

Editorial

Integrating Knowledge for a Sustainable Future

Integrando saberes para un futuro sostenible

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The *Magna Scientia UCEVA* Journal, published by the Central Unit of Valle del Cauca, is pleased to present its Volume 4, Number 2 for the year 2024. This edition is a clear manifestation of our firm commitment to open access and the dissemination of high-quality scientific research in the field of Life and Health Sciences. In a world where scientific information is crucial for social and economic development, the journal acts as a bridge between researchers and the academic community, ensuring that the most relevant and novel findings are accessible to all.

In line with the guidelines established by the Mission of Wise Men of the Ministry of Sciences, we encourage both disciplinary and multidisciplinary approaches that cover a broad spectrum of global knowledge. This diversity of perspectives is essential to address the complex challenges we face in the field of health and life sciences. Through this edition, readers will find articles that not only present original research results, but also invite reflection and debate on current and emerging issues.

In addition, the journal promotes collaboration between researchers, institutions and professionals from various areas, which contributes to enriching scientific dialogue and generating innovative solutions. We are convinced that shared knowledge is a driving force for progress, and therefore we will continue to work tirelessly to strengthen access and visibility of scientific production in our region and beyond.

In this issue, we have gathered six valuable contributions that address a variety of topics, mostly related to health. The articles include research on seasonal vaccines and their impact on community health, an analysis of the historical evolution of pharmacy, the use of medicinal plants in the indigenous community, the relationship between the work environment and employee satisfaction, the quality of patient care, as well as a study on the quality of water in the river and the labor guarantees of seafarers. Each of these works is distinguished by its high level of academic excellence and methodological rigor, contributing significantly to the advancement of scientific knowledge and presenting practical implications in various disciplines.

The articles included in this edition are:

The first one, entitled “Seasonal vaccines and community health: a literature review”, examines seasonal vaccination programs, such as influenza and COVID-19 vaccines, highlighting their crucial role in public health. The challenges faced by these programs, such as vaccine hesitancy and accessibility issues, are analyzed, emphasizing the need to implement policies that improve access and promote education about vaccination.

The second contribution, entitled “Historical evolution of pharmacy: from traditional remedies to modern pharmaceutical products”, offers a comprehensive analysis of how pharmacy has evolved throughout history, transforming from ancestral

practices based on natural remedies to the development of sophisticated pharmaceutical products based on scientific evidence. This study not only highlights the fundamental role of historical figures such as Dioskurides, known for his work “*De Materia Medica*”, which documented the use of medicinal plants in antiquity, and Galen, whose theories and practices in Greek medicine laid the foundations for modern pharmacology, but also examines how the translation and dissemination of ancient medical texts contributed to the formation of pharmacy as a scientific discipline.

The research places special emphasis on the historical and sociocultural context in which these figures operated, as well as on the technological and scientific advances that facilitated the transition to modern pharmacology. Changes in the perception of health and illness, the professionalization of pharmacists, and the establishment of regulations that marked the beginning of industrial drug production are analyzed. This historical overview not only illustrates the evolution of pharmacy, but also provides a critical view on how traditional knowledge has been systematized and, in many cases, forgotten in the process of modernization.

The third article, meanwhile, focuses on the richness of the diversity of medicinal plants in the Kankuama Indigenous Community, a study that highlights the intrinsic relationship between ancestral knowledge and the use of biodiversity. This research not only documents the different species of plants used by the community, but also explores their therapeutic applications, the cultural practices that surround them and the deep traditional knowledge that has been transmitted from generation to generation.

In addition, the article addresses a critical issue: the factors that threaten the conservation of this cultural and botanical heritage. Threats such as habitat loss, globalization, and the lack of recognition and support for traditional knowledge are identified, which puts at risk both biodiversity and the continuity of medicinal practices that have been fundamental to the health and well-being of the community. Thus, the study not only highlights the importance of preserving this ancestral knowledge,

but also advocates for policies that promote sustainability and respect for cultural traditions, as well as the need to integrate this knowledge into the field of modern health.

In the fourth investigation, a cross-sectional study is presented that comprehensively examines the interrelationship between the working conditions of nurses, their level of job satisfaction, and the quality of care provided to patients. This study underlines the importance of comprehensively addressing the existing problems in the work environment of nurses, since it has been shown that an adequate and satisfactory work environment not only promotes the well-being of employees, but also translates into higher quality care for patients. As working conditions are optimized, nursing staff motivation and engagement levels are expected to increase, which directly impacts patient experience and health outcomes. This finding highlights the need for policies that prioritize the health and well-being of healthcare professionals, in order to create a virtuous cycle that benefits both workers and patients.

In the fifth research, titled “Improving water quality prediction in the Yamuna River, Delhi,” an innovative hybrid methodology is proposed that significantly improves the ability to predict the water quality index in this important river. By overcoming the limitations of traditional models, this new methodology has managed to achieve a remarkable accuracy of 95.2%. This advance is crucial not only for the protection of the aquatic ecosystem, but also for the sustainable management of water resources in a context of increasing pressure on these resources due to urbanization and industrialization. Accurate water quality prediction allows managers to implement more effective monitoring and control measures, thereby ensuring public health and environmental preservation in the region.

Finally, in the sixth and final contribution, the labor guarantees of seafarers in Colombia are analyzed, in a study entitled “Labor guarantees of seafarers in Colombia: analysis of legal application.” This article focuses on the implementation of the ILO Convention on maritime labor of 2006, evaluating its impact on the working conditions of sea workers

in Colombia. A detailed examination of the current regulations and their adaptation to the current reality of the maritime sector is carried out, identifying the gaps between the law and its practical application. This analysis is essential to understand how labor guarantees can be strengthened, thus promoting a safer and fairer work environment for seafarers, who face unique challenges in their profession. Furthermore, the importance of updating and complying with regulations is emphasized to ensure that the rights of these workers are effectively protected, contributing to their well-being and labor dignity.

This edition of the Magna Scientia UCEVA Journal reaffirms its commitment to the dissemination of high-quality scientific research, providing the academic and professional community with valuable contributions that not only expand knowledge in various disciplines, but also have a significant impact in key areas such as public health, occupational safety, and sustainable development. Each article addresses contemporary issues from rigorous and applicable approaches, contributing to scientific progress and improving the quality of life in different environments.

Through this publication, the Central Unit of Valle del Cauca reinforces its mission to promote and disseminate the results of research at a national and international level, consolidating its role as a reference in the generation of knowledge that transcends borders and provides innovative solutions to current global challenges. In this way, it reaffirms not only its commitment to academic excellence, but also the responsibility to contribute to social well-being and comprehensive development in multiple areas.

We invite our readers to immerse themselves in this edition, where research is at the service of the community and knowledge is transformed into a tool for progress and social well-being.