

CONTEMPORARY PROBLEMS OF HYGIENE AND MEDICAL ECOLOGY**¹Rasulova Nilufar, ²Quranbayev Siroj**¹Tashkent Pediatric medical institute²Urgench Branch of Tashkent Medical Academy<https://doi.org/10.5281/zenodo.10458560>

Abstract. *This article addresses the contemporary challenges at the intersection of hygiene and medical ecology, offering insights into the dynamic landscape of health and environmental interactions. Examining the intricate relationships between human health, environmental factors, and emerging diseases, the research delves into the multifaceted problems that characterize this domain. From the impact of urbanization on hygiene practices to the challenges posed by environmental pollutants and the emergence of novel diseases, the study navigates the complex web of contemporary issues in hygiene and medical ecology. By shedding light on these challenges, the article aims to inform public health strategies, policy formulation, and interdisciplinary approaches for a healthier and more sustainable future.*

Keywords. *Hygiene, Medical Ecology, Contemporary Issues, Environmental Health, Emerging Diseases, Urbanization, Environmental Pollution, Public Health, Interdisciplinary Approaches, Policy Formulation.*

Introduction. The intricate interplay between hygiene and medical ecology is increasingly complex in the contemporary landscape, with new challenges emerging at the intersection of human health and environmental sustainability. This article seeks to unravel and address the contemporary problems that define the realms of hygiene and medical ecology, shedding light on the evolving dynamics that shape the health of populations and the ecosystems they inhabit.

In understanding the contemporary landscape, the groundwork laid by pioneers in the field provides a solid foundation. Notably, scholars like Last and Chandra (2019) have emphasized the need to reevaluate traditional notions of hygiene in the face of urbanization and globalization. The relentless pace of urban development brings with it a host of challenges to hygiene practices, demanding innovative solutions to ensure the well-being of urban populations.

Additionally, as articulated by McMichael et al. (2013), the era of the Anthropocene has ushered in unprecedented environmental changes that influence medical ecology. The surge in environmental pollutants and alterations in ecosystems pose intricate challenges to the delicate balance between human health and the environment. Understanding these challenges is paramount to devising effective strategies that protect both individual well-being and ecological integrity.

The emergence of novel diseases and the reemergence of known pathogens present contemporary challenges that demand attention. The accelerated global movement of people and goods, as observed by Morse (2012), has facilitated the rapid spread of infectious agents, transcending geographical boundaries. Addressing these challenges requires a holistic approach that considers not only medical aspects but also ecological and sociocultural dimensions.

As we navigate the complexities of the 21st century, this article endeavors to explore and analyze the contemporary problems in hygiene and medical ecology. By drawing on the insights of established researchers and recognizing the shifts in environmental, social, and epidemiological paradigms, we aim to contribute to the ongoing dialogue surrounding public health, environmental sustainability, and the interconnectedness of human and ecological health.

MATERIALS AND METHODS

1. Urbanization and Redefining Hygiene Practices:

The rapid pace of global urbanization has brought about a shift in traditional hygiene practices, necessitating a reevaluation of public health strategies. Last and Chandra (2019) highlight the challenges posed by urban living, where densely populated areas, limited access to sanitation facilities, and altered lifestyles contribute to the dynamic landscape of hygiene. The contemporary urban environment demands innovative approaches to hygiene promotion, waste management, and water sanitation to ensure the health and well-being of urban populations.

2. Environmental Pollution and Health Impacts:

The surge in environmental pollutants represents a critical challenge at the interface of medical ecology. Anthropogenic activities, including industrial processes and the widespread use of pollutants, have led to the degradation of air, water, and soil quality. McMichael et al. (2013) emphasize the far-reaching health impacts of environmental pollution, linking exposure to pollutants with respiratory diseases, cardiovascular disorders, and other health complications. Addressing contemporary problems in medical ecology necessitates a concerted effort to mitigate and adapt to the consequences of environmental degradation.

3. Emerging Diseases and Global Connectivity:

The interconnectedness of the modern world, characterized by rapid travel and global trade, has facilitated the swift dissemination of infectious agents. Morse (2012) highlights the role of global connectivity in the emergence and reemergence of infectious diseases. The contemporary medical ecological landscape is marked by the constant threat of novel pathogens crossing borders and adapting to new environments. Understanding and responding to these emerging health challenges require collaborative, interdisciplinary efforts that bridge the domains of medicine, ecology, and public health.

4. Biodiversity Loss and Ecosystem Health:

The ongoing loss of biodiversity poses a profound threat to both human health and ecological balance. Changes in ecosystems, driven by factors such as deforestation and climate change, contribute to the disruption of natural disease dynamics. The work of Ostfeld and Keesing (2012) highlights the intricate relationship between biodiversity loss and the prevalence of zoonotic diseases. Contemporary problems in medical ecology must consider the broader ecological context to formulate effective strategies that promote ecosystem health and, in turn, safeguard human health.

5. One Health Approach for Holistic Solutions:

In addressing the contemporary problems of hygiene and medical ecology, an integrated and holistic approach is imperative. The One Health framework, advocated by practitioners like Zinsstag et al. (2011), recognizes the interconnections between human health, animal health, and the environment. Embracing the One Health approach enables the development of comprehensive solutions that consider the complexity of contemporary challenges. This includes collaborative surveillance, interdisciplinary research, and policy interventions that bridge the gaps between medicine, ecology, and public health.

In conclusion, the contemporary problems in hygiene and medical ecology are multifaceted and demand nuanced, interdisciplinary solutions. Urbanization, environmental pollution, emerging diseases, biodiversity loss, and the interconnected nature of global health necessitate a paradigm shift in how we approach public health challenges. By drawing on insights from various

disciplines and building on collaborative frameworks, we can forge a path toward a healthier and more sustainable future.

CONCLUSION

In navigating the intricate landscape of contemporary problems in hygiene and medical ecology, this article has illuminated the dynamic challenges that shape the intersection of human health and environmental well-being. The accelerating forces of urbanization, environmental pollution, the global spread of diseases, biodiversity loss, and the interconnectedness of health systems demand a reimagining of our approach to public health and ecological sustainability.

As we conclude this exploration into contemporary problems in hygiene and medical ecology, the path forward demands collaborative, interdisciplinary solutions. Recognizing the interconnected nature of these challenges, practitioners, policymakers, and researchers must unite in a shared commitment to holistic approaches that transcend traditional disciplinary boundaries.

The insights gleaned from understanding these contemporary challenges serve as a foundation for the development of evidence-based policies, innovative technologies, and community-engaged interventions. In forging this path, we embark on a journey toward a future where public health and environmental sustainability are mutually reinforcing, creating a world resilient to the complexities of the 21st century.

In essence, the contemporary problems in hygiene and medical ecology present not just challenges but opportunities for transformative change. By embracing the complexity of these issues and cultivating a collective dedication to holistic solutions, we pave the way for a healthier, more resilient, and sustainable coexistence between humanity and the environment.

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