A toxic industry triggers global concern

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Billions of people use mobile phones, computers, and other electronic products every day, but few people look at their phone or TV and think about toxic chemicals harming workers. However, electronics manufacturing uses more than a thousand chemicals – many of them hazardous. The electronics industry has grown rapidly in Asia, and women became the prime labor force. As a result, this chemical-intensive industry has taken a human toll, and workers have paid with their health.

Han Hye-kyung struggles to speak and to walk, but that was not always the case. She started working in an electronics factory making LCD screens in her twenties where she used organic solvents and lead solder but received no training, information, or adequate protection. A brain tumor resulted in a loss of muscle coordination and speech. Now she requires assistance for eating, walking and using the restroom. As Han Hye-kyung says, "Often, I just want to cry – but I cannot because my eyes cannot produce tears, due to the surgery." Unfortunately, there are hundreds like her that have either died or contracted serious illnesses as a result of work in the Korean electronics industry.

Exposure to toxic chemicals in electronics manufacturing is not only a national worker safety problem in South Korea but is a global issue that has drawn the concern of governments in a UN agreement known as the Strategic Approach to International Chemicals Management. In 2009, more than 100 countries (including South Korea) agreed that hazardous chemicals in the lifecycle of electrical and electronic products poses a threat to human health and the environment. The UN defined a further need to address hazardous substances in a clear way for workers, consumers and affected communities located near manufacturing and disposal sites. This resulted in recommendations on elimination of hazardous chemicals, prevention measures, worker right to know, health-protective exposure limits, the right to form trade unions, and effective liability and compensation mechanisms among others. These UN recommendations should become benchmarks for performance by Korean companies and the government.

The threat to human health from chemical exposures in the electronics industry also caught the attention of the American Public Health Association (APHA). In 2012, APHA passed a unanimous resolution which outlined concerns with the rapid growth of the industry and the accompanying increased use of toxic substances and adverse health outcomes – particularly in Asia. APHA urged companies to, "ensure that subcontractors have the capacity to protect workers and the surrounding communities before transferring technologies and manufacturing processes to them and continue to monitor subcontractors during manufacturing to ensure protection of worker and community health."

However, many companies are not abiding by the public health guidance to protect workers and surrounding communities. Six Samsung subcontractors in South Korea were permanently blinded in 2016 when their company used methanol instead of ethanol and failed to provide even basic protective gear. This month, one of the workers, Kim Yeong-shin, testified at the UN Human Rights Council, "I lost my vision and suffered brain damage while making your mobile phones... Our lives are more important than corporate profits."

That was not the first time the Human Rights Council heard about problems in the Korean electronics industry. In 2016, the UN Special Rapporteur for toxics, Baskut Tuncak, conducted a mission visit to

South Korea. In his 2016 report presented to the 33rd Session of the Human Rights Council, the Special Rapporteur reported links between work in the Korean electronics industry and serious illnesses including lymphoma, malignant brain tumors, myelogenous leukemia and non-Hodgkin's lymphomas, as well as aplastic anemia, reproductive abnormalities and other health impacts. The report noted that most of the harmed workers were women in their twenties.

To the surprise of UN officials, Samsung claimed that no hazardous substances are used in its production processes. The UN debunked this claim and noted in their report that, "There is strong evidence that hazardous substances are used in electronics manufacturing." Finally, the Special Rapporteur expressed concern over the difficulty sick workers have in accessing compensation, "due to the high burden of proof imposed on the claimants."

The electronics industry has attempted to deflect responsibility by denying the facts. In 2016, just before Chusok, many Koreans may recall press stories that claimed the UN Special Rapporteur's report found no scientific connection between semiconductor industry working conditions and diseases and even denied any connection between diseases and work at Samsung. The UN Special Rapporteur said the press reports were "far from the truth" and immediately responded to set the record straight, "When it comes to protecting the rights of workers from toxic threats, there is considerable unfinished business for the electronics industry and the Government of Korea."

Many workers have been seriously injured or killed working in electronics production around the world but the victims are largely invisible to the global users of computers, mobile phones, TVs, and other electronic products. That is why IPEN, a network of public interest organizations in 100 countries working for a toxics free future, decided to collaborate with SHARPS and put a human face on this public health crisis in a new film called "Stories from the Clean Room." The film provides vivid testimony from 21 former workers, spouses and parental survivors. Han Hye-kyung, who appears in the film, is dedicated to preventing future harm from toxic chemicals used in electronics; "They did not protect me and we should never let them do it again...I really hope not to see victims like myself anymore."

Links

Strategic Approach to International Chemicals Management (English) http://www.saicm.org/

American Public Health Association resolution on electronics (English)

https://apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/21/08/43/improving-occupational-and-environmental-health-in-the-global-electronics-industry

UN Special Rapporteur, Baskut Tuncak, report on Republic of Korea (Arabic, English, Chinese, French, Russian, and Spanish)

http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/33/41/Add.1

Newstapa interview with UN Special Rapporteur, Baskut Tuncak (Korean) https://newstapa.org/35289

Hankyoreh Op-Ed by UN Special Rapporteur, Baskut Tuncak (Korean and English) http://www.hani.co.kr/arti/opinion/column/761730.html

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