Lancet Glob Health 2020

Published Online
September 25, 2020
https://doi.org/10.1016/
S2214-109X(20)30411-3

Work a key determinant in COVID-19 risk

Using prevalence figures from the Global Burden of Diseases, Injuries, and Risk Factors Study 2017, Andrew Clark and colleagues (August, 2020)[1] estimated the global numbers of individuals at increased risk of severe COVID-19. Age, sex, and country were considered variables of interest, and a list of underlying health conditions relevant to the disease risk were included in the analysis, grouped into 11 categories. 1·7 billion people (22% [UI 15–38] of the global population) were estimated to be at risk of severe COVID-19, with increased risk for men, older people, African countries with high HIV/AIDS prevalence, and nations with high diabetes prevalence.[1] Ethnicity, socioeconomic deprivation, and obesity were cited as other risk factors for severe COVID-19. However, occupational risk was not assessed nor cited as a potential risk factor in the study by Clark and colleagues.

Despite the absence of systematic studies on work-related risk factors for COVID-19, the pandemic has been described as a substantial challenge for occupational health[2] and several types of working condition have been reported as putting workers at risk of infection worldwide. At highest occupational risk are health-care workers, emergency response workers, and workers in social services and the care of older people. Clusters of other occupationally exposed groups have been reported. Outbreaks of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) have occurred in factories operated by the meat and poultry processing industry. In such an environment, crowded living and transport conditions, numerous high-touch areas, and difficulties with workplace physical distancing could result in high risk for SARS-CoV-2 transmission.[3]

In Italy, according to compensation claims, SARS-CoV-2 infection occurred at the workplace in 19·4% of all cases; 30% of people of working age (15–65 years) became infected in the workplace.[4] Health-care workers have been recognised as the most involved occupational category (29 548 affected individuals as of July 5, 2020, in Italy[5]), and these individuals' dual role as victims and vectors must be highlighted. It will be important to implement policies that adequately factor in the occupational dimension of risk. Specific risk management at workplaces, protection of vulnerable workers, and the development of an occupational epidemiological surveillance system has to be considered as a priority in anti-COVID-19 strategies and in the management of vaccination policies.

We declare no competing interests.

Alessandro Marinaccio, Ranieri Guerra, Sergio Iavicoli
a.marinaccio@inail.it

Italian National Institute for Insurance against Accidents at Work, Rome 00143, Italy (AM, SI); and WHO, Geneva, Switzerland (RG)

1 Clark A, Jit M, Warren-Gash C, et al. Global, regional, and national estimates of the population at increased risk of severe COVID-19 due to underlying health conditions in 2020: a modelling study. *Lancet Glob Health* 2020; **8:** e1003–17.

2 Sim MR. The COVID-19 pandemic: major risks to healthcare and other workers on the front line. *Occup Environ Med* 2020; **77:** 281–82.

3 Dyal JW, Grant MP, Broadwater K, et al. COVID-19 among workers in meat and poultry processing facilities - 19 States, April 2020. *MMWR Morb Mortal Wkly Rep* 2020; **69:** 557–61.

4 Marinaccio A, Boccuni F, Rondinone BM et al. Occupational factors in the COVID-19 pandemic in Italy: compensation claims applications support establishing an occupational surveillance system. *Occ Environ Med* (in press).

5 Italian Institute of Health. SARS-CoV-2 epidemiological data section. 2020. https://www.epicentro.iss.it/coronavirus/sars-cov-2-dashboard (accessed July 6, 2020).