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**1st ACTA PHARMACEUTICA SCIENCIA
INTERNATIONAL SYMPOSIUM (AP SIS) ON
SOCIAL AND ADMINISTRATIVE PHARMACY**

ABSTRACT BOOK

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Daoism: A philosophical approach to holistic medicine

Mehmet Barlas UZUN

Department of Pharmacy Management, Gülhane Faculty of Pharmacy, University of Health Sciences, Ankara,
Turkey

ORCID:

Mehmet Barlas UZUN: 0000-0003-2975-5290

ABSTRACT

Since the beginning of history, the human mind has been concerned with explaining the events around it. While ancient humans tried to explain events through religious and mythological concepts, thinkers like Aristotle defended the idea that natural causes lay behind events and these causes could be discovered through observation and experiments. Causal determinism claims nothing happens without a cause, and given the conditions leading up to a particular event, that event could not have occurred differently. Today's scientific perspective is deeply influenced by this notion. Causal determinism plays a significant role in the field of medicine and pharmacy. While causal determinism helps us understand diseases and determine treatment protocols, it also limits our understanding. It downplays the roles of chance, uncertainty, and human agency by focusing too heavily on causation, which leads to missing correlations between events. Holistic medicine is an approach to health care that emphasizes the consideration of the whole person, including their physical, mental, emotional, social, and spiritual wellbeing rather than focusing only on specific illnesses or symptoms. Holistic medicine adopts an integrated approach. Instead of seeing health issues as isolated events with specific, linear causes and effects, it views the individual as a complex, dynamic system where mind, body, and environment interact in intricate ways. Daoism is an ancient Chinese philosophical tradition centered on the belief that the universe is a constantly changing, interconnected web of relations that unfolds according to the Dao. Daoism mirrors holistic medicine's perspective that health is not just the absence of disease but is connected to the wellness of the whole being and its environment. Daoism is related to holistic medicine in several key ways: a holistic view of the universe, balance and harmony, qi, mind-body-spirit connection, and preventative health and lifestyle.

Key words: Causal determinism, holistic medicine, daoism



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The impact of vision impairment on therapeutic adherence in the elderly

Ela HOTI *, Sindi HUTI, Ledjan MALAJ

Department of Pharmacy, Faculty of Medicine,

University of Medicine Tirana, Albania

ORCID:

Ela HOTI: 0000-0003-1193-5357

Ledjan MALAJ: 0000-0001-9916-9858

ABSTRACT

Adherence to therapeutic treatment can be difficult for a great number of patients and particularly challenging for the elderly. After a certain age, it becomes more difficult reading medication information which can lead to taking the wrong medication, incorrect doses of it and sometimes even more problematic consequences. Despite the growing number of this age group, the measures taken to alleviate the difficulties they may encounter are almost minimal. The aim of this study is to evaluate the impact that visual impairment has on therapeutic adherence in the elderly. This was achieved through face-to-face questionnaires conducted by an interviewer. The age group under investigation ranged from 61-90 years old. The results showed that reading the medication information leaflet, the pharmacist's instructions and discerning the pills from each other due to poor colour discrimination, added up to the basic problems directly related to vision. 84.9% of the interviewees suffered from at least one disease or eye problem, where presbyopia was dominant, in 48.3% of the cases. Regretfully, only a small percentage of them went through regular ophthalmic examinations. Difficulties encountered while taking medicines were generally more than one. It was noticed that the difficulties in reading the leaflet dominates. Distinguishing the tablets from each other due to the approximate color appears as the second most problematic factor. A minor number of interviewees indicated that there was a problem with using eye drops or difficulty in dividing tablets. According to the results obtained, several measures should be taken to avoid adverse health events caused by poor adherence and to cultivate cost-effective strategies for creating programs in support of this age group. Pharmacists, in collaboration with other healthcare professionals, play an important role in monitoring adherence and identifying potential barriers.

Key words: Therapeutic adherence, elderly, visual impairment, patient information



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Pharmaceutical sciences study programs and implementation of Bologna system in Albania

Entela Haloci*

Department of Pharmacy, Faculty of Medicine, University of Medicine Tirane, Tirane, Albania

ORCID: 0000-0003-2992-8307

ABSTRACT

In 2003 Albania signed the Bologna Declaration at the Berlin Ministers Conference and Bologna, and this was the moment of implementation of this process, which consisted in changes in legislative framework and ECTS design, allocation and monitoring. The Bologna declaration and the European Union (EU) directive 2005/36/EC on the recognition of professional qualifications influenced also the pharmaceutical sciences study programmes. The directive outlines the knowledge, skills and qualifications required for the pursuit of the professional activity of a pharmacy in the EU. How did the higher education system in Albania implement the Bologna process? This study describes the main stages and difficulties that Albania higher education faced up over years and the progress of this process. The data are taken from the reports published on European Higher Education Area in 2020: Bologna Process Implementation Report 2018 and 2020 and also the accreditation external evaluation reports published from Quality Assurance Agency in Higher Education of Albania. Results showed that the process of implementation of Bologna system in Albania has been in progress regarding the standards and guidelines for quality assurance in the European higher education area criteria (ESG), but still remain some of the indicators and criteria to be fulfilled in order to fully meet. There are many reforms and many guidelines that are developed in line with this process but are still missing criteria like workload of the students and learning outcomes, ECTS allocation and monitoring guidelines or procedures. In addition the pharmaceutical study programmes offered by Albanian HIE and licensed by the Ministry of Education of Albania resulted that all of them are organised in credits, modules and in accordance with Bologna standards, but still remain the same problems as mentioned on this paper. There is a special structure. The PHARMINE consortium consists of universities from EU member states and neighbouring countries that are members of the European Association of Faculties of Pharmacy (EAFP) and evaluate how the EU directive and the Bologna declaration influence pharmacy education also which confirm what stated above.

Key words: Bologna system, implementation, Pharmaceutical study programme, ECTS, Albania



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**Title: The Challenge of Harmonization of Pediatric Drug Regulations, Critical for Safe and Effective Drugs
Used in Albania''**

Kleva Shpati¹, * Edlira Kaloshi¹, Herion Paza², Erina Hilaj¹, Dritan Shpati³

¹ Department of Pharmacy, Faculty of Medical Science, Albanian University, Tirana, Albania

² Department of Paediatrics, Faculty of Medicine, University of Medicine, Tirana, Albania

³ Department of Gynecology and Obstetrics, Head of Prenatal Diagnosis, Faculty of Medicine, University of
Medicine, Tirana, Albania

***Corresponding author: Kleva Shpati**

ORCID:

Kleva Shpati : 0000-0002-3213-1158

Edlira Kaloshi: 0009-0001-4648-9468

Erina Hilaj: 0009-0000-3009-7374

Dritan Shpati: 0009-0009-5267-1192

ABSTRACT

Before the Pediatric Regulation children were excluded from studies for new drugs. The lack of pediatric medicines forced the pediatrician to turn to medicines authorized for adults by adapting the dosage and pharmaceutical form for children. This off-label use was an increasing concern. This study aims to present the impact of Pediatric Regulation on the development and availability of pediatric drugs, a unified EMA/FDA global pediatric development plan and the possibility to implement Pediatric Regulation in Albania. This paper is based in data collected, reports, and editions of Medicine Agency, Food and Drug Administration, Medicine and Medical Device Agency in Albania, also recent articles published in scientific journals. The Regulation has brought overall positive results in the field of pediatric medications. Applying a unified global pediatric, is now an emergency and development plan between EMA and the US is in action. There is no Pediatric Regulation in Albania, but new acts are implemented and open a new perspective for a dedicated guideline. Drafting and approval of the Pediatric Regulation in Albania according to European Union ensure the increasing number of new authorized pediatric drugs; the number of pharmaceutical forms suitable for children.

Key words: Paediatric Legislation, paediatric investigation plan, best pharmaceuticals for children act, guideline, ethic



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Shaping future pharmacist toward sustainability

Tarik Čatić^{1*}

1 Pharmacy department, Sarajevo Medical School, University Sarajevo School of Science and Technology,
Sarajevo, Bosnia and Herzegovina

ORCID:

Tarik Čatić: 0000-0003-1799-9503

ABSTRACT

Sustainability can be defined as utilizing our resources in an efficient and renewable manner. Sustainable development", is a universal concern and revolves on three key pillars: economy, society and environment. The mutual connection between the environment and health is evident; health care can also affect the environment in cases of improper disposal of pharmaceutical waste, manufacturing and supply chain issues, and pollution from health care systems. Environmental pollution caused by human and veterinary pharmaceutical substances is an emerging environmental problem, but also many other indirect activities conducted by pharmacist can contribute this agenda. The International Pharmaceutical Federation (FIP) support of the United Nations 2030 Sustainable Development Agenda through Global Roadmap 2030. Similar practices are enforced by Pharmaceutical Group of European Union. Community pharmacies across Europe are strongly committed to help reducing the impact pharmaceuticals can have on the environment and preventing unnecessary waste. At the same time, they can make a meaningful difference in contributing to a healthier planet by integrating sustainability policies within their daily practice. Future pharmacists, regardless of their position, should actively contribute to the application of sustainability principles. In order to be able to adequately respond to needs and trends, it is necessary for them not only to be informed or have a developed individual awareness, but also to acquire knowledge and competence in this field through undergraduate teaching. When it comes to undergraduate education, it implies studying subjects that deal with sustainability, gaining knowledge through conferences, being socially engaged and developing competencies and networking with other stakeholders. Undergraduate education should ensure the development of competencies that would be actively applied after graduation, including rational prescription promotion - sustainable prescribing, patients' education, provision of services that support sustainability policies, and collaboration with pharmaceutical industry, in developing and strengthening policies in this field.

Key words: green pharmacy, sustainability, pharmacists' education



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Research on unused drug behavior of people residing in Ankara province

Ongun Mehmet SAKA

Department of Pharmaceutical Technology, Faculty of Pharmacy, Ankara University, Ankara, Turkiye

ORCID:

Ongun Mehmet SAKA: 0000-0002-8726-6391

ABSTRACT

Unused/wasted drugs are a growing problem globally. The health sector and the consumption of health-related products are growing rapidly, unfortunately there isn't any process for the recovery of the waste drug molecule. For this reason, on-site separation and waste minimization methods are applied or tried to be applied in Turkey and around the world to reduce pharmaceutical waste.

Waste management is an important process for all countries. Methods such as incineration and underground burying are used for non-recyclable wastes, but these grow and cause different environmental problems. When the studies conducted for the pharmacy and pharmaceutical industry are examined, it was observed that waste drugs are increasingly progressing in Turkey as if in the world, and disposal methods are limited.

In 2020, approximately 1.5 tons of household waste drugs were collected per month in Ankara. In addition, when society's habits are examined, we know that waste/unused drugs are thrown away and flushed in. Our project will be carried out in partnership with Ankara Metropolitan Municipality. Collected unused drugs are recorded as drug features (ATC classification, dosage form, expiry date, amount of used and etc.) and past data needed for analysis. According to our aim, the results will be compared by distribution in different features to make and compare an analysis with the waste drugs produced by pharmacies.

Our early results indicates that cold and flu formulations (n:96), pain killers (n:78), and vitamin combinations (n:28) were found to be the mostly wasted. Tablet (44,86%), capsules (4,64%) and injectable forms (5,72%) predominated as dosage forms. Most of collected drugs were expired (56,75%), with their original secondary container (46,25%). 10.75 % of the whole drugs were never used. When the expired drugs were examined, the drugs were kept at home for approximately 8 months after their expiry date.

Key words: Unused drugs, household drug waste, pharmacy drug waste



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**A Qualitative Study Exploring Volunteer Pharmacists' Experiences in Responding to 2023 Türkiye
earthquakes**

Gizem GÜLPINAR^{1*}, Mehmet Barlas UZUN², Ayesha IQBAL³

1 Department of Pharmacy Management, Faculty of Pharmacy, Gazi University, Ankara, Türkiye

2 Department of Pharmacy Management, Faculty of Gülhane Pharmacy, Sağlık Bilimleri University, Ankara,
Türkiye

3 Office of Lifelong Learning and the Physician Learning Program, Faculty of Medicine and Dentistry, University
of Alberta, Edmonton, Canada

***Corresponding author: Gizem Gülpınar**

ORCIDs:

Gizem GÜLPINAR 0000-0001-6720-1235

Mehmet Barlas UZUN: 0000-0003-2975-5290

Ayesha IQBAL: 0000-0001-7282-471X

ABSTRACT

Pharmacists play a vital role in disaster response efforts, providing essential medications, managing pharmacy services, consulting, and supporting victims. Their contributions, however, are often underrepresented in scientific literature. Understanding the experiences of volunteer pharmacists in the disasters enhances future disaster preparedness and response strategies involving healthcare professionals, thereby improving patient care in disaster settings. This article highlights the importance of pharmacists through the lens of their experiences in the aftermath of two major earthquakes in Türkiye, where they served on a voluntary basis to meet the pharmaceutical needs of affected populations. This study adopted a phenomenological approach. Data were collected using semi-structured interviews. A purposive sampling was used to in this study to invite volunteer pharmacists in the aftermath of earthquakes. Interview transcripts were analyzed following an inductive, reflexive, thematic analysis. In total, 15 volunteer pharmacists were interviewed. Four main overarching themes identified were “response to the earthquake”, “preparedness for the earthquake”, “experiences during service delivery” and “mental and physical experiences”. To enhance disaster management efforts, it is essential to expand the clinical responsibilities of

pharmacists such as providing wound care, administering immunization, prescribing and integrate them as integral members of disaster health teams. Nevertheless, certain barriers have been identified that may hinder pharmacists from effectively assuming these roles. It is crucial for international pharmacy organizations, non-governmental organizations, and governments to work collaboratively to mitigate the challenges in overall health systems.

Key words: Disasters, pharmacists, pharmacy practice, emergency, health system