The covid-19 crisis, mental health of healthcare workers and trade union actions

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1. Introduction

The Covid-19 crisis has had a severe impact on the already strained mental health of healthcare workers [HCWs]. Trade unions, workers and hospitals are in need of better understanding what measures and initiatives can be effective to mitigate these effects, in order to avoid that future pandemics put hospitals and their workers under similar pressure, and to address the more structural mental health problems in the sector. The project COMET (COvid-19 crisis, MEntal health of healthcare workers and Trade union actions) analyses the role and contribution of industrial relations in mitigating the negative impact of the Covid-19 crisis on the mental health of HCWs, as well as in reducing structural mental health problems in the sector.

The work of healthcare workers in hospitals has always had serious mental health risks. Common mental illnesses encompass for instance depression, anxiety disorders and post-traumatic stress disorder. Occupation-specific factors affecting mental health risks include, among others, high workloads, substantial individual responsibilities, dealing with the suffering of patients and their relatives, and the threat of physical violence. The Covid-19 crisis has further increased mental health risks among healthcare workers. As noted by De Maeseneer et al (2021), and acknowledging the risk of generalisation, research tends to emphasize the mental *illness* aspect of mental health over the dimension related to mental *well-being* - a comment also reasonably applicable to the present study.

COMET's main ambition is to improve knowledge on how COVID-19-related mental health problems among healthcare workers can be prevented or treated, and in particular which role trade unions and professional organisations representing health workers in collective bargaining, lobbies to governments and social dialogue in hospitals can play in this respect. At the moment there is very little systematic information and analysis on this question available, pointing to a lack of academic research and policy-oriented analysis in this field.

In this report we outline the results of a systematic literature review on:

(i) Mental health risks among HCWs and occupation-specific determinants;
(ii) The effects of Covid-19 on mental health risks of HCWs;
(iii) Strategies and initiatives of trade unions and hospitals in dealing with mental health risks among HCWs.

The outcomes of this literature study will be integrated into the upcoming phases of the projects, specifically the survey questionnaire and case study investigation addressing organisational and trade union actions in more detail. Detailed reports containing the results of these studies are available for download on our project website, accessible at: https://aias-hsi.uva.nl/en/projects-a-z/comet/comet.html.

The report is organized as follows. In the next section, we will provide a rationale for our process of identifying relevant literature and discuss the sources that were incorporated. Section three presents our findings on the mental health risks experienced by healthcare workers in general, and within this section we also examine the literature concerning the impact of Covid-19 on the mental health of HCWs. Moving on to section four, we delve into the literature on strategies, initiatives and experiences of trade unions, hospitals and other stakeholders. Lastly, in section five, we provide a reflection on the implications of these findings, with a specific focus on trade unions.

2. Identification of the literature

The starting point for the literature review is the compilation of published studies that investigate and elucidate the mental health challenges faced by healthcare workers, the repercussions of the Covid-19 pandemic, and the involvement of hospitals and trade unions in addressing mental health issues. To create the sample, we started with an electronic database search for relevant studies in the time period between 2015 and 2023. The electronic databases that were used to obtain the relevant literature were: ISI Web of Science, Scopus and Google scholar. Key words used included: 'anxiety', 'burnout', 'Covid-19', 'depression', 'distress', 'healthcare sector', 'healthcare workers', 'health workers', 'hospitals', 'hospital staff', 'mental health', 'mental wellbeing', 'nurses', 'nursing staff', 'organisation', 'organisational', 'pandemic', 'psychosocial risks', 'stress', 'stressors', 'trade union', 'union'.

Additionally, our search encompassed the exploration of references within empirical studies, aiming to identify other studies that might provide insights into the mental health of healthcare workers.

The original search was completed in February 2023 and complemented with relevant studies until November 2023. This report outlines the findings from a sample of 20 relevant studies on mental health issues among HCWs, 30 relevant studies with a focus on mental health risk during the Covid-19 pandemic and 50 relevant studies on the involvement of hospitals and trade unions in addressing mental health issues.

3. Mental health risks of healthcare workers

A person's mental well-being at any specific moment is shaped by the interplay of past and present experiences, along with various risk and protective factors. The determinants of mental health encompass a multifaceted interaction of biological, environmental, cultural, economic, health system, social, occupational, familial, psychological, and individual factors (World Health Organisation, 2012; De Maeseneer et al., 2021). In the context of this study, we focus on occupation-specific factors influencing mental health, calling for an emphasis on the workplace.

The work of healthcare workers [HCWs] in hospitals always has had serious mental health risks (McVicar 2003; Adolhe et al. 2015; Mohanty et al, 2019; Sovold et al., 2021). In 2013, on average 53% workers in the hospital sector was exposed to mental wellbeing risk factors, including severe time pressure or overload of work, violence or threat of violence, harassment or bullying (OECD, 2020: 111).[1]

Mental health risks are related to several dimensions in their job demands (which require effort and can have physical or psychological costs) and resources (which support the performance of work tasks and can have a positive impact on health and well-being). Job demands and resources can be classified in various categories and diverse ways. However, it is important to recognize that these categorisation systems are not discrete and exhibit a certain degree of interrelation in their meaning. In the following we emphasize job demands and resources that hold particular relevance within the context of healthcare workers.

[1] Although data has to be interpreted with caution as samples are small, the OECD-data show high cross-country varieties. High mental risks exposures (more than 70 percent of the workers) are reported for France, United Kingdom, Finland, Sweden.

Job demands - The responsibilities of healthcare workers often involve tasks that entail significant quantitative, cognitive, emotional and/ or physical demands. These demands may manifest in various ways, including heavy workloads, intense or rapid task execution, substantial individual responsibility, the necessity of taking difficult decisions, and the emotional toll of addressing the suffering of patients and their families. Workers in the health sectors face particularly high levels of emotional demands and work intensity (see for example Eurofound, 2017, 2019). Moreover, healthcare workers regularly face unfavourable work time demands, such as extended working hours, shift work or the requirement to work during unconventional hours. Healthcare workers also often work in demanding physical work environments, such as isolated workplaces and with a constant need to take preventive and protective measures. These types of heightened job demands experienced by healthcare workers and their adverse impact on mental well-being have been thoroughly documented over time (see e.g. Jimmieson et al., 2017; Johnson et al, 2018; Eurofound, 2017, 2019; Scanlan and Still, 2019). In many healthcare occupations, there is an overrepresentation of female workers who frequently encounter additional challenges in balancing their professional responsibilities with significant (unpaid) domestic workloads (Leo et al., 2021).

In addition, the health sector records the highest proportion of workers experiencing adverse social behaviours at the workplace (Eurofound, 2017). These behaviours include threats, humiliating behaviours, verbal abuse, unwanted sexual attention, harassment/bullying, and physical violence. Exposure to such behaviours has a significantly adverse impact on health and well-being (see for instance Eurofound, 2017; Mento et al., 2020).

Job resources – Whereas job demands refer to aspects of the job that require sustained physical or psychological effort and have psychological and physiological costs, resources are aspects that reduce job demands or their costs, i.e. resources to cope with demands. These resources can for instance come in the form of social support, autonomy in working time and tasks, recognition, workplace voice and appropriate pay. Workplace conditions can impact job resources, crucial for overall well-being, underscoring the importance of integrating them into preventive measures.

The quality of the social environment, or social support, is an essential job resource that can balance the negative impact of high job demands (such as emotional or quantitative demands) (Brooks et al., 2018; Kisely et al., 2020). Although healthcare workers' support from colleagues is relatively high, their overall social resources are relatively low (Eurofound, 2017, 2019), which may be related to a perceived lack of interest on behalf of the management regarding the (emotional) state of healthcare workers (Koinis et al., 2015; Eurofound, 2023).

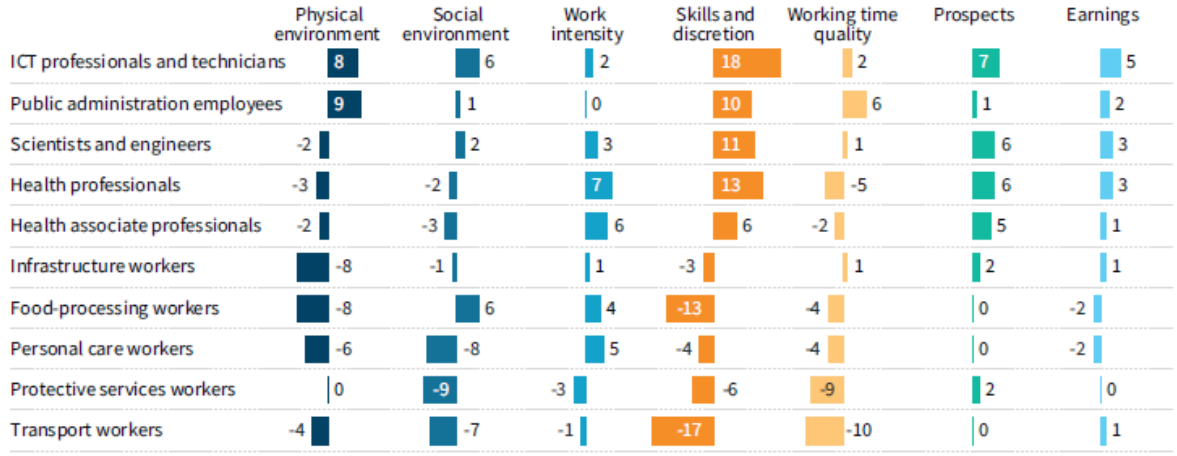
Individual job autonomy in for example working time and speed and order of tasks, is an important job resource to deal with high demands in the workplace. However, low levels of freedom to make decisions about work is associated with an increased risk of stress, emotional fatigue and anxiety, and in the longer run possibly in depression, burnouts and other serious mental health conditions among healthcare workers (De Hert, 2020; Niedhammer et al., 2021).

Remuneration can also be a job resource. However, dissatisfaction with wages is an important factor reducing the attractiveness of health professions. Remuneration of hospital nurses is around the national average in most countries. Nurses' remuneration in 2019 ranged from about 10% lower to 20% higher than the national average wage. Differences in wage levels are more significant among doctors (Eurofound, 2022a).

In sum, mental health risks are related to, among others, workloads, high levels of individual responsibility, the taking of difficult decisions, dealing with the suffering of patients and their relatives,

and the threat of physical violence. Factors like these frequently result in high levels of stress, emotional fatigue and anxiety, and in the longer run possibly in depression, burnouts and other serious mental health conditions. This, in turn, leads to absenteeism and workers leaving the healthcare sector to go to other sectors or become inactive. In this way, mental health risks have negative effects both on HCWs and on the functioning of hospitals, and ultimately on the provision of good and accessible healthcare to the population. As outlined in this section, and also illustrated in figure 1, it was observed that healthcare workers' work demands are relatively high in terms of work intensity and work time demands. Conversely, crucial resources like social support and earnings (especially for nurses) are of limited quality.

Figure 1 Job quality of selected critical occupations in relation to the workforce average



Notes: *Values on the right side of each axis represent better-than-average scores while values to the left represent worse-than-average scores, except for Work intensity, for which the reverse is the case.*
Source: *EWCS 2015*

Source: Eurofound, 2021, pp. 59.

In recent decades, and especially since the 2008 financial crisis, mental health pressures in Europe increased with the further increase in workload in healthcare and long-term care sectors; a result of, among others, austerity measures leading to understaffing and changing (new public) management methods (see e.g. Keune et al. 2020; Llorens Serrano et al., 2022.). Healthcare reforms in European countries changed the sector's landscape, with the expansion of private healthcare provision and increased fragmentation of working conditions and interest representation in the sector (Eurofound, 2022b). Generally speaking, this led to deterioration of working conditions and devaluation of work (Llorens Serrano et al., 2022), as well as growing dissatisfaction and protest in for example the hospital sector with insufficient recognition of mental health problems and the lack of measures to prevent such problems from occurring or to treat them (Keune et al., 2020). High stress levels, job-dissatisfaction and low psychological empowerment among nurses seem to be important factors for leaving jobs, and so do factors in managerial style and of supervisory support (Halter et al, 2017; World Health Organisation, 2018: 30). Health and care sectors in European countries are struggling with 'vicious circles' in reproducing dynamics of staff shortages - workloads – absenteeism/ and leaving jobs.

Mental health problems are first problems for the workers themselves. Further, these have negative effects for the functioning of hospitals as well, thinking on absenteeism and workers leaving the healthcare sector to go to other sectors or become inactive. Ultimately it put further pressures on the provision of good and accessible healthcare to the population and the attractiveness of the profession

of nurses and other medical professions among the next generations of students and workers (for example World Health Organisation, 2020).

The effects of the COVID-19 crisis

This already strained sector then had to confront the Covid-19 crisis, in which healthcare workers have been on the frontline and received broad recognition as *the* essential workers. The crisis elevated workloads to extreme levels, intensified the 'traditional' mental health risks and added several new ones: fear for one's own health and that of co-workers, fear to contaminate loved ones, having to distance oneself from loved ones, high mortality rates among patients, sometimes deaths of colleagues. Many healthcare workers had no choice but to continue working physically at their workplace to provide services for others at great risk to their own health and that of their families. Healthcare workers, and medical support staff in particular, indeed experienced a substantially higher risk of getting infected and of experiencing severe Covid-19, defined as being hospitalized or deceased (United Nations, 2020; Mutambudzi et al., 2021).

Recent research shows that the mental health impact of the Covid-19 crisis on nurses and other HCWs has been substantial (Cabarkapa et al, 2020; Lai et al., 2020; Muller et al., 2020; Spoorthy, 2020; Stelnicki et al., 2020; Tan et al., 2020; Busch et al., 2021; Kovner et al., 2021; Olaya et al., 2021; Riedel et al., 2021; Sampaio et al. 2021; Varghese et al. 2021). In terms of prevalence the results highlight significant effects in terms of anxiety, stress, depression, PTSD and insomnia among HCWs from different parts of the world (Du et al., 2020; Luceño-Moreno et al., 2020; Rossi et al., 2020; Bassi et al., 2021; Young et al., 2021; Chinvararak et al., 2022). This concerns especially the workers directly involved with COVID-19 patients in hospital, but also the colleagues in other departments of the hospital and non-clinical health workers (Franklin and Gkiouleka, 2021) and in other sectors like nursing homes and hospices. Further, Sampaio et al. (2021) – in a cohort study among nurses in Portugal - points not only to immediate impacts on mental health, but also to longer term impacts: some groups find a balance (by 'psychological adaption') but others came into more severe mental health conditions with long-lasting risks.

A large body of literature addresses individual workers' characteristics in relation to mental health risk in times of COVID-19. Generally, investigations find that female workers, workers of young age and lower educated workers are at higher risks (e.g. Franklin and Gkiouleka, 2021; Nicolaou et al. 2021). There is also evidence that mental health problems among healthcare workers during the pandemic are related to occupational groups. Especially the group of nurses has been vulnerable for the development of depression during the COVID-19 pandemic, and required extra support to strengthen their resilience and commitment (Saeed et al. 2021; Sessions et al. 2021; Palese et al., 2022). Llop-Gironés et al. (2021) points to the vulnerability of many nurses worldwide regarding their poor working and employment conditions. Other more vulnerable workers groups that are mentioned in the literature are nursing assistants, medical assistants and social workers (Prasad et al., 2021). Among young healthcare workers, depression was more common, potentially due to more difficult and demanding work duties in the context of relatively low professional experience (Saeed et al., 2021). The sense of being valued by organizations is identified as a mitigating factor in reducing the likelihood of burnout among healthcare workers. (Prasad et al., 2021).

Several studies, however, have brought forward their concerns about the low methodological quality of evaluation studies and mental health outcomes that have been conducted during the Covid-19 pandemic (see e.g. Lamb, 2020; Muller et al., 2020; De Maeseneer et al., 2021). Low response rates, convenience sampling, self-reported responses, response bias, lack of control groups and limited amount of longitudinal studies inhibit our understanding of whether or how strong the effect of the

pandemic was on healthcare workers as compared to other groups, or changed compared to pre-pandemic levels. Another limitation is that mental health research, in general, tends to emphasize the mental illness dimension, while mental well-being is under-represented.

Determinants of mental health outcomes include, amongst others, risk factors related to fear of the unknown, threats to the own mortality, stigma by society and/or family members, working long hours and limited personal, social and/ or institutional support (see e.g. Cabarkapa et al., 2020; Muller et al., 2020; De Maeseneer et al., 2021; Li et al., 2022; Eurofound, 2023). Among workers, health and care workers had a significant proportion receiving support from colleagues, yet they had one of the lowest percentages receiving support from managers (Eurofound, 2023). Negative ratings of workplace relations, organisational support, organisational preparedness, access to supplies, training in proper PPE were associated with higher scores on adverse mental health outcomes (Havei et al., 2021; Kovner et al., 2021). Overall, "Health and care workers had the poorest job quality overall during the pandemic" (Eurofound, 2023, pp. 4, also illustrated in figure 2).

Figure 2 Job quality index, by critical worker group, EU, 2021 (%)

Note: *The numbers at the start and end of each bar indicate the total percentage of workers in strained and resourced jobs, respectively.*

Source: Eurofound, 2023, pp. 11

An interesting discussion is mentioned in De Maeseneer et al (2021 about the relevance of distinguishing between burnout, PTSD and moral injury. As highlighted in their report, during significant health crises like a pandemic, the workload of healthcare workers inevitably surges, potentially surpassing available resources. This challenge may be exacerbated by illnesses and, in certain instances, the loss of lives. In such conditions, there is a persistent risk of what is commonly referred to as burnout—a state characterized by "feelings of energy depletion or exhaustion; increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and reduced professional efficacy" (World Health Organisation, 2019).

The term 'moral injury' lacks a universally agreed-upon definition, but it has been conceptualized as "a character wound that stems from a betrayal of justice by a person of authority in a high-stakes

situation" (Shay, 2014). Moral injury can lead to consequences such as re-experiencing traumatic events and engaging in avoidance or numbing behaviours. Moral injury is triggered by acts that violate deeply held moral values and causes guilt, shame and anger.

Distinguishing between conditions like burnout and moral injury is crucial because using different terminology reframes the issues, as emphasized by Dean et al. (2019) and De Maeseneer et al. (2021). Traditionally, burnout implies that the problem lies within the individual, suggesting a deficiency in resources or resilience to cope with the work environment. However, this perspective is evolving, and burnout is increasingly viewed as a problem rooted in the work environment. In contrast, moral injury places the problem at the organizational level and implicates leadership from the outset.

Impact beyond the individual

Obviously, apart from the strong negative effects on healthcare workers, the pandemic has also further increased the negative effects on the functioning of hospitals, increased the danger of workers leaving the healthcare sector and made the provision of good and accessible healthcare to the population more difficult during and after the pandemic (Eurofound, 2022a, 2023, see also figure 3 below). The pandemic exacerbated staff shortages in the healthcare sectors of many countries, especially shortages of nurses and specialised doctors (Eurofound, 2021, 2023).

Sometimes working methods have been changed, for example remote working for nurses in mental health care (Foye et al. 2021), which may have affected the quality of work and quality of care services. There are several factors playing a role in turnover intentions to healthcare workers during the pandemic, such as fear of COVID-19 exposure, psychological responses to stress, bad working conditions, and lack of organisational support (Poon et al., 2022). Additional responses in terms of preventive measures, guidance and support for healthcare workers, and (frontline) nurses in particular, have turned out to be a necessity to lessen the impact and prevent healthcare workers from leaving the sector (Labrague and de Los Santos, 2020). In 2022, the OECD highlighted the fact that the COVID-19 pandemic had worsened the pre-existing skills shortages in the healthcare workforce across various countries. (OECD/ILO, 2022). They recommended that the engagement of social partners in skills policies within the healthcare sector is crucial; to ensure that skills intelligence is well-suited for policy implementation and to foster support for the policy response among stakeholders (OECD/ILO, 2022: 8). 'Skills gaps and labour shortages are particularly costly in the health workforce, since they can increase the length of patient waiting lists and waiting times and result in poor patient care, for instance due to increased burnouts and job dissatisfaction among medical staff (OECD/ILO, 2022; Kane et al., 2007; Jun et al., 2021).

Figure 3 Sectoral challenges in the wake of the Covid-19 pandemic identified by sectoral social partners

	Workers	Employers
Hospitals and healthcare	Staff shortages Need for recognition of COVID-19 as an occupational disease Privatisation Stress (partly caused by staff shortages) Low pay	Staff shortages Mental health problems Attractiveness of jobs

Source: Eurofound, 2023, pp. 27

4. Strategies and initiatives of trade unions, hospitals and other stakeholders

In the previous section, we have explored the literature about mental health risks of healthcare workers. This section explores the literature on interventions and measures that have been taken during the COVID-19 pandemic to prevent and mitigate these risks. An important note here is that many articles and reports point to the need and importance of taking actions in times of COVID-19 and possible new health crises. However, far less literature is available about the different types of interventions and policies that have been implemented during the COVID-19 crisis, let alone about the experiences and effectiveness of these programs.

To support the mental well-being of healthcare workers, the workplace serves as a crucial context for implementing appropriate interventions. These interventions operate on various levels, encompassing policy-level initiatives (e.g., economic and social measures), organizational strategies, task-oriented approaches, and individual-focused interventions. Additionally, interventions are categorized as primary, secondary, or tertiary prevention (De Maeseneer et al., 2021). Primary interventions are proactive, aiming to prevent exposure to known risk factors and forestall the emergence of harmful effects. Primary prevention may also enhance an individual's tolerance or resilience to better manage or cope with stressors. Secondary prevention efforts precede the onset of mental health issues that could impair functioning. These interventions aim to reverse, reduce, or slow the progression of ill-health and preclinical conditions, or enhance individual resources. Such secondary approaches may involve early detection and treatment to diminish the severity or duration of symptoms and impede the further development of more serious and potentially disabling conditions. Lastly, tertiary interventions are rehabilitative in nature, seeking to alleviate negative impacts and address existing damages. Tertiary prevention efforts focus on treating and managing diagnosed conditions, minimizing their impact on daily functioning. Examples of tertiary interventions include rehabilitation, relapse prevention, providing access to resources and support, and facilitating reintegration into the workforce.

In 2020, the World Health Organisation (WHO) published a guide with targeted recommendations to protect, support and empower health professionals at individual, management, organizational and system level in the context of the COVID-19 pandemic. According to WHO, health workers' mental health should be prioritized for both long-term occupational capacity and short-term crisis response' (WHO, 2020: 8). Regarding the mental health of health workers that are threatened during COVID-19, the WHO formulates five recommendations towards managers of health organisations (World Health Organisation, 2020: 8).

1. Assess and minimize additional COVID-19-related occupational psychosocial risks for stress.
2. Ensure access to and provision of mental health and psychosocial support services (MHPSS) for health workers involved in the COVID-19 response, which facilitates suicide prevention through early identification. Provide basic psychosocial support for first-line distress care, with at least one trained MHPSS worker for every health facility to manage priority conditions.
3. Promote help-seeking and provide evidence-based resources on basic psychosocial skills for health workers. Establish approaches to discuss challenges and dilemmas, organize schedules to include breaks, minimize other work-related stress and activate peer support.
4. Train health leads in basic psychosocial skills and regular supportive monitoring of staff mental wellbeing, including protection from COVID-19-related stress (Inter-Agency Standing Committee, 2020).

5. Ensure that health workers with mental health conditions originating from COVID-19 have the same rights to treatment and access to care as the general population.

In other chapters, WHO also address recommendations to stakeholders. Namely the request to employers of planning workload to ensure appropriate working hours (guided by national law and collective agreements, if available) and enforced rest periods and breaks to prevent burnout and error (World Health Organisation: 2020: 16; see also World Health Organisation, 2018). And the recommendation to policymakers to provide female healthcare workers with support for domestic tasks and care responsibilities in private lives (World Health Organisation, 2020: 21).

Where WHO (2020) follows a multi-stakeholder approach and some integration of interventions at several levels, in the following of this section, we will analyse literature that is more targeted to certain levels specific related stakeholders in dealing with the problem of mental health of healthcare workers(during pandemics), i.e. at the Individual workers level, organisational level of (departments of) hospitals or other health providers, collective bargaining at sector and company level, and national and societal level.

Individual-level interventions

There exists a substantial body of literature advocating for the provision of individualized support to workers in the realm of mental health awareness and interventions, aiming to enhance their ability to navigate mental health challenges in the workplace and cultivate individual resilience and empowerment (World Health Organisation, 2022). The World Health Organization (WHO) specifically recommends the training of managers to effectively support the mental health of their employees, emphasizing the need to enhance managers' knowledge, attitudes, and behaviours related to mental health (World Health Organisation, 2022). In the context of healthcare workers, the literature underscores the importance of encouraging self-care through activities such as physical exercise, relaxation, maintaining a balanced diet, ensuring good sleep, seeking family support, and participating in reflective small group discussions. These recommendations apply generally and are particularly pertinent in the context of the challenges posed by the COVID-19 pandemic (Leo et al., 2021; Heath et al., 2020). Available evidence indicates that workplaces should prioritize addressing employees' fundamental needs, encompassing safety, making feasible adjustments to eating and sleeping arrangements, and integrating warmth, empathetic listening, and validation (World Health Organisation, 2011; Kiseley et al., 2020; De Maeseneer et al., 2021).

Nurses, in particular, are recognized as a crucial target group for disseminating information and organizing support programs focused on healthy coping skills and therapeutic interventions to mitigate the adverse effects of the COVID-19 pandemic (Riedel et al., 2021). Buselli et al. (2021) note that only a few countries have introduced specific psychological support intervention protocols for healthcare workers during the pandemic, with some preventive programs emerging in university-associated hospitals, underscoring the importance of multidisciplinary collaboration. According to the World Health Organization (2022), there is ambiguity regarding whether psychosocial support for at-risk workers experiencing emotional distress should be delivered within or outside the workplace (World Health Organisation, 2022: 50). While employers in the healthcare sector can contribute to raising awareness and organizing/financing infrastructure for individual support, their responsibilities are constrained.

Recognizing that mental health challenges for healthcare workers stem from work- and job-related factors, addressing the issue necessitates a broader approach beyond the individual worker level. Muller et al. (2020) posit that healthcare workers exhibit a lesser need for individual support but a greater need for social support from the organization to alleviate stress.

Organisational level

A first source of mental health problems in time of the COVID-19 pandemic lies in fear for one's own health and worries about adequate protection against contamination for healthcare workers' colleagues and families (Kisely et al., 2020; Shanafelt et al., 2020 (see also Table 1); De Maeseneer et al., 2021). Hospitals and other healthcare organizations are responsible to give their personnel access to appropriate protective equipment and testing facilities that meet the quality requirements. In addition, the pandemic presses on professional and organizational challenges to provide competent and good care. This asks for regular information, communication and training meetings how to deal with (a lots of) covid-19 patients in crisis situations (World Health Organisation, 2022; Muller et al., 2020). Challenging and traumatic clinical/professional situations and emotional demands during crises furthermore ask for team/peer support in crisis situations (Diver et al., 2021) or a buddy system (Rieckert et al., 2021) and regular small group meetings to address the wellbeing among health care workers. Also, monitoring the health status of workers in pandemic-related departments is important during the outbreak and further periods in crises situations (Rieckert et al., 2021; Zhu et al., 2020).

Table1 Requests From Health Care Professionals to Their Organization during the pandemic

Request	Principal desire	Concerns	Key components of response
Hear me	Listen to and act on health care professionals' expert perspective and frontline experience and understand and address their concerns to the extent that organizations and leaders are able	Uncertainty whether leaders recognize the most pressing concerns of frontline health care professionals and whether local physician expertise regarding infection control, critical care, emergency medicine, and mental health is being appropriately harnessed to develop organization-specific responses	Create an array of input and feedback channels (listening groups, email suggestion box, town halls, leaders visiting hospital units) and make certain that the voice of health care professionals is part of the decision-making process
Protect me	Reduce the risk of health care professionals acquiring the infection and/or being a portal of transmission to family members	Concern about access to appropriate personal protective equipment, taking home infection to family members, and not having rapid access to testing through occupational health if needed	Provide adequate personal protective equipment, rapid access to occupational health with efficient evaluation and testing if symptoms warrant, information and resources to avoid taking the infection home to family members, and accommodation to health care professionals at high risk because of age or health conditions
Prepare me	Provide the training and support that allows provision of high-quality care to patients	Concern about not being able to provide competent nursing/medical care if deployed to new area (eg, all nurses will have to be intensive care unit nurses) and about rapidly changing information/communication challenges	Provide rapid training to support a basic, critical knowledge base and appropriate backup and access to experts Clear and unambiguous communication must acknowledge that everyone is experiencing novel challenges and decisions, everyone needs to rely on each other in this time, individuals should ask for help when they need it, no one needs to make difficult decisions alone, and we are all in this together
Support me	Provide support that acknowledges human limitations in a time of extreme work hours, uncertainty, and intense exposure to critically ill patients	Need for support for personal and family needs as work hours and demands increase and schools and daycare closures occur	Provide support for physical needs, including access to healthy meals and hydration while working, lodging for individuals on rapid-cycle shifts who do not live in close proximity to the hospital, transportation assistance for sleep-deprived workers, and assistance with other tasks, and provide support for childcare needs Provide support for emotional and psychologic needs for all, including psychologic first aid deployed via webinars and delivered directly to each unit (topics may include dealing with anxiety and insomnia, practicing self-care, supporting each other, and support for moral distress), and provide individual support for those with greater distress
Care for me	Provide holistic support for the individual and their family should they need to be quarantined	Uncertainty that the organization will support/take care of personal or family needs if the health care professional develops infection	Provide lodging support for individuals living apart from their families, support for tangible needs (eg, food, childcare), check-ins and emotional support, and paid time off if quarantine is necessary

Source: Shanafelt et al., 2020, pp. 2134

Health organisations also have a role in more preventive measures in more healthy working conditions, healthy jobs and organisational solutions to lower mental health risks. The WHO, in its 'Guidelines on mental health at work', recommends that 'organizational interventions that address psychosocial risk factors, for example reductions to workload and schedule changes or improvement in communication and teamwork, may be considered for health workers to reduce emotional distress and improve work-related outcomes' (World Health Organisation 2022: 17-19). Nevertheless, it must be noted that, concurrently, the WHO is also reporting that there is a limited scientific evidence in the existing literature supporting the effectiveness of these organisational measures.

Some academic studies highlight that the most effective interventions for bolstering the mental health of the health workforce are those implemented at the workplace level. These interventions take place within the organization, led by senior management and managerial staff, and address factors at the team and organizational levels (De Brier et al., 2020; Kiseley et al., 2020; San Juan et al., 2020). Factors include communication and training, infection control, employee workload, psychological support for employees, and personal support for employees. Several studies have developed overviews to inform planners, managers and team leaders s which are likely to be helpful, or unhelpful, in supporting staff during the Covid-19 pandemic (see for instance Billings et al., 2020; Dewey et al., 2020; Greenberg et al., 2020; Kisely et al., 2020; Shanafelt et al., 2020; Walton et al., 2020).

Comparative case study research from 13 healthcare providers over the world finds that strong organizational level direction, including engaged leadership, and the input, feedback, and engagement of frontline staff were the two main facilitators in implementing initiatives designed to improve healthcare worker health and wellbeing during the COVID-19 pandemic (O'Brien et al., 2022). According to the authors, such organisational policies requires a comprehensive, multi-level and multi-modal approach to address multiple aspects of health and wellbeing (id).

Effectiveness of coordinated and/or integrated approaches is notably evident in the case of burnout. General consensus exists that burnout should be primarily regarded as an organizational issue rather than an individual one. Despite the inclination to medicalize the challenges faced by individuals affected by burnout, the support for individualized interventions is limited. Although there is some evidence of symptom overlap between workers experiencing burnout and patients with clinical depression, particularly those with pronounced exhaustion symptoms, the broader consensus is that burnout originates specifically from the work environment. In essence, an appropriate response should prioritize addressing working conditions rather than focusing solely on the affected individual (De Maeseneer et al., 2021).

Voice and workers participation of healthcare workers

Some literature suggest that giving healthcare workers *voice* – in for example terms of employment, working conditions, shifts and working hours - do have positive impacts on the wellbeing and mental health of healthcare workers. Also giving voice in the content of work, such as having job autonomy in doing tasks, have positive impacts. Positive effects of voice can be the result of *direct* individual workers' participation (Gray et al., 2019) or group participation (Von Thiele Schwarz et al. 2017), but can be also effected by regulations and practices of *indirect*, representative workers participation in the field of occupational health and safety (Walters & Wadsworth, 2017). Dependent on labour law and other national industrial relations institutions, representation can be more or less organised by unions or by works councils or other non-union employee representation at the workplace.

It is not clear how much healthcare workers themselves or their representatives - like trade unions, works councils or specified representatives in occupational health and safety – have been involved in pandemic related policies and measures in hospitals and other healthcare organisations. The availability of publication on the subject of voice and workers participation during the Covid-19 period is (still) very limited. Nevertheless, we can look to the findings of an European Working Conditions Telephone Survey in 2021 that distinguished 11 groups of critical workers. In this study, the overall picture regarding 'voice' and 'direct workers participation' for health and care workers is not that positive. Health and care workers received the lowest support from managers in 2021 compared with other COVID-19 pandemic essential workers (Eurofound, 2023: 18). Further, their level of task discretion and autonomy - the ability to choose or modify the order of tasks, the methods of performing tasks or the speed of work – were also notably lower than average (Eurofound, 2023:19). The same can be said about involvement in improving work organisation or work processes: also on this item the health and care workers scored relatively low in 2021 compared to other workers groups (Eurofound, 2023: 19). They also enjoyed the lowest level of flexibility in working hours. Female health

and care workers were in the worst situation: just 17 precent could arrange easily to take an hour or two off to deal with private or family issues (Eurofound, 2023: 20). The picture of *representative* workers participation for health and care workers however seems more positive. Almost 90 percent of the health and care workers had access to formal employee representation in the workplace in 2021, what is more than average (Eurofound, 2023: 23).

Some of the organizational and voice factors mentioned above, might be interrelated. For example, the positive effect of direct worker participation might be gone when there is also understaffing or when the organisation has adopted New Public Management principles (Llorens Serano et al,. 2022: 22).

Collective bargaining

Generally speaking, collective bargaining in Europe plays mainly a role in the job quality dimension of 'terms of employment', such as pay, working hours and job security. Trade unions participation and their influence though collective bargaining are very heterogeneous in the EU because of large differences in institutional and organisation powers of trade unions. National varieties in industrial relations regimes are also visible in the labour relations' diversity in the healthcare sector across European countries, such as membership levels in trade unions and employers' associations, and levels of collective bargaining and coordination. Furthermore, levels of privatisation in the healthcare sector are quite different across the European Member States what also might have consequences for the healthcare workers' job quality.

Besides the traditional wage bargaining in Europe, social dialogue and collective bargaining in the healthcare sectors of some European countries played a role in scaling up hospital capacities and in initiating and developing emergency measures during the covid-19 pandemic. Logically, a bigger role in countries with well-established social dialogue institutions and traditions of cooperations between the social partners, such as Austria, Belgium, Denmark, Finland, Germany, The Netherlands and Sweden (Eurofound, 2022a). In Greece, Portugal and Spain – all countries most effected by austerity measures - social partners played a more limited role in managing the pandemic response (id.) The Hungarian and Lithuanian governments even restricted the positions of social partners (id). Although collective bargaining in the hospital sectors continued to be focused on wages and bonus payments, some information and consultation involvements were in broader issues such as the adaptation of work organization to secure greater capacity, the reallocation of staff and the protection of staff's health and safety (Eurofound, 2022a). Social partners faced that the pandemic exacerbated existing staff shortages and problems with staff retention, which are related to burnout as results of high stress levels and heavy workloads of those that continued to work in the sector (id).

There is little academic literature about trade unions' actions in the field of mental health promotion in general or in healthcare sectors. However, in websites trade unions[2] around the world ask for more awareness about mental health at work and these campaigns might be enhanced by the COVID-19 crisis and recent WHO reports. Llorens Serrano et al. (2022) analysed three case studies on trade union views on psychosocial risks in the healthcare and long-term care sectors (Sweden, Germany, Spain). Trade unions in all three countries see training among OSH representatives and raising awareness as the main tools to address psychosocial risks in health and care sectors. Generally speaking, prevention is seen as more important than mitigation. It depend however on the institutional context how trade unions (can) organize their efforts. In Sweden trade unions collaborate with municipalities to make industry specific guidelines and toolboxes to use in problem situations of highest rates of reported sickness leave. In Germany, trade union have concentrated on supporting the creation of works councils in healthcare and long-term care organisations, to make risk assessments and to initiate

[2] For example Covid-19: Are You OK? | Nursing Times

consultation on psychosocial risks. German unions see sectoral collective bargaining in the hospital sector and social dialogue in individual hospital as a platform for influence. Spanish unions focus on the instrument of drafting 'counter reports' as a critical response on obligatory company risks assessment reports made by employers, and on grievance cases and awareness campaigns.

Legislation

The European Framework Directive 89/391/EEC (12 June 1989) on Occupational Safety and Health oblige employers to take the measures necessary for the safety and health protection of workers, including prevention of occupational risks and provision of information and training, as well as provision of the necessary organisation and means. Regarding for example pandemics like Covid-19, the following sentence is relevant: 'the employer shall be alert to the need to adjust these measures to take account of changing circumstances and aim to improve existing situations' (European Directive 89/391/EEC, article 6). The directive also regulates the employers' obligation regarding worker representation: 'the employer shall designate one or more workers to carry out activities related to the protection and prevention of occupational risk'. It defines a workers' representative with specific responsibility for the safety and health of workers as 'any person elected, chosen or designated in accordance with national laws and/or practices to represent workers where problems arise relating to the safety and health protection of workers at work' (cited from Eurofound, 2022b: 66).

European directives are legally binding and have to be transposed into national laws by Member States. Nevertheless, there are high varieties in national strategies in the field of Occupational Safety and Health in the European Union (European Agency for Safety and Health at Work, 2019). Furthermore, the structures of workers representation bodies in OHS and the threshold in terms of workplace size for which workers representation bodies is required, varies greatly across the EU (ETUC-CES, 2013).

Some European countries created during the COVID-19 pandemic new legislation or adapted existing legislation aimed at improving the working conditions of critical workers. The members of the Network of Eurofound correspondents found seven measures that relate to the recognition of COVID-19 as an occupational disease, which is crucial to ensuring that employers provide the right working conditions to protect workers from contracting it (Eurofound, 2023: 25). These measures covered either the entire working population - in France, Latvia and Slovakia - or health and care workers specifically, such as in Germany, Spain, Sweden and Norway.

Broader cultural or societal factors

Literature is more and more referring to the need to combat social stigma and stereotypes associated with mental illness, especially for health care workers (De Maeseneer et al., 2021; Leo et al., 2021; WHO 2020 etc.) and societal stigma against healthcare workers (Kisely et al., 2020) . Stigma is a critical barrier in itself determining health-seeking behaviour and, ultimately, access to care (De Maeseneer et al., 2021). In this context it is also important to adopt a blame free environment to share incidents and ethical issues among workers in health care organizations (Leo et al., 2021).

Recently, the European Commission has announced its intention to develop an EU mental health strategy at work, but also broader in society. We leave this policy besides this literature review because of its broad scope.

5. Summary and conclusions

The Covid-19 crisis has had a significant impact on the mental health of healthcare workers, who already faced serious mental health risks prior to the pandemic. The crisis has further increased these risks, with healthcare workers experiencing anxiety, stress, depression, post-traumatic stress disorder (PTSD), and insomnia. The mental health effects of the crisis are not limited to the individual, but also have broader implications for the functioning of hospitals and the provision of healthcare to the population.

The literature reviewed in this study highlights the importance of understanding and addressing the mental health risks faced by healthcare workers. Various factors contribute to these risks, including high workloads, substantial individual responsibilities, dealing with the suffering of patients and their relatives, and the threat of physical violence. The Covid-19 crisis has added additional stressors, such as fear for one's own health and the health of loved ones, high mortality rates among patients, and the deaths of colleagues. These factors can lead to burnout, depression, and other serious mental health conditions.

To mitigate the negative impact on healthcare workers' mental health, various strategies and initiatives have been implemented. These include individual-level interventions, such as training managers to support the mental health of their employees and promoting self-care practices among healthcare workers. Organizational-level interventions involve providing appropriate protective equipment, training, and support for healthcare workers, as well as creating a supportive work environment with good communication, teamwork, and adequate rest periods. The involvement of trade unions, hospitals, and other stakeholders is crucial in implementing these interventions and ensuring their effectiveness. Collective bargaining and workers' participation can also play a significant role in promoting the mental health of healthcare workers. Giving healthcare workers a voice in decision-making processes and addressing their concerns regarding working conditions, workloads, and job autonomy can contribute to their well-being. Trade unions have an important role to play in advocating for the mental health of healthcare workers and negotiating for better working conditions and support systems. Legislation is another important tool for protecting the mental health of healthcare workers. European directives and national laws require employers to provide a safe and healthy work environment and to involve workers' representatives in occupational safety and health matters. However, the implementation of these measures varies across countries, and there is a need for further research on their effectiveness. Addressing mental health risks in the healthcare sector requires a comprehensive and multi-level approach. Strategies should focus on prevention, early detection, and treatment of mental health issues, as well as creating a supportive work environment and addressing broader societal factors, such as stigma.

It is important to note that the literature reviewed in this study has limitations. The quality of some studies was low, and there is a need for more rigorous research on the mental health of healthcare workers in the context of pandemics. Additionally, the findings presented in this study may not apply universally, as they are based on specific contexts and populations.

In conclusion, the mental health of healthcare workers is a critical issue that requires attention from healthcare organizations, policymakers, trade unions, and other stakeholders. The Covid-19 crisis has highlighted the urgent need for interventions and support systems to protect the mental well-being of healthcare workers. It is important to prioritize the mental health of healthcare workers, both during times of crisis and in the long term, to ensure the well-being of healthcare workers and the provision of high-quality healthcare services.

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