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Global Occupational Health: Current Challenges and the Need for Urgent Action

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ABSTRACT

Background: Global occupational health and safety (OHS) is strictly linked to the dynamics of economic globalization. As the global market is increasing, the gap between developed and underdeveloped countries, occupational diseases, and injuries affect a vast number of workers worldwide. Global OHS issues also become local in developed countries due to many factors, including untrained migrant workers in the informal sector, construction, and agriculture.

Objective: To identify the current status and challenges of global occupational health and safety and the needs for preventive action.

Findings: Absence of OHS infrastructure amplifies the devastating consequences of infectious outbreaks like the Ebola pandemic and tuberculosis. Interventions in global OHS are urgently needed at various levels:

1. Increased governmental funding is needed for international organizations like the World Health Organization and the International Labor Organization to face the increasing demand for policies, guidance, and training.
2. Regulations to ban and control dangerous products are needed to avoid the transfer of hazardous production to developing countries.
3. The OHS community must address global OHS issues through advocacy, position papers, public statements, technical and ethical guidelines, and by encouraging access of OHS professionals from the developing countries to leadership positions in professional and academic societies.
4. Research, education, and training of OHS professionals, workers, unions and employers are needed to address global OHS issues and their local impact.
5. Consumers also can influence significantly the adoption of OHS practices by demanding the protection of workers who are producing he goods that are sold in the global market.

Conclusions: Following the equation of maximized profits prompted by the inhibition of OHS is an old practice that has proven to cause significant costs to societies in the developed world. It is now an urgent priority to stop this process and promote a harmonized global market where the health of workers is guaranteed in the global perspective.

Key Words: ethics, globalization, inequality, occupational health, social and global impact

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WHAT IS GLOBAL OCCUPATIONAL HEALTH?

If global health entails a wider approach of public health at the international level, occupational global health focuses on prevention of illnesses and injuries in the workplace under a worldwide perspective. The global implications of occupational health and safety (OHS) are directly related to the internationalized dynamics of the global economy. Given the tight connection of global occupational health with global economics, multidisciplinary expertise is needed to understand the links between economic development and the potential effects on the health and safety of workers. The theme of global occupational health also is prompting discussion on the new directions for research, advocacy, and capacity building to prevent and manage health and safety in workplace settings worldwide.[1]

Globalization, understood as the removal of barriers that prevent growth of trade and cross-border investment, is typically considered a positive transformation of modern times. The Cato Institute is a "policy research organization dedicated to the principles of individual liberty, limited government, and free markets" that believes in globalization: "There are at least three

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The authors declare they have no conflicts of interest.

http://dx.doi.org/10.1016/j.aogh.2014.09.006

fundamental blessings of globalization on nations that embrace it: faster economic growth, reductions in poverty, and more fertile soil for democracy."[2] In reality, globalization is not an entirely even phenomenon and does not necessarily promote growth and wealth at the global scale. A rigorous analysis of income and wealth distribution in more than 20 countries over the past 2 centuries has shown mounting inequality and an increasing gap between developed and developing economies that seem inevitable without major policy changes.[3] Globalization has promoted the introduction of market systems in many countries with the weakest capacities to create and enforce a regulatory system to protect workers and consumers.

This has resulted in the appearance of existing hazards in new forms. For example, market liberalization of pesticide distribution under structural adjustment programs in Tanzania led to an 80-fold proliferation of pesticide retailers,[4] accompanied by sale of decanted and unregistered pesticides[5] as well as the involvement of children in the sale of pesticides.[6] Globalization also has created new types of hazards, like the explosion of e-waste in China, Ghana, and other developing countries receiving electronic detritus from more developed countries, creating huge risks to populations scavenging off uncontrolled waste dumps.[7,8]

Economists generally assume that OHS is a later step in the sequence of development and should normally be undertaken once the economy is strong enough to absorb the additional expenses required by preventive action. Rapid industrialization is thought to require investment in production first and that, only once wealth is created, can it be invested in social goods such as improved health, worker protection, and protection of the environment. Therefore, these social goods are generally considered to be amenities, satisfying but not essential.[9] This acceptance of health risks in the name of industrialization has catastrophic implications, not only for the developing countries but also globally. Many multinational corporations interpret globalization more as an opportunity to take advantage of free-trade liberalization, low-wage labor, and removal of protective regulations for workers' health and the environment, rather than a contribution to improve health and wealth of the less developed parts of the globe. In fact, rather than an opportunity to harmonize health and safety standards upward,[4] globalization risks becoming a "race to the bottom."[10]

Current Challenges in Global Occupational Health

Occupational health and safety should have higher priority on the international agenda, but improvement of OHS infrastructures and systematic preventive approaches in industrializing countries are extremely slow. Although many countries have developed laws and enforcement activities, working conditions for the majority of the world's workers do not meet the minimum standards and guidelines set by the World Health Organization (WHO) and the International Labor Organization (ILO).[11] Until now, only 24 countries have ratified the ILO Employment Injury Benefits Convention (No. 121), adopted in 1964, which lists occupational diseases for which compensation should be paid and only 31 have ratified the Convention on Occupational Health Services (No. 161). The adoption of these conventions should be the first step toward the implementation of an OHS system. OSH regulations cover only about 10% of the population in developing countries. These laws omit many major hazardous sectors like agricultural and domestic work, typically not considered "industries." The informal sectors typically include more sensitive subpopulations in the workforce like child labor, pregnant women, and the elderly, with limited access to health care.

Only 5% to 10% of workers in developing countries and 20% to 50% of those in industrialized countries have access to adequate occupational health services.[12] Although in a survey among International Commission on Occupational Health members from 47 industrialized and industrializing countries, 70% reported OHS being in place and 80% noted the existence of a national institute for OHS, the estimated coverage of workers with OHS services was only 18%.[13] The WHO and the ILO have elaborated programs to foster the development of international occupational health, but the real effect of this effort is still not optimal likely due to insufficient funding.[12] ILO plays an important role in promoting OHS policies and sets minimum standards in conventions based on ethical principles.[14] ILO conventions include No. 81(labor inspection), No. 155 (occupational safety and health), No. 161 (occupational health services), No. 170 (chemical safety), and No. 174 (prevention of major industrial accidents). Additionally, the core ILO conventions include freedom of association, child labor, forced labor, and discrimination issues, which precludes OHS conventions from full budgetary resources. Although the ILO is an important reference for OHS standards, conventions and recommendations require national ratification and the lack of ratification and subsequent enforcement undermines the impact of the conventions. Moreover, some have criticized the shift in ILO standards away from specific measures with high levels of accountability toward promoting high-level global labor standards that allow flexibility in application, ostensibly to allow countries with different levels of economic development to adapt standards to their local context. This, in practice, allows greater accommodation of management discretion at the workplace.[15]

The WHO promotes action in global OHS through a network of WHO Collaborating Centers for Occupational Health. The strategy is now defined by the WHO Global Plan of Action for Workers' Health, 2008-2017.[16] Reports of the action are given periodically[17] regarding the updates of the plan's objectives:

1. Definition and implementation of workers health policies.
2. Health protection and promotion in the workplace.
3. Improvement of performance and access to OHS services.
4. Communication of evidence for action in practice.
5. Incorporation of workers health in other policies like international trading.

The Global Occupational Health Network newsletter is published on the WHO's Occupational Health website and provides a forum for the implementation of the WHO Global Plan of Action for Workers' Health. (http://www.who.int/occupational_health/publications/newsletter/en/). The effectiveness of the WHO plan at the national level is limited by the inadequate resources that are necessary to reach a successful level of implementation.

The WHO provides also OHS documentation, mostly accessible online and with detailed recommendation and protocols on a variety of issues (www.who.int/occupational_health/publications/en/).

Regardless of these international plans of action and availability of documentation, OHS remains underdeveloped in the poorest countries that need more direct support with capacity building and technical assistance, as well as the policy space to pursue less directed and restricting models of economic development in the context of unequal global relations.

Lack of OHS Infrastructure and Global Consequences

The inadequacy of OHS protections in developing countries is dramatically illustrated in the consequences of the 2014 outbreak of the Ebola virus, during which more than 100 health care workers were infected and more than half have died, among them Sierra Leone's leading doctor in the fight against Ebola, Sheik Umar Khan, considered a national hero. The implication of a lack of knowledge and functional preventive OHS infrastructure has enormous implications in these cases, where the shortage of health care workers is already a public health problem that is further amplified by the disease and deaths caused by the exposure to biological agents. In endemic or at-risk areas like West Africa, OHS should ideally be well established and ready to handle critical situations with adequate safety procedures and personal protective equipment. Drug-resistant tuberculosis (TB) is another important biological hazard affecting health workers in many parts of the world. With a mortality rate comparable to Ebola, this occupational hazard also has endemic characteristics.[18,19] The lack of an OHS infrastructure in South Africa, one of the countries with the highest drug-resistant TB burden globally, remains a serious challenge for the control of the disease, evident in that more than half of the participants at a provincial workshop in March 2014 reported that they had never conducted a TB infection control workplace assessment in response to TB cases.[20]

The health burden of poorly controlled industrialization is not limited to communicable diseases. Projections of the incidence of chronic neurodegenerative diseases indicate a dramatic increase in industrializing countries likely due to environmental exposure overlapping prolonged aging of the population, resulting in higher cumulative lifetime exposure.[21]

What is to be Done about Global Occupational Health and Safety Development?

The multiple causes of global OHS inequalities require coordinated and multidisciplinary responses that include capacity development in developing countries, policy interventions to retain skilled professionals in countries that need them most, checks and balances on international trade, restructuring of trade agreements to prioritize OHS commitments, and challenging the existing domination of global economic relations by rich countries acting in the interests of large vested interests. For example, the continued promotion of chrysotile asbestos as "safe" by countries with vested industrial interests in the asbestos industry remains a blot on the integrity of global OHS.[22]

Insufficient availability of OHS services has a negative connotation not only on a strictly clinical perspective, in terms of diagnosis and treatment of work injuries and disease, but also on awareness of health risk and hazards. A large number of workers do not benefit from any right-to-know entitlements, and are accordingly not properly informed, instructed, and trained on risk hazards and safety procedures in developing countries. The increased mobility of workers from the informal sector, as it typically takes place in most developing countries, amplifies these limitations even further. Noneducated and poorly trained supervisors and workers also may carry unsafe behaviors across borders when migrating, especially in job sectors like construction, agriculture, cleaning, and the restaurant industry. This is one of the reasons why global OHS becomes a local issue for the industrialized country, due to the large and constantly increasing number of migrant workers.

A number of educational programs for employers, supervisors and workers are available through international bodies like the ILO, WHO, Pan American Health Organization, and Salud, Trabajo y Ambiente. The availability of OHS e-learning programs offers increasing opportunities to access good-quality information. The Workers' Health Education program (www.workershealtheducation.org) of the Coronel Institute of Amsterdam offers a variety of freely available online educational resources, in English and Spanish, and useful networking facilities.

Global Trade

The other reason that global OHS is also a local problem for developed countries lies in the economic systems linking high-development countries with those in the global South. The wealth of many countries in the North is built on economic systems whose success is inextricably linked to the extraction of production and primary resources from countries of the South in ways that keep the costs of labor low in the sending countries. The processed materials are then re-exported to the South within an economic system that provides immense obstacles to developing countries seeking to break out of the cycle of poverty and to spend scarce resources on health and safety measures.

For this reason, there has been intense interest at international level in establishing human rights norms for transnational corporations and other business enterprises that would ameliorate the worst excesses of exploitative working conditions in developing countries and establish a normative framework to guide states and corporations in the protection of workers' rights, including rights to health and safety.[23] Significantly, the UN Special Rapporteur on Health included in a 2012 report a special focus on the right to occupational health as a component of the right to health recognized in International Human Rights Law.[24] Whether such measures will ultimately provide adequate checks and balances remains to be seen, but deserves maximum support from the international OHS community to provide a counterbalance to the current situation.

Similarly, there is currently a vigorous discussion in international circles on the ethics of international migration of skilled human resources in health with suggestions that receiving countries should carry an obligation to compensate the developing countries that trained such professionals and who are losing such valuable human capital to countries of the north.[25,26] In the occupational setting, this problem has not yet arisen, principally because countries of the South are so lacking in skilled OH professionals to the extent they could be "poached" for Northern industrialized countries. However, any policies on capacity development in OHS for the South would have to seriously consider the long-term sustainability of retaining skilled OHS professionals in countries where they are needed most. Thus, the implications of free trade for OHS are myriad, not just in the production process, but also in the global distribution of human resources trained in OHS.

An example of well-intended international policy to protect occupational health in the South is the Globally Harmonized System for Chemical Hazard Classification and Communication (GHS), a standardized system for characterizing hazards associated with chemicals across the globe that was adopted by the UN under the auspices of the Inter-Organization Programme for the Safe Management of Chemicals in 2002. The GHS is intended to enhance the protection of the people and the environment by providing an internationally comprehensive system for hazard communication, including establishing a recognized framework for those countries without an existing system; reduce the need for duplicative evaluation of chemicals for hazards; provide an informational framework on which countries can base programs for the sound management of chemicals and thereby facilitate international trade in chemicals whose hazards have been properly assessed.

However, preliminary findings in developing countries have shown that comprehensibility as envisaged by the GHS is far more complex than imagined, particularly for workers with limited education and where training programs are scant, as a result of which, comprehension of chemical hazards is low and systems to protect workers from hazards accordingly flawed.[27-29] As a result, the GHS, intended to protect developing country populations from chemical risks, may inadvertently end up doing the converse, by facilitating trade in chemicals in countries without the systems to regulate chemicals effectively for safety.[30]

Ethical Guidelines in Global OHS

In a relative absence of regulatory systems, ethical codes provide OHS professional with guidance especially in developing countries like Africa[31] although the process is still far from being in place on a large scale. OHS professionals face challenges of dual loyalty in many of their workplace settings where the interests of worker-patients are subjugated to third-party interests in ways that threaten to violate the rights of workers.[32] This requires both high ethical conduct from the professional and also institutional interventions to protect the independence of OHS professionals and address systemic factors that give rise to unethical practice. Negotiating reasonable resolution of dual loyalty conflicts in developing countries is rendered difficult by generally weak legal protections for workers and health professionals, a dominance of neoliberal thinking in state policy and the preference of foreign direct investment above other social goods. For that reason, ethical codes have to take robust positions on maintaining OHS independently and avoiding conflict of interest.

CONCLUSION: THE NEED FOR RAPID MAJOR INTERVENTIONS

Occupational health and safety should be an integrated component of social and economic development, both at the global and country levels. This means that when, for example, policy reform of health systems is undertaken, inclusion of workplace health and safety should be integral to such measures, such as occurred in Brazil under the National Health System programs.[33] Strong legal

systems supported by uncorrupted governments, willing to adopt full rights for women, children, and workers, and provide social insurance such as workers' compensation are needed for the success of an OHS program. Academic OHS professionals can advance knowledge and disseminate training, but for capacity development efforts to be truly sustainable, they must be linked to wider interventions aimed at achieving more equitable legal and economic systems that promote the social determinants of OHS.

Interventions in global OHS are therefore urgently needed at the following levels:

1. Increased governmental funding is needed for international organizations like the WHO and the ILO to face the increasing demand for policies, guidance, and training.
2. Regulations to ban and control dangerous products are needed to avoid the transfer of hazardous production to developing countries.
3. The OHS community must address global OHS issues through advocacy, position papers, public statements, technical and ethical guidelines, and by encouraging access of OHS professionals from developing countries to leadership positions in professional and academic societies.
4. Research, education, and training of OHS professionals, workers, unions, and employers are needed to address global OHS issues and their local impact.
5. Consumers also can influence significantly the adoption of OHS practices by demanding the protection of workers who are producing the goods that are sold in the global market.

A significant component of the textile market is produced by countries like Bangladesh, where a high incidence of fatal injuries is due to fires caused by insufficient or nonexisting fire protection.[34] Sandblasted blue jeans are marketed from countries where the production of these goods causes exposure to silica.[35] Consumption of agricultural products treated with pesticides implies worker exposure in countries with poor OHS standards and preventive infrastructures. There are many examples, the list of which is seemingly endless, as the globalized economy transfers the production of global goods to sites where OHS is not implemented and standards are not enforced. Maximizing profits where OHS does not exist has proven to cause significant costs to societies at the global level. It is now an urgent priority to stop this process and promote a harmonized global community where the protection of workers is universally guaranteed.

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