol 58%, and combination analgesics [9]. Pain is the most common condition associated with self-medication.

In many European countries, the sale of OTC medicines is permitted only in

community pharmacies under the supervision of a pharmacist (pharmacy only medicines), or they are sold in both pharmacies and non-pharmacy retail outlets such as supermarkets, gas stations. In some cases, OTC medicines are available for sale only in retail outlets [10]. Therefore, the availability of pharmacists to evaluate patient's condition, help select the appropriate OTC medication makes the pharmacy more attractive to consumers for choosing their medications, which is a powerful marketing tool. Since they are widely available and often contain multiple active ingredients in various combinations, it is necessary to use them safely [11].

According to the requirements of the International Standard of Good Pharmacy Practice (GPP), the pharmacist plays a key role in ensuring effective pharmacotherapy. This role includes the management of drug therapy, monitoring treatment effectiveness, and providing patients with evidence-based information on the rational use of medicines. In addition, the pharmacist should assess the patient's health status and individual needs, taking into account personal characteristics and clinical factors [12].

Summary and conclusions.

Pharmacists play a crucial role in promoting safe and effective self-medication through patient-centered communication, ensuring the quality of dispensed medicines, and providing accurate information on their rational use. Their responsibilities under GPP also include continuous professional development, supervision of pharmacy support staff, and collaboration with other healthcare professionals and stakeholders. As members of the healthcare team, pharmacists contribute to health promotion, disease prevention, patient counseling, and community-based health screening activities.

References:

1. U.S. Food and Drug Administration. *Understanding Over-the-Counter Medicines* [Internet]. Silver Spring (MD): FDA; [cited 2025 Dec 18]. Available from: <https://www.fda.gov/drugs/buying-using-medicine-safely/understanding-over-counter-medicines>

2. World Health Organization. *Guidelines for the Regulatory Assessment of Medicinal Products for Use in Self-Medication*. Geneva: World Health Organization; 2000. Document WHO/EDM/QSM/00.1. Available from: <https://iris.who.int/handle/10665/66154>
3. Mileski M, Kruse CS, Catalani J, Haderer T. Adopting Telemedicine for the Self-Management of Hypertension: Systematic Review JMIR Med Inform 2017;5(4):e41 doi: [10.2196/medinform.6603](https://doi.org/10.2196/medinform.6603)
4. The potential socio-economic impact of telemedicine in Canada Marco Hafner, E. 2022 Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC9242553/>
5. Wood M. Telemedicine and E-health. NHS European Office; Mar 20, 2015. Available in this article : Telemedicine: The legal framework (or the lack of it) in Europe Vera Lúcia Raposo
6. Aronson, J.K. (2004), Over-the-counter medicines. *British Journal of Clinical Pharmacology*, 58: 231-234. <https://doi.org/10.1111/j..2004.02191.x>
7. Pro 1 de l'automédication chez des patients dans la région de Rabat-Salé-Zemmour-Zair, Maroc M. Oirdi, Y. Cherrah, S. Ahid 2015 Available from : <http://dx.doi.org/10.1016/j.respe.2015.03.092>
8. Perrot S, Cittée J, Louis P, Quentin B, Robert C, Milon J-Y, Bismut H, Baumelou A. *Self-medication in pain management: The state of the art of pharmacists' role for optimal Over-The-Counter analgesic use*. *Eur J Pain*. 2019;23(10):1747–1762. doi:10.1002/ejp.1459
9. Engelbrecht D, Thandar Y, Venketsamy Y. *Analgesic self-medication among patients with chronic musculoskeletal pain in a South African chiropractic teaching clinic: a cross-sectional study*. *J Chiropr Med*. 2024;23(1-2):1-12. doi:10.1016/j.jcm.2024.02.002
10. López Vila ED, Buts C, Jegers M. *A quantitative classification of OTC medicines regulations in 30 European countries: dispensing restrictions, distribution, pharmacy ownership, and pricing systems*. *J Pharm Policy Pract*. 2023;16(1):19. doi:10.1186/s40545-023-00522-7
11. Jawaid SA. Nonprescription and self-care. In: *Community and Clinical*

Pharmacy (editors if available). 1st ed.; 2013. p.148.

12. Unhurian, L., Bielyaieva, O., Vyshnytska, I., Suschuk, N., & Petkova, I. (2018). *Implementation of standards of good pharmacy practice in the world: A review*. *Asian Journal of Pharmaceutics (AJP)*, 12 (01 Supplement), S42–S46. <https://doi.org/10.22377/ajp.v12i01.2038>

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THE ROLE OF STUDENTS' INDEPENDENT WORK IN THE FORMATION OF THEIR RESEARCH COMPETENCIES: A MASTER'S INTERN'S PERSPECTIVE

РОЛЬ САМОСТІЙНОЇ РОБОТИ СТУДЕНТІВ У ФОРМУВАННІ ЇХ НАУКОВИХ КОМПЕТЕНТНОСТЕЙ: ПОГЛЯД МАГІСТРА-ПРАКТИКАНТА

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Анотація. У статті розкрито роль самостійної роботи здобувачів у формуванні їхніх наукових компетентностей у процесі підготовки магістрів фізичної терапії. Акцентовано увагу на значенні самостійної навчально-дослідницької діяльності як важливого чинника розвитку наукового мислення, здатності до критичного аналізу наукової інформації та впровадження принципів доказової практики у професійну діяльність. Висвітлено погляд магістра-практиканта на поєднання теоретичної підготовки з реальними клінічними ситуаціями під час проходження практики. Проаналізовано приклад виконання самостійного навчально-дослідницького завдання з дисципліни «Клінічний реабілітаційний менеджмент при порушенні діяльності опорно-рухового апарату», що передбачало аналіз ефективності фізичної терапії у пацієнтів із гонартрозом. Обґрунтовано, що систематична та методично організована самостійна робота сприяє формуванню наукових компетентностей, професійної рефлексії та готовності майбутніх фізичних терапевтів до безперервного професійного розвитку.

Ключові слова: самостійна робота студентів, наукові компетентності, магістр фізичної терапії, доказова практика, професійна підготовка.

Abstract. The article examines the role of students' independent work in the formation of scientific competencies in the training of masters in physical therapy. Emphasis is placed on independent educational and research activities as a key factor in the development of scientific thinking, critical analysis of scientific information, and implementation of evidence-based practice in professional activity. The paper presents the perspective of a master's student-practitioner on integrating theoretical knowledge with real clinical situations during practical training. An example of an independent educational and research task within the course "Clinical Rehabilitation Management in Musculoskeletal Disorders" is analyzed, focusing on the assessment of the effectiveness of physical therapy in patients with knee osteoarthritis. It is substantiated that systematically organized independent work contributes to the development of scientific competencies, professional reflection, and readiness of future physical therapists for continuous professional development.

Key words: students independent work, scientific competencies, master in physical therapy, evidence-based practice, professional training.