

The impact of COVID-19 on health and care workers: a closer look at deaths

World Health Organization
Health Workforce Department

Working paper 1
September 2021



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Acronyms

COVID-19	The coronavirus disease 2019
HCW	Health and care worker
IHME	Institute for Health Metrics and Evaluation
ILO	International Labour Organization
SARS-CoV-2	The virus that causes COVID-19
WHO	World Health Organization

Key messages

- Between January 2020 and May 2021, surveillance data reported to WHO showed 3.45 million deaths due to COVID-19. Of these only 6643 deaths were identified as being in health and care workers (HCWs), but this figure significantly under-reports the burden of mortality world-wide in this group.
- From different analytical approaches, this working paper attempts to estimate the global number of deaths in HCWs due to COVID-19.
- Based on the International Labour Organization's estimated number of 135 million HCWs employed in human health and social activities and WHO's surveillance data on all deaths reported to be due to COVID-19, mixed analytical approaches present a range between 80 000 to 180 000 deaths globally with a central population-based estimate of 115 500 deaths.
- These figures, however, largely derive from the 3.45 million COVID-19-related deaths reported to WHO, a number that by itself is proving to be much lower than the actual death toll (60% or more than reported to WHO).
- High-quality recording and reporting of infections and deaths among HCWs are fundamental measures to enable appropriate protective steps to be instigated and to support calls for significant investments in integrating occupational data in death certification and surveillance reporting.
- In view of the mounting evidence that the number of deaths due to COVID-19 among HCWs is much greater than officially reported, the need for protection through vaccination cannot be overstated.
- In countries where vaccination rates of HCWs remain low, tailored communication strategies must be designed and actively pursued to increase uptake and avert vaccination hesitancy.

Background

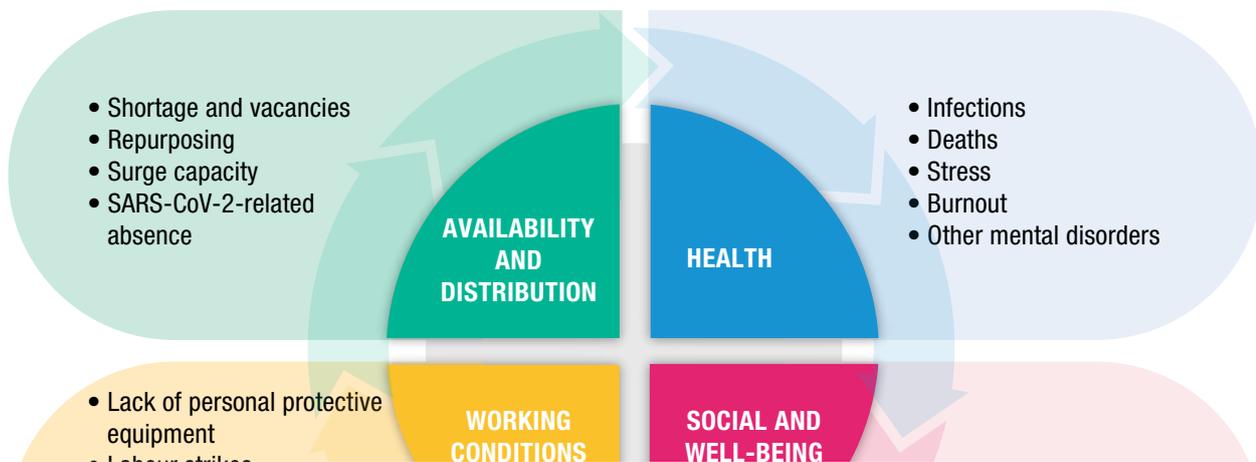
On 30 January 2020, the Director-General of the World Health Organization (WHO) declared the outbreak of disease due to a novel coronavirus a public health emergency of international concern: WHO's highest level of alarm (1). For health and care workers (HCWs) around the world the pandemic caused a heightened risk of occupational exposure to a new fast-spreading disease and created the need to adapt roles and responsibilities for a wide range of tasks and professional settings (2,3).

Intense global mobilization of public health and social measures in health facilities and communities followed, alongside the introduction of clinical protocols and individual risk assessment

in hospital settings (4). The pandemic resulted in many infections and deaths among HCWs and their households (5); the consequences continue to be measured by a diverse stream of anecdotal evidence and variable quality standards (6–9).

Undoubtedly, the health and care sector is one of the most severely hit by the pandemic as those employed or contracted in it face multiple hazards that affect their physical, mental and social well-being. HCWs have been documented to have a higher risk of infection with SARS-CoV-2 than the general population (10). Throughout 2020, the WHO Secretariat elaborated a framework to support the standardized measurement and reporting of the multidimensional impact of the pandemic on HCWs, including infection, death and mental health disorders but also the consequences of labour strikes and protests (Fig. 1) (11).

FIG. 1
Multidimensional factors related to COVID-19 that affect HCWs



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