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"Occupational Medicine in the time of COVID-19" – chances beyond workplace settings

Health and safety at work is described as a fundamental right for workers (7). Therefore, the ongoing COVID-19 pandemic requires reconsidering many aspects of workplace safety, such as implementing additional personal protective equipment (PPE) or reorganising workflows. When we screened the literature for workplace safety in regard to SARS-CoV2/COVID-19 until April 2020, we mainly found investigations on healthcare workers [HCW]. Hence, we compliment the editorial by Antonio Mutti (8), who describes the relevance of occupational medicine when considering risk of infection that can result from workplace settings, bearing in mind different occupations.

Undoubtedly, HCW have a high risk of contracting the virus, and severe courses of the disease were observed even in young HCW (2). But even as some findings from studies in healthcare settings may be transferable to other occupational fields, healthcare workplaces are special and typically – not just during the pandemic – entail contact to infectious diseases, including the need to use PPE. So we wonder: What about the non-HCW? In many other occupational fields, the pandemic has also dramatically changed the daily work experience due to additional protection requirements. While HCW are used to PPE, for those not working in the health care system this is a new and maybe stressful and frightening situation that needs to be comprehensively explored to enable occupational health professionals to support all workers.

Moreover, health and safety at workplaces is not only important for the individual worker, but a healthy workforce is important for economic prosperity, too (6). This especially concerns workplaces which are part of the critical infrastructure, such as energy or food providers or civil protection as well as teachers or child care workers. Consequently, these workplaces have to be in the occupational medicine's focus as these can be highly relevant to maintain public life and security (12).

Importantly, when we discuss the relevance of occupational medicine, we should not solely focus on its crucial role of improving safety and health at workplaces, but we should consider that occupational medicine can also have a major impact on public health: One example is that doctors in companies will have more contact with young persons who often do not visit doctors regularly. This may allow the identification of persons with high risk of infection as well as providing information on preventive measures that are not limited to workplaces. Moreover, we have learned from past instances that occupational medicine provides a valuable approach to gaining understanding of exposures that are not limited to workplaces, as exposures at workplaces are variable and often high and surrounding conditions are usually easier to monitor than in non-occupational settings. For instance, lung cancer (11) resulting from asbestos, radioactivity, arsenic, or smoking was first described, and explored, at workplaces and nowadays these findings are important issues in public health.

Regarding COVID-19, workplace-associated explorations could help to understand complex virus-human-interactions and effectiveness of preventive measures. For instance, infection clusters have been reported in slaughterhouses (3), meat processing plants, and abattoirs (9) in the UK, Germany, France, Spain, the US, and Australia (4). Similar to MERS-CoV (Middle East respiratory syndrome coronavirus) in 2014 and 2015 (1, 5, 10) such clusters must be scientifically explored to learn what makes those settings more prone to virus outbreaks than others. Moreover, taking into account that exposures at workplaces may be easier to identify and compare than in private settings, investigations at workplaces may help identifying risk factors for certain groups of people or specific diseases. Hence, findings from occupational medicine could be relevant to understand and finally control this pandemic and therefore, information assessed through workplaces could be important for workplace settings and beyond.

Overall, we think that occupational medicine can be a key contributor to fighting SARS-CoV-2. To achieve these ends, we need more studies which systematically investigate different occupational settings in the light of the pandemic.

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