Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Lack of understanding of MI and workplace adjustments
Lack of coordination between employment support agencies and mental health services.

Solutions include:
- Improving access to employment; social enterprises, such as social firms, provide responsive accessible workplace environments
- Commitment by employers (including government agencies) to quotas
- Social procurement from social enterprises for products and services

A greater recognition of the importance of vocational rehabilitation to prepare people for the world of work, effective job matching and ongoing employment support is a key step in helping people to get and keep a job. Building the mental health literacy of employers is also critical.

WISE Employment has a specialist program, WISE Ways to Work, which focuses on innovation in employment for people with MI. Its team of occupational therapists and vocational coaches assists people with MI to:
- build vocational awareness, confidence and cognitive and social skills in its evidence based vocational rehabilitation program,
- Employ Your Mind get exposure to different work environments through work-orientation opportunities transition into responsive employment with employers who have been trained in best practice workplace support.

Evaluation of the two-year pilot demonstrated improved cognitive functioning and belief in ability to work, improved job retention as well as increased confidence to provide workplace support by employers. WISE is now replicating WISE Ways to Work in other locations.

**SPL05**

**Occupational health for migrant workers in Spain, why does it matter?**

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Spain is the fourth country with the largest number of immigrants in Europe, resulting in a large proportion of migrant workers. Women constitute 48% of international migrants who suffer poor working conditions linked to the positions they mainly occupy within certain fields such as the domestic sector and caregiving services. In this connection, Spain is the second country in Europe with the highest number of domestic workers (619,600 people). In addition, 95% of caregivers in Spain are Latin American women. It also should be noted that during the COVID-19 pandemic, women have been the most affected, making up 54.8% of the total infected. They have been frequently working under unsafe and hazardous OHS conditions, often without the necessary personal protective equipment (PPE) and many being exposed to significant risks due to their direct personal contact with patients with COVID-19.

To date, many researchers have examined the working conditions of immigrants in Spain who are known to have to deal with adverse working conditions. The main objective of this research is to investigate the patterns of work and working conditions of immigrants living in Spain and to understand how these factors may affect their health.

Many of our results have showed:
- In general, four employment sectors were most commonly occupied by these immigrants, including caregiving and food service for women and agriculture and construction for men. Most immigrants were from Latin America, either unemployed or working part-time jobs, and not hired under an employment contract. Most worked in low-qualified jobs, and were exposed to occupational hazards such as falls from heights, manual handling of materials, and psychological strain. The lack of training on occupational risk prevention and labour rights were related to a low identification of work-related situations leading to a negative impact on the health of immigrants.
- In caregiving sector (mainly occupied by women) the main risks identified were biological risks, physical attacks, falls, wounds and musculoskeletal complaints related to handling patients and carrying out household chores. Most of them had not taken an occupational health test and did not report accidents occurring in the workplace for fear of losing their jobs. The main health problems were related to physical and mental health (such as musculoskeletal diseases and stress).

During the current COVID 19 pandemic, women have been the main providers of care and domestic work in the homes where they have been confined, renouncing their own freedom of movement and social interaction. They have been responsible of all the domestic work, resulting in non-stop working days during the lockdown.

**SPL06**

**Preventing Tuberculosis (TB) in health workers and silica-exposed occupations**

**Perry Gottsfeld**

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The COVID-19 pandemic has reminded us of the importance of workplace exposures and transmission in the control of airborne infectious diseases. The importance of workplace transmission of Tuberculosis (TB) has been well documented for decades, yet these past lessons have largely gone unheeded for health workers and silica-exposed occupations which are some of the highest risk subpopulations. It is estimated that health care workers who represent 3% of the global population made up 14% of reported COVID-19 and the same front-line workers are at three times greater risk for active TB compared to the general population. Despite these known risks, multiple studies have demonstrated that few health workers are provided with training or protections.

Workplace TB prevention measures overlap with measures known to reduce the spread of COVID-19 and include improved ventilation, UV germicidal irradiation, personal protective equipment and training. These dual pandemics present an opportunity to refocus investment in Infection Prevention Control (IPC) measures in healthcare settings. Silica dust exposures and silicosis are known to significantly increase the risk of active TB among miners, construction workers and other exposed occupations. Reducing silica dust exposures has been shown to reduce TB incidence in high-risk workers. Recent studies have demonstrated that informal sector miners experience much higher rates of TB infection than large-scale miners. However, low-cost dust controls have been shown to reduce respirable silica dust by 80% which can have a large impact in reducing TB and silicosis. Workplace interventions to reduce TB in healthcare setting and among silica-exposed workers are cost effective and are considerably less expensive than treatment. The International Commission on Occupational Health (ICOH) has been taking an active role in working to increase recognition of workplace interventions to reduce TB transmission. Starting in 2017 the organization spear-headed efforts at the United Nations (UN) to gain recognition for workplace interventions in the General...
Assembly TB declaration (2018) and has since engaged with UN agencies, the World Bank and other global TB funding organizations. There is a considerable need to expand primary prevention in the workplace as part of the global TB response.

**SPL07**

Reconciling epidemiological and toxicological data: Some general principles and the example of firefighters

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The fundamental relationship between toxicology and epidemiology is that increasing exposure results in an increasing response varying with the degree of individual susceptibility that at some point becomes either detectable and counted as an outcome or an increased density of cause that increases the frequency of a stochastic (random) response. Toxicologists count the magnitude of the response, epidemiologists count the frequency, and clinicians observe the new onset of outcomes that appear with exposure. A toxic agent may be the driver of the outcome or a contributing factor adding to or modifying risk. Firefighters demonstrate all of these effects as they occur together but outcomes are largely concealed or offset by lower personal risk factors. Epidemiology has therefore often been under-interpreted as a guide in terms of relative risk, a problem compounded by many methodological problems (chiefly low power, illogical aggregation of disease rubrics, dilution of risk estimates, and confounding. The data cannot be assumed to tell a simple story: interpretation requires understanding, not meta-analysis of phenomenology, which has been less helpful in etiological studies of firefighters than in other applications. What the investigator is usually seeking is an indicator of risk, which is not the same thing as the frequency of past experience. Epidemiology provides a summary of experience but it is a trailing indicator, because that experience happened earlier, in a different time and place. Looking backward, assessing causation in the individual case, one asks: “Given that something bad happened, what is the probability that it was causally related to the attribute in question?” but epidemiological methods apply to populations, not individuals. Causation analysis may benefit from Bayesian methodology to individualize risk estimates. Looking forward for prediction, in order to design more effective prevention, one asks: “Given the attribute, what is the probability that something bad will happen?” That requires a leading indicator, which more reliably emerges from an understanding of the mechanism driving the response. Looking forward, toxicology and biological markers (indicators), together with exposure science (the exposome) may have greater predictive potential than extrapolating from past experience imperfectly understood. The synthesis of epidemiology and toxicology needs to be taken further into analysis.

**SPL08**

Child Labor in Conflict Settings

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A high child labor rate is one of the greatest misfortunes that can be imposed on a society, destroying the innocence of the young, harming their health, and making them economically weak. Child labor is defined by the International Labor Organization as “work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical and/or mental development”. Around the globe, there is an estimated 152 million children affected by child labor; 72 million child laborers are in Africa, and 62 million are in Asia and the Pacific. While there has been a 38 per cent decrease of child labor globally, the progress against this phenomenon across regions has been uneven. In particular, conflict-stricken countries that continue to experience deteriorating political economy and governmental instability consequently show an increase in child labor rates, as demonstrated across the Middle East and North African region. Humanitarian crises, including conflict, often lower living standards which may result in reversals in progress to counter child labor especially in low- and middle-income countries. Children in circumstances of poverty, precarity and who come from marginalized minority groups are more vulnerable and at risk to child labor. While conflict settings exacerbate the threat posed to children, ensuring accurate and non-biased research in these settings is often difficult as a result of political and bureaucratic limitations. The hidden forms of exploitation that continue to occur in these contexts therefore require further research. This presentation aims to highlight the underlying causes for high child labor rates in conflict-stricken countries, such as political unrest, economic crises, and devastating wars.

**SPL09**

The challenge of ensuring business sustainability during outbreak

Adolfo Hernández

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Pre event:

All the aptitudes, attitudes, training and capacities for when the event happens are described.

Epidemic, pandemic event or outbreak:

Event: The event is any circumstance that requires an extra action, which goes through people and marks a before and after: floods, natural disasters such as the eruption of a volcano, outbreaks, epidemics or pandemics, in this case the COVID Pandemic -19.

Let’s refer to the Pandemic

The COVID-19 pandemic is a global pandemic currently underway derived from the disease caused by the SARS-CoV-2 virus. His first case was identified in December 2019 in the city of Wuhan, 9 capital of Hubei province, in the People’s Republic of China. The WHO recognized it as a pandemic on March 11, 2020, when it reported that there were 4,291 deaths and 118,000 cases in 114 countries.

In January 2020, when the personalities of the world of public and private health declared that Argentina would not be affected, I wrote the first infographic on COVID-19 that was disseminated by internal communications to all collaborators in Argentina. We anticipate the regulations. In mid-February 2020 we began to isolate in quarantine employees returning from destinations abroad that had the outbreak. Before the ministerial norm and every day we looked at the evolution on the John Hopkins epidemiology map. We added countries to the list in all cases before the ministerial norm, analyzing the total number of cases, mortality, and the speed of progression.