Work and Health
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Editorial

Work and Health: Foreword

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1. Introduction

Work is the propellant of human progress and well-being; it is so thanks to men and women who spend a substantial part of their life outdoors or underground, in an extremely hot or cold ambient, breathing dust, fumes and hazardous chemicals, in contact with harmful physical agents such as noise, vibration or radiation, moving heavy equipment, materials and patients, sometimes making violence to their natural biorhythms and losing their family and social links by working at night and trying to sleep daytime, when everyone else lives. For them, work, while providing the financial means for living and raising a family, can also be a source of disease and suffering.

Workers sell their own workforce, either manual or intellectual, in exchange for a salary, by which they take their role in the community and feed themselves and their families, thus reproducing it. Therefore, when a worker gets sick, the damage extends beyond himself: to the family, the community providing partial compensation, the company that loses his labour experience and productivity, his workmates exposed to the same hazards in the same workplace, and, well beyond that, to all workers all over the world who share the same workplace hazard. What distinguishes Occupational Medicine from the other medical disciplines is that occupational diseases cannot just be treated individually and the consequences of their diagnosis are far-reaching. A correct diagnosis of an occupational disease requires a multidisciplinary competence: clinical skills and knowledge of internal medicine to exclude similar diseases of non-occupational origin but must be coupled with knowledge of industrial toxicology, industrial hygiene, industrial technology, work organization, and epidemiology. A wrong diagnosis has consequences not only for the individual patient, but again for Society overall, either when the occupational origin is overlooked, or incorrectly identified. On the other hand, a precise definition of the disease entity is necessary to detect credible exposure-disease links through rigorous epidemiological methods; much emphasis has been put on exposure misclassification in occupational epidemiology, while much less attention has been devoted to disease misclassification as a source of false negative findings.

Multidisciplinarity is the essence of Occupational Medicine: there's no other medical field extending so broadly across vast areas of human knowledge. The vastness of Occupational Medicine and its achievements in Prevention have provided the most fertile background to meet emerging Environmental Health issues that resulted from human agricultural and industrial trades, allowing much progress toward protecting workers' health and the environment in developed countries. However, in this era of the global economy, primary and manufacturing industries have massively moved to developing countries, aiming for cheap labour and less restrictive regulations protecting workers' rights, health, and well-being, which have failed to follow. Exposures once plaguing workers in the developed world have reemerged where capabilities to diagnose and prevent them are lacking while, in Western countries, immigrant workers have replaced the local workforce unwilling to continue physically demanding and underpaid jobs, frequently in unprotected conditions. Also, as the cloud of dust and fumes started to clear up in the workplaces and the general environment, new health threats have emerged from traditional occupational and environmental hazards, such as lung cancer and autoimmune and kidney diseases and silica, and old, well-known occupational diseases have been discovered in novel and unexpected work circumstances, such as the merging epidemic of silicosis among young workers in the artificial stone industry. Also, while the use of persistent organic pollutants for industrial and agricultural purposes has been discontinued, the need to assess their immunotoxicity and endocrine-disrupting effects has emerged at the population level for the widespread

contamination of foodstuffs and the necessary continuing Public Health use in countries still plagued with malaria and other vector-borne diseases.

It is undeniable that exposure levels in the general environment are lower than in workplaces by several orders of magnitude; however, they extend over a large part of an individual's lifetime and the weakest and most susceptible part of the population, including children, pregnant women, elderly, and people under medication for acute or chronic diseases. Genetic polymorphisms and acquired drug-induced metabolic enzyme activation or inhibition are more likely to interact due to the large size of the exposed population. Although the increasing coverage of environmental issues in the Western media promotes the opposite perception, substantial though late, slow, and insufficient progress in air quality is taking place to achieve the changes imposed by global climate change. Still, it should not be forgotten that much of the healthier environment the West enjoys results from moving the primary industries and dirty jobs to developing countries and fast-growing economies accepting pollution and blame for CO_2 emissions in exchange of employment. On the other hand, global climate change and technological developments have opened new areas for Occupational and Environmental Medicine to foster adaptation and promoting human progress: work in extreme environments is our future and a formidable challenge for Occupational Medicine and Occupational Health in general.

However, oddly enough, the offer of occupational and environmental health programs in the academy is frequently inadequate. As a consequence, competence in Occupational Medicine is fragmented among other medical disciplines, and the multidisciplinary view connecting the different contributions to its cultural background is being lost. It is like pretending to understand what's going on inside a large room by looking from several keyholes located differently; everyone will catch a small part of the whole picture but not the whole of it.

Currently, 69 Occupational Health journals are published worldwide, 25 of which limit their scope to specific aspects. Their median SCIMAGO journal rating (SJR) among Public Health, Environmental and Occupational Health journals is 420; only eight are in the first quartile and 27 in the fourth quartile. Sixteen are published in the local idiom or address mainly a national audience. The highest SJR is 19, and the highest 2024 impact factor is 5.02. By contrast, Occupational Health is the point where progress in all domains of clinical medicine and bench science gather together, to find immediate application in protecting workers' health. Clinical Occupational Medicine is still necessary but insufficient to achieve the goal of preventing occupational diseases and promoting well-being: epigenetics, metabolomics, and nanoparticle research are mostly relevant in modern Occupational Health, not to mention the enormous scientific challenge of the so-called exposome, which would connect Occupational Health to the major scientific advancements.

2. Aim and Scope

As a new international leading journal, *Work and Health* (*WAH*) aims to reflect this progress in the vast field of Occupational and Environmental Health. Attracting the best science articles is a main goal to achieve the reputation necessary to gain influence and bring the discipline back to the relevance offered by the seminal Bernardino Ramazzini book The Morbis Artificum Diatriba in 1700. At the same time, the specificities of global occupational health require special attention to safety and work issues in the developing countries. Therefore, the editorial team will be supportive to the authors from developing countries, with tutorials, courses, translation services, and other tools. Such strategy is costly in terms of time, efforts, and commitment of the editorial team but will be rewarding for the journal and the occupational health community worldwide.

Work and Health (*WAH*) is broad in scope, welcoming original, novel fundamental research. WAH focuses on all relevant Occupational and Environmental Health themes and aims to the highest standards in occupational epidemiology, toxicology and biomarkers, and industrial hygiene, with special attention to the omics sciences, nanotoxicology, robotics, and new ICT tools to monitor and identify links between exposure and disease.

Topics of interests include, but are not limited to:

Occupational Medicine
Occupational Epidemiology
Occupational Health
Occupational Hygiene
Occupational and Environmental Toxicology
Agricultural Health
Migrant Workers
Occupational Health Surveillance in Developing Countries
New Occupational and Environmental Hazards
Environmental Epidemiology
Air and Water Pollution
Climate Change, Work and the Environment

Work in Extreme Environments
Nanotoxicology
Robotics
Gene-Environment Interactions
Reproductive Epidemiology
OMICS in Occupational health
Sleep and Work
Ionizing Radiation
Work-Related Stress
Surveillance, Prevention, and Compensation of Occupational Diseases

3. Conclusion or Outlook

Work and Health (WAH) will not be just another journal; the Editorial Board and the Editor-in-Chief are committed to making it the journal connecting all new scientific advancements to the practice of Occupational and Environmental Health worldwide, with special consideration on the fast-growing economies and developing countries. The quality of the Editorial Board staff and its international and generational blend will allow continuity in the editorial line and attract high-quality, high-impact research. These are the requisites to acquire the scientific reputation necessary to support the progress in extending health and safety coverage to workers worldwide and protecting the global environment.

We also look forward to a constant flow of information and opinions from the readers and the community of Occupational and Environmental Health scientists and practitioners so that our journal will contribute to their scientific growth and grow with them.

Acknowledgments: A special thank to all the Editorial Board members who accepted to be engaged in this effort and all readers and stakeholders who will support *WAH* to achieve its goals.

Conflicts of Interest: The author declares no conflict of interest.